

## New products for machining technicians

### **NEW** KUB Pentron



- ▲ Ø 14–46 mm
- ▲ Cyl. shank, ABS, PSC
- ▲ 2xD, 3xD, 4xD, 5xD

6–18

### **NEW** KUB 100



- ▲ Ø 14–27 mm
- ▲ Cyl. shank
- ▲ 3xD

27

### **NEW** KUB Trigon



- ▲ Ø 14–44 mm
- ▲ Combi shank, ABS
- ▲ 2xD, 3xD, 4xD

29–34

### **NEW** Indexable inserts for KUB Pentron



#### **BK8425**

- ▲ Universal PVD grade



#### **BK6115**

- ▲ Wear resistant  
CVD-coated indexable insert

19

### **NEW** Indexable inserts for KUB Trigon



#### **BK8425**

- ▲ Universal PVD grade



#### **BK6115**

- ▲ Wear resistant  
CVD-coated indexable insert

35

## Programme Extension

### MaxiDrill 900



- ▲ Expansion to include intermediate Ø for 4xD and 5xD

20–26



Solid drilling and bore machining

**1** HSS drilling

**2** Solid carbide drilling

**3** Indexable insert drilling

**4** Reaming and Countersinking

**5** Spindle Tooling

Threading

**6** Taps and thread formers

**7** Circular and Thread Milling

**8** Thread turning

Turning

**9** Turning Tools

**10** EcoCut

**11** Grooving Tools

**12** Miniature turning tools

Milling

**13** HSS Milling Cutters

**14** Solid Carbide milling cutters

**15** Milling tools with  
indexable inserts

Tool Clamping

**16** Adapters

**17** Accessories

**18** Material examples and  
article no. index

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## KOMET \ Performance

Premium quality tools for high performance.

The premium quality tools from the **KOMET Performance** product line have been designed for specific applications and are distinguished by their outstanding performance. If you make high demands on the performance of your production and want to achieve the very best results, we recommend the Premium tools in this product line.

## KOMET \ Standard

Quality tools for standard applications.

The quality tools of the **KOMET Standard** product line are high quality, high performance, reliable and enjoy the highest level of trust among our customers worldwide. Tools from this product line are the first choice for many standard applications and guarantee optimal results.

## Symbol explanation

### Shank

|            |                                                                                                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>C</b>   | Cylindrical shank with clamping flat<br>Guarantees optimum clamping of the tool and can be clamped in every standard adapter                                                                                              |
| <b>K</b>   | Drill with combi shank<br>This drill shank has two clamping flats (DIN 6535HE, DIN 6595) that guarantee pull-out protection and good face contact of the drill. Both Weldon and Whistle Notch adapters can be used.       |
| <b>ABS</b> | Drill with ABS connection<br>The ABS connection from Komet is a modular coupling system for rotating tools and stationary tools, and offers a number of advantages, such as improved force transmission                   |
| <b>PSC</b> | Drill with polygonal shank<br>The polygonal shank offers the best rigidity during the transmission of force from the drill to the adapter. The tapered polygonal shape easily absorbs torsional forces and bending forces |

### Version



Drill with thro' coolant supply  
The tried-and-tested thro' coolant system guarantees a reduction in heat at the cutting edges of the tool as well as improved chip removal



| Designation                                                                                                        | Pages |
|--------------------------------------------------------------------------------------------------------------------|-------|
| Adjuster with ABS connection  | 38    |
| <b>i</b> Adapters can be found in → <b>Chapter 16 Adapters.</b>                                                    |       |

## Application tips – eccentric sleeves

Users of rotating tools can now enjoy greater flexibility.  
Using the eccentric sleeves, you can vary and adjust the diameter of the hole by +/- 0.3 mm with ease.

Two types of eccentric sleeve are available:  
One for use with the new indexable insert drill adapter and one for use with the existing Weldon adapter.  
The difference lies solely in the design and position of the slots for the adapter's clamping screws.  
There are four sizes per type, which are tailored to the shank diameter.



*Eccentric sleeve for indexable insert drill adapter*



*Eccentric sleeve for Weldon adapter*

| Designation                                           |                                                                                     | Pages |
|-------------------------------------------------------|-------------------------------------------------------------------------------------|-------|
| Eccentric sleeves for indexable insert drill adapters |   | 37    |
| Eccentric sleeves for Weldon adapters                 |  | 37    |





## Toolfinder

● = Main Application  
○ = Extended application  
- = Not possible

|  | Boring depth | Drilling through a transverse hole | Stack plate drilling | Drilling on uneven surfaces | Drilling | Spot drilling an edge | Spot drilling a convex surface | Spot drilling angled surfaces | Spot drilling a pointed contour | Chain drilling | Drilling through a centre or pre-op |  |
|--|--------------|------------------------------------|----------------------|-----------------------------|----------|-----------------------|--------------------------------|-------------------------------|---------------------------------|----------------|-------------------------------------|--|
|--|--------------|------------------------------------|----------------------|-----------------------------|----------|-----------------------|--------------------------------|-------------------------------|---------------------------------|----------------|-------------------------------------|--|

## KUB Pentron

The specialist for large hole depths



- ▲ The all-rounder for process-secure drilling under a wide variety of conditions
- ▲ Ideal for extreme machining situations

| 2xD | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ● |  |
|-----|---|---|---|---|---|---|---|---|---|---|---|--|
| 3xD | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ● |  |
| 4xD | ● | ○ | ○ | - | ● | ● | ● | ● | ○ | ○ | ● |  |
| 5xD | ● | ○ | ○ | - | ● | ○ | ● | ○ | - | - | ○ |  |
| 3xD | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ● |  |
| 4xD | ● | ○ | ○ | - | ● | ● | ● | ● | ○ | ○ | ● |  |
| 5xD | ● | ○ | ○ | - | ● | ○ | ● | ○ | - | - | ○ |  |
| 3xD | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● | ● |  |

## MaxiDrill 900

The specialist for high productivity in rough machining



- ▲ Provides perfect drilling quality even under enormous loads
- ▲ Ideal for large drilling depths:  
The high feed rates increase productivity
- ▲ For stable machining situations

|     |   |   |   |   |   |   |   |   |   |   |  |
|-----|---|---|---|---|---|---|---|---|---|---|--|
| 2xD | ● | ● | ● | ○ | ● | ● | ● | ● | ○ | ● |  |
| 3xD | ● | ● | ● | ○ | ● | ● | ● | ● | ○ | ● |  |
| 4xD | ● | ○ | ○ | ○ | ● | ● | ● | ● | ○ | ● |  |
| 5xD | ● | ○ | ○ | ○ | ● | ● | ● | ● | ○ | ● |  |

## KUB 100

Ideal for robust machining situations



- ▲ The high performance all-rounder for outstanding productivity and reliability
- ▲ Offers consistent hole quality and a constant diameter across all materials and feed rates

|     |   |   |   |   |   |   |   |   |   |   |  |
|-----|---|---|---|---|---|---|---|---|---|---|--|
| 3xD | ● | ● | ● | ○ | ● | ● | ● | ● | ● | ● |  |
|-----|---|---|---|---|---|---|---|---|---|---|--|

## KUB Trigon

The solution for unstable conditions and high accuracy



- ▲ Ideal for machining under unstable conditions
- ▲ Well-suited to machining on less powerful machines
- ▲ The first choice for creating dimensionally accurate holes

|     |   |   |   |   |   |   |   |   |   |   |  |
|-----|---|---|---|---|---|---|---|---|---|---|--|
| 2xD | ● | - | ● | ○ | ○ | ● | ● | ○ | ● | ○ |  |
| 3xD | ○ | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |  |
| 4xD | ○ | - | ○ | - | - | ○ | ○ | - | ○ | ○ |  |
| 2xD | ● | - | ● | ○ | ○ | ● | ● | ○ | ● | ○ |  |
| 3xD | ○ | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ |  |
| 4xD | ○ | - | ○ | - | - | ○ | ○ | - | ○ | ○ |  |

## MaxiDrill Classic

The drilling tool for universal application



- ▲ Ideal for use on machines with limited power
- ▲ Suitable for use under unstable conditions

|     |   |   |   |   |   |   |   |   |   |   |  |
|-----|---|---|---|---|---|---|---|---|---|---|--|
| 2xD | ● | - | ● | - | - | ○ | ○ | - | - | ● |  |
| 3xD | ● | - | ● | - | - | ○ | ○ | - | - | ● |  |
| 4xD | ● | - | ● | - | - | ○ | ○ | - | - | ● |  |

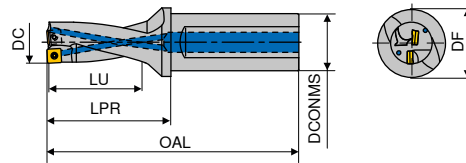
| Shank | Diameter<br>Ø | KOMET \ Performance | KOMET \ Standard                                                                    | Insert type                                                                         | No. of cutting edges | Grade | Steel           | Stainless steel | Cast iron | Non ferrous metals | Heat resistant alloys | Hardened materials | KOMET \ Performance                                                                   |
|-------|---------------|---------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------|-------|-----------------|-----------------|-----------|--------------------|-----------------------|--------------------|---------------------------------------------------------------------------------------|
| Pages |               |                     |                                                                                     |                                                                                     |                      |       |                 |                 |           |                    |                       |                    | Pages                                                                                 |
| C     | 14-46         | 6+7                 |                                                                                     |    | SOGX                 | 4     | -01<br>BK6115   | ●               | ●         | ●                  | ○                     | ○                  | 19                                                                                    |
| C     | 14-46         | 8+9                 |                                                                                     |    | SOGX                 | 4     | -01<br>BK8425   | ●               | ●         | ●                  | ○                     | ○                  | 19                                                                                    |
| C     | 14-46         | 10+11               |                                                                                     |    | SOGX                 | 4     | -01<br>BK7935   | ●               | ●         | ○                  | ○                     | ○                  |    |
| ABS   | 14-30         | 14                  |                                                                                     |    | SOGX                 | 4     | -01<br>BK7710   | ●               | ●         | ○                  | ○                     | ○                  |    |
| ABS   | 14-30         | 15                  |                                                                                     |    | SOGX                 | 4     | -01<br>BK6425   | ●               | ●         | ○                  | ○                     | ○                  |    |
| ABS   | 14-30         | 16                  |                                                                                     |                                                                                     |                      |       |                 |                 |           |                    |                       |                    |                                                                                       |
| PSC   | 14-30         | 17+18               |                                                                                     |                                                                                     |                      |       |                 |                 |           |                    |                       |                    |                                                                                       |
| C     | 12-63         | 20+21               |                                                                                     |   | SONT                 | 2 / 4 | -M30<br>CTCP420 | ●               | ○         | ●                  | ○                     | ○                  | 28                                                                                    |
| C     | 12-63         | 22+23               |                                                                                     |                                                                                     |                      |       | -M30<br>DCX1420 |                 |           |                    |                       |                    |                                                                                       |
| C     | 12-54         | 24+25               |                                                                                     |  | SONT                 | 2 / 4 | -M30<br>CTPP430 | ●               | ●         | ○                  | ○                     | ○                  | 28                                                                                    |
| C     | 12-41         | 26                  |                                                                                     |                                                                                     |                      |       | -M30<br>CCN1430 |                 |           |                    |                       |                    |                                                                                       |
| C     | 14-27         | 27                  |                                                                                     |  | SONT                 | 2 / 4 | -M30<br>CTCP420 | ●               | ○         | ●                  | ○                     | ○                  | 28                                                                                    |
|       |               |                     |                                                                                     |                                                                                     |                      |       | -M30<br>DCX1420 |                 |           |                    |                       |                    |                                                                                       |
|       |               |                     |                                                                                     |  | SONT                 | 2 / 4 | -M30<br>CTPP430 | ●               | ●         | ○                  | ○                     | ○                  | 28                                                                                    |
|       |               |                     |                                                                                     |                                                                                     |                      |       | -M30<br>CCN1430 |                 |           |                    |                       |                    |                                                                                       |
| K     | 14-44         | 29                  |                                                                                     |  | WOEX                 | 3     | -01<br>BK8425   | ●               | ●         | ●                  | ○                     | ○                  | 35                                                                                    |
| K     | 14-44         | 30                  |                                                                                     |  | WOEX                 | 3     | -03<br>BK8425   | ●               | ●         | ●                  | ○                     | ○                  | 35                                                                                    |
| K     | 14-35         | 31                  |                                                                                     |  | WOEX                 | 3     | -13<br>BK8425   | ●               | ●         | ●                  | ○                     | ○                  | 35                                                                                    |
| ABS   | 14-44         | 32                  |                                                                                     |  | WOEX                 | 3     | -01<br>BK6115   | ●               | ●         | ○                  | ○                     | ○                  | 35                                                                                    |
| ABS   | 14-44         | 33                  |                                                                                     |  | WOEX                 | 3     | -01<br>BK7935   | ●               | ●         | ○                  | ○                     | ○                  |  |
| ABS   | 14-44         | 34                  |                                                                                     |  | WOEX                 | 3     | -01<br>BK62     | ●               | ●         | ○                  | ○                     | ○                  |  |
|       |               |                     |                                                                                     |  | WOEX                 | 3     | -11<br>BK77     | ●               | ●         | ○                  | ○                     | ○                  |  |
| C     | 14-53         |                     |  |                                                                                     |                      |       |                 |                 |           |                    |                       |                    |                                                                                       |
| C     | 14-50         |                     |  |                                                                                     |                      |       |                 |                 |           |                    |                       |                    |                                                                                       |
| C     | 18-50         |                     |  |                                                                                     |                      |       |                 |                 |           |                    |                       |                    |                                                                                       |

 MaxiDrill Classic and specialised indexable inserts can be found in our online shop at [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)

## KUB Pentron

## Scope of supply:

Indexable Insert Drill incl. clamping screws

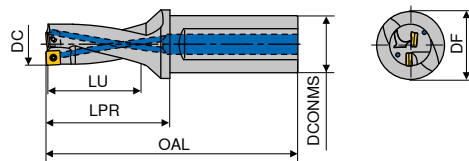


| Designation           | KOMET no. | DC   | DCONMS | DF | OAL | LU | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 872 ...<br>EUR |       |
|-----------------------|-----------|------|--------|----|-----|----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                       |           | mm   | mm     | mm | mm  | mm | mm  |                     |             |                                               |       |
| KUB-P.2D.140.R.04-C20 | U4201400  | 14,0 | 20     | 30 | 91  | 28 | 41  | 0,38                | SOGX 040204 | 338,00                                        | 14001 |
| KUB-P.2D.145.R.04-C20 | U4201450  | 14,5 | 20     | 30 | 94  | 30 | 44  | 0,38                | SOGX 040204 | 319,30                                        | 14501 |
| KUB-P.2D.150.R.04-C20 | U4201500  | 15,0 | 20     | 30 | 94  | 30 | 44  | 0,38                | SOGX 040204 | 319,30                                        | 15001 |
| KUB-P.2D.155.R.04-C20 | U4201550  | 15,5 | 20     | 30 | 98  | 32 | 48  | 0,38                | SOGX 040204 | 319,30                                        | 15501 |
| KUB-P.2D.160.R.04-C20 | U4201600  | 16,0 | 20     | 30 | 98  | 32 | 48  | 0,38                | SOGX 040204 | 319,30                                        | 16001 |
| KUB-P.2D.165.R.05-C20 | U4201650  | 16,5 | 20     | 30 | 101 | 34 | 51  | 0,62                | SOGX 050204 | 319,30                                        | 16501 |
| KUB-P.2D.170.R.05-C20 | U4201700  | 17,0 | 20     | 30 | 101 | 34 | 51  | 0,62                | SOGX 050204 | 325,50                                        | 17001 |
| KUB-P.2D.175.R.05-C25 | U4211750  | 17,5 | 25     | 30 | 109 | 36 | 53  | 0,62                | SOGX 050204 | 325,50                                        | 17502 |
| KUB-P.2D.180.R.05-C25 | U4211800  | 18,0 | 25     | 30 | 109 | 36 | 53  | 0,62                | SOGX 050204 | 325,50                                        | 18002 |
| KUB-P.2D.185.R.06-C25 | U4211850  | 18,5 | 25     | 30 | 112 | 38 | 56  | 1,01                | SOGX 060206 | 325,50                                        | 18502 |
| KUB-P.2D.190.R.06-C25 | U4211900  | 19,0 | 25     | 30 | 112 | 38 | 56  | 1,01                | SOGX 060206 | 332,80                                        | 19002 |
| KUB-P.2D.195.R.06-C25 | U4211950  | 19,5 | 25     | 30 | 114 | 40 | 58  | 1,01                | SOGX 060206 | 332,80                                        | 19502 |
| KUB-P.2D.200.R.06-C25 | U4212000  | 20,0 | 25     | 30 | 114 | 40 | 58  | 1,01                | SOGX 060206 | 332,80                                        | 20002 |
| KUB-P.2D.205.R.07-C25 | U4212050  | 20,5 | 25     | 30 | 117 | 42 | 61  | 1,01                | SOGX 07T208 | 354,60                                        | 20502 |
| KUB-P.2D.210.R.07-C25 | U4212100  | 21,0 | 25     | 30 | 117 | 42 | 61  | 1,01                | SOGX 07T208 | 354,60                                        | 21002 |
| KUB-P.2D.215.R.07-C25 | U4212150  | 21,5 | 25     | 30 | 119 | 44 | 63  | 1,01                | SOGX 07T208 | 354,60                                        | 21502 |
| KUB-P.2D.220.R.07-C25 | U4212200  | 22,0 | 25     | 30 | 119 | 44 | 63  | 1,01                | SOGX 07T208 | 354,60                                        | 22002 |
| KUB-P.2D.225.R.07-C25 | U4212250  | 22,5 | 25     | 30 | 122 | 46 | 66  | 1,01                | SOGX 07T208 | 354,60                                        | 22502 |
| KUB-P.2D.230.R.07-C25 | U4212300  | 23,0 | 25     | 30 | 122 | 46 | 66  | 1,01                | SOGX 07T208 | 354,60                                        | 23002 |
| KUB-P.2D.235.R.08-C32 | U4222350  | 23,5 | 32     | 39 | 128 | 48 | 68  | 1,28                | SOGX 080308 | 384,80                                        | 23503 |
| KUB-P.2D.240.R.08-C32 | U4222400  | 24,0 | 32     | 39 | 128 | 48 | 68  | 1,28                | SOGX 080308 | 384,80                                        | 24003 |
| KUB-P.2D.245.R.08-C32 | U4222450  | 24,5 | 32     | 39 | 131 | 50 | 71  | 1,28                | SOGX 080308 | 384,80                                        | 24503 |
| KUB-P.2D.250.R.08-C32 | U4222500  | 25,0 | 32     | 39 | 131 | 50 | 71  | 1,28                | SOGX 080308 | 384,80                                        | 25003 |
| KUB-P.2D.255.R.08-C32 | U4222550  | 25,5 | 32     | 39 | 133 | 52 | 73  | 1,28                | SOGX 080308 | 384,80                                        | 25503 |
| KUB-P.2D.260.R.08-C32 | U4222600  | 26,0 | 32     | 39 | 133 | 52 | 73  | 1,28                | SOGX 080308 | 384,80                                        | 26003 |
| KUB-P.2D.265.R.09-C32 | U4222650  | 26,5 | 32     | 39 | 136 | 54 | 76  | 2,25                | SOGX 09T308 | 406,60                                        | 26503 |
| KUB-P.2D.270.R.09-C32 | U4222700  | 27,0 | 32     | 39 | 136 | 54 | 76  | 2,25                | SOGX 09T308 | 406,60                                        | 27003 |
| KUB-P.2D.275.R.09-C32 | U4222750  | 27,5 | 32     | 39 | 138 | 56 | 78  | 2,25                | SOGX 09T308 | 406,60                                        | 27503 |
| KUB-P.2D.280.R.09-C32 | U4222800  | 28,0 | 32     | 39 | 138 | 56 | 78  | 2,25                | SOGX 09T308 | 406,60                                        | 28003 |
| KUB-P.2D.285.R.09-C32 | U4222850  | 28,5 | 32     | 39 | 141 | 58 | 81  | 2,25                | SOGX 09T308 | 406,60                                        | 28503 |
| KUB-P.2D.290.R.09-C32 | U4222900  | 29,0 | 32     | 39 | 141 | 58 | 81  | 2,25                | SOGX 09T308 | 406,60                                        | 29003 |
| KUB-P.2D.295.R.09-C32 | U4222950  | 29,5 | 32     | 39 | 143 | 60 | 83  | 2,25                | SOGX 09T308 | 406,60                                        | 29503 |
| KUB-P.2D.300.R.09-C32 | U4223000  | 30,0 | 32     | 39 | 143 | 60 | 83  | 2,25                | SOGX 09T308 | 406,60                                        | 30003 |
| KUB-P.2D.310.R.10-C40 | U4233100  | 31,0 | 40     | 50 | 154 | 62 | 86  | 2,8                 | SOGX 100408 | 442,00                                        | 31004 |
| KUB-P.2D.320.R.10-C40 | U4233200  | 32,0 | 40     | 50 | 156 | 64 | 88  | 2,8                 | SOGX 100408 | 442,00                                        | 32004 |
| KUB-P.2D.330.R.10-C40 | U4233300  | 33,0 | 40     | 50 | 159 | 66 | 91  | 2,8                 | SOGX 100408 | 442,00                                        | 33004 |
| KUB-P.2D.340.R.11-C40 | U4233400  | 34,0 | 40     | 50 | 161 | 68 | 93  | 2,8                 | SOGX 110408 | 462,80                                        | 34004 |
| KUB-P.2D.350.R.11-C40 | U4233500  | 35,0 | 40     | 50 | 164 | 70 | 96  | 2,8                 | SOGX 110408 | 462,80                                        | 35004 |
| KUB-P.2D.360.R.11-C40 | U4233600  | 36,0 | 40     | 50 | 166 | 72 | 98  | 2,8                 | SOGX 110408 | 462,80                                        | 36004 |
| KUB-P.2D.370.R.11-C40 | U4233700  | 37,0 | 40     | 50 | 169 | 74 | 101 | 2,8                 | SOGX 110408 | 462,80                                        | 37004 |
| KUB-P.2D.380.R.12-C40 | U4233800  | 38,0 | 40     | 50 | 171 | 76 | 103 | 6,25                | SOGX 120408 | 476,30                                        | 38004 |
| KUB-P.2D.390.R.12-C40 | U4233900  | 39,0 | 40     | 50 | 174 | 78 | 106 | 6,25                | SOGX 120408 | 476,30                                        | 39004 |
| KUB-P.2D.400.R.12-C40 | U4234000  | 40,0 | 40     | 50 | 176 | 80 | 108 | 6,25                | SOGX 120408 | 476,30                                        | 40004 |
| KUB-P.2D.410.R.12-C40 | U4234100  | 41,0 | 40     | 50 | 179 | 82 | 111 | 6,25                | SOGX 120408 | 476,30                                        | 41004 |
| KUB-P.2D.420.R.12-C40 | U4234200  | 42,0 | 40     | 50 | 181 | 84 | 113 | 6,25                | SOGX 120408 | 476,30                                        | 42004 |

## KUB Pentron

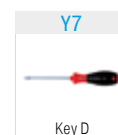
## Scope of supply:

Indexable Insert Drill incl. clamping screws



3

| Designation           | KOMET no. | DC   | DCONMS | DF | OAL | LU | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 872 ...<br>EUR |
|-----------------------|-----------|------|--------|----|-----|----|-----|---------------------|-------------|-----------------------------------------------|
| KUB-P.2D.430.R.13-C40 | U4234300  | 43,0 | 40     | 50 | 184 | 86 | 116 | 6,25                | SOGX 130508 | 476,30 43004                                  |
| KUB-P.2D.440.R.13-C40 | U4234400  | 44,0 | 40     | 50 | 186 | 88 | 118 | 6,25                | SOGX 130508 | 476,30 44004                                  |
| KUB-P.2D.450.R.13-C40 | U4234500  | 45,0 | 40     | 50 | 189 | 90 | 121 | 6,25                | SOGX 130508 | 476,30 45004                                  |
| KUB-P.2D.460.R.13-C40 | U4234600  | 46,0 | 40     | 50 | 191 | 92 | 123 | 6,25                | SOGX 130508 | 476,30 46004                                  |

Spare parts  
DC

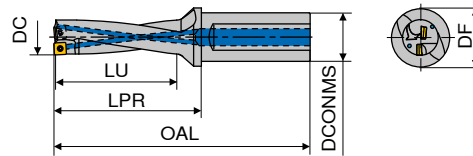
|           | Article no.<br>80 950 ...<br>EUR | Article no.<br>80 950 ...<br>EUR | Article no.<br>10 950 ...<br>EUR |
|-----------|----------------------------------|----------------------------------|----------------------------------|
| 14 - 16   | T05 - IP 6,06 057                |                                  | M1,8x3,8 - 05IP 2,36 10100       |
| 16,5 - 18 |                                  | T06 - IP 10,39 123               | M2,0x4,3 - 06IP 2,36 10000       |
| 18,5 - 23 |                                  | T06 - IP 10,39 123               | M2,2x5,5 - 06IP 2,36 10700       |
| 23,5 - 26 |                                  | T08 - IP 10,20 125               | M2,5x6,3 - 08IP 2,36 10800       |
| 26,5 - 30 |                                  | T08 - IP 10,20 125               | M3,0x7,6 - 08IP 2,36 10200       |
| 31 - 37   |                                  | T15 - IP 11,89 128               | M3,5x7,5 - 15IP 2,36 10300       |
| 38 - 46   |                                  | T20 - IP 12,54 129               | M4,5x10,0 - 20IP 2,36 10400      |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

## KUB Pentron

## Scope of supply:

Indexable Insert Drill incl. clamping screws

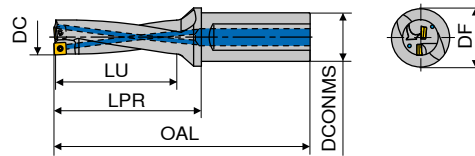


| Designation           | KOMET no. | DC   | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 873 ...<br>EUR |       |
|-----------------------|-----------|------|--------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                       |           |      |        |    |     |     |     |                     |             |                                               |       |
| KUB-P.3D.140.R.04-C20 | U4301400  | 14,0 | 20     | 30 | 105 | 42  | 55  | 0,38                | SOGX 040204 | 331,80                                        | 14001 |
| KUB-P.3D.145.R.04-C20 | U4301450  | 14,5 | 20     | 30 | 109 | 45  | 59  | 0,38                | SOGX 040204 | 331,80                                        | 14501 |
| KUB-P.3D.150.R.04-C20 | U4301500  | 15,0 | 20     | 30 | 109 | 45  | 59  | 0,38                | SOGX 040204 | 331,80                                        | 15001 |
| KUB-P.3D.155.R.04-C20 | U4301550  | 15,5 | 20     | 30 | 114 | 48  | 64  | 0,38                | SOGX 040204 | 331,80                                        | 15501 |
| KUB-P.3D.160.R.04-C20 | U4301600  | 16,0 | 20     | 30 | 114 | 48  | 64  | 0,38                | SOGX 040204 | 331,80                                        | 16001 |
| KUB-P.3D.165.R.05-C20 | U4301650  | 16,5 | 20     | 30 | 118 | 51  | 68  | 0,62                | SOGX 050204 | 331,80                                        | 16501 |
| KUB-P.3D.170.R.05-C20 | U4301700  | 17,0 | 20     | 30 | 118 | 51  | 68  | 0,62                | SOGX 050204 | 340,10                                        | 17001 |
| KUB-P.3D.175.R.05-C25 | U4311750  | 17,5 | 25     | 30 | 127 | 54  | 71  | 0,62                | SOGX 050204 | 340,10                                        | 17501 |
| KUB-P.3D.180.R.05-C25 | U4311800  | 18,0 | 25     | 30 | 127 | 54  | 71  | 0,62                | SOGX 050204 | 340,10                                        | 18001 |
| KUB-P.3D.185.R.06-C25 | U4311850  | 18,5 | 25     | 30 | 131 | 57  | 75  | 1,01                | SOGX 060206 | 340,10                                        | 18501 |
| KUB-P.3D.190.R.06-C25 | U4311900  | 19,0 | 25     | 30 | 131 | 57  | 75  | 1,01                | SOGX 060206 | 350,50                                        | 19001 |
| KUB-P.3D.195.R.06-C25 | U4311950  | 19,5 | 25     | 30 | 134 | 60  | 78  | 1,01                | SOGX 060206 | 350,50                                        | 19501 |
| KUB-P.3D.200.R.06-C25 | U4312000  | 20,0 | 25     | 30 | 134 | 60  | 78  | 1,01                | SOGX 060206 | 350,50                                        | 20001 |
| KUB-P.3D.205.R.07-C25 | U4312050  | 20,5 | 25     | 30 | 138 | 63  | 82  | 1,01                | SOGX 07T208 | 373,40                                        | 20501 |
| KUB-P.3D.210.R.07-C25 | U4312100  | 21,0 | 25     | 30 | 138 | 63  | 82  | 1,01                | SOGX 07T208 | 373,40                                        | 21001 |
| KUB-P.3D.215.R.07-C25 | U4312150  | 21,5 | 25     | 30 | 141 | 66  | 85  | 1,01                | SOGX 07T208 | 373,40                                        | 21501 |
| KUB-P.3D.220.R.07-C25 | U4312200  | 22,0 | 25     | 30 | 141 | 66  | 85  | 1,01                | SOGX 07T208 | 373,40                                        | 22002 |
| KUB-P.3D.225.R.07-C25 | U4312250  | 22,5 | 25     | 30 | 145 | 69  | 89  | 1,01                | SOGX 07T208 | 373,40                                        | 22502 |
| KUB-P.3D.230.R.07-C25 | U4312300  | 23,0 | 25     | 30 | 145 | 69  | 89  | 1,01                | SOGX 07T208 | 373,40                                        | 23002 |
| KUB-P.3D.235.R.08-C32 | U4322350  | 23,5 | 32     | 39 | 152 | 72  | 92  | 1,28                | SOGX 080308 | 404,60                                        | 23503 |
| KUB-P.3D.240.R.08-C32 | U4322400  | 24,0 | 32     | 39 | 152 | 72  | 92  | 1,28                | SOGX 080308 | 404,60                                        | 24003 |
| KUB-P.3D.245.R.08-C32 | U4322450  | 24,5 | 32     | 39 | 156 | 75  | 96  | 1,28                | SOGX 080308 | 404,60                                        | 24503 |
| KUB-P.3D.250.R.08-C32 | U4322500  | 25,0 | 32     | 39 | 156 | 75  | 96  | 1,28                | SOGX 080308 | 404,60                                        | 25003 |
| KUB-P.3D.255.R.08-C32 | U4322550  | 25,5 | 32     | 39 | 159 | 78  | 99  | 1,28                | SOGX 080308 | 404,60                                        | 25503 |
| KUB-P.3D.260.R.08-C32 | U4322600  | 26,0 | 32     | 39 | 159 | 78  | 99  | 1,28                | SOGX 080308 | 404,60                                        | 26003 |
| KUB-P.3D.265.R.09-C32 | U4322650  | 26,5 | 32     | 39 | 163 | 81  | 103 | 2,25                | SOGX 09T308 | 425,40                                        | 26503 |
| KUB-P.3D.270.R.09-C32 | U4322700  | 27,0 | 32     | 39 | 163 | 81  | 103 | 2,25                | SOGX 09T308 | 425,40                                        | 27003 |
| KUB-P.3D.275.R.09-C32 | U4322750  | 27,5 | 32     | 39 | 166 | 84  | 106 | 2,25                | SOGX 09T308 | 425,40                                        | 27503 |
| KUB-P.3D.280.R.09-C32 | U4322800  | 28,0 | 32     | 39 | 166 | 84  | 106 | 2,25                | SOGX 09T308 | 425,40                                        | 28003 |
| KUB-P.3D.285.R.09-C32 | U4322850  | 28,5 | 32     | 39 | 170 | 87  | 110 | 2,25                | SOGX 09T308 | 425,40                                        | 28503 |
| KUB-P.3D.290.R.09-C32 | U4322900  | 29,0 | 32     | 39 | 170 | 87  | 110 | 2,25                | SOGX 09T308 | 425,40                                        | 29003 |
| KUB-P.3D.295.R.09-C32 | U4322950  | 29,5 | 32     | 39 | 173 | 90  | 113 | 2,25                | SOGX 09T308 | 425,40                                        | 29503 |
| KUB-P.3D.300.R.09-C32 | U4323000  | 30,0 | 32     | 39 | 173 | 90  | 113 | 2,25                | SOGX 09T308 | 425,40                                        | 30003 |
| KUB-P.3D.310.R.10-C40 | U4333100  | 31,0 | 40     | 50 | 185 | 93  | 117 | 2,8                 | SOGX 100408 | 463,80                                        | 31004 |
| KUB-P.3D.320.R.10-C40 | U4333200  | 32,0 | 40     | 50 | 188 | 96  | 120 | 2,8                 | SOGX 100408 | 463,80                                        | 32004 |
| KUB-P.3D.330.R.10-C40 | U4333300  | 33,0 | 40     | 50 | 192 | 99  | 124 | 2,8                 | SOGX 100408 | 463,80                                        | 33004 |
| KUB-P.3D.340.R.11-C40 | U4333400  | 34,0 | 40     | 50 | 195 | 102 | 127 | 2,8                 | SOGX 110408 | 485,70                                        | 34004 |
| KUB-P.3D.350.R.11-C40 | U4333500  | 35,0 | 40     | 50 | 199 | 105 | 131 | 2,8                 | SOGX 110408 | 485,70                                        | 35004 |
| KUB-P.3D.360.R.11-C40 | U4333600  | 36,0 | 40     | 50 | 202 | 108 | 134 | 2,8                 | SOGX 110408 | 485,70                                        | 36004 |
| KUB-P.3D.370.R.11-C40 | U4333700  | 37,0 | 40     | 50 | 206 | 111 | 138 | 2,8                 | SOGX 110408 | 485,70                                        | 37004 |
| KUB-P.3D.380.R.12-C40 | U4333800  | 38,0 | 40     | 50 | 209 | 114 | 141 | 6,25                | SOGX 120408 | 500,20                                        | 38004 |
| KUB-P.3D.390.R.12-C40 | U4333900  | 39,0 | 40     | 50 | 213 | 117 | 145 | 6,25                | SOGX 120408 | 500,20                                        | 39004 |
| KUB-P.3D.400.R.12-C40 | U4334000  | 40,0 | 40     | 50 | 216 | 120 | 148 | 6,25                | SOGX 120408 | 500,20                                        | 40004 |
| KUB-P.3D.410.R.12-C40 | U4334100  | 41,0 | 40     | 50 | 220 | 123 | 152 | 6,25                | SOGX 120408 | 500,20                                        | 41004 |
| KUB-P.3D.420.R.12-C40 | U4334200  | 42,0 | 40     | 50 | 223 | 126 | 155 | 6,25                | SOGX 120408 | 500,20                                        | 42004 |

## KUB Pentron

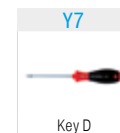
## Scope of supply:

Indexable Insert Drill incl. clamping screws



3

| Designation           | KOMET no. | DC   | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 873 ...<br>EUR |
|-----------------------|-----------|------|--------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|
|                       |           | mm   | mm     | mm | mm  | mm  | mm  |                     |             |                                               |
| KUB-P.3D.430.R.13-C40 | U4334300  | 43,0 | 40     | 50 | 227 | 129 | 159 | 6,25                | SOGX 130508 | 500,20 43004                                  |
| KUB-P.3D.440.R.13-C40 | U4334400  | 44,0 | 40     | 50 | 230 | 132 | 162 | 6,25                | SOGX 130508 | 500,20 44004                                  |
| KUB-P.3D.450.R.13-C40 | U4334500  | 45,0 | 40     | 50 | 234 | 135 | 166 | 6,25                | SOGX 130508 | 500,20 45004                                  |
| KUB-P.3D.460.R.13-C40 | U4334600  | 46,0 | 40     | 50 | 237 | 138 | 169 | 6,25                | SOGX 130508 | 500,20 46004                                  |

Spare parts  
DC

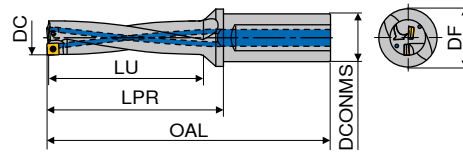
|           | Article no.<br>80 950 ...<br>EUR | Article no.<br>80 950 ...<br>EUR | Article no.<br>10 950 ...<br>EUR |
|-----------|----------------------------------|----------------------------------|----------------------------------|
| 14 - 16   | T05 - IP 6,06 057                |                                  | M1,8x3,8 - 05IP 2,36 10100       |
| 16,5 - 18 |                                  | T06 - IP 10,39 123               | M2,0x4,3 - 06IP 2,36 10000       |
| 18,5 - 23 |                                  | T06 - IP 10,39 123               | M2,2x5,5 - 06IP 2,36 10700       |
| 23,5 - 26 |                                  | T08 - IP 10,20 125               | M2,5x6,3 - 08IP 2,36 10800       |
| 26,5 - 30 |                                  | T08 - IP 10,20 125               | M3,0x7,6 - 08IP 2,36 10200       |
| 31 - 37   |                                  | T15 - IP 11,89 128               | M3,5x7,5 - 15IP 2,36 10300       |
| 38 - 46   |                                  | T20 - IP 12,54 129               | M4,5x10,0 - 20IP 2,36 10400      |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

## KUB Pentron

## Scope of supply:

Indexable Insert Drill incl. clamping screws



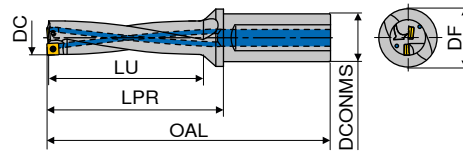
| Designation           | KOMET no. | DC   | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 874 ...<br>EUR |       |
|-----------------------|-----------|------|--------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                       |           |      |        |    |     |     |     |                     |             |                                               |       |
| KUB-P.4D.140.R.04-C20 | U4401400  | 14,0 | 20     | 30 | 119 | 56  | 69  | 0,38                | SOGX 040204 | 423,30                                        | 14001 |
| KUB-P.4D.145.R.04-C20 | U4401450  | 14,5 | 20     | 30 | 124 | 60  | 74  | 0,38                | SOGX 040204 | 423,30                                        | 14501 |
| KUB-P.4D.150.R.04-C20 | U4401500  | 15,0 | 20     | 30 | 124 | 60  | 74  | 0,38                | SOGX 040204 | 423,30                                        | 15001 |
| KUB-P.4D.155.R.04-C20 | U4401550  | 15,5 | 20     | 30 | 130 | 64  | 80  | 0,38                | SOGX 040204 | 423,30                                        | 15501 |
| KUB-P.4D.160.R.04-C20 | U4401600  | 16,0 | 20     | 30 | 130 | 64  | 80  | 0,38                | SOGX 040204 | 423,30                                        | 16001 |
| KUB-P.4D.165.R.05-C20 | U4401650  | 16,5 | 20     | 30 | 135 | 68  | 85  | 0,62                | SOGX 050204 | 423,30                                        | 16501 |
| KUB-P.4D.170.R.05-C20 | U4401700  | 17,0 | 20     | 30 | 135 | 68  | 85  | 0,62                | SOGX 050204 | 434,70                                        | 17001 |
| KUB-P.4D.175.R.05-C25 | U4411750  | 17,5 | 25     | 30 | 145 | 72  | 89  | 0,62                | SOGX 050204 | 434,70                                        | 17502 |
| KUB-P.4D.180.R.05-C25 | U4411800  | 18,0 | 25     | 30 | 145 | 72  | 89  | 0,62                | SOGX 050204 | 434,70                                        | 18002 |
| KUB-P.4D.185.R.06-C25 | U4411850  | 18,5 | 25     | 30 | 150 | 76  | 94  | 1,01                | SOGX 060206 | 434,70                                        | 18502 |
| KUB-P.4D.190.R.06-C25 | U4411900  | 19,0 | 25     | 30 | 150 | 76  | 94  | 1,01                | SOGX 060206 | 447,20                                        | 19002 |
| KUB-P.4D.195.R.06-C25 | U4411950  | 19,5 | 25     | 30 | 154 | 80  | 98  | 1,01                | SOGX 060206 | 447,20                                        | 19502 |
| KUB-P.4D.200.R.06-C25 | U4412000  | 20,0 | 25     | 30 | 154 | 80  | 98  | 1,01                | SOGX 060206 | 447,20                                        | 20002 |
| KUB-P.4D.205.R.07-C25 | U4412050  | 20,5 | 25     | 30 | 159 | 84  | 103 | 1,01                | SOGX 07T208 | 463,80                                        | 20502 |
| KUB-P.4D.210.R.07-C25 | U4412100  | 21,0 | 25     | 30 | 159 | 84  | 103 | 1,01                | SOGX 07T208 | 463,80                                        | 21002 |
| KUB-P.4D.215.R.07-C25 | U4412150  | 21,5 | 25     | 30 | 163 | 88  | 107 | 1,01                | SOGX 07T208 | 463,80                                        | 21502 |
| KUB-P.4D.220.R.07-C25 | U4412200  | 22,0 | 25     | 30 | 163 | 88  | 107 | 1,01                | SOGX 07T208 | 463,80                                        | 22002 |
| KUB-P.4D.225.R.07-C25 | U4412250  | 22,5 | 25     | 30 | 168 | 92  | 112 | 1,01                | SOGX 07T208 | 463,80                                        | 22502 |
| KUB-P.4D.230.R.07-C25 | U4412300  | 23,0 | 25     | 30 | 168 | 92  | 112 | 1,01                | SOGX 07T208 | 463,80                                        | 23002 |
| KUB-P.4D.235.R.08-C32 | U4422350  | 23,5 | 32     | 39 | 176 | 96  | 116 | 1,28                | SOGX 080308 | 481,50                                        | 23503 |
| KUB-P.4D.240.R.08-C32 | U4422400  | 24,0 | 32     | 39 | 176 | 96  | 116 | 1,28                | SOGX 080308 | 481,50                                        | 24003 |
| KUB-P.4D.245.R.08-C32 | U4422450  | 24,5 | 32     | 39 | 181 | 100 | 121 | 1,28                | SOGX 080308 | 481,50                                        | 24503 |
| KUB-P.4D.250.R.08-C32 | U4422500  | 25,0 | 32     | 39 | 181 | 100 | 121 | 1,28                | SOGX 080308 | 481,50                                        | 25003 |
| KUB-P.4D.255.R.08-C32 | U4422550  | 25,5 | 32     | 39 | 185 | 104 | 125 | 1,28                | SOGX 080308 | 481,50                                        | 25503 |
| KUB-P.4D.260.R.08-C32 | U4422600  | 26,0 | 32     | 39 | 185 | 104 | 125 | 1,28                | SOGX 080308 | 481,50                                        | 26003 |
| KUB-P.4D.265.R.09-C32 | U4422650  | 26,5 | 32     | 39 | 190 | 108 | 130 | 2,25                | SOGX 09T308 | 543,90                                        | 26503 |
| KUB-P.4D.270.R.09-C32 | U4422700  | 27,0 | 32     | 39 | 190 | 108 | 130 | 2,25                | SOGX 09T308 | 543,90                                        | 27003 |
| KUB-P.4D.275.R.09-C32 | U4422750  | 27,5 | 32     | 39 | 194 | 112 | 134 | 2,25                | SOGX 09T308 | 543,90                                        | 27503 |
| KUB-P.4D.280.R.09-C32 | U4422800  | 28,0 | 32     | 39 | 194 | 112 | 134 | 2,25                | SOGX 09T308 | 543,90                                        | 28003 |
| KUB-P.4D.285.R.09-C32 | U4422850  | 28,5 | 32     | 39 | 199 | 116 | 139 | 2,25                | SOGX 09T308 | 543,90                                        | 28503 |
| KUB-P.4D.290.R.09-C32 | U4422900  | 29,0 | 32     | 39 | 199 | 116 | 139 | 2,25                | SOGX 09T308 | 543,90                                        | 29003 |
| KUB-P.4D.295.R.09-C32 | U4422950  | 29,5 | 32     | 39 | 203 | 120 | 143 | 2,25                | SOGX 09T308 | 543,90                                        | 29503 |
| KUB-P.4D.300.R.09-C32 | U4423000  | 30,0 | 32     | 39 | 203 | 120 | 143 | 2,25                | SOGX 09T308 | 543,90                                        | 30003 |
| KUB-P.4D.310.R.10-C40 | U4433100  | 31,0 | 40     | 50 | 216 | 124 | 148 | 2,8                 | SOGX 100408 | 576,20                                        | 31004 |
| KUB-P.4D.320.R.10-C40 | U4433200  | 32,0 | 40     | 50 | 220 | 128 | 152 | 2,8                 | SOGX 100408 | 576,20                                        | 32004 |
| KUB-P.4D.330.R.10-C40 | U4433300  | 33,0 | 40     | 50 | 225 | 132 | 157 | 2,8                 | SOGX 100408 | 576,20                                        | 33004 |
| KUB-P.4D.340.R.11-C40 | U4433400  | 34,0 | 40     | 50 | 229 | 136 | 161 | 2,8                 | SOGX 110408 | 592,80                                        | 34004 |
| KUB-P.4D.350.R.11-C40 | U4433500  | 35,0 | 40     | 50 | 234 | 140 | 166 | 2,8                 | SOGX 110408 | 592,80                                        | 35004 |
| KUB-P.4D.360.R.11-C40 | U4433600  | 36,0 | 40     | 50 | 238 | 144 | 170 | 2,8                 | SOGX 110408 | 592,80                                        | 36004 |
| KUB-P.4D.370.R.11-C40 | U4433700  | 37,0 | 40     | 50 | 243 | 148 | 175 | 2,8                 | SOGX 110408 | 592,80                                        | 37004 |
| KUB-P.4D.380.R.12-C40 | U4433800  | 38,0 | 40     | 50 | 247 | 152 | 179 | 6,25                | SOGX 120408 | 611,50                                        | 38004 |
| KUB-P.4D.390.R.12-C40 | U4433900  | 39,0 | 40     | 50 | 252 | 156 | 184 | 6,25                | SOGX 120408 | 611,50                                        | 39004 |
| KUB-P.4D.400.R.12-C40 | U4434000  | 40,0 | 40     | 50 | 256 | 160 | 188 | 6,25                | SOGX 120408 | 611,50                                        | 40004 |
| KUB-P.4D.410.R.12-C40 | U4434100  | 41,0 | 40     | 50 | 261 | 164 | 193 | 6,25                | SOGX 120408 | 611,50                                        | 41004 |
| KUB-P.4D.420.R.12-C40 | U4434200  | 42,0 | 40     | 50 | 265 | 168 | 197 | 6,25                | SOGX 120408 | 611,50                                        | 42004 |



## KUB Pentron

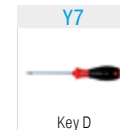
## Scope of supply:

Indexable Insert Drill incl. clamping screws



3

| Designation           | KOMET no. | DC   | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 874 ...<br>EUR |
|-----------------------|-----------|------|--------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|
|                       |           | mm   | mm     | mm | mm  | mm  | mm  |                     |             |                                               |
| KUB-P.4D.430.R.13-C40 | U4434300  | 43,0 | 40     | 50 | 270 | 172 | 202 | 6,25                | SOGX 130508 | 657,30 43004                                  |
| KUB-P.4D.440.R.13-C40 | U4434400  | 44,0 | 40     | 50 | 274 | 176 | 206 | 6,25                | SOGX 130508 | 657,30 44004                                  |
| KUB-P.4D.450.R.13-C40 | U4434500  | 45,0 | 40     | 50 | 279 | 180 | 211 | 6,25                | SOGX 130508 | 657,30 45004                                  |
| KUB-P.4D.460.R.13-C40 | U4434600  | 46,0 | 40     | 50 | 283 | 184 | 215 | 6,25                | SOGX 130508 | 657,30 46004                                  |

Spare parts  
DC

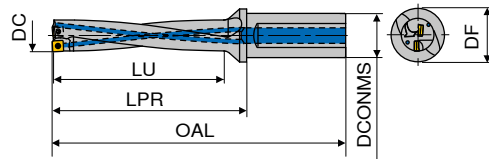
|           | Article no.<br>80 950 ...<br>EUR | Article no.<br>80 950 ...<br>EUR | Article no.<br>10 950 ...<br>EUR |
|-----------|----------------------------------|----------------------------------|----------------------------------|
| 14 - 16   | T05 - IP 6,06 057                |                                  | M1,8x3,8 - 05IP 2,36 10100       |
| 16,5 - 18 |                                  | T06 - IP 10,39 123               | M2,0x4,3 - 06IP 2,36 10000       |
| 18,5 - 23 |                                  | T06 - IP 10,39 123               | M2,2x5,5 - 06IP 2,36 10700       |
| 23,5 - 26 |                                  | T08 - IP 10,20 125               | M2,5x6,3 - 08IP 2,36 10800       |
| 26,5 - 30 |                                  | T08 - IP 10,20 125               | M3,0x7,6 - 08IP 2,36 10200       |
| 31 - 37   |                                  | T15 - IP 11,89 128               | M3,5x7,5 - 15IP 2,36 10300       |
| 38 - 46   |                                  | T20 - IP 12,54 129               | M4,5x10,0 - 20IP 2,36 10400      |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

## KUB Pentron

## Scope of supply:

Indexable Insert Drill incl. clamping screws

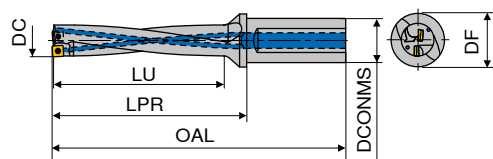


| Designation           | KOMET no. | DC   | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 875 ...<br>EUR |       |
|-----------------------|-----------|------|--------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                       |           |      |        |    |     |     |     |                     |             |                                               |       |
| KUB-P.5D.140.R.04-C20 | U4501400  | 14,0 | 20     | 30 | 133 | 70  | 83  | 0,38                | SOGX 040204 | 457,60                                        | 14001 |
| KUB-P.5D.145.R.04-C20 | U4501450  | 14,5 | 20     | 30 | 139 | 75  | 89  | 0,38                | SOGX 040204 | 457,60                                        | 14501 |
| KUB-P.5D.150.R.04-C20 | U4501500  | 15,0 | 20     | 30 | 139 | 75  | 89  | 0,38                | SOGX 040204 | 457,60                                        | 15001 |
| KUB-P.5D.155.R.04-C20 | U4501550  | 15,5 | 20     | 30 | 146 | 80  | 96  | 0,38                | SOGX 040204 | 457,60                                        | 15501 |
| KUB-P.5D.160.R.04-C20 | U4501600  | 16,0 | 20     | 30 | 146 | 80  | 96  | 0,38                | SOGX 040204 | 457,60                                        | 16001 |
| KUB-P.5D.165.R.05-C20 | U4501650  | 16,5 | 20     | 30 | 152 | 85  | 102 | 0,62                | SOGX 050204 | 457,60                                        | 16501 |
| KUB-P.5D.170.R.05-C20 | U4501700  | 17,0 | 20     | 30 | 152 | 85  | 102 | 0,62                | SOGX 050204 | 471,10                                        | 17001 |
| KUB-P.5D.175.R.05-C25 | U4511750  | 17,5 | 25     | 30 | 163 | 90  | 107 | 0,62                | SOGX 050204 | 471,10                                        | 17502 |
| KUB-P.5D.180.R.05-C25 | U4511800  | 18,0 | 25     | 30 | 163 | 90  | 107 | 0,62                | SOGX 050204 | 471,10                                        | 18002 |
| KUB-P.5D.185.R.06-C25 | U4511850  | 18,5 | 25     | 30 | 169 | 95  | 113 | 1,01                | SOGX 060206 | 471,10                                        | 18502 |
| KUB-P.5D.190.R.06-C25 | U4511900  | 19,0 | 25     | 30 | 169 | 95  | 113 | 1,01                | SOGX 060206 | 481,50                                        | 19002 |
| KUB-P.5D.195.R.06-C25 | U4511950  | 19,5 | 25     | 30 | 174 | 100 | 118 | 1,01                | SOGX 060206 | 481,50                                        | 19502 |
| KUB-P.5D.200.R.06-C25 | U4512000  | 20,0 | 25     | 30 | 174 | 100 | 118 | 1,01                | SOGX 060206 | 481,50                                        | 20002 |
| KUB-P.5D.205.R.07-C25 | U4512050  | 20,5 | 25     | 30 | 180 | 105 | 124 | 1,01                | SOGX 07T208 | 499,20                                        | 20502 |
| KUB-P.5D.210.R.07-C25 | U4512100  | 21,0 | 25     | 30 | 180 | 105 | 124 | 1,01                | SOGX 07T208 | 499,20                                        | 21002 |
| KUB-P.5D.215.R.07-C25 | U4512150  | 21,5 | 25     | 30 | 185 | 110 | 129 | 1,01                | SOGX 07T208 | 499,20                                        | 21502 |
| KUB-P.5D.220.R.07-C25 | U4512200  | 22,0 | 25     | 30 | 185 | 110 | 129 | 1,01                | SOGX 07T208 | 499,20                                        | 22002 |
| KUB-P.5D.225.R.07-C25 | U4512250  | 22,5 | 25     | 30 | 191 | 115 | 135 | 1,01                | SOGX 07T208 | 499,20                                        | 22502 |
| KUB-P.5D.230.R.07-C25 | U4512300  | 23,0 | 25     | 30 | 191 | 115 | 135 | 1,01                | SOGX 07T208 | 499,20                                        | 23002 |
| KUB-P.5D.235.R.08-C32 | U4522350  | 23,5 | 32     | 39 | 200 | 120 | 140 | 1,28                | SOGX 080308 | 515,80                                        | 23503 |
| KUB-P.5D.240.R.08-C32 | U4522400  | 24,0 | 32     | 39 | 200 | 120 | 140 | 1,28                | SOGX 080308 | 515,80                                        | 24003 |
| KUB-P.5D.245.R.08-C32 | U4522450  | 24,5 | 32     | 39 | 206 | 125 | 146 | 1,28                | SOGX 080308 | 515,80                                        | 24503 |
| KUB-P.5D.250.R.08-C32 | U4522500  | 25,0 | 32     | 39 | 206 | 125 | 146 | 1,28                | SOGX 080308 | 515,80                                        | 25003 |
| KUB-P.5D.255.R.08-C32 | U4522550  | 25,5 | 32     | 39 | 211 | 130 | 151 | 1,28                | SOGX 080308 | 515,80                                        | 25503 |
| KUB-P.5D.260.R.08-C32 | U4522600  | 26,0 | 32     | 39 | 211 | 130 | 151 | 1,28                | SOGX 080308 | 515,80                                        | 26003 |
| KUB-P.5D.265.R.09-C32 | U4522650  | 26,5 | 32     | 39 | 217 | 135 | 157 | 2,25                | SOGX 09T308 | 581,40                                        | 26503 |
| KUB-P.5D.270.R.09-C32 | U4522700  | 27,0 | 32     | 39 | 217 | 135 | 157 | 2,25                | SOGX 09T308 | 581,40                                        | 27003 |
| KUB-P.5D.275.R.09-C32 | U4522750  | 27,5 | 32     | 39 | 222 | 140 | 162 | 2,25                | SOGX 09T308 | 581,40                                        | 27503 |
| KUB-P.5D.280.R.09-C32 | U4522800  | 28,0 | 32     | 39 | 222 | 140 | 162 | 2,25                | SOGX 09T308 | 581,40                                        | 28003 |
| KUB-P.5D.285.R.09-C32 | U4522850  | 28,5 | 32     | 39 | 228 | 145 | 168 | 2,25                | SOGX 09T308 | 581,40                                        | 28503 |
| KUB-P.5D.290.R.09-C32 | U4522900  | 29,0 | 32     | 39 | 228 | 145 | 168 | 2,25                | SOGX 09T308 | 581,40                                        | 29003 |
| KUB-P.5D.295.R.09-C32 | U4522950  | 29,5 | 32     | 39 | 233 | 150 | 173 | 2,25                | SOGX 09T308 | 581,40                                        | 29503 |
| KUB-P.5D.300.R.09-C32 | U4523000  | 30,0 | 32     | 39 | 233 | 150 | 173 | 2,25                | SOGX 09T308 | 581,40                                        | 30003 |
| KUB-P.5D.310.R.10-C40 | U4533100  | 31,0 | 40     | 50 | 247 | 155 | 179 | 2,8                 | SOGX 100408 | 621,90                                        | 31004 |
| KUB-P.5D.320.R.10-C40 | U4533200  | 32,0 | 40     | 50 | 252 | 160 | 184 | 2,8                 | SOGX 100408 | 621,90                                        | 32004 |
| KUB-P.5D.330.R.10-C40 | U4533300  | 33,0 | 40     | 50 | 258 | 165 | 190 | 2,8                 | SOGX 100408 | 621,90                                        | 33004 |
| KUB-P.5D.340.R.11-C40 | U4533400  | 34,0 | 40     | 50 | 263 | 170 | 195 | 2,8                 | SOGX 110408 | 639,60                                        | 34004 |
| KUB-P.5D.350.R.11-C40 | U4533500  | 35,0 | 40     | 50 | 269 | 175 | 201 | 2,8                 | SOGX 110408 | 639,60                                        | 35004 |
| KUB-P.5D.360.R.11-C40 | U4533600  | 36,0 | 40     | 50 | 274 | 180 | 206 | 2,8                 | SOGX 110408 | 639,60                                        | 36004 |
| KUB-P.5D.370.R.11-C40 | U4533700  | 37,0 | 40     | 50 | 280 | 185 | 212 | 2,8                 | SOGX 110408 | 639,60                                        | 37004 |
| KUB-P.5D.380.R.12-C40 | U4533800  | 38,0 | 40     | 50 | 285 | 190 | 217 | 6,25                | SOGX 120408 | 657,30                                        | 38004 |
| KUB-P.5D.390.R.12-C40 | U4533900  | 39,0 | 40     | 50 | 291 | 195 | 223 | 6,25                | SOGX 120408 | 657,30                                        | 39004 |
| KUB-P.5D.400.R.12-C40 | U4534000  | 40,0 | 40     | 50 | 296 | 200 | 228 | 6,25                | SOGX 120408 | 657,30                                        | 40004 |
| KUB-P.5D.410.R.12-C40 | U4534100  | 41,0 | 40     | 50 | 302 | 205 | 234 | 6,25                | SOGX 120408 | 657,30                                        | 41004 |
| KUB-P.5D.420.R.12-C40 | U4534200  | 42,0 | 40     | 50 | 307 | 210 | 239 | 6,25                | SOGX 120408 | 657,30                                        | 42004 |

## KUB Pentron

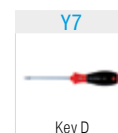
## Scope of supply:

Indexable Insert Drill incl. clamping screws



3

| Designation           | KOMET no. | DC   | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 875 ...<br>EUR |
|-----------------------|-----------|------|--------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|
|                       |           | mm   | mm     | mm | mm  | mm  | mm  |                     |             |                                               |
| KUB-P.5D.430.R.13-C40 | U4534300  | 43,0 | 40     | 50 | 313 | 215 | 245 | 6,25                | SOGX 130508 | 716,60 43004                                  |
| KUB-P.5D.440.R.13-C40 | U4534400  | 44,0 | 40     | 50 | 318 | 220 | 250 | 6,25                | SOGX 130508 | 716,60 44004                                  |
| KUB-P.5D.450.R.13-C40 | U4534500  | 45,0 | 40     | 50 | 324 | 225 | 256 | 6,25                | SOGX 130508 | 716,60 45004                                  |
| KUB-P.5D.460.R.13-C40 | U4534600  | 46,0 | 40     | 50 | 329 | 230 | 261 | 6,25                | SOGX 130508 | 716,60 46004                                  |

Spare parts  
DC

|           | Article no.<br>80 950 ...<br>EUR | Article no.<br>80 950 ...<br>EUR | Article no.<br>10 950 ...<br>EUR |
|-----------|----------------------------------|----------------------------------|----------------------------------|
| 14 - 16   | T05 - IP 6,06 057                |                                  | M1,8x3,8 - 05IP 2,36 10100       |
| 16,5 - 18 |                                  | T06 - IP 10,39 123               | M2,0x4,3 - 06IP 2,36 10000       |
| 18,5 - 23 |                                  | T06 - IP 10,39 123               | M2,2x5,5 - 06IP 2,36 10700       |
| 23,5 - 26 |                                  | T08 - IP 10,20 125               | M2,5x6,3 - 08IP 2,36 10800       |
| 26,5 - 30 |                                  | T08 - IP 10,20 125               | M3,0x7,6 - 08IP 2,36 10200       |
| 31 - 37   |                                  | T15 - IP 11,89 128               | M3,5x7,5 - 15IP 2,36 10300       |
| 38 - 46   |                                  | T20 - IP 12,54 129               | M4,5x10,0 - 20IP 2,36 10400      |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

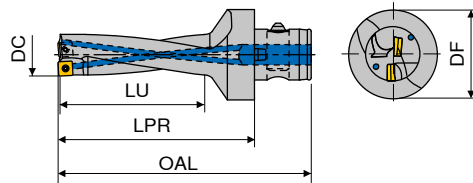
## KUB Pentron

## Scope of supply:

Indexable Insert Drill incl. clamping screws



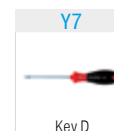
ABS



| Designation             | KOMET no. | DC   | DF | OAL | LU | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 873 ...<br>EUR |       |
|-------------------------|-----------|------|----|-----|----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                         |           | mm   | mm | mm  | mm | mm  |                     |             |                                               |       |
| KUB-P.3D.140.R.04-ABS50 | U4351400  | 14,0 | 50 | 100 | 42 | 69  | 0,38                | SOGX 040204 | 404,60                                        | 14095 |
| KUB-P.3D.145.R.04-ABS50 | U4351450  | 14,5 | 50 | 104 | 45 | 73  | 0,38                | SOGX 040204 | 404,60                                        | 14595 |
| KUB-P.3D.150.R.04-ABS50 | U4351500  | 15,0 | 50 | 104 | 45 | 73  | 0,38                | SOGX 040204 | 404,60                                        | 15095 |
| KUB-P.3D.155.R.04-ABS50 | U4351550  | 15,5 | 50 | 109 | 48 | 78  | 0,38                | SOGX 040204 | 404,60                                        | 15595 |
| KUB-P.3D.160.R.04-ABS50 | U4351600  | 16,0 | 50 | 109 | 48 | 78  | 0,38                | SOGX 040204 | 404,60                                        | 16095 |
| KUB-P.3D.165.R.05-ABS50 | U4351650  | 16,5 | 50 | 113 | 51 | 82  | 0,62                | SOGX 050204 | 404,60                                        | 16595 |
| KUB-P.3D.170.R.05-ABS50 | U4351700  | 17,0 | 50 | 113 | 51 | 82  | 0,62                | SOGX 050204 | 413,90                                        | 17095 |
| KUB-P.3D.175.R.05-ABS50 | U4351750  | 17,5 | 50 | 116 | 54 | 85  | 0,62                | SOGX 050204 | 413,90                                        | 17595 |
| KUB-P.3D.180.R.05-ABS50 | U4351800  | 18,0 | 50 | 116 | 54 | 85  | 0,62                | SOGX 050204 | 413,90                                        | 18095 |
| KUB-P.3D.185.R.06-ABS50 | U4351850  | 18,5 | 50 | 120 | 57 | 89  | 1,01                | SOGX 060206 | 413,90                                        | 18595 |
| KUB-P.3D.190.R.06-ABS50 | U4351900  | 19,0 | 50 | 120 | 57 | 89  | 1,01                | SOGX 060206 | 424,30                                        | 19095 |
| KUB-P.3D.195.R.06-ABS50 | U4351950  | 19,5 | 50 | 123 | 60 | 92  | 1,01                | SOGX 060206 | 424,30                                        | 19595 |
| KUB-P.3D.200.R.06-ABS50 | U4352000  | 20,0 | 50 | 123 | 60 | 92  | 1,01                | SOGX 060206 | 424,30                                        | 20095 |
| KUB-P.3D.205.R.07-ABS50 | U4352050  | 20,5 | 50 | 126 | 63 | 95  | 1,01                | SOGX 07T208 | 436,80                                        | 20595 |
| KUB-P.3D.210.R.07-ABS50 | U4352100  | 21,0 | 50 | 126 | 63 | 95  | 1,01                | SOGX 07T208 | 436,80                                        | 21095 |
| KUB-P.3D.215.R.07-ABS50 | U4352150  | 21,5 | 50 | 129 | 66 | 98  | 1,01                | SOGX 07T208 | 436,80                                        | 21595 |
| KUB-P.3D.220.R.07-ABS50 | U4352200  | 22,0 | 50 | 129 | 66 | 98  | 1,01                | SOGX 07T208 | 436,80                                        | 22095 |
| KUB-P.3D.225.R.07-ABS50 | U4352250  | 22,5 | 50 | 132 | 69 | 101 | 1,01                | SOGX 07T208 | 436,80                                        | 22595 |
| KUB-P.3D.230.R.07-ABS50 | U4352300  | 23,0 | 50 | 132 | 69 | 101 | 1,01                | SOGX 07T208 | 436,80                                        | 23095 |
| KUB-P.3D.235.R.08-ABS50 | U4352350  | 23,5 | 50 | 135 | 72 | 104 | 1,28                | SOGX 080308 | 450,30                                        | 23595 |
| KUB-P.3D.240.R.08-ABS50 | U4352400  | 24,0 | 50 | 135 | 72 | 104 | 1,28                | SOGX 080308 | 450,30                                        | 24095 |
| KUB-P.3D.245.R.08-ABS50 | U4352450  | 24,5 | 50 | 139 | 75 | 108 | 1,28                | SOGX 080308 | 450,30                                        | 24595 |
| KUB-P.3D.250.R.08-ABS50 | U4352500  | 25,0 | 50 | 139 | 75 | 108 | 1,28                | SOGX 080308 | 450,30                                        | 25095 |
| KUB-P.3D.255.R.08-ABS50 | U4352550  | 25,5 | 50 | 142 | 78 | 111 | 1,28                | SOGX 080308 | 450,30                                        | 25595 |
| KUB-P.3D.260.R.08-ABS50 | U4352600  | 26,0 | 50 | 142 | 78 | 111 | 1,28                | SOGX 080308 | 450,30                                        | 26095 |
| KUB-P.3D.265.R.09-ABS50 | U4352650  | 26,5 | 50 | 146 | 81 | 115 | 2,25                | SOGX 09T308 | 504,40                                        | 26595 |
| KUB-P.3D.270.R.09-ABS50 | U4352700  | 27,0 | 50 | 146 | 81 | 115 | 2,25                | SOGX 09T308 | 504,40                                        | 27095 |
| KUB-P.3D.275.R.09-ABS50 | U4352750  | 27,5 | 50 | 149 | 84 | 118 | 2,25                | SOGX 09T308 | 504,40                                        | 27595 |
| KUB-P.3D.280.R.09-ABS50 | U4352800  | 28,0 | 50 | 149 | 84 | 118 | 2,25                | SOGX 09T308 | 504,40                                        | 28095 |
| KUB-P.3D.285.R.09-ABS50 | U4352850  | 28,5 | 50 | 153 | 87 | 122 | 2,25                | SOGX 09T308 | 504,40                                        | 28595 |
| KUB-P.3D.290.R.09-ABS50 | U4352900  | 29,0 | 50 | 153 | 87 | 122 | 2,25                | SOGX 09T308 | 504,40                                        | 29095 |
| KUB-P.3D.295.R.09-ABS50 | U4352950  | 29,5 | 50 | 156 | 90 | 125 | 2,25                | SOGX 09T308 | 504,40                                        | 29595 |
| KUB-P.3D.300.R.09-ABS50 | U4353000  | 30,0 | 50 | 156 | 90 | 125 | 2,25                | SOGX 09T308 | 504,40                                        | 30095 |



Screwdriver



Key D



Clamping screw

Spare parts  
DC

| Spare parts |          |      | Article no. |          | Article no. |                 | Article no.     |       |       |
|-------------|----------|------|-------------|----------|-------------|-----------------|-----------------|-------|-------|
| DC          |          |      | 80 950 ...  |          | 80 950 ...  |                 | 10 950 ...      |       |       |
|             |          |      | EUR         |          | EUR         |                 | EUR             |       |       |
| 14 - 16     | T05 - IP | 6,06 | 057         |          |             | M1,8x3,8 - 05IP | 2,36            | 10100 |       |
| 16,5 - 18   |          |      |             | T06 - IP | 10,39       | 123             | M2,0x4,3 - 06IP | 2,36  | 10000 |
| 18,5 - 23   |          |      |             | T06 - IP | 10,39       | 123             | M2,2x5,5 - 06IP | 2,36  | 10700 |
| 23,5 - 26   |          |      |             | T08 - IP | 10,20       | 125             | M2,5x6,3 - 08IP | 2,36  | 10800 |
| 26,5 - 30   |          |      |             | T08 - IP | 10,20       | 125             | M3,0x7,6 - 08IP | 2,36  | 10200 |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

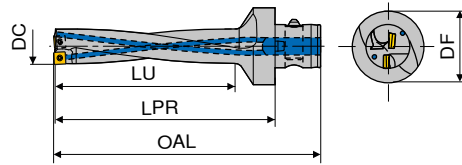
## KUB Pentron

## Scope of supply:

Indexable Insert Drill incl. clamping screws



ABS

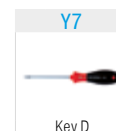


3

| Designation             | KOMET no. | DC   | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 874 ...<br>EUR |       |
|-------------------------|-----------|------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                         |           |      |    |     |     |     |                     |             |                                               |       |
| KUB-P.4D.140.R.04-ABS50 | U4451400  | 14,0 | 50 | 114 | 56  | 83  | 0,38                | SOGX 040204 | 481,50                                        | 14095 |
| KUB-P.4D.145.R.04-ABS50 | U4451450  | 14,5 | 50 | 119 | 60  | 88  | 0,38                | SOGX 040204 | 481,50                                        | 14595 |
| KUB-P.4D.150.R.04-ABS50 | U4451500  | 15,0 | 50 | 119 | 60  | 88  | 0,38                | SOGX 040204 | 481,50                                        | 15095 |
| KUB-P.4D.155.R.04-ABS50 | U4451550  | 15,5 | 50 | 125 | 64  | 94  | 0,38                | SOGX 040204 | 481,50                                        | 15595 |
| KUB-P.4D.160.R.04-ABS50 | U4451600  | 16,0 | 50 | 125 | 64  | 94  | 0,38                | SOGX 040204 | 481,50                                        | 16095 |
| KUB-P.4D.165.R.05-ABS50 | U4451650  | 16,5 | 50 | 130 | 68  | 99  | 0,62                | SOGX 050204 | 481,50                                        | 16595 |
| KUB-P.4D.170.R.05-ABS50 | U4451700  | 17,0 | 50 | 130 | 68  | 99  | 0,62                | SOGX 050204 | 495,00                                        | 17095 |
| KUB-P.4D.175.R.05-ABS50 | U4451750  | 17,5 | 50 | 134 | 72  | 103 | 0,62                | SOGX 050204 | 495,00                                        | 17595 |
| KUB-P.4D.180.R.05-ABS50 | U4451800  | 18,0 | 50 | 134 | 72  | 103 | 0,62                | SOGX 050204 | 495,00                                        | 18095 |
| KUB-P.4D.185.R.06-ABS50 | U4451850  | 18,5 | 50 | 139 | 76  | 108 | 1,01                | SOGX 060206 | 495,00                                        | 18595 |
| KUB-P.4D.190.R.06-ABS50 | U4451900  | 19,0 | 50 | 139 | 76  | 108 | 1,01                | SOGX 060206 | 504,40                                        | 19095 |
| KUB-P.4D.195.R.06-ABS50 | U4451950  | 19,5 | 50 | 143 | 80  | 112 | 1,01                | SOGX 060206 | 504,40                                        | 19595 |
| KUB-P.4D.200.R.06-ABS50 | U4452000  | 20,0 | 50 | 143 | 80  | 112 | 1,01                | SOGX 060206 | 504,40                                        | 20095 |
| KUB-P.4D.205.R.07-ABS50 | U4452050  | 20,5 | 50 | 147 | 84  | 116 | 1,01                | SOGX 07T208 | 524,20                                        | 20595 |
| KUB-P.4D.210.R.07-ABS50 | U4452100  | 21,0 | 50 | 147 | 84  | 116 | 1,01                | SOGX 07T208 | 524,20                                        | 21095 |
| KUB-P.4D.215.R.07-ABS50 | U4452150  | 21,5 | 50 | 151 | 88  | 120 | 1,01                | SOGX 07T208 | 524,20                                        | 21595 |
| KUB-P.4D.220.R.07-ABS50 | U4452200  | 22,0 | 50 | 151 | 88  | 120 | 1,01                | SOGX 07T208 | 524,20                                        | 22095 |
| KUB-P.4D.225.R.07-ABS50 | U4452250  | 22,5 | 50 | 155 | 92  | 124 | 1,01                | SOGX 07T208 | 524,20                                        | 22595 |
| KUB-P.4D.230.R.07-ABS50 | U4452300  | 23,0 | 50 | 155 | 92  | 124 | 1,01                | SOGX 07T208 | 524,20                                        | 23095 |
| KUB-P.4D.235.R.08-ABS50 | U4452350  | 23,5 | 50 | 159 | 96  | 128 | 1,28                | SOGX 080308 | 539,80                                        | 23595 |
| KUB-P.4D.240.R.08-ABS50 | U4452400  | 24,0 | 50 | 159 | 96  | 128 | 1,28                | SOGX 080308 | 539,80                                        | 24095 |
| KUB-P.4D.245.R.08-ABS50 | U4452450  | 24,5 | 50 | 164 | 100 | 133 | 1,28                | SOGX 080308 | 539,80                                        | 24595 |
| KUB-P.4D.250.R.08-ABS50 | U4452500  | 25,0 | 50 | 164 | 100 | 133 | 1,28                | SOGX 080308 | 539,80                                        | 25095 |
| KUB-P.4D.255.R.08-ABS50 | U4452550  | 25,5 | 50 | 168 | 104 | 137 | 1,28                | SOGX 080308 | 539,80                                        | 25595 |
| KUB-P.4D.260.R.08-ABS50 | U4452600  | 26,0 | 50 | 168 | 104 | 137 | 1,28                | SOGX 080308 | 539,80                                        | 26095 |
| KUB-P.4D.265.R.09-ABS50 | U4452650  | 26,5 | 50 | 173 | 108 | 142 | 2,25                | SOGX 09T308 | 605,30                                        | 26595 |
| KUB-P.4D.270.R.09-ABS50 | U4452700  | 27,0 | 50 | 173 | 108 | 142 | 2,25                | SOGX 09T308 | 605,30                                        | 27095 |
| KUB-P.4D.275.R.09-ABS50 | U4452750  | 27,5 | 50 | 177 | 112 | 146 | 2,25                | SOGX 09T308 | 605,30                                        | 27595 |
| KUB-P.4D.280.R.09-ABS50 | U4452800  | 28,0 | 50 | 177 | 112 | 146 | 2,25                | SOGX 09T308 | 605,30                                        | 28095 |
| KUB-P.4D.285.R.09-ABS50 | U4452850  | 28,5 | 50 | 182 | 116 | 151 | 2,25                | SOGX 09T308 | 605,30                                        | 28595 |
| KUB-P.4D.290.R.09-ABS50 | U4452900  | 29,0 | 50 | 182 | 116 | 151 | 2,25                | SOGX 09T308 | 605,30                                        | 29095 |
| KUB-P.4D.295.R.09-ABS50 | U4452950  | 29,5 | 50 | 186 | 120 | 155 | 2,25                | SOGX 09T308 | 605,30                                        | 29595 |
| KUB-P.4D.300.R.09-ABS50 | U4453000  | 30,0 | 50 | 186 | 120 | 155 | 2,25                | SOGX 09T308 | 605,30                                        | 30095 |



Screwdriver



Key D



Clamping screw

## Spare parts

| DC        | Article no.<br>80 950 ...<br>EUR | Article no.<br>80 950 ...<br>EUR | Article no.<br>10 950 ...<br>EUR |
|-----------|----------------------------------|----------------------------------|----------------------------------|
|           |                                  |                                  |                                  |
| 14 - 16   | T05 - IP 6,06 057                |                                  | M1,8x3,8 - 05IP 2,36 10100       |
| 16,5 - 18 |                                  | T06 - IP 10,39 123               | M2,0x4,3 - 06IP 2,36 10000       |
| 18,5 - 23 |                                  | T06 - IP 10,39 123               | M2,2x5,5 - 06IP 2,36 10700       |
| 23,5 - 26 |                                  | T08 - IP 10,20 125               | M2,5x6,3 - 08IP 2,36 10800       |
| 26,5 - 30 |                                  | T08 - IP 10,20 125               | M3,0x7,6 - 08IP 2,36 10200       |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

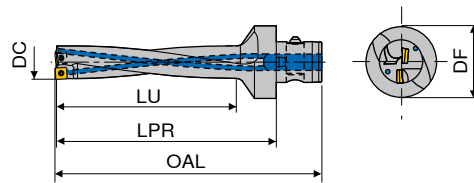
## KUB Pentron

## Scope of supply:

Indexable Insert Drill incl. clamping screws



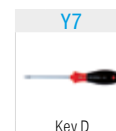
ABS



| Designation             | KOMET no. | DC   | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 875 ...<br>EUR |       |
|-------------------------|-----------|------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                         |           |      |    |     |     |     |                     |             |                                               |       |
| KUB-P.5D.140.R.04-ABS50 | U4551400  | 14,0 | 50 | 128 | 70  | 97  | 0,38                | SOGX 040204 | 515,80                                        | 14095 |
| KUB-P.5D.145.R.04-ABS50 | U4551450  | 14,5 | 50 | 134 | 75  | 103 | 0,38                | SOGX 040204 | 515,80                                        | 14595 |
| KUB-P.5D.150.R.04-ABS50 | U4551500  | 15,0 | 50 | 134 | 75  | 103 | 0,38                | SOGX 040204 | 515,80                                        | 15095 |
| KUB-P.5D.155.R.04-ABS50 | U4551550  | 15,5 | 50 | 141 | 80  | 110 | 0,38                | SOGX 040204 | 515,80                                        | 15595 |
| KUB-P.5D.160.R.04-ABS50 | U4551600  | 16,0 | 50 | 141 | 80  | 110 | 0,38                | SOGX 040204 | 515,80                                        | 16095 |
| KUB-P.5D.165.R.05-ABS50 | U4551650  | 16,5 | 50 | 147 | 85  | 116 | 0,62                | SOGX 050204 | 515,80                                        | 16595 |
| KUB-P.5D.170.R.05-ABS50 | U4551700  | 17,0 | 50 | 147 | 85  | 116 | 0,62                | SOGX 050204 | 529,40                                        | 17095 |
| KUB-P.5D.175.R.05-ABS50 | U4551750  | 17,5 | 50 | 152 | 90  | 121 | 0,62                | SOGX 050204 | 529,40                                        | 17595 |
| KUB-P.5D.180.R.05-ABS50 | U4551800  | 18,0 | 50 | 152 | 90  | 121 | 0,62                | SOGX 050204 | 529,40                                        | 18095 |
| KUB-P.5D.185.R.06-ABS50 | U4551850  | 18,5 | 50 | 158 | 95  | 127 | 1,01                | SOGX 060206 | 529,40                                        | 18595 |
| KUB-P.5D.190.R.06-ABS50 | U4551900  | 19,0 | 50 | 158 | 95  | 127 | 1,01                | SOGX 060206 | 539,80                                        | 19095 |
| KUB-P.5D.195.R.06-ABS50 | U4551950  | 19,5 | 50 | 163 | 100 | 132 | 1,01                | SOGX 060206 | 539,80                                        | 19595 |
| KUB-P.5D.200.R.06-ABS50 | U4552000  | 20,0 | 50 | 163 | 100 | 132 | 1,01                | SOGX 060206 | 539,80                                        | 20095 |
| KUB-P.5D.205.R.07-ABS50 | U4552050  | 20,5 | 50 | 168 | 105 | 137 | 1,01                | SOGX 07T208 | 558,50                                        | 20595 |
| KUB-P.5D.210.R.07-ABS50 | U4552100  | 21,0 | 50 | 168 | 105 | 137 | 1,01                | SOGX 07T208 | 558,50                                        | 21095 |
| KUB-P.5D.215.R.07-ABS50 | U4552150  | 21,5 | 50 | 173 | 110 | 142 | 1,01                | SOGX 07T208 | 558,50                                        | 21595 |
| KUB-P.5D.220.R.07-ABS50 | U4552200  | 22,0 | 50 | 173 | 110 | 142 | 1,01                | SOGX 07T208 | 558,50                                        | 22095 |
| KUB-P.5D.225.R.07-ABS50 | U4552250  | 22,5 | 50 | 178 | 115 | 147 | 1,01                | SOGX 07T208 | 558,50                                        | 22595 |
| KUB-P.5D.230.R.07-ABS50 | U4552300  | 23,0 | 50 | 178 | 115 | 147 | 1,01                | SOGX 07T208 | 558,50                                        | 23095 |
| KUB-P.5D.235.R.08-ABS50 | U4552350  | 23,5 | 50 | 183 | 120 | 152 | 1,28                | SOGX 080308 | 576,20                                        | 23595 |
| KUB-P.5D.240.R.08-ABS50 | U4552400  | 24,0 | 50 | 183 | 120 | 152 | 1,28                | SOGX 080308 | 576,20                                        | 24095 |
| KUB-P.5D.245.R.08-ABS50 | U4552450  | 24,5 | 50 | 189 | 125 | 158 | 1,28                | SOGX 080308 | 576,20                                        | 24595 |
| KUB-P.5D.250.R.08-ABS50 | U4552500  | 25,0 | 50 | 189 | 125 | 158 | 1,28                | SOGX 080308 | 576,20                                        | 25095 |
| KUB-P.5D.255.R.08-ABS50 | U4552550  | 25,5 | 50 | 194 | 130 | 163 | 1,28                | SOGX 080308 | 576,20                                        | 25595 |
| KUB-P.5D.260.R.08-ABS50 | U4552600  | 26,0 | 50 | 194 | 130 | 163 | 1,28                | SOGX 080308 | 576,20                                        | 26095 |
| KUB-P.5D.265.R.09-ABS50 | U4552650  | 26,5 | 50 | 200 | 135 | 169 | 2,25                | SOGX 09T308 | 639,60                                        | 26595 |
| KUB-P.5D.270.R.09-ABS50 | U4552700  | 27,0 | 50 | 200 | 135 | 169 | 2,25                | SOGX 09T308 | 639,60                                        | 27095 |
| KUB-P.5D.275.R.09-ABS50 | U4552750  | 27,5 | 50 | 205 | 140 | 174 | 2,25                | SOGX 09T308 | 639,60                                        | 27595 |
| KUB-P.5D.280.R.09-ABS50 | U4552800  | 28,0 | 50 | 205 | 140 | 174 | 2,25                | SOGX 09T308 | 639,60                                        | 28095 |
| KUB-P.5D.285.R.09-ABS50 | U4552850  | 28,5 | 50 | 211 | 145 | 180 | 2,25                | SOGX 09T308 | 639,60                                        | 28595 |
| KUB-P.5D.290.R.09-ABS50 | U4552900  | 29,0 | 50 | 211 | 145 | 180 | 2,25                | SOGX 09T308 | 639,60                                        | 29095 |
| KUB-P.5D.295.R.09-ABS50 | U4552950  | 29,5 | 50 | 216 | 150 | 185 | 2,25                | SOGX 09T308 | 639,60                                        | 29595 |
| KUB-P.5D.300.R.09-ABS50 | U4553000  | 30,0 | 50 | 216 | 150 | 185 | 2,25                | SOGX 09T308 | 639,60                                        | 30095 |



Screwdriver



Key D



Clamping screw

Spare parts  
DC

| Article no.<br>80 950 ...<br>EUR |          | Article no.<br>80 950 ...<br>EUR |     | Article no.<br>10 950 ...<br>EUR |            |
|----------------------------------|----------|----------------------------------|-----|----------------------------------|------------|
| 14 - 16                          | T05 - IP | 6,06                             | 057 | M1,8x3,8 - 05IP                  | 2,36 10100 |
| 16,5 - 18                        |          |                                  |     | M2,0x4,3 - 06IP                  | 2,36 10000 |
| 18,5 - 23                        |          |                                  |     | M2,2x5,5 - 06IP                  | 2,36 10700 |
| 23,5 - 26                        |          |                                  |     | M2,5x6,3 - 08IP                  | 2,36 10800 |
| 26,5 - 30                        |          |                                  |     | M3,0x7,6 - 08IP                  | 2,36 10200 |

**i** Suitable adapters can be found in → Chapter 16 Adapters.



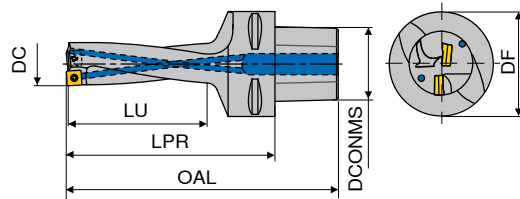
## KUB Pentron

## Scope of supply:

Indexable Insert Drill incl. clamping screws



PSC



3

| Designation             | KOMET no. | DC   | DCONMS | DF | OAL | LU | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 873 ...<br>EUR |       |
|-------------------------|-----------|------|--------|----|-----|----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                         |           | mm   | mm     | mm | mm  | mm | mm  |                     |             |                                               |       |
| KUB-P.3D.140.R.04-PSC50 | U4061400  | 14,0 | 24,25  | 50 | 103 | 42 | 73  | 0,38                | SOGX 040204 | 439,90                                        | 14055 |
| KUB-P.3D.145.R.04-PSC50 | U4061450  | 14,5 | 24,25  | 50 | 107 | 45 | 77  | 0,38                | SOGX 040204 | 439,90                                        | 14555 |
| KUB-P.3D.150.R.04-PSC50 | U4061500  | 15,0 | 24,25  | 50 | 107 | 45 | 77  | 0,38                | SOGX 040204 | 439,90                                        | 15055 |
| KUB-P.3D.155.R.04-PSC50 | U4061550  | 15,5 | 24,25  | 50 | 112 | 48 | 82  | 0,38                | SOGX 040204 | 439,90                                        | 15555 |
| KUB-P.3D.160.R.04-PSC50 | U4061600  | 16,0 | 24,25  | 50 | 112 | 48 | 82  | 0,38                | SOGX 040204 | 439,90                                        | 16055 |
| KUB-P.3D.160.R.04-PSC63 | U4071600  | 16,0 | 30,30  | 63 | 124 | 48 | 86  | 0,38                | SOGX 040204 | 439,90                                        | 16056 |
|                         |           |      |        |    |     |    |     |                     |             |                                               |       |
| KUB-P.3D.165.R.05-PSC50 | U4061650  | 16,5 | 24,25  | 50 | 116 | 51 | 86  | 0,62                | SOGX 050204 | 450,30                                        | 16555 |
| KUB-P.3D.170.R.05-PSC50 | U4061700  | 17,0 | 24,25  | 50 | 116 | 51 | 86  | 0,62                | SOGX 050204 | 450,30                                        | 17055 |
| KUB-P.3D.175.R.05-PSC50 | U4061750  | 17,5 | 24,25  | 50 | 119 | 54 | 89  | 0,62                | SOGX 050204 | 450,30                                        | 17555 |
| KUB-P.3D.180.R.05-PSC50 | U4061800  | 18,0 | 24,25  | 50 | 119 | 54 | 89  | 0,62                | SOGX 050204 | 450,30                                        | 18055 |
| KUB-P.3D.165.R.05-PSC63 | U4071650  | 16,5 | 30,30  | 63 | 128 | 51 | 90  | 0,62                | SOGX 050204 | 450,30                                        | 16556 |
| KUB-P.3D.170.R.05-PSC63 | U4071700  | 17,0 | 30,30  | 63 | 128 | 51 | 90  | 0,62                | SOGX 050204 | 450,30                                        | 17056 |
| KUB-P.3D.175.R.05-PSC63 | U4071750  | 17,5 | 30,30  | 63 | 131 | 54 | 93  | 0,62                | SOGX 050204 | 450,30                                        | 17556 |
| KUB-P.3D.180.R.05-PSC63 | U4071800  | 18,0 | 30,30  | 63 | 131 | 54 | 93  | 0,62                | SOGX 050204 | 450,30                                        | 18056 |
|                         |           |      |        |    |     |    |     |                     |             |                                               |       |
| KUB-P.3D.185.R.06-PSC50 | U4061850  | 18,5 | 24,25  | 50 | 123 | 57 | 93  | 1,01                | SOGX 060206 | 450,30                                        | 18555 |
| KUB-P.3D.190.R.06-PSC50 | U4061900  | 19,0 | 24,25  | 50 | 123 | 57 | 93  | 1,01                | SOGX 060206 | 461,80                                        | 19055 |
| KUB-P.3D.195.R.06-PSC50 | U4061950  | 19,5 | 24,25  | 50 | 126 | 60 | 96  | 1,01                | SOGX 060206 | 461,80                                        | 19555 |
| KUB-P.3D.200.R.06-PSC50 | U4062000  | 20,0 | 24,25  | 50 | 126 | 60 | 96  | 1,01                | SOGX 060206 | 461,80                                        | 20055 |
| KUB-P.3D.185.R.06-PSC63 | U4071850  | 18,5 | 30,30  | 63 | 135 | 57 | 97  | 1,01                | SOGX 060206 | 450,30                                        | 18556 |
| KUB-P.3D.190.R.06-PSC63 | U4071900  | 19,0 | 30,30  | 63 | 135 | 57 | 97  | 1,01                | SOGX 060206 | 461,80                                        | 19056 |
| KUB-P.3D.195.R.06-PSC63 | U4071950  | 19,5 | 30,30  | 63 | 138 | 60 | 100 | 1,01                | SOGX 060206 | 461,80                                        | 19556 |
| KUB-P.3D.200.R.06-PSC63 | U4072000  | 20,0 | 30,30  | 63 | 138 | 60 | 100 | 1,01                | SOGX 060206 | 461,80                                        | 20056 |
|                         |           |      |        |    |     |    |     |                     |             |                                               |       |
| KUB-P.3D.205.R.07-PSC50 | U4062050  | 20,5 | 24,25  | 50 | 130 | 63 | 100 | 1,01                | SOGX 07T208 | 475,30                                        | 20555 |
| KUB-P.3D.210.R.07-PSC50 | U4062100  | 21,0 | 24,25  | 50 | 130 | 63 | 100 | 1,01                | SOGX 07T208 | 475,30                                        | 21055 |
| KUB-P.3D.215.R.07-PSC50 | U4062150  | 21,5 | 24,25  | 50 | 133 | 66 | 103 | 1,01                | SOGX 07T208 | 475,30                                        | 21555 |
| KUB-P.3D.220.R.07-PSC50 | U4062200  | 22,0 | 24,25  | 50 | 133 | 66 | 103 | 1,01                | SOGX 07T208 | 475,30                                        | 22055 |
| KUB-P.3D.225.R.07-PSC50 | U4062250  | 22,5 | 24,25  | 50 | 137 | 69 | 107 | 1,01                | SOGX 07T208 | 475,30                                        | 22555 |
| KUB-P.3D.230.R.07-PSC50 | U4062300  | 23,0 | 24,25  | 50 | 137 | 69 | 107 | 1,01                | SOGX 07T208 | 475,30                                        | 23055 |
| KUB-P.3D.205.R.07-PSC63 | U4072050  | 20,5 | 30,30  | 63 | 142 | 63 | 104 | 1,01                | SOGX 07T208 | 475,30                                        | 20556 |
| KUB-P.3D.210.R.07-PSC63 | U4072100  | 21,0 | 30,30  | 63 | 142 | 63 | 104 | 1,01                | SOGX 07T208 | 475,30                                        | 21056 |
| KUB-P.3D.215.R.07-PSC63 | U4072150  | 21,5 | 30,30  | 63 | 145 | 66 | 107 | 1,01                | SOGX 07T208 | 475,30                                        | 21556 |
| KUB-P.3D.220.R.07-PSC63 | U4072200  | 22,0 | 30,30  | 63 | 145 | 66 | 107 | 1,01                | SOGX 07T208 | 475,30                                        | 22056 |
| KUB-P.3D.225.R.07-PSC63 | U4072250  | 22,5 | 30,30  | 63 | 149 | 69 | 111 | 1,01                | SOGX 07T208 | 475,30                                        | 22556 |
| KUB-P.3D.230.R.07-PSC63 | U4072300  | 23,0 | 30,30  | 63 | 149 | 69 | 111 | 1,01                | SOGX 07T208 | 475,30                                        | 23056 |
|                         |           |      |        |    |     |    |     |                     |             |                                               |       |
| KUB-P.3D.235.R.08-PSC50 | U4062350  | 23,5 | 24,25  | 50 | 140 | 72 | 110 | 1,28                | SOGX 080308 | 489,80                                        | 23555 |
| KUB-P.3D.240.R.08-PSC50 | U4062400  | 24,0 | 24,25  | 50 | 140 | 72 | 110 | 1,28                | SOGX 080308 | 489,80                                        | 24055 |
| KUB-P.3D.245.R.08-PSC50 | U4062450  | 24,5 | 24,25  | 50 | 144 | 75 | 114 | 1,28                | SOGX 080308 | 489,80                                        | 24555 |
| KUB-P.3D.250.R.08-PSC50 | U4062500  | 25,0 | 24,25  | 50 | 144 | 75 | 114 | 1,28                | SOGX 080308 | 489,80                                        | 25055 |
| KUB-P.3D.255.R.08-PSC50 | U4062550  | 25,5 | 24,25  | 50 | 147 | 78 | 117 | 1,28                | SOGX 080308 | 489,80                                        | 25555 |
| KUB-P.3D.260.R.08-PSC50 | U4062600  | 26,0 | 24,25  | 50 | 147 | 78 | 117 | 1,28                | SOGX 080308 | 489,80                                        | 26055 |
| KUB-P.3D.235.R.08-PSC63 | U4072350  | 23,5 | 30,30  | 63 | 152 | 72 | 114 | 1,28                | SOGX 080308 | 489,80                                        | 23556 |
| KUB-P.3D.240.R.08-PSC63 | U4072400  | 24,0 | 30,30  | 63 | 152 | 72 | 114 | 1,28                | SOGX 080308 | 489,80                                        | 24056 |
| KUB-P.3D.245.R.08-PSC63 | U4072450  | 24,5 | 30,30  | 63 | 156 | 75 | 118 | 1,28                | SOGX 080308 | 489,80                                        | 24556 |
| KUB-P.3D.250.R.08-PSC63 | U4072500  | 25,0 | 30,30  | 63 | 156 | 75 | 118 | 1,28                | SOGX 080308 | 489,80                                        | 25056 |
| KUB-P.3D.255.R.08-PSC63 | U4072550  | 25,5 | 30,30  | 63 | 159 | 78 | 121 | 1,28                | SOGX 080308 | 489,80                                        | 25556 |
| KUB-P.3D.260.R.08-PSC63 | U4072600  | 26,0 | 30,30  | 63 | 159 | 78 | 121 | 1,28                | SOGX 080308 | 489,80                                        | 26056 |
|                         |           |      |        |    |     |    |     |                     |             |                                               |       |
| KUB-P.3D.265.R.09-PSC50 | U4062650  | 26,5 | 24,25  | 50 | 151 | 81 | 121 | 2,25                | SOGX 09T308 | 548,10                                        | 26555 |
| KUB-P.3D.270.R.09-PSC50 | U4062700  | 27,0 | 24,25  | 50 | 151 | 81 | 121 | 2,25                | SOGX 09T308 | 548,10                                        | 27055 |
| KUB-P.3D.275.R.09-PSC50 | U4062750  | 27,5 | 24,25  | 50 | 154 | 84 | 124 | 2,25                | SOGX 09T308 | 548,10                                        | 27555 |



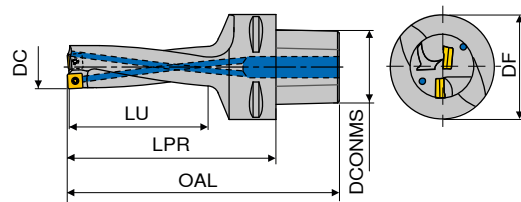
## KUB Pentron

## Scope of supply:

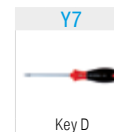
Indexable Insert Drill incl. clamping screws



PSC



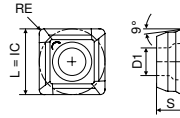
| Designation             | KOMET no. | DC   | DCONMS | DF | OAL | LU | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 873 ...<br>EUR |
|-------------------------|-----------|------|--------|----|-----|----|-----|---------------------|-------------|-----------------------------------------------|
|                         |           | mm   | mm     | mm | mm  | mm | mm  |                     |             |                                               |
| KUB-P.3D.280.R.09-PSC50 | U4062800  | 28,0 | 24,25  | 50 | 154 | 84 | 124 | 2,25                | SOGX 09T308 | 548,10 28055                                  |
| KUB-P.3D.285.R.09-PSC50 | U4062850  | 28,5 | 24,25  | 50 | 158 | 87 | 128 | 2,25                | SOGX 09T308 | 548,10 28555                                  |
| KUB-P.3D.290.R.09-PSC50 | U4062900  | 29,0 | 24,25  | 50 | 158 | 87 | 128 | 2,25                | SOGX 09T308 | 548,10 29055                                  |
| KUB-P.3D.295.R.09-PSC50 | U4062950  | 29,5 | 24,25  | 50 | 161 | 90 | 131 | 2,25                | SOGX 09T308 | 548,10 29555                                  |
| KUB-P.3D.300.R.09-PSC50 | U4063000  | 30,0 | 24,25  | 50 | 161 | 90 | 131 | 2,25                | SOGX 09T308 | 548,10 30055                                  |
| KUB-P.3D.265.R.09-PSC63 | U4072650  | 26,5 | 30,30  | 63 | 163 | 81 | 125 | 2,25                | SOGX 09T308 | 548,10 26556                                  |
| KUB-P.3D.270.R.09-PSC63 | U4072700  | 27,0 | 30,30  | 63 | 163 | 81 | 125 | 2,25                | SOGX 09T308 | 548,10 27056                                  |
| KUB-P.3D.275.R.09-PSC63 | U4072750  | 27,5 | 30,30  | 63 | 166 | 84 | 128 | 2,25                | SOGX 09T308 | 548,10 27556                                  |
| KUB-P.3D.280.R.09-PSC63 | U4072800  | 28,0 | 30,30  | 63 | 166 | 84 | 128 | 2,25                | SOGX 09T308 | 548,10 28056                                  |
| KUB-P.3D.285.R.09-PSC63 | U4072850  | 28,5 | 30,30  | 63 | 170 | 87 | 132 | 2,25                | SOGX 09T308 | 548,10 28556                                  |
| KUB-P.3D.290.R.09-PSC63 | U4072900  | 29,0 | 30,30  | 63 | 170 | 87 | 132 | 2,25                | SOGX 09T308 | 548,10 29056                                  |
| KUB-P.3D.295.R.09-PSC63 | U4072950  | 29,5 | 30,30  | 63 | 173 | 90 | 135 | 2,25                | SOGX 09T308 | 548,10 29556                                  |
| KUB-P.3D.300.R.09-PSC63 | U4073000  | 30,0 | 30,30  | 63 | 173 | 90 | 135 | 2,25                | SOGX 09T308 | 548,10 30056                                  |

Spare parts  
DC

|           |          | Article no.<br>80 950 ...<br>EUR | Article no.<br>80 950 ...<br>EUR | Article no.<br>10 950 ...<br>EUR |
|-----------|----------|----------------------------------|----------------------------------|----------------------------------|
| 14 - 16   | T05 - IP | 6,06                             | 057                              | M1,8x3,8 - 05IP 2,36 10100       |
| 16,5 - 18 |          |                                  |                                  | M2,0x4,3 - 06IP 2,36 10000       |
| 18,5 - 23 |          |                                  |                                  | M2,2x5,5 - 06IP 2,36 10700       |
| 23,5 - 26 |          |                                  |                                  | M2,5x6,3 - 08IP 2,36 10800       |
| 26,5 - 30 |          |                                  |                                  | M3,0x7,6 - 08IP 2,36 10200       |

## SOGX

| Designation | L    | IC   | D1   | S    |
|-------------|------|------|------|------|
|             | mm   | mm   | mm   | mm   |
| SOGX 0402.. | 4,8  | 4,8  | 2,05 | 2,20 |
| SOGX 0502.. | 5,5  | 5,5  | 2,30 | 2,40 |
| SOGX 0602.. | 6,2  | 6,2  | 2,60 | 2,75 |
| SOGX 07T2.. | 7,1  | 7,1  | 2,60 | 2,97 |
| SOGX 0803.. | 8,0  | 8,0  | 2,85 | 3,40 |
| SOGX 09T3.. | 8,9  | 8,9  | 3,40 | 3,90 |
| SOGX 1004.. | 9,8  | 9,8  | 4,10 | 4,20 |
| SOGX 1104.. | 10,9 | 10,9 | 4,10 | 4,50 |
| SOGX 1204.. | 12,0 | 12,0 | 5,20 | 4,80 |
| SOGX 1305.. | 13,2 | 13,2 | 5,20 | 5,20 |



3

## SOGX

-01  
BK8425-01  
BK6115

| SOGX        |       | SOGX        |       |
|-------------|-------|-------------|-------|
| NEW         | 1A/3# | NEW         | 1A/3# |
| Article no. |       | Article no. |       |
| 10 820 ...  |       | 10 820 ...  |       |
| EUR         |       | EUR         |       |
|             |       | 16,12       | 40401 |
|             | 30401 | 16,22       | 40501 |
|             | 30501 | 16,33       | 40601 |
|             | 30601 | 16,43       | 40701 |
|             | 30701 | 16,54       | 40801 |
|             | 30801 | 17,16       | 40901 |
|             | 30901 | 17,68       | 41001 |
|             | 31001 | 18,20       | 41101 |
|             | 31101 | 19,14       | 41201 |
|             | 31201 | 22,26       | 41301 |
|             | 31301 |             |       |

| ISO                   | KOMET no.       | RE  |   |   |
|-----------------------|-----------------|-----|---|---|
|                       |                 | mm  |   |   |
| 040204                | W8010010.046115 | 0,4 |   |   |
| 040204                | W8010010.048425 | 0,4 |   |   |
| 050204                | W8012010.046115 | 0,4 |   |   |
| 050204                | W8012010.048425 | 0,4 |   |   |
| 060206                | W8018010.066115 | 0,6 |   |   |
| 060206                | W8018010.068425 | 0,6 |   |   |
| 07T208                | W8020010.086115 | 0,8 |   |   |
| 07T208                | W8020010.088425 | 0,8 |   |   |
| 080308                | W8024010.086115 | 0,8 |   |   |
| 080308                | W8024010.088425 | 0,8 |   |   |
| 09T308                | W8028010.086115 | 0,8 |   |   |
| 09T308                | W8028010.088425 | 0,8 |   |   |
| 100408                | W8032010.086115 | 0,8 |   |   |
| 100408                | W8032010.088425 | 0,8 |   |   |
| 110408                | W8038010.086115 | 0,8 |   |   |
| 110408                | W8038010.088425 | 0,8 |   |   |
| 120408                | W8042010.086115 | 0,8 |   |   |
| 120408                | W8042010.088425 | 0,8 |   |   |
| 130508                | W8046010.086115 | 0,8 |   |   |
| 130508                | W8046010.088425 | 0,8 |   |   |
| Steel                 |                 |     | • | • |
| Stainless steel       |                 |     | • |   |
| Cast iron             |                 |     | • | • |
| Non ferrous metals    |                 |     |   |   |
| Heat resistant alloys |                 |     |   |   |
| hardened materials    |                 |     |   | ○ |

→ v<sub>c</sub>/f<sub>z</sub> Page 40-42

**i** BK6115-01 is exclusively recommended for use on the peripheral cutting edge!

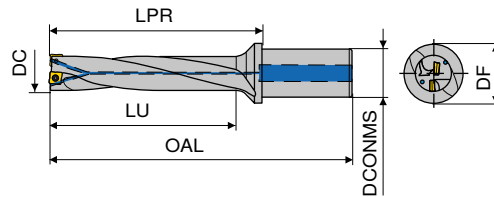


Specialised indexable inserts for machining aluminium or stainless steels (BK7935, BK7710, BK6425) can be found in our online shop at [cuttingtools.ceratizit.com](http://cuttingtools.ceratizit.com)

# MaxiDrill 900

## Scope of supply:

Indexable Insert Drill including clamping screws and key

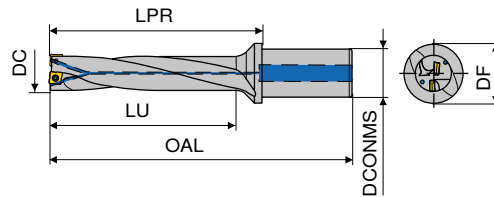


| Designation           | DC   | DCONMS | DF | OAL | LU | LPR | torque moment<br>Nm | Insert      | 2B/41       |     |
|-----------------------|------|--------|----|-----|----|-----|---------------------|-------------|-------------|-----|
|                       |      |        |    |     |    |     |                     |             | Article no. |     |
|                       | mm   | mm     | mm | mm  | mm | mm  |                     |             | 10 852 ...  |     |
|                       |      |        |    |     |    |     |                     |             | EUR         |     |
| MD900.2D.120.R.03-C20 | 12,0 | 20     | 28 | 90  | 24 | 40  | 0,4                 | SONT 031804 | 243,80      | 120 |
| MD900.2D.125.R.03-C20 | 12,5 | 20     | 28 | 91  | 25 | 41  | 0,4                 | SONT 031804 | 243,80      | 125 |
| MD900.2D.130.R.03-C20 | 13,0 | 20     | 28 | 92  | 26 | 42  | 0,4                 | SONT 031804 | 243,80      | 130 |
| MD900.2D.135.R.03-C20 | 13,5 | 20     | 28 | 93  | 27 | 43  | 0,4                 | SONT 031804 | 243,80      | 135 |
| MD900.2D.140.R.04-C20 | 14,0 | 20     | 30 | 96  | 28 | 46  | 0,7                 | SONT 042105 | 259,50      | 140 |
| MD900.2D.145.R.04-C20 | 14,5 | 20     | 30 | 97  | 29 | 47  | 0,7                 | SONT 042105 | 259,50      | 145 |
| MD900.2D.150.R.04-C20 | 15,0 | 20     | 30 | 98  | 30 | 48  | 0,7                 | SONT 042105 | 259,50      | 150 |
| MD900.2D.155.R.04-C20 | 15,5 | 20     | 30 | 99  | 31 | 49  | 0,7                 | SONT 042105 | 259,50      | 155 |
| MD900.2D.160.R.05-C20 | 16,0 | 20     | 30 | 100 | 32 | 50  | 0,7                 | SONT 052306 | 259,50      | 160 |
| MD900.2D.165.R.05-C20 | 16,5 | 20     | 30 | 101 | 33 | 51  | 0,7                 | SONT 052306 | 259,50      | 165 |
| MD900.2D.170.R.05-C20 | 17,0 | 20     | 30 | 102 | 34 | 52  | 0,7                 | SONT 052306 | 276,20      | 170 |
| MD900.2D.175.R.05-C20 | 17,5 | 20     | 30 | 103 | 35 | 53  | 0,7                 | SONT 052306 | 276,20      | 175 |
| MD900.2D.180.R.06-C25 | 18,0 | 25     | 32 | 111 | 36 | 55  | 1                   | SONT 062506 | 276,20      | 180 |
| MD900.2D.185.R.06-C25 | 18,5 | 25     | 32 | 112 | 37 | 56  | 1                   | SONT 062506 | 276,20      | 185 |
| MD900.2D.190.R.06-C25 | 19,0 | 25     | 32 | 113 | 38 | 57  | 1                   | SONT 062506 | 296,80      | 190 |
| MD900.2D.195.R.06-C25 | 19,5 | 25     | 32 | 114 | 39 | 58  | 1                   | SONT 062506 | 296,80      | 195 |
| MD900.2D.200.R.06-C25 | 20,0 | 25     | 32 | 115 | 40 | 59  | 1                   | SONT 062506 | 296,80      | 200 |
| MD900.2D.205.R.06-C25 | 20,5 | 25     | 32 | 116 | 41 | 60  | 1                   | SONT 062506 | 296,80      | 205 |
| MD900.2D.210.R.07-C25 | 21,0 | 25     | 32 | 118 | 42 | 62  | 1                   | SONT 072907 | 296,80      | 210 |
| MD900.2D.220.R.07-C25 | 22,0 | 25     | 32 | 120 | 44 | 64  | 1                   | SONT 072907 | 296,80      | 220 |
| MD900.2D.230.R.07-C25 | 23,0 | 25     | 32 | 122 | 46 | 66  | 1                   | SONT 072907 | 306,10      | 230 |
| MD900.2D.240.R.08-C32 | 24,0 | 32     | 40 | 132 | 48 | 72  | 1,2                 | SONT 083308 | 306,10      | 240 |
| MD900.2D.250.R.08-C32 | 25,0 | 32     | 40 | 134 | 50 | 74  | 1,2                 | SONT 083308 | 306,10      | 250 |
| MD900.2D.260.R.08-C32 | 26,0 | 32     | 40 | 136 | 52 | 76  | 1,2                 | SONT 083308 | 338,90      | 260 |
| MD900.2D.270.R.08-C32 | 27,0 | 32     | 40 | 138 | 54 | 78  | 1,2                 | SONT 083308 | 338,90      | 270 |
| MD900.2D.280.R.09-C32 | 28,0 | 32     | 40 | 140 | 56 | 80  | 2,2                 | SONT 093808 | 338,90      | 280 |
| MD900.2D.290.R.09-C32 | 29,0 | 32     | 40 | 142 | 58 | 82  | 2,2                 | SONT 093808 | 338,90      | 290 |
| MD900.2D.300.R.09-C32 | 30,0 | 32     | 40 | 144 | 60 | 84  | 2,2                 | SONT 093808 | 338,90      | 300 |
| MD900.2D.310.R.09-C32 | 31,0 | 32     | 40 | 146 | 62 | 86  | 2,2                 | SONT 093808 | 367,60      | 310 |
| MD900.2D.320.R.09-C32 | 32,0 | 32     | 40 | 148 | 64 | 88  | 2,2                 | SONT 093808 | 367,60      | 320 |
| MD900.2D.330.R.10-C40 | 33,0 | 40     | 50 | 163 | 66 | 93  | 3,2                 | SONT 104408 | 367,60      | 330 |
| MD900.2D.340.R.10-C40 | 34,0 | 40     | 50 | 165 | 68 | 95  | 3,2                 | SONT 104408 | 367,60      | 340 |
| MD900.2D.350.R.10-C40 | 35,0 | 40     | 50 | 167 | 70 | 97  | 3,2                 | SONT 104408 | 375,90      | 350 |
| MD900.2D.360.R.10-C40 | 36,0 | 40     | 50 | 169 | 72 | 99  | 3,2                 | SONT 104408 | 375,90      | 360 |
| MD900.2D.370.R.12-C40 | 37,0 | 40     | 56 | 174 | 74 | 104 | 3,2                 | SONT 124810 | 388,10      | 370 |
| MD900.2D.380.R.12-C40 | 38,0 | 40     | 56 | 176 | 76 | 106 | 3,2                 | SONT 124810 | 388,10      | 380 |
| MD900.2D.390.R.12-C40 | 39,0 | 40     | 56 | 178 | 78 | 108 | 3,2                 | SONT 124810 | 388,10      | 390 |
| MD900.2D.400.R.12-C40 | 40,0 | 40     | 56 | 180 | 80 | 110 | 3,2                 | SONT 124810 | 388,10      | 400 |
| MD900.2D.410.R.12-C40 | 41,0 | 40     | 56 | 182 | 82 | 112 | 3,2                 | SONT 124810 | 388,10      | 410 |

## MaxiDrill 900

## Scope of supply:

Indexable Insert Drill including clamping screws and key



3

| Designation           | DC   | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | 2B/41                     |     |
|-----------------------|------|--------|----|-----|-----|-----|---------------------|-------------|---------------------------|-----|
|                       |      |        |    |     |     |     |                     |             | Article no.<br>10 852 ... |     |
|                       | mm   | mm     | mm | mm  | mm  | mm  |                     |             | EUR                       |     |
| MD900.2D.420.R.13-C40 | 42,0 | 40     | 60 | 187 | 84  | 117 | 5                   | SONT 135012 | 407,70                    | 420 |
| MD900.2D.430.R.13-C40 | 43,0 | 40     | 60 | 189 | 86  | 119 | 5                   | SONT 135012 | 407,70                    | 430 |
| MD900.2D.440.R.13-C40 | 44,0 | 40     | 60 | 191 | 88  | 121 | 5                   | SONT 135012 | 407,70                    | 440 |
| MD900.2D.450.R.13-C40 | 45,0 | 40     | 60 | 193 | 90  | 123 | 5                   | SONT 135012 | 407,70                    | 450 |
| MD900.2D.460.R.13-C40 | 46,0 | 40     | 60 | 195 | 92  | 125 | 5                   | SONT 135012 | 407,70                    | 460 |
| MD900.2D.470.R.15-C40 | 47,0 | 40     | 60 | 198 | 94  | 128 | 5                   | SONT 155312 | 428,30                    | 470 |
| MD900.2D.480.R.15-C40 | 48,0 | 40     | 60 | 200 | 96  | 130 | 5                   | SONT 155312 | 428,30                    | 480 |
| MD900.2D.490.R.15-C40 | 49,0 | 40     | 60 | 202 | 98  | 132 | 5                   | SONT 155312 | 462,10                    | 490 |
| MD900.2D.500.R.15-C40 | 50,0 | 40     | 60 | 204 | 100 | 134 | 5                   | SONT 155312 | 462,10                    | 500 |
| MD900.2D.520.R.15-C40 | 51,0 | 40     | 60 | 206 | 102 | 136 | 5                   | SONT 155312 | 474,50                    | 510 |
| MD900.2D.510.R.15-C40 | 52,0 | 40     | 60 | 208 | 104 | 138 | 5                   | SONT 155312 | 474,50                    | 520 |
| MD900.2D.530.R.15-C40 | 53,0 | 40     | 60 | 210 | 106 | 140 | 5                   | SONT 155312 | 474,50                    | 530 |
| MD900.2D.540.R.15-C40 | 54,0 | 40     | 60 | 212 | 108 | 142 | 5                   | SONT 155312 | 474,50                    | 540 |
| MD900.2D.550.R.17-C40 | 55,0 | 40     | 60 | 215 | 110 | 145 | 5                   | SONT 175612 | 474,50                    | 550 |
| MD900.2D.560.R.17-C40 | 56,0 | 40     | 60 | 217 | 112 | 147 | 5                   | SONT 175612 | 491,90                    | 560 |
| MD900.2D.570.R.17-C40 | 57,0 | 40     | 60 | 219 | 114 | 149 | 5                   | SONT 175612 | 491,90                    | 570 |
| MD900.2D.580.R.17-C40 | 58,0 | 40     | 60 | 221 | 116 | 151 | 5                   | SONT 175612 | 491,90                    | 580 |
| MD900.2D.590.R.17-C40 | 59,0 | 40     | 60 | 223 | 118 | 153 | 5                   | SONT 175612 | 491,90                    | 590 |
| MD900.2D.600.R.17-C40 | 60,0 | 40     | 62 | 225 | 120 | 155 | 5                   | SONT 175612 | 491,90                    | 600 |
| MD900.2D.610.R.17-C40 | 61,0 | 40     | 62 | 227 | 122 | 157 | 5                   | SONT 175612 | 491,90                    | 610 |
| MD900.2D.620.R.17-C40 | 62,0 | 40     | 64 | 229 | 124 | 159 | 5                   | SONT 175612 | 491,90                    | 620 |
| MD900.2D.630.R.17-C40 | 63,0 | 40     | 64 | 231 | 126 | 161 | 5                   | SONT 175612 | 491,90                    | 630 |

Y7



Key D

2A/28



Clamping screw

Spare parts  
DC

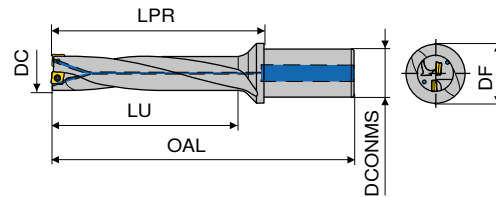
|           |          | Article no.<br>80 950 ... |     | Article no.<br>70 950 ... |          |
|-----------|----------|---------------------------|-----|---------------------------|----------|
|           |          | EUR                       |     | EUR                       |          |
| 12 - 13,5 | T06 - IP | 10,39                     | 123 | M1,8x3,6 - IP             | 3,68 862 |
| 14 - 17,5 | T06 - IP | 10,39                     | 123 | M2x4,3 - IP               | 3,28 863 |
| 18 - 23   | T07 - IP | 10,22                     | 124 | M2,2x5 - IP               | 3,18 856 |
| 24 - 27   | T08 - IP | 10,20                     | 125 | M2,5x6 - IP               | 4,09 857 |
| 28 - 32   | T09 - IP | 11,24                     | 126 | M3x7 - IP                 | 3,14 819 |
| 33 - 41   | T15 - IP | 11,89                     | 128 | M3,5x8,6 - IP             | 3,14 859 |
| 42 - 63   | T20 - IP | 12,54                     | 129 | M4,5x10,5 - IP            | 3,14 864 |

**i** Suitable adapters can be found in → **Chapter 16 Adapters.**

## MaxiDrill 900

## Scope of supply:

Indexable Insert Drill including clamping screws and key

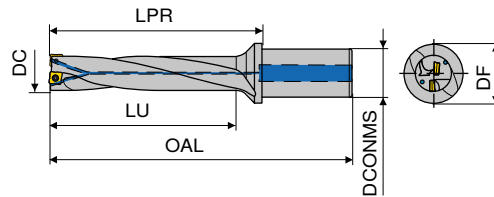


| Designation           | DC   | DCONMS | DF | OAL | LU    | LPR | torque moment<br>Nm | Insert      | 2B/41             |     |
|-----------------------|------|--------|----|-----|-------|-----|---------------------|-------------|-------------------|-----|
|                       |      |        |    |     |       |     |                     |             | Article no.       |     |
|                       | mm   | mm     | mm | mm  | mm    | mm  |                     |             | <b>10 853 ...</b> |     |
|                       |      |        |    |     |       |     |                     |             | <b>EUR</b>        |     |
| MD900.3D.120.R.03-C20 | 12,0 | 20     | 28 | 102 | 36,0  | 52  | 0,4                 | SONT 031804 | 259,70            | 120 |
| MD900.3D.125.R.03-C20 | 12,5 | 20     | 28 | 104 | 37,5  | 54  | 0,4                 | SONT 031804 | 259,70            | 125 |
| MD900.3D.130.R.03-C20 | 13,0 | 20     | 28 | 105 | 39,0  | 55  | 0,4                 | SONT 031804 | 259,70            | 130 |
| MD900.3D.135.R.03-C20 | 13,5 | 20     | 28 | 107 | 40,5  | 57  | 0,4                 | SONT 031804 | 259,70            | 135 |
| MD900.3D.140.R.04-C20 | 14,0 | 20     | 30 | 109 | 42,0  | 59  | 0,7                 | SONT 042105 | 273,50            | 140 |
| MD900.3D.145.R.04-C20 | 14,5 | 20     | 30 | 111 | 44,0  | 61  | 0,7                 | SONT 042105 | 273,50            | 145 |
| MD900.3D.150.R.04-C20 | 15,0 | 20     | 30 | 112 | 45,0  | 62  | 0,7                 | SONT 042105 | 273,50            | 150 |
| MD900.3D.155.R.04-C20 | 15,5 | 20     | 30 | 114 | 47,0  | 64  | 0,7                 | SONT 042105 | 280,00            | 155 |
| MD900.3D.160.R.05-C20 | 16,0 | 20     | 30 | 115 | 48,0  | 65  | 0,7                 | SONT 052306 | 280,00            | 160 |
| MD900.3D.165.R.05-C20 | 16,5 | 20     | 30 | 117 | 50,0  | 67  | 0,7                 | SONT 052306 | 280,00            | 165 |
| MD900.3D.170.R.05-C20 | 17,0 | 20     | 30 | 118 | 51,0  | 68  | 0,7                 | SONT 052306 | 290,80            | 170 |
| MD900.3D.175.R.05-C20 | 17,5 | 20     | 30 | 120 | 53,0  | 70  | 0,7                 | SONT 052306 | 290,80            | 175 |
| MD900.3D.180.R.06-C25 | 18,0 | 25     | 32 | 128 | 54,0  | 72  | 1                   | SONT 062506 | 290,80            | 180 |
| MD900.3D.185.R.06-C25 | 18,5 | 25     | 32 | 130 | 56,0  | 74  | 1                   | SONT 062506 | 290,80            | 185 |
| MD900.3D.190.R.06-C25 | 19,0 | 25     | 32 | 131 | 57,0  | 75  | 1                   | SONT 062506 | 312,40            | 190 |
| MD900.3D.195.R.06-C25 | 19,5 | 25     | 32 | 133 | 59,0  | 77  | 1                   | SONT 062506 | 312,40            | 195 |
| MD900.3D.200.R.06-C25 | 20,0 | 25     | 32 | 134 | 60,0  | 78  | 1                   | SONT 062506 | 312,40            | 200 |
| MD900.3D.205.R.06-C25 | 20,5 | 25     | 32 | 136 | 62,0  | 80  | 1                   | SONT 062506 | 312,40            | 205 |
| MD900.3D.210.R.07-C25 | 21,0 | 25     | 32 | 138 | 63,0  | 82  | 1                   | SONT 072907 | 312,40            | 210 |
| MD900.3D.215.R.07-C25 | 21,5 | 25     | 32 | 140 | 65,0  | 84  | 1                   | SONT 072907 | 312,40            | 215 |
| MD900.3D.220.R.07-C25 | 22,0 | 25     | 32 | 141 | 66,0  | 85  | 1                   | SONT 072907 | 312,40            | 220 |
| MD900.3D.225.R.07-C25 | 22,5 | 25     | 32 | 143 | 68,0  | 87  | 1                   | SONT 072907 | 322,10            | 225 |
| MD900.3D.230.R.07-C25 | 23,0 | 25     | 32 | 144 | 69,0  | 88  | 1                   | SONT 072907 | 322,10            | 230 |
| MD900.3D.235.R.07-C25 | 23,5 | 25     | 32 | 146 | 71,0  | 90  | 1                   | SONT 072907 | 322,10            | 235 |
| MD900.3D.240.R.08-C32 | 24,0 | 32     | 40 | 155 | 72,0  | 95  | 1,2                 | SONT 083308 | 322,10            | 240 |
| MD900.3D.245.R.08-C32 | 24,5 | 32     | 40 | 157 | 74,0  | 97  | 1,2                 | SONT 083308 | 322,10            | 245 |
| MD900.3D.250.R.08-C32 | 25,0 | 32     | 40 | 158 | 75,0  | 98  | 1,2                 | SONT 083308 | 322,10            | 250 |
| MD900.3D.255.R.08-C32 | 25,5 | 32     | 40 | 160 | 77,0  | 100 | 1,2                 | SONT 083308 | 322,10            | 255 |
| MD900.3D.260.R.08-C32 | 26,0 | 32     | 40 | 161 | 78,0  | 101 | 1,2                 | SONT 083308 | 356,70            | 260 |
| MD900.3D.265.R.08-C32 | 26,5 | 32     | 40 | 163 | 80,0  | 103 | 1,2                 | SONT 083308 | 356,70            | 265 |
| MD900.3D.270.R.08-C32 | 27,0 | 32     | 40 | 164 | 81,0  | 104 | 1,2                 | SONT 083308 | 356,70            | 270 |
| MD900.3D.275.R.08-C32 | 27,5 | 32     | 40 | 166 | 83,0  | 106 | 1,2                 | SONT 083308 | 356,70            | 275 |
| MD900.3D.280.R.09-C32 | 28,0 | 32     | 40 | 167 | 84,0  | 107 | 2,2                 | SONT 093808 | 356,70            | 280 |
| MD900.3D.285.R.09-C32 | 28,5 | 32     | 40 | 169 | 86,0  | 109 | 2,2                 | SONT 093808 | 356,70            | 285 |
| MD900.3D.290.R.09-C32 | 29,0 | 32     | 40 | 170 | 87,0  | 110 | 2,2                 | SONT 093808 | 356,70            | 290 |
| MD900.3D.295.R.09-C32 | 29,5 | 32     | 40 | 172 | 89,0  | 112 | 2,2                 | SONT 093808 | 356,70            | 295 |
| MD900.3D.300.R.09-C32 | 30,0 | 32     | 40 | 173 | 90,0  | 113 | 2,2                 | SONT 093808 | 356,70            | 300 |
| MD900.3D.305.R.09-C32 | 30,5 | 32     | 40 | 175 | 92,0  | 115 | 2,2                 | SONT 093808 | 356,70            | 305 |
| MD900.3D.310.R.09-C32 | 31,0 | 32     | 40 | 176 | 93,0  | 116 | 2,2                 | SONT 093808 | 387,00            | 310 |
| MD900.3D.315.R.09-C32 | 31,5 | 32     | 40 | 178 | 95,0  | 118 | 2,2                 | SONT 093808 | 387,00            | 315 |
| MD900.3D.320.R.09-C32 | 32,0 | 32     | 40 | 179 | 96,0  | 119 | 2,2                 | SONT 093808 | 387,00            | 320 |
| MD900.3D.325.R.10-C40 | 32,5 | 40     | 50 | 192 | 98,0  | 124 | 3,2                 | SONT 104408 | 387,00            | 325 |
| MD900.3D.330.R.10-C40 | 33,0 | 40     | 50 | 193 | 99,0  | 125 | 3,2                 | SONT 104408 | 387,00            | 330 |
| MD900.3D.335.R.10-C40 | 33,5 | 40     | 50 | 195 | 101,0 | 127 | 3,2                 | SONT 104408 | 387,00            | 335 |
| MD900.3D.340.R.10-C40 | 34,0 | 40     | 50 | 196 | 102,0 | 128 | 3,2                 | SONT 104408 | 387,00            | 340 |
| MD900.3D.345.R.10-C40 | 34,5 | 40     | 50 | 198 | 104,0 | 130 | 3,2                 | SONT 104408 | 387,00            | 345 |
| MD900.3D.350.R.10-C40 | 35,0 | 40     | 50 | 199 | 105,0 | 131 | 3,2                 | SONT 104408 | 395,60            | 350 |

## MaxiDrill 900

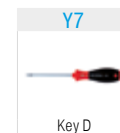
## Scope of supply:

Indexable Insert Drill including clamping screws and key

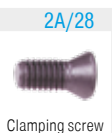


3

| Designation           | DC   | DCONMS | DF | OAL | LU    | LPR | torque moment<br>Nm | Insert      | 2B/41                     |     |
|-----------------------|------|--------|----|-----|-------|-----|---------------------|-------------|---------------------------|-----|
|                       |      |        |    |     |       |     |                     |             | Article no.<br>10 853 ... |     |
|                       | mm   | mm     | mm | mm  | mm    | mm  |                     |             | EUR                       |     |
| MD900.3D.355.R.10-C40 | 35,5 | 40     | 50 | 201 | 107,0 | 133 | 3,2                 | SONT 104408 | 395,60                    | 355 |
| MD900.3D.360.R.10-C40 | 36,0 | 40     | 50 | 202 | 108,0 | 134 | 3,2                 | SONT 104408 | 395,60                    | 360 |
| MD900.3D.365.R.10-C40 | 36,5 | 40     | 50 | 204 | 110,0 | 136 | 3,2                 | SONT 104408 | 395,60                    | 365 |
| MD900.3D.370.R.12-C40 | 37,0 | 40     | 56 | 211 | 111,0 | 141 | 3,2                 | SONT 124810 | 408,60                    | 370 |
| MD900.3D.380.R.12-C40 | 38,0 | 40     | 56 | 214 | 114,0 | 144 | 3,2                 | SONT 124810 | 408,60                    | 380 |
| MD900.3D.390.R.12-C40 | 39,0 | 40     | 56 | 217 | 117,0 | 147 | 3,2                 | SONT 124810 | 408,60                    | 390 |
| MD900.3D.400.R.12-C40 | 40,0 | 40     | 56 | 220 | 120,0 | 150 | 3,2                 | SONT 124810 | 408,60                    | 400 |
| MD900.3D.410.R.12-C40 | 41,0 | 40     | 56 | 223 | 123,0 | 153 | 3,2                 | SONT 124810 | 408,60                    | 410 |
| MD900.3D.420.R.13-C40 | 42,0 | 40     | 60 | 229 | 126,0 | 159 | 5                   | SONT 135012 | 429,10                    | 420 |
| MD900.3D.430.R.13-C40 | 43,0 | 40     | 60 | 232 | 129,0 | 162 | 5                   | SONT 135012 | 429,10                    | 430 |
| MD900.3D.440.R.13-C40 | 44,0 | 40     | 60 | 235 | 132,0 | 165 | 5                   | SONT 135012 | 429,10                    | 440 |
| MD900.3D.450.R.13-C40 | 45,0 | 40     | 60 | 238 | 135,0 | 168 | 5                   | SONT 135012 | 429,10                    | 450 |
| MD900.3D.460.R.13-C40 | 46,0 | 40     | 60 | 241 | 138,0 | 171 | 5                   | SONT 135012 | 429,10                    | 460 |
| MD900.3D.470.R.15-C40 | 47,0 | 40     | 60 | 245 | 141,0 | 175 | 5                   | SONT 155312 | 450,70                    | 470 |
| MD900.3D.480.R.15-C40 | 48,0 | 40     | 60 | 248 | 144,0 | 178 | 5                   | SONT 155312 | 450,70                    | 480 |
| MD900.3D.490.R.15-C40 | 49,0 | 40     | 60 | 251 | 147,0 | 181 | 5                   | SONT 155312 | 486,40                    | 490 |
| MD900.3D.500.R.15-C40 | 50,0 | 40     | 60 | 254 | 150,0 | 184 | 5                   | SONT 155312 | 486,40                    | 500 |
| MD900.3D.510.R.15-C40 | 51,0 | 40     | 60 | 257 | 153,0 | 187 | 5                   | SONT 155312 | 499,40                    | 510 |
| MD900.3D.520.R.15-C40 | 52,0 | 40     | 60 | 260 | 156,0 | 190 | 5                   | SONT 155312 | 499,40                    | 520 |
| MD900.3D.530.R.15-C40 | 53,0 | 40     | 60 | 263 | 159,0 | 193 | 5                   | SONT 155312 | 499,40                    | 530 |
| MD900.3D.540.R.15-C40 | 54,0 | 40     | 60 | 266 | 162,0 | 196 | 5                   | SONT 155312 | 499,40                    | 540 |
| MD900.3D.550.R.17-C40 | 55,0 | 40     | 60 | 270 | 165,0 | 200 | 5                   | SONT 175612 | 499,40                    | 550 |
| MD900.3D.560.R.17-C40 | 56,0 | 40     | 60 | 273 | 168,0 | 203 | 5                   | SONT 175612 | 517,80                    | 560 |
| MD900.3D.570.R.17-C40 | 57,0 | 40     | 60 | 276 | 171,0 | 206 | 5                   | SONT 175612 | 517,80                    | 570 |
| MD900.3D.580.R.17-C40 | 58,0 | 40     | 60 | 279 | 174,0 | 209 | 5                   | SONT 175612 | 517,80                    | 580 |
| MD900.3D.590.R.17-C40 | 59,0 | 40     | 60 | 282 | 177,0 | 212 | 5                   | SONT 175612 | 517,80                    | 590 |
| MD900.3D.600.R.17-C40 | 60,0 | 40     | 62 | 285 | 180,0 | 215 | 5                   | SONT 175612 | 517,80                    | 600 |
| MD900.3D.610.R.17-C40 | 61,0 | 40     | 62 | 288 | 183,0 | 218 | 5                   | SONT 175612 | 517,80                    | 610 |
| MD900.3D.620.R.17-C40 | 62,0 | 40     | 64 | 291 | 186,0 | 221 | 5                   | SONT 175612 | 517,80                    | 620 |
| MD900.3D.630.R.17-C40 | 63,0 | 40     | 64 | 294 | 189,0 | 224 | 5                   | SONT 175612 | 517,80                    | 630 |



Key D



Clamping screw

Spare parts  
DC

|           |          | Article no.<br>80 950 ... |     | Article no.<br>70 950 ... |          |
|-----------|----------|---------------------------|-----|---------------------------|----------|
|           |          | EUR                       |     | EUR                       |          |
| 12 - 13,5 | T06 - IP | 10,39                     | 123 | M1,8x3,6 - IP             | 3,68 862 |
| 14 - 17,5 | T06 - IP | 10,39                     | 123 | M2x4,3 - IP               | 3,28 863 |
| 18 - 23,5 | T07 - IP | 10,22                     | 124 | M2,2x5 - IP               | 3,18 856 |
| 24 - 27,5 | T08 - IP | 10,20                     | 125 | M2,5x6 - IP               | 4,09 857 |
| 28 - 32   | T09 - IP | 11,24                     | 126 | M3x7 - IP                 | 3,14 819 |
| 32,5 - 41 | T15 - IP | 11,89                     | 128 | M3,5x8,6 - IP             | 3,14 859 |
| 42 - 63   | T20 - IP | 12,54                     | 129 | M4,5x10,5 - IP            | 3,14 864 |

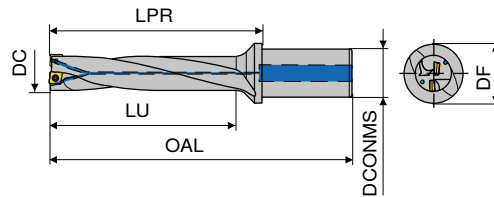
**i** Suitable adapters can be found in → Chapter 16 Adapters.



## MaxiDrill 900

## Scope of supply:

Indexable Insert Drill including clamping screws and key

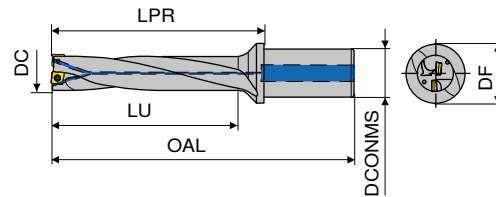


| Designation           | DC   | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | 2B/41                     |     |
|-----------------------|------|--------|----|-----|-----|-----|---------------------|-------------|---------------------------|-----|
|                       |      |        |    |     |     |     |                     |             | Article no.<br>10 854 ... |     |
|                       | mm   | mm     | mm | mm  | mm  | mm  |                     |             | EUR                       |     |
| MD900.4D.120.R.03-C20 | 12,0 | 20     | 28 | 114 | 48  | 64  | 0,4                 | SONT 031804 | 358,20                    | 120 |
| MD900.4D.125.R.03-C20 | 12,5 | 20     | 28 | 116 | 50  | 66  | 0,4                 | SONT 031804 | 358,20                    | 125 |
| MD900.4D.130.R.03-C20 | 13,0 | 20     | 28 | 118 | 52  | 68  | 0,4                 | SONT 031804 | 358,20                    | 130 |
| MD900.4D.135.R.03-C20 | 13,5 | 20     | 28 | 120 | 54  | 70  | 0,4                 | SONT 031804 | 358,20                    | 135 |
| MD900.4D.140.R.04-C20 | 14,0 | 20     | 30 | 123 | 56  | 73  | 0,7                 | SONT 042105 | 368,60                    | 140 |
| MD900.4D.145.R.04-C20 | 14,5 | 20     | 30 | 125 | 58  | 75  | 0,7                 | SONT 042105 | 368,60                    | 145 |
| MD900.4D.150.R.04-C20 | 15,0 | 20     | 30 | 127 | 60  | 77  | 0,7                 | SONT 042105 | 368,60                    | 150 |
| MD900.4D.155.R.04-C20 | 15,5 | 20     | 30 | 129 | 62  | 79  | 0,7                 | SONT 042105 | 368,60                    | 155 |
| MD900.4D.160.R.05-C20 | 16,0 | 20     | 30 | 131 | 64  | 81  | 0,7                 | SONT 052306 | 377,20                    | 160 |
| MD900.4D.165.R.05-C20 | 16,5 | 20     | 30 | 133 | 66  | 83  | 0,7                 | SONT 052306 | 377,20                    | 165 |
| MD900.4D.170.R.05-C20 | 17,0 | 20     | 30 | 135 | 68  | 85  | 0,7                 | SONT 052306 | 391,40                    | 170 |
| MD900.4D.175.R.05-C20 | 17,5 | 20     | 30 | 137 | 70  | 87  | 0,7                 | SONT 052306 | 391,40                    | 175 |
| MD900.4D.180.R.06-C25 | 18,0 | 25     | 32 | 146 | 72  | 90  | 1                   | SONT 062506 | 391,40                    | 180 |
| MD900.4D.185.R.06-C25 | 18,5 | 25     | 32 | 148 | 74  | 92  | 1                   | SONT 062506 | 391,40                    | 185 |
| MD900.4D.190.R.06-C25 | 19,0 | 25     | 32 | 150 | 76  | 94  | 1                   | SONT 062506 | 420,50                    | 190 |
| MD900.4D.195.R.06-C25 | 19,5 | 25     | 32 | 152 | 78  | 96  | 1                   | SONT 062506 | 420,50                    | 195 |
| MD900.4D.200.R.06-C25 | 20,0 | 25     | 32 | 154 | 80  | 98  | 1                   | SONT 062506 | 420,50                    | 200 |
| MD900.4D.205.R.06-C25 | 20,5 | 25     | 32 | 156 | 82  | 100 | 1                   | SONT 062506 | 420,50                    | 205 |
| MD900.4D.210.R.07-C25 | 21,0 | 25     | 32 | 159 | 84  | 103 | 1                   | SONT 072907 | 420,50                    | 210 |
| MD900.4D.220.R.07-C25 | 22,0 | 25     | 32 | 163 | 88  | 107 | 1                   | SONT 072907 | 420,50                    | 220 |
| MD900.4D.230.R.07-C25 | 23,0 | 25     | 32 | 167 | 92  | 111 | 1                   | SONT 072907 | 434,50                    | 230 |
| MD900.4D.240.R.08-C32 | 24,0 | 32     | 40 | 179 | 96  | 119 | 1,2                 | SONT 083308 | 434,50                    | 240 |
| MD900.4D.250.R.08-C32 | 25,0 | 32     | 40 | 183 | 100 | 123 | 1,2                 | SONT 083308 | 434,50                    | 250 |
| MD900.4D.260.R.08-C32 | 26,0 | 32     | 40 | 187 | 104 | 127 | 1,2                 | SONT 083308 | 480,00                    | 260 |
| MD900.4D.270.R.08-C32 | 27,0 | 32     | 40 | 191 | 108 | 131 | 1,2                 | SONT 083308 | 480,00                    | 270 |
| MD900.4D.280.R.09-C32 | 28,0 | 32     | 40 | 195 | 112 | 135 | 2,2                 | SONT 093808 | 480,00                    | 280 |
| MD900.4D.290.R.09-C32 | 29,0 | 32     | 40 | 199 | 116 | 139 | 2,2                 | SONT 093808 | 480,00                    | 290 |
| MD900.4D.300.R.09-C32 | 30,0 | 32     | 40 | 203 | 120 | 143 | 2,2                 | SONT 093808 | 480,00                    | 300 |
| MD900.4D.310.R.09-C32 | 31,0 | 32     | 40 | 207 | 124 | 147 | 2,2                 | SONT 093808 | 521,00                    | 310 |
| MD900.4D.320.R.09-C32 | 32,0 | 32     | 40 | 211 | 128 | 151 | 2,2                 | SONT 093808 | 521,00                    | 320 |
| MD900.4D.330.R.10-C40 | 33,0 | 40     | 50 | 228 | 132 | 158 | 3,2                 | SONT 104408 | 521,00                    | 330 |
| MD900.4D.340.R.10-C40 | 34,0 | 40     | 50 | 232 | 136 | 162 | 3,2                 | SONT 104408 | 521,00                    | 340 |
| MD900.4D.350.R.10-C40 | 35,0 | 40     | 50 | 236 | 140 | 166 | 3,2                 | SONT 104408 | 531,90                    | 350 |
| MD900.4D.360.R.10-C40 | 36,0 | 40     | 50 | 240 | 144 | 170 | 3,2                 | SONT 104408 | 531,90                    | 360 |
| MD900.4D.370.R.12-C40 | 37,0 | 40     | 56 | 248 | 148 | 178 | 3,2                 | SONT 124810 | 550,20                    | 370 |
| MD900.4D.380.R.12-C40 | 38,0 | 40     | 56 | 252 | 152 | 182 | 3,2                 | SONT 124810 | 550,20                    | 380 |
| MD900.4D.390.R.12-C40 | 39,0 | 40     | 56 | 256 | 156 | 186 | 3,2                 | SONT 124810 | 550,20                    | 390 |
| MD900.4D.400.R.12-C40 | 40,0 | 40     | 56 | 260 | 160 | 190 | 3,2                 | SONT 124810 | 550,20                    | 400 |
| MD900.4D.410.R.12-C40 | 41,0 | 40     | 56 | 264 | 164 | 194 | 3,2                 | SONT 124810 | 550,20                    | 410 |

# MaxiDrill 900

## Scope of supply:

Indexable Insert Drill including clamping screws and key



3

| Designation           | DC   | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | 2B/41<br>Article no.<br>10 854 ...<br>EUR |     |
|-----------------------|------|--------|----|-----|-----|-----|---------------------|-------------|-------------------------------------------|-----|
|                       | mm   | mm     | mm | mm  | mm  | mm  |                     |             |                                           |     |
| MD900.4D.420.R.13-C40 | 42,0 | 40     | 60 | 271 | 168 | 201 | 5                   | SONT 135012 | 577,20                                    | 420 |
| MD900.4D.430.R.13-C40 | 43,0 | 40     | 60 | 275 | 172 | 205 | 5                   | SONT 135012 | 577,20                                    | 430 |
| MD900.4D.440.R.13-C40 | 44,0 | 40     | 60 | 279 | 176 | 209 | 5                   | SONT 135012 | 577,20                                    | 440 |
| MD900.4D.450.R.13-C40 | 45,0 | 40     | 60 | 283 | 180 | 213 | 5                   | SONT 135012 | 577,20                                    | 450 |
| MD900.4D.460.R.13-C40 | 46,0 | 40     | 60 | 287 | 184 | 217 | 5                   | SONT 135012 | 577,20                                    | 460 |
| MD900.4D.470.R.15-C40 | 47,0 | 40     | 60 | 292 | 188 | 222 | 5                   | SONT 155312 | 608,60                                    | 470 |
| MD900.4D.480.R.15-C40 | 48,0 | 40     | 60 | 296 | 192 | 226 | 5                   | SONT 155312 | 608,60                                    | 480 |
| MD900.4D.490.R.15-C40 | 49,0 | 40     | 60 | 300 | 196 | 230 | 5                   | SONT 155312 | 608,60                                    | 490 |
| MD900.4D.500.R.15-C40 | 50,0 | 40     | 60 | 304 | 200 | 234 | 5                   | SONT 155312 | 608,60                                    | 500 |
| MD900.4D.510.R.15-C40 | 51,0 | 40     | 60 | 308 | 204 | 238 | 5                   | SONT 155312 | 608,60                                    | 510 |
| MD900.4D.520.R.15-C40 | 52,0 | 40     | 60 | 312 | 208 | 242 | 5                   | SONT 155312 | 608,60                                    | 520 |
| MD900.4D.530.R.15-C40 | 53,0 | 40     | 60 | 316 | 212 | 246 | 5                   | SONT 155312 | 608,60                                    | 530 |
| MD900.4D.540.R.15-C40 | 54,0 | 40     | 60 | 320 | 216 | 250 | 5                   | SONT 155312 | 608,60                                    | 540 |

## Spare parts

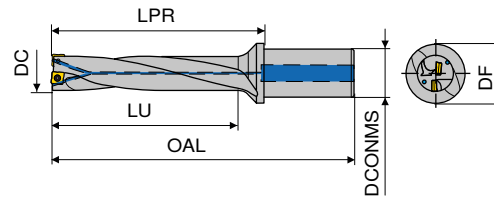
| DC      | Y7                               |       |     | 2A/28                            |      |     |
|---------|----------------------------------|-------|-----|----------------------------------|------|-----|
|         | Key D                            |       |     | Clamping screw                   |      |     |
|         | Article no.<br>80 950 ...<br>EUR |       |     | Article no.<br>70 950 ...<br>EUR |      |     |
| 12 - 13 | T06 - IP                         | 10,39 | 123 | M1,8x3,6 - IP                    | 3,68 | 862 |
| 14 - 17 | T06 - IP                         | 10,39 | 123 | M2x4,3 - IP                      | 3,28 | 863 |
| 18 - 23 | T07 - IP                         | 10,22 | 124 | M2,2x5 - IP                      | 3,18 | 856 |
| 24 - 27 | T08 - IP                         | 10,20 | 125 | M2,5x6 - IP                      | 4,09 | 857 |
| 28 - 32 | T09 - IP                         | 11,24 | 126 | M3x7 - IP                        | 3,14 | 819 |
| 33 - 41 | T15 - IP                         | 11,89 | 128 | M3,5x8,6 - IP                    | 3,14 | 859 |
| 42 - 54 | T20 - IP                         | 12,54 | 129 | M4,5x10,5 - IP                   | 3,14 | 864 |

**i** Suitable adapters can be found in → **Chapter 16 Adapters.**

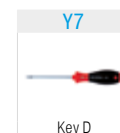
## MaxiDrill 900

## Scope of supply:

Indexable Insert Drill including clamping screws and key



| Designation           | DC   | DCONMS | DF | OAL | LU    | LPR   | torque moment<br>Nm | Insert      | 2B/41<br>Article no.<br>10 855 ...<br>EUR |     |
|-----------------------|------|--------|----|-----|-------|-------|---------------------|-------------|-------------------------------------------|-----|
|                       |      |        |    |     |       |       |                     |             |                                           |     |
| MD900.5D.120.R.03-C20 | 12,0 | 20     | 28 | 126 | 60,0  | 76,0  | 0,4                 | SONT 031804 | 428,20                                    | 120 |
| MD900.5D.125.R.03-C20 | 12,5 | 20     | 28 | 128 | 62,5  | 78,0  | 0,4                 | SONT 031804 | 428,20                                    | 125 |
| MD900.5D.130.R.03-C20 | 13,0 | 20     | 28 | 131 | 65,0  | 81,0  | 0,4                 | SONT 031804 | 428,20                                    | 130 |
| MD900.5D.135.R.03-C20 | 13,5 | 20     | 28 | 132 | 67,5  | 82,0  | 0,4                 | SONT 031804 | 428,20                                    | 135 |
| MD900.5D.140.R.04-C20 | 14,0 | 20     | 30 | 137 | 70,0  | 87,0  | 0,7                 | SONT 042105 | 437,80                                    | 140 |
| MD900.5D.145.R.04-C20 | 14,5 | 20     | 30 | 139 | 72,5  | 89,0  | 0,7                 | SONT 042105 | 437,80                                    | 145 |
| MD900.5D.150.R.04-C20 | 15,0 | 20     | 30 | 142 | 75,0  | 92,0  | 0,7                 | SONT 042105 | 437,80                                    | 150 |
| MD900.5D.155.R.04-C20 | 15,5 | 20     | 30 | 144 | 77,5  | 94,5  | 0,7                 | SONT 042105 | 437,80                                    | 155 |
| MD900.5D.160.R.05-C20 | 16,0 | 20     | 30 | 147 | 80,0  | 97,0  | 0,7                 | SONT 052306 | 448,60                                    | 160 |
| MD900.5D.165.R.05-C20 | 16,5 | 20     | 30 | 149 | 82,5  | 99,0  | 0,7                 | SONT 052306 | 448,60                                    | 165 |
| MD900.5D.170.R.05-C20 | 17,0 | 20     | 30 | 152 | 85,0  | 102,0 | 0,7                 | SONT 052306 | 464,80                                    | 170 |
| MD900.5D.175.R.05-C20 | 17,5 | 20     | 30 | 154 | 87,5  | 104,0 | 0,7                 | SONT 052306 | 464,80                                    | 175 |
| MD900.5D.180.R.06-C25 | 18,0 | 25     | 32 | 164 | 90,0  | 108,0 | 1                   | SONT 062506 | 464,80                                    | 180 |
| MD900.5D.185.R.06-C25 | 18,5 | 25     | 32 | 166 | 92,5  | 110,0 | 1                   | SONT 062506 | 464,80                                    | 185 |
| MD900.5D.190.R.06-C25 | 19,0 | 25     | 32 | 169 | 95,0  | 113,0 | 1                   | SONT 062506 | 499,40                                    | 190 |
| MD900.5D.195.R.06-C25 | 19,5 | 25     | 32 | 171 | 97,5  | 115,0 | 1                   | SONT 062506 | 499,40                                    | 195 |
| MD900.5D.200.R.06-C25 | 20,0 | 25     | 32 | 174 | 100,0 | 118,0 | 1                   | SONT 062506 | 499,40                                    | 200 |
| MD900.5D.205.R.06-C25 | 20,5 | 25     | 32 | 175 | 102,5 | 119,0 | 1                   | SONT 062506 | 499,40                                    | 205 |
| MD900.5D.210.R.07-C25 | 21,0 | 25     | 32 | 180 | 105,0 | 124,0 | 1                   | SONT 072907 | 499,40                                    | 210 |
| MD900.5D.220.R.07-C25 | 22,0 | 25     | 32 | 184 | 110,0 | 128,0 | 1                   | SONT 072907 | 499,40                                    | 220 |
| MD900.5D.230.R.07-C25 | 23,0 | 25     | 32 | 189 | 115,0 | 133,0 | 1                   | SONT 072907 | 517,20                                    | 230 |
| MD900.5D.240.R.08-C32 | 24,0 | 32     | 40 | 203 | 120,0 | 143,0 | 1,2                 | SONT 083308 | 517,20                                    | 240 |
| MD900.5D.250.R.08-C32 | 25,0 | 32     | 40 | 208 | 125,0 | 148,0 | 1,2                 | SONT 083308 | 517,20                                    | 250 |
| MD900.5D.260.R.08-C32 | 26,0 | 32     | 40 | 212 | 130,0 | 152,0 | 1,2                 | SONT 083308 | 570,80                                    | 260 |
| MD900.5D.270.R.08-C32 | 27,0 | 32     | 40 | 217 | 135,0 | 157,0 | 1,2                 | SONT 083308 | 570,80                                    | 270 |
| MD900.5D.280.R.09-C32 | 28,0 | 32     | 40 | 221 | 140,0 | 161,0 | 2,2                 | SONT 093808 | 570,80                                    | 280 |
| MD900.5D.290.R.09-C32 | 29,0 | 32     | 40 | 226 | 145,0 | 166,0 | 2,2                 | SONT 093808 | 570,80                                    | 290 |
| MD900.5D.300.R.09-C32 | 30,0 | 32     | 40 | 230 | 150,0 | 170,0 | 2,2                 | SONT 093808 | 570,80                                    | 300 |
| MD900.5D.310.R.09-C32 | 31,0 | 32     | 40 | 235 | 155,0 | 175,0 | 2,2                 | SONT 093808 | 618,30                                    | 310 |
| MD900.5D.320.R.09-C32 | 32,0 | 32     | 40 | 239 | 160,0 | 179,0 | 2,2                 | SONT 093808 | 618,30                                    | 320 |
| MD900.5D.330.R.10-C40 | 33,0 | 40     | 50 | 259 | 165,0 | 191,0 | 3,2                 | SONT 104408 | 618,30                                    | 330 |
| MD900.5D.340.R.10-C40 | 34,0 | 40     | 50 | 264 | 170,0 | 196,0 | 3,2                 | SONT 104408 | 618,30                                    | 340 |
| MD900.5D.350.R.10-C40 | 35,0 | 40     | 50 | 269 | 175,0 | 201,0 | 3,2                 | SONT 104408 | 632,30                                    | 350 |
| MD900.5D.360.R.10-C40 | 36,0 | 40     | 50 | 274 | 180,0 | 206,0 | 3,2                 | SONT 104408 | 632,30                                    | 360 |
| MD900.5D.370.R.12-C40 | 37,0 | 40     | 56 | 285 | 185,0 | 215,0 | 3,2                 | SONT 124810 | 654,00                                    | 370 |
| MD900.5D.380.R.12-C40 | 38,0 | 40     | 56 | 290 | 190,0 | 220,0 | 3,2                 | SONT 124810 | 654,00                                    | 380 |
| MD900.5D.390.R.12-C40 | 39,0 | 40     | 56 | 295 | 195,0 | 225,0 | 3,2                 | SONT 124810 | 654,00                                    | 390 |
| MD900.5D.400.R.12-C40 | 40,0 | 40     | 56 | 300 | 200,0 | 230,0 | 3,2                 | SONT 124810 | 654,00                                    | 400 |
| MD900.5D.410.R.12-C40 | 41,0 | 40     | 56 | 305 | 205,0 | 235,0 | 3,2                 | SONT 124810 | 654,00                                    | 410 |



Key D



Clamping screw

Spare parts  
DC

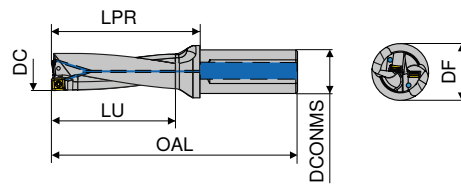
|       |        | EUR   |     | EUR         |          |
|-------|--------|-------|-----|-------------|----------|
| 12-13 | T06-IP | 10,39 | 123 | M1,8x3,6-IP | 3,68 862 |
| 14-17 | T06-IP | 10,39 | 123 | M2x4,3-IP   | 3,28 863 |
| 18-23 | T07-IP | 10,22 | 124 | M2,2x5-IP   | 3,18 856 |
| 24-27 | T08-IP | 10,20 | 125 | M2,5x6-IP   | 4,09 857 |
| 28-32 | T09-IP | 11,24 | 126 | M3x7-IP     | 3,14 819 |
| 33-41 | T15-IP | 11,89 | 128 | M3,5x8,6-IP | 3,14 859 |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

## KUB 100

## Scope of supply:

Indexable Insert Drill incl. clamping screws



3

| Designation             | DC   | DCONMS | DF | OAL | LU | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#                 |       |
|-------------------------|------|--------|----|-----|----|-----|---------------------|-------------|---------------------------|-------|
|                         |      |        |    |     |    |     |                     |             | Article no.<br>10 881 ... |       |
| KUB-100.3D.140.R.04-C20 | 14,0 | 20     | 30 | 105 | 42 | 55  | 0,7                 | SONT 042105 | EUR 360,90                | 99140 |
| KUB-100.3D.150.R.04-C20 | 15,0 | 20     | 30 | 109 | 45 | 59  | 0,7                 | SONT 042105 | EUR 360,90                | 99150 |
| KUB-100.3D.160.R.05-C20 | 16,0 | 20     | 30 | 114 | 48 | 64  | 0,7                 | SONT 052306 | EUR 360,90                | 99160 |
| KUB-100.3D.165.R.05-C20 | 16,5 | 20     | 30 | 118 | 51 | 68  | 0,7                 | SONT 052306 | EUR 360,90                | 99165 |
| KUB-100.3D.170.R.05-C20 | 17,0 | 20     | 30 | 118 | 51 | 68  | 0,7                 | SONT 052306 | EUR 370,20                | 99170 |
| KUB-100.3D.175.R.05-C25 | 17,5 | 25     | 30 | 127 | 54 | 71  | 0,7                 | SONT 052306 | EUR 370,20                | 99175 |
| KUB-100.3D.180.R.06-C25 | 18,0 | 25     | 30 | 127 | 54 | 71  | 1                   | SONT 062506 | EUR 370,20                | 99180 |
| KUB-100.3D.185.R.06-C25 | 18,5 | 25     | 30 | 131 | 57 | 75  | 1                   | SONT 062506 | EUR 370,20                | 99185 |
| KUB-100.3D.190.R.06-C25 | 19,0 | 25     | 30 | 131 | 57 | 75  | 1                   | SONT 062506 | EUR 380,60                | 99190 |
| KUB-100.3D.195.R.06-C25 | 19,5 | 25     | 30 | 134 | 60 | 78  | 1                   | SONT 062506 | EUR 380,60                | 99195 |
| KUB-100.3D.200.R.06-C25 | 20,0 | 25     | 30 | 134 | 60 | 78  | 1                   | SONT 062506 | EUR 380,60                | 99200 |
| KUB-100.3D.210.R.07-C25 | 21,0 | 25     | 30 | 138 | 63 | 82  | 1                   | SONT 072907 | EUR 405,60                | 99210 |
| KUB-100.3D.220.R.07-C25 | 22,0 | 25     | 30 | 141 | 66 | 85  | 1                   | SONT 072907 | EUR 405,60                | 99220 |
| KUB-100.3D.230.R.07-C25 | 23,0 | 25     | 30 | 145 | 69 | 89  | 1                   | SONT 072907 | EUR 405,60                | 99230 |
| KUB-100.3D.240.R.08-C32 | 24,0 | 32     | 39 | 152 | 72 | 92  | 1,2                 | SONT 083308 | EUR 439,90                | 99240 |
| KUB-100.3D.250.R.08-C32 | 25,0 | 32     | 39 | 156 | 75 | 96  | 1,2                 | SONT 083308 | EUR 439,90                | 99250 |
| KUB-100.3D.260.R.08-C32 | 26,0 | 32     | 39 | 159 | 78 | 99  | 1,2                 | SONT 083308 | EUR 439,90                | 99260 |
| KUB-100.3D.270.R.08-C32 | 27,0 | 32     | 39 | 163 | 81 | 103 | 1,2                 | SONT 083308 | EUR 462,80                | 99270 |

Y7



Key D

2A/28



Clamping screw

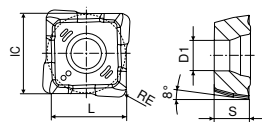
Spare parts  
DC

|           |          | Article no.<br>80 950 ... |     | Article no.<br>70 950 ... |          |
|-----------|----------|---------------------------|-----|---------------------------|----------|
|           |          | EUR                       |     | EUR                       |          |
| 14 - 17,5 | T06 - IP | 10,39                     | 123 | M2x4,3 - IP               | 3,28 863 |
| 18 - 23   | T07 - IP | 10,22                     | 124 | M2,2x5 - IP               | 3,18 856 |
| 24 - 27   | T08 - IP | 10,20                     | 125 | M2,5x6 - IP               | 4,09 857 |

**i** Suitable adapters can be found in → **Chapter 16 Adapters.**

## SONT

| Designation | IC   | D1   | L    | S    |
|-------------|------|------|------|------|
|             | mm   | mm   | mm   | mm   |
| SONT 0318.. | 5,4  | 2,10 | 3,8  | 1,80 |
| SONT 0421.. | 4,6  | 2,25 | 4,2  | 2,10 |
| SONT 0523.. | 5,3  | 2,25 | 4,8  | 2,30 |
| SONT 0625.. | 5,9  | 2,50 | 5,5  | 2,50 |
| SONT 0729.. | 6,5  | 2,50 | 6,1  | 2,90 |
| SONT 0833.. | 7,7  | 2,90 | 7,3  | 3,30 |
| SONT 0938.. | 8,9  | 3,50 | 8,5  | 3,80 |
| SONT 1044.. | 10,1 | 4,10 | 9,6  | 4,40 |
| SONT 1248.. | 11,6 | 4,10 | 11,0 | 4,80 |
| SONT 1350.. | 13,0 | 5,30 | 12,2 | 5,00 |
| SONT 1553.. | 15,2 | 5,30 | 14,4 | 5,30 |
| SONT 1756.. | 17,5 | 5,30 | 16,7 | 5,60 |



## SONT

| ISO                   | RE  | -M30 CTPP430                                                                      |                   | -M30 CTPP430                                                                        |     | -M30 CTCP420                                                                        |                   | -M30 CTCP420                                                                        |     |
|-----------------------|-----|-----------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------|-------------------|-------------------------------------------------------------------------------------|-----|
|                       |     | -M30 CCN1430                                                                      |                   | -M30 CCN1430                                                                        |     | -M30 DCX1420                                                                        |                   | -M30 DCX1420                                                                        |     |
|                       |     | DRAGONSKIN                                                                        |                   | DRAGONSKIN                                                                          |     | DRAGONSKIN                                                                          |                   | DRAGONSKIN                                                                          |     |
|                       |     |  |                   |  |     |  |                   |  |     |
|                       |     | SONT 1A/08                                                                        |                   | SONT 1A/08                                                                          |     | SONT 1A/08                                                                          |                   | SONT 1A/08                                                                          |     |
|                       |     | Article no. 10 830 ...                                                            |                   | Article no. 10 830 ...                                                              |     | Article no. 10 830 ...                                                              |                   | Article no. 10 830 ...                                                              |     |
|                       |     | EUR                                                                               |                   | EUR                                                                                 |     | EUR                                                                                 |                   | EUR                                                                                 |     |
| 031804                | 0,4 | 12,11                                                                             | 103 <sup>1)</sup> | 13,88                                                                               | 104 | 12,11                                                                               | 703 <sup>1)</sup> | 13,88                                                                               | 704 |
| 042105                | 0,5 |                                                                                   |                   | 14,07                                                                               | 105 |                                                                                     |                   | 14,07                                                                               | 705 |
| 052306                | 0,6 |                                                                                   |                   | 14,30                                                                               | 106 |                                                                                     |                   | 14,30                                                                               | 706 |
| 062506                | 0,6 |                                                                                   |                   | 14,62                                                                               | 107 |                                                                                     |                   | 14,62                                                                               | 707 |
| 072907                | 0,7 |                                                                                   |                   | 14,94                                                                               | 108 |                                                                                     |                   | 14,94                                                                               | 708 |
| 083308                | 0,8 |                                                                                   |                   | 15,30                                                                               | 109 |                                                                                     |                   | 15,30                                                                               | 709 |
| 093808                | 0,8 |                                                                                   |                   | 16,03                                                                               | 110 |                                                                                     |                   | 16,03                                                                               | 710 |
| 104408                | 0,8 |                                                                                   |                   | 16,98                                                                               | 112 |                                                                                     |                   | 16,98                                                                               | 712 |
| 124810                | 1,0 |                                                                                   |                   | 17,98                                                                               | 113 |                                                                                     |                   | 17,98                                                                               | 713 |
| 135012                | 1,2 |                                                                                   |                   | 20,39                                                                               | 115 |                                                                                     |                   | 20,39                                                                               | 715 |
| 155312                | 1,2 |                                                                                   |                   | 21,61                                                                               | 117 |                                                                                     |                   | 21,61                                                                               | 717 |
| 175612                | 1,2 |                                                                                   |                   |                                                                                     |     |                                                                                     |                   |                                                                                     |     |
| Steel                 |     | ●                                                                                 |                   | ●                                                                                   |     | ●                                                                                   |                   | ●                                                                                   |     |
| Stainless steel       |     | ●                                                                                 |                   | ●                                                                                   |     | ○                                                                                   |                   | ○                                                                                   |     |
| Cast iron             |     | ○                                                                                 |                   | ○                                                                                   |     | ●                                                                                   |                   | ●                                                                                   |     |
| Non ferrous metals    |     | ○                                                                                 |                   | ○                                                                                   |     | ○                                                                                   |                   | ○                                                                                   |     |
| Heat resistant alloys |     | ○                                                                                 |                   | ○                                                                                   |     | ○                                                                                   |                   | ○                                                                                   |     |
| hardened materials    |     |                                                                                   |                   |                                                                                     |     |                                                                                     |                   |                                                                                     |     |

1) two usable cutting edges

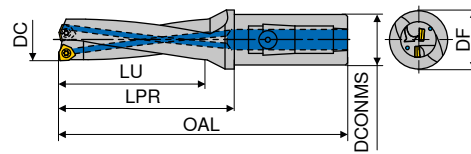
→ v<sub>c</sub>/f<sub>z</sub> Page 43-46

**i** CTCP420 -M30 (DCX1420) is exclusively recommended for use on the peripheral cutting edge!

## KUB Trigon

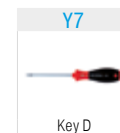
## Scope of supply:

Indexable Insert Drill incl. clamping screws



3

| Designation           | KOMET no. | DC | DCONMS | DF | OAL | LU | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 892 ...<br>EUR |       |
|-----------------------|-----------|----|--------|----|-----|----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                       |           |    |        |    |     |    |     |                     |             |                                               |       |
| KUB-T.2D.140.R.03-K20 | V4331404  | 14 | 20     | 30 | 102 | 28 | 52  | 0,62                | WOEX 030204 | 302,60                                        | 14011 |
| KUB-T.2D.150.R.03-K20 | V4331504  | 15 | 20     | 30 | 104 | 30 | 54  | 0,62                | WOEX 030204 | 302,60                                        | 15011 |
| KUB-T.2D.160.R.03-K20 | V4331602  | 16 | 20     | 30 | 106 | 32 | 56  | 0,62                | WOEX 030204 | 302,60                                        | 16011 |
| KUB-T.2D.170.R.03-K20 | V4331702  | 17 | 20     | 30 | 108 | 34 | 58  | 0,62                | WOEX 030204 | 302,60                                        | 17011 |
| KUB-T.2D.180.R.03-K20 | V4331802  | 18 | 20     | 30 | 110 | 36 | 60  | 0,62                | WOEX 030204 | 302,60                                        | 18011 |
| KUB-T.2D.190.R.03-K20 | V4331902  | 19 | 20     | 30 | 112 | 38 | 62  | 0,62                | WOEX 030204 | 302,60                                        | 19011 |
| KUB-T.2D.200.R.04-K25 | V4432002  | 20 | 25     | 30 | 120 | 40 | 64  | 1,01                | WOEX 040304 | 305,80                                        | 20012 |
| KUB-T.2D.210.R.04-K25 | V4432102  | 21 | 25     | 30 | 122 | 42 | 66  | 1,01                | WOEX 040304 | 305,80                                        | 21012 |
| KUB-T.2D.220.R.04-K25 | V4432202  | 22 | 25     | 30 | 124 | 44 | 68  | 1,01                | WOEX 040304 | 305,80                                        | 22012 |
| KUB-T.2D.230.R.04-K25 | V4432302  | 23 | 25     | 30 | 126 | 46 | 70  | 1,01                | WOEX 040304 | 305,80                                        | 23012 |
| KUB-T.2D.240.R.04-K25 | V4432402  | 24 | 25     | 30 | 128 | 48 | 72  | 1,01                | WOEX 040304 | 305,80                                        | 24012 |
| KUB-T.2D.250.R.05-K32 | V4532502  | 25 | 32     | 39 | 134 | 50 | 74  | 1,28                | WOEX 05T304 | 331,80                                        | 25013 |
| KUB-T.2D.260.R.05-K32 | V4532602  | 26 | 32     | 39 | 136 | 52 | 76  | 1,28                | WOEX 05T304 | 331,80                                        | 26013 |
| KUB-T.2D.270.R.05-K32 | V4532702  | 27 | 32     | 39 | 138 | 54 | 78  | 1,28                | WOEX 05T304 | 331,80                                        | 27013 |
| KUB-T.2D.280.R.05-K32 | V4532802  | 28 | 32     | 39 | 140 | 56 | 80  | 1,28                | WOEX 05T304 | 331,80                                        | 28013 |
| KUB-T.2D.290.R.05-K32 | V4532902  | 29 | 32     | 39 | 142 | 58 | 82  | 1,28                | WOEX 05T304 | 331,80                                        | 29013 |
| KUB-T.2D.300.R.05-K32 | V4533002  | 30 | 32     | 39 | 149 | 60 | 89  | 1,28                | WOEX 05T304 | 331,80                                        | 30013 |
| KUB-T.2D.310.R.05-K32 | V4533102  | 31 | 32     | 39 | 151 | 62 | 91  | 1,28                | WOEX 05T304 | 331,80                                        | 31013 |
| KUB-T.2D.320.R.05-K32 | V4533202  | 32 | 32     | 39 | 153 | 64 | 93  | 1,28                | WOEX 05T304 | 331,80                                        | 32013 |
| KUB-T.2D.330.R.05-K32 | V4533302  | 33 | 32     | 39 | 155 | 66 | 95  | 1,28                | WOEX 05T304 | 331,80                                        | 33013 |
| KUB-T.2D.340.R.05-K32 | V4533402  | 34 | 32     | 39 | 157 | 68 | 97  | 1,28                | WOEX 05T304 | 331,80                                        | 34013 |
| KUB-T.2D.350.R.05-K32 | V4533502  | 35 | 32     | 39 | 159 | 70 | 99  | 1,28                | WOEX 05T304 | 331,80                                        | 35013 |
| KUB-T.2D.360.R.05-K32 | V4533602  | 36 | 32     | 39 | 161 | 72 | 101 | 1,28                | WOEX 05T304 | 331,80                                        | 36013 |
| KUB-T.2D.370.R.06-K32 | V4533702  | 37 | 32     | 39 | 173 | 74 | 113 | 2,8                 | WOEX 06T304 | 346,30                                        | 37013 |
| KUB-T.2D.380.R.06-K32 | V4533802  | 38 | 32     | 39 | 175 | 76 | 115 | 2,8                 | WOEX 06T304 | 346,30                                        | 38013 |
| KUB-T.2D.390.R.06-K32 | V4533902  | 39 | 32     | 39 | 177 | 78 | 117 | 2,8                 | WOEX 06T304 | 346,30                                        | 39013 |
| KUB-T.2D.400.R.06-K32 | V4534002  | 40 | 32     | 39 | 179 | 80 | 119 | 2,8                 | WOEX 06T304 | 346,30                                        | 40013 |
| KUB-T.2D.410.R.06-K32 | V4534102  | 41 | 32     | 39 | 181 | 82 | 121 | 2,8                 | WOEX 06T304 | 346,30                                        | 41013 |
| KUB-T.2D.420.R.06-K32 | V4534202  | 42 | 32     | 39 | 183 | 84 | 123 | 2,8                 | WOEX 06T304 | 346,30                                        | 42013 |
| KUB-T.2D.430.R.06-K32 | V4534302  | 43 | 32     | 39 | 185 | 86 | 125 | 2,8                 | WOEX 06T304 | 346,30                                        | 43013 |
| KUB-T.2D.440.R.06-K32 | V4534402  | 44 | 32     | 39 | 187 | 88 | 127 | 2,8                 | WOEX 06T304 | 346,30                                        | 44013 |



Key D



Clamping screw

Spare parts  
DC

|         |          | Article no.<br>80 950 ...<br>EUR |     | Article no.<br>10 950 ...<br>EUR |            |
|---------|----------|----------------------------------|-----|----------------------------------|------------|
|         |          |                                  |     |                                  |            |
| 14 - 19 | T06 - IP | 10,39                            | 123 | M2,0x4,3 - 06IP                  | 2,36 10000 |
| 20 - 24 | T06 - IP | 10,39                            | 123 | M2,2x5,5 - 06IP                  | 2,36 10700 |
| 25 - 36 | T08 - IP | 10,20                            | 125 | M2,5x7,2 - 10IP                  | 2,36 10500 |
| 37 - 44 | T10 - IP | 11,56                            | 127 | M3,5x7,3 - 10IP                  | 2,36 10600 |

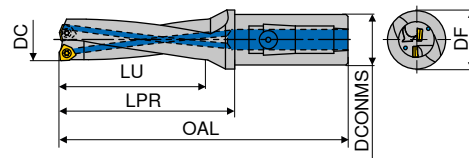
**i** Suitable adapters can be found in → Chapter 16 Adapters.



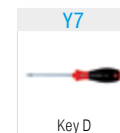
## KUB Trigon

## Scope of supply:

Indexable Insert Drill incl. clamping screws



| Designation           | KOMET no. | DC | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 893 ...<br>EUR |       |
|-----------------------|-----------|----|--------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                       |           |    |        |    |     |     |     |                     |             |                                               |       |
| KUB-T.3D.140.R.03-K20 | V4371404  | 14 | 20     | 30 | 116 | 42  | 66  | 0,62                | WOEX 030204 | 317,20                                        | 14011 |
| KUB-T.3D.150.R.03-K20 | V4371504  | 15 | 20     | 30 | 119 | 45  | 69  | 0,62                | WOEX 030204 | 317,20                                        | 15011 |
| KUB-T.3D.160.R.03-K20 | V4371602  | 16 | 20     | 30 | 122 | 48  | 72  | 0,62                | WOEX 030204 | 317,20                                        | 16011 |
| KUB-T.3D.170.R.03-K20 | V4371702  | 17 | 20     | 30 | 125 | 51  | 75  | 0,62                | WOEX 030204 | 317,20                                        | 17011 |
| KUB-T.3D.180.R.03-K20 | V4371802  | 18 | 20     | 30 | 128 | 54  | 78  | 0,62                | WOEX 030204 | 317,20                                        | 18011 |
| KUB-T.3D.190.R.03-K20 | V4371902  | 19 | 20     | 30 | 131 | 57  | 81  | 0,62                | WOEX 030204 | 317,20                                        | 19011 |
| KUB-T.3D.200.R.04-K25 | V4472002  | 20 | 25     | 30 | 140 | 60  | 84  | 1,01                | WOEX 040304 | 340,10                                        | 20012 |
| KUB-T.3D.210.R.04-K25 | V4472102  | 21 | 25     | 30 | 143 | 63  | 87  | 1,01                | WOEX 040304 | 340,10                                        | 21012 |
| KUB-T.3D.220.R.04-K25 | V4472202  | 22 | 25     | 30 | 146 | 66  | 90  | 1,01                | WOEX 040304 | 340,10                                        | 22012 |
| KUB-T.3D.230.R.04-K25 | V4472302  | 23 | 25     | 30 | 149 | 69  | 93  | 1,01                | WOEX 040304 | 340,10                                        | 23012 |
| KUB-T.3D.240.R.04-K25 | V4472402  | 24 | 25     | 30 | 152 | 72  | 96  | 1,01                | WOEX 040304 | 340,10                                        | 24012 |
| KUB-T.3D.250.R.05-K32 | V4572502  | 25 | 32     | 39 | 159 | 75  | 99  | 1,28                | WOEX 05T304 | 370,20                                        | 25013 |
| KUB-T.3D.260.R.05-K32 | V4572602  | 26 | 32     | 39 | 162 | 78  | 102 | 1,28                | WOEX 05T304 | 370,20                                        | 26013 |
| KUB-T.3D.270.R.05-K32 | V4572702  | 27 | 32     | 39 | 165 | 81  | 105 | 1,28                | WOEX 05T304 | 370,20                                        | 27013 |
| KUB-T.3D.280.R.05-K32 | V4572802  | 28 | 32     | 39 | 168 | 84  | 108 | 1,28                | WOEX 05T304 | 370,20                                        | 28013 |
| KUB-T.3D.290.R.05-K32 | V4572902  | 29 | 32     | 39 | 171 | 87  | 111 | 1,28                | WOEX 05T304 | 370,20                                        | 29013 |
| KUB-T.3D.300.R.05-K32 | V4573002  | 30 | 32     | 39 | 179 | 90  | 119 | 1,28                | WOEX 05T304 | 370,20                                        | 30013 |
| KUB-T.3D.310.R.05-K32 | V4573102  | 31 | 32     | 39 | 182 | 93  | 122 | 1,28                | WOEX 05T304 | 370,20                                        | 31013 |
| KUB-T.3D.320.R.05-K32 | V4573202  | 32 | 32     | 39 | 185 | 96  | 125 | 1,28                | WOEX 05T304 | 370,20                                        | 32013 |
| KUB-T.3D.330.R.05-K32 | V4573302  | 33 | 32     | 39 | 188 | 99  | 128 | 1,28                | WOEX 05T304 | 370,20                                        | 33013 |
| KUB-T.3D.340.R.05-K32 | V4573402  | 34 | 32     | 39 | 191 | 102 | 131 | 1,28                | WOEX 05T304 | 370,20                                        | 34013 |
| KUB-T.3D.350.R.05-K32 | V4573502  | 35 | 32     | 39 | 194 | 105 | 134 | 1,28                | WOEX 05T304 | 370,20                                        | 35013 |
| KUB-T.3D.360.R.05-K32 | V4573602  | 36 | 32     | 39 | 197 | 108 | 137 | 1,28                | WOEX 05T304 | 370,20                                        | 36013 |
| KUB-T.3D.370.R.06-K32 | V4573702  | 37 | 32     | 39 | 210 | 111 | 150 | 2,8                 | WOEX 06T304 | 401,40                                        | 37013 |
| KUB-T.3D.380.R.06-K32 | V4573802  | 38 | 32     | 39 | 213 | 114 | 153 | 2,8                 | WOEX 06T304 | 401,40                                        | 38013 |
| KUB-T.3D.390.R.06-K32 | V4573902  | 39 | 32     | 39 | 216 | 117 | 156 | 2,8                 | WOEX 06T304 | 401,40                                        | 39013 |
| KUB-T.3D.400.R.06-K32 | V4574002  | 40 | 32     | 39 | 219 | 120 | 159 | 2,8                 | WOEX 06T304 | 401,40                                        | 40013 |
| KUB-T.3D.410.R.06-K32 | V4574102  | 41 | 32     | 39 | 222 | 123 | 162 | 2,8                 | WOEX 06T304 | 401,40                                        | 41013 |
| KUB-T.3D.420.R.06-K32 | V4574202  | 42 | 32     | 39 | 225 | 126 | 165 | 2,8                 | WOEX 06T304 | 401,40                                        | 42013 |
| KUB-T.3D.430.R.06-K32 | V4574302  | 43 | 32     | 39 | 228 | 129 | 168 | 2,8                 | WOEX 06T304 | 401,40                                        | 43013 |
| KUB-T.3D.440.R.06-K32 | V4574402  | 44 | 32     | 39 | 231 | 132 | 171 | 2,8                 | WOEX 06T304 | 401,40                                        | 44013 |



Key D



Clamping screw

Spare parts  
DC

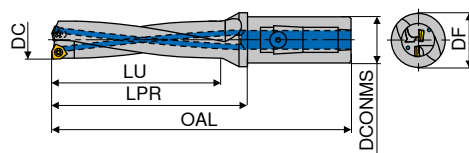
|         |          | Article no.<br>80 950 ...<br>EUR |     | Article no.<br>10 950 ...<br>EUR |            |
|---------|----------|----------------------------------|-----|----------------------------------|------------|
|         |          |                                  |     |                                  |            |
| 14 - 19 | T06 - IP | 10,39                            | 123 | M2,0x4,3 - 06IP                  | 2,36 10000 |
| 20 - 24 | T06 - IP | 10,39                            | 123 | M2,2x5,5 - 06IP                  | 2,36 10700 |
| 25 - 36 | T08 - IP | 10,20                            | 125 | M2,5x7,2 - 10IP                  | 2,36 10500 |
| 37 - 44 | T10 - IP | 11,56                            | 127 | M3,5x7,3 - 10IP                  | 2,36 10600 |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

## KUB Trigon

## Scope of supply:

Indexable Insert Drill incl. clamping screws



3

| Designation           | KOMET no. | DC | DCONMS | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 894 ...<br>EUR |       |
|-----------------------|-----------|----|--------|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                       |           |    |        |    |     |     |     |                     |             |                                               |       |
| KUB-T.4D.140.R.03-K20 | V4391404  | 14 | 20     | 30 | 130 | 56  | 80  | 0,62                | WOEX 030204 | 348,40                                        | 14011 |
| KUB-T.4D.150.R.03-K20 | V4391504  | 15 | 20     | 30 | 134 | 60  | 84  | 0,62                | WOEX 030204 | 348,40                                        | 15011 |
| KUB-T.4D.160.R.03-K20 | V4391602  | 16 | 20     | 30 | 138 | 64  | 88  | 0,62                | WOEX 030204 | 348,40                                        | 16011 |
| KUB-T.4D.170.R.03-K20 | V4391702  | 17 | 20     | 30 | 142 | 68  | 92  | 0,62                | WOEX 030204 | 348,40                                        | 17011 |
| KUB-T.4D.180.R.03-K20 | V4391802  | 18 | 20     | 30 | 146 | 72  | 96  | 0,62                | WOEX 030204 | 348,40                                        | 18011 |
| KUB-T.4D.190.R.03-K20 | V4391902  | 19 | 20     | 30 | 150 | 76  | 100 | 0,62                | WOEX 030204 | 348,40                                        | 19011 |
| KUB-T.4D.200.R.04-K25 | V4492002  | 20 | 25     | 30 | 160 | 80  | 104 | 1,01                | WOEX 040304 | 374,40                                        | 20012 |
| KUB-T.4D.210.R.04-K25 | V4492102  | 21 | 25     | 30 | 164 | 84  | 108 | 1,01                | WOEX 040304 | 374,40                                        | 21012 |
| KUB-T.4D.220.R.04-K25 | V4492202  | 22 | 25     | 30 | 168 | 88  | 112 | 1,01                | WOEX 040304 | 374,40                                        | 22012 |
| KUB-T.4D.230.R.04-K25 | V4492302  | 23 | 25     | 30 | 172 | 92  | 116 | 1,01                | WOEX 040304 | 374,40                                        | 23012 |
| KUB-T.4D.240.R.04-K25 | V4492402  | 24 | 25     | 30 | 176 | 96  | 120 | 1,01                | WOEX 040304 | 374,40                                        | 24012 |
| KUB-T.4D.250.R.05-K32 | V4592502  | 25 | 32     | 39 | 184 | 100 | 124 | 1,28                | WOEX 05T304 | 383,80                                        | 25013 |
| KUB-T.4D.260.R.05-K32 | V4592602  | 26 | 32     | 39 | 188 | 104 | 128 | 1,28                | WOEX 05T304 | 383,80                                        | 26013 |
| KUB-T.4D.270.R.05-K32 | V4592702  | 27 | 32     | 39 | 192 | 108 | 132 | 1,28                | WOEX 05T304 | 383,80                                        | 27013 |
| KUB-T.4D.280.R.05-K32 | V4592802  | 28 | 32     | 39 | 196 | 112 | 136 | 1,28                | WOEX 05T304 | 383,80                                        | 28013 |
| KUB-T.4D.290.R.05-K32 | V4592902  | 29 | 32     | 39 | 200 | 116 | 140 | 1,28                | WOEX 05T304 | 404,60                                        | 29013 |
| KUB-T.4D.300.R.05-K32 | V4593002  | 30 | 32     | 39 | 209 | 120 | 149 | 1,28                | WOEX 05T304 | 404,60                                        | 30013 |
| KUB-T.4D.310.R.05-K32 | V4593102  | 31 | 32     | 39 | 213 | 124 | 153 | 1,28                | WOEX 05T304 | 404,60                                        | 31013 |
| KUB-T.4D.320.R.05-K32 | V4593202  | 32 | 32     | 39 | 217 | 128 | 157 | 1,28                | WOEX 05T304 | 404,60                                        | 32013 |
| KUB-T.4D.330.R.05-K32 | V4593302  | 33 | 32     | 39 | 221 | 132 | 161 | 1,28                | WOEX 05T304 | 404,60                                        | 33013 |
| KUB-T.4D.340.R.05-K32 | V4593402  | 34 | 32     | 39 | 225 | 136 | 165 | 1,28                | WOEX 05T304 | 404,60                                        | 34013 |
| KUB-T.4D.350.R.05-K32 | V4593502  | 35 | 32     | 39 | 229 | 140 | 169 | 1,28                | WOEX 05T304 | 404,60                                        | 35013 |

Y7



Key D

W7



Clamping screw

Spare parts  
DC

| DC      |          | Article no.<br>80 950 ...<br>EUR |     | Article no.<br>10 950 ...<br>EUR |            |
|---------|----------|----------------------------------|-----|----------------------------------|------------|
|         |          |                                  |     |                                  |            |
| 14 - 19 | T06 - IP | 10,39                            | 123 | M2,0x4,3 - 06IP                  | 2,36 10000 |
| 20 - 24 | T06 - IP | 10,39                            | 123 | M2,2x5,5 - 06IP                  | 2,36 10700 |
| 25 - 35 | T08 - IP | 10,20                            | 125 | M2,5x7,2 - 10IP                  | 2,36 10500 |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

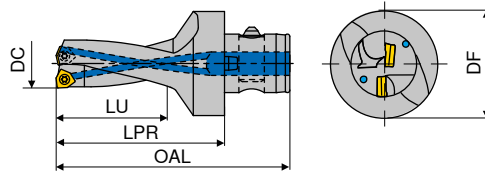
## KUB Trigon

## Scope of supply:

Indexable Insert Drill incl. clamping screws



ABS



| Designation             | KOMET no. | DC | DF | OAL | LU | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 892 ...<br>EUR |       |
|-------------------------|-----------|----|----|-----|----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                         |           |    |    |     |    |     |                     |             |                                               |       |
| KUB-T.2D.140.R.03-ABS50 | V3031403  | 14 | 50 | 94  | 28 | 63  | 0,62                | WOEX 030204 | 356,70                                        | 14095 |
| KUB-T.2D.150.R.03-ABS50 | V3031503  | 15 | 50 | 96  | 30 | 65  | 0,62                | WOEX 030204 | 356,70                                        | 15095 |
| KUB-T.2D.160.R.03-ABS50 | V3031601  | 16 | 50 | 98  | 32 | 67  | 0,62                | WOEX 030204 | 356,70                                        | 16095 |
| KUB-T.2D.170.R.03-ABS50 | V3031701  | 17 | 50 | 100 | 34 | 69  | 0,62                | WOEX 030204 | 356,70                                        | 17095 |
| KUB-T.2D.180.R.03-ABS50 | V3031801  | 18 | 50 | 102 | 36 | 71  | 0,62                | WOEX 030204 | 356,70                                        | 18095 |
| KUB-T.2D.190.R.03-ABS50 | V3031901  | 19 | 50 | 104 | 38 | 73  | 0,62                | WOEX 030204 | 356,70                                        | 19095 |
| KUB-T.2D.200.R.04-ABS50 | V3032001  | 20 | 50 | 106 | 40 | 75  | 1,01                | WOEX 040304 | 358,80                                        | 20095 |
| KUB-T.2D.210.R.04-ABS50 | V3032101  | 21 | 50 | 108 | 42 | 77  | 1,01                | WOEX 040304 | 358,80                                        | 21095 |
| KUB-T.2D.220.R.04-ABS50 | V3032201  | 22 | 50 | 110 | 44 | 79  | 1,01                | WOEX 040304 | 358,80                                        | 22095 |
| KUB-T.2D.230.R.04-ABS50 | V3032301  | 23 | 50 | 112 | 46 | 81  | 1,01                | WOEX 040304 | 358,80                                        | 23095 |
| KUB-T.2D.240.R.04-ABS50 | V3032401  | 24 | 50 | 114 | 48 | 83  | 1,01                | WOEX 040304 | 358,80                                        | 24095 |
| KUB-T.2D.250.R.05-ABS50 | V3032501  | 25 | 50 | 116 | 50 | 85  | 1,28                | WOEX 05T304 | 364,00                                        | 25095 |
| KUB-T.2D.260.R.05-ABS50 | V3032601  | 26 | 50 | 118 | 52 | 87  | 1,28                | WOEX 05T304 | 364,00                                        | 26095 |
| KUB-T.2D.270.R.05-ABS50 | V3032701  | 27 | 50 | 120 | 54 | 89  | 1,28                | WOEX 05T304 | 364,00                                        | 27095 |
| KUB-T.2D.280.R.05-ABS50 | V3032801  | 28 | 50 | 122 | 56 | 91  | 1,28                | WOEX 05T304 | 364,00                                        | 28095 |
| KUB-T.2D.290.R.05-ABS50 | V3032901  | 29 | 50 | 124 | 58 | 93  | 1,28                | WOEX 05T304 | 364,00                                        | 29095 |
| KUB-T.2D.300.R.05-ABS50 | V3033001  | 30 | 50 | 131 | 60 | 100 | 1,28                | WOEX 05T304 | 364,00                                        | 30095 |
| KUB-T.2D.310.R.05-ABS50 | V3033101  | 31 | 50 | 133 | 62 | 102 | 1,28                | WOEX 05T304 | 364,00                                        | 31095 |
| KUB-T.2D.320.R.05-ABS50 | V3033201  | 32 | 50 | 135 | 64 | 104 | 1,28                | WOEX 05T304 | 364,00                                        | 32095 |
| KUB-T.2D.330.R.05-ABS50 | V3033301  | 33 | 50 | 137 | 66 | 106 | 1,28                | WOEX 05T304 | 364,00                                        | 33095 |
| KUB-T.2D.340.R.05-ABS50 | V3033401  | 34 | 50 | 139 | 68 | 108 | 1,28                | WOEX 05T304 | 364,00                                        | 34095 |
| KUB-T.2D.350.R.05-ABS50 | V3033501  | 35 | 50 | 141 | 70 | 110 | 1,28                | WOEX 05T304 | 364,00                                        | 35095 |
| KUB-T.2D.360.R.05-ABS50 | V3033601  | 36 | 50 | 143 | 72 | 112 | 1,28                | WOEX 05T304 | 364,00                                        | 36095 |
| KUB-T.2D.370.R.06-ABS50 | V3033701  | 37 | 50 | 155 | 74 | 124 | 2,8                 | WOEX 06T304 | 382,70                                        | 37095 |
| KUB-T.2D.380.R.06-ABS50 | V3033801  | 38 | 50 | 157 | 76 | 126 | 2,8                 | WOEX 06T304 | 382,70                                        | 38095 |
| KUB-T.2D.390.R.06-ABS50 | V3033901  | 39 | 50 | 159 | 78 | 128 | 2,8                 | WOEX 06T304 | 382,70                                        | 39095 |
| KUB-T.2D.400.R.06-ABS50 | V3034001  | 40 | 50 | 161 | 80 | 130 | 2,8                 | WOEX 06T304 | 382,70                                        | 40095 |
| KUB-T.2D.410.R.06-ABS50 | V3034101  | 41 | 50 | 163 | 82 | 132 | 2,8                 | WOEX 06T304 | 382,70                                        | 41095 |
| KUB-T.2D.420.R.06-ABS50 | V3034201  | 42 | 50 | 165 | 84 | 134 | 2,8                 | WOEX 06T304 | 382,70                                        | 42095 |
| KUB-T.2D.430.R.06-ABS50 | V3034301  | 43 | 50 | 167 | 86 | 136 | 2,8                 | WOEX 06T304 | 382,70                                        | 43095 |
| KUB-T.2D.440.R.06-ABS50 | V3034401  | 44 | 50 | 169 | 88 | 138 | 2,8                 | WOEX 06T304 | 382,70                                        | 44095 |

Spare parts  
DC

|         |          | Article no.<br>80 950 ...<br>EUR |     |                 | Article no.<br>10 950 ...<br>EUR |       |
|---------|----------|----------------------------------|-----|-----------------|----------------------------------|-------|
|         |          |                                  |     |                 |                                  |       |
| 14 - 19 | T06 - IP | 10,39                            | 123 | M2,0x4,3 - 06IP | 2,36                             | 10000 |
| 20 - 24 | T06 - IP | 10,39                            | 123 | M2,2x5,5 - 06IP | 2,36                             | 10700 |
| 25 - 36 | T08 - IP | 10,20                            | 125 | M2,5x7,2 - 10IP | 2,36                             | 10500 |
| 37 - 44 | T10 - IP | 11,56                            | 127 | M3,5x7,3 - 10IP | 2,36                             | 10600 |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

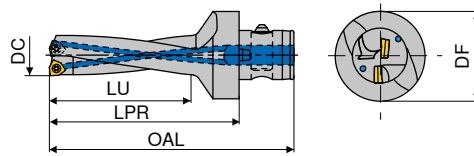
## KUB Trigon

## Scope of supply:

Indexable Insert Drill incl. clamping screws



ABS



3

| Designation             | KOMET no. | DC | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 893 ...<br>EUR |       |
|-------------------------|-----------|----|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|-------|
|                         |           |    |    |     |     |     |                     |             |                                               |       |
| KUB-T.3D.140.R.03-ABS50 | V3071403  | 14 | 50 | 108 | 42  | 77  | 0,62                | WOEX 030204 | 392,10                                        | 14095 |
| KUB-T.3D.150.R.03-ABS50 | V3071503  | 15 | 50 | 111 | 45  | 80  | 0,62                | WOEX 030204 | 392,10                                        | 15095 |
| KUB-T.3D.160.R.03-ABS50 | V3071601  | 16 | 50 | 114 | 48  | 83  | 0,62                | WOEX 030204 | 392,10                                        | 16095 |
| KUB-T.3D.170.R.03-ABS50 | V3071701  | 17 | 50 | 117 | 51  | 86  | 0,62                | WOEX 030204 | 392,10                                        | 17095 |
| KUB-T.3D.180.R.03-ABS50 | V3071801  | 18 | 50 | 120 | 54  | 89  | 0,62                | WOEX 030204 | 392,10                                        | 18095 |
| KUB-T.3D.190.R.03-ABS50 | V3071901  | 19 | 50 | 123 | 57  | 92  | 0,62                | WOEX 030204 | 392,10                                        | 19095 |
| KUB-T.3D.200.R.04-ABS50 | V3072001  | 20 | 50 | 126 | 60  | 95  | 1,01                | WOEX 040304 | 399,40                                        | 20095 |
| KUB-T.3D.210.R.04-ABS50 | V3072101  | 21 | 50 | 129 | 63  | 98  | 1,01                | WOEX 040304 | 399,40                                        | 21095 |
| KUB-T.3D.220.R.04-ABS50 | V3072201  | 22 | 50 | 132 | 66  | 101 | 1,01                | WOEX 040304 | 399,40                                        | 22095 |
| KUB-T.3D.230.R.04-ABS50 | V3072301  | 23 | 50 | 135 | 69  | 104 | 1,01                | WOEX 040304 | 399,40                                        | 23095 |
| KUB-T.3D.240.R.04-ABS50 | V3072401  | 24 | 50 | 138 | 72  | 107 | 1,01                | WOEX 040304 | 399,40                                        | 24095 |
| KUB-T.3D.250.R.05-ABS50 | V3072501  | 25 | 50 | 141 | 75  | 110 | 1,28                | WOEX 05T304 | 408,70                                        | 25095 |
| KUB-T.3D.260.R.05-ABS50 | V3072601  | 26 | 50 | 144 | 78  | 113 | 1,28                | WOEX 05T304 | 408,70                                        | 26095 |
| KUB-T.3D.270.R.05-ABS50 | V3072701  | 27 | 50 | 147 | 81  | 116 | 1,28                | WOEX 05T304 | 408,70                                        | 27095 |
| KUB-T.3D.280.R.05-ABS50 | V3072801  | 28 | 50 | 150 | 84  | 119 | 1,28                | WOEX 05T304 | 408,70                                        | 28095 |
| KUB-T.3D.290.R.05-ABS50 | V3072901  | 29 | 50 | 153 | 87  | 122 | 1,28                | WOEX 05T304 | 408,70                                        | 29095 |
| KUB-T.3D.300.R.05-ABS50 | V3073001  | 30 | 50 | 161 | 90  | 130 | 1,28                | WOEX 05T304 | 408,70                                        | 30095 |
| KUB-T.3D.310.R.05-ABS50 | V3073101  | 31 | 50 | 164 | 93  | 133 | 1,28                | WOEX 05T304 | 408,70                                        | 31095 |
| KUB-T.3D.320.R.05-ABS50 | V3073201  | 32 | 50 | 167 | 96  | 136 | 1,28                | WOEX 05T304 | 408,70                                        | 32095 |
| KUB-T.3D.330.R.05-ABS50 | V3073301  | 33 | 50 | 170 | 99  | 139 | 1,28                | WOEX 05T304 | 408,70                                        | 33095 |
| KUB-T.3D.340.R.05-ABS50 | V3073401  | 34 | 50 | 173 | 102 | 142 | 1,28                | WOEX 05T304 | 408,70                                        | 34095 |
| KUB-T.3D.350.R.05-ABS50 | V3073501  | 35 | 50 | 176 | 105 | 145 | 1,28                | WOEX 05T304 | 408,70                                        | 35095 |
| KUB-T.3D.360.R.05-ABS50 | V3073601  | 36 | 50 | 179 | 108 | 148 | 1,28                | WOEX 05T304 | 408,70                                        | 36095 |
| KUB-T.3D.370.R.06-ABS50 | V3073701  | 37 | 50 | 192 | 111 | 161 | 2,8                 | WOEX 06T304 | 444,10                                        | 37095 |
| KUB-T.3D.380.R.06-ABS50 | V3073801  | 38 | 50 | 195 | 114 | 164 | 2,8                 | WOEX 06T304 | 444,10                                        | 38095 |
| KUB-T.3D.390.R.06-ABS50 | V3073901  | 39 | 50 | 198 | 117 | 167 | 2,8                 | WOEX 06T304 | 444,10                                        | 39095 |
| KUB-T.3D.400.R.06-ABS50 | V3074001  | 40 | 50 | 201 | 120 | 170 | 2,8                 | WOEX 06T304 | 444,10                                        | 40095 |
| KUB-T.3D.410.R.06-ABS50 | V3074101  | 41 | 50 | 204 | 123 | 173 | 2,8                 | WOEX 06T304 | 444,10                                        | 41095 |
| KUB-T.3D.420.R.06-ABS50 | V3074201  | 42 | 50 | 207 | 126 | 176 | 2,8                 | WOEX 06T304 | 444,10                                        | 42095 |
| KUB-T.3D.430.R.06-ABS50 | V3074301  | 43 | 50 | 210 | 129 | 179 | 2,8                 | WOEX 06T304 | 444,10                                        | 43095 |
| KUB-T.3D.440.R.06-ABS50 | V3074401  | 44 | 50 | 213 | 132 | 182 | 2,8                 | WOEX 06T304 | 444,10                                        | 44095 |

Spare parts  
DC

|         |          | Article no.<br>80 950 ...<br>EUR |     |                 | Article no.<br>10 950 ...<br>EUR |       |
|---------|----------|----------------------------------|-----|-----------------|----------------------------------|-------|
|         |          |                                  |     |                 |                                  |       |
| 14 - 19 | T06 - IP | 10,39                            | 123 | M2,0x4,3 - 06IP | 2,36                             | 10000 |
| 20 - 24 | T06 - IP | 10,39                            | 123 | M2,2x5,5 - 06IP | 2,36                             | 10700 |
| 25 - 36 | T08 - IP | 10,20                            | 125 | M2,5x7,2 - 10IP | 2,36                             | 10500 |
| 37 - 44 | T10 - IP | 11,56                            | 127 | M3,5x7,3 - 10IP | 2,36                             | 10600 |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

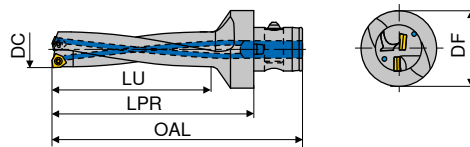
## KUB Trigon

## Scope of supply:

Indexable Insert Drill incl. clamping screws



ABS



| Designation             | KOMET no. | DC | DF | OAL | LU  | LPR | torque moment<br>Nm | Insert      | NEW 2B/6#<br>Article no.<br>10 894 ...<br>EUR |
|-------------------------|-----------|----|----|-----|-----|-----|---------------------|-------------|-----------------------------------------------|
|                         |           | mm | mm | mm  | mm  | mm  |                     |             |                                               |
| KUB-T.4D.140.R.03-ABS50 | V3091403  | 14 | 50 | 122 | 56  | 91  | 0,62                | WOEX 030204 | 431,60 14095                                  |
| KUB-T.4D.150.R.03-ABS50 | V3091503  | 15 | 50 | 126 | 60  | 95  | 0,62                | WOEX 030204 | 431,60 15095                                  |
| KUB-T.4D.160.R.03-ABS50 | V3091601  | 16 | 50 | 130 | 64  | 99  | 0,62                | WOEX 030204 | 431,60 16095                                  |
| KUB-T.4D.170.R.03-ABS50 | V3091701  | 17 | 50 | 134 | 68  | 103 | 0,62                | WOEX 030204 | 431,60 17095                                  |
| KUB-T.4D.180.R.03-ABS50 | V3091801  | 18 | 50 | 138 | 72  | 107 | 0,62                | WOEX 030204 | 431,60 18095                                  |
| KUB-T.4D.190.R.03-ABS50 | V3091901  | 19 | 50 | 142 | 76  | 111 | 0,62                | WOEX 030204 | 431,60 19095                                  |
| KUB-T.4D.200.R.04-ABS50 | V3092001  | 20 | 50 | 146 | 80  | 115 | 1,01                | WOEX 040304 | 439,90 20095                                  |
| KUB-T.4D.210.R.04-ABS50 | V3092101  | 21 | 50 | 150 | 84  | 119 | 1,01                | WOEX 040304 | 439,90 21095                                  |
| KUB-T.4D.220.R.04-ABS50 | V3092201  | 22 | 50 | 154 | 88  | 123 | 1,01                | WOEX 040304 | 439,90 22095                                  |
| KUB-T.4D.230.R.04-ABS50 | V3092301  | 23 | 50 | 158 | 92  | 127 | 1,01                | WOEX 040304 | 439,90 23095                                  |
| KUB-T.4D.240.R.04-ABS50 | V3092401  | 24 | 50 | 162 | 96  | 131 | 1,01                | WOEX 040304 | 439,90 24095                                  |
| KUB-T.4D.250.R.05-ABS50 | V3092501  | 25 | 50 | 166 | 100 | 135 | 1,28                | WOEX 05T304 | 449,30 25095                                  |
| KUB-T.4D.260.R.05-ABS50 | V3092601  | 26 | 50 | 170 | 104 | 139 | 1,28                | WOEX 05T304 | 449,30 26095                                  |
| KUB-T.4D.270.R.05-ABS50 | V3092701  | 27 | 50 | 174 | 108 | 143 | 1,28                | WOEX 05T304 | 449,30 27095                                  |
| KUB-T.4D.280.R.05-ABS50 | V3092801  | 28 | 50 | 178 | 112 | 147 | 1,28                | WOEX 05T304 | 449,30 28095                                  |
| KUB-T.4D.290.R.05-ABS50 | V3092901  | 29 | 50 | 182 | 116 | 151 | 1,28                | WOEX 05T304 | 449,30 29095                                  |
| KUB-T.4D.300.R.05-ABS50 | V3093001  | 30 | 50 | 191 | 120 | 160 | 1,28                | WOEX 05T304 | 449,30 30095                                  |
| KUB-T.4D.310.R.05-ABS50 | V3093101  | 31 | 50 | 195 | 124 | 164 | 1,28                | WOEX 05T304 | 449,30 31095                                  |
| KUB-T.4D.320.R.05-ABS50 | V3093201  | 32 | 50 | 199 | 128 | 168 | 1,28                | WOEX 05T304 | 449,30 32095                                  |
| KUB-T.4D.330.R.05-ABS50 | V3093301  | 33 | 50 | 203 | 132 | 172 | 1,28                | WOEX 05T304 | 449,30 33095                                  |
| KUB-T.4D.340.R.05-ABS50 | V3093401  | 34 | 50 | 207 | 136 | 176 | 1,28                | WOEX 05T304 | 449,30 34095                                  |
| KUB-T.4D.350.R.05-ABS50 | V3093501  | 35 | 50 | 211 | 140 | 180 | 1,28                | WOEX 05T304 | 449,30 35095                                  |
| KUB-T.4D.360.R.05-ABS50 | V3093601  | 36 | 50 | 215 | 144 | 184 | 1,28                | WOEX 05T304 | 449,30 36095                                  |
| KUB-T.4D.370.R.06-ABS50 | V3093701  | 37 | 50 | 229 | 148 | 198 | 2,8                 | WOEX 06T304 | 487,80 37095                                  |
| KUB-T.4D.380.R.06-ABS50 | V3093801  | 38 | 50 | 233 | 152 | 202 | 2,8                 | WOEX 06T304 | 487,80 38095                                  |
| KUB-T.4D.390.R.06-ABS50 | V3093901  | 39 | 50 | 237 | 156 | 206 | 2,8                 | WOEX 06T304 | 487,80 39095                                  |
| KUB-T.4D.400.R.06-ABS50 | V3094001  | 40 | 50 | 241 | 160 | 210 | 2,8                 | WOEX 06T304 | 487,80 40095                                  |
| KUB-T.4D.410.R.06-ABS50 | V3094101  | 41 | 50 | 245 | 164 | 214 | 2,8                 | WOEX 06T304 | 487,80 41095                                  |
| KUB-T.4D.420.R.06-ABS50 | V3094201  | 42 | 50 | 249 | 168 | 218 | 2,8                 | WOEX 06T304 | 487,80 42095                                  |
| KUB-T.4D.430.R.06-ABS50 | V3094301  | 43 | 50 | 253 | 172 | 222 | 2,8                 | WOEX 06T304 | 487,80 43095                                  |
| KUB-T.4D.440.R.06-ABS50 | V3094401  | 44 | 50 | 257 | 176 | 226 | 2,8                 | WOEX 06T304 | 487,80 44095                                  |

Y7



Key D

W7



Clamping screw

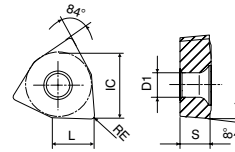
Spare parts  
DC

|         |          | Article no.<br>80 950 ...<br>EUR |     | Article no.<br>10 950 ...<br>EUR |            |
|---------|----------|----------------------------------|-----|----------------------------------|------------|
| 14 - 19 | T06 - IP | 10,39                            | 123 | M2,0x4,3 - 06IP                  | 2,36 10000 |
| 20 - 24 | T06 - IP | 10,39                            | 123 | M2,2x5,5 - 06IP                  | 2,36 10700 |
| 25 - 36 | T08 - IP | 10,20                            | 125 | M2,5x7,2 - 10IP                  | 2,36 10500 |
| 37 - 44 | T10 - IP | 11,56                            | 127 | M3,5x7,3 - 10IP                  | 2,36 10600 |

**i** Suitable adapters can be found in → Chapter 16 Adapters.

## WOEX

| Designation | L   | IC    | S    | D1   |
|-------------|-----|-------|------|------|
|             | mm  | mm    | mm   | mm   |
| WOEX 0302.. | 3,2 | 5,00  | 2,30 | 2,30 |
| WOEX 0403.. | 4,1 | 6,35  | 3,18 | 2,55 |
| WOEX 05T3.. | 5,3 | 8,00  | 3,80 | 2,85 |
| WOEX 06T3.. | 6,6 | 10,00 | 3,80 | 4,05 |



3

## WOEX

|                       |                 |     | -01<br>BK8425                                                                     | -03<br>BK8425                                                                       | -13<br>BK8425                                                                       | -01<br>BK6115                                                                       |
|-----------------------|-----------------|-----|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                       |                 |     |  |  |  |  |
| ISO                   | KOMET no.       | RE  | WOEX<br>NEW 1A/3#<br>Article no.<br>10 821 ...<br>EUR                             | WOEX<br>NEW 1A/3#<br>Article no.<br>10 821 ...<br>EUR                               | WOEX<br>NEW 1A/3#<br>Article no.<br>10 821 ...<br>EUR                               | WOEX<br>NEW 1A/3#<br>Article no.<br>10 821 ...<br>EUR                               |
|                       |                 |     |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
|                       |                 | mm  |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| 030204                | W2910030.048425 | 0,4 |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| 030204                | W2910130.048425 | 0,4 |                                                                                   | 11,65 30303                                                                         |                                                                                     |                                                                                     |
| 030204                | W2910010.048425 | 0,4 | 11,34 30301                                                                       |                                                                                     | 13,73 30313                                                                         |                                                                                     |
| 030204                | W2910010.046115 | 0,4 |                                                                                   |                                                                                     |                                                                                     | 16,43 40301                                                                         |
| 040304                | W2918130.048425 | 0,4 |                                                                                   |                                                                                     | 13,83 30413                                                                         |                                                                                     |
| 040304                | W2918030.048425 | 0,4 |                                                                                   | 12,38 30403                                                                         |                                                                                     |                                                                                     |
| 040304                | W2918010.048425 | 0,4 | 12,06 30401                                                                       |                                                                                     |                                                                                     |                                                                                     |
| 040304                | W2918010.046115 | 0,4 |                                                                                   |                                                                                     |                                                                                     | 16,54 40401                                                                         |
| 05T304                | W2924130.048425 | 0,4 |                                                                                   |                                                                                     | 14,14 30513                                                                         |                                                                                     |
| 05T304                | W2924030.048425 | 0,4 |                                                                                   | 17,47 30503                                                                         |                                                                                     |                                                                                     |
| 05T304                | W2924010.048425 | 0,4 | 12,38 30501                                                                       |                                                                                     |                                                                                     |                                                                                     |
| 05T304                | W2924010.046115 | 0,4 |                                                                                   |                                                                                     |                                                                                     | 15,91 40501                                                                         |
| 06T304                | W2934130.048425 | 0,4 |                                                                                   |                                                                                     | 15,60 30613                                                                         |                                                                                     |
| 06T304                | W2934030.048425 | 0,4 |                                                                                   | 18,30 30603                                                                         |                                                                                     |                                                                                     |
| 06T304                | W2934010.048425 | 0,4 | 13,83 30601                                                                       |                                                                                     |                                                                                     |                                                                                     |
| 06T304                | W2934010.046115 | 0,4 |                                                                                   |                                                                                     |                                                                                     | 17,68 40601                                                                         |
| Steel                 |                 |     | •                                                                                 | •                                                                                   | •                                                                                   | •                                                                                   |
| Stainless steel       |                 |     | •                                                                                 | •                                                                                   | •                                                                                   | •                                                                                   |
| Cast iron             |                 |     | •                                                                                 | •                                                                                   | •                                                                                   | •                                                                                   |
| Non ferrous metals    |                 |     |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Heat resistant alloys |                 |     |                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| hardened materials    |                 |     |                                                                                   |                                                                                     |                                                                                     | ○                                                                                   |

→ v<sub>c</sub>/f<sub>z</sub> Page 47-50

**i** BK8425 -03 and BK6115 -01 are exclusively recommended for use on the peripheral cutting edge!



Specialised indexable inserts for machining aluminium or stainless steels (BK7935, BK62, BK77) can be found in our online shop at [cuttingtools.ceratzit.com](http://cuttingtools.ceratzit.com)



## Application tips – eccentric sleeves

Users of rotating tools can now enjoy greater flexibility.

Using the eccentric sleeves, you can vary and adjust the diameter of the hole by  $\pm 0.3$  mm with ease.

Two types of eccentric sleeve are available:

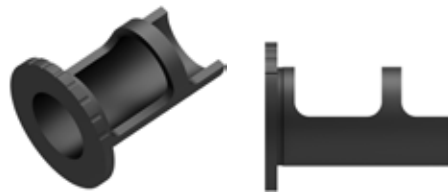
One for use with the new indexable insert drill adapter and one for use with the existing Weldon adapter.

The difference lies solely in the design and position of the slots for the adapter's clamping screws.

There are four sizes per type, which are tailored to the shank diameter.

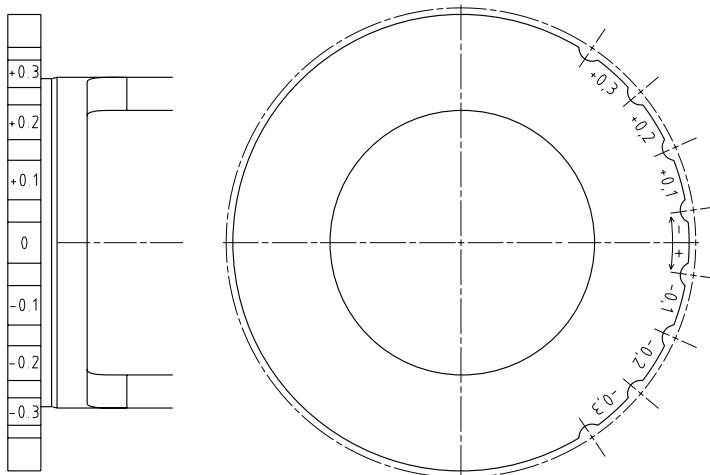


*Eccentric sleeve for indexable insert drill adapter*



*Eccentric sleeve for Weldon adapter*

A scale is engraved on every eccentric sleeve (radially and on the face), so that the user can adjust the bore diameter according to requirements.



*Side view*

*End view*

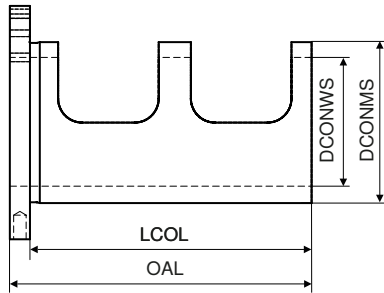
### Instructions for use

1. Position the sleeve in the respective adapter and insert the indexable insert drill.
2. Set the sleeve to the zero position. → The „0“ must align with the clamping screws on the adapter.
3. Clamp the adapter's clamping screws.
4. Drill.
5. Measure the bore diameter.
6. Loosen the clamping screws.
7. Correct the bore diameter using the sleeve. → Observe the scale on the sleeve. The value must align with the clamping screws on the adapter.
8. Clamp the clamping screws.
9. Drill.

**i** A scale is engraved on every eccentric sleeve (radially and on the face).

**i** Owing to the radial adjustment of the drill axis, the feed rate should be reduced by approx. 30 % for longer drilling tools (4xD and 5xD).

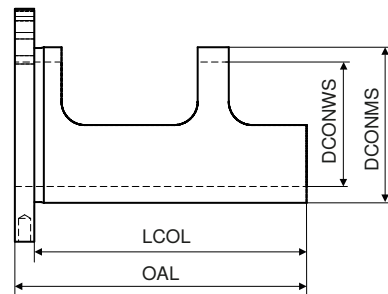
## Eccentric sleeve – indexable insert drill adapter



3

| Designation | DCONWS | DCONMS | OAL | LCOL | 2A/28                     |     |
|-------------|--------|--------|-----|------|---------------------------|-----|
|             | mm     | mm     | mm  | mm   | Article no.<br>10 870 ... |     |
| EHB.D20.D25 | 20     | 25     | 61  | 56   | EUR 156,20                | 120 |
| EHB.D25.D32 | 25     | 32     | 65  | 60   | EUR 169,90                | 125 |
| EHB.D32.D40 | 32     | 40     | 75  | 70   | EUR 185,60                | 132 |
| EHB.D40.D50 | 40     | 50     | 85  | 80   | EUR 203,40                | 140 |

## Eccentric sleeve – standard Weldon adapter

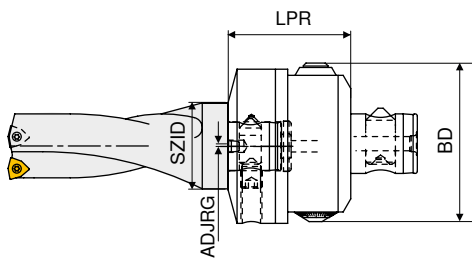


| Designation | DCONWS | DCONMS | OAL | LCOL | 2A/28                     |     |
|-------------|--------|--------|-----|------|---------------------------|-----|
|             | mm     | mm     | mm  | mm   | Article no.<br>10 871 ... |     |
| EHW.D20.D25 | 20     | 25     | 61  | 56   | EUR 156,20                | 120 |
| EHW.D25.D32 | 25     | 32     | 65  | 60   | EUR 169,90                | 125 |
| EHW.D32.D40 | 32     | 40     | 75  | 70   | EUR 185,60                | 132 |
| EHW.D40.D50 | 40     | 50     | 85  | 80   | EUR 203,40                | 140 |

**i** Application tips for eccentric sleeves can be found on → **Page 36**.

# Adjuster with ABS connection

- ▲ Precise adjustment using micrometric adjusting spindle
- ▲ Max. adjustment range 3 mm on diameter
- ▲ Graduation of scale 1 line 0.02 mm on diameter
- ▲ Stable clamping of the top section after adjustment using four clamping screws arranged on the face



AD

**NEW** W4

Article no.  
**84 210 ...**

**EUR**

1.184,00 05097

| Adapter | KOMET no. | BD | LPR | ADJRG | SZID   |
|---------|-----------|----|-----|-------|--------|
|         |           | mm | mm  | mm    |        |
| ABS 50  | M0100001  | 70 | 57  | 1,5   | ABS 50 |

## Material examples referring to the cutting data tables

|   | Index | Material                                 | Strength<br>N/mm <sup>2</sup> / HB / HRC | Material<br>number | Material designation      | Material<br>number | Material designation      | Material<br>number | Material designation      |
|---|-------|------------------------------------------|------------------------------------------|--------------------|---------------------------|--------------------|---------------------------|--------------------|---------------------------|
| P | 1.1   | General construction steel               | < 800 N/mm <sup>2</sup>                  | 1.0402             | EN3B                      |                    |                           |                    |                           |
|   | 1.2   | Free cutting steel                       | < 800 N/mm <sup>2</sup>                  | 1.0711             | EN1A                      |                    |                           |                    |                           |
|   | 1.3   | Hardened steel, non alloyed              | < 800 N/mm <sup>2</sup>                  | 1.0401             | EN32C                     |                    |                           |                    |                           |
|   | 1.4   | Alloyed hardened steel                   | < 1000 N/mm <sup>2</sup>                 | 1.7325             | 25 CD4                    |                    |                           |                    |                           |
|   | 1.5   | Tempering steel, unalloyed               | < 850 N/mm <sup>2</sup>                  | 1.5752             | EN36                      | 1.0535             | EN9                       |                    |                           |
|   | 1.6   | Tempering steel, unalloyed               | < 1000 N/mm <sup>2</sup>                 | 1.6582             | EN24                      |                    |                           |                    |                           |
|   | 1.7   | Tempering steel, alloyed                 | < 800 N/mm <sup>2</sup>                  | 1.7225             | EN19                      |                    |                           |                    |                           |
|   | 1.8   | Tempering steel, alloyed                 | < 1300 N/mm <sup>2</sup>                 | 1.8515             | EN40B                     |                    |                           |                    |                           |
|   | 1.9   | Steel castings                           | < 850 N/mm <sup>2</sup>                  | 0.9650             | G-X 260 Cr 27             | 1.6750             | GS-20 NiCrMo 3.7          | 1.6582             | GS-34 CrNiMo 6            |
|   | 1.10  | Nitriding steel                          | < 1000 N/mm <sup>2</sup>                 | 1.8509             | EN41B                     |                    |                           |                    |                           |
|   | 1.11  | Nitriding steel                          | < 1200 N/mm <sup>2</sup>                 | 1.1186             | EN8                       | 1.1160             | EN14A                     |                    |                           |
|   | 1.12  | Roller bearing steel                     | < 1200 N/mm <sup>2</sup>                 | 1.3505             | 534A99                    |                    |                           |                    |                           |
|   | 1.13  | Spring steel                             | < 1200 N/mm <sup>2</sup>                 |                    | EN45                      |                    | EN47                      |                    | EN43                      |
|   | 1.14  | High-speed steel                         | < 1300 N/mm <sup>2</sup>                 | 1.3343             | M2                        | 1.3249             | M34                       |                    |                           |
|   | 1.15  | Cold working tool steel                  | < 1300 N/mm <sup>2</sup>                 | 1.2379             | D2                        | 1.2311             | P20                       |                    |                           |
|   | 1.16  | Hot working tool steel                   | < 1300 N/mm <sup>2</sup>                 | 1.2344             | H13                       |                    |                           |                    |                           |
| M | 2.1   | Cast steel and sulphured stainless steel | < 850 N/mm <sup>2</sup>                  | 1.4581             | 318                       |                    |                           |                    |                           |
|   | 2.2   | Stainless steel, ferritic                | < 750 N/mm <sup>2</sup>                  | 1.4000             | 403                       |                    |                           |                    |                           |
|   | 2.3   | Stainless steel, martensitic             | < 900 N/mm <sup>2</sup>                  | 1.4057             | EN57                      |                    |                           |                    |                           |
|   | 2.4   | Stainless steel, ferritic / martensitic  | < 1100 N/mm <sup>2</sup>                 | 1.4028             | EN56B                     |                    |                           |                    |                           |
|   | 2.5   | Stainless steel, austenitic / ferritic   | < 850 N/mm <sup>2</sup>                  | 1.4542             | 17-4PH                    |                    |                           |                    |                           |
|   | 2.6   | Stainless steel, austenitic              | < 750 N/mm <sup>2</sup>                  | 1.4305             | 303                       | 1.4401             | 316                       | 1.4301             | 304                       |
|   | 2.7   | Heat resistant steel                     | < 1100 N/mm <sup>2</sup>                 | 1.4876             | Incoloy 800               |                    |                           |                    |                           |
| K | 3.1   | Grey cast iron with lamellar graphite    | 100–350 N/mm <sup>2</sup>                | 0.6015             | Grade 150                 | 0.6020             | Grade 220                 | 0.6025             | Grade 260                 |
|   | 3.2   | Grey cast iron with lamellar graphite    | 300–500 N/mm <sup>2</sup>                | 0.6030             | Grade 300                 | 0.6035             | Grade 350                 | 0.6040             | Grade 400                 |
|   | 3.3   | Gray cast iron with spheroidal graphite  | 300–500 N/mm <sup>2</sup>                | 0.7040             | SG 400-12                 | 0.7043             | SG 370-17                 | 0.7050             | SG 500-7                  |
|   | 3.4   | Gray cast iron with spheroidal graphite  | 500–900 N/mm <sup>2</sup>                | 0.7060             | SG 600-3                  | 0.7070             | SG 700-2                  | 0.7080             | SG 800-2                  |
|   | 3.5   | White malleable cast iron                | 270–450 N/mm <sup>2</sup>                | 0.8035             | GTW-35                    | 0.8045             | GTW-45                    |                    |                           |
|   | 3.6   | White malleable cast iron                | 500–650 N/mm <sup>2</sup>                | 0.8055             | GTW-55                    | 0.8065             | GTW-65                    |                    |                           |
|   | 3.7   | Black malleable cast iron                | 300–450 N/mm <sup>2</sup>                | 0.8135             | GTS-35                    | 0.8145             | GTS-45                    |                    |                           |
|   | 3.8   | Black malleable cast iron                | 500–800 N/mm <sup>2</sup>                | 0.8155             | GTS-55                    | 0.8170             | GTS-70                    |                    |                           |
| N | 4.1   | Aluminium (non alloyed, low alloyed)     | < 350 N/mm <sup>2</sup>                  | 3.0255             | 1050 A                    | 3.0275             | 1070 A                    | 3.0285             | 1080 A (A8)               |
|   | 4.2   | Aluminium alloys < 0.5 % Si              | < 500 N/mm <sup>2</sup>                  | 3.1325             | 2017 A (AU4G)             | 3.4335             | 7005 (AZ5G)               | 3.4365             | 7075 (AZ5GU)              |
|   | 4.3   | Aluminium alloy 0.5–10 % Si              | < 400 N/mm <sup>2</sup>                  | 3.2315             | A-G S1                    | 3.2373             | A-S9 G                    | 3.2151             | A-S 6 U4                  |
|   | 4.4   | Aluminium alloys 10–15 % Si              | < 400 N/mm <sup>2</sup>                  | 3.2581             | A-S12                     | 3.2583             | A-S12 U                   |                    |                           |
|   | 4.5   | Aluminum alloys > 15 % Si                | < 400 N/mm <sup>2</sup>                  |                    | A-S18                     |                    | A-S17 U4                  |                    |                           |
|   | 4.6   | Copper (non alloyed, low alloyed)        | < 350 N/mm <sup>2</sup>                  | 2.0040             | Cu-c1                     | 2.0060             | Cu-a1                     | 2.0090             | Cu-b1                     |
|   | 4.7   | Copper wrought alloys                    | < 700 N/mm <sup>2</sup>                  | 2.1247             | Cub2 (Beryllium Copper)   | 2.0855             | CuN2S (Nickel Copper)     | 2.1310             | CU-Fe2P                   |
|   | 4.8   | Special copper alloys                    | < 200 HB                                 | 2.0916             | Cu-A5                     | 2.1525             | Cu-S3 M                   |                    | Ampco 8 (Cu-A6Fe2)        |
|   | 4.9   | Special copper alloys                    | < 300 HB                                 | 2.0978             | Cu-A11 Fe5 Ni5            |                    | Ampco 18 (Cu-A10 Fe3)     |                    |                           |
|   | 4.10  | Special copper alloys                    | > 300 HB                                 | 2.1247             | Cu Be2                    |                    | Ampco M4                  |                    |                           |
|   | 4.11  | Short-chipping brass, bronze, red bronze | < 600 N/mm <sup>2</sup>                  | 2.0331             | Cu Zn36 Pb1,5             | 2.0380             | Cu Zn39 Pb2 (Ms 56)       | 2.0410             | Cu Zn44 Pb2               |
|   | 4.12  | Long-chipping brass                      | < 600 N/mm <sup>2</sup>                  | 2.0335             | Cu Zn 36 (Ms63)           | 2.1293             | Cu Cr1 Zr                 |                    |                           |
|   | 4.13  | Thermoplastics                           |                                          | PE                 | PVC                       | PS                 | Polystyrene               |                    | Plexiglas                 |
|   | 4.14  | Duroplastics                             |                                          | PF                 | Bakelite                  |                    | Pertinax                  |                    |                           |
|   | 4.15  | Fibre-reinforced plastics                |                                          |                    | Carbon Fibre              |                    | Fibreglass                |                    | Aramid Fibre (Kevlar)     |
|   | 4.16  | Magnesium and magnesium alloys           | < 850 N/mm <sup>2</sup>                  | 3.5812             | Mg A7 Z1                  | 3.5662             | Mg A9                     | 3.5105             | Mg Tr3 Z2 Zn 1            |
|   | 4.17  | Graphite                                 |                                          |                    | R8500X                    |                    | R8650                     |                    | Technograph 15            |
|   | 4.18  | Tungsten and tungsten alloys             |                                          |                    | W-Ni Fe (Densimet)        |                    | W- Ni Cu (Inermet)        |                    | Denal                     |
|   | 4.19  | Molybdenum and molybdenum alloys         |                                          |                    | TZM                       |                    | MHQ                       |                    | Mo W                      |
| S | 5.1   | Pure nickel                              |                                          | 2.4066             | Ni99 (Nickel 200)         | 2.4068             | Lc Ni99 (Nickel 201)      |                    |                           |
|   | 5.2   | Nickel alloys                            |                                          | 1.3912             | Fe-Ni36 (Invar)           | 1.3917             | Fe-Ni42 (N42)             | 1.3922             | Fe-Ni48 (N48)             |
|   | 5.3   | Nickel alloys                            | < 850 N/mm <sup>2</sup>                  | 2.4375             | Ni Cu30 Al (Monel K500)   | 2.4360             | Ni Cu30Fe (Monel 400)     | 2.4668             |                           |
|   | 5.4   | Nickel molybdenum alloys                 |                                          | 2.4600             | Ni Mo30Cr2 (Hastelloy B4) | 2.4617             | Ni Mo28 (Hastelloy B2)    | 2.4819             | Ni Mo16Cr16 Hastell. C276 |
|   | 5.5   | Nickel-chromium alloys                   | < 1300 N/mm <sup>2</sup>                 | 2.4951             | Ni Cr20TiAl (Nimonic 80A) | 2.4858             | Ni Cr21Mo (Inconel 825)   | 2.4856             | Ni Cr22Mo9Nb Inconel 625  |
|   | 5.6   | Cobalt Chrome Alloys                     | < 1300 N/mm <sup>2</sup>                 | 2.4964             | Co Cr20 W15 Ni10          |                    | Co Cr20 Ni16 Mo7          |                    | Co Cr28 Mo 6              |
|   | 5.7   | Heat resistant alloys                    | < 1300 N/mm <sup>2</sup>                 | 1.4718             | Z45 C S 9-3               | 1.4747             | Z80 CSN 20-02             | 1.4845             | Z12 CN 25-20              |
|   | 5.8   | Nickel-cobalt-chromium alloys            | < 1400 N/mm <sup>2</sup>                 | 2.4851             | Ni Cr23Fe (Inconel 601)   | 2.4668             | Ni Cr19NbMo (Inconel 718) | 2.4602             | Ni Cr21Mo14 Hastelloy C22 |
|   | 5.9   | Pure titanium                            | < 900 N/mm <sup>2</sup>                  | 3.7025             | T35 (Titanium Grade 1)    | 3.7034             | T40 (Titanium Grade 2)    | 3.7064             | T60 (Titanium Grade 4)    |
|   | 5.10  | Titanium alloys                          | < 700 N/mm <sup>2</sup>                  |                    | T-A6-Nb7 (367)            |                    | T-A5-Sn2-Mo4-Cr4 (Ti17)   |                    | T-A3-V2,5 (Gr18)          |
|   | 5.11  | Titanium alloys                          | < 1200 N/mm <sup>2</sup>                 | 3.7165             | T-A6-V4 (Ta6V)            |                    | T-A4-3V-Mo2-Fe2 (SP700)   |                    | T-A5-Sn1-Zr1-V1-Mo (Gr32) |
| H | 6.1   |                                          | < 45 HRC                                 |                    |                           |                    |                           |                    |                           |
|   | 6.2   |                                          | 46–55 HRC                                |                    |                           |                    |                           |                    |                           |
|   | 6.3   | Tempered steel                           | 56–60 HRC                                |                    |                           |                    |                           |                    |                           |
|   | 6.4   |                                          | 61–65 HRC                                |                    |                           |                    |                           |                    |                           |
|   | 6.5   |                                          | 65–70 HRC                                |                    |                           |                    |                           |                    |                           |

## Cutting data standard values for KUB Pentron – 2xD, 3xD

| Index |                         |         | C, ABS and PSC  |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
|-------|-------------------------|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------|---------------|---------------|---------------|
|       | BK6115                  | BK8425  | Ø 14-15,5<br>mm | Ø 16-17,5<br>mm | Ø 18-19,5<br>mm | Ø 20-21,5<br>mm | Ø 22-23,5<br>mm | Ø 24-25,5<br>mm | Ø 26-27,5<br>mm | Ø 28-30<br>mm | Ø 31-33<br>mm | Ø 34-37<br>mm | Ø 38-42<br>mm | Ø 43-46<br>mm |
|       | v <sub>c</sub> in m/min |         | f in mm/rev.    |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 1.1   | 250-350                 | 200-320 | 0,04-0,1        | 0,04-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     |
| 1.2   | 250-350                 | 200-320 | 0,04-0,1        | 0,04-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     |
| 1.3   | 250-300                 | 250-300 | 0,04-0,1        | 0,04-0,14       | 0,1-0,15        | 0,1-0,16        | 0,11-0,16       | 0,11-0,16       | 0,11-0,16       | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     |
| 1.4   | 250-300                 | 250-300 | 0,04-0,1        | 0,04-0,14       | 0,1-0,15        | 0,1-0,16        | 0,11-0,16       | 0,11-0,16       | 0,11-0,16       | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     |
| 1.5   | 250-300                 | 250-300 | 0,04-0,1        | 0,04-0,14       | 0,1-0,15        | 0,1-0,16        | 0,11-0,16       | 0,11-0,16       | 0,11-0,16       | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     |
| 1.6   | 200-280                 | 140-220 | 0,08-0,16       | 0,08-0,2        | 0,11-0,2        | 0,11-0,2        | 0,13-0,22       | 0,14-0,24       | 0,14-0,24       | 0,14-0,24     | 0,14-0,24     | 0,14-0,24     | 0,14-0,25     | 0,14-0,25     |
| 1.7   | 200-280                 | 140-220 | 0,08-0,16       | 0,08-0,2        | 0,11-0,2        | 0,11-0,2        | 0,13-0,22       | 0,14-0,24       | 0,14-0,24       | 0,14-0,24     | 0,14-0,24     | 0,14-0,24     | 0,14-0,25     | 0,14-0,25     |
| 1.8   | 200-280                 | 140-220 | 0,08-0,16       | 0,08-0,2        | 0,11-0,2        | 0,11-0,2        | 0,13-0,22       | 0,14-0,24       | 0,14-0,24       | 0,14-0,24     | 0,14-0,24     | 0,14-0,24     | 0,14-0,25     | 0,14-0,25     |
| 1.9   | 250-300                 | 250-300 | 0,04-0,1        | 0,04-0,14       | 0,1-0,15        | 0,1-0,16        | 0,11-0,16       | 0,11-0,16       | 0,11-0,16       | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     |
| 1.10  | 200-280                 | 140-220 | 0,08-0,16       | 0,08-0,2        | 0,11-0,2        | 0,11-0,2        | 0,13-0,22       | 0,14-0,24       | 0,14-0,24       | 0,14-0,24     | 0,14-0,24     | 0,14-0,24     | 0,14-0,25     | 0,14-0,25     |
| 1.11  | 200-280                 | 140-220 | 0,08-0,16       | 0,08-0,2        | 0,11-0,2        | 0,11-0,2        | 0,13-0,22       | 0,14-0,24       | 0,14-0,24       | 0,14-0,24     | 0,14-0,24     | 0,14-0,24     | 0,14-0,25     | 0,14-0,25     |
| 1.12  | 200-280                 | 140-220 | 0,08-0,16       | 0,08-0,2        | 0,11-0,2        | 0,11-0,2        | 0,13-0,22       | 0,14-0,24       | 0,14-0,24       | 0,14-0,24     | 0,14-0,24     | 0,14-0,24     | 0,14-0,25     | 0,14-0,25     |
| 1.13  | 200-280                 | 140-220 | 0,08-0,16       | 0,08-0,2        | 0,11-0,2        | 0,11-0,2        | 0,13-0,22       | 0,14-0,24       | 0,14-0,24       | 0,14-0,24     | 0,14-0,24     | 0,14-0,24     | 0,14-0,25     | 0,14-0,25     |
| 1.14  | 200-280                 | 140-220 | 0,08-0,16       | 0,08-0,2        | 0,11-0,2        | 0,11-0,2        | 0,13-0,22       | 0,14-0,24       | 0,14-0,24       | 0,14-0,24     | 0,14-0,24     | 0,14-0,24     | 0,14-0,25     | 0,14-0,25     |
| 1.15  | 170-230                 | 120-200 | 0,06-0,12       | 0,06-0,15       | 0,1-0,15        | 0,09-0,2        | 0,12-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.16  | 170-230                 | 120-200 | 0,06-0,12       | 0,06-0,15       | 0,1-0,15        | 0,09-0,2        | 0,12-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 2.1   |                         | 150-210 | 0,06-0,14       | 0,08-0,14       | 0,08-0,14       | 0,08-0,16       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      |
| 2.2   |                         | 150-210 | 0,06-0,14       | 0,08-0,14       | 0,08-0,14       | 0,08-0,16       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      |
| 2.3   |                         | 150-210 | 0,06-0,14       | 0,08-0,14       | 0,08-0,14       | 0,08-0,16       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      |
| 2.4   |                         | 120-200 | 0,06-0,14       | 0,08-0,14       | 0,08-0,14       | 0,08-0,16       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     |
| 2.5   |                         | 110-190 | 0,06-0,11       | 0,06-0,1        | 0,06-0,1        | 0,06-0,13       | 0,09-0,16       | 0,1-0,16        | 0,1-0,16        | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      |
| 2.6   |                         | 120-200 | 0,06-0,14       | 0,08-0,14       | 0,08-0,14       | 0,08-0,16       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     |
| 2.7   |                         | 110-190 | 0,06-0,11       | 0,06-0,1        | 0,06-0,1        | 0,06-0,13       | 0,09-0,16       | 0,1-0,16        | 0,1-0,16        | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      |
| 3.1   | 160-320                 | 140-220 | 0,08-0,18       | 0,1-0,18        | 0,1-0,18        | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.2   | 160-320                 | 140-220 | 0,08-0,18       | 0,1-0,18        | 0,1-0,18        | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.3   | 120-200                 | 140-220 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.4   | 100-180                 | 120-180 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.5   | 90-150                  | 110-170 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.6   | 90-150                  | 110-170 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.7   | 90-150                  | 110-170 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.8   | 90-150                  | 110-170 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 4.1   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.2   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.3   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.4   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.5   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.6   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.7   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.8   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.9   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.10  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.11  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.12  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.13  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.14  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.15  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.16  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.17  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.18  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.19  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.1   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.2   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.3   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.4   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.5   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.6   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.7   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.8   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.9   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.10  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.11  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.1   | 50-90                   |         | 0,02-0,06       | 0,02-0,06       | 0,02-0,06       | 0,02-0,06       | 0,02-0,06       | 0,02-0,06       | 0,02-0,06       | 0,02-0,06     | 0,02-0,06     | 0,02-0,06     | 0,02-0,06     | 0,02-0,06     |
| 6.2   | 30-50                   |         | 0,01-0,03       | 0,01-0,03       | 0,01-0,03       | 0,01-0,03       | 0,01-0,02       | 0,01-0,02       | 0,01-0,02       | 0,01-0,02     | 0,01-0,02     | 0,01-0,02     | 0,01-0,02     | 0,01-0,02     |
| 6.3   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.4   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.5   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |



During the drilling operation on through holes a sharp disk will be produced.  
Safety precautions must be observed.  
A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation,  
coolant pressure must be at least 5 bar.  
Optimum pressure is > 15 bar.

## Cutting data standard values for KUB Pentron – 4xD

| Index |                         |         | C and ABS       |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
|-------|-------------------------|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------|---------------|---------------|---------------|
|       | BK6115                  | BK8425  | Ø 14-15,5<br>mm | Ø 16-17,5<br>mm | Ø 18-19,5<br>mm | Ø 20-21,5<br>mm | Ø 22-23,5<br>mm | Ø 24-25,5<br>mm | Ø 26-27,5<br>mm | Ø 28-30<br>mm | Ø 31-33<br>mm | Ø 34-37<br>mm | Ø 38-42<br>mm | Ø 43-46<br>mm |
|       | v <sub>c</sub> in m/min |         | f in mm/rev.    |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 1.1   | 250-350                 | 200-320 | 0,04-0,08       | 0,04-0,12       | 0,06-0,1        | 0,05-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     |
| 1.2   | 250-350                 | 200-320 | 0,04-0,08       | 0,04-0,12       | 0,06-0,1        | 0,05-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12       | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     |
| 1.3   | 250-300                 | 250-300 | 0,04-0,09       | 0,04-0,14       | 0,1-0,15        | 0,1-0,16        | 0,11-0,16       | 0,11-0,16       | 0,11-0,16       | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     |
| 1.4   | 250-300                 | 250-300 | 0,04-0,09       | 0,04-0,14       | 0,1-0,15        | 0,1-0,16        | 0,11-0,16       | 0,11-0,16       | 0,11-0,16       | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     |
| 1.5   | 250-300                 | 250-300 | 0,04-0,09       | 0,04-0,14       | 0,1-0,15        | 0,1-0,16        | 0,11-0,16       | 0,11-0,16       | 0,11-0,16       | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     |
| 1.6   | 200-280                 | 140-220 | 0,06-0,16       | 0,08-0,16       | 0,11-0,16       | 0,11-0,18       | 0,13-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.7   | 200-280                 | 140-220 | 0,06-0,16       | 0,08-0,16       | 0,11-0,16       | 0,11-0,18       | 0,13-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.8   | 200-280                 | 140-220 | 0,06-0,16       | 0,08-0,16       | 0,11-0,16       | 0,11-0,18       | 0,13-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.9   | 250-300                 | 250-300 | 0,04-0,09       | 0,04-0,14       | 0,1-0,15        | 0,1-0,16        | 0,11-0,16       | 0,11-0,16       | 0,11-0,16       | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     | 0,11-0,16     |
| 1.10  | 200-280                 | 140-220 | 0,06-0,16       | 0,08-0,16       | 0,11-0,16       | 0,11-0,18       | 0,13-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.11  | 200-280                 | 140-220 | 0,06-0,16       | 0,08-0,16       | 0,11-0,16       | 0,11-0,18       | 0,13-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.12  | 200-280                 | 140-220 | 0,06-0,16       | 0,08-0,16       | 0,11-0,16       | 0,11-0,18       | 0,13-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.13  | 200-280                 | 140-220 | 0,06-0,16       | 0,08-0,16       | 0,11-0,16       | 0,11-0,18       | 0,13-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.14  | 200-280                 | 140-220 | 0,06-0,16       | 0,08-0,16       | 0,11-0,16       | 0,11-0,18       | 0,13-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.15  | 170-230                 | 120-200 | 0,06-0,12       | 0,06-0,15       | 0,1-0,15        | 0,09-0,2        | 0,12-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 1.16  | 170-230                 | 120-200 | 0,06-0,12       | 0,06-0,15       | 0,1-0,15        | 0,09-0,2        | 0,12-0,22       | 0,14-0,22       | 0,14-0,22       | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     | 0,14-0,22     |
| 2.1   |                         | 150-210 | 0,06-0,12       | 0,08-0,12       | 0,08-0,12       | 0,08-0,15       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      |
| 2.2   |                         | 150-210 | 0,06-0,12       | 0,08-0,12       | 0,08-0,12       | 0,08-0,15       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      |
| 2.3   |                         | 150-210 | 0,06-0,12       | 0,08-0,12       | 0,08-0,12       | 0,08-0,15       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      | 0,1-0,18      |
| 2.4   |                         | 120-200 | 0,06-0,12       | 0,08-0,12       | 0,08-0,12       | 0,08-0,15       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     |
| 2.5   |                         | 110-190 | 0,06-0,1        | 0,06-0,1        | 0,06-0,1        | 0,06-0,13       | 0,09-0,16       | 0,1-0,16        | 0,1-0,16        | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      |
| 2.6   |                         | 120-200 | 0,06-0,12       | 0,08-0,12       | 0,08-0,12       | 0,08-0,15       | 0,1-0,18        | 0,12-0,18       | 0,12-0,18       | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     | 0,12-0,18     |
| 2.7   |                         | 110-190 | 0,06-0,1        | 0,06-0,1        | 0,06-0,1        | 0,06-0,13       | 0,09-0,16       | 0,1-0,16        | 0,1-0,16        | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      | 0,1-0,16      |
| 3.1   | 160-320                 | 140-220 | 0,08-0,18       | 0,1-0,18        | 0,1-0,18        | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.2   | 160-320                 | 140-220 | 0,08-0,18       | 0,1-0,18        | 0,1-0,18        | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.3   | 120-200                 | 140-220 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.4   | 100-180                 | 120-180 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.5   | 90-150                  | 110-170 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.6   | 90-150                  | 110-170 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.7   | 90-150                  | 110-170 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 3.8   | 90-150                  | 110-170 | 0,08-0,18       | 0,12-0,18       | 0,12-0,18       | 0,12-0,22       | 0,14-0,25       | 0,16-0,3        | 0,2-0,3         | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       | 0,2-0,3       |
| 4.1   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.2   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.3   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.4   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.5   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.6   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.7   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.8   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.9   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.10  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.11  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.12  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.13  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.14  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.15  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.16  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.17  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.18  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.19  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.1   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.2   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.3   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.4   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.5   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.6   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.7   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.8   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.9   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.10  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.11  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.1   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.2   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.3   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.4   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.5   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |



During the drilling operation on through holes a sharp disk will be produced.  
Safety precautions must be observed.  
A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation,  
coolant pressure must be at least 5 bar.  
Optimum pressure is > 15 bar.



## Cutting data standard values for KUB Pentron – 5xD

| Index |                         |         | C and ABS       |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
|-------|-------------------------|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|---------------|---------------|---------------|---------------|
|       | BK6115                  | BK8425  | Ø 14–15,5<br>mm | Ø 16–17,5<br>mm | Ø 18–19,5<br>mm | Ø 20–21,5<br>mm | Ø 22–23,5<br>mm | Ø 24–25,5<br>mm | Ø 26–27,5<br>mm | Ø 28–30<br>mm | Ø 31–33<br>mm | Ø 34–37<br>mm | Ø 38–42<br>mm | Ø 43–46<br>mm |
|       | v <sub>c</sub> in m/min |         | f in mm/rev.    |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 1.1   | 250–350                 | 200–320 | 0,04–0,09       | 0,06–0,1        | 0,06–0,1        | 0,05–0,12       | 0,06–0,12       | 0,06–0,12       | 0,06–0,12       | 0,08–0,12     | 0,08–0,12     | 0,08–0,12     | 0,08–0,12     | 0,08–0,12     |
| 1.2   | 250–350                 | 200–320 | 0,04–0,09       | 0,06–0,1        | 0,06–0,1        | 0,05–0,12       | 0,06–0,12       | 0,06–0,12       | 0,06–0,12       | 0,08–0,12     | 0,08–0,12     | 0,08–0,12     | 0,08–0,12     | 0,08–0,12     |
| 1.3   | 250–300                 | 250–300 | 0,04–0,1        | 0,06–0,13       | 0,08–0,13       | 0,08–0,14       | 0,09–0,14       | 0,09–0,14       | 0,09–0,14       | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     |
| 1.4   | 250–300                 | 250–300 | 0,04–0,1        | 0,06–0,13       | 0,08–0,13       | 0,08–0,14       | 0,09–0,14       | 0,09–0,14       | 0,09–0,14       | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     |
| 1.5   | 250–300                 | 250–300 | 0,04–0,1        | 0,06–0,13       | 0,08–0,13       | 0,08–0,14       | 0,09–0,14       | 0,09–0,14       | 0,09–0,14       | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     |
| 1.6   | 200–280                 | 140–220 | 0,06–0,12       | 0,06–0,13       | 0,08–0,13       | 0,08–0,18       | 0,13–0,22       | 0,14–0,22       | 0,14–0,2        | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       |
| 1.7   | 200–280                 | 140–220 | 0,06–0,12       | 0,06–0,13       | 0,08–0,13       | 0,08–0,18       | 0,13–0,22       | 0,14–0,22       | 0,14–0,2        | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       |
| 1.8   | 200–280                 | 140–220 | 0,06–0,12       | 0,06–0,13       | 0,08–0,13       | 0,08–0,18       | 0,13–0,22       | 0,14–0,22       | 0,14–0,2        | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       |
| 1.9   | 250–300                 | 250–300 | 0,04–0,1        | 0,06–0,13       | 0,08–0,13       | 0,08–0,14       | 0,09–0,14       | 0,09–0,14       | 0,09–0,14       | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     | 0,09–0,14     |
| 1.10  | 200–280                 | 140–220 | 0,06–0,12       | 0,06–0,13       | 0,08–0,13       | 0,08–0,18       | 0,13–0,22       | 0,14–0,22       | 0,14–0,2        | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       |
| 1.11  | 200–280                 | 140–220 | 0,06–0,12       | 0,06–0,13       | 0,08–0,13       | 0,08–0,18       | 0,13–0,22       | 0,14–0,22       | 0,14–0,2        | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       |
| 1.12  | 200–280                 | 140–220 | 0,06–0,12       | 0,06–0,13       | 0,08–0,13       | 0,08–0,18       | 0,13–0,22       | 0,14–0,22       | 0,14–0,2        | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       |
| 1.13  | 200–280                 | 140–220 | 0,06–0,12       | 0,06–0,13       | 0,08–0,13       | 0,08–0,18       | 0,13–0,22       | 0,14–0,22       | 0,14–0,2        | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       |
| 1.14  | 200–280                 | 140–220 | 0,06–0,12       | 0,06–0,13       | 0,08–0,13       | 0,08–0,18       | 0,13–0,22       | 0,14–0,22       | 0,14–0,2        | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       | 0,1–0,2       |
| 1.15  | 170–230                 | 120–200 | 0,06–0,12       | 0,08–0,15       | 0,09–0,15       | 0,09–0,2        | 0,12–0,22       | 0,14–0,22       | 0,14–0,22       | 0,14–0,22     | 0,14–0,2      | 0,14–0,2      | 0,14–0,2      | 0,14–0,2      |
| 1.16  | 170–230                 | 120–200 | 0,06–0,12       | 0,08–0,15       | 0,09–0,15       | 0,09–0,2        | 0,12–0,22       | 0,14–0,22       | 0,14–0,22       | 0,14–0,22     | 0,14–0,2      | 0,14–0,2      | 0,14–0,2      | 0,14–0,2      |
| 2.1   |                         | 150–210 | 0,06–0,1        | 0,06–0,1        | 0,06–0,1        | 0,06–0,13       | 0,09–0,16       | 0,1–0,16        | 0,1–0,16        | 0,1–0,16      | 0,1–0,16      | 0,1–0,16      | 0,1–0,16      | 0,1–0,16      |
| 2.2   |                         | 150–210 | 0,06–0,1        | 0,06–0,1        | 0,06–0,1        | 0,06–0,13       | 0,09–0,16       | 0,1–0,16        | 0,1–0,16        | 0,1–0,16      | 0,1–0,16      | 0,1–0,16      | 0,1–0,16      | 0,1–0,16      |
| 2.3   |                         | 150–210 | 0,06–0,1        | 0,06–0,1        | 0,06–0,1        | 0,06–0,13       | 0,09–0,16       | 0,1–0,16        | 0,1–0,16        | 0,1–0,16      | 0,1–0,16      | 0,1–0,16      | 0,1–0,16      | 0,1–0,16      |
| 2.4   |                         | 120–200 | 0,06–0,1        | 0,06–0,1        | 0,06–0,1        | 0,06–0,13       | 0,09–0,16       | 0,12–0,16       | 0,12–0,14       | 0,08–0,14     | 0,08–0,14     | 0,08–0,14     | 0,08–0,14     | 0,08–0,14     |
| 2.5   |                         | 110–190 | 0,06–0,1        | 0,06–0,1        | 0,06–0,1        | 0,06–0,11       | 0,07–0,14       | 0,1–0,14        | 0,1–0,14        | 0,1–0,14      | 0,1–0,14      | 0,1–0,14      | 0,1–0,14      | 0,1–0,14      |
| 2.6   |                         | 120–200 | 0,06–0,1        | 0,06–0,1        | 0,06–0,1        | 0,06–0,13       | 0,09–0,16       | 0,12–0,16       | 0,12–0,14       | 0,08–0,14     | 0,08–0,14     | 0,08–0,14     | 0,08–0,14     | 0,08–0,14     |
| 2.7   |                         | 110–190 | 0,06–0,1        | 0,06–0,1        | 0,06–0,1        | 0,06–0,11       | 0,07–0,14       | 0,1–0,14        | 0,1–0,14        | 0,1–0,14      | 0,1–0,14      | 0,1–0,14      | 0,1–0,14      | 0,1–0,14      |
| 3.1   | 160–320                 | 140–220 | 0,08–0,15       | 0,08–0,16       | 0,1–0,16        | 0,1–0,2         | 0,12–0,23       | 0,14–0,28       | 0,18–0,28       | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     |
| 3.2   | 160–320                 | 140–220 | 0,08–0,15       | 0,08–0,16       | 0,1–0,16        | 0,1–0,2         | 0,12–0,23       | 0,14–0,28       | 0,18–0,28       | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     |
| 3.3   | 120–200                 | 140–220 | 0,08–0,15       | 0,08–0,16       | 0,1–0,16        | 0,1–0,2         | 0,12–0,23       | 0,14–0,28       | 0,18–0,28       | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     |
| 3.4   | 100–180                 | 120–180 | 0,08–0,15       | 0,08–0,16       | 0,1–0,16        | 0,1–0,2         | 0,12–0,23       | 0,14–0,28       | 0,18–0,28       | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     |
| 3.5   | 90–150                  | 110–170 | 0,08–0,15       | 0,08–0,16       | 0,1–0,16        | 0,1–0,2         | 0,12–0,23       | 0,14–0,28       | 0,18–0,28       | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     |
| 3.6   | 90–150                  | 110–170 | 0,08–0,15       | 0,08–0,16       | 0,1–0,16        | 0,1–0,2         | 0,12–0,23       | 0,14–0,28       | 0,18–0,28       | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     |
| 3.7   | 90–150                  | 110–170 | 0,08–0,15       | 0,08–0,16       | 0,1–0,16        | 0,1–0,2         | 0,12–0,23       | 0,14–0,28       | 0,18–0,28       | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     |
| 3.8   | 90–150                  | 110–170 | 0,08–0,15       | 0,08–0,16       | 0,1–0,16        | 0,1–0,2         | 0,12–0,23       | 0,14–0,28       | 0,18–0,28       | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     | 0,18–0,28     |
| 4.1   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.2   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.3   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.4   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.5   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.6   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.7   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.8   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.9   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.10  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.11  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.12  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.13  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.14  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.15  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.16  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.17  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.18  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 4.19  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.1   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.2   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.3   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.4   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.5   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.6   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.7   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.8   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.9   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.10  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 5.11  |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.1   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.2   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.3   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.4   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |
| 6.5   |                         |         |                 |                 |                 |                 |                 |                 |                 |               |               |               |               |               |



During the drilling operation on through holes a sharp disk will be produced. Safety precautions must be observed. A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation, coolant pressure must be at least 5 bar. Optimum pressure is > 15 bar.

## Cutting data standard values for MaxiDrill 900 – 2xD

| Index | DRAGONSKIN           |                      | C               |                 |                 |                 |                 |               |                   |               |                 |                 |
|-------|----------------------|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|-------------------|---------------|-----------------|-----------------|
|       | CTCP420<br>(DCX1420) | CTPP430<br>(CCN1430) | Ø 12-15,5<br>mm | Ø 16-17,5<br>mm | Ø 18-20,5<br>mm | Ø 21-23,5<br>mm | Ø 24-27,5<br>mm | Ø 28-32<br>mm | Ø 32,5-36,5<br>mm | Ø 37-41<br>mm | Ø 41,5-46<br>mm | Ø 46,5-63<br>mm |
|       | $v_c$ in m/min       |                      | $f$ in mm/rev.  |                 |                 |                 |                 |               |                   |               |                 |                 |
| 1.1   | 240-390              | 200-300              | 0,04-0,16       | 0,04-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,22       | 0,07-0,24     | 0,07-0,24         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.2   | 240-390              | 200-300              | 0,04-0,16       | 0,04-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,22       | 0,07-0,24     | 0,07-0,24         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.3   | 190-310              | 180-280              | 0,04-0,16       | 0,04-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,22       | 0,07-0,24     | 0,07-0,24         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.4   | 190-310              | 180-280              | 0,04-0,13       | 0,04-0,14       | 0,05-0,15       | 0,05-0,15       | 0,06-0,17       | 0,06-0,19     | 0,06-0,19         | 0,10-0,21     | 0,10-0,23       | 0,10-0,23       |
| 1.5   | 190-310              | 180-280              | 0,04-0,15       | 0,04-0,15       | 0,05-0,16       | 0,05-0,17       | 0,06-0,19       | 0,06-0,21     | 0,06-0,21         | 0,08-0,22     | 0,08-0,22       | 0,09-0,26       |
| 1.6   | 170-290              | 160-250              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,22       | 0,07-0,24     | 0,07-0,24         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.7   | 180-280              | 150-220              | 0,04-0,17       | 0,05-0,18       | 0,05-0,20       | 0,06-0,22       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,27     | 0,10-0,30       | 0,10-0,32       |
| 1.8   | 170-280              | 130-200              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.9   | 170-280              | 130-200              | 0,04-0,17       | 0,05-0,18       | 0,05-0,20       | 0,06-0,22       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,27     | 0,10-0,30       | 0,10-0,32       |
| 1.10  | 170-280              | 130-200              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,08-0,25     | 0,09-0,27       | 0,10-0,29       |
| 1.11  | 170-280              | 130-200              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,08-0,25     | 0,09-0,27       | 0,10-0,29       |
| 1.12  | 170-280              | 130-200              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,08-0,25     | 0,09-0,27       | 0,10-0,29       |
| 1.13  | 170-280              | 130-200              | 0,04-0,16       | 0,05-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,30       |
| 1.14  | 170-280              | 130-200              | 0,04-0,16       | 0,05-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,30       |
| 1.15  | 120-200              | 100-160              | 0,04-0,16       | 0,05-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,30       |
| 1.16  | 120-200              | 100-160              | 0,04-0,16       | 0,05-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,30       |
| 2.1   | 140-230              | 100-180              | 0,04-0,11       | 0,04-0,12       | 0,05-0,15       | 0,06-0,15       | 0,06-0,17       | 0,06-0,19     | 0,06-0,19         | 0,10-0,22     | 0,10-0,22       | 0,10-0,22       |
| 2.2   | 140-230              | 100-180              | 0,04-0,11       | 0,04-0,12       | 0,05-0,15       | 0,06-0,15       | 0,06-0,17       | 0,06-0,19     | 0,06-0,19         | 0,10-0,22     | 0,10-0,22       | 0,10-0,22       |
| 2.3   |                      | 100-180              | 0,04-0,12       | 0,04-0,13       | 0,05-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,18     | 0,06-0,18         | 0,09-0,23     | 0,10-0,23       | 0,10-0,23       |
| 2.4   |                      | 80-140               | 0,04-0,12       | 0,04-0,13       | 0,05-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,18     | 0,06-0,18         | 0,09-0,23     | 0,10-0,23       | 0,10-0,23       |
| 2.5   |                      | 80-140               | 0,04-0,10       | 0,04-0,11       | 0,05-0,13       | 0,05-0,14       | 0,05-0,15       | 0,05-0,15     | 0,05-0,16         | 0,08-0,20     | 0,08-0,20       | 0,08-0,20       |
| 2.6   | 140-230              | 100-160              | 0,04-0,11       | 0,04-0,12       | 0,05-0,14       | 0,05-0,15       | 0,06-0,15       | 0,06-0,16     | 0,06-0,17         | 0,10-0,22     | 0,10-0,22       | 0,10-0,22       |
| 2.7   |                      | 80-140               | 0,04-0,10       | 0,04-0,11       | 0,05-0,13       | 0,05-0,14       | 0,05-0,15       | 0,05-0,15     | 0,05-0,16         | 0,08-0,20     | 0,08-0,20       | 0,08-0,20       |
| 3.1   | 190-310              | 120-200              | 0,07-0,20       | 0,07-0,22       | 0,08-0,24       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 3.2   | 170-290              | 100-180              | 0,07-0,19       | 0,07-0,20       | 0,08-0,22       | 0,10-0,24       | 0,1-0,26        | 0,1-0,26      | 0,1-0,28          | 0,10-0,30     | 0,10-0,30       | 0,10-0,32       |
| 3.3   | 190-310              | 120-200              | 0,07-0,20       | 0,07-0,20       | 0,08-0,22       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,28          | 0,10-0,30     | 0,10-0,30       | 0,10-0,32       |
| 3.4   | 170-290              | 100-180              | 0,07-0,18       | 0,07-0,18       | 0,08-0,20       | 0,10-0,23       | 0,1-0,25        | 0,1-0,25      | 0,1-0,25          | 0,10-0,27     | 0,10-0,27       | 0,10-0,29       |
| 3.5   | 140-230              | 80-160               | 0,07-0,19       | 0,07-0,20       | 0,08-0,21       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 3.6   | 130-210              | 70-150               | 0,07-0,19       | 0,07-0,20       | 0,08-0,21       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 3.7   | 140-230              | 80-160               | 0,07-0,19       | 0,07-0,20       | 0,08-0,21       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 3.8   | 130-210              | 70-150               | 0,07-0,19       | 0,07-0,20       | 0,08-0,21       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 4.1   |                      | 150-500              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15       | 0,10-0,16       | 0,10-0,16       | 0,10-0,17     | 0,10-0,17         | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.2   |                      | 150-450              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15       | 0,10-0,18       | 0,10-0,18       | 0,10-0,19     | 0,10-0,19         | 0,10-0,20     | 0,10-0,20       | 0,10-0,20       |
| 4.3   |                      | 150-350              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15       | 0,10-0,18       | 0,10-0,18       | 0,10-0,19     | 0,10-0,19         | 0,10-0,20     | 0,10-0,20       | 0,10-0,20       |
| 4.4   |                      | 150-300              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15       | 0,10-0,18       | 0,10-0,18       | 0,10-0,19     | 0,10-0,19         | 0,10-0,20     | 0,10-0,20       | 0,10-0,20       |
| 4.5   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.6   |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.7   |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.8   |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.9   |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.10  |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.11  |                      | 150-300              | 0,06-0,15       | 0,07-0,16       | 0,08-0,18       | 0,10-0,18       | 0,10-0,18       | 0,10-0,20     | 0,10-0,20         | 0,10-0,25     | 0,10-0,25       | 0,10-0,25       |
| 4.12  |                      | 150-300              | 0,06-0,15       | 0,07-0,16       | 0,08-0,18       | 0,10-0,18       | 0,10-0,18       | 0,10-0,20     | 0,10-0,20         | 0,10-0,25     | 0,10-0,25       | 0,10-0,25       |
| 4.13  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.14  |                      | 50-150               | 0,04-0,09       | 0,04-0,10       | 0,05-0,10       | 0,05-0,12       | 0,05-0,12       | 0,05-0,12     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,05-0,12       |
| 4.15  |                      | 50-140               | 0,06-0,14       | 0,07-0,14       | 0,08-0,15       | 0,10-0,16       | 0,10-0,16       | 0,10-0,16     | 0,10-0,16         | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.16  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.17  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.18  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.19  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 5.1   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.2   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.3   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.4   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.5   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.6   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.7   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.8   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.9   |                      | 40-100               | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.10  |                      | 40-80                | 0,04-0,10       | 0,04-0,10       | 0,07-0,10       | 0,05-0,12       | 0,06-0,12       | 0,07-0,15     | 0,07-0,15         | 0,08-0,16     | 0,08-0,16       | 0,08-0,18       |
| 5.11  |                      | 40-80                | 0,04-0,10       | 0,04-0,10       | 0,07-0,10       | 0,05-0,12       | 0,06-0,12       | 0,07-0,15     | 0,07-0,15         | 0,08-0,16     | 0,08-0,16       | 0,08-0,18       |
| 6.1   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 6.2   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 6.3   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 6.4   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 6.5   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |



During the drilling operation on through holes a sharp disk will be produced.  
Safety precautions must be observed.  
A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation,  
coolant pressure must be at least 5 bar.  
Optimum pressure is > 15 bar.

## Cutting data standard values for MaxiDrill 900 + KUB 100 – 3xD

| Index | DRAGONSKIN           |                      | C               |                 |                 |                 |                 |               |                   |               |                 |                 |
|-------|----------------------|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|-------------------|---------------|-----------------|-----------------|
|       | CTCP420<br>(DCX1420) | CTPP430<br>(CCN1430) | Ø 12-15,5<br>mm | Ø 16-17,5<br>mm | Ø 18-20,5<br>mm | Ø 21-23,5<br>mm | Ø 24-27,5<br>mm | Ø 28-32<br>mm | Ø 32,5-36,5<br>mm | Ø 37-41<br>mm | Ø 41,5-46<br>mm | Ø 46,5-63<br>mm |
|       | $v_c$ in m/min       |                      | $f$ in mm/rev.  |                 |                 |                 |                 |               |                   |               |                 |                 |
| 1.1   | 240-390              | 200-300              | 0,04-0,16       | 0,04-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,22       | 0,07-0,24     | 0,07-0,24         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.2   | 240-390              | 200-300              | 0,04-0,16       | 0,04-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,22       | 0,07-0,24     | 0,07-0,24         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.3   | 190-310              | 180-280              | 0,04-0,16       | 0,04-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,22       | 0,07-0,24     | 0,07-0,24         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.4   | 190-310              | 180-280              | 0,04-0,13       | 0,04-0,14       | 0,05-0,15       | 0,05-0,15       | 0,06-0,17       | 0,06-0,19     | 0,06-0,19         | 0,10-0,21     | 0,10-0,23       | 0,10-0,23       |
| 1.5   | 190-310              | 180-280              | 0,04-0,15       | 0,04-0,15       | 0,05-0,16       | 0,05-0,17       | 0,06-0,19       | 0,06-0,21     | 0,06-0,21         | 0,08-0,22     | 0,08-0,22       | 0,09-0,24       |
| 1.6   | 170-290              | 160-250              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,22       | 0,07-0,24     | 0,07-0,24         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.7   | 180-280              | 150-220              | 0,04-0,17       | 0,05-0,18       | 0,05-0,20       | 0,06-0,22       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,27     | 0,10-0,30       | 0,10-0,32       |
| 1.8   | 170-280              | 130-200              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,29       |
| 1.9   | 170-280              | 130-200              | 0,04-0,17       | 0,05-0,18       | 0,05-0,20       | 0,06-0,22       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,27     | 0,10-0,30       | 0,10-0,32       |
| 1.10  | 170-280              | 130-200              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,08-0,25     | 0,09-0,27       | 0,10-0,29       |
| 1.11  | 170-280              | 130-200              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,08-0,25     | 0,09-0,27       | 0,10-0,29       |
| 1.12  | 170-280              | 130-200              | 0,04-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,08-0,25     | 0,09-0,27       | 0,10-0,29       |
| 1.13  | 170-280              | 130-200              | 0,04-0,16       | 0,05-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,30       |
| 1.14  | 170-280              | 130-200              | 0,04-0,16       | 0,05-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,30       |
| 1.15  | 120-200              | 100-160              | 0,04-0,16       | 0,05-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,30       |
| 1.16  | 120-200              | 100-160              | 0,04-0,16       | 0,05-0,17       | 0,05-0,18       | 0,06-0,20       | 0,07-0,23       | 0,07-0,25     | 0,07-0,25         | 0,10-0,25     | 0,10-0,27       | 0,10-0,30       |
| 2.1   | 140-230              | 100-180              | 0,04-0,11       | 0,04-0,12       | 0,05-0,15       | 0,06-0,15       | 0,06-0,17       | 0,06-0,19     | 0,06-0,19         | 0,10-0,22     | 0,10-0,22       | 0,10-0,22       |
| 2.2   | 140-230              | 100-180              | 0,04-0,11       | 0,04-0,12       | 0,05-0,15       | 0,06-0,15       | 0,06-0,17       | 0,06-0,19     | 0,06-0,19         | 0,10-0,22     | 0,10-0,22       | 0,10-0,22       |
| 2.3   |                      | 100-180              | 0,04-0,12       | 0,04-0,13       | 0,05-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,18     | 0,06-0,18         | 0,09-0,23     | 0,10-0,23       | 0,10-0,23       |
| 2.4   |                      | 80-140               | 0,04-0,12       | 0,04-0,13       | 0,05-0,15       | 0,05-0,16       | 0,05-0,18       | 0,06-0,18     | 0,06-0,18         | 0,09-0,23     | 0,10-0,23       | 0,10-0,23       |
| 2.5   |                      | 80-140               | 0,04-0,10       | 0,04-0,11       | 0,05-0,13       | 0,05-0,14       | 0,05-0,15       | 0,05-0,15     | 0,05-0,16         | 0,08-0,20     | 0,08-0,20       | 0,08-0,20       |
| 2.6   | 140-230              | 100-160              | 0,04-0,11       | 0,04-0,12       | 0,05-0,14       | 0,05-0,15       | 0,06-0,15       | 0,06-0,16     | 0,06-0,17         | 0,10-0,22     | 0,10-0,22       | 0,10-0,22       |
| 2.7   |                      | 80-140               | 0,04-0,10       | 0,04-0,11       | 0,05-0,13       | 0,05-0,14       | 0,05-0,15       | 0,05-0,15     | 0,05-0,16         | 0,08-0,20     | 0,08-0,20       | 0,08-0,20       |
| 3.1   | 190-310              | 120-200              | 0,07-0,20       | 0,07-0,22       | 0,08-0,24       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 3.2   | 170-290              | 100-180              | 0,07-0,19       | 0,07-0,20       | 0,08-0,22       | 0,10-0,24       | 0,1-0,26        | 0,1-0,26      | 0,1-0,28          | 0,10-0,30     | 0,10-0,30       | 0,10-0,32       |
| 3.3   | 190-310              | 120-200              | 0,07-0,20       | 0,07-0,20       | 0,08-0,22       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,28          | 0,10-0,30     | 0,10-0,30       | 0,10-0,32       |
| 3.4   | 170-290              | 100-180              | 0,07-0,18       | 0,07-0,18       | 0,08-0,20       | 0,10-0,23       | 0,1-0,25        | 0,1-0,25      | 0,1-0,25          | 0,10-0,27     | 0,10-0,27       | 0,10-0,29       |
| 3.5   | 140-230              | 80-160               | 0,07-0,19       | 0,07-0,20       | 0,08-0,21       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 3.6   | 130-210              | 70-150               | 0,07-0,19       | 0,07-0,20       | 0,08-0,21       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 3.7   | 140-230              | 80-160               | 0,07-0,19       | 0,07-0,20       | 0,08-0,21       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 3.8   | 130-210              | 70-150               | 0,07-0,19       | 0,07-0,20       | 0,08-0,21       | 0,10-0,25       | 0,1-0,28        | 0,1-0,28      | 0,1-0,30          | 0,10-0,32     | 0,10-0,32       | 0,10-0,34       |
| 4.1   |                      | 150-500              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15       | 0,10-0,16       | 0,10-0,16       | 0,10-0,17     | 0,10-0,17         | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.2   |                      | 150-450              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15       | 0,10-0,18       | 0,10-0,18       | 0,10-0,19     | 0,10-0,19         | 0,10-0,20     | 0,10-0,20       | 0,10-0,20       |
| 4.3   |                      | 150-350              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15       | 0,10-0,18       | 0,10-0,18       | 0,10-0,19     | 0,10-0,19         | 0,10-0,20     | 0,10-0,20       | 0,10-0,20       |
| 4.4   |                      | 150-300              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15       | 0,10-0,18       | 0,10-0,18       | 0,10-0,19     | 0,10-0,19         | 0,10-0,20     | 0,10-0,20       | 0,10-0,20       |
| 4.5   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.6   |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.7   |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.8   |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.9   |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.10  |                      | 150-300              | 0,06-0,13       | 0,07-0,16       | 0,08-0,15       | 0,10-0,15       | 0,10-0,15       | 0,10-0,17     | 0,10-0,17         | 0,10-0,19     | 0,10-0,19       | 0,10-0,19       |
| 4.11  |                      | 150-300              | 0,06-0,15       | 0,07-0,16       | 0,08-0,18       | 0,10-0,18       | 0,10-0,18       | 0,10-0,20     | 0,10-0,20         | 0,10-0,25     | 0,10-0,25       | 0,10-0,25       |
| 4.12  |                      | 150-300              | 0,06-0,15       | 0,07-0,16       | 0,08-0,18       | 0,10-0,18       | 0,10-0,18       | 0,10-0,20     | 0,10-0,20         | 0,10-0,25     | 0,10-0,25       | 0,10-0,25       |
| 4.13  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.14  |                      | 50-150               | 0,04-0,09       | 0,04-0,10       | 0,05-0,10       | 0,05-0,12       | 0,05-0,12       | 0,05-0,12     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,05-0,12       |
| 4.15  |                      | 50-140               | 0,06-0,14       | 0,07-0,14       | 0,08-0,15       | 0,10-0,16       | 0,10-0,16       | 0,10-0,16     | 0,10-0,16         | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.16  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.17  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.18  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 4.19  |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 5.1   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.2   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.3   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.4   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.5   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.6   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.7   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.8   |                      | 20-80                | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.9   |                      | 40-100               | 0,03-0,07       | 0,04-0,08       | 0,04-0,08       | 0,05-0,08       | 0,05-0,10       | 0,05-0,10     | 0,05-0,12         | 0,05-0,12     | 0,05-0,12       | 0,06-0,15       |
| 5.10  |                      | 40-80                | 0,04-0,10       | 0,04-0,10       | 0,07-0,10       | 0,05-0,12       | 0,06-0,12       | 0,07-0,15     | 0,07-0,15         | 0,08-0,16     | 0,08-0,16       | 0,08-0,18       |
| 5.11  |                      | 40-80                | 0,04-0,10       | 0,04-0,10       | 0,07-0,10       | 0,05-0,12       | 0,06-0,12       | 0,07-0,15     | 0,07-0,15         | 0,08-0,16     | 0,08-0,16       | 0,08-0,18       |
| 6.1   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 6.2   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 6.3   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 6.4   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |
| 6.5   |                      |                      |                 |                 |                 |                 |                 |               |                   |               |                 |                 |



During the drilling operation on through holes a sharp disk will be produced.  
Safety precautions must be observed.  
A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation,  
coolant pressure must be at least 5 bar.  
Optimum pressure is > 15 bar.

## Cutting data for MaxiDrill 900 indexable insert drill – 4xD

| Index | DRAGONSKIN              | DRAGONSKIN           | C               |                 |               |               |               |               |               |               |                 |                 |
|-------|-------------------------|----------------------|-----------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|
|       | CTCP420<br>(DCX1420)    | CTPP430<br>(CCN1430) | Ø 12-15,5<br>mm | Ø 16-17,5<br>mm | Ø 18-20<br>mm | Ø 21-23<br>mm | Ø 24-27<br>mm | Ø 28-32<br>mm | Ø 33-36<br>mm | Ø 37-41<br>mm | Ø 41,5-46<br>mm | Ø 46,5-54<br>mm |
|       | v <sub>c</sub> in m/min |                      | f in mm/rev.    |                 |               |               |               |               |               |               |                 |                 |
| 1.1   | 240-390                 | 200-300              | 0,04-0,14       | 0,04-0,15       | 0,05-0,16     | 0,06-0,18     | 0,07-0,20     | 0,07-0,22     | 0,07-0,22     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.2   | 240-390                 | 200-300              | 0,04-0,14       | 0,04-0,15       | 0,05-0,16     | 0,06-0,18     | 0,07-0,20     | 0,07-0,22     | 0,07-0,22     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.3   | 190-310                 | 180-280              | 0,04-0,14       | 0,04-0,15       | 0,05-0,16     | 0,06-0,18     | 0,07-0,20     | 0,07-0,22     | 0,07-0,22     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.4   | 190-310                 | 180-280              | 0,04-0,11       | 0,04-0,12       | 0,05-0,12     | 0,05-0,13     | 0,06-0,15     | 0,06-0,17     | 0,06-0,17     | 0,06-0,17     | 0,06-0,17       | 0,07-0,17       |
| 1.5   | 190-310                 | 180-280              | 0,04-0,13       | 0,04-0,14       | 0,05-0,14     | 0,05-0,15     | 0,06-0,17     | 0,06-0,19     | 0,06-0,19     | 0,06-0,20     | 0,06-0,20       | 0,07-0,22       |
| 1.6   | 170-290                 | 160-250              | 0,04-0,14       | 0,04-0,15       | 0,05-0,16     | 0,06-0,18     | 0,07-0,20     | 0,07-0,22     | 0,07-0,22     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.7   | 180-280                 | 150-220              | 0,04-0,17       | 0,04-0,18       | 0,05-0,18     | 0,06-0,20     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,24     | 0,07-0,24       | 0,08-0,26       |
| 1.8   | 170-280                 | 130-200              | 0,04-0,14       | 0,04-0,15       | 0,05-0,15     | 0,06-0,17     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.9   | 170-280                 | 130-200              | 0,04-0,17       | 0,04-0,18       | 0,05-0,18     | 0,06-0,20     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,24     | 0,07-0,24       | 0,08-0,26       |
| 1.10  | 170-280                 | 130-200              | 0,04-0,14       | 0,04-0,15       | 0,05-0,15     | 0,06-0,17     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.11  | 170-280                 | 130-200              | 0,04-0,14       | 0,04-0,15       | 0,05-0,15     | 0,06-0,17     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.12  | 170-280                 | 130-200              | 0,04-0,14       | 0,04-0,15       | 0,05-0,15     | 0,06-0,17     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.13  | 170-280                 | 130-200              | 0,04-0,14       | 0,04-0,15       | 0,05-0,15     | 0,06-0,17     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.14  | 170-280                 | 130-200              | 0,04-0,14       | 0,04-0,15       | 0,05-0,15     | 0,06-0,18     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.15  | 120-200                 | 100-160              | 0,04-0,14       | 0,04-0,15       | 0,05-0,15     | 0,06-0,18     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 1.16  | 120-200                 | 100-160              | 0,04-0,14       | 0,04-0,15       | 0,05-0,15     | 0,06-0,18     | 0,07-0,20     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23     | 0,07-0,23       | 0,08-0,25       |
| 2.1   | 140-230                 | 100-180              | 0,04-0,10       | 0,04-0,10       | 0,05-0,12     | 0,06-0,12     | 0,06-0,15     | 0,06-0,17     | 0,06-0,17     | 0,08-0,20     | 0,08-0,20       | 0,08-0,20       |
| 2.2   | 140-230                 | 100-180              | 0,04-0,10       | 0,04-0,10       | 0,05-0,12     | 0,06-0,12     | 0,06-0,15     | 0,06-0,17     | 0,06-0,17     | 0,08-0,20     | 0,08-0,20       | 0,08-0,20       |
| 2.3   |                         | 100-180              | 0,04-0,12       | 0,04-0,12       | 0,05-0,15     | 0,05-0,16     | 0,05-0,18     | 0,06-0,16     | 0,06-0,16     | 0,08-0,22     | 0,08-0,22       | 0,08-0,22       |
| 2.4   |                         | 80-140               | 0,04-0,12       | 0,04-0,12       | 0,05-0,15     | 0,05-0,16     | 0,05-0,18     | 0,06-0,16     | 0,06-0,16     | 0,08-0,22     | 0,08-0,22       | 0,08-0,22       |
| 2.5   |                         | 80-140               | 0,04-0,10       | 0,04-0,10       | 0,05-0,10     | 0,05-0,12     | 0,05-0,13     | 0,05-0,13     | 0,05-0,13     | 0,07-0,16     | 0,07-0,16       | 0,07-0,16       |
| 2.6   | 140-230                 | 100-160              | 0,04-0,10       | 0,04-0,10       | 0,05-0,12     | 0,05-0,13     | 0,06-0,13     | 0,06-0,14     | 0,06-0,14     | 0,08-0,20     | 0,08-0,20       | 0,08-0,20       |
| 2.7   |                         | 80-140               | 0,04-0,10       | 0,04-0,10       | 0,05-0,10     | 0,05-0,12     | 0,05-0,13     | 0,05-0,13     | 0,05-0,13     | 0,07-0,16     | 0,07-0,16       | 0,07-0,16       |
| 3.1   | 190-310                 | 120-200              | 0,07-0,18       | 0,07-0,20       | 0,08-0,22     | 0,10-0,24     | 0,1-0,25      | 0,1-0,25      | 0,1-0,28      | 0,10-0,30     | 0,10-0,30       | 0,10-0,30       |
| 3.2   | 170-290                 | 100-180              | 0,07-0,17       | 0,07-0,18       | 0,08-0,20     | 0,10-0,22     | 0,1-0,25      | 0,1-0,25      | 0,1-0,27      | 0,10-0,29     | 0,10-0,29       | 0,10-0,29       |
| 3.3   | 190-310                 | 120-200              | 0,07-0,18       | 0,07-0,18       | 0,08-0,20     | 0,10-0,24     | 0,1-0,26      | 0,1-0,26      | 0,1-0,26      | 0,10-0,28     | 0,10-0,28       | 0,10-0,28       |
| 3.4   | 170-290                 | 100-180              | 0,07-0,17       | 0,07-0,18       | 0,08-0,18     | 0,10-0,22     | 0,1-0,22      | 0,1-0,22      | 0,1-0,23      | 0,10-0,25     | 0,10-0,25       | 0,10-0,25       |
| 3.5   | 140-230                 | 80-160               | 0,07-0,17       | 0,07-0,18       | 0,08-0,18     | 0,10-0,22     | 0,1-0,25      | 0,1-0,25      | 0,1-0,28      | 0,10-0,30     | 0,10-0,30       | 0,10-0,30       |
| 3.6   | 130-210                 | 70-150               | 0,07-0,17       | 0,07-0,18       | 0,08-0,18     | 0,10-0,22     | 0,1-0,25      | 0,1-0,25      | 0,1-0,28      | 0,10-0,30     | 0,10-0,30       | 0,10-0,30       |
| 3.7   | 140-230                 | 80-160               | 0,07-0,17       | 0,07-0,18       | 0,08-0,18     | 0,10-0,22     | 0,1-0,25      | 0,1-0,25      | 0,1-0,28      | 0,10-0,30     | 0,10-0,30       | 0,10-0,30       |
| 3.8   | 130-210                 | 70-150               | 0,07-0,17       | 0,07-0,18       | 0,08-0,18     | 0,10-0,22     | 0,1-0,25      | 0,1-0,25      | 0,1-0,28      | 0,10-0,30     | 0,10-0,30       | 0,10-0,30       |
| 4.1   |                         | 150-500              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15     | 0,10-0,16     | 0,10-0,16     | 0,10-0,17     | 0,10-0,17     | 0,10-0,17     | 0,10-0,17       | 0,10-0,17       |
| 4.2   |                         | 150-450              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15     | 0,10-0,18     | 0,10-0,18     | 0,10-0,19     | 0,10-0,19     | 0,10-0,20     | 0,10-0,20       | 0,10-0,20       |
| 4.3   |                         | 150-350              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15     | 0,10-0,18     | 0,10-0,18     | 0,10-0,19     | 0,10-0,19     | 0,10-0,20     | 0,10-0,20       | 0,10-0,20       |
| 4.4   |                         | 150-300              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15     | 0,10-0,18     | 0,10-0,18     | 0,10-0,19     | 0,10-0,19     | 0,10-0,20     | 0,10-0,20       | 0,10-0,20       |
| 4.5   |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 4.6   |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,15     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.7   |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,15     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.8   |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,15     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.9   |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,15     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.10  |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,15     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.11  |                         | 150-300              | 0,06-0,15       | 0,07-0,16       | 0,08-0,18     | 0,10-0,18     | 0,10-0,18     | 0,10-0,20     | 0,10-0,20     | 0,10-0,22     | 0,10-0,22       | 0,10-0,22       |
| 4.12  |                         | 150-300              | 0,06-0,15       | 0,07-0,16       | 0,08-0,18     | 0,10-0,18     | 0,10-0,18     | 0,10-0,20     | 0,10-0,20     | 0,10-0,22     | 0,10-0,22       | 0,10-0,22       |
| 4.13  |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 4.14  |                         | 50-150               | 0,04-0,09       | 0,04-0,10       | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,12     | 0,05-0,12     | 0,05-0,12     | 0,05-0,12       | 0,05-0,12       |
| 4.15  |                         | 50-140               | 0,06-0,14       | 0,07-0,14       | 0,08-0,14     | 0,10-0,15     | 0,10-0,16     | 0,10-0,16     | 0,10-0,16     | 0,10-0,18     | 0,10-0,18       | 0,10-0,18       |
| 4.16  |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 4.17  |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 4.18  |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 4.19  |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 5.1   |                         | 20-80                | 0,03-0,07       | 0,04-0,07       | 0,04-0,07     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10       | 0,05-0,10       |
| 5.2   |                         | 20-80                | 0,03-0,07       | 0,04-0,07       | 0,04-0,07     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10       | 0,05-0,10       |
| 5.3   |                         | 20-80                | 0,03-0,07       | 0,04-0,07       | 0,04-0,07     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10       | 0,05-0,10       |
| 5.4   |                         | 20-80                | 0,03-0,07       | 0,04-0,07       | 0,04-0,07     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10       | 0,05-0,10       |
| 5.5   |                         | 20-80                | 0,03-0,07       | 0,04-0,07       | 0,04-0,07     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10       | 0,05-0,10       |
| 5.6   |                         | 20-80                | 0,03-0,07       | 0,04-0,07       | 0,04-0,07     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10       | 0,05-0,10       |
| 5.7   |                         | 20-80                | 0,03-0,07       | 0,04-0,07       | 0,04-0,07     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10       | 0,05-0,10       |
| 5.8   |                         | 20-80                | 0,03-0,07       | 0,04-0,07       | 0,04-0,07     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10       | 0,05-0,10       |
| 5.9   |                         | 40-100               | 0,03-0,07       | 0,04-0,07       | 0,04-0,07     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10       | 0,05-0,10       |
| 5.10  |                         | 40-80                | 0,04-0,10       | 0,04-0,10       | 0,05-0,10     | 0,05-0,12     | 0,05-0,12     | 0,06-0,15     | 0,07-0,15     | 0,07-0,15     | 0,07-0,15       | 0,07-0,15       |
| 5.11  |                         | 40-80                | 0,04-0,10       | 0,04-0,10       | 0,05-0,10     | 0,05-0,12     | 0,05-0,12     | 0,06-0,15     | 0,07-0,15     | 0,07-0,15     | 0,07-0,15       | 0,07-0,15       |
| 6.1   |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 6.2   |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 6.3   |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 6.4   |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |
| 6.5   |                         |                      |                 |                 |               |               |               |               |               |               |                 |                 |



During the drilling operation on through holes a sharp disk will be produced.  
Safety precautions must be observed.  
A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation,  
coolant pressure must be at least 5 bar.  
Optimum pressure is > 15 bar.

## Cutting data standard values for MaxiDrill 900 – 5xD

| Index | DRAGONSKIN              | DRAGONSKIN           | C               |                 |               |               |               |               |               |               |
|-------|-------------------------|----------------------|-----------------|-----------------|---------------|---------------|---------------|---------------|---------------|---------------|
|       | CTCP420<br>(DCX1420)    | CTPP430<br>(CCN1430) | Ø 12-15,5<br>mm | Ø 16-17,5<br>mm | Ø 18-20<br>mm | Ø 21-23<br>mm | Ø 24-27<br>mm | Ø 28-32<br>mm | Ø 33-36<br>mm | Ø 37-41<br>mm |
|       | v <sub>c</sub> in m/min |                      | f in mm/rev.    |                 |               |               |               |               |               |               |
| 1.1   | 240-390                 | 200-300              | 0,04-0,12       | 0,04-0,12       | 0,05-0,12     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,23     |
| 1.2   | 240-390                 | 200-300              | 0,04-0,12       | 0,04-0,12       | 0,05-0,12     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,23     |
| 1.3   | 190-310                 | 180-280              | 0,04-0,12       | 0,04-0,12       | 0,05-0,12     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,23     |
| 1.4   | 190-310                 | 180-280              | 0,04-0,09       | 0,04-0,09       | 0,04-0,08     | 0,04-0,10     | 0,06-0,12     | 0,06-0,14     | 0,06-0,14     | 0,08-0,17     |
| 1.5   | 190-310                 | 180-280              | 0,04-0,10       | 0,04-0,10       | 0,05-0,10     | 0,05-0,12     | 0,06-0,14     | 0,06-0,16     | 0,06-0,16     | 0,08-0,20     |
| 1.6   | 170-290                 | 160-250              | 0,04-0,10       | 0,04-0,12       | 0,05-0,12     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,23     |
| 1.7   | 180-280                 | 150-220              | 0,04-0,15       | 0,04-0,15       | 0,05-0,15     | 0,05-0,17     | 0,07-0,18     | 0,08-0,20     | 0,08-0,20     | 0,10-0,25     |
| 1.8   | 170-280                 | 130-200              | 0,04-0,13       | 0,04-0,14       | 0,05-0,13     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,23     |
| 1.9   | 170-280                 | 130-200              | 0,04-0,15       | 0,04-0,16       | 0,05-0,15     | 0,05-0,17     | 0,07-0,18     | 0,08-0,20     | 0,08-0,20     | 0,10-0,25     |
| 1.10  | 170-280                 | 130-200              | 0,04-0,12       | 0,04-0,13       | 0,05-0,13     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,25     |
| 1.11  | 170-280                 | 130-200              | 0,04-0,12       | 0,04-0,13       | 0,05-0,13     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,25     |
| 1.12  | 170-280                 | 130-200              | 0,04-0,12       | 0,04-0,13       | 0,05-0,13     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,25     |
| 1.13  | 170-280                 | 130-200              | 0,04-0,12       | 0,04-0,13       | 0,05-0,13     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,25     |
| 1.14  | 170-280                 | 130-200              | 0,04-0,12       | 0,04-0,13       | 0,05-0,13     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,25     |
| 1.15  | 120-200                 | 100-160              | 0,04-0,12       | 0,04-0,13       | 0,05-0,13     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,25     |
| 1.16  | 120-200                 | 100-160              | 0,04-0,12       | 0,04-0,13       | 0,05-0,13     | 0,05-0,15     | 0,07-0,17     | 0,08-0,19     | 0,08-0,19     | 0,10-0,25     |
| 2.1   | 140-230                 | 100-180              | 0,04-0,09       | 0,04-0,09       | 0,04-0,08     | 0,04-0,10     | 0,06-0,12     | 0,07-0,15     | 0,07-0,15     | 0,08-0,18     |
| 2.2   | 140-230                 | 100-180              | 0,04-0,09       | 0,04-0,09       | 0,04-0,08     | 0,04-0,10     | 0,06-0,12     | 0,07-0,15     | 0,07-0,15     | 0,08-0,18     |
| 2.3   |                         | 100-180              | 0,04-0,11       | 0,04-0,11       | 0,04-0,13     | 0,05-0,15     | 0,05-0,16     | 0,06-0,16     | 0,06-0,16     | 0,08-0,20     |
| 2.4   |                         | 80-140               | 0,04-0,11       | 0,04-0,11       | 0,04-0,13     | 0,05-0,15     | 0,05-0,16     | 0,06-0,16     | 0,06-0,16     | 0,08-0,20     |
| 2.5   |                         | 80-140               | 0,04-0,08       | 0,04-0,08       | 0,04-0,09     | 0,05-0,11     | 0,05-0,12     | 0,05-0,12     | 0,05-0,12     | 0,08-0,15     |
| 2.6   | 140-230                 | 100-160              | 0,04-0,09       | 0,04-0,09       | 0,04-0,09     | 0,05-0,11     | 0,05-0,12     | 0,05-0,12     | 0,05-0,12     | 0,08-0,16     |
| 2.7   |                         | 80-140               | 0,04-0,08       | 0,04-0,08       | 0,04-0,09     | 0,05-0,11     | 0,05-0,12     | 0,05-0,12     | 0,05-0,12     | 0,08-0,15     |
| 3.1   | 190-310                 | 120-200              | 0,07-0,18       | 0,07-0,20       | 0,08-0,22     | 0,10-0,23     | 0,10-0,25     | 0,10-0,25     | 0,10-0,25     | 0,10-0,25     |
| 3.2   | 170-290                 | 100-180              | 0,07-0,17       | 0,07-0,18       | 0,08-0,18     | 0,10-0,20     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     |
| 3.3   | 190-310                 | 120-200              | 0,07-0,18       | 0,07-0,18       | 0,08-0,18     | 0,10-0,23     | 0,10-0,25     | 0,10-0,25     | 0,10-0,25     | 0,10-0,25     |
| 3.4   | 170-290                 | 100-180              | 0,07-0,17       | 0,07-0,18       | 0,08-0,16     | 0,10-0,20     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     |
| 3.5   | 140-230                 | 80-160               | 0,07-0,17       | 0,07-0,18       | 0,08-0,16     | 0,10-0,20     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     |
| 3.6   | 130-210                 | 70-150               | 0,07-0,17       | 0,07-0,18       | 0,08-0,16     | 0,10-0,20     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     |
| 3.7   | 140-230                 | 80-160               | 0,07-0,17       | 0,07-0,18       | 0,08-0,16     | 0,10-0,20     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     |
| 3.8   | 130-210                 | 70-150               | 0,07-0,17       | 0,07-0,18       | 0,08-0,16     | 0,10-0,20     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     | 0,10-0,22     |
| 4.1   |                         | 150-500              | 0,06-0,12       | 0,07-0,14       | 0,08-0,15     | 0,10-0,16     | 0,10-0,16     | 0,10-0,17     | 0,10-0,17     | 0,10-0,17     |
| 4.2   |                         | 150-450              | 0,06-0,12       | 0,07-0,14       | 0,08-0,14     | 0,10-0,18     | 0,10-0,18     | 0,10-0,19     | 0,10-0,19     | 0,10-0,19     |
| 4.3   |                         | 150-350              | 0,06-0,12       | 0,07-0,14       | 0,08-0,14     | 0,10-0,18     | 0,10-0,18     | 0,10-0,19     | 0,10-0,19     | 0,10-0,19     |
| 4.4   |                         | 150-300              | 0,06-0,12       | 0,07-0,14       | 0,08-0,14     | 0,10-0,18     | 0,10-0,18     | 0,10-0,19     | 0,10-0,19     | 0,10-0,19     |
| 4.5   |                         |                      |                 |                 |               |               |               |               |               |               |
| 4.6   |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,14     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,17     |
| 4.7   |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,14     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,17     |
| 4.8   |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,14     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,17     |
| 4.9   |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,14     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,17     |
| 4.10  |                         | 150-300              | 0,06-0,13       | 0,07-0,14       | 0,08-0,14     | 0,10-0,15     | 0,10-0,15     | 0,10-0,17     | 0,10-0,17     | 0,10-0,17     |
| 4.11  |                         | 150-300              | 0,06-0,15       | 0,07-0,16       | 0,08-0,16     | 0,10-0,18     | 0,10-0,18     | 0,10-0,20     | 0,10-0,20     | 0,10-0,20     |
| 4.12  |                         | 150-300              | 0,06-0,15       | 0,07-0,16       | 0,08-0,16     | 0,10-0,18     | 0,10-0,18     | 0,10-0,20     | 0,10-0,20     | 0,10-0,20     |
| 4.13  |                         |                      |                 |                 |               |               |               |               |               |               |
| 4.14  |                         | 50-150               | 0,04-0,09       | 0,04-0,10       | 0,04-0,08     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10     | 0,05-0,10     |
| 4.15  |                         | 50-140               | 0,06-0,14       | 0,07-0,14       | 0,08-0,14     | 0,10-0,15     | 0,10-0,15     | 0,10-0,15     | 0,10-0,15     | 0,10-0,15     |
| 4.16  |                         |                      |                 |                 |               |               |               |               |               |               |
| 4.17  |                         |                      |                 |                 |               |               |               |               |               |               |
| 4.18  |                         |                      |                 |                 |               |               |               |               |               |               |
| 4.19  |                         |                      |                 |                 |               |               |               |               |               |               |
| 5.1   |                         | 20-80                | 0,03-0,06       | 0,04-0,06       | 0,04-0,06     | 0,04-0,06     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,09     |
| 5.2   |                         | 20-80                | 0,03-0,06       | 0,04-0,06       | 0,04-0,06     | 0,04-0,06     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,09     |
| 5.3   |                         | 20-80                | 0,03-0,06       | 0,04-0,06       | 0,04-0,06     | 0,04-0,06     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,09     |
| 5.4   |                         | 20-80                | 0,03-0,06       | 0,04-0,06       | 0,04-0,06     | 0,04-0,06     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,09     |
| 5.5   |                         | 20-80                | 0,03-0,06       | 0,04-0,06       | 0,04-0,06     | 0,04-0,06     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,09     |
| 5.6   |                         | 20-80                | 0,03-0,06       | 0,04-0,06       | 0,04-0,06     | 0,04-0,06     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,09     |
| 5.7   |                         | 20-80                | 0,03-0,06       | 0,04-0,06       | 0,04-0,06     | 0,04-0,06     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,09     |
| 5.8   |                         | 20-80                | 0,03-0,06       | 0,04-0,06       | 0,04-0,06     | 0,04-0,06     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,09     |
| 5.9   |                         | 40-100               | 0,03-0,06       | 0,04-0,06       | 0,04-0,06     | 0,04-0,06     | 0,04-0,07     | 0,05-0,08     | 0,05-0,08     | 0,05-0,09     |
| 5.10  |                         | 40-80                | 0,04-0,08       | 0,04-0,08       | 0,04-0,08     | 0,05-0,11     | 0,05-0,11     | 0,06-0,12     | 0,07-0,12     | 0,07-0,12     |
| 5.11  |                         | 40-80                | 0,04-0,08       | 0,04-0,08       | 0,04-0,08     | 0,05-0,11     | 0,05-0,11     | 0,06-0,12     | 0,07-0,12     | 0,07-0,12     |
| 6.1   |                         |                      |                 |                 |               |               |               |               |               |               |
| 6.2   |                         |                      |                 |                 |               |               |               |               |               |               |
| 6.3   |                         |                      |                 |                 |               |               |               |               |               |               |
| 6.4   |                         |                      |                 |                 |               |               |               |               |               |               |
| 6.5   |                         |                      |                 |                 |               |               |               |               |               |               |



During the drilling operation on through holes a sharp disk will be produced.  
Safety precautions must be observed.  
A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation,  
coolant pressure must be at least 5 bar.  
Optimum pressure is > 15 bar.

## Cutting data standard values KUB Trigon – 2xD

| Index                   | BK6115  | BK8425  | K and ABS     |               |               |               |               |               |               |
|-------------------------|---------|---------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                         |         |         | Ø 14-16<br>mm | Ø 17-19<br>mm | Ø 20-24<br>mm | Ø 25-29<br>mm | Ø 30-36<br>mm | Ø 37-40<br>mm | Ø 41-44<br>mm |
|                         |         |         | f in mm/rev.  |               |               |               |               |               |               |
| v <sub>c</sub> in m/min |         |         |               |               |               |               |               |               |               |
| 1.1                     | 250-350 | 200-320 | 0,04-0,08     | 0,04-0,1      | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     |
| 1.2                     | 250-350 | 200-320 | 0,04-0,08     | 0,04-0,1      | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     |
| 1.3                     | 250-300 | 250-300 | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,07-0,14     | 0,07-0,14     | 0,07-0,14     | 0,08-0,16     |
| 1.4                     | 250-300 | 250-300 | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,07-0,14     | 0,07-0,14     | 0,07-0,14     | 0,08-0,16     |
| 1.5                     | 250-300 | 250-300 | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,07-0,14     | 0,07-0,14     | 0,07-0,14     | 0,08-0,16     |
| 1.6                     | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.7                     | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.8                     | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.9                     | 250-300 | 250-300 | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,07-0,14     | 0,07-0,14     | 0,07-0,14     | 0,08-0,16     |
| 1.10                    | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.11                    | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.12                    | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.13                    | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.14                    | 70-110  | 50-90   | 0,03-0,05     | 0,03-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,1      | 0,08-0,12     | 0,08-0,12     |
| 1.15                    | 170-230 | 120-200 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,14     |
| 1.16                    | 170-230 | 120-200 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,14     |
| 2.1                     |         | 150-210 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     |
| 2.2                     |         | 150-210 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     |
| 2.3                     |         | 150-210 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     |
| 2.4                     |         | 120-200 | 0,04-0,06     | 0,04-0,06     | 0,06-0,08     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,14     |
| 2.5                     |         | 110-190 | 0,04-0,06     | 0,04-0,06     | 0,06-0,08     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     |
| 2.6                     |         | 120-200 | 0,04-0,06     | 0,04-0,06     | 0,06-0,08     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,14     |
| 2.7                     |         | 110-190 | 0,04-0,06     | 0,04-0,06     | 0,06-0,08     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     |
| 3.1                     | 160-320 | 140-220 | 0,06-0,1      | 0,06-0,12     | 0,08-0,14     | 0,1-0,2       | 0,1-0,2       | 0,1-0,2       | 0,1-0,25      |
| 3.2                     | 160-320 | 140-220 | 0,06-0,1      | 0,06-0,12     | 0,08-0,14     | 0,1-0,2       | 0,1-0,2       | 0,1-0,2       | 0,1-0,25      |
| 3.3                     | 120-200 | 140-220 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,2       | 0,1-0,2       | 0,1-0,2       | 0,1-0,25      |
| 3.4                     | 100-180 | 120-180 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,2       | 0,1-0,2       | 0,1-0,2       | 0,1-0,25      |
| 3.5                     | 90-150  | 110-170 | 0,06-0,1      | 0,06-0,12     | 0,08-0,16     | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      |
| 3.6                     | 90-150  | 110-170 | 0,06-0,1      | 0,06-0,12     | 0,08-0,16     | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      |
| 3.7                     | 90-150  | 110-170 | 0,06-0,1      | 0,06-0,12     | 0,08-0,16     | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      |
| 3.8                     | 90-150  | 110-170 | 0,06-0,1      | 0,06-0,12     | 0,08-0,16     | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      |
| 4.1                     |         |         |               |               |               |               |               |               |               |
| 4.2                     |         |         |               |               |               |               |               |               |               |
| 4.3                     |         |         |               |               |               |               |               |               |               |
| 4.4                     |         |         |               |               |               |               |               |               |               |
| 4.5                     |         |         |               |               |               |               |               |               |               |
| 4.6                     |         |         |               |               |               |               |               |               |               |
| 4.7                     |         |         |               |               |               |               |               |               |               |
| 4.8                     |         |         |               |               |               |               |               |               |               |
| 4.9                     |         |         |               |               |               |               |               |               |               |
| 4.10                    |         |         |               |               |               |               |               |               |               |
| 4.11                    |         |         |               |               |               |               |               |               |               |
| 4.12                    |         |         |               |               |               |               |               |               |               |
| 4.13                    |         |         |               |               |               |               |               |               |               |
| 4.14                    |         |         |               |               |               |               |               |               |               |
| 4.15                    |         |         |               |               |               |               |               |               |               |
| 4.16                    |         |         |               |               |               |               |               |               |               |
| 4.17                    |         |         |               |               |               |               |               |               |               |
| 4.18                    |         |         |               |               |               |               |               |               |               |
| 4.19                    |         |         |               |               |               |               |               |               |               |
| 5.1                     |         |         |               |               |               |               |               |               |               |
| 5.2                     |         |         |               |               |               |               |               |               |               |
| 5.3                     |         |         |               |               |               |               |               |               |               |
| 5.4                     |         |         |               |               |               |               |               |               |               |
| 5.5                     |         |         |               |               |               |               |               |               |               |
| 5.6                     |         |         |               |               |               |               |               |               |               |
| 5.7                     |         |         |               |               |               |               |               |               |               |
| 5.8                     |         |         |               |               |               |               |               |               |               |
| 5.9                     |         |         |               |               |               |               |               |               |               |
| 5.10                    |         |         |               |               |               |               |               |               |               |
| 5.11                    |         |         |               |               |               |               |               |               |               |
| 6.1                     | 50-90   |         | 0,03-0,05     | 0,03-0,05     | 0,04-0,08     | 0,06-0,1      | 0,06-0,1      | 0,08-0,12     | 0,08-0,12     |
| 6.2                     | 30-50   |         | 0,03-0,05     | 0,03-0,05     | 0,04-0,08     | 0,06-0,1      | 0,06-0,1      | 0,06-0,1      | 0,06-0,1      |
| 6.3                     |         |         |               |               |               |               |               |               |               |
| 6.4                     |         |         |               |               |               |               |               |               |               |
| 6.5                     |         |         |               |               |               |               |               |               |               |



During the drilling operation on through holes a sharp disk will be produced. Safety precautions must be observed.  
A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation, coolant pressure must be at least 5 bar.  
Optimum pressure is > 15 bar.



## Cutting data standard values KUB Trigon – 3xD

| Index                   | BK6115  | BK8425  | K and ABS     |               |               |               |               |               |               |
|-------------------------|---------|---------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                         |         |         | Ø 14-16<br>mm | Ø 17-19<br>mm | Ø 20-24<br>mm | Ø 25-29<br>mm | Ø 30-36<br>mm | Ø 37-40<br>mm | Ø 41-44<br>mm |
|                         |         |         | f in mm/rev.  |               |               |               |               |               |               |
| v <sub>c</sub> in m/min |         |         |               |               |               |               |               |               |               |
| 1.1                     | 250-350 | 200-320 | 0,04-0,08     | 0,04-0,1      | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     |
| 1.2                     | 250-350 | 200-320 | 0,04-0,08     | 0,04-0,1      | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     |
| 1.3                     | 250-300 | 250-300 | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,07-0,14     | 0,07-0,14     | 0,07-0,14     | 0,08-0,16     |
| 1.4                     | 250-300 | 250-300 | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,07-0,14     | 0,07-0,14     | 0,07-0,14     | 0,08-0,16     |
| 1.5                     | 250-300 | 250-300 | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,07-0,14     | 0,07-0,14     | 0,07-0,14     | 0,08-0,16     |
| 1.6                     | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.7                     | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.8                     | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.9                     | 250-300 | 250-300 | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,07-0,14     | 0,07-0,14     | 0,07-0,14     | 0,08-0,16     |
| 1.10                    | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.11                    | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.12                    | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.13                    | 200-280 | 140-220 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,14     | 0,08-0,16     | 0,08-0,16     | 0,08-0,16     |
| 1.14                    | 70-110  | 50-90   | 0,03-0,05     | 0,03-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,1      | 0,08-0,12     | 0,08-0,12     |
| 1.15                    | 170-230 | 120-200 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,14     |
| 1.16                    | 170-230 | 120-200 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,07-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,14     |
| 2.1                     |         | 150-210 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     |
| 2.2                     |         | 150-210 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     |
| 2.3                     |         | 150-210 | 0,04-0,06     | 0,04-0,08     | 0,06-0,1      | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     | 0,08-0,14     |
| 2.4                     |         | 120-200 | 0,04-0,06     | 0,04-0,06     | 0,06-0,08     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,14     |
| 2.5                     |         | 110-190 | 0,04-0,06     | 0,04-0,06     | 0,06-0,08     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     |
| 2.6                     |         | 120-200 | 0,04-0,06     | 0,04-0,06     | 0,06-0,08     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,14     |
| 2.7                     |         | 110-190 | 0,04-0,06     | 0,04-0,06     | 0,06-0,08     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     | 0,08-0,12     |
| 3.1                     | 160-320 | 140-220 | 0,06-0,1      | 0,06-0,12     | 0,08-0,14     | 0,1-0,2       | 0,1-0,2       | 0,1-0,2       | 0,1-0,25      |
| 3.2                     | 160-320 | 140-220 | 0,06-0,1      | 0,06-0,12     | 0,08-0,14     | 0,1-0,2       | 0,1-0,2       | 0,1-0,2       | 0,1-0,25      |
| 3.3                     | 120-200 | 140-220 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,2       | 0,1-0,2       | 0,1-0,2       | 0,1-0,25      |
| 3.4                     | 100-180 | 120-180 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,2       | 0,1-0,2       | 0,1-0,2       | 0,1-0,25      |
| 3.5                     | 90-150  | 110-170 | 0,06-0,1      | 0,06-0,12     | 0,08-0,16     | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      |
| 3.6                     | 90-150  | 110-170 | 0,06-0,1      | 0,06-0,12     | 0,08-0,16     | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      |
| 3.7                     | 90-150  | 110-170 | 0,06-0,1      | 0,06-0,12     | 0,08-0,16     | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      |
| 3.8                     | 90-150  | 110-170 | 0,06-0,1      | 0,06-0,12     | 0,08-0,16     | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      | 0,1-0,25      |
| 4.1                     |         |         |               |               |               |               |               |               |               |
| 4.2                     |         |         |               |               |               |               |               |               |               |
| 4.3                     |         |         |               |               |               |               |               |               |               |
| 4.4                     |         |         |               |               |               |               |               |               |               |
| 4.5                     |         |         |               |               |               |               |               |               |               |
| 4.6                     |         |         |               |               |               |               |               |               |               |
| 4.7                     |         |         |               |               |               |               |               |               |               |
| 4.8                     |         |         |               |               |               |               |               |               |               |
| 4.9                     |         |         |               |               |               |               |               |               |               |
| 4.10                    |         |         |               |               |               |               |               |               |               |
| 4.11                    |         |         |               |               |               |               |               |               |               |
| 4.12                    |         |         |               |               |               |               |               |               |               |
| 4.13                    |         |         |               |               |               |               |               |               |               |
| 4.14                    |         |         |               |               |               |               |               |               |               |
| 4.15                    |         |         |               |               |               |               |               |               |               |
| 4.16                    |         |         |               |               |               |               |               |               |               |
| 4.17                    |         |         |               |               |               |               |               |               |               |
| 4.18                    |         |         |               |               |               |               |               |               |               |
| 4.19                    |         |         |               |               |               |               |               |               |               |
| 5.1                     |         |         |               |               |               |               |               |               |               |
| 5.2                     |         |         |               |               |               |               |               |               |               |
| 5.3                     |         |         |               |               |               |               |               |               |               |
| 5.4                     |         |         |               |               |               |               |               |               |               |
| 5.5                     |         |         |               |               |               |               |               |               |               |
| 5.6                     |         |         |               |               |               |               |               |               |               |
| 5.7                     |         |         |               |               |               |               |               |               |               |
| 5.8                     |         |         |               |               |               |               |               |               |               |
| 5.9                     |         |         |               |               |               |               |               |               |               |
| 5.10                    |         |         |               |               |               |               |               |               |               |
| 5.11                    |         |         |               |               |               |               |               |               |               |
| 6.1                     | 50-90   |         | 0,03-0,05     | 0,03-0,05     | 0,04-0,08     | 0,06-0,1      | 0,06-0,1      | 0,08-0,12     | 0,08-0,12     |
| 6.2                     | 30-50   |         | 0,03-0,05     | 0,03-0,05     | 0,04-0,08     | 0,06-0,1      | 0,06-0,1      | 0,06-0,1      | 0,06-0,1      |
| 6.3                     |         |         |               |               |               |               |               |               |               |
| 6.4                     |         |         |               |               |               |               |               |               |               |
| 6.5                     |         |         |               |               |               |               |               |               |               |



During the drilling operation on through holes a sharp disk will be produced. Safety precautions must be observed.  
A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation, coolant pressure must be at least 5 bar.  
Optimum pressure is > 15 bar.



## Cutting data standard values KUB Trigon – 4xD

| Index | BK6115                  | BK8425  | K             |               |               |               |               |
|-------|-------------------------|---------|---------------|---------------|---------------|---------------|---------------|
|       |                         |         | Ø 14-16<br>mm | Ø 17-19<br>mm | Ø 20-24<br>mm | Ø 25-29<br>mm | Ø 30-35<br>mm |
|       | v <sub>c</sub> in m/min |         | f in mm/rev.  |               |               |               |               |
| 1.1   | 250-350                 | 200-320 | 0,04-0,06     | 0,04-0,08     | 0,04-0,08     | 0,05-0,1      | 0,05-0,1      |
| 1.2   | 250-350                 | 200-320 | 0,04-0,06     | 0,04-0,08     | 0,04-0,08     | 0,05-0,1      | 0,05-0,1      |
| 1.3   | 250-300                 | 250-300 | 0,02-0,04     | 0,04-0,06     | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     |
| 1.4   | 250-300                 | 250-300 | 0,02-0,04     | 0,04-0,06     | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     |
| 1.5   | 250-300                 | 250-300 | 0,02-0,04     | 0,04-0,06     | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     |
| 1.6   | 200-280                 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     |
| 1.7   | 200-280                 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     |
| 1.8   | 200-280                 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     |
| 1.9   | 250-300                 | 250-300 | 0,02-0,04     | 0,04-0,06     | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     |
| 1.10  | 200-280                 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     |
| 1.11  | 200-280                 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     |
| 1.12  | 200-280                 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     |
| 1.13  | 200-280                 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     |
| 1.14  | 70-110                  | 50-90   | 0,02-0,04     | 0,03-0,04     | 0,04-0,06     | 0,04-0,08     | 0,04-0,1      |
| 1.15  | 170-230                 | 120-200 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,05-0,1      | 0,05-0,1      |
| 1.16  | 170-230                 | 120-200 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,05-0,1      | 0,05-0,1      |
| 2.1   |                         | 150-210 | 0,02-0,04     | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,06-0,12     |
| 2.2   |                         | 150-210 | 0,02-0,04     | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,06-0,12     |
| 2.3   |                         | 150-210 | 0,02-0,04     | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,06-0,12     |
| 2.4   |                         | 120-200 | 0,02-0,04     | 0,02-0,04     | 0,04-0,06     | 0,06-0,1      | 0,06-0,1      |
| 2.5   |                         | 110-190 | 0,02-0,04     | 0,02-0,04     | 0,04-0,06     | 0,06-0,1      | 0,06-0,1      |
| 2.6   |                         | 120-200 | 0,02-0,04     | 0,02-0,04     | 0,04-0,06     | 0,06-0,1      | 0,06-0,1      |
| 2.7   |                         | 110-190 | 0,02-0,04     | 0,02-0,04     | 0,04-0,06     | 0,06-0,1      | 0,06-0,1      |
| 3.1   | 160-320                 | 140-220 | 0,06-0,08     | 0,06-0,1      | 0,06-0,12     | 0,08-0,18     | 0,08-0,18     |
| 3.2   | 160-320                 | 140-220 | 0,06-0,08     | 0,06-0,1      | 0,06-0,12     | 0,08-0,18     | 0,08-0,18     |
| 3.3   | 120-200                 | 140-220 | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,08-0,18     | 0,08-0,18     |
| 3.4   | 100-180                 | 120-180 | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,08-0,18     | 0,08-0,18     |
| 3.5   | 90-150                  | 110-170 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,23      | 0,1-0,23      |
| 3.6   | 90-150                  | 110-170 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,23      | 0,1-0,23      |
| 3.7   | 90-150                  | 110-170 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,23      | 0,1-0,23      |
| 3.8   | 90-150                  | 110-170 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,23      | 0,1-0,23      |
| 4.1   |                         |         |               |               |               |               |               |
| 4.2   |                         |         |               |               |               |               |               |
| 4.3   |                         |         |               |               |               |               |               |
| 4.4   |                         |         |               |               |               |               |               |
| 4.5   |                         |         |               |               |               |               |               |
| 4.6   |                         |         |               |               |               |               |               |
| 4.7   |                         |         |               |               |               |               |               |
| 4.8   |                         |         |               |               |               |               |               |
| 4.9   |                         |         |               |               |               |               |               |
| 4.10  |                         |         |               |               |               |               |               |
| 4.11  |                         |         |               |               |               |               |               |
| 4.12  |                         |         |               |               |               |               |               |
| 4.13  |                         |         |               |               |               |               |               |
| 4.14  |                         |         |               |               |               |               |               |
| 4.15  |                         |         |               |               |               |               |               |
| 4.16  |                         |         |               |               |               |               |               |
| 4.17  |                         |         |               |               |               |               |               |
| 4.18  |                         |         |               |               |               |               |               |
| 4.19  |                         |         |               |               |               |               |               |
| 5.1   |                         |         |               |               |               |               |               |
| 5.2   |                         |         |               |               |               |               |               |
| 5.3   |                         |         |               |               |               |               |               |
| 5.4   |                         |         |               |               |               |               |               |
| 5.5   |                         |         |               |               |               |               |               |
| 5.6   |                         |         |               |               |               |               |               |
| 5.7   |                         |         |               |               |               |               |               |
| 5.8   |                         |         |               |               |               |               |               |
| 5.9   |                         |         |               |               |               |               |               |
| 5.10  |                         |         |               |               |               |               |               |
| 5.11  |                         |         |               |               |               |               |               |
| 6.1   |                         |         |               |               |               |               |               |
| 6.2   |                         |         |               |               |               |               |               |
| 6.3   |                         |         |               |               |               |               |               |
| 6.4   |                         |         |               |               |               |               |               |
| 6.5   |                         |         |               |               |               |               |               |



During the drilling operation on through holes a sharp disk will be produced. Safety precautions must be observed.  
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Optimum pressure is > 15 bar.

## Cutting data standard values KUB Trigon – 4xD

| Index                   | BK6115  | BK8425  | ABS           |               |               |               |               |               |               |
|-------------------------|---------|---------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|                         |         |         | Ø 14-16<br>mm | Ø 17-19<br>mm | Ø 20-24<br>mm | Ø 25-29<br>mm | Ø 30-36<br>mm | Ø 37-40<br>mm | Ø 41-44<br>mm |
|                         |         |         | f in mm/rev.  |               |               |               |               |               |               |
| v <sub>c</sub> in m/min |         |         |               |               |               |               |               |               |               |
| 1.1                     | 250-350 | 200-320 | 0,04-0,06     | 0,04-0,08     | 0,04-0,08     | 0,05-0,1      | 0,05-0,1      | 0,05-0,1      | 0,05-0,1      |
| 1.2                     | 250-350 | 200-320 | 0,04-0,06     | 0,04-0,08     | 0,04-0,08     | 0,05-0,1      | 0,05-0,1      | 0,05-0,1      | 0,05-0,1      |
| 1.3                     | 250-300 | 250-300 | 0,02-0,04     | 0,04-0,06     | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,14     |
| 1.4                     | 250-300 | 250-300 | 0,02-0,04     | 0,04-0,06     | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,14     |
| 1.5                     | 250-300 | 250-300 | 0,02-0,04     | 0,04-0,06     | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,14     |
| 1.6                     | 200-280 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     | 0,06-0,14     | 0,06-0,14     |
| 1.7                     | 200-280 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     | 0,06-0,14     | 0,06-0,14     |
| 1.8                     | 200-280 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     | 0,06-0,14     | 0,06-0,14     |
| 1.9                     | 250-300 | 250-300 | 0,02-0,04     | 0,04-0,06     | 0,04-0,1      | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,06-0,14     |
| 1.10                    | 200-280 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     | 0,06-0,14     | 0,06-0,14     |
| 1.11                    | 200-280 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     | 0,06-0,14     | 0,06-0,14     |
| 1.12                    | 200-280 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     | 0,06-0,14     | 0,06-0,14     |
| 1.13                    | 200-280 | 140-220 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,06-0,14     | 0,06-0,14     | 0,06-0,14     |
| 1.14                    | 70-110  | 50-90   | 0,02-0,04     | 0,03-0,04     | 0,04-0,06     | 0,04-0,08     | 0,04-0,1      | 0,05-0,12     | 0,05-0,12     |
| 1.15                    | 170-230 | 120-200 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,05-0,1      | 0,05-0,1      | 0,05-0,1      | 0,05-0,12     |
| 1.16                    | 170-230 | 120-200 | 0,02-0,04     | 0,04-0,06     | 0,06-0,08     | 0,05-0,1      | 0,05-0,1      | 0,05-0,1      | 0,05-0,12     |
| 2.1                     |         | 150-210 | 0,02-0,04     | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,08-0,12     |
| 2.2                     |         | 150-210 | 0,02-0,04     | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,08-0,12     |
| 2.3                     |         | 150-210 | 0,02-0,04     | 0,04-0,06     | 0,04-0,08     | 0,06-0,12     | 0,06-0,12     | 0,06-0,12     | 0,08-0,12     |
| 2.4                     |         | 120-200 | 0,02-0,04     | 0,04-0,06     | 0,04-0,06     | 0,06-0,1      | 0,06-0,1      | 0,06-0,1      | 0,08-0,12     |
| 2.5                     |         | 110-190 | 0,02-0,04     | 0,04-0,06     | 0,04-0,06     | 0,06-0,1      | 0,06-0,1      | 0,06-0,1      | 0,08-0,1      |
| 2.6                     |         | 120-200 | 0,02-0,04     | 0,04-0,06     | 0,04-0,06     | 0,06-0,1      | 0,06-0,1      | 0,06-0,1      | 0,08-0,12     |
| 2.7                     |         | 110-190 | 0,02-0,04     | 0,04-0,06     | 0,04-0,06     | 0,06-0,1      | 0,06-0,1      | 0,06-0,1      | 0,08-0,1      |
| 3.1                     | 160-320 | 140-220 | 0,06-0,08     | 0,06-0,1      | 0,06-0,12     | 0,08-0,18     | 0,08-0,18     | 0,08-0,18     | 0,1-0,23      |
| 3.2                     | 160-320 | 140-220 | 0,06-0,08     | 0,06-0,1      | 0,06-0,12     | 0,08-0,18     | 0,08-0,18     | 0,08-0,18     | 0,1-0,23      |
| 3.3                     | 120-200 | 140-220 | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,08-0,18     | 0,08-0,18     | 0,08-0,18     | 0,1-0,23      |
| 3.4                     | 100-180 | 120-180 | 0,04-0,06     | 0,06-0,08     | 0,06-0,12     | 0,08-0,18     | 0,08-0,18     | 0,08-0,18     | 0,1-0,23      |
| 3.5                     | 90-150  | 110-170 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,23      | 0,1-0,23      | 0,1-0,23      | 0,1-0,23      |
| 3.6                     | 90-150  | 110-170 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,23      | 0,1-0,23      | 0,1-0,23      | 0,1-0,23      |
| 3.7                     | 90-150  | 110-170 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,23      | 0,1-0,23      | 0,1-0,23      | 0,1-0,23      |
| 3.8                     | 90-150  | 110-170 | 0,06-0,08     | 0,06-0,1      | 0,08-0,14     | 0,1-0,23      | 0,1-0,23      | 0,1-0,23      | 0,1-0,23      |
| 4.1                     |         |         |               |               |               |               |               |               |               |
| 4.2                     |         |         |               |               |               |               |               |               |               |
| 4.3                     |         |         |               |               |               |               |               |               |               |
| 4.4                     |         |         |               |               |               |               |               |               |               |
| 4.5                     |         |         |               |               |               |               |               |               |               |
| 4.6                     |         |         |               |               |               |               |               |               |               |
| 4.7                     |         |         |               |               |               |               |               |               |               |
| 4.8                     |         |         |               |               |               |               |               |               |               |
| 4.9                     |         |         |               |               |               |               |               |               |               |
| 4.10                    |         |         |               |               |               |               |               |               |               |
| 4.11                    |         |         |               |               |               |               |               |               |               |
| 4.12                    |         |         |               |               |               |               |               |               |               |
| 4.13                    |         |         |               |               |               |               |               |               |               |
| 4.14                    |         |         |               |               |               |               |               |               |               |
| 4.15                    |         |         |               |               |               |               |               |               |               |
| 4.16                    |         |         |               |               |               |               |               |               |               |
| 4.17                    |         |         |               |               |               |               |               |               |               |
| 4.18                    |         |         |               |               |               |               |               |               |               |
| 4.19                    |         |         |               |               |               |               |               |               |               |
| 5.1                     |         |         |               |               |               |               |               |               |               |
| 5.2                     |         |         |               |               |               |               |               |               |               |
| 5.3                     |         |         |               |               |               |               |               |               |               |
| 5.4                     |         |         |               |               |               |               |               |               |               |
| 5.5                     |         |         |               |               |               |               |               |               |               |
| 5.6                     |         |         |               |               |               |               |               |               |               |
| 5.7                     |         |         |               |               |               |               |               |               |               |
| 5.8                     |         |         |               |               |               |               |               |               |               |
| 5.9                     |         |         |               |               |               |               |               |               |               |
| 5.10                    |         |         |               |               |               |               |               |               |               |
| 5.11                    |         |         |               |               |               |               |               |               |               |
| 6.1                     |         |         |               |               |               |               |               |               |               |
| 6.2                     |         |         |               |               |               |               |               |               |               |
| 6.3                     |         |         |               |               |               |               |               |               |               |
| 6.4                     |         |         |               |               |               |               |               |               |               |
| 6.5                     |         |         |               |               |               |               |               |               |               |

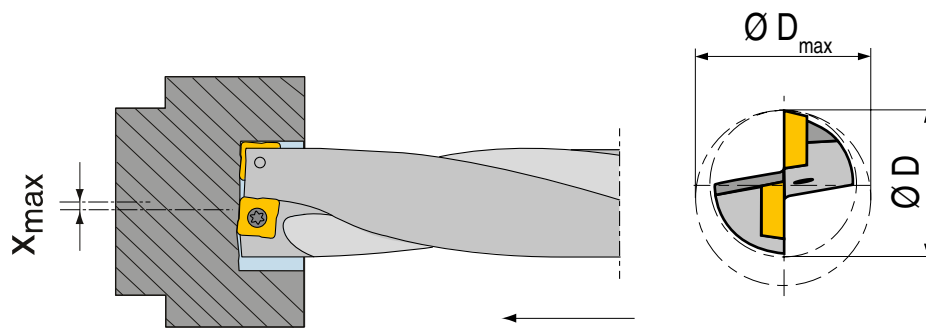


During the drilling operation on through holes a sharp disk will be produced. Safety precautions must be observed.  
A safety guard has to be provided as protection.



In order to ensure efficient chip evacuation, coolant pressure must be at least 5 bar.  
Optimum pressure is > 15 bar.

## Maximum adjustment range (X) during solid drilling / from the centre for stationary applications – KUB Pentron



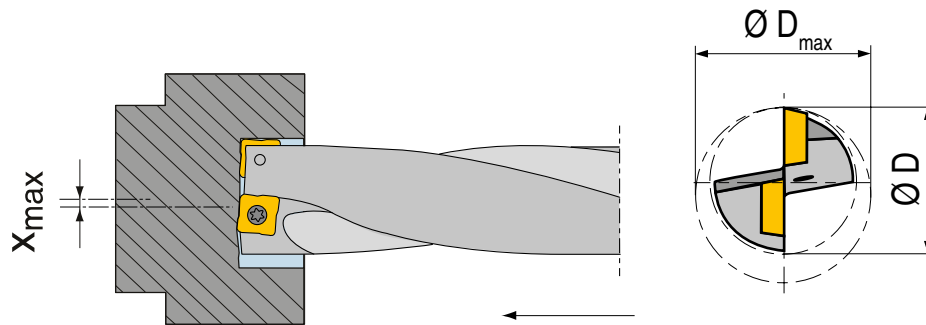
At max. offset  $X_{\max}$  the hole will be:  
 $D_{\max} = D + 2X_{\max}$   
 e.g. for  $D = 20.0$  mm,  $X_{\max} = 0.20$  mm:  
 $D_{\max} = D + 0.4 = 20.4$  mm

| Ø D<br>mm | Insert Size | $X_{\max}$<br>mm | Ø D <sub>max</sub><br>mm |
|-----------|-------------|------------------|--------------------------|
| 14        | SOGX 04.... | 0,25             | 14,5                     |
| 14,5      |             | 0,25             | 15,0                     |
| 15,0      |             | 0,25             | 15,5                     |
| 15,5      |             | 0,25             | 16,0                     |
| 16,0      |             | 0,25             | 16,5                     |
| 16,5      | SOGX 05.... | 0,25             | 17,0                     |
| 17,0      |             | 0,25             | 17,5                     |
| 17,5      |             | 0,25             | 18,0                     |
| 18,0      |             | 0,25             | 18,5                     |
| 18,5      |             | 0,25             | 19,0                     |
| 19,0      | SOGX 06.... | 0,25             | 19,5                     |
| 19,5      |             | 0,25             | 20,0                     |
| 20,0      |             | 0,25             | 20,5                     |
| 20,5      |             | 0,25             | 21,0                     |
| 21,0      |             | 0,25             | 21,5                     |
| 21,5      | SOGX 07.... | 0,25             | 22,0                     |
| 22,0      |             | 0,25             | 22,5                     |
| 22,5      |             | 0,25             | 23,0                     |
| 23,0      |             | 0,25             | 23,5                     |
| 23,5      |             | 0,25             | 24,0                     |
| 24,0      | SOGX 08.... | 0,25             | 24,5                     |
| 24,5      |             | 0,25             | 25,0                     |
| 25,0      |             | 0,25             | 25,5                     |
| 25,5      |             | 0,25             | 26,0                     |
| 26,0      |             | 0,25             | 26,5                     |
| 26,5      | SOGX 09.... | 0,25             | 27,0                     |
| 27,0      |             | 0,25             | 27,5                     |
| 27,5      |             | 0,25             | 28,0                     |
| 28,0      |             | 0,25             | 28,5                     |
| 28,5      |             | 0,25             | 29,0                     |
| 29,0      | SOGX 10.... | 0,25             | 29,5                     |
| 29,5      |             | 0,25             | 30,0                     |
| 30,0      |             | 0,25             | 30,5                     |
| 31,0      |             | 0,25             | 31,5                     |
| 32,0      |             | 0,25             | 32,5                     |
| 33,0      |             | 0,25             | 33,5                     |

| Ø D<br>mm | Insert Size | $X_{\max}$<br>mm | Ø D <sub>max</sub><br>mm |
|-----------|-------------|------------------|--------------------------|
| 34,0      | SOGX 11.... | 0,25             | 34,5                     |
| 35,0      |             | 0,25             | 35,5                     |
| 36,0      |             | 0,25             | 36,5                     |
| 37,0      |             | 0,25             | 37,5                     |
| 38,0      |             | 0,25             | 38,5                     |
| 39,0      | SOGX 12.... | 0,25             | 39,5                     |
| 40,0      |             | 0,25             | 40,5                     |
| 41,0      |             | 0,25             | 41,5                     |
| 42,0      |             | 0,25             | 42,5                     |
| 43,0      |             | 0,25             | 43,5                     |
| 44,0      | SOGX 13.... | 0,25             | 44,5                     |
| 45,0      |             | 0,25             | 45,5                     |
| 46,0      |             | 0,25             | 46,5                     |

**i** The maximum radial X-offset affects the cutting force balance of the drill, therefore, the use of lower feed rates is recommended!

## Maximum off set (X) for drilling into full material / with stationary applications – MaxiDrill 900 + KUB 100



At max. offset  $X_{max}$  the hole will be:

$$D_{max} = D + 2X_{max}$$

e.g. for  $D = 20.0$  mm,  $X_{max} = 0.20$  mm:

$$D_{max} = D + 0.4 = 20.4$$

| Ø D<br>mm | Insert Size | $X_{max}$<br>mm | Ø D <sub>max</sub><br>mm |
|-----------|-------------|-----------------|--------------------------|
| 12,0      | SONT 03.... | 0,50            | 13,0                     |
| 12,5      |             | 0,40            | 13,3                     |
| 13,0      |             | 0,35            | 13,7                     |
| 13,5      |             | 0,30            | 14,1                     |
| 14,0      | SONT 04.... | 0,35            | 14,7                     |
| 14,5      |             | 0,25            | 15,0                     |
| 15,0      |             | 0,20            | 15,4                     |
| 15,5      |             | 0,15            | 15,8                     |
| 16,0      | SONT 05.... | 0,40            | 16,8                     |
| 16,5      |             | 0,35            | 17,2                     |
| 17,0      |             | 0,30            | 17,6                     |
| 17,5      |             | 0,25            | 18,0                     |
| 18,0      | SONT 06.... | 0,50            | 19,0                     |
| 18,5      |             | 0,40            | 19,3                     |
| 19,0      |             | 0,35            | 19,7                     |
| 19,5      |             | 0,25            | 20,0                     |
| 20,0      | SONT 07.... | 0,20            | 20,4                     |
| 20,5      |             | 0,15            | 20,8                     |
| 21,0      |             | 0,35            | 21,7                     |
| 21,5      |             | 0,30            | 22,1                     |
| 22,0      | SONT 08.... | 0,25            | 22,5                     |
| 22,5      |             | 0,15            | 22,8                     |
| 23,0      |             | 0,15            | 23,3                     |
| 23,5      |             | 0,10            | 23,7                     |
| 24,0      | SONT 09.... | 0,65            | 25,3                     |
| 24,5      |             | 0,55            | 25,6                     |
| 25,0      |             | 0,55            | 26,1                     |
| 25,5      |             | 0,40            | 26,3                     |
| 26,0      | SONT 10.... | 0,35            | 26,7                     |
| 26,5      |             | 0,30            | 27,1                     |
| 27,0      |             | 0,25            | 27,5                     |
| 27,5      |             | 0,15            | 27,8                     |
| 28,0      | SONT 11.... | 0,90            | 29,8                     |
| 28,5      |             | 0,80            | 30,1                     |
| 29,0      |             | 0,75            | 30,5                     |
| 29,5      |             | 0,70            | 30,9                     |
| 30,0      | SONT 12.... | 0,60            | 31,2                     |
| 30,5      |             | 0,55            | 31,6                     |
| 31,0      |             | 0,45            | 31,9                     |
| 31,5      |             | 0,40            | 32,3                     |
| 32,0      |             | 0,30            | 32,6                     |

| Ø D<br>mm | Insert Size | $X_{max}$<br>mm | Ø D <sub>max</sub><br>mm |
|-----------|-------------|-----------------|--------------------------|
| 32,5      | SONT 10.... | 0,80            | 34,1                     |
| 33,0      |             | 0,80            | 34,6                     |
| 33,5      |             | 0,65            | 34,8                     |
| 34,0      |             | 0,60            | 35,2                     |
| 34,5      | SONT 11.... | 0,50            | 35,5                     |
| 35,0      |             | 0,45            | 35,9                     |
| 35,5      |             | 0,35            | 36,2                     |
| 36,0      |             | 0,35            | 36,7                     |
| 36,5      | SONT 12.... | 0,20            | 36,9                     |
| 37,0      |             | 1,00            | 39,0                     |
| 38,0      |             | 0,85            | 39,7                     |
| 39,0      |             | 0,70            | 40,4                     |
| 40,0      | SONT 13.... | 0,50            | 41,0                     |
| 41,0      |             | 0,35            | 41,7                     |
| 42,0      |             | 0,95            | 43,9                     |
| 43,0      |             | 0,80            | 44,6                     |
| 44,0      | SONT 14.... | 0,60            | 45,2                     |
| 45,0      |             | 0,45            | 45,9                     |
| 46,0      |             | 0,30            | 46,6                     |
| 47,0      |             | 1,80            | 50,6                     |
| 48,0      | SONT 15.... | 1,65            | 51,3                     |
| 49,0      |             | 1,50            | 52,0                     |
| 50,0      |             | 1,35            | 52,7                     |
| 51,0      |             | 1,15            | 53,3                     |
| 52,0      | SONT 16.... | 0,95            | 53,9                     |
| 53,0      |             | 0,80            | 54,6                     |
| 54,0      |             | 0,60            | 55,2                     |
| 55,0      |             | 2,10            | 59,2                     |
| 56,0      | SONT 17.... | 1,90            | 59,8                     |
| 57,0      |             | 1,75            | 60,5                     |
| 58,0      |             | 1,55            | 61,1                     |
| 59,0      |             | 1,35            | 61,7                     |
| 60,0      | SONT 18.... | 1,15            | 62,3                     |
| 61,0      |             | 1,00            | 63,0                     |
| 62,0      |             | 0,85            | 63,7                     |
| 63,0      |             | 0,65            | 64,3                     |

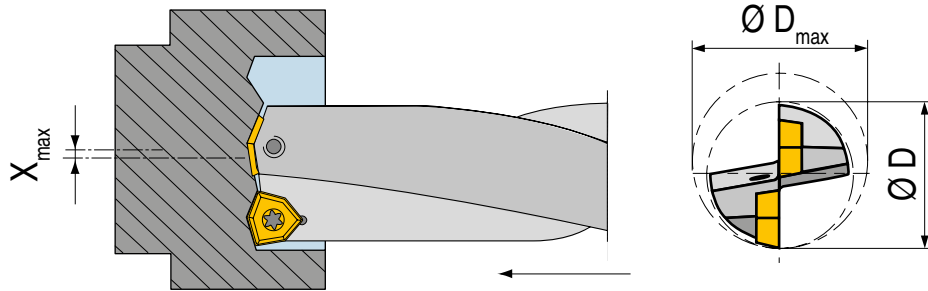
**i** The maximum radial X-offset affects the cutting force balance of the drill, therefore, the use of lower feed rates is recommended!

## Technical data for turning – MaxiDrill 900

| Insert Size | $a_{p \max}$ in mm | f in mm/rev. |
|-------------|--------------------|--------------|
| SONT 03     | 0,40–1,50          | 0,08–0,22    |
| SONT 04     | 0,40–1,80          | 0,09–0,27    |
| SONT 05     | 0,60–2,40          | 0,10–0,30    |
| SONT 06     | 0,60–2,80          | 0,11–0,34    |
| SONT 07     | 0,60–3,40          | 0,13–0,38    |
| SONT 08     | 0,70–4,20          | 0,15–0,41    |

| Insert Size | $a_{p \max}$ in mm | f in mm/rev. |
|-------------|--------------------|--------------|
| SONT 09     | 0,70–4,50          | 0,16–0,42    |
| SONT 10     | 0,70–4,80          | 0,17–0,44    |
| SONT 12     | 0,90–5,50          | 0,18–0,45    |
| SONT 13     | 1,00–6,00          | 0,20–0,45    |
| SONT 15     | 1,20–6,40          | 0,21–0,46    |
| SONT 17     | 1,20–6,70          | 0,21–0,47    |

## Maximum adjustment range (X) during solid drilling / from the centre for stationary applications – KUB Trigon



At max. offset  $X_{\max}$  the hole will be:  
 $D_{\max} = D + 2X_{\max}$   
 e.g. for  $D = 20.0 \text{ mm}$ ,  $X_{\max} = 0.20 \text{ mm}$ :  
 $D_{\max} = D + 0.4 = 20.4 \text{ mm}$

| Ø D<br>mm | Insert Size | $X_{\max}$<br>mm | Ø D <sub>max</sub><br>mm |
|-----------|-------------|------------------|--------------------------|
| 14,0      | WOEX 03.... | 0,5              | 15,0                     |
| 15,0      |             | 0,5              | 16,0                     |
| 16,0      |             | 0,5              | 17,0                     |
| 17,0      |             | 0,5              | 18,0                     |
| 18,0      |             | 0,5              | 19,0                     |
| 19,0      | WOEX 04.... | 0,5              | 20,0                     |
| 20,0      |             | 0,5              | 21,0                     |
| 21,0      |             | 0,5              | 22,0                     |
| 22,0      |             | 0,5              | 23,0                     |
| 23,0      |             | 0,5              | 24,0                     |
| 24,0      | WOEX 05.... | 0,5              | 25,0                     |
| 25,0      |             | 0,5              | 26,0                     |
| 26,0      |             | 1,0              | 28,0                     |
| 27,0      |             | 1,5              | 30,0                     |
| 28,0      |             | 1,5              | 31,0                     |
| 29,0      |             | 1,5              | 32,0                     |
| 30,0      |             | 1,25             | 32,5                     |
| 31,0      |             | 1,25             | 33,5                     |
| 32,0      |             | 1,0              | 34,0                     |
| 33,0      |             | 0,5              | 34,0                     |
| 34,0      |             | 0,5              | 35,0                     |
| 35,0      |             | 0,5              | 36,0                     |
| 36,0      |             | 0,5              | 37,0                     |

| Ø D<br>mm | Insert Size | $X_{\max}$<br>mm | Ø D <sub>max</sub><br>mm |
|-----------|-------------|------------------|--------------------------|
| 37        | WOEX 06.... | 1,5              | 40,0                     |
| 38        |             | 1,5              | 41,0                     |
| 39        |             | 1,5              | 42,0                     |
| 40        |             | 1,5              | 43,0                     |
| 41        |             | 1,5              | 44,0                     |
| 42        |             | 1,5              | 45,0                     |
| 43        |             | 1,0              | 45,0                     |
| 44        |             | 0,5              | 45,0                     |

## Coding example indexable insert drilling

| System         | Length    | Bore diameter | Direction of rotation | Insert size | Machine connection and size |
|----------------|-----------|---------------|-----------------------|-------------|-----------------------------|
| <b>MD-900</b>  | <b>4D</b> | <b>240</b>    | <b>R</b>              | <b>08</b>   | <b>C 32</b>                 |
| <b>KUB-T</b>   | <b>2D</b> | <b>350</b>    | <b>R</b>              | <b>05</b>   | <b>K 32</b>                 |
| <b>KUB-P</b>   | <b>3D</b> | <b>215</b>    | <b>R</b>              | <b>07</b>   | <b>ABS 50</b>               |
| <b>KUB-P</b>   | <b>3D</b> | <b>290</b>    | <b>R</b>              | <b>04</b>   | <b>PSC 63</b>               |
| <b>KUB-100</b> | <b>3D</b> | <b>300</b>    | <b>R</b>              | <b>07</b>   | <b>C 25</b>                 |

▲ MD-900 = MaxiDrill 900

▲ KUB-P = KUB Pentron

▲ KUB-T = KUB Trigon

▲ KUB-100 = KUB 100

▲ 240 = 24.0 mm

▲ 350 = 35.0 mm

▲ 215 = 21.5 mm

▲ 290 = 29.0 mm

▲ 300 = 30.0 mm

▲ R = right

▲ C32 = Cylindrical shank Ø 32.0 mm

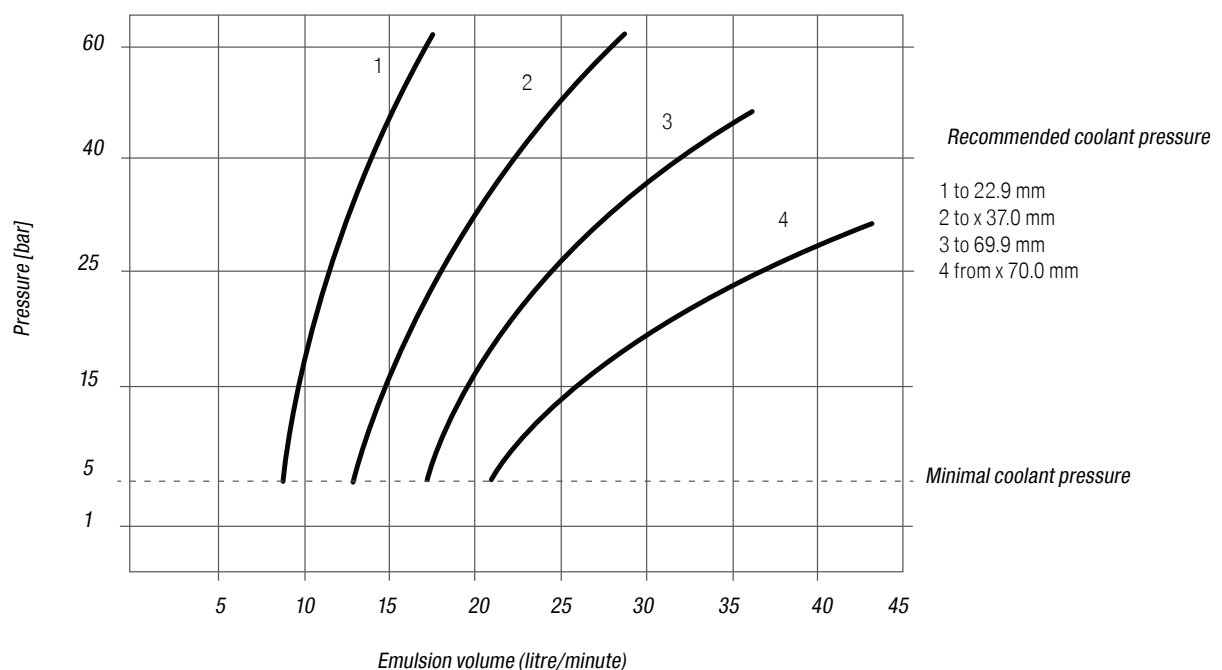
▲ K32 = Cylindrical shank with  
combi clamping flat Ø 32.0 mm

▲ ABS50 = ABS adapter size 50

▲ PSC63 = PSC adapter shank size 63

▲ C25 = Cylindrical Shank Ø 25.0 mm

## Recommended coolant pressure and coolant flow





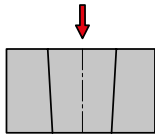
## Problems / possible causes / solutions

## Rotating and stationary application



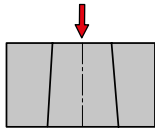
## Short service life / types of wear of indexable inserts

- ▲ Cutting speed too high → select the correct cutting speed
- ▲ Insert grade selection has too little wear resistance → select a wear resistant grade
- ▲ Tool overhang too large → if possible, use a shorter tool
- ▲ Damaged insert seat → check tool, replace if necessary
- ▲ Clamping device stability too low → increase stability



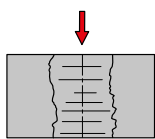
## Hole tapers in

- ▲ Chip jam on the outer cutting edge → use a different chip breakage geometry, increase the feed if necessary
- ▲ Material very soft → increase the cutting speed, reduce the feed
- ▲ Use a positive cutting edge geometry



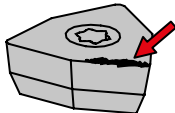
## Hole tapers out

- ▲ Chip jam on the inner cutting edge → use a different chip breakage geometry, increase the feed if necessary



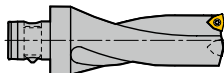
## Poor surface quality

- ▲ Poor chip evacuation → optimise the cutting parameters: Increase the cutting speed, reduce the feed



## Built-up edge

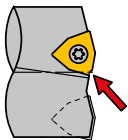
- ▲ Cutting speed too low → increase cutting speed
- ▲ Indexable insert too negative → use positive geometry
- ▲ Unsuitable coating → select the correct coating



## Friction marks on the tool shank

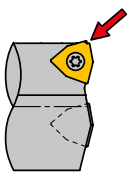
- ▲ Bore diameter too small → check the setting
- ▲ Chip evacuation problems → optimise the cutting parameters, check the geometry of the indexable insert
- ▲ Cutting radius too high → use the correct cutting radius

## Stationary application



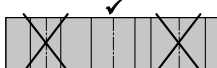
## Edge breakage on the inner cutting edge

- ▲ Centre height of the tool too high/too low → adjust tool turret/adaptor if necessary → Recalibrate the machine
- ▲ Indexable insert grades interchanged → use correct indexable insert
- ▲ Feed too high → reduce feed
- ▲ Indexable insert grade too brittle → use a tougher indexable insert grade
- ▲ Incorrect indexable insert geometry → if necessary use a geometry with a chamfered cutting edge



## Edge breakage on the outer cutting edge

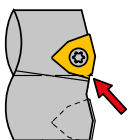
- ▲ Feed too high → reduce feed
- ▲ Interrupted cut → switch to a tougher grade of indexable insert
- ▲ Cutting radius too small → use an indexable insert with a larger cutting radius



## Hole too small / too large

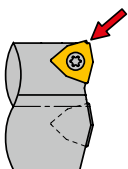
- ▲ Machine is not in the X-0 position → move axis to correct position
- ▲ Machine axis has been moved → recalibrate the machine

## Rotating application



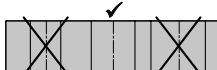
## Edge breakage on the inner cutting edge

- ▲ Indexable insert grades interchanged → use correct indexable insert
- ▲ Feed too high → reduce feed
- ▲ Indexable insert grade too brittle → use a tougher indexable insert grade
- ▲ Incorrect indexable insert geometry → if necessary use a geometry with a chamfered cutting edge



## Edge breakage on the outer cutting edge

- ▲ Feed too high → reduce feed
- ▲ Interrupted cut → switch to a tougher grade of indexable insert
- ▲ Cutting radius too small → use an indexable insert with a larger cutting radius



## Hole too small / too large when using adjustable tools

- ▲ Incorrect cutting radius used → use the correct cutting radius
- ▲ Incorrect setting → use the correct tool setting
- ▲ Increase cutting fluid supply

## Grades Overview

### CTPP430

- ▲ Carbide, TiAlN-coated
- ▲ ISO | **P30** | **M25** | S25 | K30 | N25
- ▲ The universal high-performance grade for steel, austenitic steel and heat-resistant alloys

CCN1430

### BK8425

- ▲ Carbide, TiAlN/TiN-coated
- ▲ ISO | **P25** | **M25** | **K25**
- ▲ Universally applicable grade with increased wear resistance thanks to the innovative PVD coating in a multilayer design

### CTCP420

- ▲ Carbide, TiCN-Al<sub>2</sub>O<sub>3</sub>-coated
- ▲ ISO | **P20** | **K20** | M20
- ▲ The wear-resistant solution for steel and cast iron materials at high cutting speeds

DCX1420

### BK6115

- ▲ Carbide, TiCN-TiN-Al<sub>2</sub>O<sub>3</sub>-coated
- ▲ ISO | **P20** | **K20** | H20
- ▲ High-quality, surface-treated coating for machining cast iron materials under normal to stable conditions and high cutting speeds

### BK7710

- ▲ Carbide, TiB<sub>2</sub>-coated
- ▲ ISO | **N10** | S10
- ▲ The wear-resistant grade with optimum cutting characteristics to prevent built-up edge formation for machining aluminium and titanium alloys

### BK7935

- ▲ Carbide, AlTiN-coated
- ▲ ISO | **P35** | **M30** | S30 | K30 | N30
- ▲ The tough carbide grade for machining stainless steel and acid-resistant steels as well as special alloys

### BK6425

- ▲ Carbide, TiCN-Al<sub>2</sub>O<sub>3</sub>-TiN-coated
- ▲ ISO | **P25** | **M15** | K20
- ▲ The extremely wear-resistant grade for machining all steel and stainless materials

### BK77

- ▲ Carbide, TiN-coated
- ▲ ISO | **S10** | **N10**
- ▲ The wear-resistant carbide grade for machining aluminum alloys, superalloys and plastics at medium cutting speeds

### BK62

- ▲ Carbide, TiN-TiCN-Al<sub>2</sub>O<sub>3</sub>-coated
- ▲ ISO | **K15** | H15
- ▲ Special carbide grade for machining cast iron materials at high cutting speeds  
Not suitable for machining aluminium materials

## Chip breakers

### -01

- ▲ Universal geometry suitable for a wide range of materials
- ▲ Can be used for the center and peripheral insert

### -03

- ▲ Geometry for chip breaking problems with excellent chip control at low feed rates
- ▲ Can only be used for the peripheral insert
- ▲ Main application in low alloyed and stainless steels

### -11

- ▲ Highly positive, minimally rounded chip breaker
- ▲ For soft cutting use
- ▲ Main application in aluminum

### -13

- ▲ Very positive geometry for low alloy, stainless and acid-resistant steels
- ▲ Can be used for the center and peripheral insert
- ▲ Due to the low cutting forces well suited to unstable conditions

## Application

