

NEW

NEW PRODUCTS FOR MACHINING



5-AXIS MACHINING TO PERFECTION

X5G-Z

TEAM CUTTING TOOLS



KOMET



KLENK

CERATIZIT is a high-technology engineering group specialised in cutting tools and hard material solutions.

Tooling the Future

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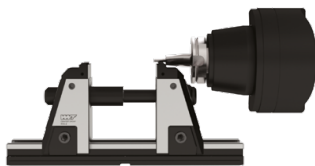
X5G-Z

5-axis machining to perfection



X5G-Z, the 5-axis vice for demanding applications!

All the advantages that ensure optimum and simple 5- and 6-sided machining combined in a single clamping device.



Optimum accessibility

Clamping and machining at the highest level. Perfect accessibility from all sides – a huge plus for the X5G-Z!



Fast jaw changeover without tools

Reduces setup times significantly.

Comprehensive jaw system with 18 quick-change jaws in widths of 40 mm/65 mm/80 mm/125 mm



Spindle quick change system

Quick conversion!

Maximum ease of handling and integrated pull-down action for 5- and 6-sided machining

Fully encapsulated, mechanical spindle

Simple to extend up to a
clamping range of 680 mm

Quick adjustment of clamping range

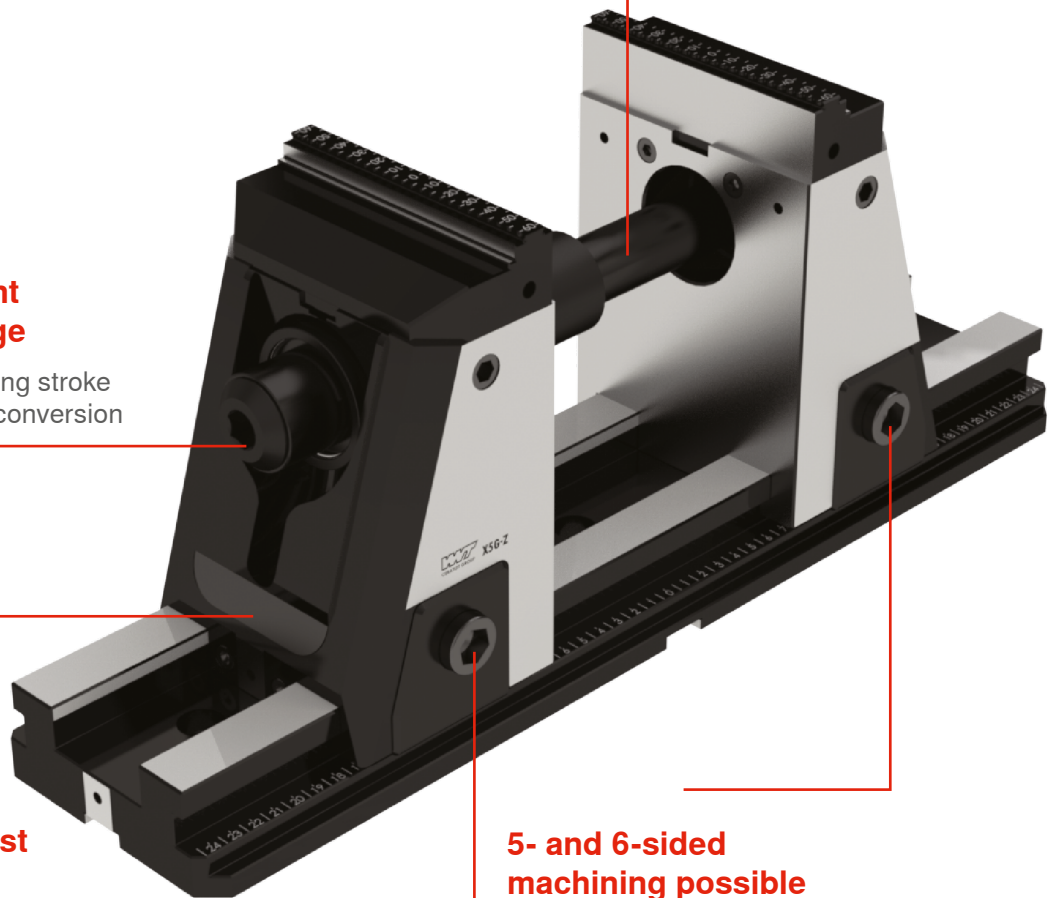
130 mm basic clamping stroke
without the need for conversion

Optimised against vibrations

Integrated, internal
elastomer damping

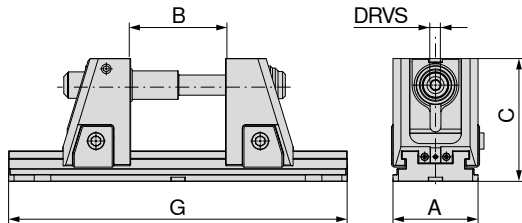
5- and 6-sided machining possible

Integrated pull-down action,
No force transmission across
the seating surface



Mechanical 5-axis vice with movable fixed jaws, 181 mm height

- ▲ Optimum accessibility
- ▲ 5- and 6-sided machining possible
- ▲ Fast jaw changeover
- ▲ Clamping on the machine table is possible with MNG/PNG,
or directly through the base body



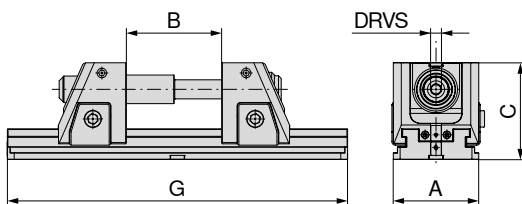
NEW

80 908 ...

A mm	B $\pm 0,015$ mm	C mm	G mm	DRVS mm	MXC kN	WT kg	
125	4 - 134	181	330	14	40	33,2	52500
125	4 - 234	181	430	14	40	36,1	52600
125	4 - 304	181	500	14	40	38,1	52700
125	4 - 434	181	630	14	40	41,8	52800
125	4 - 604	181	800	14	40	46,6	52900

Mechanical 5-axis vice with movable fixed jaws, 142 mm height

- ▲ Optimum accessibility
- ▲ 5- and 6-sided machining possible
- ▲ Fast jaw changeover
- ▲ Clamping on the machine table is possible with MNG/PNG,
or directly through the base body



NEW

80 908 ...

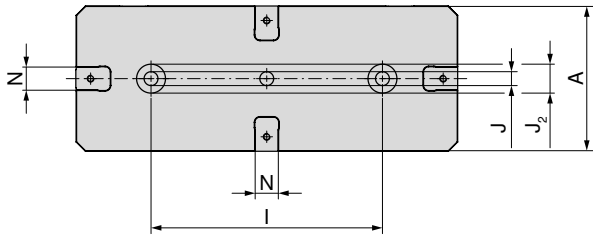
A mm	B $\pm 0,015$ mm	C mm	G mm	DRVS mm	MXC kN	WT kg	
125	4 - 134	142	330	14	40	27,3	42500
125	4 - 234	142	430	14	40	30,2	42600
125	4 - 304	142	500	14	40	32,2	42700
125	4 - 434	142	630	14	40	35,9	42800
125	4 - 604	142	800	14	40	40,7	42900



Basic clamping stroke 130 mm – Larger clamping ranges can be achieved using drawbar extensions! See **page 11**.
The structural dimension tables for the various jaws can be found from **page 6** onwards.

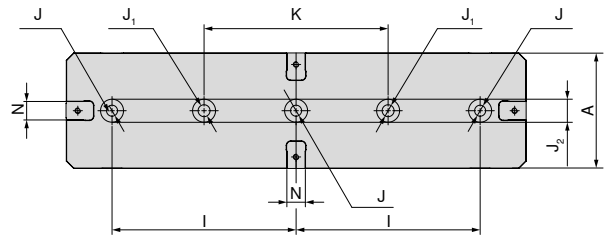
X5G-Z/-S underside dimensions

Base width 125 mm and 330 mm length



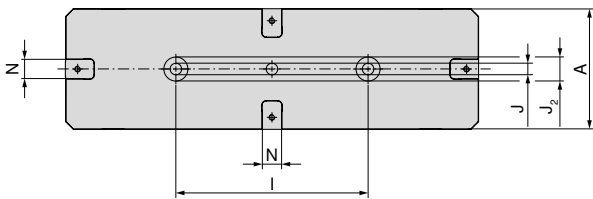
A	I $\pm 0,02$	J $H7$	J ₂ $H6$	N $H7$
mm	mm	mm	mm	mm
125	200	12	25	20

Base width 125 mm and 630 mm length



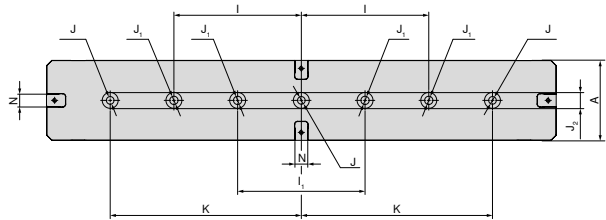
A	I $\pm 0,02$	J $H7$	J ₁	J ₂ $H6$	K $\pm 0,02$	N $H7$
mm	mm	mm	mm	mm	mm	mm
125	200	12	13	25	200	20

Base width 125 mm and 430 mm length



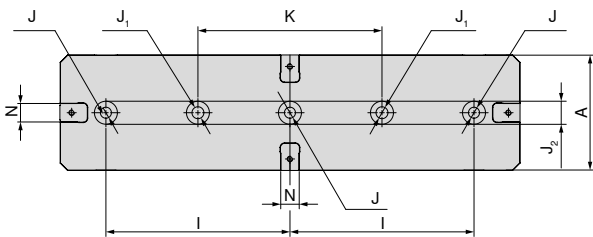
A	I $\pm 0,02$	J $H7$	J ₂ $H6$	N $H7$
mm	mm	mm	mm	mm
125	200	12	25	20

Base width 125 mm and 800 mm length



A	I $\pm 0,02$	I ₁ $\pm 0,02$	J $H7$	J ₁	J ₂ $H6$	K $\pm 0,02$	N $H7$
mm	mm	mm	mm	mm	mm	mm	mm
125	200	200	12	13	25	300	20

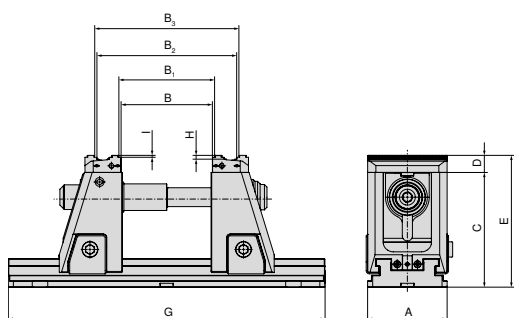
Base width 125 mm and 500 mm length



A	I $\pm 0,02$	J $H7$	J ₁	J ₂ $H6$	K $\pm 0,02$	N $H7$
mm	mm	mm	mm	mm	mm	mm
125	200	12	13	25	200	20

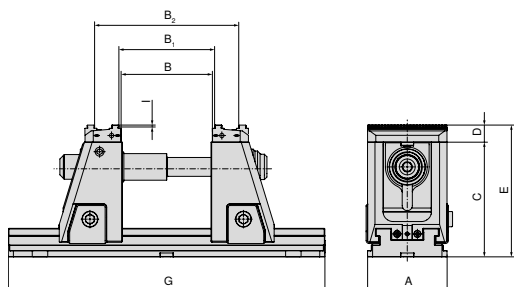
X5G-Z/-S structural dimension table for the different jaws

With indexable jaws, grip 3 mm



Type	Drawbar 430 mm 80 908 80000	Drawbar 500 mm 80 908 80100	Drawbar 630 mm 80 908 80200	Drawbar 800 mm 80 908 80300	A	B	B ₁	B ₂	B ₃	C	D	E	G	H	I
80 908 52500					125	5-134	12-141	80-210	88-217	181	27	208	330	6	3
80 908 42500					125	5-134	12-141	80-210	88-217	142	27	169	330	6	3
80 908 52600	1 x				125	5-234	12-241	80-310	88-317	181	27	208	430	6	3
80 908 42600	1 x				125	5-234	12-241	80-310	88-317	142	27	169	430	6	3
80 908 52700	1 x	1 x			125	5-304	12-311	80-380	88-387	181	27	208	500	6	3
80 908 42700	1 x	1 x			125	5-304	12-311	80-380	88-387	142	27	169	500	6	3
80 908 52800	1 x	1 x	1 x		125	5-434	12-441	80-510	88-517	181	27	208	630	6	3
80 908 42800	1 x	1 x	1 x		125	5-434	12-441	80-510	88-517	142	27	169	630	6	3
80 908 52900	1 x	1 x	1 x	1 x	125	5-604	12-611	80-680	88-687	181	27	208	800	6	3
80 908 42900	1 x	1 x	1 x	1 x	125	5-604	12-611	80-680	88-687	142	27	169	800	6	3

With indexable jaws, grip 5 mm



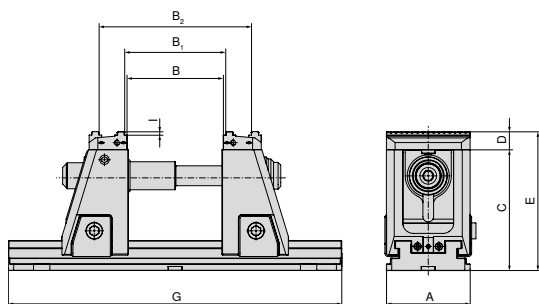
Type	Drawbar 430 mm 80 908 80000	Drawbar 500 mm 80 908 80100	Drawbar 630 mm 80 908 80200	Drawbar 800 mm 80 908 80300	A	B	B ₁	B ₂	C	D	E	G	I
80 908 52500					125	5-134	12-141	88-217	181	27	208	330	5
80 908 42500					125	5-134	12-141	88-217	142	27	169	330	5
80 908 52600	1 x				125	5-234	12-241	88-317	181	27	208	430	5
80 908 42600	1 x				125	5-234	12-241	88-317	142	27	169	430	5
80 908 52700	1 x	1 x			125	5-304	12-311	88-387	181	27	208	500	5
80 908 42700	1 x	1 x			125	5-304	12-311	88-387	142	27	169	500	5
80 908 52800	1 x	1 x	1 x		125	5-434	12-441	88-517	181	27	208	630	5
80 908 42800	1 x	1 x	1 x		125	5-434	12-441	88-517	142	27	169	630	5
80 908 52900	1 x	1 x	1 x	1 x	125	5-604	12-611	88-687	181	27	208	800	5
80 908 42900	1 x	1 x	1 x	1 x	125	5-604	12-611	88-687	142	27	169	800	5



Drawbar extensions can be found on → [page 11](#).

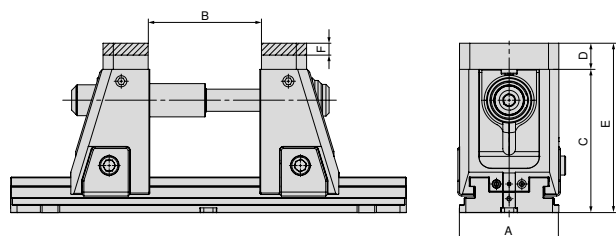
X5G-Z/-S structural dimension table for the different jaws

With stepped jaws, carbide grip 5 mm



Type	Drawbar 430 mm 80 908 80000	Drawbar 500 mm 80 908 80100	Drawbar 630 mm 80 908 80200	Drawbar 800 mm 80 908 80300	A	B	B ₁	B ₂	C	D	E	G	I
80 908 52500					125	5-134	12-141	88-217	181	27	208	330	5
80 908 42500					125	5-134	12-141	88-217	142	27	169	330	5
80 908 52600	1 x				125	5-234	12-241	88-317	181	27	208	430	5
80 908 42600	1 x				125	5-234	12-241	88-317	142	27	169	430	5
80 908 52700	1 x	1 x			125	5-304	12-311	88-387	181	27	208	500	5
80 908 42700	1 x	1 x			125	5-304	12-311	88-387	142	27	169	500	5
80 908 52800	1 x	1 x	1 x		125	5-434	12-441	88-517	181	27	208	630	5
80 908 42800	1 x	1 x	1 x		125	5-434	12-441	88-517	142	27	169	630	5
80 908 52900	1 x	1 x	1 x	1 x	125	5-604	12-611	88-687	181	27	208	800	5
80 908 42900	1 x	1 x	1 x	1 x	125	5-604	12-611	88-687	142	27	169	800	5

With soft jaws, steel



Article no.
System jaws

2 x 80 909 31200

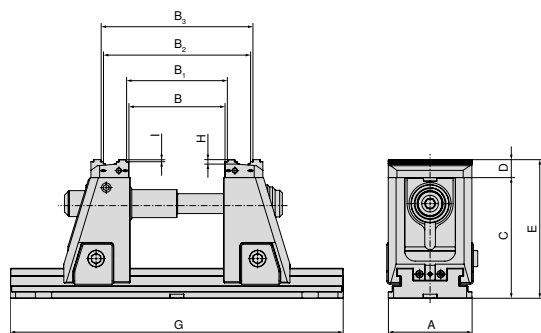
Type	Drawbar 430 mm 80 908 80000	Drawbar 500 mm 80 908 80100	Drawbar 630 mm 80 908 80200	Drawbar 800 mm 80 908 80300	A	B	C	D	E	F	G
80 908 52500					125	4-134	181	33	214	15	330
80 908 42500					125	4-134	142	33	175	15	330
80 908 52600	1 x				125	4-234	181	33	214	15	430
80 908 42600	1 x				125	4-234	142	33	175	15	430
80 908 52700	1 x	1 x			125	4-304	181	33	214	15	500
80 908 42700	1 x	1 x			125	4-304	142	33	175	15	500
80 908 52800	1 x	1 x	1 x		125	4-434	181	33	214	15	630
80 908 42800	1 x	1 x	1 x		125	4-434	142	33	175	15	630
80 908 52900	1 x	1 x	1 x	1 x	125	4-604	181	33	214	15	800
80 908 42900	1 x	1 x	1 x	1 x	125	4-604	142	33	175	15	800



Drawbar extensions can be found on → page 11.

X5G-Z/-S structural dimension table for the different jaws

With indexable jaws embossed profile

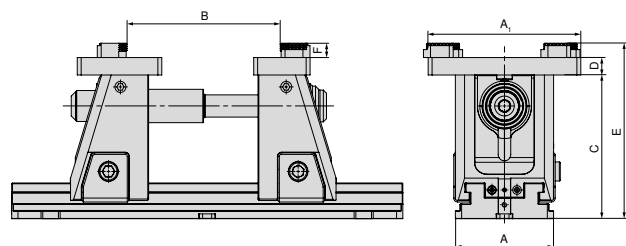


Article no.
System jaws

2 x 80 908 31200

Type	Drawbar 430 mm 80 908 80000	Drawbar 500 mm 80 908 80100	Drawbar 630 mm 80 908 80200	Drawbar 800 mm 80 908 80300	A	B	B ₁	B ₂	B ₃	C	D	E	G	H	I
80 908 52500					125	5-134	12-141	82-210	89-217	181	27	208	330	6	3
80 908 42500					125	5-134	12-141	82-210	89-217	142	27	169	330	6	3
80 908 52600	1 x				125	5-234	12-241	82-310	89-317	181	27	208	430	6	3
80 908 42600	1 x				125	5-234	12-241	82-310	89-317	142	27	169	430	6	3
80 908 52700	1 x	1 x			125	5-304	12-311	82-380	89-387	181	27	208	500	6	3
80 908 42700	1 x	1 x			125	5-304	12-311	82-380	89-387	142	27	169	500	6	3
80 908 52800	1 x	1 x	1 x		125	5-434	12-441	82-510	89-517	181	27	208	630	6	3
80 908 42800	1 x	1 x	1 x		125	5-434	12-441	82-510	89-517	142	27	169	630	6	3
80 908 52900	1 x	1 x	1 x	1 x	125	5-604	12-611	82-680	89-687	181	27	208	800	6	3
80 908 42900	1 x	1 x	1 x	1 x	125	5-604	12-611	82-680	89-687	142	27	169	800	6	3

With pendulum and adapter plate



Article no.
System jaws

80 909 31500 + 80 909 31300

Type	Drawbar 430 mm 80 908 80000	Drawbar 500 mm 80 908 80100	Drawbar 630 mm 80 908 80200	Drawbar 800 mm 80 908 80300	A	B	C	D	E	F	G
80 908 52500					125	42-230	181	22	221	18	330
80 908 42500					125	42-230	142	22	182	18	330
80 908 52600	1 x				125	42-330	181	22	221	18	430
80 908 42600	1 x				125	42-330	142	22	182	18	430
80 908 52700	1 x	1 x			125	42-400	181	22	221	18	500
80 908 42700	1 x	1 x			125	42-400	142	22	182	18	500
80 908 52800	1 x	1 x	1 x		125	42-530	181	22	221	18	630
80 908 42800	1 x	1 x	1 x		125	42-530	142	22	182	18	630
80 908 52900	1 x	1 x	1 x	1 x	125	42-700	181	22	221	18	800
80 908 42900	1 x	1 x	1 x	1 x	125	42-700	142	22	182	18	800

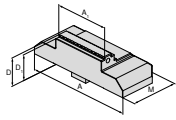


Drawbar extensions can be found on → **page 11.**

System jaws overview

Description	A	A ₁	D	D ₁	M	price	Article no.	Type association
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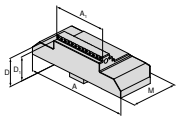
Indexable grip jaw, 3 mm



▲ Price per piece

							NEW		NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
125	125	27	24	57			80 908 30000				●								
125	80	27	24	57			80 908 30100				●								
125	65	27	24	57			80 908 30200				●								
125	40	27	24	57			80 908 30300				●								

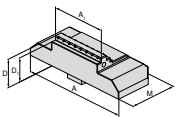
Indexable grip jaw, 5 mm



▲ Price per piece

							NEW		NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
125	125	27	22	57			80 908 30400				●								
125	80	27	22	57			80 908 30500				●								
125	65	27	22	57			80 908 30600				●								
125	40	27	22	57			80 908 30700				●								

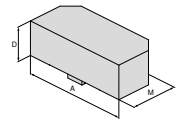
Stepped jaw, carbide grip 5 mm



▲ Price per piece

							NEW		NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
125	125	27	22	57			80 908 30800				●								
125	80	27	22	57			80 908 30900				●								
125	65	27	22	57			80 908 31000				●								
125	40	27	22	57			80 908 31100				●								

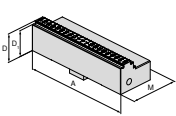
Soft jaw, steel



▲ Price per piece

							NEW		NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
125		33		57			80 909 31200				●								

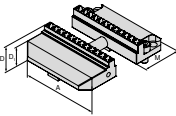
Indexable jaw embossed profile



▲ Price per piece
▲ suitable for LANG embossed profile

							NEW		NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
125		27	24	57			80 908 31200				●								

Precision jaw



▲ Price per set

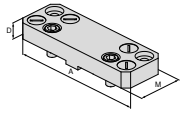
							NEW		NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
125		27	24	57			80 908 31300				●								

The exact procedure for the hardened precision jaw set can be found on → **page 10.**

System jaws overview

Description	for width	A	D	M	price	Article no.	Type association
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Adapter plate



- ▲ for holding 6-function indexable jaws
- ▲ Price per piece
- ▲ incl. cover screws

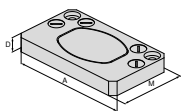
125	180	22	104
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NEW

80 909 31500

NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
		●								

Floating jaw



- ▲ for holding 6-function indexable jaws
- ▲ Price per piece
- ▲ incl. cover screws

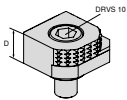
125	180	22	62
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NEW

80 909 31300

NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
		●								

6 function indexable jaw



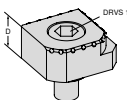
- ▲ 1 = Smooth, carbide coated
- ▲ 2 = Grip with 3 mm step
- ▲ 3 = Grip with 8 mm step
- ▲ 4 = Grip with 18 mm step
- ▲ 5 = Rough grip with 8 mm step
- ▲ 6 = Round grip
- ▲ $M_{max} = 60 \text{ Nm}$
- ▲ Including fixation screws

		18	
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80 892 246

NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
●	●	●	●	●	●	●	●	●	●	●

6x indexable jaw, carbide grip



- ▲ 1 = Smooth
- ▲ 2 = Carbide grip
- ▲ 3 = Carbide grip with 3 mm step
- ▲ 4 = Carbide grip with 8 mm step
- ▲ 5 = Round carbide grip with 8 mm step
- ▲ 6 = Round carbide grip
- ▲ Incl. fixing screws

		18	
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NEW

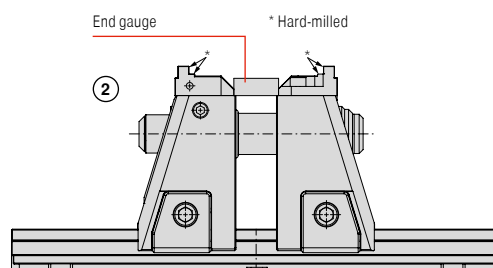
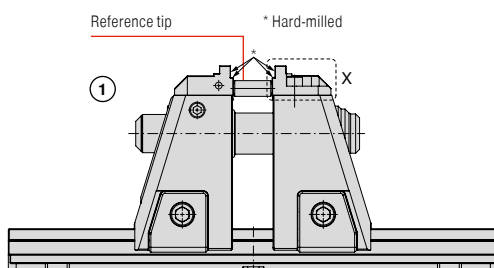
80 890 35300

NCG	H5G / -S / -Z	X5G-Z / -S	ESG 4	ESG 5	ESG mini	HDG 2	ZSG 4	ZSG mini	DSG 4	MSG 2
●	●	●	●	●	●	●	●	●	●	●

Procedure for hardened precision jaw set

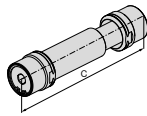
The X5G-Z impresses with its extreme accuracy. All the components have been ground or hard-milled to a high level of precision. Despite this, there are still applications whereby the precision requirements cannot be satisfied in full due to the tolerance chain of the indexable grip jaws. For these situations we offer a hardened precision jaw set (article no. 80 908 31300) that can be hard-milled by the customer on the clamping flat (both sides).

Hard machining is carried out in the precision vice (both screws on the supporting jaws tightened to 140 Nm). The precision jaws must be hard-milled as per the views shown (1+2). The reference tip supplied is used for clamping in the standard position (1). An end gauge can be used for clamping in the VS position (2).



System accessories overview

Spindle unit X5G-Z



NEW

80 908 ...

C mm	WT kg
227,5	2,5

50100

Drawbar



NEW

80 908 ...

for width mm	G mm
125	430

80000

Drawbar



NEW

80 908 ...

for width mm	G mm
125	500

80100

Drawbar



NEW

80 908 ...

for width mm	G mm
125	630

80200

Drawbar



NEW

80 908 ...

for width mm	G mm
125	800

80300

System accessories overview

Torque Wrench

▲ without socket



Square	TQX Nm	80 884 ...
1/2"	20 - 200	504

Socket



Square	DRVS mm	80 877 ...
1/2"	14	214

Hand crank

▲ Version with external hex

▲ For quick adjustment



for width mm	DRVS mm	H5G-Z 80 907 ...
125	14	500

UNITED. EXPERIENCED. METAL CUTTING.



**SPECIALIST FOR INDEXABLE INSERT TOOLS
FOR TURNING, MILLING AND GROOVING**

The product brand CERATIZIT stands for high-quality indexable insert tools. The products are characterized by their high quality and contain the DNA of many years of experience in the development and production of carbide tools.



**THE QUALITY LABEL FOR
EFFICIENT BORE PRODUCTION**

High-precision drilling, reaming, countersinking and boring is a matter of expertise: efficient tooling solutions for drilling and mechatronic tools are therefore part of the KOMET brand name.



**EXPERTS FOR ROTATING TOOLS,
TOOL HOLDERS AND CLAMPING SOLUTIONS**

WNT is synonymous with product diversity: solid carbide and HSS rotating tools, tool holders and efficient workholding solutions are all part of this brand.



**CUTTING TOOLS
FOR THE AEROSPACE INDUSTRY**

Solid carbide drills specially developed for the aerospace industry bear the product name KLENK. The highly specialised products are specifically designed for machining lightweight materials.