











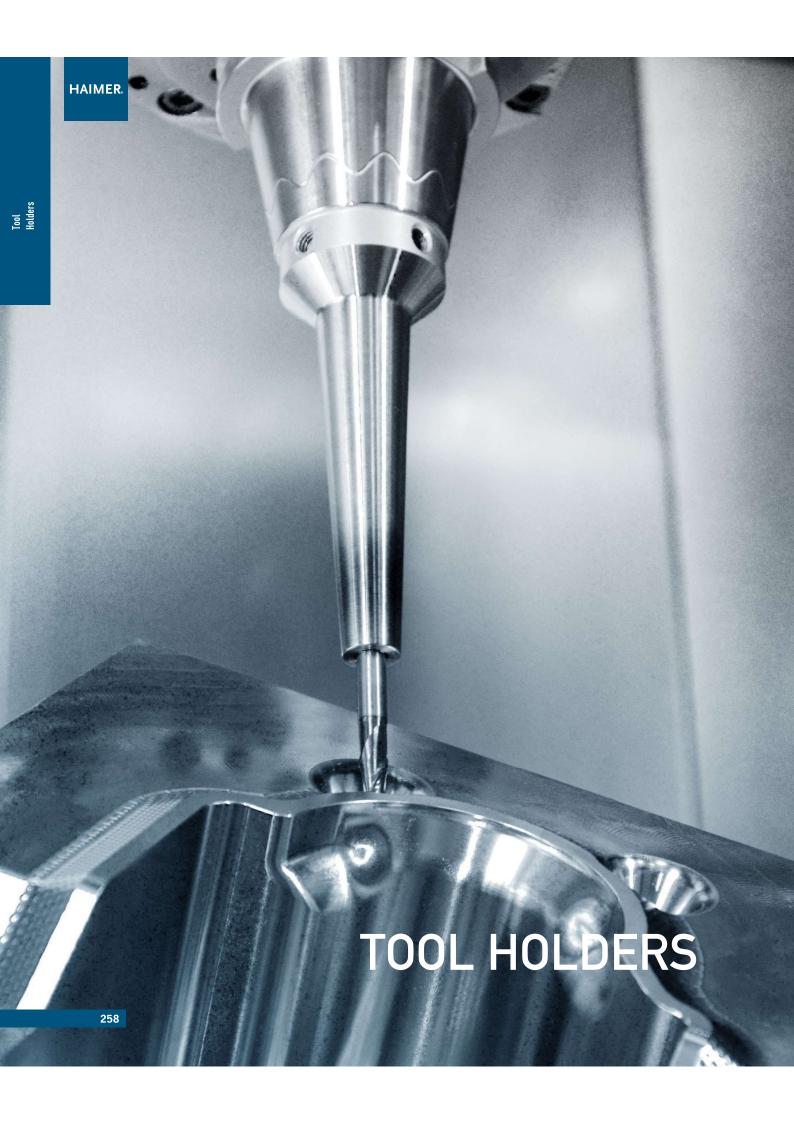






MASTER CATALOG

HAIMER®





# ISO 26623 PSC 63

Article	Page
ISO 26623 PSC 63	
Technical Details of Interface	486
Shrink Fit Chuck	488
Power Shrink Chuck	489
Collet Chuck ER	490
Power Collet Chuck	491
High Precision Collet Chuck	492
Weldon Holder	493
Face Mill Arbor	494
Blank Adapter – Hardened	495

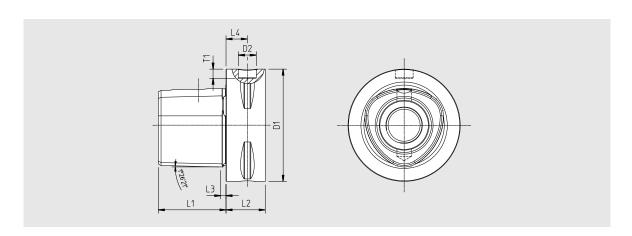
# POLYGON SHANK COUPLING PSC 63 ISO 26623

### Compared to steep tapers, PSC has the following advantages:

- Highly repeatable accuracy when clamping tools into spindle
- Fixed axial positioning with face contact surface
- Suitable for high speed cutting
- No pull stud necessary
- Interface with a unique tapered polygon and flange face contact
- Exact positioning in the circumferential direction
- Highest runout accuracy, torque and rigidity
- Innovative modular tool system with highest precision
- Suitable for both turning and milling centers
- Incl. bore for data chip Ø 10 mm

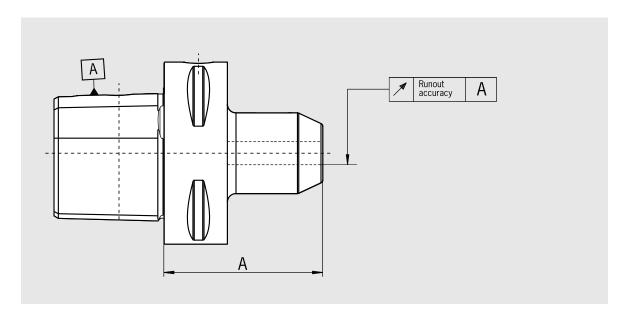
#### Material:

- Special case-hardening steel for highly stressed parts
  Surface hardness: 60–2 HRC
- Tensile strength in core min. 950 N/mm²



Length [mm]	D1	D2	L1	L2	L3	L4	T1
PSC 63	63	10	38	22	3	12	5

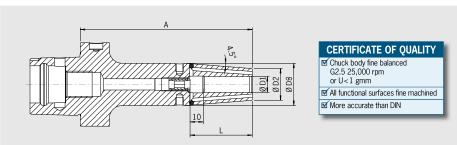
# RUNOUT ACCURACY ISO 26623



Gage length A [mm]	A < 160	A ≥ 160
max. runout tolerance in mm		
Shrink Fit Chuck	0.003	0.004
Collet Chuck ER	0.003	0.004
Power Collet Chuck	0.003	0.004
High Precision Collet Chuck	0.003	0.004
Weldon Tool Holder	0.003	0.004
Face Mill Arbor	0.006	0.006

# SHRINK FIT CHUCK ISO 26623-1 · PSC 63





#### Shrink fit chuck suitable for use with all available shrink fit units.

- Interface with a unique tapered polygon and flange location face
- Exact positioning in the spindle
- Highest runout accuracy, torque and rigidity
- Innovative modular tool system with highest precision
- Suitable for both turning and milling centers
- With threaded holes in order to balance with balancing screws
- Inch sizes with Cool Jet, metric sizes without Cool Jet (optional available)

#### ISO 26623

- Delivery: With back-up screw

#### Optional:

- Metric sizes: Cooling with Cool Jet for an extra charge (See page 501)
- Cooling with Cool Flash for an extra charge (See pages 502-503)

INCH	Clamping Ø	D1 [inch]	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1 1/4
	Ø D2 [inch]		0.83	0.83	0.94	0.94	0.94	1.06	1.30	1.30	1.73	1.73
	Ø D3 [inch]		1.06	1.06	1.26	1.26	1.26	1.34	1.65	1.65	2.09	2.09
	L [inch]		1.42	1.42	1.65	1.65	1.85	1.97	2.05	2.05	2.28	2.28
Gage length A [inch] Order No.	short <b>CC6.140</b>		3.15 . <b>1/4Z.4</b>	_	3.15 . <b>3/8Z.4</b>	_	3.15 . <b>1/2Z.4</b>	3.35 . <b>5/8Z.4</b>	3.35 . <b>3/4Z.4</b>	_	3.54 . <b>1Z.4</b>	_
Gage length A [inch] Order No.	long <b>CC6.141</b>		3.94 . <b>1/4Z.4</b>	3.94 . <b>5/16Z.4</b>	3.94 . <b>3/8Z.4</b>	3.94 . <b>7/16Z.4</b>	3.94 . <b>1/2Z.4</b>	3.94 . <b>5/8Z.4</b>	3.94 . <b>3/4Z.4</b>	3.94 . <b>7/8Z.4</b>	_	-
Gage length A [inch] Order No.	ZG130 CC6.144		5.12 . <b>1/4Z.4</b>	_	5.12 .3/8Z.4	_	5.12 . <b>1/27.4</b>	5.12 . <b>5/8Z.4</b>	5.12 . <b>3/4Z.4</b>	_	5.12 . <b>1Z.4</b>	5.12 . <b>11/4Z.4</b>

METRIC	Clamping Ø	D1 [mm]	03	04	05	06	08	10	12	14	16	18	20	25	32
	Ø D2 [mm]		10	10	10	21	21	24	24	27	27	33	33	44	44
	Ø D3 [mm]		<u> -</u>	_		27	27	32	32	34	34	42	42	53	53
	L [mm]		09	12	15	36	36	42	47	47	50	50	52	58	58
Gage length A [mm] Order No.	short <b>CC6.140</b>		.03	80 <sup>1)</sup> . <b>04</b>	80 <sup>1)</sup> . <b>05</b>	80 . <b>06</b>	80 <b>.08</b>	80 <b>.10</b>	80 . <b>12</b>	85 . <b>14</b>	85 . <b>16</b>	85 . <b>18</b>	85 . <b>20</b>	90 . <b>25</b>	95 . <b>32</b>
Gage length A [mm] Order No.	long CC6.141		_	_	_	100 . <b>06</b>	100 . <b>08</b>	100 <b>.10</b>	100 . <b>12</b>	100 . <b>14</b>	100 . <b>16</b>	100 . <b>18</b>	100 . <b>20</b>	_	_
Gage length A [mm] Order No.	ZG120 CC6.147		120 <sup>2)</sup> .03.1	120 <sup>2)</sup> . <b>04.1</b>	120 <sup>2)</sup> . <b>05.1</b>	120 . <b>06</b>	120 . <b>08</b>	120 <b>.10</b>	120 <b>.12</b>	120 . <b>14</b>	120 . <b>16</b>	_	120 <b>.20</b>	120 <b>.25</b>	_
Gage length A [mm] Order No.	ZG130 CC6.144		130 <sup>2)</sup> .03.1	130 <sup>2)</sup> . <b>04.1</b>	130 <sup>2)</sup> . <b>05.1</b>	130 . <b>06</b>	130 . <b>08</b>	130 <b>.10</b>	130 . <b>12</b>	130 . <b>14</b>	130 . <b>16</b>	130 . <b>18</b>	130 . <b>20</b>	130 . <b>25</b>	130 . <b>32</b>
Gage length A [mm] Order No.	oversize <b>CC6.142</b>			_	_	160 . <b>06</b>	160 . <b>08</b>	160 . <b>10</b>	160 . <b>12</b>	160 . <b>14</b>	160 . <b>16</b>	160 . <b>18</b>	160 . <b>20</b>	160 . <b>25</b>	160 <b>32</b>

Acc	е	SSOI	ies
_			

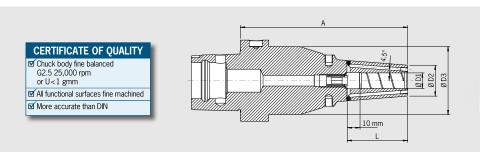
Cool Flash



Order No. 91.100.40

See pages 502-503

# POWER SHRINK CHUCK ISO 26623-1 · PSC 63





The Power Shrink Chuck is designed for the highest cutting performance in High Speed machining. The optimized design combines high rigidity with vibration dampening, which protects the machine, spindle and tool.

- Highest cutting performance with higher spindle speeds, higher feeds and larger cutting depths
- Shorter cycle times, higher machining accuracy
- Quieter running, therefore better surface quality and protection of tools, spindles and machines
- With threaded holes in order to balance with balancing screws
- Cool Jet bores that can be sealed included
- Cooling with Cool Flash for an extra charge (See pages 502-503)

#### The long versions (A=130) with slim tips are especially versatile to use.

- High rigidity, slim at the tip, dampen vibrations
- High clamping force
- Equally suited to High Speed and Heavy Duty machining
- Universal usage, saves space in tool magazine

INCH	Clamping Ø D1 [inch]	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1	1 1/4
	Ø D2 [inch] ultra short	0.87	0.87	1.04	1.04	1.04	1.16	1.40	1.40	1.77	1.77
	Ø D3 [inch] ultra short	_	_	_	_	_	_	_	_	_	_
	L [inch] ultra short	1.50	1.50	1.69	1.81	1.81	2.00	2.09	2.09	2.36	2.56
Gage length A [inch] Order No. Safe-Lock Order No.	ultra short CC6.145	2.56 . <b>1/4Z.3</b>	2.56 . <b>5/16Z.3</b>	2.56 . <b>3/8Z.3</b>	2.56 . <b>7/16Z.3</b>	•	2.76 .5/8Z.3 .5/8Z.37	2.76 .3/4Z.3 .3/4Z.37	2.76 <b>.7/8Z.3</b>	3.15 . <b>1Z.3</b> —	3.15 . <b>11/4Z.3</b> —
	Ø D2 [inch] ZG130	0.83		0.94		0.94	1.06	1.30			
	Ø D3 [inch] ZG130	2.09		2.09		2.09	2.09	2.09			
	L [inch] ZG130	1.42		1.65		1.65	1.97	1.97			
Gage length A [inch] Order No. Safe-Lock Order No.	ZG130 CC6.144 CC6.144	5.12 .1/4Z.3 .1/4Z.37	_	5.12 .3/8Z.3 .3/8Z.37	_	5.12 .1/2Z.3 .1/2Z.37	5.12 — .5/8 <b>Z</b> .37	5.12 — .3/4Z.37			

METRIC	Clamping Ø D1 [mm]	06	08	10	12	14	16	18	20	25	32
	Ø D2 [mm] ultra short	22	22	26.5	26.5	29.5	29.5	35.5	35.5	45	45
	Ø D3 [mm] ultra short	_	_	_	_	_	_	_	_	_	_
	L [mm] ultra short	38	38	43	46	48	51	51	53	60	65
Gage Length A [mm] Order No. Safe-Lock Order No.	CC6.145		65 . <b>08.3</b> —	65 . <b>10.3</b> —	65 .12.3 .12.37	70 . <b>14.3</b>	70 . <b>16.3</b> . <b>16.37</b>	70 . <b>18.3</b>	70 . <b>20.3</b> . <b>20.37</b>	80 . <b>25.3</b> . <b>25.37</b>	80 .32.3 .32.37
	Ø D2 [mm] ZG130	21	21	24	24		27		33		
	Ø D3 [mm] ZG130	53	53	53	53		53		53		
	L [mm] ZG130	36	36	42	47		50		52		
Gage Length A [mm] Order No. Safe-Lock Order No.	ZG130 CC6.144 CC6.144	130 . <b>06.3</b>	130 . <b>08.3</b>	130 . <b>10.3</b> . <b>10.37</b>	130 . <b>12.3</b> . <b>12.37</b>		130 . <b>16.3</b> . <b>16.37</b>	.6.3 .20			

Accessories

Cool Flash

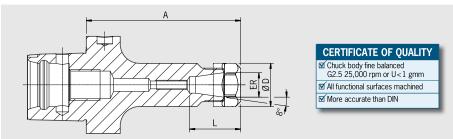


Order No. 91.100.40

See pages 502-503

# COLLET CHUCK ER ISO 26623-1 · PSC 63





#### Use:

For clamping tools with cylindrical shank in collets according to ISO 15488 (formerly DIN 6499). Available from ER 16 to 40.

#### ISO 26623

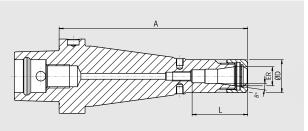
- Included in delivery: With locknut (balanced, with slide coating for higher clamping forces)
- In four  $\mbox{\tt different}$  lengths available, additionally Mini-ER 11 and Mini-ER 16 in two lengths

INCH	ER		16	20	25	32	40
	Ø D [inch]		1.1	1.34	1.65	1.97	2.48
	Clamping range	e [inch]	0.02-0.39	0.06-0.51	0.04-0.63	0.06-0.79	0.98-1.02
L [inch] Gage length A [inch] Order No.	ultra short CC6.025		2) 2.36 . <b>16</b> <sup>1)</sup>	2) 2.36 . <b>20</b> <sup>1)</sup>	1.91 2.36 <b>.25</b> 1)	1.87 2.36 . <b>32</b> 1)	2.11 2.56 . <b>40</b> <sup>1)</sup>
L [inch] Gage length A [inch] Order No.	long <b>CC6.021</b>		1.30 3.94 . <b>16</b>	1.54 3.94 <b>.20</b>	1.63 3.94 <b>.25</b>	1.87 3.94 . <b>32</b>	2.11 3.94 . <b>40</b>
L [inch] Gage length A [inch] Order No.	ZG130 CC6.024		1.30 5.12 . <b>16</b>	1.54 5.12 <b>.20</b>	1.63 5.12 <b>.25</b>	1.87 5.12 . <b>32</b>	2.11 5.12 . <b>40</b>
L [inch] Gage length A [inch] Order No.	oversize CC6.022		1.30 6.30 . <b>16</b>	1.54 6.30 <b>.20</b>	1.63 6.30 <b>.25</b>	1.87 6.30 <b>.32</b>	2.11 6.30 <b>.40</b>

INCH	Collet Chuck Mini-ER		11	16
	Ø D1 [inch]		0.63	0.87
	L [inch]		1.00	1.56
Gage length A [inch] Order No.	long CC6.021		3.94 . <b>11.7</b> ¹)	3.94 . <b>16.7</b> <sup>1)</sup>
Gage length A [inch] Order No.	oversize CC6.022		6.30 . <b>11.7</b> 1)	6.30 . <b>16.7</b> <sup>1)</sup>

# POWER COLLET CHUCK ISO 26623-1 · PSC 63







The Power Collet Chuck is designed for the highest cutting performance in High Speed machining. The optimized design with improved construction combines high rigidity with vibration dampening features, giving more protection to the machine, spindle and tool. The universal Power Collet Chuck is a unique high performance chuck that can also be used with standard collets.

- TIR less than 0.00012" (3  $\mu$ m) at 3  $\times$  D with HAIMER Power Collets
- Also for standard collets ER according to ISO 15488 (Attention: By using standard collet, ER length A will increase)
- High rigidity

- Runs smoother thanks to vibration absorbing geometry, yielding better surface finish and increased tool, spindle and machine protection
- Highest cutting performance with higher spindle speeds, higher feeds and larger cutting depths
- Shorter cycle times, higher machining accuracy, high clamping force
- Equally suited to High Speed and dynamic machining
- With threaded holes in order to balance with balancing screws
- Optional: Cool Jet bores on Power Collets
- Program of Power Collets on pages 774 776

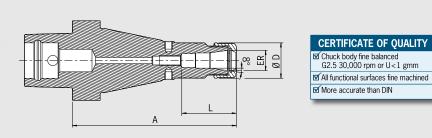
INCH	ER	16	25	32
	Ø D [inch]	1.1	1.65	1.97
	Clamping range [inch]	1/8-3/8	1/8-5/8	1/8-3/4
	Clamping range [mm]	2.0-10.0	2.0-16.0	2.0–20.0
	L [inch]	1.69	2.01	2.09
Gage length A [inch] Order No.	oversize CC6.024	6.30 <sup>1)</sup> . <b>16.3</b>	6.30 <sup>1)</sup> <b>.25.3</b>	6.30 <sup>1)</sup> <b>.32.3</b>

Accessories						
Locknut (fine-ba	lanced)					See page 779
Size		<del></del>	ER 16	ER 25	ER 32	
Order No.	83.914		.16	.25	.32	
Power Collet cla	mping wrench					See page 781
Torque Master to	orque wrench					See page 780
Order No.	84.600.00					
Power Collets						See page 775
Power Collets wi	ith Safe-Lock					See page 776
Cool Jet bores for	or Power Collets					See page 777
Order No.	91.100.27					
Shrink Fit Collets	S				(	See pages 759-767

1) With back-up screw

# HIGH PRECISION COLLET CHUCK ISO 26623-1 · PSC 63





The High Precision Collet Chuck is designed for the highest cutting performance in High Speed machining. The optimized design with better construction and a special coated smooth locknut combines high rigidity with vibration dampening and noise-reducing features, giving more protection to machines, spindles and tools.

- With a specially coated smooth locknut, balanced at < 1 gmm
- High runout accuracy: < 0.00012" (3  $\mu m)$  at 3  $\times$  D with HAIMER Power Collets
- Also for standard collets ER according to ISO 15488 (Attention: By using standard collet, ER length A will increase)
- High rigidity

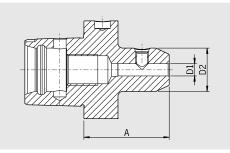
- Runs smoother thanks to vibration absorbing geometry, yielding better surface finish and increased tool, spindle and machine protection
- Highest cutting performance with higher spindle speeds, higher feeds and larger cutting depths
- Shorter cycle times, higher machining accuracy, higher clamping forces
- Equally suited to High Speed and dynamic machining
- With threaded holes in order to balance with balancing screws
- Optional: Cool Jet bores on Power Collets
- Program of Power Collets on pages 774 776

INCH	ER	16	25	32
	Ø D [inch]	1.1	1.65	1.97
	Clamping range [inch]	1/8-3/8	1/8-5/8	1/8-3/4
	Clamping range [mm]	2.0-10.0	2.0-16.0	2.0–20.0
	L [inch]	1.69	2.01	2.09
Gage length A [inch] Order No.	oversize CC6.024	6.30 <sup>1)</sup> .16.3.HP	6.30 <sup>1)</sup> .25.3.HP	6.30 <sup>1)</sup> <b>.32.3.HP</b>

Accessories					
High Precision Smooth Locknut (fin	ne-balanced)				See page 779
Size	П	ER 16	ER 25	ER 32	
Order No. 83.914	Ш	.16.1	.25.1	.32.1	
Roller bearing wrench					See page 782
Order No. 84.650		.16.1	.25.1	.32.1	
Collets ER	===			S	ee pages 768-773
Shrink Fit Collets				S	ee pages 759-767
Power Collets					See page 775
Power Collets with Safe-Lock					See page 776
Cool Jet bores for Power Collets					See page 777
Order No. 91.100.27					

# WELDON TOOL HOLDER ISO 26623-1 · PSC 63







#### Use:

For clamping cutters with cylindrical shanks and Weldon flats according to DIN 1835-B and DIN 6935-HB.

From Ø 6 to Ø 40 mm.

- Interface with a unique tapered polygon and flange location face
- Exact positioning in the spindle
- Highest runout accuracy, torque and rigidity
- Innovative modular tool system with highest precision
- Suitable for both turning and milling centers

#### ISO 26623

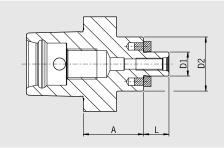
- Included in delivery: with clamping screw

METRIC	Clamping Ø D1	[mm]	06	08	10	12	14	16	18	20	25	32	40
	Ø D2 [mm]		25	28	35	42	44	48	50	52	64	72	80
Gage length A [mm] Order No.	short <b>CC6.000</b>		55 . <b>06</b>	55 . <b>08</b>	60 . <b>10</b>	60 . <b>12</b>	60 <b>.14</b>	65 . <b>16</b>	65 . <b>18</b>	65 . <b>20</b>	80 . <b>25</b>	90 . <b>32</b>	100 . <b>40</b>

#### Accessories **Clamping screw** Clamping Ø 06 80 10 12 14 16 18 20 25 40 85.100... .06 .08 .12 .12 .14 .18 .20 Order No. .10 .14 .16 .25 Balancing index rings long/oversize Clamping Ø 06 80 10 12 14 16 18 20 25 32 40 Clamping Order No. 79.350... Cool Jet bores from Ø 6 mm − Ø 20 mm O 100.24 .25 .28 .35 .42 .48 .50 .52 .64 .80 .44 .72 See page 501 Cool Jet Bores from Ø 25 mm – Ø 20 mm Order No. 91.100.24 Cool Jet bores from Ø 25 mm – Ø 32 mm Order No. 91.100.26 See page 501

# FACE MILL ARBOR ISO 26623-1 · PSC 63







#### Use

For clamping face mill cutters and cutters with radial driving slot DIN 1880.

- Interface with a unique tapered polygon and flange location face
- Exact positioning in the spindle
- Highest runout accuracy, torque and rigidity
- Innovative modular tool system with highest precision
- Suitable for both turning and milling centers

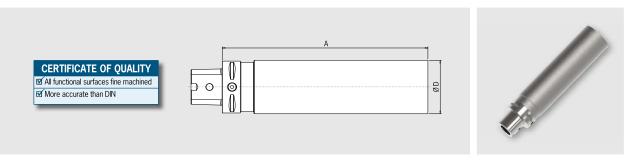
### ISO 26623

- Included in delivery: tightening bolt
- With coolant exit bores on the end face for milling cutters with central cooling

METRIC	Clamping Ø D	1 [mm]	16	22	27	32	40
	Ø D2 [mm]		36	48	60	63	70
	L [mm]		17	19	21	24	27
Gage length A [mm] Order No.	short CC6.050		40 . <b>16.KKB</b>	25 . <b>22.KKB</b>	25 . <b>27.KKB</b>	25 . <b>32.KKB</b>	40 . <b>40.KKB</b>

Accessories								
Tightening bolt								
Size D1		<b>₽</b> A	16	22	27	32	40	
Order No.	85.300	<del></del>	.16	.22	.27	.32	.40	
Wrench								
Size D1		φ	16	22	27	32	40	
Order No.	84.400	₩	.16	.22	.27	.32	.40	
Balancing index rings								
Size D1		$\bigcirc$	16	_	_	_	40	
Order No.	79.350	$\oplus$	.36				.70	

# BLANK ADAPTER - HARDENED ISO 26623-1 · PSC 63



#### Use:

For manufacturing special tools in your own factory.

#### Version:

- Polygon taper and groove hardened and ground
- Cylindrical part hardened to 52+2 HRC

METRIC	Ø D [mm]		65
Gage Length A [mm] Order No.	ZG100 RCC6.096.0650		100 . <b>0100</b>
Gage Length A [mm] Order No.	ZG250 RCC6.096.0650	10	250 . <b>0250</b>