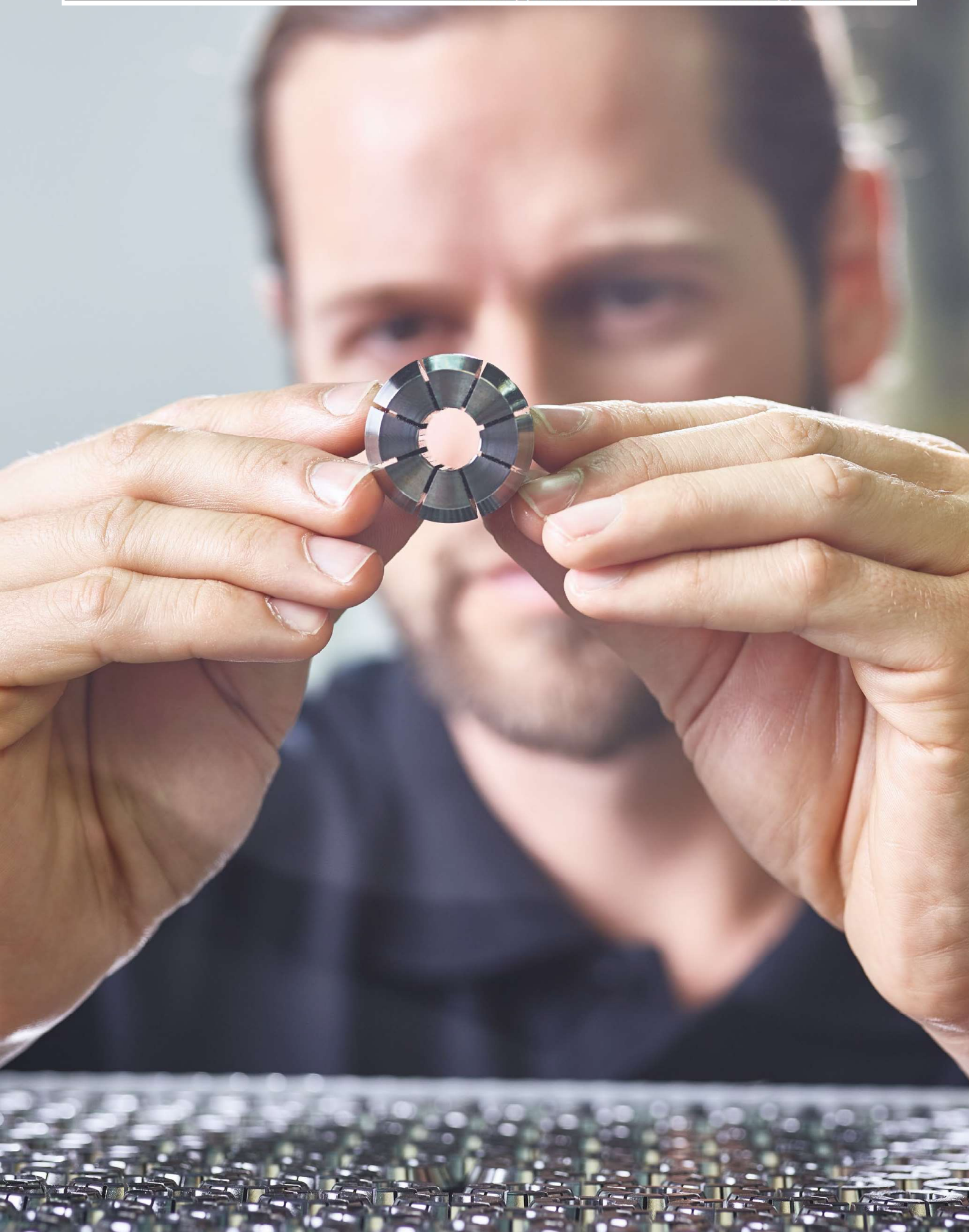
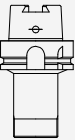
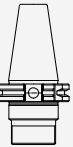
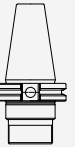
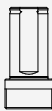
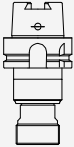
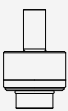




Experience the widest ER range

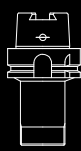
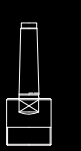
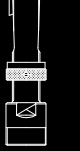
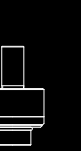
Standard					Cylindrical collets					Collet holders for tapping			Floating chucks		Collet reductions	
HSK/ER	SK/ER	BT/ER	CAT/ER	CAPTO/ER	CYL/ER	CYL/ERM(X) CYLF/ERM(X)	CYL/ER NC	CYDF/ERM CYDF/ERM(X)	MK/ER	SH/ER	ISO 20/ER	HSK-A SSY	CYL SSY CYL GSF	PH/ER PHC/ER PHC-C/ER	MPH/ERM MPHC/ERM(X)	ER(M)/ERM ER(MX)/ERM(X)
																
page 70	page 76	page 80	page 88	page 94	page 98	page 102	page 107	page 108	page 110	page 112	page 114	page 116	page 116	page 119	page 122	page 127

Micro-machining	Standard and ultraprecision	micRun®	Metallic sealed	Pullout protection secuRgrip®	Collets for tapping	
ER-MB	ER-Standard/ ER-UP	MR	ER-DM	ER-SG	ER-GB	PCM ET1
						
page 134	page 135	page 199	page 144	page 149	page 150	page 154

Standard		Standard with bearing		Mini nut		Slip-off proof mini nut		External thread		Sealing and coolant flush disks			
Hi-Q®/ER	Hi-Q®/ERC	Hi-Q®/ERB	Hi-Q®/ERBC	Hi-Q®/ERM	Hi-Q®/ERMC	Hi-Q®/ERMX intRlox®	Hi-Q®/ERMXC intRlox®	ER MS	Hi-Q®/ERAX	Hi-Q®/ERAXC	reCool® RCR/RCS	DS/ER	KS/ER
													
page 160	page 162	page 164	page 164	page 166	page 166	page 168	page 168	page 170	page 172	page 172	page 174	page 244	page 252

B: bearing C: cooling M: mini thread X: slip-off proof A: external thread

DS: sealing disk KS: coolant flush disk

Standard					Colletholders for tapping			Floating chucks		Collet reductions		
HSK/ ER	SK/ ER	BT/ ER	CAT/ ER	CAPTO/ ER	MK/ ER	SH/ ER	ISO 20/ ER	HSK-A SSY	CYL SSY CYL GSF	PH/ER PHC/ER PHC-C/ER	MPH/ ERMX MPHC/ ERMX	ER(M)/ ERM ER(MX)/ ERMX
												
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Swiss quality ER toolholders



	HSK/ER	SK/ER	BT/ER	BT+/ER	CAT/ER	CAT+/ER	CAPTO/ER
Norm	DIN 69893	DIN 69871	MAS 403 JIS B 6339	–	ASME B5.50	–	–
ISO	ISO 12164	ISO 7388-1	ISO 7388-2	–	–	–	ISO 26623
Balancing	G 2.5 @ 25,000 min ⁻¹	G 2.5 @ 25,000 min ⁻¹	G 2.5 @ 25,000 min ⁻¹	G 2.5 @ 25,000 min ⁻¹	G 2.5 @ 25,000 min ⁻¹	G 2.5 @ 25,000 min ⁻¹	G 2.5 @ 25,000 min ⁻¹
Chip hole	HSK-A	•	–	–	–	–	–
Runout TIR (outer taper to inner cone)	≤0.003 mm	≤0.003 mm	≤0.003 mm	≤0.003 mm	≤0.003 mm	≤0.003 mm	≤0.003 mm
Taper tolerance	DIN ISO	AT3	AT3	AT1	AT3	AT1	ISO 26623
MFD*	–	–	–	–	–	–	–
Form A + AD	–	•	•	•	•	•	–
Form AD + B	–	•	•	–	•	–	–

*micro friction dampening technology



	HSK-A/ER XL	SK/ER XL	BT/ER XL	CAT/ER XL	CAPTO/ER XL
Norm	DIN 69893	DIN 69871	MAS 403 JIS B 6339	ASME B5.50	–
ISO	ISO 12164	ISO 7388-1	ISO 7388-2	–	ISO 26623
Balancing	G 2.5 @ 5,000 min ⁻¹	G 2.5 @ 5,000 min ⁻¹	G 2.5 @ 5,000 min ⁻¹	G 2.5 @ 5,000 min ⁻¹	G 2.5 @ 5,000 min ⁻¹
Chip hole	HSK-A	•	–	–	–
Runout TIR (outer taper to inner cone)	≤0.01 mm	≤0.01 mm	≤0.01 mm	≤0.01 mm	≤0.01 mm
Taper tolerance	DIN ISO	AT3	AT3	AT3	ISO 26623
MFD*	•	•	•	•	•
Form A + AD	–	•	•	•	–
Form AD + B	–	–	–	–	–

*micro friction dampening technology

Cylindrical collets

CYL/
ER



page 98

CYL/
ERM(X)
CYLF/
ERM(X)



page 106

CYL/
ER NC



page 107

CYDF/
ERM
CYDF/
ERM(X)



page 108



Swiss quality ER toolholders



CYL/ER



CYL/ERM



CYL/ERMX



CYLF/ERM

	CYL/ER	CYL/ERM	CYL/ERMX	CYLF/ERM
Shank tolerance	h6	h6	h6	h6
Runout TIR (shank to cone)	≤0.003 mm	≤0.003 mm	≤0.003 mm	≤0.005 mm
Rotary applications	•	•	•	–
Clamping flat	–	–	–	•
Double ER	–	–	–	–
Slip-off proof	–	–	•	–
Minimal outer diameter	–	•	•	•



CYLF/ERMX



CYDF/ERM



CYDF/ERMX



CYL/ERNC

	CYLF/ERMX	CYDF/ERM	CYDF/ERMX	CYL/ERNC
Shank tolerance	h6	h6	h6	h6
Runout TIR (shank to cone)	≤0.005 mm	≤0.005 mm	≤0.005 mm	≤0.005 mm
Rotary applications	–	–	–	–
Clamping flat	•	•	•	•
Double ER	–	•	•	–
Slip-off proof	•	–	•	–
Minimal outer diameter	•	•	•	–

HSK toolholders

Designed for rotating applications, all our HSK toolholders are suited for high-speed applications where consistent performance is key.

DIN 69893/ISO 12164

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Balancing

100% balanced to G 2.5 @ 25,000 rpm/<1gmm.

XL toolholders

100% balanced to G 2.5 @ 5,000 rpm.
TIR from inner to outer taper <10 μm .

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All toolholders with the additional type information "H" in the article name are designed for balancing rings.

Hi-Q®/ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

Vibration dampening

Our holders offer a good vibration dampening to sustain a high surface finish and can prevent cutting force alterations.

Special applications

When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend to use our friction-bearing clamping nuts Hi-Q®/ERB and Hi-Q®/ERBC.

ID chip hole (only HSK form A)

In accordance with DIN 69873 for 10 mm diameter. Available on request.

*Accessories are not included in delivery. HSK-A 125 available on request
Other XL sizes available on request*

Balancing specifications

HSK 25	balanced to 90,000 min ⁻¹
HSK 32	balanced to 60,000 min ⁻¹
HSK 40	balanced to 45,000 min ⁻¹
HSK 50	balanced to 36,000 min ⁻¹
HSK 63	G 2.5 @ 25,000 min ⁻¹
HSK 80	G 2.5 @ 25,000 min ⁻¹
HSK 100	G 2.5 @ 25,000 min ⁻¹
HSK 125	G 2.5 @ 25,000 min ⁻¹



Expert advice

For all HSK-A and HSK-E form toolholders a range of coolant tubes (KSR) is available.
For KSR part numbers please refer to page 265.

HSK-A toolholders

HSK-A

DIN 69893

ISO 12164

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
HSK-A 32							
HSK-A 32/ER 11 x 050	2532.11110	19	—	50	—	—	E 11 P
HSK-A 32/ER 16 x 060	2532.11620	28	—	60	—	—	E 16 P
HSK-A 32/ER 20 x 060	2532.12020	34	—	60	—	—	E 20 P
HSK-A 32/ER 25 x 065	2532.12520	42	—	65	—	—	E 25
HSK-A 40							
HSK-A 40/ER 16 x 080 H	4540.11640	28	—	80	—	225	E 16 P
HSK-A 40/ER 25 x 080 H	4540.12540	42	—	80	—	325	E 25
HSK-A 50							
HSK-A 50/ER 16 x 100 H	4550.11650	28	—	100	—	325	E 16 P
HSK-A 50/ER 25 x 080 H	4550.12540	42	—	80	—	325	E 25
HSK-A 50/ER 25 x 100 H	4550.12550	42	—	100	—	325	E 25
HSK-A 50/ER 32 x 100 H	4550.13250	50	—	100	—	405	E 32
HSK-A 63							
HSK-A 63/ER 11 x 100 H	4563.11150	19	—	100	—	325	E 11 P
HSK-A 63/ER 16 x 080 H	4563.11640	28	—	80	—	325	E 16 P
HSK-A 63/ER 16 x 100 H	4563.11650	28	—	100	—	325	E 16 P
HSK-A 63/ER 16 x 160 H	4563.11680	28	—	160	—	325/225	E 16 P
HSK-A 63/ER 16 x 240 XL	8865.13070	28	46	240	140	—	E 16 P
HSK-A 63/ER 16 x 260 XL	8865.13090	28	46	260	140	—	E 16 P
HSK-A 63/ER 16 x 300 XL	8865.13130	28	46	300	140	—	E 16 P
HSK-A 63/ER 16 x 340 XL	8865.13170	28	46	340	240	—	E 16 P
HSK-A 63/ER 16 x 360 XL	8865.13190	28	46	360	240	—	E 16 P
HSK-A 63/ER 16 x 400 XL	8865.13230	28	46	400	240	—	E 16 P
HSK-A 63/ER 20 x 075	2563.12030	34	—	75	—	—	E 20 P
HSK-A 63/ER 25 x 080 H	4563.12540	42	—	80	—	325	E 25
HSK-A 63/ER 25 x 100 H	4563.12550	42	—	100	—	325	E 25
HSK-A 63/ER 25 x 160 H	4563.12580	42	—	160	—	325	E 25
HSK-A 63/ER 25 x 200 H	4563.12590	42	—	200	—	405/325	E 25
HSK-A 63/ER 32 x 080 H	4563.13240	50	—	80	—	405	E 32
HSK-A 63/ER 32 x 100 H	4563.13250	50	—	100	—	405	E 32
HSK-A 63/ER 32 x 160 H	4563.13280	50	—	160	—	405	E 32
HSK-A 63/ER 32 x 200 H	4563.13290	50	—	200	—	405/405	E 32
HSK-A 63/ER 32 x 240 XL	8865.16070	50	55	240	140	—	E 32
HSK-A 63/ER 32 x 260 XL	8865.16090	50	55	260	140	—	E 32
HSK-A 63/ER 32 x 340 XL	8865.16170	50	55	340	240	—	E 32
HSK-A 63/ER 32 x 360 XL	8865.16190	50	55	360	240	—	E 32

*Balancing rings H: Ready to accept balancing rings

Included in delivery: Toolholders with Hi-Q®/ER clamping nut and back-up screw

HSK-A toolholders

HSK-A

DIN 69893

ISO 12164

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
HSK-A 63/ER 40 x 080	2563.14040	63	—	80	—	—	E 40
HSK-A 63/ER 40 x 120 H	4563.14060	63	—	120	—	505	E 40
HSK-A 63/ER 40 x 160 H	4563.14080	63	—	160	—	505	E 40

HSK-A 80

HSK-A 80/ER 16 x 100 H	4580.11650	28	—	100	—	325	E 16 P
HSK-A 80/ER 16 x 160 H	4580.11680	28	—	160	—	325/225	E 16 P
HSK-A 80/ER 32 x 100 H	4580.13250	50	—	100	—	405	E 32
HSK-A 80/ER 40 x 120 H	4580.14060	63	—	120	—	505	E 40

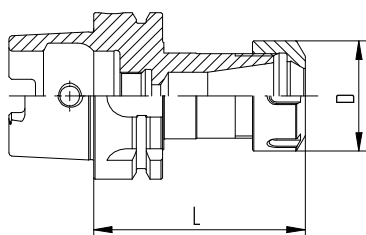
HSK-A 100

HSK-A 100/ER 16 x 100 H	4500.11650	28	—	100	—	405	E 16 P
HSK-A 100/ER 16 x 160 H	4500.11680	28	—	160	—	405/225	E 16 P
HSK-A 100/ER 16 x 200 H	4500.11690	28	—	200	—	405/225	E 16 P
HSK-A 100/ER 16 x 240 XL	8885.13070	28	46	240	140	—	E 16 P
HSK-A 100/ER 16 x 300 XL	8885.13130	28	46	300	140	—	E 16 P
HSK-A 100/ER 16 x 340 XL	8885.13170	28	46	340	240	—	E 16 P
HSK-A 100/ER 16 x 400 XL	8885.13230	28	46	400	240	—	E 16 P
HSK-A 100/ER 25 x 100 H	4500.12550	42	—	100	—	405	E 25
HSK-A 100/ER 25 x 160 H	4500.12580	42	—	160	—	405/325	E 25
HSK-A 100/ER 25 x 200 H	4500.12590	42	—	200	—	405/325	E 25
HSK-A 100/ER 32 x 100 H	4500.13250	50	—	100	—	405	E 32
HSK-A 100/ER 32 x 160 H	4500.13280	50	—	160	—	405	E 32
HSK-A 100/ER 32 x 246 XL	8885.16070	50	55	246	140	—	E 32
HSK-A 100/ER 32 x 346 XL	8885.16170	50	55	346	240	—	E 32
HSK-A 100/ER 40 x 120 H	4500.14060	63	—	120	—	505	E 40
HSK-A 100/ER 40 x 200 H	4500.14090	63	—	200	—	505/505	E 40

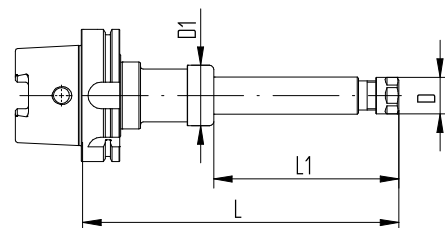
*Balancing rings H: Ready to accept balancing rings

Included in delivery: Toolholders with Hi-Q®/ER clamping nut and back-up screw

HSK-A: Hole for data carrier DIN STD 69873 in the flange



HSK-A/ER



HSK-A/ER XL

HSK-C toolholders

HSK-C

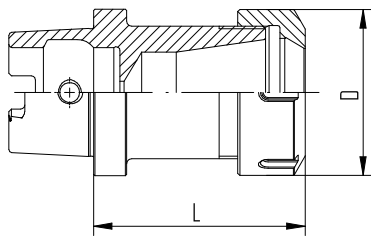
DIN 69893

ISO 12164

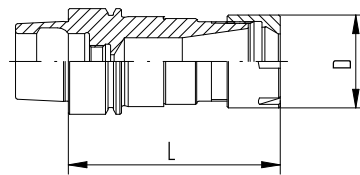
Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
HSK-C 32							
HSK-C 32/ER 16 x 060	2532.11622	28	–	60	–	–	E 16 P
HSK-C 32/ER 20 x 060	2532.12022	34	–	60	–	–	E 20 P
HSK-C 32/ER 25 x 070	2532.12532	42	–	70	–	–	E 25
HSK-C 40							
HSK-C 40/ER 20 x 060	2540.12022	34	–	60	–	–	E 20 P
HSK-C 40/ER 25 x 070	2540.12532	42	–	70	–	–	E 25
HSK-C 40/ER 32 x 075	2540.13232	50	–	75	–	–	E 32
HSK-C 50							
HSK-C 50/ER 25 x 070	2550.12532	42	–	70	–	–	E 25
HSK-C 50/ER 32 x 075	2550.13232	50	–	75	–	–	E 32
HSK-C 50/ER 40 x 080	2550.14042	63	–	80	–	–	E 40
HSK-C 63							
HSK-C 63/ER 32 x 075	2563.13232	50	–	75	–	–	E 32
HSK-C 63/ER 40 x 080	2563.14042	63	–	80	–	–	E 40

*Balancing rings H: Ready to accept balancing rings

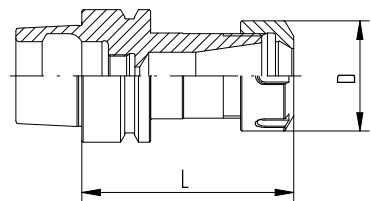
Included in delivery: Toolholders with Hi-Q®/ER clamping nut and back-up screw



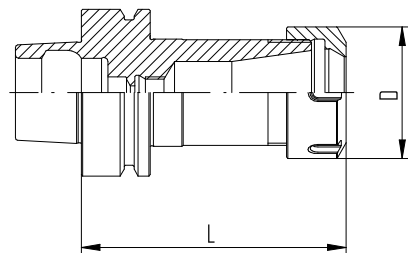
HSK-C/ER



HSK-E/ER M



HSK-E/ER



HSK-F/ER

HSK-E toolholders

HSK-F toolholders

HSK-E	HSK-F
DIN 69893	DIN 69893
ISO 12164	ISO 12164

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
HSK-E 25							
HSK-E 25/ERM 16 x 048	2525.11618	22	—	48	—	—	E 16 M
HSK-E 32							
HSK-E 32/ERM 16 x 060	2532.11628	22	—	60	—	—	E 16 M
HSK-E 32/ERM 20 x 060	2532.12028	28	—	60	—	—	E 20 M
HSK-E 40							
HSK-E 40/ER 11 x 060 H	4540.11124	19	—	60	—	225	E 11 P
HSK-E 40/ER 16 x 060 H	4540.11624	28	—	60	—	225	E 16 P
HSK-E 40/ER 16 x 080 H	4540.11644	28	—	80	—	225	E 16 P
HSK-E 40/ERM 20 x 075 H	4540.12038	28	—	75	—	285	E 20 M
HSK-E 40/ERM 25 x 080 H	4540.12548	35	—	80	—	325	E 25 M
HSK-E 50							
HSK-E 50/ER 16 x 060	2550.11624	28	—	60	—	—	E 16 P
HSK-E 50/ER 16 x 100 H	4550.11654	28	—	100	—	325	E 16 P
HSK-E 50/ER 16 x 160 H	4550.11684	28	—	160	—	325 / 225	E 16 P
HSK-E 50/ER 20 x 070 H	4550.12034	34	—	70	—	325	E 20 P
HSK-E 50/ER 25 x 080 H	4550.12544	42	—	80	—	325	E 25
HSK-E 50/ER 25 x 100 H	4550.12554	42	—	100	—	325	E 25
HSK-E 50/ER 32 x 100 H	4550.13254	50	—	100	—	405	E 32
HSK-E 50/ER 32 x 160 H	4550.13284	50	—	160	—	405	E 32
HSK-E 63							
HSK-E 63/ER 32 x 090 H	4563.13244	50	—	90	—	405	E 32
HSK-E 63/ER 40 x 080	2563.14044	63	—	80	—	—	E 40
HSK-E 63/ER 40 x 120 H	4563.14064	63	—	120	—	505	E 40
HSK-F 63							
HSK-F 63/ER 16 x 100 H	4563.11655	28	—	100	—	325	E 16 P
HSK-F 63/ER 25 x 100 H	4563.12555	42	—	100	—	325	E 25
HSK-F 63/ER 32 x 100 H	4563.13255	50	—	100	—	405	E 32
HSK-F 63/ER 40 x 120 H	4563.14065	63	—	120	—	505	E 40
HSK-FP**							
HSK-FP 80/ER 16 X 3" H	8020.13400	25	—	76.2	—	285	E 16 P
HSK-FP 80/ER 32 X 3" H	8020.13300	50	—	76.2	—	405	E 32

*Balancing rings H: Ready to accept balancing rings

Included in delivery: Toolholders with Hi-Q®/ER clamping nut and back-up screw

**USA only



Steep taper toolholders SK

Universally suitable for different machining applications.

DIN 69871 / DIN ISO 7388-1

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Taper accuracy AT3

Better spindle-to-holder fit and accuracy.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Balancing

100% balanced to G 2.5 @ 25,000 rpm / <1gmm.

XL toolholders

100% balanced to G 2.5 @ 5,000 rpm.
TIR from inner to outer taper <10 μm .

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All toolholders with the additional type information "H" in the article name are designed for balancing rings.

Hi-Q®/ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

Vibration dampening

Our holders offer good vibration dampening to sustain a high surface finish and can help prevent chatter.

ID chip hole

In accordance with DIN 69873 for 10 mm diameter.

Accessories are not included in delivery. Other XL sizes available on request

Balancing specifications

SK 30	balanced to 30,000 min ⁻¹
SK 40	G 2.5 @ 25,000 min ⁻¹
SK 50	G 2.5 @ 25,000 min ⁻¹



SK toolholders

ERA-Zero-Z® toolholders

SK

DIN 69871

DIN ISO 7388-1

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
SK 30							
SK 30/ER 16 x 070 H	4230.11630	28	–	70	–	285	E 16 P
SK 30/ER 16 x 100 H	4230.11650	28	–	100	–	285	E 16 P
SK 30/ER 25 x 060 H	4230.12520	42	–	60	–	325	E 25
SK 30/ER 32 x 065	2230.13220	50	–	65	–	–	E 32
SK 40							
SK 40/ER 11 x 100 H	4240.11150	19	–	100	–	325	E 11 P
SK 40/ER 11 x 160 H	4240.11180	19	–	160	–	325	E 11 P
SK 40/ER 16 x 070 H	4240.11630	28	–	70	–	405	E 16 P
SK 40/ER 16 x 100 H	4240.11650	28	–	100	–	405	E 16 P
SK 40/ER 16 x 160 H	4240.11680	28	–	160	–	405/225	E 16 P
SK 40/ER 16 x 200 H	4240.11690	28	–	200	–	405/225	E 16 P
SK 40/ER 16 x 260 XL	8842.13090	28	46	260	140	–	E 16 P
SK 40/ER 16 x 300 XL	8842.13130	28	46	300	140	–	E 16 P
SK 40/ER 16 x 320 XL	8842.13150	28	46	320	240	–	E 16 P
SK 40/ER 16 x 360 XL	8842.13190	28	46	360	240	–	E 16 P
SK 40/ER 16 x 400 XL	8842.13230	28	46	400	240	–	E 16 P
SK 40/ER 20 x 070 H	4240.12030	34	–	70	–	325	E 20 P
SK 40/ER 20 x 100 H	4240.12050	34	–	100	–	325	E 20 P
SK 40/ER 25 x 070 H	4240.12530	42	–	70	–	405	E 25
SK 40/ER 25 x 100 H	4240.12550	42	–	100	–	405	E 25
SK 40/ER 25 x 160 H	4240.12580	42	–	160	–	405/325	E 25
SK 40/ER 25 x 200 H	4240.12590	42	–	200	–	405/325	E 25
SK 40/ERA 32 x 019	2240.13207	–	–	19	–	–	E 32 AX
SK 40/ER 32 x 070 H	4240.13230	50	–	70	–	405	E 32
SK 40/ER 32 x 100 H	4240.13250	50	–	100	–	405	E 32
SK 40/ER 32 x 160 H	4240.13280	50	–	160	–	405/405	E 32
SK 40/ER 32 x 200 H	4240.13290	50	–	200	–	405/405	E 32
SK 40/ER 32 x 320 XL	8842.16150	50	55	320	240	–	E 32
SK 40/ER 40 x 080	2240.14040	63	–	80	–	–	E 40
SK 40/ER 40 x 100 H	4240.14050	63	–	100	–	405	E 40
SK 40/ER 40 x 160 H	4240.14080	63	–	160	–	505/505	E 40

*Balancing rings H: Ready to accept balancing rings

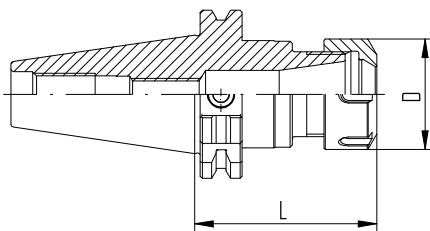
Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERAX clamping nuts

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
SK-B 40							
SK-B 40/ER 11 x 100 H	4240.11153	19	—	100	—	325	E 11 P
SK-B 40/ER 11 x 160 H	4240.11183	19	—	160	—	325	E 11 P
SK-B 40/ER 16 x 070 H	4240.11633	28	—	70	—	405	E 16 P
SK-B 40/ER 16 x 100 H	4240.11653	28	—	100	—	405	E 16 P
SK-B 40/ER 16 x 160 H	4240.11683	28	—	160	—	405/225	E 16 P
SK-B 40/ER 16 x 200 H	4240.11693	28	—	200	—	405/225	E 16 P
SK-B 40/ER 20 x 070 H	4240.12033	34	—	70	—	325	E 20 P
SK-B 40/ER 20 x 100 H	4240.12053	34	—	100	—	325	E 20 P
SK-B 40/ER 25 x 070 H	4240.12533	42	—	70	—	405	E 25
SK-B 40/ER 25 x 100 H	4240.12553	42	—	100	—	405	E 25
SK-B 40/ER 25 x 160 H	4240.12583	42	—	160	—	405/325	E 25
SK-B 40/ER 25 x 200 H	4240.12593	42	—	200	—	405/325	E 25
SK-B 40/ER 32 x 070 H	4240.13233	50	—	70	—	405	E 32
SK-B 40/ER 32 x 100 H	4240.13253	50	—	100	—	405	E 32
SK-B 40/ER 32 x 160 H	4240.13283	50	—	160	—	405/405	E 32
SK-B 40/ER 32 x 200 H	4240.13293	50	—	200	—	405/405	E 32
SK-B 40/ER 40 x 080	2240.14043	63	—	80	—	—	E 40
SK-B 40/ER 40 x 100 H	4240.14053	63	—	100	—	505	E 40
SK-B 40/ER 40 x 160 H	4240.14083	63	—	160	—	505/505	E 40

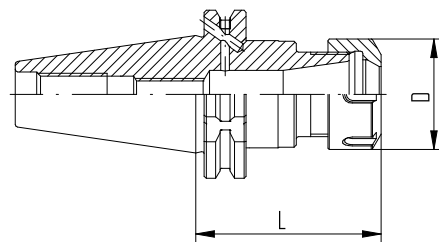
*Balancing rings

Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERAX clamping nuts

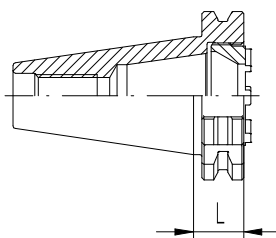
H: Ready to accept balancing rings



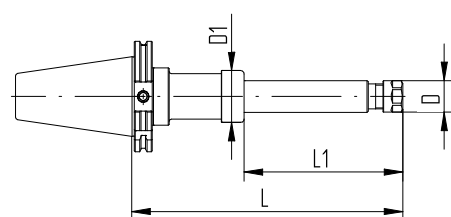
SK/ER (form A+AD)



SK-B/ER (form AD+B)



SK/ERA



SK/ER XL (form A+AD)

SK toolholders

SK-B toolholders

SK	SK-B
DIN 69871	DIN 69871
DIN ISO 7388-1	DIN ISO 7388-1

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
SK 50							
SK 50/ER 16 x 100 H	4250.11650	0.25	–	100	–	505	E 16 P
SK 50/ER 16 x 160 H	4250.11680	28	–	160	–	505/225	E 16 P
SK 50/ER 16 x 200 H	4250.11690	28	–	200	–	505/225	E 16 P
SK 50/ER 16 x 240 XL	8852.13070	28	46	240	140	–	E 16 P
SK 50/ER 16 x 300 XL	8852.13130	28	46	300	140	–	E 16 P
SK 50/ER 16 x 340 XL	8852.13170	28	46	340	240	–	E 16 P
SK 50/ER 16 x 400 XL	8852.13230	28	46	400	240	–	E 16 P
SK 50/ER 20 x 070 H	4250.12030	34	–	70	–	325	E 20 P
SK 50/ER 20 x 100 H	4250.12050	34	–	100	–	325	E 20 P
SK 50/ER 25 x 070 H	4250.12530	42	–	70	–	405	E 25
SK 50/ER 25 x 100 H	4250.12550	42	–	100	–	405	E 25
SK 50/ER 25 x 160 H	4250.12580	42	–	160	–	405/325	E 25
SK 50/ER 25 x 200 H	4250.12590	42	–	200	–	405/325	E 25
SK 50/ER 32 x 100 H	4250.13250	50	–	100	–	505	E 32
SK 50/ER 32 x 160 H	4250.13280	50	–	160	–	505/405	E 32
SK 50/ER 32 x 200 H	4250.13290	50	–	200	–	505/405	E 32
SK 50/ER 32 x 320 XL	8852.16150	50	55	320	240	–	E 32
SK 50/ER 40 x 100 H	4250.14050	63	–	100	–	505	E 40
SK 50/ER 40 x 160 H	4250.14080	63	–	160	–	505/505	E 40
SK 50/ER 40 x 200 H	4250.14090	63	–	200	–	505/505	E 40
SK 50/ER 50 x 100	2250.15050	78	–	100	–	–	E 50
SK-B 50							
SK-B 50/ER 16 x 100 H	4250.11653	28	–	100	–	505	E 16 P
SK-B 50/ER 16 x 160 H	4250.11683	28	–	160	–	505/225	E 16 P
SK-B 50/ER 16 x 200 H	4250.11693	28	–	200	–	505/225	E 16 P
SK-B 50/ER 20 x 070 H	4250.12033	34	–	70	–	325	E 20 P
SK-B 50/ER 20 x 100 H	4250.12053	34	–	100	–	325	E 20 P
SK-B 50/ER 25 x 070 H	4250.12533	42	–	70	–	405	E 25
SK-B 50/ER 25 x 100 H	4250.12553	42	–	100	–	405	E 25
SK-B 50/ER 25 x 160 H	4250.12583	42	–	160	–	405/325	E 25
SK-B 50/ER 25 x 200 H	4250.12593	42	–	200	–	405/325	E 25
SK-B 50/ER 32 x 100 H	4250.13253	50	–	100	–	505	E 32
SK-B 50/ER 32 x 160 H	4250.13283	50	–	160	–	505/405	E 32
SK-B 50/ER 32 x 200 H	4250.13293	50	–	200	–	505/405	E 32
SK-B 50/ER 40 x 100 H	4250.14053	63	–	100	–	505	E 40
SK-B 50/ER 40 x 160 H	4250.14083	63	–	160	–	505/505	E 40
SK-B 50/ER 40 x 200 H	4250.14093	63	–	200	–	505/505	E 40

*Balancing rings

Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERAX clamping nuts

H: Ready to accept balancing rings

Steep taper toolholders BT

Universally suitable for different machining applications, the BT interface toolholders cater for different machining needs.

MAS 403 / JIS B 6339 / DIN ISO 7388-2

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Taper accuracy AT3

Better spindle-to-holder fit and accuracy.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Balancing

100% balanced to G 2.5 @ 25,000 rpm / <1gmm.

XL toolholders

100% balanced to G 2.5 @ 5,000 rpm.
TIR from inner to outer taper <10 μm .

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All toolholders with the additional type information "H" in the article name are designed for balancing rings.

Hi-Q®/ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

Vibration dampening

Our holders offer good vibration dampening to sustain a high surface finish and can help prevent chatter.

*Accessories are not included in delivery. HSK-A 125 available on request
Other XL sizes available on request*

Balancing specifications

BT 30	balanced to 30000 min ⁻¹
BT 40	G 2.5 @ 25000 min ⁻¹
BT 50	G 2.5 @ 25000 min ⁻¹



BT toolholders

ERA Zero-Z® toolholders

BT

MAS 403

JIS B 6339

DIN ISO 7388-2

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
BT 30							
BT 30/ER 11 x 050	2130.11110	19	–	50	–	–	E 11 P
BT 30/ER 11 x 100 H	4130.11150	19	–	100	–	225	E 11 P
BT 30/ER 16 x 050	2130.11610	28	–	50	–	–	E 16 P
BT 30/ER 16 x 080 H	4130.11640	28	–	80	–	285	E 16 P
BT 30/ER 16 x 100 H	4130.11650	28	–	100	–	285	E 16 P
BT 30/ERA 20 x 022	2130.12007	–	–	22	–	–	E 20 AX
BT 30/ER 20 x 050	2130.12010	34	–	50	–	–	E 20 P
BT 30/ER 20 x 070 H	4130.12030	34	–	70	–	325	E 20 P
BT 30/ER 20 x 100 H	4130.12050	34	–	100	–	325	E 20 P
BT 30/ER 25 x 060 H	4130.12520	42	–	60	–	325	E 25
BT 30/ER 25 x 100 H	4130.12550	42	–	100	–	325	E 25
BT 30/ER 32 x 060	2130.13220	50	–	60	–	–	E 32
BT 30/ER 32 x 100 H	4130.13250	50	–	100	–	405	E 32

BT 30 ERM**

BT 30/ERM 8 x 100	2130.10855	12	–	100	–	–	E 8 M
BT 30/ERM 11 x 100 H	4130.11155	16	–	100	–	225	E 11 M

*Balancing rings

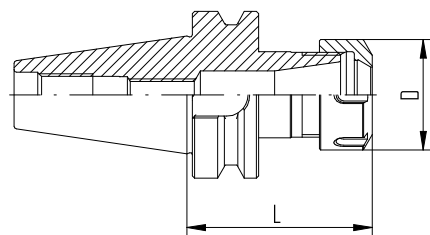
Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERAX clamping nuts

H: Ready to accept balancing rings

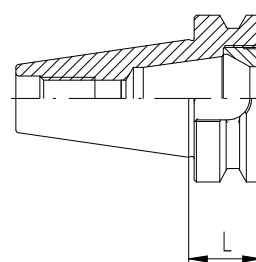
**USA only



BT/ER



BT/ER (form A+AD)



BT/ERA

BT toolholders

ERA Zero-Z® toolholders

BT

MAS 403

JIS B 6339

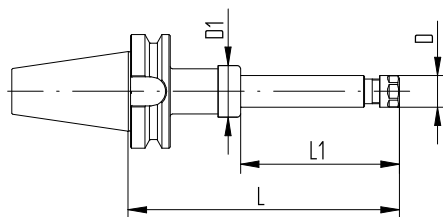
DIN ISO 7388-2

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
BT 40							
BT 40/ER 11 x 100 H	4140.11150	19	—	100	—	285	E 11 P
BT 40/ER 11 x 160 H	4140.11180	19	—	160	—	285	E 11 P
BT 40/ER 16 x 070 H	4140.11630	28	—	70	—	285	E 16 P
BT 40/ER 16 x 100 H	4140.11650	28	—	100	—	285	E 16 P
BT 40/ER 16 x 160 H	4140.11680	28	—	160	—	285/225	E 16 P
BT 40/ER 16 x 220 XL	8841.13050	28	46	220	140	—	E 16 P
BT 40/ER 16 x 260 XL	8841.13090	28	46	260	140	—	E 16 P
BT 40/ER 16 x 300 XL	8841.13130	28	46	300	140	—	E 16 P
BT 40/ER 16 x 320 XL	8841.13150	28	46	320	240	—	E 16 P
BT 40/ER 16 x 360 XL	8841.13190	28	46	360	240	—	E 16 P
BT 40/ER 16 x 400 XL	8841.13230	28	46	400	240	—	E 16 P
BT 40/ER 20 x 070 H	4140.12030	34	—	70	—	325	E 20 P
BT 40/ER 20 x 100 H	4140.12050	34	—	100	—	285	E 20 P
BT 40/ER 20 x 160 H	4140.12080	34	—	160	—	405/285	E 20 P
BT 40/ER 25 x 070 H	4140.12530	42	—	70	—	325	E 25
BT 40/ER 25 x 100 H	4140.12550	42	—	100	—	405	E 25
BT 40/ER 25 x 160 H	4140.12580	42	—	160	—	405/325	E 25
BT 40/ERA 32 x 027	2140.13207	—	—	27	—	—	E 32 AX
BT 40/ER 32 x 070 H	4140.13230	50	—	70	—	405	E 32
BT 40/ER 32 x 100 H	4140.13250	50	—	100	—	405	E 32
BT 40/ER 32 x 160 H	4140.13280	50	—	160	—	405/405	E 32
BT 40/ER 32 x 226 XL	8841.16050	50	55	226	140	—	E 32
BT 40/ER 32 x 326 XL	8841.16150	50	55	326	240	—	E 32
BT 40/ER 40 x 080	2140.14040	63	—	80	—	—	E 40
BT 40/ER 40 x 100 H	4140.14050	63	—	100	—	505	E 40
BT 40/ER 40 x 160 H	4140.14080	63	—	160	—	505/505	E 40

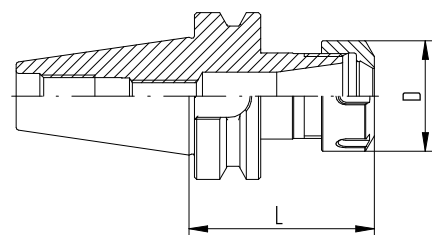
*Balancing rings

Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERAX clamping nuts

H: Ready to accept balancing rings



BT/ER XL



BT/ER (form A+AD)

BT/BT-B toolholders

BT

BT-B

MAS 403

JIS B 6339

DIN ISO 7388-2

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
BT-B 40							
BT-B 40/ER 16 x 070 H	4140.11633	28	–	70	–	285	E 16 P
BT-B 40/ER 16 x 100 H	4140.11653	28	–	100	–	285	E 16 P
BT-B 40/ER 16 x 160 H	4140.11683	28	–	160	–	285/225	E 16 P
BT-B 40/ER 20 x 070 H	4140.12033	34	–	70	–	325	E 20 P
BT-B 40/ER 20 x 100 H	4140.12053	34	–	100	–	285	E 20 P
BT-B 40/ER 20 x 160 H	4140.12083	34	–	160	–	405/285	E 20 P
BT-B 40/ER 25 x 070 H	4140.12533	42	–	70	–	325	E 25
BT-B 40/ER 25 x 100 H	4140.12553	42	–	100	–	405	E 25
BT-B 40/ER 25 x 160 H	4140.12583	42	–	160	–	405/325	E 25
BT-B 40/ER 32 x 070 H	4140.13233	50	–	70	–	405	E 32
BT-B 40/ER 32 x 100 H	4140.13253	50	–	100	–	405	E 32
BT-B 40/ER 32 x 160 H	4140.13283	50	–	160	–	405/405	E 32
BT-B 40/ER 40 x 080	2140.14043	63	–	80	–	–	E 40
BT-B 40/ER 40 x 100 H	4140.14053	63	–	100	–	505	E 40
BT-B 40/ER 40 x 160 H	4140.14083	63	–	160	–	505/505	E 40
BT 50							
BT 50/ER 16 x 100 H	4150.11650	28	–	100	–	505	E 16 P
BT 50/ER 16 x 160 H	4150.11680	28	–	160	–	505/225	E 16 P
BT 50/ER 16 x 240 XL	8851.13070	28	46	240	140	–	E 16 P
BT 50/ER 16 x 260 XL	8851.13090	28	46	260	140	–	E 16 P
BT 50/ER 16 x 300 XL	8851.13130	28	46	300	140	–	E 16 P
BT 50/ER 16 x 340 XL	8851.13170	28	46	340	240	–	E 16 P
BT 50/ER 16 x 360 XL	8851.13190	28	46	360	240	–	E 16 P
BT 50/ER 16 x 400 XL	8851.13230	28	46	400	240	–	E 16 P
BT 50/ER 20 x 070	2150.12030	34	–	70	–	–	E 20 P
BT 50/ER 20 x 100 H	4150.12050	34	–	100	–	325	E 20 P
BT 50/ER 25 x 070	2150.12530	42	–	70	–	–	E 25
BT 50/ER 25 x 100 H	4150.12550	42	–	100	–	405	E 25
BT 50/ER 25 x 160 H	4150.12580	42	–	160	–	405/325	E 25
BT 50/ER 32 x 100 H	4150.13250	50	–	100	–	505	E 32
BT 50/ER 32 x 160 H	4150.13280	50	–	160	–	505/405	E 32
BT 50/ER 32 x 200 H	4150.13290	50	–	200	–	505/405	E 32
BT 50/ER 32 x 240 XL	8851.16070	50	55	240	140	–	E 32
BT 50/ER 32 x 340 XL	8851.16170	50	55	340	240	–	E 32
BT 50/ER 40 x 100 H	4150.14050	63	–	100	–	505	E 40
BT 50/ER 40 x 160 H	4150.14080	63	–	160	–	505/505	E 40
BT 50/ER 50 x 100	2150.15050	78	–	100	–	–	E 50

*Balancing rings

Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERAX clamping nuts

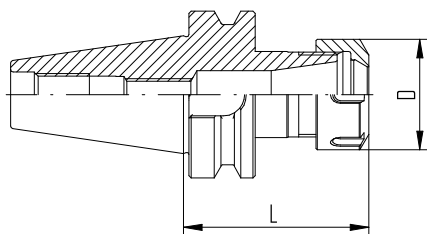
H: Ready to accept balancing rings

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
BT-B 50							
BT-B 50/ER 16 x 100 H	4150.11653	28	—	100	—	505	E 16 P
BT-B 50/ER 16 x 160 H	4150.11683	28	—	160	—	505/225	E 16 P
BT-B 50/ER 20 x 070	2150.12033	34	—	70	—	—	E 20 P
BT-B 50/ER 20 x 100 H	4150.12053	34	—	100	—	325	E 20 P
BT-B 50/ER 25 x 070	2150.12533	42	—	70	—	—	E 25
BT-B 50/ER 25 x 100 H	4150.12553	42	—	100	—	405	E 25
BT-B 50/ER 25 x 160 H	4150.12583	42	—	160	—	405/325	E 25
BT-B 50/ER 32 x 100 H	4150.13253	50	—	100	—	505	E 32
BT-B 50/ER 32 x 160 H	4150.13283	50	—	160	—	505/405	E 32
BT-B 50/ER 40 x 100 H	4150.14053	63	—	100	—	505	E 40
BT-B 50/ER 40 x 160 H	4150.14083	63	—	160	—	505/505	E 40

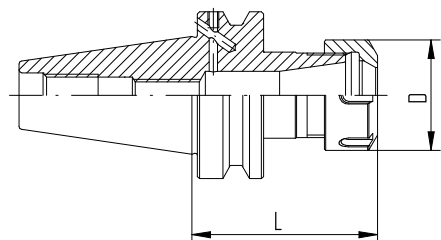
*Balancing rings

Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERAX clamping nuts

H: Ready to accept balancing rings



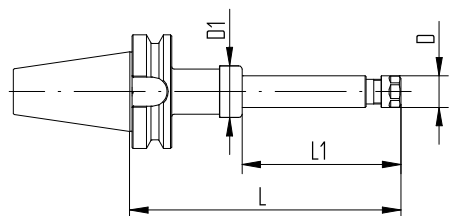
BT/ER (form A+AD)



BT-B/ER (form AD+B)

Expert advice

What is the difference between form A+AD and AD+B?
 Form A+AD: coolant supply through the taper
 Form AD+B: coolant supply through the flange



BT/ER XL

BT-OM toolholders

ERA Zero-Z® toolholder

BT-OM

HAAS

HURCO

Information

BT-OM/ER toolholders without drive slots

Applications

This special toolholder without drive slots is designed for use on HAAS and HURCO CNC-machining centers.

Special applications

When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend to use our friction-bearing clamping nuts Hi-Q®/ERB* and Hi-Q®/ERBC*.

**Not for use with ERA toolholders.*

Balancing

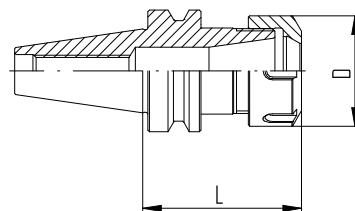
REGO-FIX BT-OM/ER(A) toolholders are balanced to G 2.5 @ 25,000 rpm/<1gmm. Type H toolholders are compatible with Hi-Q® balancing rings which allow precision balancing of the entire system including cutting tool up to 80,000 rpm depending on the balancing rings used.

Matched tooling system for best fit

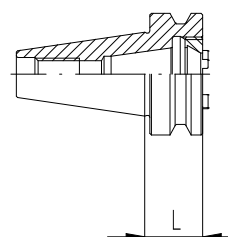
For highest precision and best results the entire machining system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

For the influence of runout on tool life, please refer to page 270.

Accessories are not included in delivery.



BT-OM/ER



BT-OM/ERA

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
BT-OM							
BT-OM 30/ER 16 x 080 H	4130.11648	28	—	80	—	285	E 16 P
BT-OM 30/ER 25 x 060 H	4130.12528	42	—	60	—	325	E 25
BT-OM 30/ER 32 x 060	2130.13228	50	—	60	—	—	E 32
BT-OM 30/ERA 20 x 022	2130.12008	—	—	22	—	—	E 20 AX

*Balancing rings

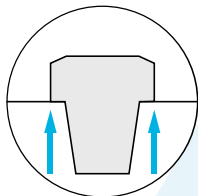
Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERAX clamping nuts

H: Ready to accept balancing rings

REGO-FIX BT+ toolholders

Certified The BIG PLUS SYSTEM – licensed by BIG Daishowa – is manufactured at REGO-FIX in Switzerland under license according to BIG PLUS specifications.

Key advantages



Higher toolholder stiffness due to taper (AT1) and face contact.

MAS 403 / JIS B 6339 / DIN ISO 7388-2

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Surface finish max. Ra 0.25

Better spindle-to-holder fit and accuracy.

Balancing

100% balanced to G 2.5 @ 25,000 rpm / <1gmm.

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All toolholders with the additional type information "H" in the article name are designed for balancing rings.

Hi-Q®/ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

Vibration dampening

Our holders offer good vibration dampening to sustain a high surface finish and can help prevent chatter.

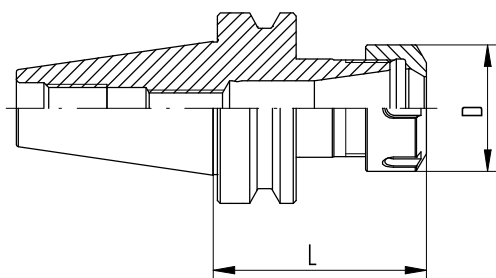


Accessories are not included in delivery. Form B available on request

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
BT+ 30							
BT+ 30/ER 11 x 100 H	4130.11156	19	–	100	–	225	E 11 P
BT+ 30/ER 16 x 050	2130.11616	28	–	50	–	–	E 16 P
BT+ 30/ER 16 x 080 H	4130.11646	28	–	80	–	285	E 16 P
BT+ 30/ER 20 x 050	2130.12016	34	–	50	–	–	E 20 P
BT+ 30/ER 20 x 070 H	4130.12036	34	–	70	–	325	E 20 P
BT+ 30/ER 25 x 060 H	4130.12526	42	–	60	–	325	E 25
BT+ 30/ER 32 x 060	2130.13226	50	–	60	–	–	E 32
BT+ 40							
BT+ 40/ER 16 x 070 H	4140.11636	28	–	70	–	285	E 16 P
BT+ 40/ER 16 x 100 H	4140.11656	28	–	100	–	285	E 16 P
BT+ 40/ER 20 x 070 H	4140.12036	34	–	70	–	325	E 20 P
BT+ 40/ER 25 x 070 H	4140.12536	42	–	70	–	325	E 25
BT+ 40/ER 32 x 070 H	4140.13236	50	–	70	–	405	E 32
BT+ 40/ER 32 x 100 H	4140.13256	50	–	100	–	405	E 32
BT+ 40/ER 32 x 160 H	4140.13286	50	–	160	–	405/405	E 32
BT+ 50							
BT+ 50/ER 32 x 100 H	4150.13256	50	–	100	–	505	E 32
BT+ 50/ER 32 x 160 H	4150.13286	50	–	160	–	505/405	E 32

*Balancing rings H: Ready to accept balancing rings

Included in delivery: toolholders come with Hi-Q®/ER clamping nut



BT+ /ER (A+AD)

Steep taper toolholders CAT

Universally suitable for different machining applications.

ASME B5.50

Features and benefits

Runout $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Taper accuracy AT3

Better spindle-to-holder fit and accuracy.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Balancing

100% balanced to G 2.5 @ 25,000 rpm.

Balancing in XL toolholders

100% balanced to G 2.5 @ 5,000 rpm.

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All toolholders with the additional type information "H" in the article name are designed for balancing rings.

Hi-Q®/ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

Vibration dampening

Our holders offer good vibration dampening to sustain a high surface finish and can help prevent chatter.

Accessories are not included in delivery. Form B available on request



CAT toolholders

ERA Zero-Z® toolholder

CAT

ASME B5.50

Type	Part no.	Dimensions				Accessories	
		D [mm]	D1 [mm]	L [inch]	L1 [inch]	FWR*	Wrench
CAT 40							
CAT 40/ER 11 x 3" H	4340.11131	19	—	3	—	325	7112.11010
CAT 40/ER 11 x 6" H	4340.11171	19	—	6	—	325	7112.11010
CAT 40/ER 16 x 3" H	4340.11631	28	—	3	—	325	7112.16010
CAT 40/ER 16 x 4" H	4340.11651	28	—	4	—	285	7112.16010
CAT 40/ER 16 x 6" H	4340.11671	28	—	6	—	325/225	7112.16010
CAT 40/ER 16 x 8" XL	8843.13031	28	42	8	4	—	7112.16010
CAT 40/ER 16 x 10" XL	8843.13101	28	42	10	4	—	7112.16010
CAT 40/ER 16 x 12" XL	8843.13131	28	42	12	8	—	7112.16010
CAT 40/ER 16 x 14" XL	8843.13181	28	42	14	8	—	7112.16010
CAT 40/ER 20 x 3" H	4340.12031	34	—	3	—	285	7112.20010
CAT 40/ER 20 x 4" H	4340.12051	34	—	4	—	325	7112.20010
CAT 40/ER 20 x 6" H	4340.12071	34	—	6	—	405/285	7112.20010
CAT 40/ER 25 x 4" H	4340.12551	42	—	4	—	325	7111.25000
CAT 40/ER 25 x 6" H	4340.12571	42	—	6	—	405/325	7111.25000
CAT 40/ERA 32 x 019 mm	2340.13200	35	—	19 mm	—	—	7111.32000
CAT 40/ER 32 x 3" H	4340.13231	50	—	3	—	405	7111.32000
CAT 40/ER 32 x 4" H	4340.13251	50	—	4	—	405	7111.32000
CAT 40/ER 32 x 5" H	4340.13261	50	—	5	—	405	7111.32000
CAT 40/ER 32 x 6" H	4340.13271	50	—	6	—	405/405	7111.32000
CAT 40/ER 32 x 10" XL	8843.16081	50	52	10	4	—	7111.32000
CAT 40/ER 32 x 14" XL	8843.16141	50	52	14	8	—	7111.32000
CAT 40/ER 40 x 3.5" H	4340.14041	63	—	3.5	—	505	7111.40000
CAT 40/ER 40 x 6" H	4340.14071	63	—	6	—	505/505	7111.40000

*Balancing rings

Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERA clamping nuts

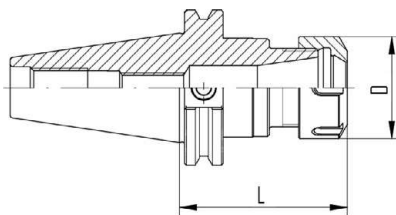
H: Ready to accept balancing rings

Type	Part no.	Dimensions				Accessories	
		D [mm]	D1 [mm]	L [inch]	L1 [inch]	FWR*	Wrench
CAT-B 40							
CAT-B 40/ER 11 x 3" H	4340.11134	19	—	3	—	325	7112.11010
CAT-B 40/ER 11 x 6" H	4340.11174	19	—	6	—	325	7112.11010
CAT-B 40/ER 16 x 3" H	4340.11634	28	—	3	—	325	7112.16010
CAT-B 40/ER 16 x 4" H	4340.11654	28	—	4	—	285	7112.16010
CAT-B 40/ER 16 x 6" H	4340.11674	28	—	6	—	325/225	7112.16010
CAT-B 40/ER 20 x 3" H	4340.12034	34	—	3	—	285	7112.20010
CAT-B 40/ER 20 x 4" H	4340.12054	34	—	4	—	325	7112.20010
CAT-B 40/ER 20 x 6" H	4340.12074	34	—	6	—	405/285	7112.20010
CAT-B 40/ER 25 x 4" H	4340.12554	42	—	4	—	325	7111.25000
CAT-B 40/ER 25 x 6" H	4340.12574	42	—	6	—	405/325	7111.25000
CAT-B 40/ER 32 x 3" H	4340.13234	50	—	3	—	405	7111.32000
CAT-B 40/ER 32 x 4" H	4340.13254	50	—	4	—	405	7111.32000
CAT-B 40/ER 32 x 5" H	4340.13264	50	—	5	—	405	7111.32000
CAT-B 40/ER 32 x 6" H	4340.13274	50	—	6	—	405/405	7111.32000
CAT-B 40/ER 40 x 3.5" H	4340.14044	63	—	3.5	—	505	7111.40000
CAT-B 40/ER 40 x 6" H	4340.14074	63	—	6	—	505/505	7111.40000

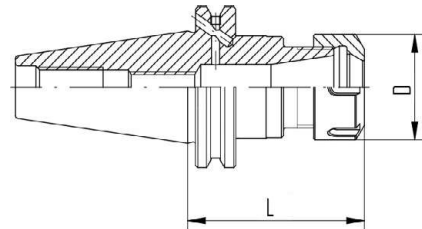
*Balancing rings

Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERA clamping nuts

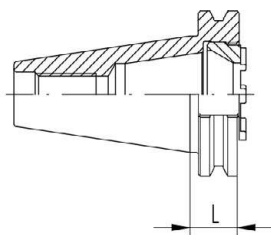
H: Ready to accept balancing rings



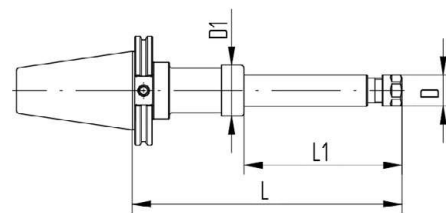
CAT/ER (Form A+AD)



CAT-B/ER (Form AD+B)



CAT/ERA



CAT/ER XL (Form A+AD)

CAT toolholders

CAT-B toolholders

CAT

CAT-B

Type	Part no.	Dimensions				Accessories	
		D [mm]	D1 [mm]	L [inch]	L1 [inch]	FWR*	Wrench
CAT 50							
CAT 50/ER 16 x 4" H	4350.11651	28		4		505	7112.16010
CAT 50/ER 16 x 6" H	4350.11671	28		6		505/225	7112.16010
CAT 50/ER 16 x 8" XL	8853.13031	28	42	8	4		7112.16010
CAT 50/ER 16 x 10" XL	8853.13081	28	42	10	4		7112.16010
CAT 50/ER 16 x 12" XL	8853.13131	28	42	12	8		7112.16010
CAT 50/ER 16 x 14" XL	8853.13181	28	42	14	8		7112.16010
CAT 50/ER 20 x 4" H	4350.12051	34		4		505	7112.20010
CAT 50/ER 20 x 6" H	4350.12071	34		6		505/285	7112.20010
CAT 50/ER 25 x 4" H	4350.12551	42		4		505	7111.25000
CAT 50/ER 25 x 6" H	4350.12571	42		6		505/325	7111.25000
CAT 50/ER 32 x 4" H	4350.13251	50		4		505	7111.32000
CAT 50/ER 32 x 6" H	4350.13271	50		6		505/405	7111.32000
CAT 50/ER 32 x 10" XL	8853.16081	50	52	10	4		7111.32000
CAT 50/ER 32 x 14" XL	8853.16181	50	52	14	8		7111.32000
CAT 50/ERA 40 x 019 mm	2350.14007	44		19 mm			7117.40000
CAT 50/ER 40 x 4" H	4350.14051	63		4		505	7111.40000
CAT 50/ER 40 x 6" H	4350.14071	63		6		505/505	7111.40000
CAT-B 50							
CAT-B 50/ER 16 x 4" H	4350.11654	28		4		505	7112.16010
CAT-B 50/ER 16 x 6" H	4350.11674	28		6		505/225	7112.16010
CAT-B 50/ER 20 x 4" H	4350.12054	34		4		505	7112.20010
CAT-B 50/ER 20 x 6" H	4350.12074	34		6		505/285	7112.20010
CAT-B 50/ER 25 x 4" H	4350.12554	42		4		505	7111.25000
CAT-B 50/ER 25 x 6" H	4350.12574	42		6		505/325	7111.25000
CAT-B 50/ER 32 x 4" H	4350.13254	50		4		505	7111.32000
CAT-B 50/ER 32 x 6" H	4350.13274	50		6		505/405	7111.32000
CAT-B 50/ER 40 x 4" H	4350.14054	63		4		505	7111.40000
CAT-B 50/ER 40 x 6" H	4350.14074	63		6		505/505	7111.40000

*Balancing rings

Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERA clamping nuts

H: Ready to accept balancing rings

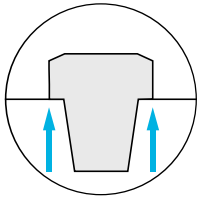
Expert advice

For additional technical drawings and details, see the REGO-FIX website at www.rego-fix.com.

REGO-FIX CAT+ toolholders

Certified The BIG PLUS SYSTEM – licensed by BIG Daishowa – is manufactured at REGO-FIX in Switzerland under license according to BIG PLUS specifications.

Key advantages



Higher toolholder stiffness due to taper (AT1) and face contact

Type	Part no. AD+B	Dimensions				Accessories	
		D [mm]	D1	L [inch]	L1	FWR*	Wrench
CAT+ 40**							
CAT+ 40/ER 11 x 3" H	4340.11136	19	—	3	—	285	7112.11010
CAT+ 40/ER 16 x 3" H	4340.11636	28	—	3	—	325	7112.16010
CAT+ 40/ER 16 x 6" H	4340.11676	28	—	6	—	325/225	7112.16010
CAT+ 40/ER 20 x 3" H	4340.12036	34	—	3	—	285	7112.20010
CAT+ 40/ER 20 x 6" H	4340.12076	34	—	6	—	405/285	7112.20010
CAT+ 40/ER 25 x 4" H	4340.12556	42	—	4	—	325	7111.25000
CAT+ 40/ER 25 x 6" H	4340.12576	42	—	6	—	405/325	7111.25000
CAT+ 40/ER 32 x 3" H	4340.13236	50	—	3	—	405	7111.32000
CAT+ 40/ER 32 x 6" H	4340.13276	50	—	6	—	405/405	7111.32000
CAT+ 50**							
CAT+ 50/ER 16 x 4" H	4350.11656	28	—	4	—	505	7112.16010
CAT+ 50/ER 16 x 6" H	4350.11676	28	—	6	—	505/225	7112.16010
CAT+ 50/ER 20 x 4" H	4350.12056	34	—	4	—	505	7112.20010
CAT+ 50/ER 25 x 4" H	4350.12556	42	—	4	—	505	7111.25000
CAT+ 50/ER 32 x 4" H	4350.13256	50	—	4	—	505	7111.32000
CAT+ 50/ER 32 x 6" H	4350.13276	50	—	6	—	505/405	7111.32000
CAT+ 50/ER 40 x 4" H	4350.14056	63	—	4	—	505	7111.40000

*Balancing rings

Included in delivery: ER toolholders come with Hi-Q®/ER clamping nut. ERA toolholders come with Hi-Q®/ERA clamping nuts

**USA only

H: Ready to accept balancing rings



REGO-FIX CAPTO toolholders

These self-centering and balanced toolholders enable high-torque transmission and show a high-bending strength.

ISO 12164

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$

Measured from inner taper to outer taper.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Balancing

100% balanced to G 2.5 @ 25,000 rpm / <1gmm.

XL toolholders

100% balanced to G 2.5 @ 5,000 rpm.
TIR from inner to outer taper <10 μm .

Hi-Q® balancing system

Ready to accept Hi-Q® balancing rings which allow for the offset of the imbalance introduced by the cutting tool up to 80,000 rpm depending on the balancing rings used. All toolholders with the additional type information "H" in the article name are designed for balancing rings.

Hi-Q®/ER clamping nut included in delivery

Guarantees highest clamping force and best balancing.

Vibration dampening

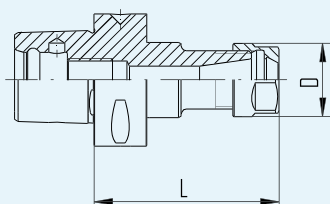
Our holders offer good vibration dampening to sustain a high surface finish and can help prevent chatter.

*Accessories are not included in delivery. Other XL sizes available on request
All REGO-FIX CAPTO toolholders are available with chip hole on request*

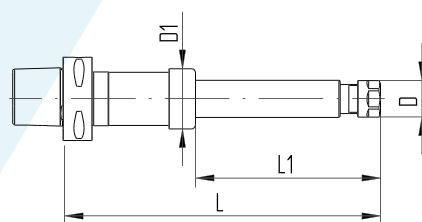
Balancing specifications

C3	balanced to 60,000 rpm
C4	balanced to 45,000 rpm
C5	balanced to 36,000 rpm
C6	G 2.5 @ 25,000 rpm
C8	G 2.5 @ 25,000 rpm

Certified REGO-FIX CAPTO – licensed by Sandvik Coromant – is manufactured at REGO-FIX Switzerland under license according to CAPTO specifications.



C/ER



C/ER XL

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
C3							
C3/ER 16 x 045	2803.11610	28	–	45	–	–	E 16 P
C3/ER 20 x 045	2803.12010	34	–	45	–	–	E 20 P
C4							
C4/ER 16 x 070	2804.11630	28	–	70	–	–	E 16 P
C4/ER 20 x 052	2804.12010	34	–	52	–	–	E 20 P
C4/ER 25 x 052	2804.12510	42	–	52	–	–	E 25
C4/ER 32 x 054	2804.13210	50	–	54	–	–	E 32
C5							
C5/ER 16 x 070 H	4805.11630	28	–	70	–	285	E 16 P
C5/ER 16 x 100 H	4805.11650	28	–	100	–	285	E 16 P
C5/ER 20 x 055	2805.12010	34	–	55	–	–	E 20 P
C5/ER 20 x 100 H	4805.12050	34	–	100	–	325	E 20 P
C5/ER 25 x 055	2805.12510	42	–	55	–	–	E 25
C5/ER 25 x 100 H	4805.12550	42	–	100	–	405	E 25
C5/ER 32 x 057	2805.13210	50	–	57	–	–	E 32
C5/ER 32 x 070 H	4805.13230	50	–	70	–	405	E 32
C5/ER 32 x 100H	4805.13250	50	–	100	–	405	E 32
C6							
C6/ER 11 x 150 H	4806.11170	19	–	150	–	325	E 11 P
C6/ER 16 x 070 H	4806.11630	28	–	70	–	325	E 16 P
C6/ER 16 x 100 H	4806.11650	28	–	100	–	325	E 16 P
C6/ER 16 x 150 H	4806.11670	28	–	150	–	325	E 16 P
C6/ER 16 x 225 XL	8886.13050	28	46	225	140	–	E 16 P
C6/ER 16 x 240 XL	8886.13070	28	46	240	140	–	E 16 P
C6/ER 16 x 260 XL	8886.13090	28	46	260	140	–	E 16 P
C6/ER 16 x 300 XL	8886.13130	28	46	300	140	–	E 16 P
C6/ER 16 x 325 XL	8886.13150	28	46	325	240	–	E 16 P
C6/ER 16 x 340 XL	8886.13170	28	46	340	240	–	E 16 P
C6/ER 16 x 360 XL	8886.13190	28	46	360	240	–	E 16 P
C6/ER 16 x 400 XL	8886.13230	28	46	400	240	–	E 16 P
C6/ER 20 x 060	2806.12020	34	–	60	–	–	E 20 P

*Balancing rings H: Ready to accept balancing rings

Included in delivery: toolholders come with Hi-Q®/ER clamping nut

All REGO-FIX CAPTO toolholders are available with chip hole on request.

Type	Part no.	Dimensions [mm]				Accessories	
		D	D1	L	L1	FWR*	Wrench
C6 continued							
C6/ER 25 x 060	2806.12520	42	–	60	–	–	E 25
C6/ER 25 x 100 H	4806.12550	42	–	100	–	405	E 25
C6/ER 25 x 130 H	4806.12560	42	–	130	–	405	E 25
C6/ER 32 x 060	2806.13220	50	–	60	–	–	E 32
C6/ER 32 x 070 H	4806.13230	50	–	70	–	405	E 32
C6/ER 32 x 100 H	4806.13250	50	–	100	–	505	E 32
C6/ER 32 x 230 XL	8886.16060	50	55	230	140	–	E 32
C6/ER 32 x 330 XL	8886.16160	50	55	330	240	–	E 32
C6/ER 40 x 065	2806.14020	63	–	65	–	–	E 40

C8							
C8/ER 16 x 232 XL	8888.13060	28	46	232	140	–	E 16 P
C8/ER 16 x 332 XL	8888.13160	28	46	332	240	–	E 16 P
C8/ER 25 x 070	2808.12530	42	–	70	–	–	E 25
C8/ER 32 x 070	2808.13230	50	–	70	–	–	E 32
C8/ER 32 x 230 XL	8888.16060	50	55	230	140	–	E 32
C8/ER 32 x 330 XL	8888.16160	50	55	330	240	–	E 32
C8/ER 40 x 070	2808.14030	63	–	70	–	–	E 40
C8/ER 50 x 080	2808.15040	78	–	80	–	–	E 50

*Balancing rings H: Ready to accept balancing rings

Included in delivery: toolholders come with Hi-Q®/ER clamping nut

All REGO-FIX CAPTO toolholders are available with chip hole on request



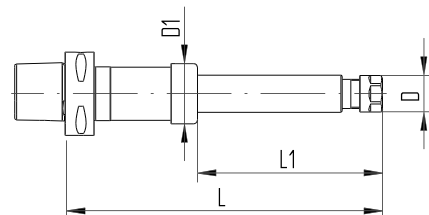
C/ER

Expert advice

We recommend tightening the clamping nuts with our TORCO-BLOCK or torque wrench. Get the best accuracy by respecting the suitable tightening forces.

For more information on TORCO-BLOCK, see page 262.

For tightening torque recommendations, please refer to page 293.



C/ER XL



Cylindrical shank toolholders CYL

CYL/CYLF/CYDF

Features and benefits

Runout TIR $\leq 3 \mu\text{m}$ for CYL/ERM and CYL/ERMX

Measured from inner taper to outer shank.

Runout TIR $\leq 5 \mu\text{m}$ for CYLF/ERM and CYLF/ERMX

Measured from inner taper to outer shank.

Runout TIR $\leq 5 \mu\text{m}$ for CYDF/ERM and CYDF/ERMX

Measured from inner taper to outer shank.

Surface finish max. Ra 0.25

Achieve high clamping force and high transferable torque.

Sizes

ER 8–ER 40
h6 tolerance on shanks.

Types

- // With or without clamping flat
- // Double ER holders

Accessories are not included in delivery

Expert advice

We recommend tightening the clamping nuts with our torque wrench.

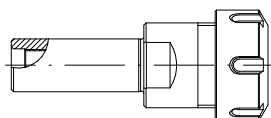
For tightening torque recommendations, please refer to page 293.



Available CYL toolholders and their key characteristics

Cylindrical REGO-FIX toolholders are designed for automatic turning machines and can also be utilized as extensions. We offer many different product types to fit your machining needs.

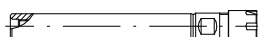
CYL/ER



CYL/ER The short versions are particularly used on turret lathes, where a short overhang is often required.

For technical dimensions, please refer to page 100.

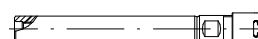
CYL/ERM



CYL/ERM This type is suited for Swiss automatic machines, machining centers and conventional machines. Can be used as extension.

For technical dimensions, please refer to page 102.

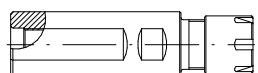
CYL/ERMX



CYL/ERMX This type is suited for Swiss automatic machines, machining centers and conventional machines. The slip-off proof mini clamping nut intRlox® prevents injuries caused by slipping off while tightening the nut. Can be used as extension.

For technical dimensions, please refer to page 102.

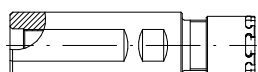
CYLF/ERM



CYLF/ERM The line of cylindrical toolholders with clamping flat is particularly designed for Swiss automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos. Cannot be used as extension.

For technical dimensions, please refer to page 104.

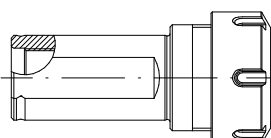
CYLF/ERMX



CYLF/ERMX The line of cylindrical toolholders with clamping flat is particularly designed for Swiss automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos. The slip-off proof mini clamping nut intRlox® prevents injuries caused by slipping off while tightening the nut. Cannot be used as extension.

For technical dimensions, please refer to page 104.

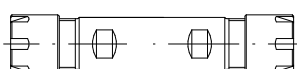
CYL/ER NC



CYL/ER NC These toolholders are particularly suitable on Swiss automatic CNC turning machines, but can also be used on other turning machines.

For technical dimensions, please refer to page 107.

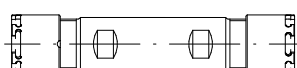
CYDF/ERM



CYDF/ERM The line of double toolholders with clamping flat has been designed for Swiss automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos and offers the possibility to hold two cutting tools on the same toolholder.

For technical dimensions, please refer to page 108.

CYDF/ERMX



CYDF/ERMX The line of double toolholders with clamping flat has been designed for Swiss Automatic CNC machines, e.g., Citizen, Manurhin, Star or Tornos, and offers the possibility to hold two cutting tools on the same toolholder. The slip-off proof mini clamping nut intRlox® prevents injuries caused by slipping off while tightening the nut.

For technical dimensions, please refer to page 108.

Type	Part no.	Dimensions [mm]				Accessory		
		D	D1 h6	L	L1	G1	G2	Wrench
CYL 1/2 [inch]								
CYL 1/2" x 070/ER 11	2613.11141	19	12.7	70	28.5	M 6	M 6	E 11 P
CYL 1/2" x 100/ER 16	2613.11661	28	12.7	100	36	M 6	M 6	E 16 P
CYL 1/2" x 100/ER 20	2613.12061	34	12.7	100	44.5	M 6	M 6	E 20 P
CYL 14 [mm]								
CYL 14 x 060/ER 16	2614.11630	28	14	60	36.5	M 6	M 6	E 16 P
CYL 16 [mm]								
CYL 16 x 060/ER 16	2616.11630	28	16	60	36.5	M 8 x 1	–	E 16 P
CYL 5/8 [inch]								
CYL 5/8" x 060/ER 16	2616.11631	28	15.875	60	36.5	M 8 x 1	–	E 16 P
CYL 5/8" x 100/ER 20	2616.12061	34	15.875	100	44.5	M 8 x 1	M 8 x 1	E 20 P
CYL 3/4 [inch]								
CYL 3/4" x 050/ER 16	2619.11621	28	19.05	50	30.5	M 12 x 1	–	E 16 P
CYL 3/4" x 100/ER 16	2619.11661	28	19.05	100	30.5	M 12 x 1	M 11 x 1	E 16 P
CYL 3/4" x 060/ER 20	2619.12031	34	19.05	60	36.5	M 12 x 1	–	E 20 P
CYL 3/4" x 050/ER 25	2619.12521	42	19.05	50	47	M 12 x 1	–	E 25
CYL 20 [mm]								
CYL 20 x 050/ER 16	2620.11620	28	20	50	30.5	M 12 x 1	–	E 16 P
CYL 20 x 100/ER 16	2620.11660	28	20	100	30.5	M 12 x 1	M 11 x 1	E 16 P
CYL 20 x 030/ER 20	2620.12010	34	20	30	36.5	M 12 x 1	–	E 20 P
CYL 20 x 060/ER 20	2620.12030	34	20	60	36.5	M 12 x 1	–	E 20 P
CYL 20 x 050/ER 25	2620.12520	42	20	50	47	M 12 x 1	–	E 25
CYL 20 x 100/ER 25	2620.12560	42	20	100	47	M 12 x 1	M 12 x 1	E 25
CYL 20 x 050/ER 32	2620.13220	50	20	50	54	M 12 x 1	–	E 32
CYL 20 x 100/ER 32	2620.13260	50	20	100	54	M 12 x 1	M 12 x 1	E 32
CYL 25 [mm]								
CYL 25 x 050/ER 25	2625.12520	42	25	50	47	M 18 x 1.5	–	E 25
CYL 25 x 100/ER 25	2625.12560	42	25	100	47	M 18 x 1.5	M 18 x 1.5	E 25
CYL 25 x 050/ER 32	2625.13220	50	25	50	54	M 18 x 1.5	–	E 32
CYL 25 x 050/ER 40	2625.14020	63	25	50	60	M 18 x 1.5	–	E 40

Included in delivery: toolholders come with Hi-Q®/ER clamping nut and back-up screw

Type	Part no.	Dimensions [mm]				G1	G2	Accessory
		D	D1 h6	L	L1			Wrench
CYL 1 [inch]								
CYL 1" x 100/ER 20	2625.12061	34	25.4	100	39.5	M 14 x 1	M 14 x 1	E 20 P
CYL 1" x 050/ER 25	2625.12521	42	25.4	50	47	M 18 x 1.5	–	E 25
CYL 1" x 100/ER 25	2625.12561	42	25.4	100	47	M 18 x 1.5	M 18 x 1.5	E 25
CYL 1" x 050/ER 32	2625.13221	50	25.4	50	53	M 18 x 1.5	–	E 32
CYL 1" x 050/ER 40	2625.14021	63	25.4	50	60	M 18 x 1.5	–	E 40

CYL 30 [mm]									
CYL 30 x 050/ER 25	2630.12520	42	30	50	42	M 18 x 1.5	—	E 25	

CYL 1 1/4 [inch]									
CYL 1 1/4" x 060/ER 32	2632.13231	50	31.75	60	53	M 22 x 1.5	—	E 32	

Included in delivery: toolholders come with Hi-Q®/ER clamping nut and back-up screw



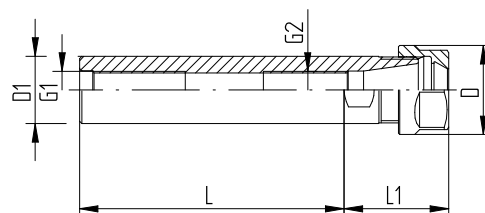
CYL/ER

Coolant adapters*

CGA M 12 x 1/1/8" NPT	7239.12181
CGA M 14 x 1/1/4" NPT	7239.14141
CGA M 18 x 1.5/1/4" NPT	7239.18141
CGA M 22 x 1.5/1/4" NPT	7239.22141

Converts back-up screw threads to coolant port for through coolant applications

*USA only



CYL/ER

CYL/ERM toolholders (mini clamping nut)

CYL

CYL/ERMX toolholders with intrRlox® (slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1				
CYL 6 [mm]									
CYL 6 x 045/ERM 11	2606.21120	16	6	45	26.5	–	–	–	E 11 M
CYL 6 x 045/ERMX 11	4606.21120	16	6	45	26.5	–	–	•	E 11 MX
CYL 7 [mm]									
CYL 7 x 045/ERM 11	2607.21120	16	7	45	26.5	–	–	–	E 11 M
CYL 7 x 045/ERMX 11	4607.21120	16	7	45	26.5	–	–	•	E 11 MX
CYL 8 [mm]									
CYL 8 x 080/ERM 8	2608.20850	12	8	80	26	M 5	–	–	E 8 M
CYL 8 x 080/ERMX 8	4608.20850	12	8	80	26	M 5	–	•	E 8 MX
CYL 8 x 056/ERM 11	2608.21130	16	8	56	26.5	M 5	–	–	E 11 M
CYL 8 x 056/ERMX 11	4608.21130	16	8	56	26.5	M 5	–	–	E 11 MX
CYL 3/8 [inch]									
CYL 3/8" x 070/ERM 8	2609.20841	12	9.525	70	23	M 5	M 5	–	E 8 M
CYL 3/8" x 070/ERMX 8	4609.20841	12	9.525	70	23	M 5	M 5	•	E 8 MX
CYL 10 [mm]									
CYL 10 x 060/ERM 16	2610.21630	22	10	60	38.5	M 5	–	–	E 16 M
CYL 10 x 060/ERMX 16	4610.21630	22	10	60	38.5	M 5	–	•	E 16 MX
CYL 12 [mm]									
CYL 12 x 080/ERM 8	2612.20850	12	12	80	17	M 5	–	–	E 8 M
CYL 12 x 080/ERMX 8	4612.20850	12	12	80	17	M 5	–	•	E 8 MX
CYL 12 x 080/ERM 16	2612.21650	22	12	80	38.5	M 5	–	–	E 16 M
CYL 12 x 080/ERMX 16	4612.21650	22	12	80	38.5	M 5	–	•	E 16 MX
CYL 1/2 [inch]									
CYL 1/2" x 140/ERM 11	2613.21191	16	12.7	140	29.5	M 6	M 6	–	E 11 M
CYL 1/2" x 140/ERMX 11	4613.21191	16	12.7	140	29.5	M 6	M 6	•	E 11 MX
CYL 1/2" x 140/ERM 16	2613.21691	22	12.7	140	37	M 6	M 6	–	E 16 M
CYL 1/2" x 140/ERMX 16	4613.21691	22	12.7	140	37	M 6	M 6	•	E 16 MX
CYL 16 [mm]									
CYL 16 x 150/ERM 11	2616.21190	16	16	150	21	M 8 x 1	M 8 x 1	–	E 11 M
CYL 16 x 150/ERMX 11	4616.21190	16	16	150	21	M 8 x 1	M 8 x 1	•	E 11 MX
CYL 16 x 100/ERM 20	2616.22060	28	16	100	42.5	M 8 x 1	–	–	E 20 M
CYL 16 x 100/ERMX 20	4616.22060	28	16	100	42.5	M 8 x 1	–	•	E 20 MX

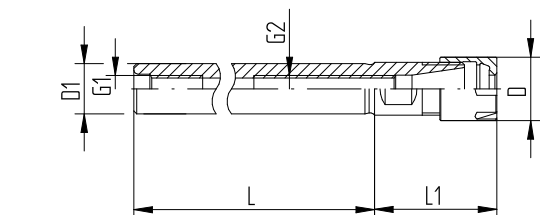
CYL/ERM toolholders (mini clamping nut)

CYL

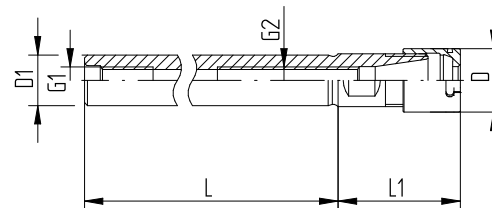
CYL/ERMX toolholders with intRlox® (slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1				
CYL 5/8 [inch]									
CYL 5/8" x 150/ERM 11	2616.21191	16	15.875	150	19.5	M 8 x 1	M 8 x 1	–	E 11 M
CYL 5/8" x 150/ERMX 11	4616.21191	16	15.875	150	19.5	M 8 x 1	M 8 x 1	•	E 11 MX
CYL 3/4 [inch]									
CYL 3/4" x 155/ERM 16	2619.21691	22	19.05	155	26.5	M 12 x 1	–	–	E 16 M
CYL 3/4" x 155/ERMX 16	4619.21691	22	19.05	155	26.5	M 12 x 1	–	•	E 16 MX
CYL 3/4" x 100/ERM 25	2619.22561	35	19.05	100	47	M 12 x 1	M 12 x 1	–	E 25 M
CYL 3/4" x 100/ERMX 25	4619.22561	35	19.05	100	47	M 12 x 1	M 12 x 1	•	E 25 MX
CYL 20 [mm]									
CYL 20 x 155/ERM 16	2620.21690	22	20	155	25.5	M 12 x 1	M 11 x 1	–	E 16 M
CYL 20 x 155/ERMX 16	4620.21690	22	20	155	25.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYL 25 [mm]									
CYL 25 x 155/ERM 20	2625.22090	28	25	155	27	M 14 x 1	M 14 x 1	–	E 20 M
CYL 25 x 155/ERMX 20	4625.22090	28	25	155	27	M 14 x 1	M 14 x 1	•	E 20 MX
CYL 1 [inch]									
CYL 1" x 155/ERM 20	2625.22091	28	25.4	155	27	M 14 x 1	M 14 x 1	–	E 20 M
CYL 1" x 155/ERMX 20	4625.22091	28	25.4	155	27	M 14 x 1	M 14 x 1	•	E 20 MX

Included in delivery: toolholders come with Hi-Q®/ERM or Hi-Q®/ERMX clamping nut and back-up screw



CYL/ERM



CYL/ERMX

CYLF/ERM toolholders (mini clamping nut)

CYLF

CYLF/ERMX toolholders with intrRlox® (slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1				
CYLF 12 [mm]									
CYLF 12 x 043/ERM 8	2612.20822	12	12	43	17	M 5	–	–	E 8 M
CYLF 12 x 043/ERMX 8	4612.20822	12	12	43	17	M 5	–	•	E 8 MX
CYLF 5/8 [inch]									
CYLF 5/8" x 043/ERM 8	2616.20811	12	15.875	43	15.5	M 5	M 5	–	E 8 M
CYLF 5/8" x 043/ERMX 8	4616.20811	12	15.875	43	15.5	M 5	M 5	•	E 8 MX
CYLF 16 [mm]									
CYLF 16 x 038/ERM 11	2616.21112	16	16	38	19.5	M 8 x 1	–	–	E 11 M
CYLF 16 x 038/ERMX 11	4616.21112	16	16	50	16	M 8 x 1	–	•	E 11 MX
CYLF 16 x 050/ERM 11	2616.21122	16	16	50	16	M 8 x 1	–	–	E 11 M
CYLF 16 x 050/ERMX 11	4616.21122	16	16	50	16	M 8 x 1	–	•	E 11 MX
CYFL 16 x 140/ERM 11	2616.21192	16	16	140	19.5	M 8 x 1	M 8 x 1	–	E 11 M
CYFL 16 x 140/ERMX 11	4616.21192	16	16	140	19.5	M 8 x 1	M 8 x 1	•	E 11 MX
CYLF 16 x 035/ERM 16	2616.21612	22	16	35	36	M 8 x 1	–	–	E 16 M
CYLF 16 x 035/ERMX 16	4616.21612	22	16	35	36	M 8 x 1	–	•	E 16 MX
CYLF 3/4 [inch]									
CYLF 3/4" x 115/ERM 11	2619.21173	16	19.05	115	19.5	M 8 x 1	M 8 x 1	–	E 11 M
CYLF 3/4" x 115/ERMX 11	4619.21173	16	19.05	115	19.5	M 8 x 1	M 8 x 1	•	E 11 MX
CYLF 3/4" x 038/ERM 16	2619.21613	22	19.05	38	27.5	M 12 x 1	–	–	E 16 M
CYLF 3/4" x 038/ERMX 16	4619.21613	22	19.05	38	27.5	M 12 x 1	–	•	E 16 MX
CYLF 3/4" x 050/ERM 16	2619.21623	22	19.05	50	25	M 12 x 1	–	–	E 16 M
CYLF 3/4" x 050/ERMX 16	4619.21623	22	19.05	50	25	M 12 x 1	–	•	E 16 MX
CYLF 3/4" x 070/ERM 16	2619.21643	22	19.05	70	29.5	M 12 x 1	–	–	E 16 M
CYLF 3/4" x 070/ERMX 16	4619.21643	22	19.05	70	29.5	M 12 x 1	–	•	E 16 MX
CYLF 3/4" x 120/ERM 16	2619.21683	22	19.05	120	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 3/4" x 120/ERMX 16	4619.21683	22	19.05	120	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 3/4" x 140/ERM 16	2619.21693	22	19.05	140	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 3/4" x 140/ERMX 16	4619.21693	22	19.05	140	27.5	M 12 x 1	M 11 x 1	•	E 16 MX

Included in delivery: toolholders come with Hi-Q®/ERM or Hi-Q®/ERMX clamping nut and back-up screw

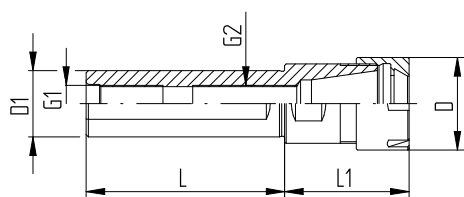
CYLF/ERM toolholders (mini clamping nut)

CYLF

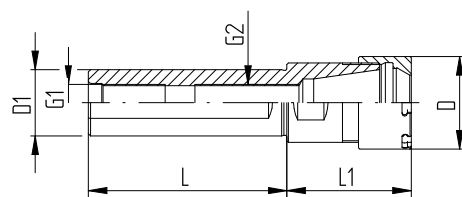
CYLF/ERMX toolholders with intrRlox® (slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1				
CYLF 20 [mm]									
CYLF 20 x 060/ERM 11	2620.21132	16	20	60	19.5	M 8 x 1	–	–	E 11 M
CYLF 20 x 060/ERMX 11	4620.21132	16	20	60	19.5	M 8 x 1	–	•	E 11 MX
CYLF 20 x 038/ERM 16	2620.21612	22	20	38	26.5	M 12 x 1	–	–	E 16 M
CYLF 20 x 038/ERMX 16	4620.21612	22	20	38	26.5	M 12 x 1	–	•	E 16 MX
CYLF 20 x 050/ERM 16	2620.21622	22	20	50	27.5	M 12 x 1	–	–	E 16 M
CYLF 20 x 050/ERMX 16	4620.21622	22	20	50	27.5	M 12 x 1	–	•	E 16 MX
CYLF 20 x 070/ERM 16	2620.21642	22	20	70	27.5	M 12 x 1	–	–	E 16 M
CYLF 20 x 070/ERMX 16	4620.21642	22	20	70	27.5	M 12 x 1	–	•	E 16 MX
CYLF 20 x 120/ERM 16	2620.21682	22	20	120	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 20 x 120/ERMX 16	4620.21682	22	20	120	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 20 x 140/ERM 16	2620.21692	22	20	140	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 20 x 140/ERMX 16	4620.21692	22	20	140	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 22 [mm]									
CYLF 22 x 038/ERM 16	2622.21612	22	22	38	27.5	M 12 x 1	–	–	E 16 M
CYLF 22 x 038/ERMX 16	4622.21612	22	22	38	27.5	M 12 x 1	–	–	E 16 MX
CYLF 22 x 070/ERM 16	2622.21642	22	22	70	27.5	M 12 x 1	–	–	E 16 M
CYLF 22 x 070/ERMX 16	4622.21642	22	22	70	27.5	M 12 x 1	–	–	E 16 MX
CYLF 22 x 100/ERM 16	2622.21662	22	22	100	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 22 x 100/ERMX 16	4622.21662	22	22	100	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 22 x 080/ERM 20	2622.22052	28	22	80	39	M 12 x 1	M 12 x 1	–	E 20 M
CYLF 22 x 080/ERMX 20	4622.22052	28	22	80	39	M 12 x 1	M 12 x 1	•	E 20 MX
CYLF 22 x 070/ERM 25	2622.22542	35	22	70	47	M 12 x 1	M 12 x 1	–	E 25 M

Included in delivery: toolholders come with Hi-Q®/ERM or Hi-Q®/ERMX clamping nut and sealing back-up screw



CYLF/ERM



CYLF/ERMX

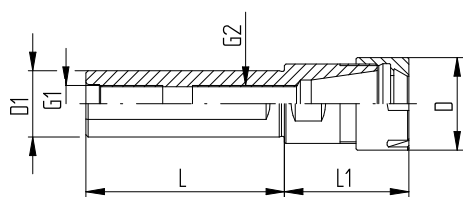
CYLF/ERM toolholders (mini clamping nut)

CYLF

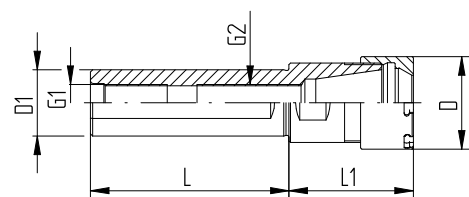
CYLF/ERMX toolholders with intrRlox® (slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]				G1	G2	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1				
CYLF 25 [mm]									
CYLF 25 x 065/ERM 16	2625.21642	22	25	65	27.5	M 12 x 1	–	–	E 16 M
CYLF 25 x 065/ERMX 16	4625.21642	22	25	65	27.5	M 12 x 1	–	•	E 16 MX
CYLF 25 x 100/ERM 20	2625.22062	28	25	100	28	M 14 x 1	M 14 x 1	–	E 20 M
CYLF 25 x 100/ERMX 20	4625.22062	28	25	100	28	M 14 x 1	M 14 x 1	•	E 20 MX
CYLF 25 x 154/ERM 20	2625.22002	28	25	154	28	M 14 x 1	M 14 x 1	–	E 20 M
CYLF 25 x 154/ERMX 20	4625.22002	28	25	154	28	M 14 x 1	M 14 x 1	•	E 20 MX
CYLF 25 x 075/ERM 25	2625.22552	35	25	75	47	M 14 x 1	M 14 x 1	–	E 25 M
CYLF 25 x 075/ERMX 25	4625.22552	35	25	75	47	M 14 x 1	M 14 x 1	•	E 25 MX
CYLF 25 x 145/ERM 25	2625.22592	35	25	145	36	M 14 x 1	M 14 x 1	–	E 25 M
CYLF 25 x 145/ERMX 25	4625.22592	35	25	145	36	M 14 x 1	M 14 x 1	•	E 25 MX
CYLF 1 [inch]									
CYLF 1" x 033/ERM 16	2625.21613	22	25.4	33	28	M 12 x 1	–	–	E 16 M
CYLF 1" x 033/ERMX 16	4625.21613	22	25.4	33	28	M 12 x 1	–	•	E 16 MX
CYLF 1" x 065/ERM 16	2625.21643	22	25.4	65	27.5	M 12 x 1	–	–	E 16 M
CYLF 1" x 065/ERMX 16	4625.21643	22	25.4	65	27.5	M 12 x 1	–	•	E 16 MX
CYLF 1" x 075/ERM 16	2625.21653	22	25.4	75	27.5	M 12 x 1	–	–	E 16 M
CYLF 1" x 075/ERMX 16	4625.21653	22	25.4	75	27.5	M 12 x 1	–	•	E 16 MX
CYLF 1" x 100/ERM 16	2625.21663	22	25.4	100	27.5	M 12 x 1	M 11 x 1	–	E 16 M
CYLF 1" x 100/ERMX 16	4625.21663	22	25.4	100	27.5	M 12 x 1	M 11 x 1	•	E 16 MX
CYLF 1" x 100/ERM 20	2625.22063	28	25.4	100	27.5	M 14 x 1	M 14 x 1	–	E 20 M
CYLF 1" x 100/ERMX 20	4625.22063	28	25.4	100	27.5	M 14 x 1	M 14 x 1	•	E 20 MX
CYLF 1" x 140/ERM 20	2625.22093	28	25.4	140	27.5	M 14 x 1	M 14 x 1	–	E 20 M
CYLF 1" x 140/ERMX 20	4625.22093	28	25.4	140	27.5	M 14 x 1	M 14 x 1	•	E 20 MX
CYLF 32 [mm]									
CYLF 32 x 070/ERM 25	2632.22542	35	32	70	30	M 18 x 1.5	–	–	E 25 M
CYLF 32 x 070/ERMX 25	4632.22542	35	32	70	30	M 18 x 1.5	–	•	E 25 MX

Included in delivery: toolholders come with Hi-Q®/ERM or Hi-Q®/ERMX clamping nut and back-up screw



CYLF/ERM



CYLF/ERMX

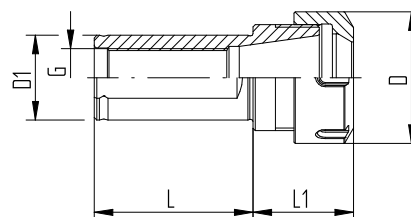
Type	Part no.	Dimensions [mm]				Accessory	
		D	D1 h6	L	L1	G	Wrench
CYL 1 1/4 [inch]*							
CYL 1 1/4" x 060/ER NC 25	2632.12533	42	31.75	60	32	M 18 x 1.5	E 25
CYL 1 1/4" x 060/ER NC 32	2632.13233	50	31.75	60	38	M 22 x 1.5	E 32
CYL 32 [mm]							
CYL 32 x 060/ER NC 25	2632.12532	42	32	60	32	M 18 x 1.5	E 25
CYL 32 x 060/ER NC 32	2632.13232	50	32	60	38	M 22 x 1.5	E 32
CYL 1 1/2 [inch]*							
CYL 1 1/2" x 080/ER NC 32	2638.13253	50	38.1	80	33	M 22 x 1.5	E 32
CYL 1 1/2" x 075/ER NC 40	2638.14053	63	38.1	75	55	M 22 x 1.5	E 40
CYL 40 [mm]							
CYL 40 x 080/ER NC 32	2640.13252	50	40	80	39	M 22 x 1.5	E 32
CYL 40 x 075/ER NC 40	2640.14052	63	40	75	55	M 22 x 1.5	E 40

Included in delivery: toolholders come with Hi-Q®/ER clamping nut and back-up screw

*USA only



CYL/ER NC



CYL/ER NC

CYDF/ERM toolholders (mini clamping nut)

CYDF

CYDF/ERMX toolholders with intrRlox® (slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]					Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1	G		
CYDF 12 [mm]								
CYDF 12 x 015/ERM 8	2612.20804	12	12	15	46	–	–	E 8 M
CYDF 12 x 015/ERMX 8	4612.20804	12	12	15	46	–	•	E 8 MX
CYDF 12 x 025/ERM 8	2612.20814	12	12	25	56	–	–	E 8 M
CYDF 12 x 025/ERMX 8	4612.20814	12	12	25	56	–	•	E 8 MX
CYDF 5/8 [inch]								
CYDF 5/8" x 015/ERM 8	2616.20805	12	15.875	15	46	–	–	E 8 M
CYDF 5/8" x 025/ERM 8	2616.20895	12	15.875	25	56	–	–	E 8 M
CYDF 5/8" x 025/ERMX 8	4616.20895	12	15.875	25	56	–	•	E 8 MX
CYDF 16 [mm]								
CYDF 16 x 040/ERM 11	2616.21114	16	16	40	79	–	–	E 11 M
CYDF 16 x 040/ERMX 11	4616.21114	16	16	40	79	–	•	E 11 MX
CYDF 16 x 050/ERM 11	2616.21124	16	16	50	89	–	–	E 11 M
CYDF 16 x 050/ERMX 11	4616.21124	16	16	50	89	–	•	E 11 MX
CYDF 3/4 [inch]								
CYDF 3/4" x 040/ERM 11	2619.21125	16	19.05	40	79	–	–	E 11 M
CYDF 3/4" x 040/ERMX 11	4619.21125	16	19.05	40	79	–	•	E 11 MX
CYDF 3/4" x 070/ERM 11	2619.21145	16	19.05	70	109	–	–	E 11 M
CYDF 3/4" x 070/ERMX 11	4619.21145	16	19.05	70	109	–	•	E 11 MX
CYDF 3/4" x 090/ERM 11	2619.21165	16	19.05	90	129	–	–	E 11 M
CYDF 3/4" x 090/ERMX 11	4619.21165	16	19.05	90	129	–	•	E 11 MX
CYDF 3/4" x 055/ERM 16	2619.21635	22	19.05	55	107	–	–	E 16 M
CYDF 3/4" x 055/ERMX 16	4619.21635	22	19.05	55	107	–	•	E 16 MX
CYDF 20 [mm]								
CYDF 20 x 030/ERM 11	2620.21114	16	20	30	69	–	–	E 11 M
CYDF 20 x 030/ERMX 11	4620.21114	16	20	30	69	–	•	E 11 MX
CYDF 20 x 050/ERM 11	2620.21124	16	20	50	89	–	–	E 11 M
CYDF 20 x 050/ERMX 11	4620.21124	16	20	50	89	–	•	E 11 MX
CYDF 20 x 055/ERM 16	2620.21634	22	20	55	107	–	–	E 16 M
CYDF 20 x 055/ERMX 16	4620.21634	22	20	55	107	–	•	E 16 MX

Included in delivery: toolholders come with two Hi-Q®/ERM or Hi-Q®/ERMX clamping nuts and back-up screw

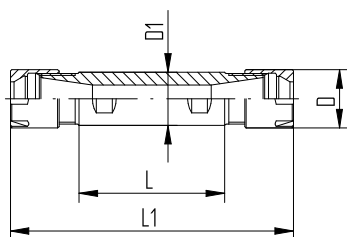
CYDF/ERM toolholders (mini clamping nut)

CYDF

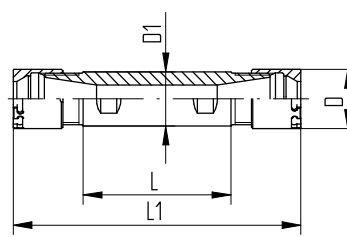
CYDF/ERMX toolholders with intrRlox® (slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]				G	Slip-off proof	Accessory Wrench
		D	D1 h6	L	L1			
CYDF 22 [mm]								
CYDF 22 x 150/ERM 11	2622.21194	16	22	150	189	–	–	E 11 M
CYDF 22 x 040/ERM 16	2622.21624	22	22	40	80	–	–	E 16 M
CYDF 22 x 055/ERM 16	2622.21634	22	22	55	110	–	–	E 16 M
CYDF 22 x 055/ERMX 16	4622.21634	22	22	55	110	–	•	E 16 MX
CYDF 22 x 075/ERM 16	2622.21654	22	22	75	130	–	–	E 16 M
CYDF 22 x 075/ERMX 16	4622.21654	22	22	75	130	–	•	E 16 MX
CYDF 25 [mm]								
CYDF 25 x 062/ERM 16	2625.21634	22	25	62	117	–	–	E 16 M
CYDF 25 x 062/ERMX 16	4625.21634	22	25	62	117	–	•	E 16 MX
CYDF 1 [inch]								
CYDF 1" x 030/ERM 16	2625.21615	22	25.4	30	86	–	–	E 16 M
CYDF 1" x 030/ERMX 16	4625.21615	22	25.4	30	86	–	•	E 16 MX
CYDF 1" x 062/ERM 16	2625.21635	22	25.4	62	117	–	–	E 16 M
CYDF 1" x 062/ERMX 16	4625.21635	22	25.4	62	117	–	•	E 16 MX
CYDF 32 [mm]								
CYDF 32 x 055/ERM 20	2632.22034	28	32	55	110	–	–	E 20 M
CYDF 32 x 055/ERMX 20	4632.22034	28	32	55	110	–	•	E 20 MX
CYDF 32 x 075/ERM 20	2632.22054	28	32	75	130	–	–	E 20 M
CYDF 32 x 075/ERMX 20	4632.22054	28	32	75	130	–	•	E 20 MX

Included in delivery: toolholders come with two Hi-Q®/ERM or Hi-Q®/ERMx clamping nuts and back-up screw



CYDF/ERM



CYDF/ERMx

Morse taper toolholders MK



Applications Morse taper toolholders are designed for drawbar thread application. They can be used on milling or combined drilling-milling machines as well as on boring machines. For drilling machines we supply the corresponding tangs (ATL) on request.

Special applications When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend the use of our friction-bearing clamping nuts Hi-Q®/ERB and Hi-Q®/ERBC.

Matched tooling system for best fit For highest precision and best results the whole system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

For the influence of runout on tool life see the graph page 270.

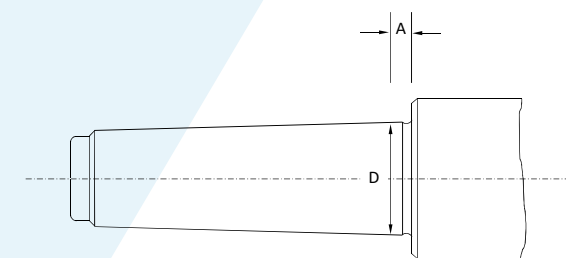
Accessories are not included in delivery.

Expert advice

We recommend tightening the clamping nuts with our torque wrench.

For tightening torque recommendations, please refer to page 293.

Type	Dimensions [mm]	
	D	A
MK		
MK 1	12.06	3.5
MK 2	17.78	5.0
MK 3	23.82	5.0
MK 4	31.26	6.5
MK 5	44.39	6.5



MK 1 – 5

Morse taper toolholders MK

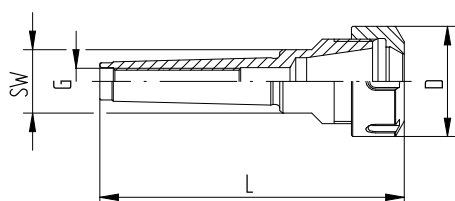
Tangs ATL

MK

DIN 228-A

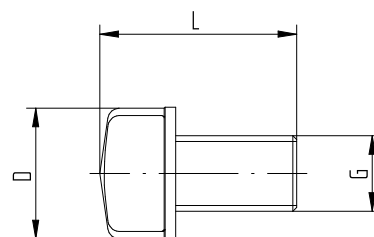
Type	Part no.	Dimensions [mm]		G	SW	Accessory
		D	L			Wrench
MK 1						
MK 1/ER 16 x 041	2701.11600	28	93.5	M 6	17	E 16 P
MK 2						
MK 2/ER 20 x 049	2702.12000	34	111.5	M 10	22	E 20 P
MK 2/ER 25 x 052	2702.12500	42	115	M 10	27	E 25
MK 2/ER 32 x 060	2702.13200	50	123	M 10	32	E 32
MK 3						
MK 3/ER 25 x 052	2703.12500	42	132	M 12	27	E 25
MK 3/ER 32 x 070	2703.13200	50	150	M 12	32	E 32
MK 4						
MK 4/ER 32 x 060	2704.13200	50	161.5	M 16	32	E 32
MK 4/ER 40 x 082	2704.14000	63	183	M 16	41	E 40
MK 5						
MK 5/ER 40 x 064	2705.14000	63	192	M 20	41	E 40
MK 5/ER 50 x 086	2705.15900	78	214	M 20	50	E 50

Included in delivery: toolholders come with Hi-Q® / ER clamping nut and back-up screw



MK/ER

Type	Part no.	G	Dimensions [mm]	
			D	L
Tangs ATL				
ATL 6/MK 1	7221.01000	M 6	8.5	21.5
ATL 10/MK 2	7221.02000	M 10	13.5	30.5
ATL 12/MK 3	7221.03000	M 12	18.5	35
ATL 16/MK 4	7221.04000	M 16	24.5	41
ATL 20/MK 5	7221.05000	M 20	35	52



ATL/MK

Automotive shank toolholders SH



Applications Automotive shank toolholders with trapezoidal thread are supplied with a setting nut. With this type of toolholder, ER, ER-GB and PCM ET1 collets can be used.

Special applications A quick-change setting nut according to system BILZ is available as an option. This option must be ordered separately. When extra high clamping force is needed, e.g., when tapping with ER-GB, we recommend the use of our friction-bearing clamping nuts Hi-Q®/ERB and Hi-Q®/ERBC.

Matched tooling system for best fit For highest precision and best results the whole system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

For the influence of runout on tool life see the graph on page 270.

Accessories are not included in delivery.

Expert advice

We recommend tightening the clamping nuts with our torque wrench.

For tightening torque recommendations, please refer to page 293.

Automotive shank toolholders SH

SH

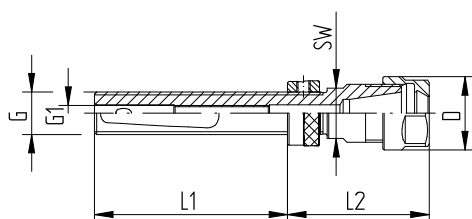
DIN 6327-C

Type	Part no.	Dimensions [mm]			G	G1	SW	Accessory
		D	L1	L2				Wrench
SH 12								
SH 12 x 050/ER 11	2612.11104	19	50	46.6	Tr 12 x 1.5	M 5	12	E 11 P
SH 16								
SH 16 x 073/ER 16	2616.11604	28	73	53.5	Tr 16 x 1.5	M 6	19	E 16 P
SH 20								
SH 20 x 076/ER 20	2620.12004	34	76	59.5	Tr 20 x 2	M 8	22	E 20 P
SH 28								
SH 28 x 083/ER 25	2628.12504	42	83	57	Tr 28 x 2	M 18 x 2	28	E 25

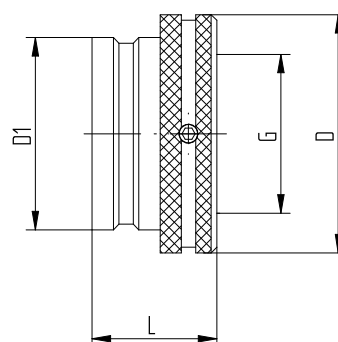
Included in delivery: toolholders come with Hi-Q®/ER clamping nut, back-up screw, setting nut and Woodruff-key

Save time with our quick-change setting nut.

Type	Part no.	Dimensions [mm]			G
		D	D1	L	
Quick-change setting nut (System BILZ)					
SSM 12	7238.12000	22	16.4	18	Tr 12 x 1.5
SSM 16	7238.16000	26	19.9	18.5	Tr 16 x 1.5
SSM 20	7238.20000	33	25.4	20	Tr 20 x 2
SSM 28	7238.28000	42	33.9	22	Tr 28 x 2



SH/ER



SSM

ISO 20 toolholders



Applications The REGO-FIX ISO 20 toolholders are designed to work with the HAAS Office Mill. To utilize the full potential of your machine, use the REGO-FIX brand of holders and collets to see the difference quality can achieve in your machining operations.

Balancing

// 100% balanced to 50,000 rpm.

Matched tooling system for best fit For highest precision and best results the whole system counts. Therefore REGO-FIX components are carefully matched for optimum fit and accuracy. This guarantees the best runout and balance.

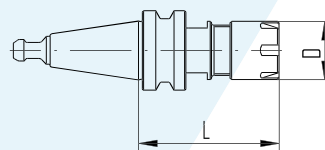
For the influence of runout on tool life see the graph on page 270.

Accessories are not included in delivery.

Expert advice

We recommend tightening the clamping nuts with our torque wrench.

For tightening torque recommendations, please refer to page 293.



ISO / ERM HAAS

Type	Part no.	Dimensions [mm]		Accessory
		D	L	Wrench
ISO 20				
ISO 20/ERM 11 x 048 HAAS	2420.11116	16	48	E 11 M
ISO 20/ERM 16 x 053 HAAS	2420.11616	22	53	E 16 M
ISO 20/ERM 20 x 055 HAAS	2420.12016	28	55	E 20 M

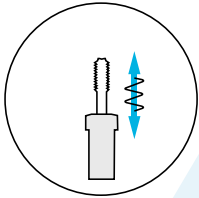
Included in delivery: ISO toolholder comes with Hi-Q®/ERM mini clamping nut and integral pull stud



ER thread-cutting solutions

CYL SSY/HSK-A SSY Softsynchro® tapping holder

- // With **minimum length compensation**
- // Eliminates small synchronization errors of machines (Rigid Tapping)

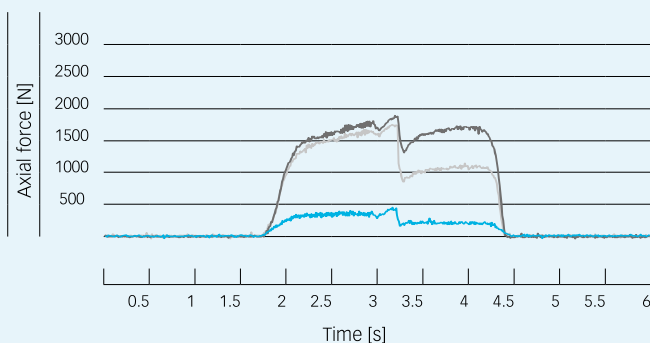


Applications

- // Machines for direct thread cutting
- // For all tapping tools with h9 shanks
- // The turning movement of the spindles can be offset with the feed axis and thus synchronized
- // Synchronization errors are created by the dynamics of the spindle and linear drives. The tapping holder is equipped with the minimum length compensation and compensates the synchronization errors
- // Guides coolant with up to 50 bar of pressure to the tap, without compromising length compensation
- // Depending on the application, the service life for the customer can be increased by up to 150%

Comparative axial force testing

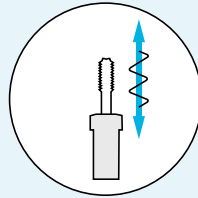
Occurring axial forces with thread forms M10 in St37. Speed 500 rpm
Source: In-house testing



Summary The axial forces increase with increasing speed. With a rigid toolholder, the forces occurring when forming threads are considerably higher than with the Softsynchro® tapping holder. This allows for the optimum use of the synchronous spindle with the best possible service life and thread surface quality.

CYL GSF tapping holder

- // With **length compensation**
- // For machines without a tapping option

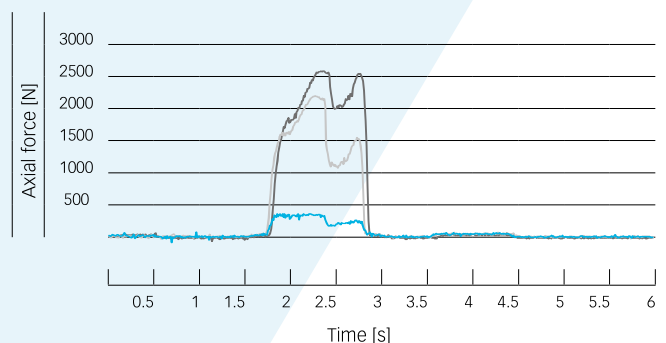


Applications

- // Used on machines in which the feed movement is not synchronized with the thread pitch during processing
- // Ensures the compensation of differences between the thread pitch and spindle feed
- // Features a pressure-point mechanism
- // Safe tap cutting
- // Uniform, reproducible thread depths
- // Guides coolant with up to 50 bar of pressure to the tap, without compromising length compensation
- // Universal use thanks to its compact design and low gauge length

Comparative axial force testing

Occurring axial forces with thread forms M10 in St37. Speed 2.000 rpm
Source: In-house testing



- REGO-FIX Softsynchro® tapping holders
- Competitor synchronous toolholder
- Rigid synchronous toolholder

ER tapping holders

HSK-A SSY

69893-A

ISO 12164

CYL SSY

DIN 1835 B+E

CYL GSF

DIN 1835 B+E

Type	Part no.	Dimensions [mm]		Compression	Tension	SW	Accessory
		D	L	[mm]	[mm]		Wrench
HSK-A 63 SSY							
HSK-A 63 SSY / ERC 20	2563.62000	34	95.5	0.5	0.5	19	E 20 P
HSK-A 63 SSY / ERC 32	2563.63200	50	108.8	0.5	0.5	32	E 32

Included in delivery: Tapping holder comes with Hi-Q® / ERC clamping nut

Type	Part no.	Dimensions [mm]				Compression	Tension	SW	Accessory
		D	D1	L	L1	[mm]	[mm]		Wrench
CYL 25 SSY									
CYL 25 SSY/ERC 20	2625.62000	34	25	73	57	0.5	0.5	19	E 20 P
CYL 25 SSY/ERC 32	2625.63200	50	25	87.5	57	0.5	0.5	32	E 32

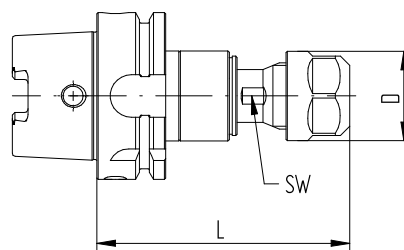
Included in delivery: Tapping holder comes with Hi-Q® / ERC clamping nut

Type	Part no.	Dimensions [mm]				Compression	Tension	SW	Accessory
		D	D1	L	L1	[mm]	[mm]		Wrench
CYL 25 GSF									
CYL 25 GSF / ERMC 20	2625.62001	28	25	85	57	5	7.5	28	E 20 M
CYL 25 GSF / ERC 32	2625.63201	50	25	115	57	7	10	34	E 32

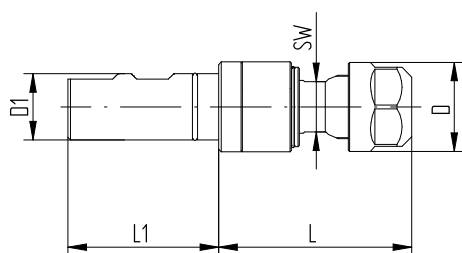
Included in delivery: Tapping holder comes with Hi-Q® / ERC or Hi-Q® / ERMC clamping nut



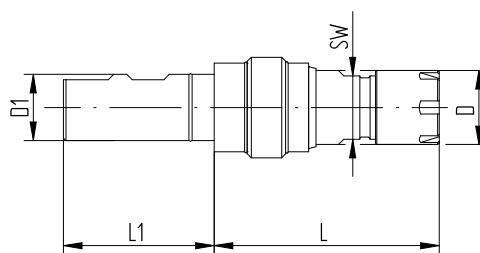
HSK-A SSY / CYL SSY / CYL GSF



HSK-A 63 SSY / ERC



CYL 25 SSY / ERC



CYL 25 GSF

ER floating chucks

When using reamers on lathes it is often necessary to compensate for axis error between the chuck and the bore to be machined. This error can be corrected by using a self-centering floating chuck.

PH/PHC/PHC-C/MPH

Features and benefits

Adjustable floating resistance

Continuously adjustable between auto-centering and free-floating. No restriction of the floating movement.

Adjustment for tool weight

Optimal setup by adjustment of floating resistance is possible.

Vertical and horizontal application

Adjustable self-centering keeps the tool at the center of the floating chuck, even in the horizontal position. Prevents chatter marks and extends tool life.

Combined ball- and friction-bearing

Combined ball and friction-bearing for easy floating:

- // Ball bearing for smooth reaming at low load applications
- // Friction-bearing to withstand high pressures at high load applications

Double sealing against dirt

Prevents coolant and chips from entering the floating chuck.

Excellent bore quality

Only parallel floatation of tool possible.

Floating chuck PH/ER

Features REGO-FIX floating chucks are excellent tools for reaming and tapping:

- // They are specially designed so the tool is self-centering in a vertical and horizontal position
- // The self-centering feature allows very precise positioning of the reaming or tapping tool. This is especially important in horizontal applications, where on ordinary floating chucks the weight of the tool tends to dislocate the tool from the rotational axis
- // The float is always parallel to the rotational axis and the rotation is both clockwise and counter clockwise

Floating chuck PHC/ER for coolant through tools

Features Floating chucks PHC/ER for coolant through tools are especially designed for internal cooling and have the same advantages as the PH/ER floating chucks.

Floating chuck PHC-C/ER REGO-FIX CAPTO

Features These REGO-FIX CAPTO floating chucks are manufactured with polygon interface – licensed by Sandvik Coromant.

Floating chuck MPH/ERMX for tight spaces

Application REGO-FIX MPH/ERMX floating chucks are an efficient solution for tight space applications.

MPHC/ERMXC for tight spaces with internal cooling

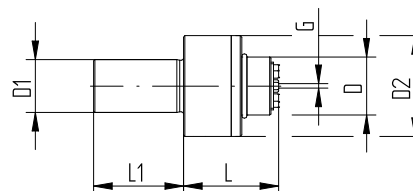
Application The MPHC floating chuck is the mini version with internal cooling, common with modern reaming applications.

PH floating chucks for non coolant through tools

PH

Type	Part no.	Dimensions [mm]					G	Accessory
		D	D1 h6	D2	L	L1		Wrench
PH 5/8 [inch]								
PH 5/8" /ER 11	2616.91102	22	15.88	38	36	34	0.8	E 11 AX
PH 16 [mm]								
PH 16/ER 11	2616.91100	22	16	38	36	34	0.8	E 11 AX
PH 3/4 [inch]								
PH 3/4" /ER 11	2619.91102	22	19.05	38	36	34	0.8	E 11 AX
PH 20 [mm]								
PH 20/ER 11	2620.91100	22	20	38	36	34	0.8	E 11 AX
PH 22 [mm]								
PH 22/ER 11	2622.91100	22	22	38	36	34	0.8	E 11 AX

Included in delivery: Floating holder comes with Hi-Q®/ER clamping nut and wrench



PH/ER

PHC floating chucks for coolant through tools

PHC

Type	Part no.	Dimensions [mm]					Accessory	
		D	D1 h6	D2	L	L1	G	Wrench
PHC 5/8 [inch]								
PHC 5/8" /ER 20	2616.92004	33	15.88	56	53.5	38	1	E 20 AX
PHC 16								
PHC 16/ER 20	2616.92003	33	16	56	53.5	38	1	E 20 AX
PHC 3/4 [inch]								
PHC 3/4" /ER 20	2619.92004	33	19.05	56	53.5	38	1	E 20 AX
PHC 3/4" /ER 32	2619.93204	46	19.05	70	64.5	46	1.5	E 32 AX
PHC 20 [mm]								
PHC 20/ER 20	2620.92003	33	20	56	53.5	38	1	E 20 AX
PHC 20/ER 32	2620.93203	46	20	70	64.5	46	1.5	E 32 AX
PHC 22 [mm]								
PHC 22/ER 20	2622.92003	33	22	56	53.5	38	1	E 20 AX
PHC 22/ER 32	2622.93203	46	22	70	64.5	46	1.5	E 32 AX
PHC 25 [mm]								
PHC 25/ER 20	2625.92003	33	25	56	53.5	38	1	E 20 AX
PHC 25/ER 32	2625.93203	46	25	70	64.5	46	1.5	E 32 AX
PHC 1 [inch]								
PHC 1" /ER 20	2625.92004	33	25.4	56	53.5	38	1	E 20 AX
PHC 1" /ER 32	2625.93204	46	25.4	70	64.5	46	1.5	E 32 AX
PHC 1 1/4 [inch]								
PHC 1 1/4" /ER 32	2632.93204	46	31.75	70	64.5	46	1.5	E 32 AX
PHC 32 [mm]								
PHC 32/ER 32	2632.93203	46	32	70	64.5	46	1.5	E 32 AX
PHC 1 3/4 [inch]								
PHC 1 3/4" /ER 32	2644.93204	46	44.45	70	64.5	46	1.5	E 32 AX

Included in delivery: Floating holder comes with Hi-Q®/ERAX clamping nut, wrench and adjusting key

Expert advice

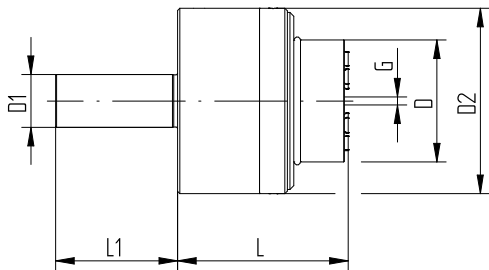
When using coolant through tools please order Hi-Q®/ERAXC clamping nuts and the corresponding sealing disks.

PHC floating chucks for coolant through tools with REGO-FIX CAPTO interface

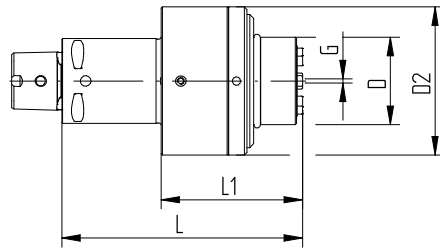
PHC-C

Type	Part no.	Dimensions [mm]					Accessory
		D	D2	L	L1	G	Wrench
PHC-C3							
PHC-C3/ER 20	2803.92003	33	56	91	53.5	0.8	E 20 AX
PHC-C4							
PHC-C4/ER 20	2804.92003	33	56	91	56.5	0.8	E 20 AX
PHC-C4/ER 32	2804.93203	46	70	100	64	0.8	E 32 AX

Included in delivery: Floating holder comes with Hi-Q®/ERAX clamping nut and wrench



PHC/ER



PHC-C/ER

Certified REGO-FIX CAPTO – licensed by Sandvik Coromant – is manufactured at REGO-FIX Switzerland under license according to CAPTO specifications.

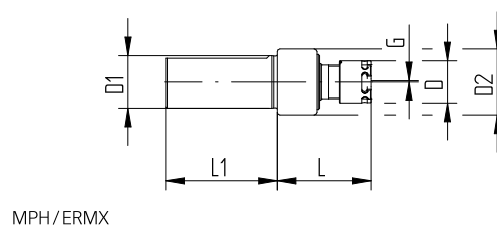
MPH mini floating chucks with intrRlox®

MPH

(slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]					Accessory	
		D	D1 h6	D2	L	L1	G	Wrench
MPH 8 [mm]								
MPH 8/ERMX 11	4608.91107	16	8	25	35.5	42	0.5	E 11 MX
MPH 10 [mm]								
MPH 10/ERMX 11	4610.91107	16	10	25	35.5	42	0.5	E 11 MX
MPH 16 [mm]								
MPH 16/ERMX 11	4616.91107	16	16	25	35.5	42	0.5	E 11 MX
MPH 3/4 [inch]								
MPH 3/4" / ERMX 11	4619.91108	16	19.05	25	35.5	70	0.5	E 11 MX
MPH 20 [mm]								
MPH 20/ERMX 11	4620.91107	16	20	25	35.5	42	0.5	E 11 MX
MPH 22 [mm]								
MPH 22/ERMX 11	4622.91107	16	22	25	35.5	42	0.5	E 11 MX
MPH 25 [mm]								
MPH 25/ERMX 11	4625.91107	16	25	25	35.5	42	0.5	E 11 MX
MPH 1 [inch]								
MPH 1" / ERMX 11	4625.91108	16	25.4	25	35.5	42	0.5	E 11 MX

Included in delivery: Floating holder comes with Hi-Q®/ERMX clamping nut and wrench



MPHC mini floating chucks with intrRlox®

MPHC

(slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]					G	Accessory
		D	D1 h6	D2	L	L1		Wrench
MPHC 8 [mm]								
MPHC 8/ERMX 11	4608.91105	16	8	25	35.5	42	0.5	E 11 MX
MPHC 10 [mm]								
MPHC 10/ERMX 11	4610.91105	16	10	25	35.5	42	0.5	E 11 MX
MPHC 10/ERMX 16	4610.91605	22	10	31	48.7	42	0.5	E 16 MX
MPHC 16 [mm]								
MPHC 16/ERMX 16	4616.91605	22	16	31	48.7	42	0.5	E 16 MX
MPHC 3/4 [inch]								
MPHC 3/4" /ERMX 11	4619.91106	16	19.05	25	35.5	42	0.5	E 11 MX
MPHC 3/4" /ERMX 16	4619.91606	22	19.05	31	48.7	42	0.5	E 16 MX
MPHC 20 [mm]								
MPHC 20/ERMX 11	4620.91105	16	20	25	35.5	42	0.5	E 11 MX
MPHC 20/ERMX 16	4620.91605	22	20	31	48.7	42	0.5	E 16 MX
MPHC 22 [mm]								
MPHC 22/ERMX 16	4622.91605	22	22	31	48.7	42	0.5	E 16 MX
MPHC 25 [mm]								
MPHC 25/ERMX 16	4625.91605	22	25	31	48.7	42	0.5	E 16 MX
MPHC 1 [inch]								
MPH 1" /ERMX 16	4625.91606	22	25.4	31	48.7	42	0.5	E 16 MX

Type	Part no.	D	SW	D2	L	L1	G	Wrench
MPHC ER 11 ADP								
MPHC ER 11/ERMX 11	7168.11110	16	19	25	35.5	24	0.5	E 11 MX
MPHC ERM 11/ERMX 11	7169.11110	16	19	25	35.5	24	0.5	E 11 MX

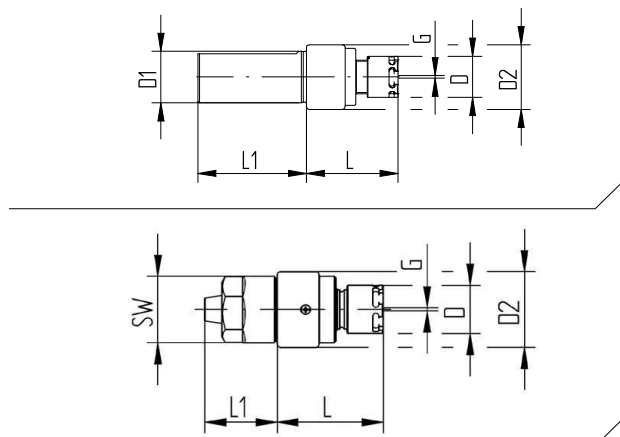
Included in delivery: Mini holder, Hi-Q® / ERMX nut and wrench



MPHC/ERMX



MPHC ER 11 ADP



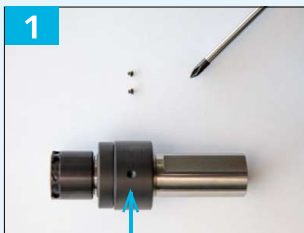
Maintenance instructions for floating chucks

There are two main versions of floating chucks

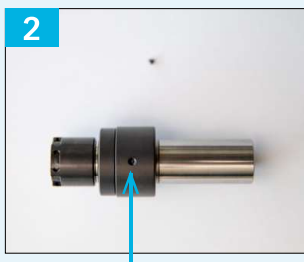
MPHC



With 2 screws on the side of the flange.



Take both screws out with a fitting screwdriver (PH0). Blow out with dry pressurised air.



Put one screw back. Fill with 10 drops of thin oil.



Put the second screw back.

MPH



With one screw in the cylindrical shaft on the back of the floating chuck.



Take the screw in the cylinder out with a fitting screwdriver (flat-head1). Blow out with dry pressurised air. Fill with 10 drops of thin oil.



Put the screw back in the back (do not forget the spring). Re-adjust the spring tension in the cylinder shaft.



Collet reductions

ER/ERM ERM/ERM ER/ERMX ERMX/ERMX

Features and benefits

Surface finish max. Ra 0.25

Higher clamping force and higher transferable torque.

Applications

The collet reductions are mainly used on Swiss machines with live tooling.

Quick change system

Best suited for quick tool change as the cutting tools can be preinstalled

Length presetting

Tools can be preset outside of the machine.

Minimal external dimensions

Achieve minimal external dimensions by using Hi-Q®/ERM or Hi-Q®/ERMX clamping nuts.

Accessories are not included in delivery



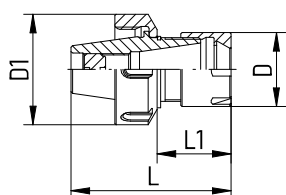
Expert advice

We recommend tightening the clamping nuts with our torque wrench.

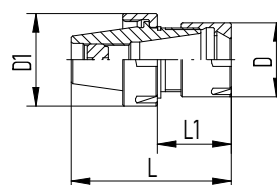
For tightening torque recommendations, please refer to page 293.

Type	Part no.	Dimensions [mm]				Accessory
		D	D1	L	L1	Wrench
ER 11						
ER 11/ERM 8	7162.11080	12	19	33	16.5	E 11 P/E 8 M
ER 16						
ER 16/ERM 11	7162.16110	16	28	42.5	18.5	E 16 P/E 11 M
ER 20						
ER 20/ERM 11*	7162.20110	16	34	42	16.5	E 20 P/E 11 M
ER 20/ERM 16	7162.20160	22	34	55.5	28	E 20 P/E 16 M
ER 25						
ER 25/ERM 11*	7162.25110	16	42	54.4	16.5	E 25/E 11 M
ER 25/ERM 16	7162.25160	22	42	60.5	28	E 25/E 16 M
ER 25/ERM 20	7162.25200	28	42	60.5	28	E 25/E 20 M
ERM 11						
ERM 11/ERM 8	7161.11080	12	16	33	16.5	E 11 M/E 8 M
ERM 16						
ERM 16/ERM 11	7161.16110	16	23	42.5	18.5	E 16 M/E 11 M
ERM 20						
ERM 20/ERM 16	7161.20160	22	28	55.5	28	E 20 M/E 16 M
ERM 25						
ERM 25/ERM 11*	7161.25110	16	35	54.5	22	E 25 M/E 11 M
ERM 25/ERM 16	7161.25160	22	35	60.5	28	E 25 M/E 16 M
ERM 25/ERM 20	7161.25200	28	35	60.5	28	E 25 M/E 20 M
ER 32*						
ER 32/ER 16	7160.32160	28	50	56	29.5	E 32/E 16 P
ER 32/ER 20	7160.32200	34	50	69.5	32.5	E 32/E 20 P

*USA only



ER/ERM



ERM/ERM

Collet reductions with intRlox®

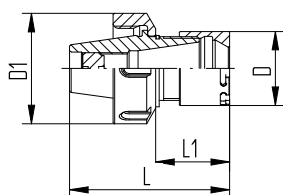
ER/ERMX

ERMX/ERMX

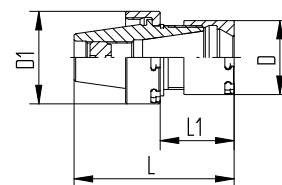
(slip-off proof mini clamping nut)

Type	Part no.	Dimensions [mm]				Accessory
		D	D1	L	L1	Wrench
ER 11						
ER 11/ERMX 8	7165.11080	12	19	33	16.5	E 11 P/E 8 MX
ER 16						
ER 16/ERMX 11	7165.16110	16	28	42.5	18.5	E 16 P/E 11 MX
ER 20						
ER 20/ERMX 11*	7165.20110	16	34	42	16.5	E 20 P/E 11 MX
ER 20/ERMX 16	7165.20160	22	34	55.5	28	E 20 P/E 16 MX
ER 25						
ER 25/ERMX 11*	7165.25110	16	42	54.4	16.5	E 25/E 11 MX
ER 25/ERMX 16	7165.25160	22	42	60.5	28	E 25/E 16 MX
ER 25/ERMX 20	7165.25200	28	42	60.5	28	E 25/E 20 MX
ERMX 11						
ERMX 11/ERMX 8	7164.11080	12	16	33	16.5	E 11 MX/E 8 MX
ERMX 16						
ERMX 16/ERMX 11	7164.16110	16	23	42.5	18.5	E 16 MX/E 11 MX
ERMX 20						
ERMX 20/ERMX 16	7164.20160	22	28	55.5	28	E 20 MX/E 16 MX
ERMX 25						
ERMX 25/ERMX 11*	7164.25110	16	35	54.5	22	E 25 MX/E 11 MX
ERMX 25/ERMX 16	7164.25160	22	35	60.5	28	E 25 MX/E 16 MX

*USA only



ER/ERMX



ERMX/ERMX

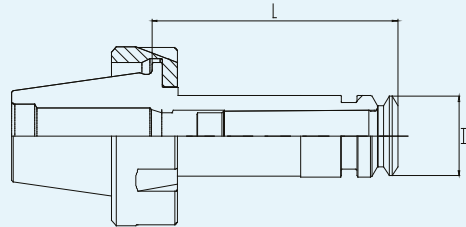


swissQuick powRgrip® adapter



What is it? The swissQuick ER-to-PG adapter is a short “mini-holder” with a solid ER body profile on the back, with a powRgrip collet cavity on the front. This unique design allows for quick tool changes with an ER fixture while still receiving the benefits of the powRgrip system.

Locking ring The swissQuick is configured with a special locking ring to ensure that the collet body is removed with the nut.



ER-to-PG swissQuick

Type	Part no.	Dimensions [mm]		
		D	L	ER nut thread
ER/PG*				
ER 20/PG 10 swissQuick	7660.20100	16	35.5	M 25 x 1.5
ER 25/PG 15 swissQuick	7660.25150	24	36	M 32 x 1.5
ERM/PG*				
ERM 20/PG 10 swissQuick	7661.20100	16	35.5	M 24 x 1
ERM 25/PG 15 swissQuick	7661.25150	24	36	M 30 x 1

*USA only



REGO-FIX▲

REGO-FIX BELGIUM

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