NEW

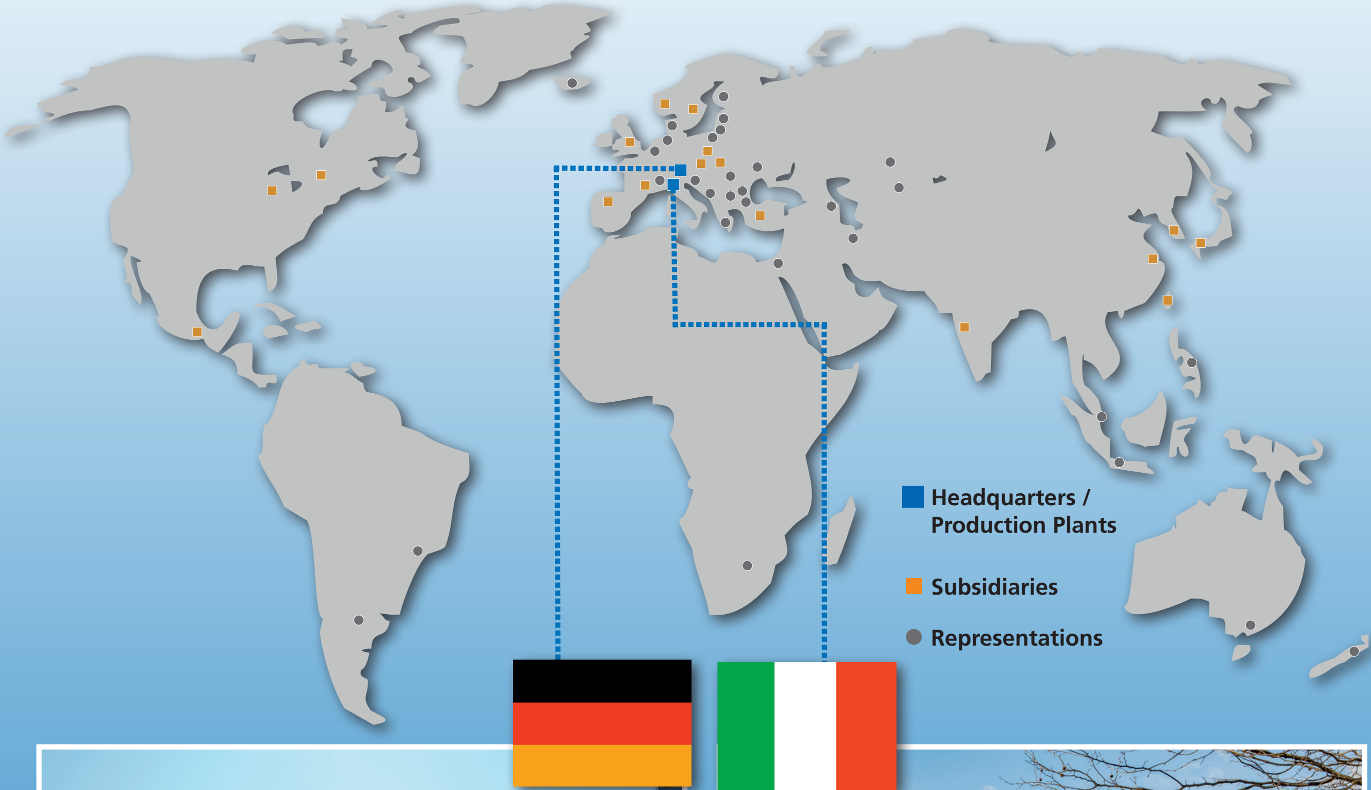
I.D. CLAMPING

from SMW-AUTOBLOK

HIGH PRECISION

Standard and special solutions

SMW-AUTOBLOK worldwide



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Clamping mandrels for every machine and every application

Features \ Expanding mandrel	EMX-P	EMX-F	EMX-FP	EMX-C	EMX-S
Automation with air sensing	●●	●●	●●	●●	●●
Pull-down (⊾ clamping bore and contact surface right-angled)	●●	○○	●●	●●	●●
Clamping sleeves cold-vulcanised against penetration of chips	●●	●●	●●	○○	○○
Segment sleeves hot-vulcanised - 60 HRC	○○	○○	○○	●●	●●

Suitability \ Expanding mandrel	EMX-P	EMX-F	EMX-FP	EMX-C	EMX-S
Suitable for high quantities	●○	●○	●○	●●	●●
Suitable for short clamping length	○○	●●	●●	○○	●○
Suitable for low lying clamping length	●●	○○	○○	●●	○○

Unsuitable: ○○ **Conditionally suitable:** ●○ **Very well suitable:** ●●

Manual or power operated expanding madrels / Adapter flanges

Page 6

EMX-P
Power operated sleeve expanding mandrels Ø 14.7 - 131.7 mm

- Highest repeatability
- Size 1 - 11
- Large expansibility
- Preparation for air sensing
- Segment sleeves vulcanized (option)

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EMX-F/FP
Power operated sleeve expanding mandrels Ø 19.7 - 132.9 mm

- Highest repeatability
- Size 1 - 6
- Large expansibility
- Preparation for air sensing
- FP: with pull-down
- Segment sleeves vulcanized (option)

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EMX-C
Power operated segment expanding mandrels Ø 25 - 121 mm

- Highest repeatability
- Size 1 - 5
- Large expansibility
- Preparation for air sensing
- Case hardened / wear resistant segment sleeves

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Adapter flanges EMX-P, EMX-F/FP, EMX-C
ISO-A for expanding mandrels

- The expanding mandrels have a cylindrical mounting
- Flanges for machine spindle DIN 55026 / ISO-A 702/1

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EMX-S
Power operated expanding mandrels Ø 18 - 105 mm

- For turning, grinding and milling
- Size 1 - 5
- Case hardened / wear resistant segment sleeves
- Large expansibility
- Very rigid design

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Adapter flanges EMX-S
Hand or power operated expanding mandrels

- The expanding mandrels have a cylindrical mounting
- Flanges for machine spindle DIN 55026 / ISO-A 702/1

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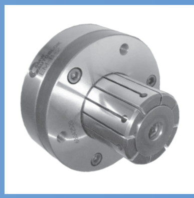
EM-A, EM-AL
Hand or power operated expanding mandrels Ø 14.7 - 129.7 mm

- Size 1 - 11
- Large expansibility
- Flange mounting
- Very rigid design



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EM-B
Hand or power operated expanding mandrels Ø 16.0 - 129.5 mm

- Size 0 - 4
- Large expansibility
- Flange mounting
- Very rigid design

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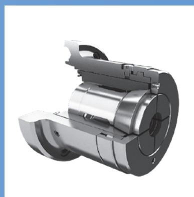
Adapter flanges EM-A, EM-B
ISO-A for expanding mandrels

- The expanding mandrels have a cylindrical mounting
- Flanges for machine spindle DIN 55026 / ISO-A 702/1



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KSZ-MB
Collet chuck

- For bar machining
- Push actuation

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COMOT-DZ
Hybrid collet chuck

- Use of vulcanized standard collets
- Clamping of thin walled work pieces
- Ideal for bar loader machines
- Best tool accessability
- Seal against contamination of the collet

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COMOT-AZ
Hybrid collet chuck

- Use of vulcanized standard collet
- Optional premium adapter for the use of slotted high-precision collets
- Optional use of expanding mandrels of the connect series EMX-F-CO
- Preparation for air sensing
- Radial fine adjustment

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COMOT-NZ
Hybrid collet chuck

- Use of vulcanized standard collets
- Clamping of thin walled work pieces
- Rigid axial stop front or in the bore
- Optional use of expanding mandrels of the connect series EMX-F-CO-NZ

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Special clamping solutions
Application examples

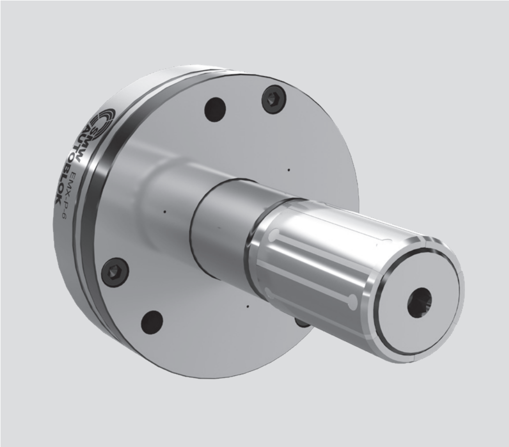
- Special mandrels
- Sliding jaw collet chuck
- Special sleeve mandrels
- Sliding jaw mandrels
- Combination chuck

EMX-P

Expanding mandrel
Power operated

Expanding mandrel Ø 14.7 - 131.7 mm

- Size 1 - 11
- Highest concentricity
- Air sensing



Application/customer benefits

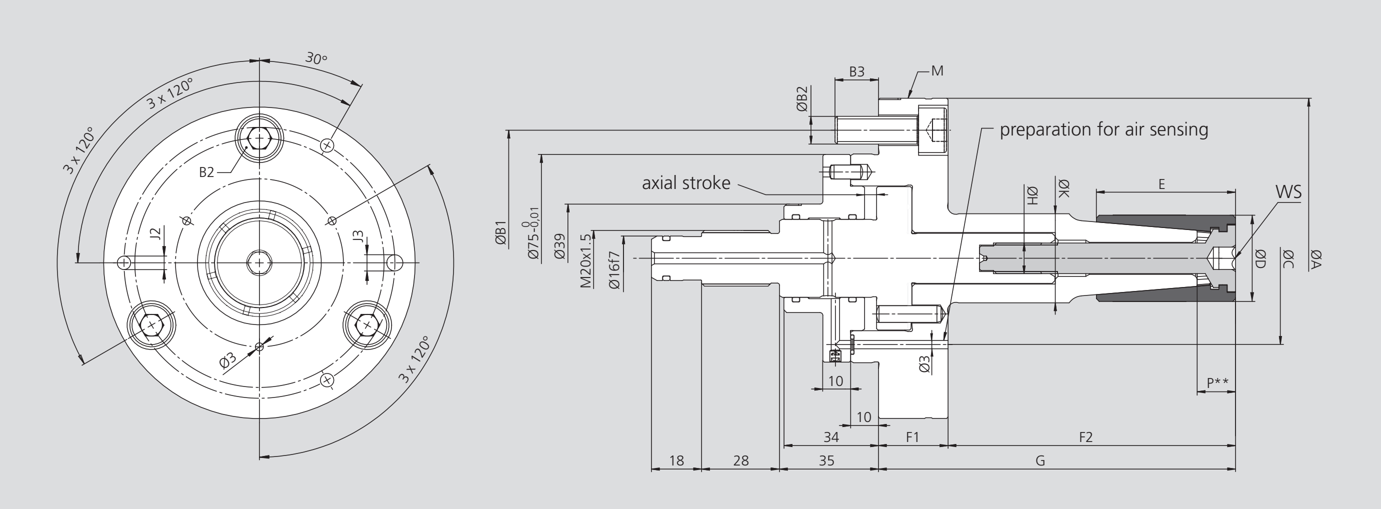
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission due to fixed arbor
- Axial pull down by axial movement of the clamping sleeve during actuation
- Quick set-up

Technical features

- Large expansibility (1 mm in diameter)
- Power operated / manual lubrication
- Flange mounting
- Very rigid design
- Vulcanized expanding sleeve for protection from the penetration of chips (option)
- Preparation for air sensing

Standard equipment

Basic mandrel with draw bolt for power operation
Mounting bolts



Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type Id. No.	EMX-P-1 9310000	EMX-P-2 9320000	EMX-P-3 9330000	EMX-P-4 9340000	EMX-P-5 9350000	EMX-P-6 9360000	EMX-P-7 9370000	EMX-P-8 9380000	EMX-P-9 9390000	EMX-P-10 9300000	EMX-P-11 9310010
A	115	115	115	115	115	115	135	135	135	135	135
B1	92	92	92	92	92	92	112	112	112	112	112
B2	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10
B3	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6	15.6
C 3 x 120° Ø 3	62	62	62	62	62	62	62	76	85	98	110
D Clamping range	14.7 - 19.7	19.7 - 24.7	24.7 - 29.7	29.7 - 34.7	34.7 - 39.7	39.7 - 44.7	44.7 - 54.7	54.7 - 64.7	64.7 - 81.7	81.7 - 101.7	101.7 - 131.7
E	35	40	46	50	60	60	80	90	100	122	140
F1	25	25	25	25	25	25	25	25	25	25	25
F2	75	85	96	105	115	115	151	157	191	217	244
G	100	110	121	130	140	140	176	182	216	242	269
H	M6	M8	M10	M11x1.5	M12	M14	M14	M14	M14	M20	M20
J1	100	100	100	100	100	100	115	115	115	115	115
J2	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M8	3 x M8	3 x M8	3 x M8	3 x M8
J3 H7	6	6	6	6	6	6	8	8	8	8	8
K f8	22	27	29	32	35	38	42	50	60	73	86
M transport	-	-	-	-	-	-	-	-	3 x M8	3 x M8	3 x M8
P**	13	15	15	15.5	16	16.5	18.5	20.5	21	21.5	25.2
WS (hex)	WS4	WS4	WS6	WS8	WS8	WS8	WS8	WS10	WS10	WS12	WS12

Technical data

SMW-AUTOBLOK Type Id. No.	EMX-P-1 9310000	EMX-P-2 9320000	EMX-P-3 9330000	EMX-P-4 9340000	EMX-P-5 9350000	EMX-P-6 9360000	EMX-P-7 9370000	EMX-P-8 9380000	EMX-P-9 9390000	EMX-P-10 9300000	EMX-P-11 9310010
Axial stroke	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Sleeve expansion Ø *	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Max. axial force in kN	7	7	12	12	15	20	20	20	25	25	30
Max. transmittable torque in Nm	20	28	60	70	100	150	170	210	320	400	570
Weight in kg	2.9	3.0	3.1	3.2	3.3	3.4	4.6	5.2	6.6	8.7	11.9
Rec. actuating cylinders	SIN-S 70	SIN-S 70	SIN-S 85	SIN-S 85	SIN-S 85	SIN-S 100	SIN-S 100	SIN-S 100	SIN-S 100	SIN-S 100	SIN-S 125

All measurements in unclamped position = Right end position.

* From dimension of clamping sleeve.

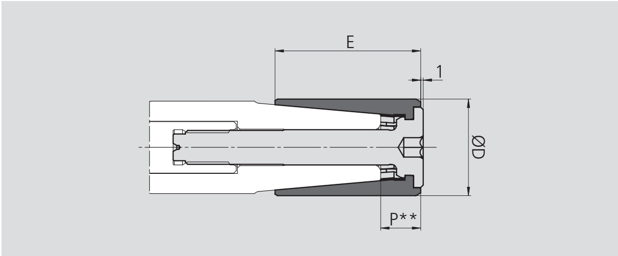
** Clamping on area P only is not allowed.

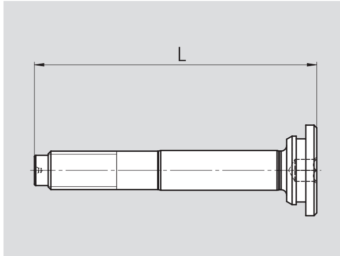
Expanding mandrel Ø 14.7 - 131.7 mm

EMX-P

Expanding mandrel
Power operated

■ Ordering review





Basic mandel							Clamping sleeve* with actuating screw	Actuating screw	
Type	Id. No.	Clamping range	ØD	E	Expansibility	P**	Id. No.	Id. No.	L
EMX-P-1	9310000	14.7 - 19.7	14.7	35	1	12.7	9310147	9310002000	75.5
			15.7	35	1	12.7	9310157		
			16.7	35	1	12.7	9310167		
			17.7	35	1	12.7	9310177		
			18.7	35	1	12.7	9310187		
EMX-P-2	9320000	19.7 - 24.7	19.7	40	1	14.7	9320197	9320002000	80
			20.7	40	1	14.7	9320207		
			21.7	40	1	14.7	9320217		
			22.7	40	1	14.7	9320227		
			23.7	40	1	14.7	9320237		
EMX-P-3	9330000	24.7 - 29.7	24.7	46	1	14.7	9330247	9330002000	86.5
			25.7	46	1	14.7	9330257		
			26.7	46	1	14.7	9330267		
			27.7	46	1	14.7	9330277		
			28.7	46	1	14.7	9330287		
EMX-P-4	9340000	29.7 - 34.7	29.7	50	1	15.2	9340297	9340002000	92
			30.7	50	1	15.2	9340307		
			31.7	50	1	15.2	9340317		
			32.7	50	1	15.2	9340327		
			33.7	50	1	15.2	9340337		
EMX-P-5	9350000	34.7 - 39.7	34.7	60	1	15.7	9350347	9350002000	102
			35.7	60	1	15.7	9350357		
			36.7	60	1	15.7	9350367		
			37.7	60	1	15.7	9350377		
			38.7	60	1	15.7	9350387		
EMX-P-6	9360000	39.7 - 44.7	39.7	60	1	16.2	9360397	9360002000	102
			40.7	60	1	16.2	9360407		
			41.7	60	1	16.2	9360417		
			42.7	60	1	16.2	9360427		
			43.7	60	1	16.2	9360437		
EMX-P-7	9370000	44.7 - 54.7	44.7	80	1	18.2	9370447	9370002000	116
			45.7	80	1	18.2	9370457		
			46.7	80	1	18.2	9370467		
			47.7	80	1	18.2	9370477		
			48.7	80	1	18.2	9370487		
			49.7	80	1	18.2	9370497		
			50.7	80	1	18.2	9370507		
			51.7	80	1	18.2	9370517		
			52.7	80	1	18.2	9370527		
			53.7	80	1	18.2	9370537		
EMX-P-8	9380000	54.7 - 64.7	54.7	90	1	20.2	9380547	9380002000	126
			55.7	90	1	20.2	9380557		
			56.7	90	1	20.2	9380567		
			57.7	90	1	20.2	9380577		
			58.7	90	1	20.2	9380587		
			59.7	90	1	20.2	9380597		
			60.7	90	1	20.2	9380607		
			61.7	90	1	20.2	9380617		
			62.7	90	1	20.2	9380627		
			63.7	90	1	20.2	9380637		
EMX-P-9	9390000	64.7 - 81.7	64.7	100	1	20.7	9390647	9390002000	136
			65.7	100	1	20.7	9390657		
			66.7	100	1	20.7	9390667		
			67.7	100	1	20.7	9390677		
			68.7	100	1	20.7	9390687		
			69.7	100	1	20.7	9390697		
			70.7	100	1	20.7	9390707		
			71.7	100	1	20.7	9390717		
			72.7	100	1	20.7	9390727		
			73.7	100	1	20.7	9390737		
			74.7	100	1	20.7	9390747		
			75.7	100	1	20.7	9390757		
			76.7	100	1	20.7	9390767		
			77.7	100	1	20.7	9390777		
			78.7	100	1	20.7	9390787		
			79.7	100	1	20.7	9390797		
			80.7	100	1	20.7	9390807		

* Id. No. XXXXXX-V = Clamping sleeve vulcanized.
** Clamping on area P only is not allowed.

EMX-P

Expanding mandrel
Power operated

Expanding mandrel Ø 14.7 - 131.7 mm

■ Ordering review

Basic mandrel							Clamping sleeve* with actuating screw	Actuation screw	
Type	Id. No.	Clamping range	ØD	E	Expansibility	P**	Id. No.	Id. No.	L
EMX-P-10	9300000	81.7 - 101.7	81.7	122	1	21.7	9300817	9300002000	164
			82.7	122	1	21.7	9300827		
			83.7	122	1	21.7	9300837		
			84.7	122	1	21.7	9300847		
			85.7	122	1	21.7	9300857		
			86.7	122	1	21.7	9300867		
			87.7	122	1	21.7	9300877		
			88.7	122	1	21.7	9300887		
			89.7	122	1	21.7	9300897		
			90.7	122	1	21.7	9300907		
			91.7	122	1	21.7	9300917		
			92.7	122	1	21.7	9300927		
			93.7	122	1	21.7	9300937		
			94.7	122	1	21.7	9300947		
			95.7	122	1	21.7	9300957		
			96.7	122	1	21.7	9300967		
			97.7	122	1	21.7	9300977		
			98.7	122	1	21.7	9300987		
			99.7	122	1	21.7	9300997		
			100.7	122	1	21.7	9301007		
EMX-P-11	9310010	101.7 - 131.7	101.7	140	1	26.2	9311017	9310002010	182
			102.7	140	1	26.2	9311027		
			103.7	140	1	26.2	9311037		
			104.7	140	1	26.2	9311047		
			105.7	140	1	26.2	9311057		
			106.7	140	1	26.2	9311067		
			107.7	140	1	26.2	9311077		
			108.7	140	1	26.2	9311087		
			109.7	140	1	26.2	9311097		
			110.7	140	1	26.2	9311107		
			111.7	140	1	26.2	9311117		
			112.7	140	1	26.2	9311127		
			113.7	140	1	26.2	9311137		
			114.7	140	1	26.2	9311147		
			115.7	140	1	26.2	9311157		
			116.7	140	1	26.2	9311167		
			117.7	140	1	26.2	9311177		
			118.7	140	1	26.2	9311187		
			119.7	140	1	26.2	9311197		
			120.7	140	1	26.2	9311207		
			121.7	140	1	26.2	9311217		
			122.7	140	1	26.2	9311227		
			123.7	140	1	26.2	9311237		
			124.7	140	1	26.2	9311247		
			125.7	140	1	26.2	9311257		
			126.7	140	1	26.2	9311267		
			127.7	140	1	26.2	9311277		
			128.7	140	1	26.2	9311287		
			129.7	140	1	26.2	9311297		
			130.7	140	1	26.2	9311307		

* Id. No. XXXXXX-V = Clamping sleeve vulcanized.
** Clamping on area P only is not allowed.

Notes

EMX-F/FP

Expanding mandrel
Power operated

Expanding mandrel Ø 19.7 - 132.9 mm

- Size 1 - 6
- Highest concentricity
- Air sensing

Application/customer benefits

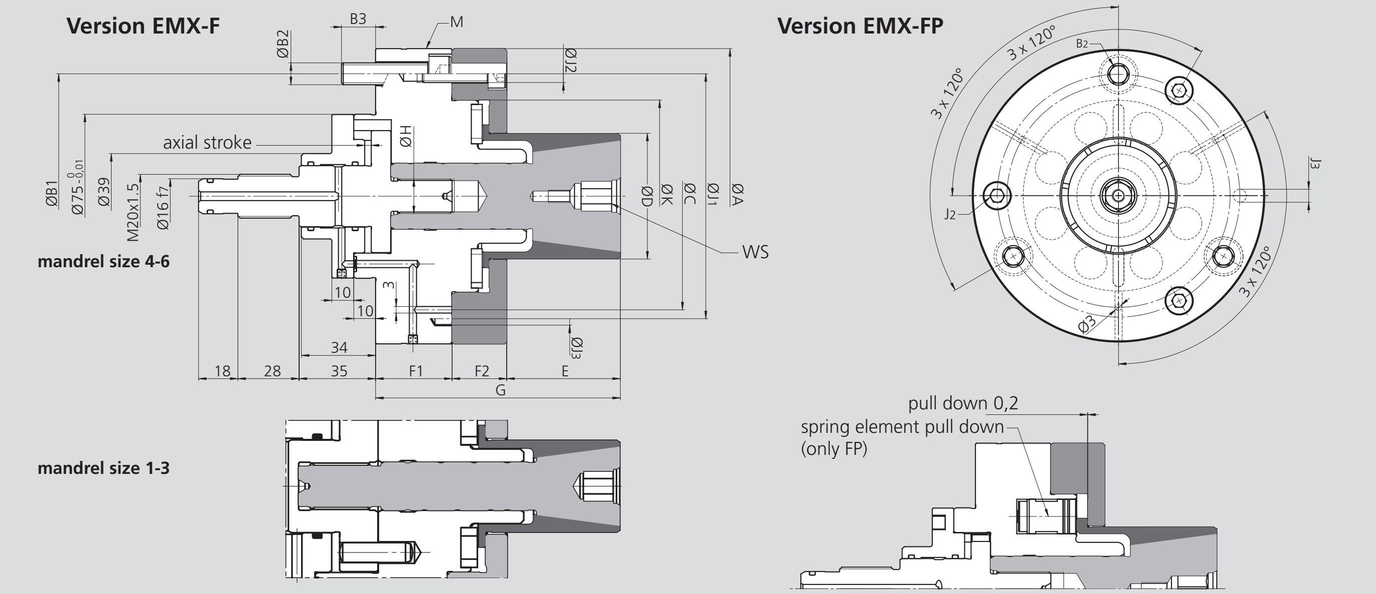
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission
- Clamping of very short workpieces on the front section of the sleeve possible
- FP: With axial pull down for best face run out

Technical features

- Large expansibility 0.6 - 1.2 mm depending on size
- Power operated / manual lubrication
- Flange mounting
- Very rigid design
- Vulcanized expanding sleeve for protection from the penetration of chips (option)
- Preparation for air sensing

Standard equipment

Basic mandrel with draw bolt for power operation
Mounting bolts



Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type		EMX-F/FP-1	EMX-F/FP-2	EMX-F/FP-3	EMX-F/FP-4	EMX-F/FP-5	EMX-F/FP-6
Id. No.	EMX-F	9110000	9120000	9130000	9140000	9150000	9160000
	EMX-FP	9210000	9220000	9230000	9240000	9250000	9260000
A		115	115	115	135	165	210
B1		92	92	92	112	140	182
B2		3 x M10	3 x M10	3 x M10	3 x M10	3 x M12	3 x M12
B3		15.6	15.6	15.6	15.6	17.9	17.9
C	3 x 120° Ø 3	62	62	86	112	140	182
D	Clamping range	19.7 - 30.3	27.7 - 40.3	34.7 - 55.5	49.7 - 75.5	69.7 - 95.9	89.7 - 132.9
E		27	34	38	52	69	81
F1		30	30	30	35	40	40
F2		18	18	22	25	30	33
G		75	82	90	112	139	154
H		M10 x 1	M14 x 1.5	M16 x 1.5	M16 x 1.5	M20 x 1.5	M20 x 1.5
J1		100	100	100	112	140	182
J2	3 x 120°	M6	M6	M6	M8	M8	M8
J3	H7	6	6	6	8	8	8
K	g6	42	52	65	88	112	155
M transport	3 x 120°	-	-	-	M8	M10	M10
WS (hex)		WS6	WS8	WS10	WS12	WS14	WS14

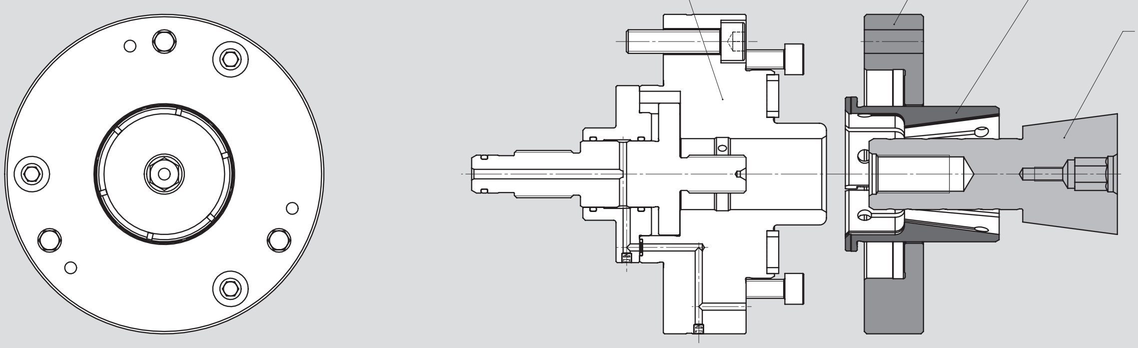
Technical data

SMW-AUTOBLOK Type		EMX-F/FP-1	EMX-F/FP-2	EMX-F/FP-3	EMX-F/FP-4	EMX-F/FP-5	EMX-F/FP-6
Axial stroke		3.0	2.4	3.0	3.0	5.0	5.0
Expansibility in dia.		0.6	0.6	0.8	0.8	1.2	1.2
Max. axial force in kN		12	20	25	25	30	30
Max. transmittable torque		1 / 2 / 3	1 / 2 / 3	1 / 2 / 3	1 / 2 / 3	1 / 2 / 3	1 / 2 / 3 / 4
in Nm*		35 / 50 / 55	80 / 100 / 110	100 / 115 / 160	150 / 180 / 220	225 / 255 / 290	445 / 500 / 570 / 630
Weight in kg		3.3	3.4	3.5	5.3	8.5	14.2
Actuating cylinders	CSN	200	200	250	250	250	250
	SIN-S	70	85	100	100	125	125

* Depending on taper size (1 / 2 / 3)

All measurements in unclamped position = Right end position.

■ Ordering review



Subject to technical changes.
For more detailed information please ask our customer service.

Mandrel without exchange parts						Taper	Disc F / FP	Segment sleeve*	
without pull-down				with pull-down					
Type	Id. No.	clamping range	sleeve expansion Ø	Type	Id. No.	Id. No.	Id. No.	Id.-No.	ØD
EMX-F-1	9110000	19.7 - 30.3	0.6	EMX-FP-1	9210000	9112016	9113021 / 9213021	9110197	19.7
								9110202	20.2
							9113022 / 9213022	9110207	20.7
								9110212	21.2
							9113023 / 9213023	9110217	21.7
								9110222	22.2
							9113024 / 9213024	9110227	22.7
						9112020		9110232	23.2
							9113025 / 9213025	9110237	23.7
								9110242	24.2
							9113026 / 9213026	9110247	24.7
								9110252	25.2
							9113027 / 9213027	9110257	25.7
								9110262	26.2
						9112023	9113028 / 9213028	9110267	26.7
								9110272	27.2
							9113029 / 9213029	9110277	27.7
								9110282	28.2
							9113030 / 9213030	9110287	28.7
								9110292	29.2
							9113031 / 9213031	9110297	29.7
EMX-F-2	9120000	27.7 - 40.3	0.6	EMX-FP-2	9220000	9122024	9123029 / 9223029	9120277	27.7
								9120282	28.2
							9123030 / 9223030	9120287	28.7
								9120292	29.2
							9123031 / 9223031	9120297	29.7
								9120302	30.2
							9123032 / 9223032	9120307	30.7
								9120312	31.2
						9122028	9123033 / 9223033	9120317	31.7
								9120322	32.2
							9123034 / 9223034	9120327	32.7
								9120332	33.2
							9123035 / 9223035	9120337	33.7
								9120342	34.2
							9123036 / 9223036	9120347	34.7
								9120352	35.2
						9122032	9123037 / 9223037	9120357	35.7
								9120362	36.2
							9123038 / 9223038	9120367	36.7
								9120372	37.2
							9123039 / 9223039	9120377	37.7
								9120382	38.2
							9123040 / 9223040	9120387	38.7
								9120392	39.2
							9123041 / 9223041	9120397	39.7

* Id. No. XXXXXX-V = Clamping sleeve vulcanized.

EMX-F/FP

Expanding mandrel
Power operated

Expanding mandrel Ø 19.7 - 132.9 mm

■ Ordering review

Mandrel without exchange parts						Taper	Disc F / FP	Segment sleeve*	
without pull-down				with pull-down					
Type	Id. No.	Clamping range	Sleeve expansion Ø	Type	Id. No.	Id. No.	Id. No.	Id. No.	ØD
EMX-F-3	9130000	34.7 - 55.5	0.8	EMX-FP-3	9230000	9132030	9133037 / 9233037	9130347	34.7
								9130352	35.2
							9133038 / 9233038	9130357	35.7
								9130362	36.2
							9133039 / 9233039	9130367	36.7
								9130372	37.2
							9133040 / 9233040	9130377	37.7
								9130382	38.2
							9133041 / 9233041	9130387	38.7
								9130392	39.2
							9133042 / 9233042	9130397	39.7
								9130402	40.2
							9133043 / 9233043	9130407	40.7
						9132037	9133044 / 9233044	9130412	41.2
								9130417	41.7
							9133045 / 9233045	9130422	42.2
								9130427	42.7
							9133046 / 9233046	9130432	43.2
								9130437	43.7
							9133047 / 9233047	9130442	44.2
								9130447	44.7
							9133048 / 9233048	9130452	45.2
								9130457	45.7
							9133049 / 9233049	9130462	46.2
								9130467	46.7
							9133050 / 9233050	9130472	47.2
								9130477	47.7
						9132044	9133051 / 9233051	9130482	48.2
								9130487	48.7
							9133052 / 9233052	9130492	49.2
								9130497	49.7
							9133053 / 9233053	9130502	50.2
								9130507	50.7
							9133054 / 9233054	9130512	51.2
								9130517	51.7
							9133055 / 9233055	9130522	52.2
								9130527	52.7
							9133056 / 9233056	9130532	53.2
								9130537	53.7
							9133057 / 9233057	9130542	54.2
								9130547	54.7
EMX-F-4	9140000	49.7 - 75.5	0.8	EMX-FP-4	9240000	9142044	9143052 / 9243052	9140497	49.7
								9140502	50.2
							9143053 / 9243053	9140507	50.7
								9140512	51.2
							9143054 / 9243054	9140517	51.7
								9140522	52.2
							9143055 / 9243055	9140527	52.7
								9140532	53.2
							9143056 / 9243056	9140537	53.7
								9140542	54.2
							9143057 / 9243057	9140547	54.7
								9140552	55.2
							9143058 / 9243058	9140557	55.7
								9140562	56.2
							9143059 / 9243059	9140567	56.7
								9140572	57.2
						9142051	9143060 / 9243060	9140577	57.7
								9140582	58.2
							9143061 / 9243061	9140587	58.7
								9140592	59.2
							9143062 / 9243062	9140597	59.7
								9140602	60.2
							9143063 / 9243063	9140607	60.7
								9140612	61.2
							9143064 / 9243064	9140617	61.7
								9140622	62.2
							9143065 / 9243065	9140627	62.7
								9140632	63.2
							9143066 / 9243066	9140637	63.7
								9140642	64.2
							9143067 / 9243067	9140647	64.7
								9140652	65.2
						9142060	9143068 / 9243068	9140657	65.7
								9140662	66.2
							9143069 / 9243069	9140667	66.7
								9140672	67.2
							9143070 / 9243070	9140677	67.7
								9140682	68.2
							9143071 / 9243071	9140687	68.7
								9140692	69.2
							9143072 / 9243072	9140697	69.7
								9140702	70.2
							9143073 / 9243073	9140707	70.7
								9140712	71.2
							9143074 / 9243074	9140717	71.7
								9140722	72.2
							9143075 / 9243075	9140727	72.7
								9140732	73.2
							9143076 / 9243076	9140737	73.7
								9140742	74.2
							9143077 / 9243077	9140747	74.7

* Id. No. XXXXXX-V = Clamping sleeve vulcanized.

Expanding mandrel Ø 19.7 - 132.9 mm

EMX-F/FP

Expanding mandrel
Power operated

■ Ordering review

Mandrel without exchange parts						Taper	Disc	Segment sleeve*	
without pull-down				with pull-down			F / FP		
Type	Id. No.	Clamping range	Sleeve expansion Ø	Type	Id. No.	Id. No.	Id. No.	Id. No.	ØD
EMX-F-5	9150000	69.7 - 95.9	1.2	EMX-FP-5	9250000	9152063	9153072 / 9253072	9150697	69.7
							9153073 / 9253073	9150707	70.7
							9153074 / 9253074	9150717	71.7
							9153075 / 9253075	9150727	72.7
							9153076 / 9253076	9150737	73.7
							9153077 / 9253077	9150747	74.7
							9153078 / 9253078	9150757	75.7
							9153079 / 9253079	9150767	76.7
						9152071	9153080 / 9253080	9150777	77.7
							9153081 / 9253081	9150787	78.7
							9153082 / 9253082	9150797	79.7
							9153083 / 9253083	9150807	80.7
							9153084 / 9253084	9150817	81.7
							9153085 / 9253085	9150827	82.7
							9153086 / 9253086	9150837	83.7
							9153087 / 9253087	9150847	84.7
							9153088 / 9253088	9150857	85.7
						9152080	9153089 / 9253089	9150867	86.7
							9153090 / 9253090	9150877	87.7
							9153091 / 9253091	9150887	88.7
							9153092 / 9253092	9150897	89.7
							9153093 / 9253093	9150907	90.7
							9153094 / 9253094	9150917	91.7
							9153095 / 9253095	9150927	92.7
							9153096 / 9253096	9150937	93.7
							9153097 / 9253097	9150947	94.7
EMX-F-6	9160000	89.7 - 132.9	1.2	EMX-FP-6	9260000	9162082	9163092 / 9263092	9160897	89.7
							9163093 / 9263093	9160907	90.7
							9163094 / 9263094	9160917	91.7
							9163095 / 9263095	9160927	92.7
							9163096 / 9263096	9160937	93.7
							9163097 / 9263097	9160947	94.7
							9163098 / 9263098	9160957	95.7
							9163099 / 9263099	9160967	96.7
							9163100 / 9263100	9160977	97.7
							9163101 / 9263101	9160987	98.7
						9162092	9163102 / 9263102	9160997	99.7
							9163103 / 9263103	9161007	100.7
							9163104 / 9263104	9161017	101.7
							9163105 / 9263105	9161027	102.7
							9163106 / 9263106	9161037	103.7
							9163107 / 9263107	9161047	104.7
							9163108 / 9263108	9161057	105.7
							9163109 / 9263109	9161067	106.7
							9163110 / 9263110	9161077	107.7
							9163111 / 9263111	9161087	108.7
							9163112 / 9263112	9161097	109.7
						9162103	9163113 / 9263113	9161107	110.7
							9163114 / 9263114	9161117	111.7
							9163115 / 9263115	9161127	112.7
							9163116 / 9263116	9161137	113.7
							9163117 / 9263117	9161147	114.7
							9163118 / 9263118	9161157	115.7
							9163119 / 9263119	9161167	116.7
							9163120 / 9263120	9161177	117.7
							9163121 / 9263121	9161187	118.7
							9163122 / 9263122	9161197	119.7
							9163123 / 9263123	9161207	120.7
						9162114	9163124 / 9263124	9161217	121.7
							9163125 / 9263125	9161227	122.7
							9163126 / 9263126	9161237	123.7
							9163127 / 9263127	9161247	124.7
							9163128 / 9263128	9161257	125.7
							9163129 / 9263129	9161267	126.7
							9163130 / 9263130	9161277	127.7
							9163131 / 9263131	9161287	128.7
							9163132 / 9263132	9161297	129.7
							9163133 / 9263133	9161307	130.7
							9163134 / 9263134	9161317	131.7

* Id. No. XXXXXX-V = Clamping sleeve vulcanized.

EMX-C

Segment sleeve mandrel
Power operated

Segment sleeve mandrel Ø 25 - 121 mm

- **Size 1 - 5**
- **Large expansibility**

Application/customer benefits

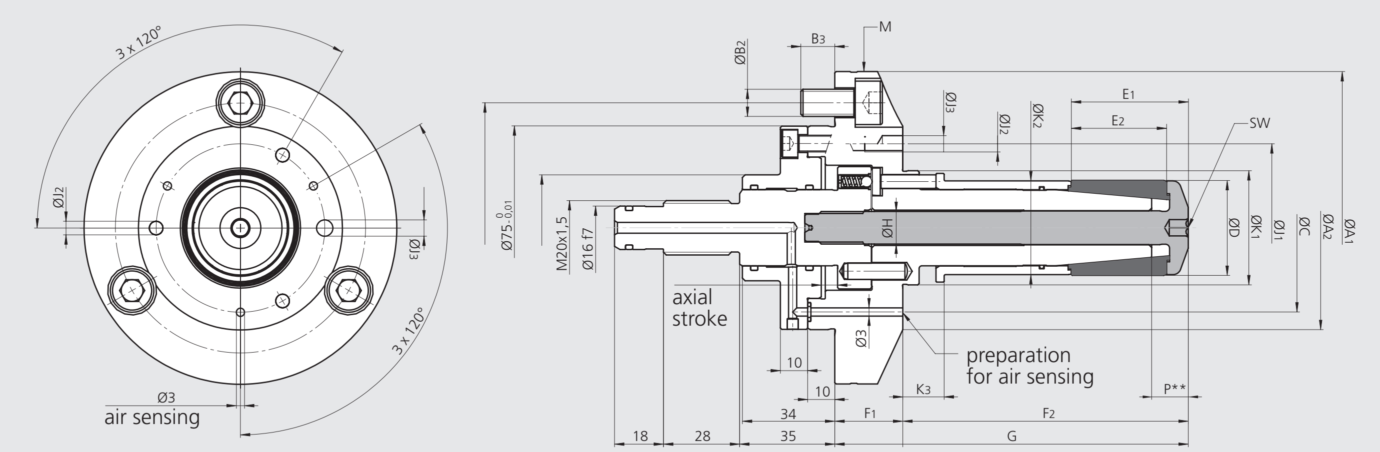
- Ideal for volume production and hard turning / grinding with wear resistant, case hardened and vulcanised clamping sleeves
- Highest accuracy and high torque transmission by means of fixed mandrel body
- Axial pull down by the axial clamping movement of the clamping sleeve = best face run out
- Clamping sleeve quick change for short setup times
- Preparation for air sensing

Technical details

- Large expansibility 1 - 1.2 mm depending on the size (-0.3 » +0.7 / -0.3 » +0.9 from nom. Ø)
- Case hardened and vulcanized segment sleeves
- Power operated / manual lubrication
- Rigid design with flange mounting

Standard equipment

Basic mandrel with draw bolt for power operation + actuating screw; Mounting bolts



Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type		EMX-C-1	EMX-C-2	EMX-C-3	EMX-C-4	EMX-C-5
Id. No.		9410000	9420000	9430000	9440000	9450000
A1		115	115	115	135	165
A2		75	75	115	135	165
B1		92	92	92	112	140
B2		3 x M10	3 x M10	3 x M10	3 x M10	3 x M12
B3		12.5	12.5	15.6	15.6	16
C	**3 x 120° Ø 3**	62	62	75	95	120
D	**Clamping range**	25 - 37	35 - 53	49 - 70	66 - 95	90-120
E1		37	43	55	64	86
E2	**Clamping length**	30	35	45	50	70
F1		25	25	25	25	32
F2		94	105	131.5	150.7	185.5
G		119	130	156.5	175.7	217.5
H		M8 x 1	M12 x 1.5	M14 x 1.5	M16 x 1.5	M20 x 1.5
J1		62	62	100	115	140
J2	**3 x 120°**	M6	M6	M6	M8	M8
J3	**H7**	6	6	6	8	8
K1	**f8**	35	42	54	73	96
K2	**f8**	24.5	34.5	48.5	64.5	89.5
K3		16.2	15.2	16.5	17	22
M transport	**3 x 120°**	-	-	-	M8	M8
P**		12.5	13.5	15.5	19.5	21.5
WS (hex)		WS5	WS6	WS10	WS12	WS14

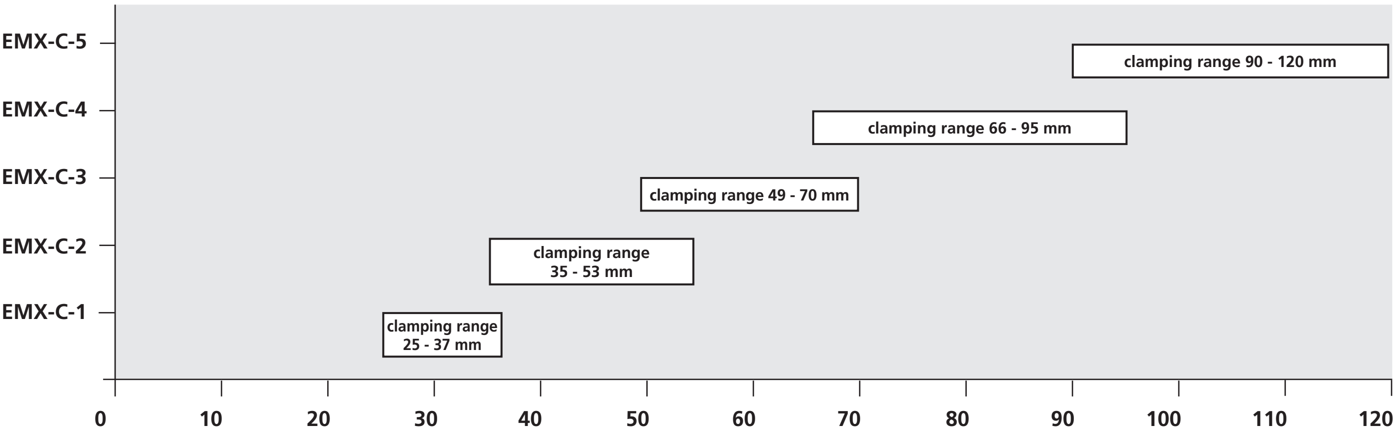
Technical data

SMW-AUTOBLOK Type	EMX-C-1	EMX-C-2	EMX-C-3	EMX-C-4	EMX-C-5
Id. No.	9410000	9420000	9430000	9440000	9450000
Axial stroke	6.0	6.0	6.0	6.0	6.0
Expansibility in dia.	1.0	1.0	1.2	1.2	1.2
Max. actuating force in kN	8	12	15	25	30
Max. transmittable torque in Nm	36	74	120	281	467
Weight in kg	2.9	3.2	4.3	6.6	13.3
Rec. clamping cylinders	**SIN-S 70**	**SIN-S 85**	**SIN-S 85**	**SIN-S 100**	**SIN-S 125**

All measurements in unclamped position = Right end position.

** Clamping on area P only is not allowed.

Overview clamping ranges



Clamping sleeves

EMX-C-1*

Ø	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**
Id. No.	9410250	9410260	9410270	9410280	9410290	9410300	9410310	9410320	9410330	9410340	9410350	9410360	9410370

EMX-C-2*

Ø	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**
Id. No.	9420350	9420360	9420370	9420380	9420390	9420400	9420410	9420420	9420430	9420440	9420450	9420460	9420470
Ø	**48**	**49**	**50**	**51**	**52**	**53**							
Id. No.	9420480	9420490	9420500	9420510	9420520	9420530							

EMX-C-3*

Ø	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**	**59**	**60**	**61**
Id. No.	9430490	9430500	9430510	9430520	9430530	9430540	9430550	9430560	9430570	9430580	9430590	9430600	9430610
Ø	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**				
Id. No.	9430620	9430630	9430640	9430650	9430660	9430670	9430680	9430690	9430700				

EMX-C-4*

Ø	**66**	**67**	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**
Id. No.	9440660	9440670	9440680	9440690	9440700	9440710	9440720	9440730	9440740	9440750	9440760	9440770	9440780
Ø	**79**	**80**	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**	**91**
Id. No.	9440790	9440800	9440810	9440820	9440830	9440840	9440850	9440860	9440870	9440880	9440890	9440900	9440910
Ø	**92**	**93**	**94**	**95**									
Id. No.	9440920	9440930	9440940	9440950									

EMX-C-5*

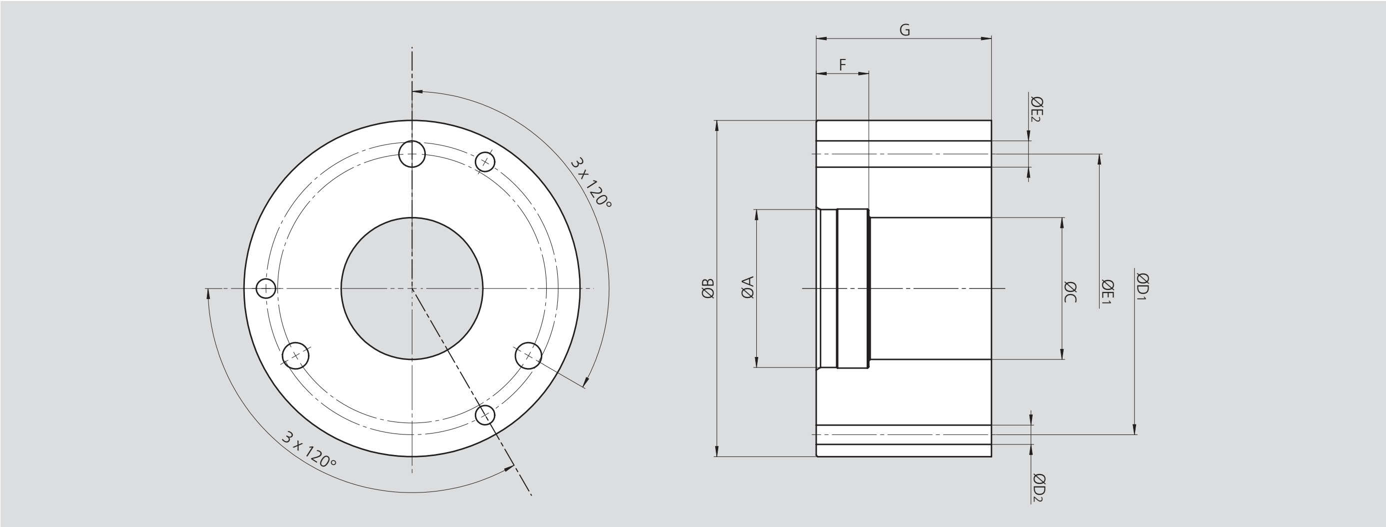
Ø	**90**	**91**	**92**	**93**	**94**	**95**	**96**	**97**	**98**	**99**	**100**	**101**	**102**
Id. No.	9450900	9450910	9450920	9450930	9450940	9450950	9450960	9450970	9450980	9450990	9451000	9451010	9451020
Ø	**103**	**104**	**105**	**106**	**107**	**108**	**109**	**110**	**111**	**112**	**113**	**114**	**115**
Id. No.	9451030	9451040	9451050	9451060	9451070	9451080	9451090	9451100	9451110	9451120	9451130	9451140	9451150
Ø	**116**	**117**	**118**	**119**	**120**								
Id. No.	9451160	9451170	9451180	9451190	9451200								

* The expanding sleeves have a loading clearance of 0.3 mm in dia.

Clamping screws

Type	Id. No.
EMX-C-1	9412000
EMX-C-2	9422000
EMX-C-3	9432000
EMX-C-4	9442000
EMX-C-5	9452000

Workstop blanks soft for EMX-C

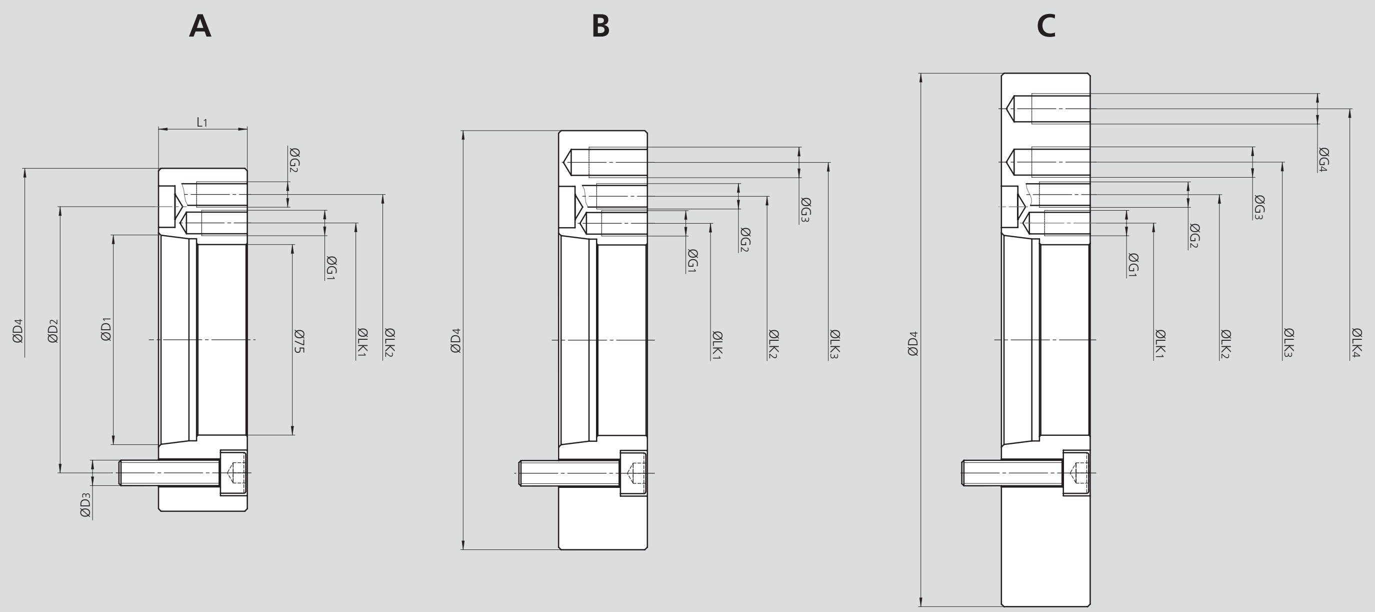


Mandrel size	EMX-C-1		EMX-C-2		EMX-C-3		EMX-C-4		EMX-C-5	
	short	long	short	long	short	long	short	long	short	long
Id. No.	9413000	9413001	9423000	9423001	9433000	9433001	9443000	9443001	9453000	9453001
ØA	35	35	42	42	54	54	73	73	96	96
ØB	75	75	75	75	115	115	135	135	165	165
ØC	24.5	24.5	34.5	34.5	48.5	48.5	64.5	64.5	89.5	89.5
ØD1	62	62	62	62	100	100	115	115	140	140
ØD2	6.6	6.6	6.6	6.6	6.6	6.6	9	9	9	9
ØE1	-	-	-	-	92	92	112	112	140	140
ØE2	-	-	-	-	9	9	9	9	12	12
F	17.2	17.2	16.2	16.2	17.5	17.5	18	18	23	23
G	40	75	45	85	60	110	70	125	85	160

■ EMX-P, EMX-F/FP, EMX-C have cylindrical mounting
■ Adapters for DIN 55026 / ISO-A 702-1 spindle noses

Adapters

ISO-A for sleeve expanding mandrels



Subject to technical changes.
For more detailed information please ask our customer service.

Technical data

Adapter flange Id. No.		Spindle nose ISO	D1	D2	D3	D4	L1	LK1	G1	LK2	G2	LK3	G3	LK4	G4
9000051	mm	A5	82.563	104.8	3 x M10	135	35	92	3 x M10	112	3 x M10	-	-	-	-
9000052	mm	A5	82.563	104.8	3 x M10	165	35	92	3 x M10	112	3 x M10	140	3 x M12	-	-
9000053	mm	A5	82.563	104.8	3 x M10	210	35	92	3 x M10	112	3 x M10	140	3 x M12	182	3 x M12
9000061	mm	A6	106.375	133.4	3 x M12	165	36	92	3 x M10	112	3 x M10	140	3 x M12	-	-
9000062	mm	A6	106.375	133.4	3 x M12	210	36	92	3 x M10	112	3 x M10	140	3 x M12	182	3 x M12
9000081	mm	A8	139.719	171.4	3 x M16	210	45	92	3 x M10	112	3 x M10	140	3 x M12	182	3 x M12

Appropriate adapter flanges	Spindle nose ISO	EMX-P	EMX-F/FP	EMX-C	Type
9000051	A5	0-1-2-3-4-5-6-7-8-9-10-11	1-2-3-4	1-2-3-4	A
9000052	A5	0-1-2-3-4-5-6-7-8-9-10-11	1-2-3-4-5	1-2-3-4-5	B
9000053	A5	0-1-2-3-4-5-6-7-8-9-10-11	1-2-3-4-5-6	1-2-3-4-5	C
9000061	A6	0-1-2-3-4-5-6-7-8-9-10-11	1-2-3-4-5	1-2-3-4-5	B
9000062	A6	0-1-2-3-4-5-6-7-8-9-10-11	1-2-3-4-5-6	1-2-3-4-5	C
9000081	A8	0-1-2-3-4-5-6-7-8-9-10-11	1-2-3-4-5-6	1-2-3-4-5	C

EMX-S

Segment sleeve mandrel
Power operated

Segment sleeve mandrel Ø 18 - 105 mm

- Size 1 - 4
- Large expansibility

Application/customer benefits

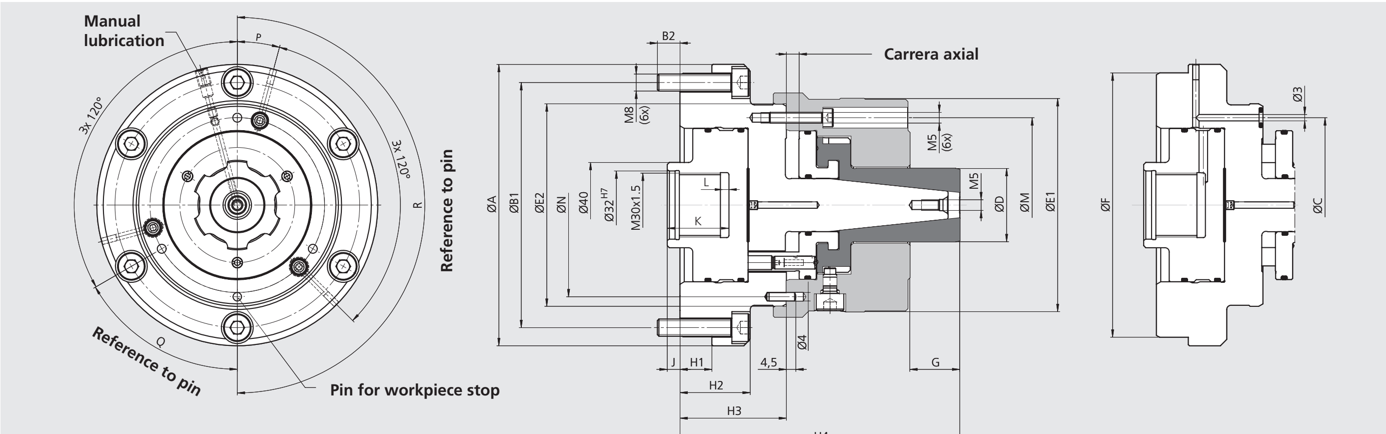
- Ideal for volume production and hard turning / grinding with wear resistant, case hardened and vulcanised clamping sleeves
- Highest accuracy and high torque transmission by means of fixed mandrel body
- Axial pull down by the axial clamping movement of the clamping sleeve = best face run out
- Clamping sleeve quick change for short setup times
- Preparation for air sensing
- With integrated manual lubrication for consistent high clamping forces and low wear

Technical details

- Large expansibility 0.8 - 1.2 mm depending on the size (The clamping sleeves have a max. radial expansibility in diameter of ± 0.4 mm or ± 0.6 mm from the nominal diameter.)
- Power operated
- Rigid design with flange mounting
- Tapped holes in the face for axial stops

Standard equipment

Base mandrel with mounting bolts



Illustrations show mandrel variant with 1-circuit air sensing in open clamping position.
Information on the variant with 2-circuit air sensing on request.

SMW-Autoblok Type			EMX-S-1	EMX-S-2	EMX-S-3	EMX-S-4
Id. No.	**EMX-S (1-circuit-AS)**		**9601100000**	**9602100000**	**9603100000**	**9604100000**
	EMX-S (2-circuit-AS)		**9621100000**	**9622100000**	**9623100000**	**9624100000**
	A	mm	132	132	132	157
	B1	mm	115	115	115	137
	B2	mm	13.6	10.6	12.5	12.5
3x120° Ø3,0	**C**	mm	66	82	100	128
	E1	mm	82	100	114	143
f8	**E2**	mm	80	95	88	115
	F	mm	124 - 0.01	124 - 0.01	124 - 0.01	147 - 0.01
Clamping range	**D**	mm	18 / >18 - 23 / >23 - 35	30 - 55	48 - 80	70 - 105
Clamping length max.	**G_{max}**	mm	10.5 / 17.5 / 23	41	51	57
Clamping length min.	**G_{min}**	mm	7	8	8	8
	H1	mm	15	15	15	14.3
	H2	mm	30	33	44	49
	H3	mm	48	50	44	49
	H4	mm	107.5	131.5	146.5	162
	J	mm	8	6	6	6
	K	mm	30	29	25	29
Ring gap	**L**	mm	4	4	4	5
	M	mm	66	82	100	128
	N	mm	70	86	104	128
	P	deg.	15	15	90	15
	Q	deg.	30	30	15	60
	R	deg.	180	180	30	30

SMW-Autoblok Type		EMX-S-1	EMX-S-2	EMX-S-3	EMX-S-4
Axial stroke	mm	4	6	6	6
Expansion in dia.	mm	0.8	1.2	1.2	1.2
Max. actuating force	kN	15	20	25	35
Max. torque	Nm	50	90	160	410
Weight	kg	3.9	4.4	5.3	9.4
Recommended clamping cylinders		**SIN-S-70**	**SINS-S-85**	**SINS-S-85**	**SINS-S-85**

All measurements in unclamped position = Right end position.

Segment sleeve mandrel Ø 18 - 105 mm

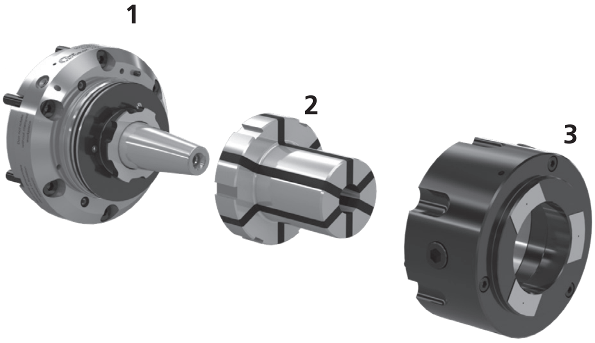
- Size 1 - 4
- Large expansibility

EMX-S

Segment sleeve mandrel
Power operated

Technical design

1. Basic body EM-S with spindle adapter
2. Segment sleeve (case hardened + vulcanized) with bayonet quick change.
   Clamping sleeves size EM-S-1 with three segments, clamping sleeves from size EM-S-2 on with six segments for better gripping force distribution
3. Workstop



Clamping sleeves

EMX-S-1*

Ø	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
Id. No.	9601301800	9601301900	9601302000	9601302100	9601302200	9601302300	9601302400	9601302500	9601302600	9601302700	9601302800	9601302900	9601303000
Ø	**31**	**32**	**33**	**34**	**35**								
Id. No.	9601303100	9601303200	9601303300	9601303400	9601303500								

EMX-S-2**

Ø	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**
Id. No.	9602303000	9602303100	9602303200	9602303300	9602303400	9602303500	9602303600	9602303700	9602303800	9602303900	9602304000	9602304100	9602304200
Ø	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**
Id. No.	9602304300	9602304400	9602304500	9602304600	9602304700	9602304800	9602304900	9602305000	9602305100	9602305200	9602305300	9602305400	9602305500

EMX-S-3**

Ø	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**
Id. No.	9603304500	9603304600	9603304700	9603304800	9603304900	9603305000	9603305100	9603305200	9603305300	9603305400	9603305500	9603305600	9603305700
Ø	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**
Id. No.	9603305800	9603305900	9603306000	9603306100	9603306200	9603306300	9603306400	9603306500	9603306600	9603306700	9603306800	9603306900	9603307000
Ø	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**			
Id. No.	9603307100	9603307200	9603307300	9603307400	9603307500	9603307600	9603307700	9603307800	9603307900	9603308000			

EMX-S-4**

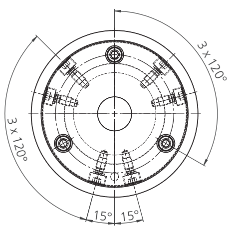
Ø	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**	**81**	**82**
Id. No.	9604307000	9604307100	9604307200	9604307300	9604307400	9604307500	9604307600	9604307700	9604307800	9604307900	9604308000	9604308100	9604308200
Ø	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**	**91**	**92**	**93**	**94**	**95**
Id. No.	9604308300	9604308400	9604308500	9604308600	9604308700	9604308800	9604308900	9604309000	9604309100	9604309200	9604309300	9604309400	9604309500
Ø	**96**	**97**	**98**	**99**	**100**	**101**	**102**	**103**	**104**	**105**			
Id. No.	9604309600	9604309700	9604309800	9604309900	9604310000	9604310100	9604310200	9604310300	9604310400	9604310500			

* The clamping sleeves have a max. radial expansibility in diameter of ± 0.4 mm from the nominal diameter.
** The clamping sleeves have a max. radial expansibility in diameter of ± 0.6 mm from the nominal diameter.

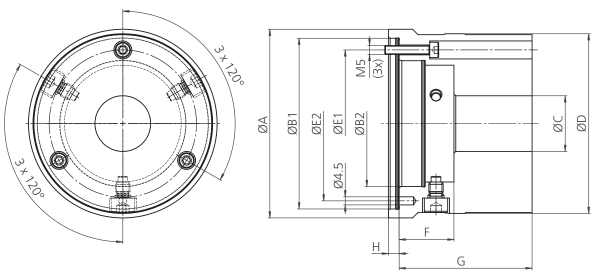
Soft work stop blanks

Type	EMX-S-1	EMX-S-2	EMX-S-3	EMX-S-4
Id. No.*	9100321	9100322	9100323	9100324
Id. No.**	5301416	5301417	5301418	5301419
A	93	105	113	142
B1	80	95	-	-
B2	-	-	88	115
C	19	31	46	71
D	82	100	114	143
E1	66	82	100	128
E2	70	86	104	128
F	27.5	30.5	41	45
G	53	74	95	105
H	6	6	-	-

EMX-S-1



EMX-S-2 / -3 / -4



* Soft, finish machined on mandrel side, pre machined on workpiece side.
** Soft, with stock material (0.3 mm) for case hardening and grinding

Ordering review set articles (1-circuit-Air sensing (AS) basic mandrel + adapter)

Type	EMX-S-1	EMX-S-2	EMX-S-3	EMX-S-4
A05	9601000005	9602000005	9603000005	9604000005
A06	9601000006	9602000006	9603000006	9604000006
A08	9601000008	9602000008	9603000008	9604000008
Z140	9601000140	9602000140	9603000140	9604000140
Z170	9601000170	9602000170	9603000170	9604000170

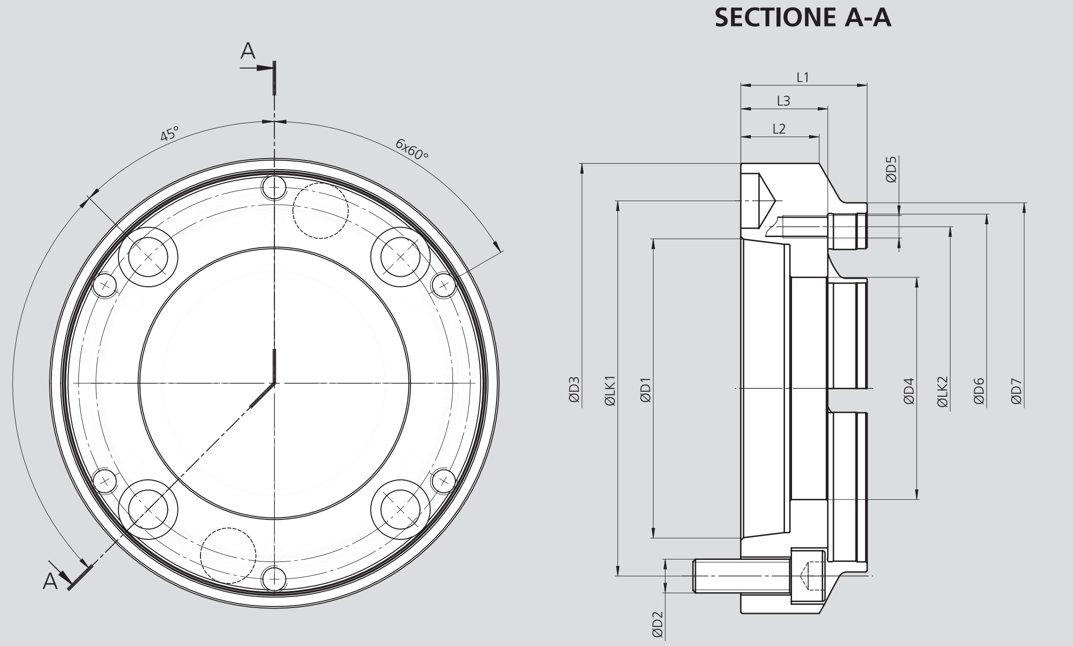
Parts included: Basic mandrel + standard flange + mounting bolts
For mandrels with 2-circuit-AS use Id. No. on page 310 for basic mandrel and code for adapters on page 312!
For mandrels with 2-circuit-AS use Id. no. of the basic mandrel on the previous page and code for adapters on the following page!

Adapters

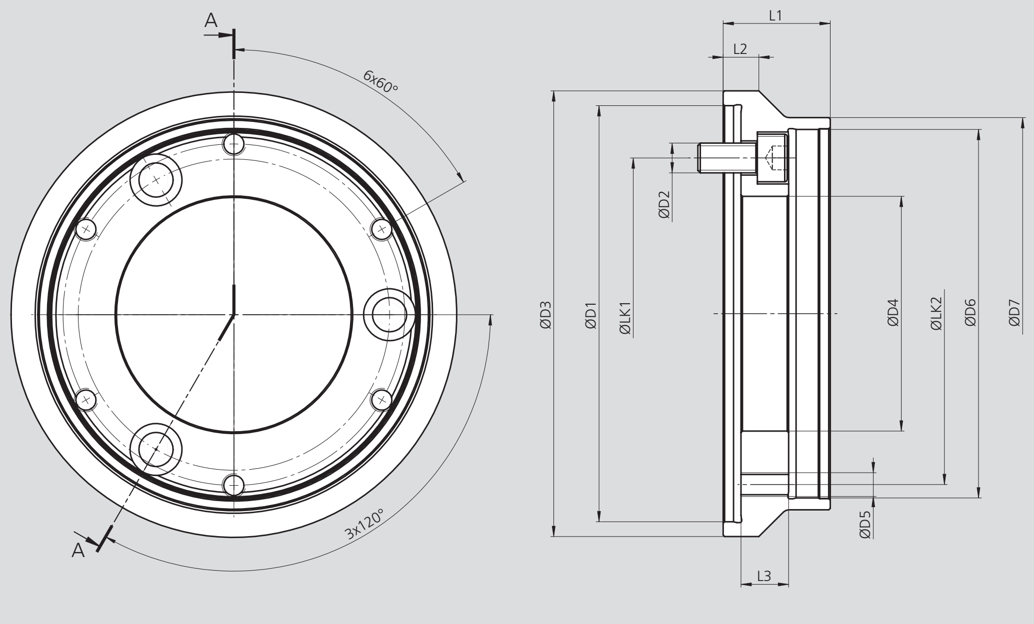
ISO-A for expanding mandrels

- Mandrels EMX-S have cylindrical mounting
- Adapters for DIN 55026 / ISO-A 702-1 / ISO-A 702-1 spindle noses

A



ZA



Subject to technical changes.
For more detailed information please ask our customer service.

Technical data

Flange Id. No.	Mandrel size		Spindle nose ISO 702-1 (A)	Spindle nose ISO 702-4 (ZA)	D1	LK1	D2	D3	D4	LK2	D5	D6	D7	L1	L2	L3
9600200005	EMX-S-1 / 2 / 3	mm	A5	-	82.563	104.8	4 x M10	132	79	115	6 x M8	124	D3	45	-	31
9600200006		mm	A6	-	106.375	133.4	4 x M12	160	79	115	6 x M8	124	132	45	28	31
9600200008		mm	A8	-	139.719	171.4	4 x M16	202	79	115	6 x M8	124	140	47	29	33
9600200140		mm	-	140	140	104.8	3 x M10	150	79	115	6 x M8	124	132	36	12	16
9600200170		mm	-	170	170	133.4	6 x M12	180	79	115	6 x M8	124	157	36	24.5	16
9604200005	EMX-S-4	mm	A5	-	82.563	104.8	4 x M10	157	79	137	6 x M8	147	D3	45	-	31
9604200006		mm	A6	-	106.375	133.4	4 x M12	157	102.5	137	6 x M8	147	D3	43	-	29
9604200008		mm	A8	-	139.719	171.4	4 x M16	202	103	137	6 x M8	147	157	47	17	33
9604200140		mm	-	140	140	104.8	3 x M10	157	80	137	6 x M8	147	D3	50	-	31
9604200170		mm	-	170	170	133.4	6 x M12	180	103	137	6 x M8	147	157	48	11.5	29

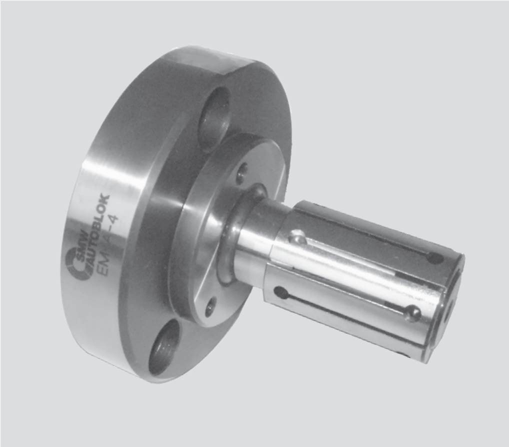
Notes

EM-A / EM-AL

Expanding mandrel
Manual or power operated

Expanding mandrel Ø 14.7 - 129.7 mm

- Size 1 - 11
- Large expansibility
- EM-AL: Body lengthened



Application/customer benefits

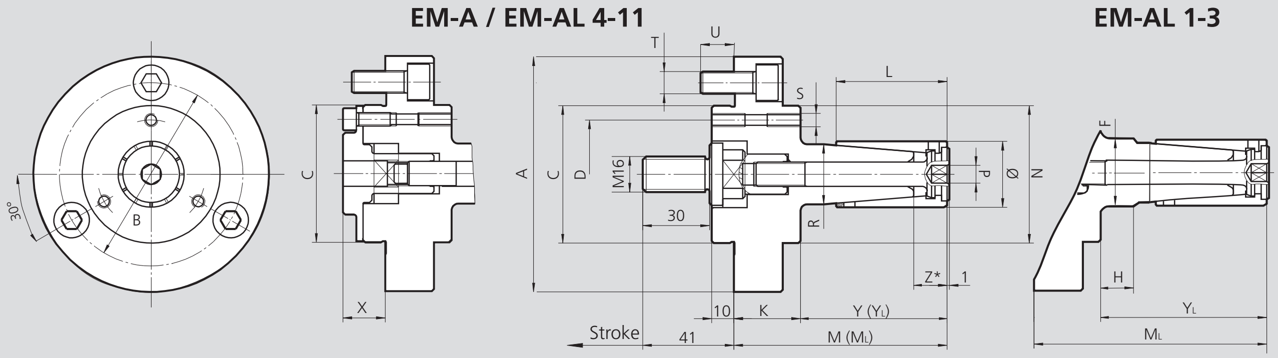
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission because of fixed arbor
- Axial pull down by axial movement of the clamping sleeve during actuation
- Quick set-up

Technical features

- Large expansibility 1 - 2 mm depending on size
- Hand or power operated
- Flange mounting
- Very rigid design
- Tapped holes at the front face to mount axial stops
- Clamping sleeves are also available in siliconized version
- EM-AL: Clamping mandrel with extra long body

Standard equipment

Basic mandrel with draw bolt for power operation
Mounting bolts



Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type		EM-A-1 EM-AL-1	EM-A-2 EM-AL-2	EM-A-3 EM-AL-3	EM-A-4 EM-AL-4	EM-A-5 EM-AL-5	EM-A-6 EM-AL-6	EM-A-7 EM-AL-7	EM-A-8 EM-AL-8	EM-A-9 EM-AL-9	EM-A-10 EM-AL-10	EM-A-11 EM-AL-11
EM-A Id. No. (power operated)		68100110	68100210	68100310	68100410	68100510	68100610	68100710	68100810	68100910	68101010	68101110
EM-AL Id. No. (power operated)		68100111	68100211	68100311	68100411	68100511	68100611	68100711	68100811	68100911	68101011	68101111
A		106	106	106	106	106	106	130	130	130	130	130
B		82.6	82.6	82.6	82.6	82.6	82.6	104.8	104.8	104.8	104.8	104.8
C	**g5**	62	62	62	62	62	62	86	86	86	86	86
D		49	49	49	49	49	49	73	73	73	100	100
F		22	23	26	-	-	-	-	-	-	-	-
H		25	30	35	-	-	-	-	-	-	-	-
K		30	30	30	30	30	30	30	30	30	30	30
L		35	40	46	50	60	60	80	90	100	122	140
M		81	86	92	96	106	106	132	142	152	174	195
M_L	(Version EM-AL)	106	116	127	136	146	146	182	188	222	248	275
N		62	62	62	62	62	62	86	86	86	-	-
Ø	**mm**	14.7-19.7	19.7-24.7	24.7-29.7	29.7-34.7	34.7-39.7	39.7-44.7	44.7-54.7	54.7-64.7	64.7-81.7	81.7-101.7	101.7-131.7
P	**SW**	4	4	6	8	8	8	8	10	10	10	10
R	**h6**	14	19	23	27	31.5	36	42	50	60	73	86
S	**(3 x 120°)**	M6	M6	M6	M6	M6	M6	M6	M6	M6	M6	M6
T	**(3 x 120°)**	M10	M10	M10	M10	M10	M10	M10	M10	M10	M10	M10
U		15	15	15	15	15	15	15	15	15	17	17
X		19	19	19	19	19	19	13	13	13	21	21
Y		51	56	62	66	76	76	102	112	122	144	165
Y_L	(Version EM-AL)	76	86	97	106	116	116	152	158	192	218	245
Z*		12.5	14.5	14.5	15	15.5	16	24	26	26.5	27.5	32
Manual kit EM-A		68110110	68110210	68110310	68110410	68110510	68110610	68110710	68110810	68110810	68111010	68111110
Manual kit EM-AL		68110111	68110211	68110311	68110411	68110511	68110611	68110711	68110811	68110811	68111011	68111111
Draw bolt power op. EM-A		68050110	68050210	68050310	68050410	68050510	68050610	68050710	68050710	68050710	68051010	68051110
Draw bolt power op. EM-AL		68050111	68050211	68050311	68050411	68050511	68050611	68050711	68050811	68050911	68051011	68051111

* Clamping on area Z only is not allowed.

Technical data

SMW-AUTOBLOK Type		EM-A-1 EM-AL-1	EM-A-2 EM-AL-2	EM-A-3 EM-AL-3	EM-A-4 EM-AL-4	EM-A-5 EM-AL-5	EM-A-6 EM-AL-6	EM-A-7 EM-AL-7	EM-A-8 EM-AL-8	EM-A-9 EM-AL-9	EM-A-10 EM-AL-10	EM-A-11 EM-AL-11
Stroke	mm	6	6	6	6	6	6	12	12	12	12	12
Max. actuating force	kN	5	7	12	12	15	20	20	20	25	25	30
Max. transm. torque	Nm	15	35	75	100	120	150	200	250	275	320	500
Actuating cylinder (rec.)		**SIN-S 70**	**SIN-S 70**	**SIN-S 85**	**SIN-S 85**	**SIN-S 85**	**SIN-S 100**	**SIN-S 100**	**SIN-S100**	**SIN-S-100**	**SIN-S-100**	**SIN-S 125**

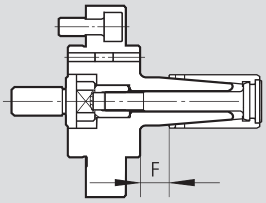
All dimensions in unclamped position = Right end position.

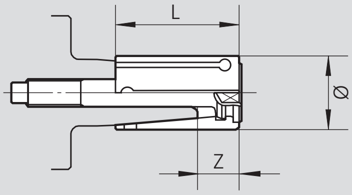
Expanding mandrel Ø 14.7 - 129.7 mm

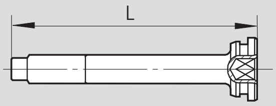
■ Ordering review

EM-A / EM-AL

Expanding mandrel
Manual or power operated







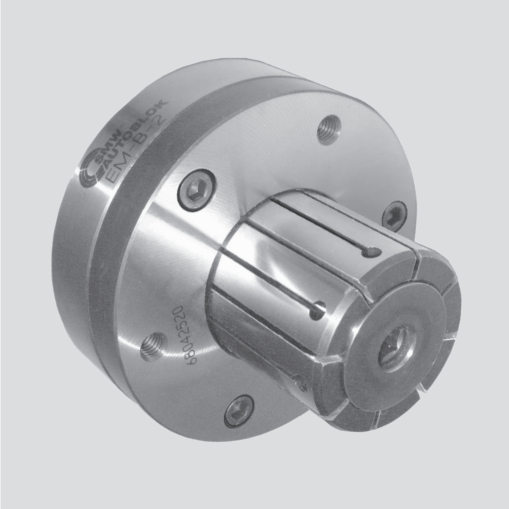
Basic mandrel			Clamping sleeve cpl. with actuating screw					Actuating screw	
Type	Id. No.	F	Id. No.	Ø	L	Expansibility	Z	Id. No.	L
EM-A-1	68100110	16	68300147	14.7	35	1	12.5	68030110	76.5
			68300157	15.7	35	1	12.5		
EM-AL-1	68100111	41	68300167	16.7	35	1	12.5		
			68300177	17.7	35	1	12.5		
			68300187	18.7	35	1	12.5		
EM-A-2	68100210	16	68300197	19.7	40	1	14.5	68030210	81
			68300207	20.7	40	1	14.5		
EM-AL-2	68100211	46	68300217	21.7	40	1	14.5		
			68300227	22.7	40	1	14.5		
			68300237	23.7	40	1	14.5		
EM-A-3	68100310	16	68300247	24.7	46	1	14.5	68030310	87.5
			68300257	25.7	46	1	14.5		
EM-AL-3	68100311	51	68300267	26.7	46	1	14.5		
			68300277	27.7	46	1	14.5		
			68300287	28.7	46	1	14.5		
EM-A-4	68100410	16	68300297	29.7	50	1	15	68030410	93
			68300307	30.7	50	1	15		
EM-AL-4	68100411	56	68300317	31.7	50	1	15		
			68300327	32.7	50	1	15		
			68300337	33.7	50	1	15		
EM-A-5	68100510	16	68300347	34.7	60	1	15.5	68030510	103
			68300357	35.7	60	1	15.5		
EM-AL-5	68100511	56	68300367	36.7	60	1	15.5		
			68300377	37.7	60	1	15.5		
			68300387	38.7	60	1	15.5		
EM-A-6	68100610	16	68300397	39.7	60	1	16	68030610	103
			68300407	40.7	60	1	16		
EM-AL-6	68100611	56	68300417	41.7	60	1	16		
			68300427	42.7	60	1	16		
			68300437	43.7	60	1	16		
EM-A-7	68100710	22	68300447	44.7	80	2	24	68030710	117
			68300467	46.7	80	2	24		
EM-AL-7	68100711	72	68300487	48.7	80	2	24		
			68300497	49.7	80	2	24		
			68300507	50.7	80	2	24		
			68300527	52.7	80	2	24		
EM-A-8	68100810	22	68300547	54.7	90	2	26	68030810	127
			68300567	56.7	90	2	26		
EM-AL-8	68100811	68	68300587	58.7	90	2	26		
			68300597	59.7	90	2	26		
			68300607	60.7	90	2	26		
			68300627	62.7	90	2	26		
EM-A-9	68100910	22	68300647	64.7	100	2	26.5	68030910	137
			68300667	66.7	100	2	26.5		
EM-AL-9	68100911	92	68300687	68.7	100	2	26.5		
			68300697	69.7	100	2	26.5		
			68300707	70.7	100	2	26.5		
			68300727	72.7	100	2	26.5		
			68300747	74.7	100	2	26.5		
			68300767	76.7	100	2	26.5		
			68300787	78.7	100	2	26.5		
			68300807	80.7	100	2	26.5		
EM-A-10	68101010	22	68300817	81.7	122	2	27.5	68031010	165
			68300837	83.7	122	2	27.5		
EM-AL-10	68101011	96	68300857	85.7	122	2	27.5		
			68300877	87.7	122	2	27.5		
			68300897	89.7	122	2	27.5		
			68300917	91.7	122	2	27.5		
			68300937	93.7	122	2	27.5		
			68300957	95.7	122	2	27.5		
			68300977	97.7	122	2	27.5		
			68300997	99.7	122	2	27.5		
EM-A-11	68101110	25	68301017	101.7	140	2	32	68031110	183
			68301037	103.7	140	2	32		
EM-AL-11	68101111	105	68301057	105.7	140	2	32		
			68301077	107.7	140	2	32		
			68301097	109.7	140	2	32		
			68301117	111.7	140	2	32		
			68301137	113.7	140	2	32		
			68301157	115.7	140	2	32		
			68301177	117.7	140	2	32		
			68301197	119.7	140	2	32		
			68301217	121.7	140	2	32		
			68301237	123.7	140	2	32		
			68301257	125.7	140	2	32		
			68301277	127.7	140	2	32		
			68301297	129.7	140	2	32		

EM-B

Expanding mandrel
Manual or power operated

Expanding mandrel Ø 16 - 129.5 mm

- Size 0 - 4
- Large expansibility



Application/customer benefits

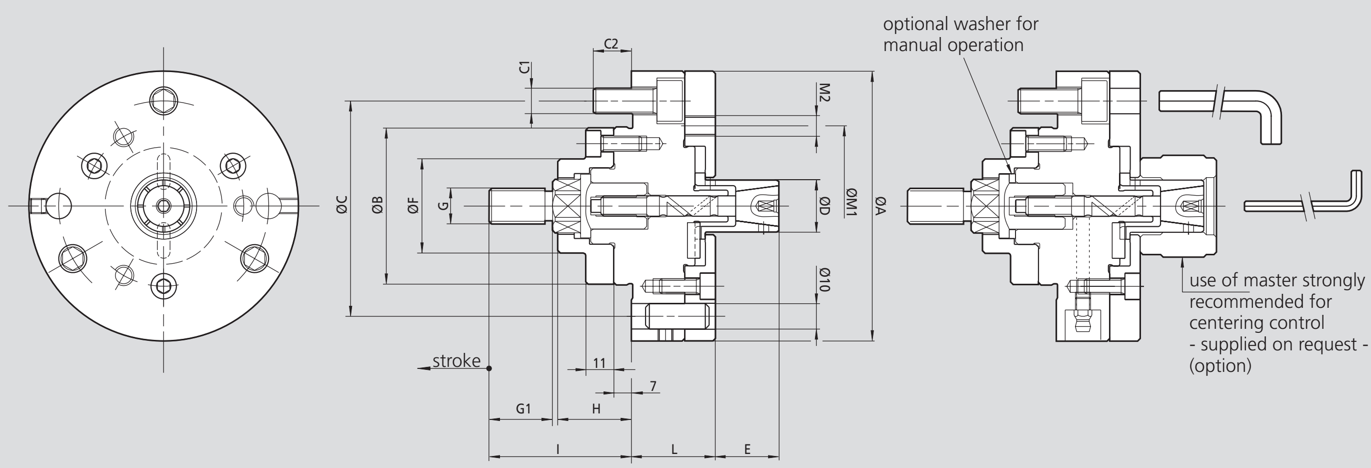
- For turning, milling, grinding and gear cutting operations
- High flexibility by means of modular system
- High torque transmission and concentricity
- No axial movement of clamping sleeve during operation
- Clamping of very short workpieces on the front section of the sleeve possible

Technical features

- Large expansibility up to 1.5 mm in diameter
- Hand or power operated
- Flange mounting
- Very rigid design
- Tapped holes at the front face to mount axial stops
- Clamping sleeves are also available in siliconized version

Standard equipment

Basic mandrel with draw bolt for power operation
Mounting bolts



Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type		EM-B 0	EM-B 1	EM-B 2	EM-B 3	EM-B 4
A	mm	106	106	106	125	180
B g5	mm	62	62	62	62	86
C	mm	82.6	82.6	82.6	82.6	133.4
C1	mm	3 x M10	3 x M10	3 x M10	3 x M10	3 x M12
C2	mm	16	16	16	16	15
D	mm	16 - 25.5	20 - 40.5	35 - 60.5	55 - 81	80 - 131
E	mm	23	28	43	58	85
F	mm	37	37	37	37	55
G	mm	M16	M16	M16	M16	M16
G1	mm	25	25	25	25	25
H	mm	29	29	29	29	36
I	mm	56	56	56	56	62
L	mm	35	37	37	37	50
M1	mm	63	68	85	104	162
M2	mm	3 x M8	3 x M8	3 x M8	6 x M8	6 x M8
N	mm	M8	M10	M14	M14	M18

Technical data

SMW-AUTOBLOK Type		EM-B 0	EM-B 1	EM-B 2	EM-B 3	EM-B 4
Axial stroke	mm	2.5	2.5	2.5	5	6.5
Sleeve expansion on Ø	mm	0.5	0.5	0.5	1	1.5
Max. axial force	kN	7	12	20	20	25
Recommended	**CSN**	**150**	**200**	**200**	**200**	**250**
actuating cylinders	**SIN-S**	**70**	**70**	**85**	**85**	**100**

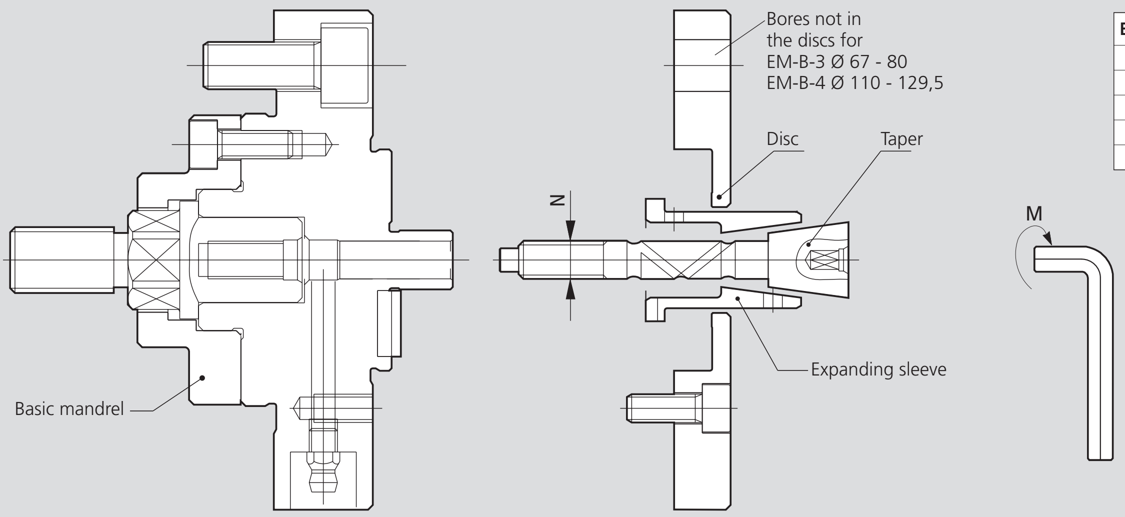
All measurements in unclamped position = Right end position.

Expanding mandrel Ø 16 - 129.5 mm

■ Ordering review

EM-B

Expanding mandrel
Manual or power operated



EM-B	N	M(N.m)
0	M8	23
1	M10	45
2	M14	125
3	M14	125
4	M18	250

Subject to technical changes.
For more detailed information please ask our customer service.

EM-B-0

Basic mandrel 68100021
Expanding sleeve Ø D16 – Ø D25

Taper	68020120		
Disc	**68040121**	**68040221**	**68040321**
D16	68200160		
D16.5	68200165		
D17	68200170		
D17.5		68200175	
D18		68200180	
D18.5		68200185	
D19			68200190
D19.5			68200195
D20			68200200
Taper	**68020220**		
Disc	**68040421**	**68040521**	**68040621**
D20.5	68200205		
D21	68200210		
D21.5	68200215		
D22		68200220	
D22.5		68200225	
D23		68200230	
D23.5			68200235
D24			68200240
D24.5			68200245
D25			68200250

EM-B-1

Basic mandrel 68101021
Expanding sleeve Ø D20 – Ø D40

Taper	68021120		
Disc	**68041121**	**68041221**	**68041321**
D20	68210200		
D20.5	68210205		
D21	68210210		
D21.5		68210215	
D22		68210220	
D22.5		68210225	
D23		68210230	
D23.5		68210235	
D24			68210240
D24.5			68210245
D25			68210250
Taper	**68021220**		
Disc	**68041421**	**68041521**	**68041621**
D25.5	68210255		
D26	68210260		
D26.5	68210265		
D27	68210270		
D27.5	68210275		
D28	68210280		
D28.5		68210285	
D29		68210290	
D29.5		68210295	
D30		68210300	
D30.5		68210305	
D31		68210310	
D31.5			68210315
D32			68210320
D32.5			68210325
D33			68210330
D33.5			68210335
D34			68210340
D34.5			68210345
D35			68210350
Taper	**68021320**		
Disc	**68041721**	**68041821**	
D35.5	68210355		
D36	68210360		
D36.5	68210365		
D37	68210370		
D37.5	68210375		
D38	68210380		
D38.5		68210385	
D39		68210390	
D39.5		68210395	
D40		68210400	

EM-B-2

Basic mandrel 68102021
Expanding sleeve Ø D35 – Ø D60

Taper	68022120		
Disc	**68042121**	**68042221**	
D35	68220350		
D35.5	68220355		
D36	68220360		
D36.5	68220365		
D37	68220370		
D37.5		68220375	
D38		68220380	
D38.5		68220385	
D39		68220390	
D39.5		68220395	
D40		68220400	
Taper	**68022220**		
Disc	**68042321**	**68042421**	**68042521**
D40.5	68220405		
D41	68220410		
D41.5	68220415		
D42	68220420		
D42.5	68220425		
D43	68220430		
D43.5		68220435	
D44		68220440	
D44.5		68220445	
D45		68220450	
D45.5		68220455	
D46		68220460	
D46.5			68220465
D47			68220470
D47.5			68220475
D48			68220480
D48.5			68220485
D49			68220490
D49.5			68220495
D50			68220500
Taper	**68022320**		
Disc	**68042621**	**68042721**	**68042821**
D50.5	68220505		
D51	68220510		
D51.5	68220515		
D52	68220520		
D52.5	68220525		
D53	68220530		
D53.5		68220535	
D54		68220540	
D54.5		68220545	
D55		68220550	
D55.5		68220555	
D56		68220560	
D56.5			68220565
D57			68220570
D57.5			68220575
D58			68220580
D58.5			68220585
D59			68220590
D59.5			68220595
D60			68220600

EM-B-3

Basic mandrel 68103021
Expanding sleeve Ø D55 – Ø D80

Taper	68023120		
Disc	**68043121**	**68043221**	
D55	68230550		
D56	68230560		
D57	68230570		
D58		68230580	
D59		68230590	
D60		68230600	
Taper	**68023220**		
Disc	**68043321**	**68043421**	**68043521**
D61	68230610		
D62	68230620		
D63	68230630		
D64		68230640	
D65		68230650	
D66		68230660	
D67			68230670
D68			68230680
D69			68230690
D70			68230700
Taper	**68023320**		
Disc	**68043621**	**68043721**	**68043821**
D71	68230710		
D72	68230720		
D73	68230730		
D74		68230740	
D75		68230750	
D76		68230760	
D77			68230770
D78			68230780
D79			68230790
D80			68230800

EM-B-4

Basic mandrel 68104021
Expanding sleeve Ø D80 – Ø D129.5

Taper	68024120	
Disc	**68044121**	**68044221**
D80	68240800	
D81.5	68240815	
D83	68240830	
D84.5	68240845	
D86		68240860
D87.5		68240875
D89		68240890
D90.5		68240905
Taper	**68024220**	
Disc	**68044321**	**68044421**
D92	68240920	
D93.5	68240935	
D95	68240950	
D96.5	68240965	
D98		68240980
D99.5		68240995
D101		68241010
D102.5		68241025
Taper	**68024320**	
Disc	**68044521**	**68044621**
D104	68241040	
D105.5	68241055	
D107	68241070	
D108.5	68241085	
D110		68241100
D111.5		68241115
D113		68241130
D114.5		68241145
Taper	**68024420**	
Disc	**68044721**	**68044821**
D116	68241160	
D117.5	68241175	
D119	68241190	
D120.5	68241205	
D122		68241220
D123.5		68241235
D125		68241250
D126.5		68241265
D128		68241280
D129.5		68241295

Ordering example:

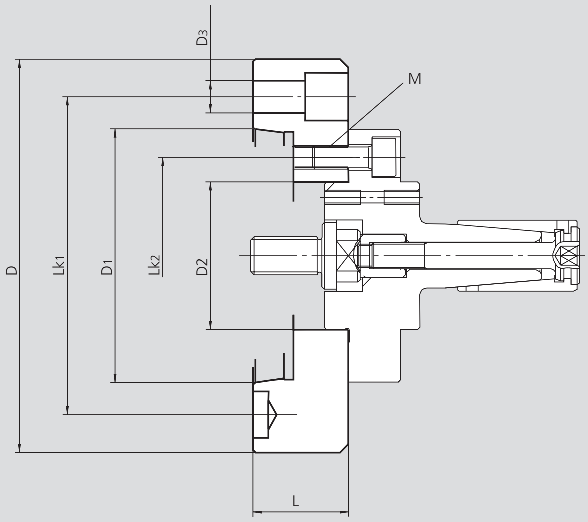
Component ID = Ø 30	
Basic mandrel EM-B-1	Id. No. 68101021
Expanding sleeve AD = Ø 30	Id. No. 68210300
Taper	Id. No. 68021220
Disc	Id. No. 68041521

Adapters

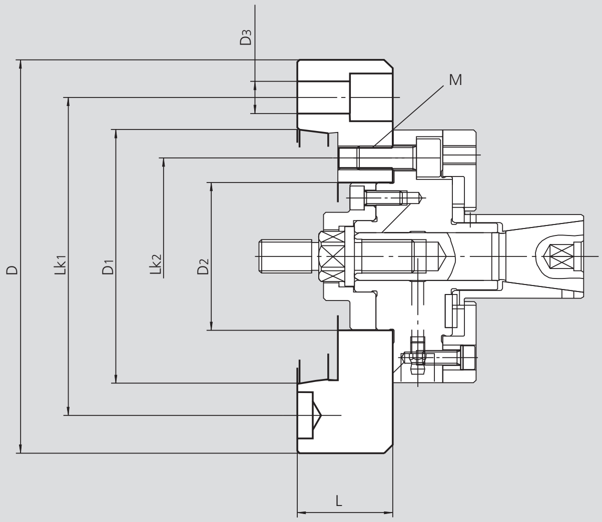
ISO-A for expanding mandrels

- Mandrels EM-A and EM-B have cylindrical mounting
- Adapters for DIN 55026 / ISO-A 702/1 spindle noses

EM-A



EM-B



Subject to technical changes.
For more detailed information please ask our customer service.

Technical data

Adapter flange Id. No.		Spindle nose ISO	D	D1	D2	D3	LK1	LK2	L	M
24150100	mm	A5	127	82.563	62^{H6}	12	104.8	82.6	40	3 x M10
24150400	mm	A5	135	82.563	86^{H6}	12	104.8	104.8	40	3 x M10
24160100	mm	A6	165	106.375	62^{H6}	13.5	133.4	82.6	40	3 x M10
24160400	mm	A6	165	106.375	86^{H6}	13.5	133.4	104.8	40	3 x M10
24180100	mm	A8	210	139.719	62^{H6}	17	171.4	82.6	40	3 x M10
24180400	mm	A8	210	139.719	86^{H6}	17	171.4	104.8	40	3 x M10

Appropriate adapter flanges	EM-A	EM-B
24150100 ISO-A5 24160100 ISO-A6 24180100 ISO-A8	1-2-3-4-5-6	0-1-2-3
24150400 ISO-A5 24160400 ISO-A6 24180400 ISO-A8	7-8-9-10-11	4

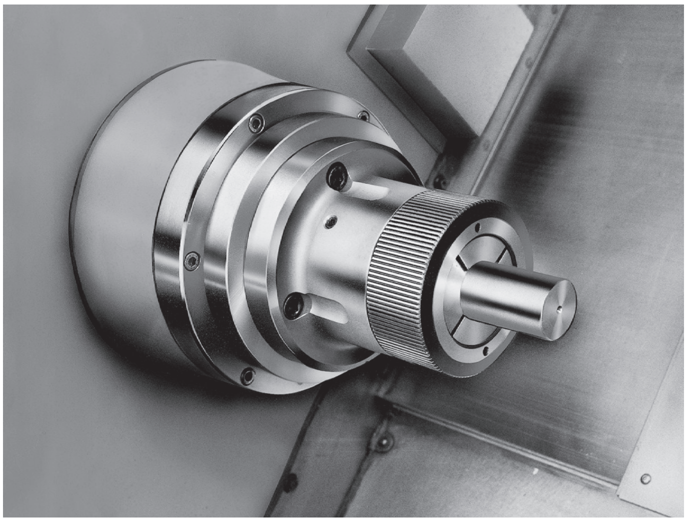
Notes

KSZ-MB

Collet chuck

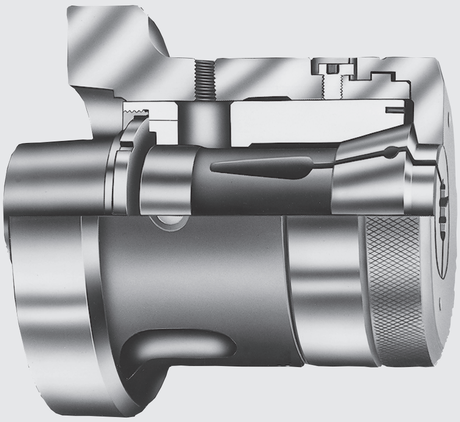
Collet chuck for bar machining

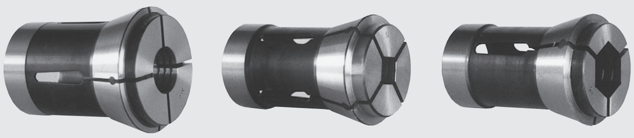
- Bars Ø 3 - 80
- Collets DIN 6343



Application/customer benefits

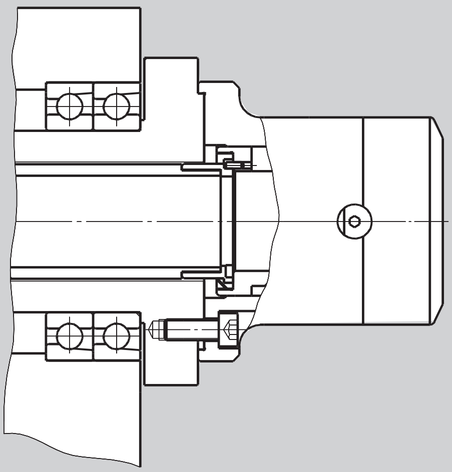
- Efficient machining of bar material on automatic bar machines with bar feed.
- Less deformation of thin-walled components during clamping.
- Quick set-up by means of bayonet locking cap.
- For highest speeds.
- Clamping / unclamping of chuck during spindle rotation is possible.





Profitability

- Quick and simple installation to all lathes (alternating with 3-jaw chucks).
- Round, square and hexagonal material can be clamped by simply changing the collet.
- Cost effective by using standard collets DIN 6343 as well as standard Rubberflex and multi range collets.
- Collets for highest concentricity for special profiles, vulcanized, coated or ground to size are available on request.



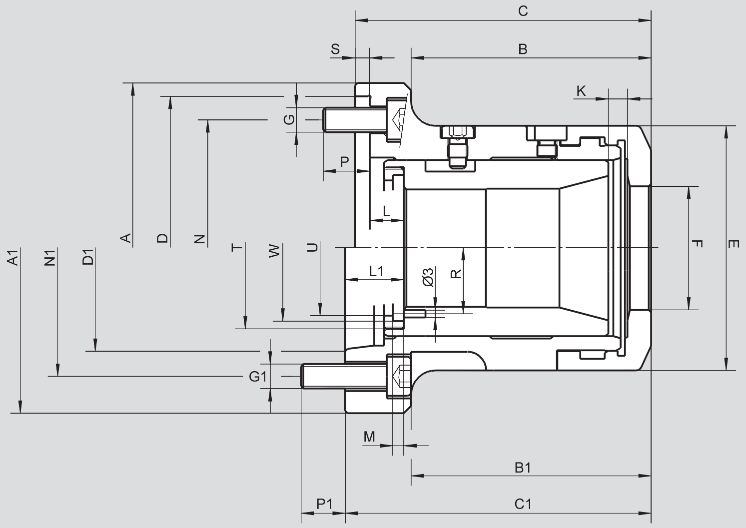
- Case hardened and ground chuck parts ensure long service life.
- Finish-machining of all parts in one set-up guarantees perfect concentricity.
- Direct mounting to the machine spindle ensures high concentricity.
- High operating reliability due to a minimum of parts.
- High axial positioning accuracy of the components by means of push type collet system.

KSZ-MB

■ Main dimensions and technical data

Collet chuck

Attention: Chuck position „open“ (left end position) is situated with end stop in actuating cylinder.
Do not actuate chuck without cap nut mounted!
Remove pin dia. 3 for rotating ring nut for direct connection in thread dimension T.



Subject to technical changes.
For more detailed information please ask our customer service.

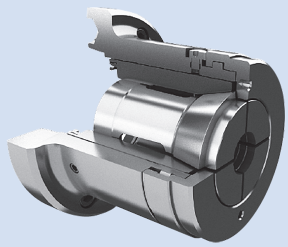
SMW-AUTOBLOK Type		KSZ-MB 40			KSZ-MB 60				KSZ-MB 80
Mounting		**Z140**	**A5**	**A6**	**Z170**	**Z220**	**A6**	**A8**	**Z220 / A8**
Id. No.		088174	088180	088179	088175	088176	088178	088177	091209
	A h6	148	-	-	185	235	-	-	-
	A1 h6	-	135	170	-	-	170	220	220
	B	90.9	-	-	108.9	108.9	-	-	-
	B1	-	96.9	91.9	-	-	117.9	108.4	147
	C	113.9	-	-	138.9	140.9	-	-	-
	C1	-	123.9	123.9	-	-	144.9	145.9	176.5
Center mounting	**D**	140	-	-	170	220	-	-	-
Short taper mounting according to DIN 55026	**D1**	-	A5	A6	-	-	A6	A8	A8
	E	102	102	102	130	130	130	130	156
	F	51	51	51	74	74	74	74	95
	G	3 x M10	-	-	6 x M12	6 x M16	-	-	-
	G1	-	4 x M10	4 x M12	-	-	4 x M12	4 x M16	6 x M16
	Kmax.	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
	L	8.5	-	-	14.0	16.0	-	-	-
	L1	-	24.5	24.5	-	-	26.0	27.0	41
	M	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0
	N	104.8	-	-	133.4	171.4	-	-	-
	N1	-	104.8	133.4	-	-	133.4	171.4	171.4
	P	18	-	-	14	20	-	-	-
	P1	-	14	14.5	-	-	16	16	27.5
	R	28	28	28	39.5	39.5	39.5	39.5	51
	S	6	-	-	6	6	-	-	-
Pressure sleeve thread / **thread depth**	**T**	M66 x 1.5 / **8**			M90 x 1.5 / **8**				M114 x 2 / **11**
	U	54			77				99
	W	62.5			83				107
Max. speed	r.p.m.	6000	6000	6000	5000	5000	5000	5000	4000
Max. actuating force	daN	2500	2500	2500	3000	3000	3000	3000	3500
Max. gripping force	daN	5400	5400	5400	6500	6500	6500	6500	7300
Weight without collets	kg	6.1	7.7	7.8	13.6	14.2	14.1	18.1	20.8
Rec. actuating cylinders	**Type**	**VNK-T2 102-46**			**VNK-T2 150-67**				**VNK-T2 200-86**
Speed	r.p.m.	7000			5500				4000

KSZ-MB

Collet chuck

■ Ordering review

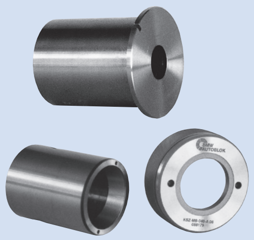
Supply range: Chuck and mounting bolts



Size / Spindle mounting	KSZ-MB 40	KSZ-MB 60	KSZ-MB 80 - 193 E
Centering rim standard	Z140 088174	Z170 088175	Z220* 091209*
Centering rim large		Z220 088176	
A 05	088180		
A 06	088179	088178	
A 08		088177	091209*

* **Attention:** KSZ-MB 80-193E with standard centering rim (Id. No. 091209) has outside centering 220 mm (and also inside taper A8).

Accessories for KSZ-MB



Size / Accessories	KSZ-MB 40	KSZ-MB 60	KSZ-MB 80
Blank adapter	0363960	0360810	
Reduction for smaller collets (comprising pressure sleeve and cap nut)	KSZ-MB size 40 to size 26 0360720 / 0361792	KSZ-MB size 60 to size 40 0360121 / 0361360	KSZ-MB size 80 to size 40 0362082 / 0360135
			KSZ-MB size 80 to size 60 0362081 / 0360134

Collets for KSZ-MB 40

Steel collets DIN 6343 series 173 E
ROUND*

Ø	**3**	**3.5**	**4**	**4.5**	**5**	**5.5**	**6**	**6.5**	**7**	**7.5**	**8**	**8.5**	**9**
Id. No.	012961	012962	012963	012964	012965	012966	012967	012968	012969	012970	012971	012972	012973
Ø	**9.5**	**10**	**10.5**	**11**	**11.5**	**12**	**12.5**	**13**	**13.5**	**14**	**14.5**	**15**	**15.5**
Id. No.	012974	012975	012976	012977	012978	012979	012980	012981	012982	012983	012984	012985	012986
Ø	**16**	**16.5**	**17**	**17.5**	**18**	**18.5**	**19**	**19.5**	**20**	**20.5**	**21**	**21.5**	**22**
Id. No.	012987	012988	012989	012990	012991	012992	012993	012994	012995	012996	012997	012998	012999
Ø	**22.5**	**23**	**23.5**	**24**	**24.5**	**25**	**25.5**	**26**	**26.5**	**27**	**27.5**	**28**	**28.5**
Id. No.	013000	013001	013002	013003	013004	013005	013006	013007	013008	013009	013010	013011	013012
Ø	**29**	**29.5**	**30**	**30.5**	**31**	**31.5**	**32**	**32.5**	**33**	**33.5**	**34**	**34.5**	**35**
Id. No.	013013	013014	013015	013016	013017	013018	013019	013020	013021	013022	013023	013024	013025
Ø	**35.5**	**36**	**36.5**	**37**	**37.5**	**38**	**38.5**	**39**	**39.5**	**40**	**40.5**	**41**	**41.5**
Id. No.	013026	013027	013028	013029	013030	013031	013032	013033	013034	013035	013036	013037	013038
Ø	**42**												
Id. No.	013039												

HEXAGONAL**

⬡	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**19**
Id. No.	013040	013041	013042	013043	013044	013045	013046	013047	013048	013049	013050	013051	013052
⬡	**20**	**21**	**22**	**24**	**26**	**27**	**28**	**30**	**31**	**32**	**36**		
Id. No.	016428	016429	013053	013054	016430	013055	016431	013056	016432	013057	013058		

SQUARE**

☐	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**18**	**20**
Id. No.	013059	013060	013061	013062	013063	013064	013065	013066	013067	013068	013069	013070	013071
☐	**22**	**25**	**28**										
Id. No.	013072	013073	013074										

Rubberflex collets series 36 (recommended for raw part clamping)
ROUND

Ø	**7-9**	**9-11**	**11-13**	**13-15**	**15-17**	**17-19**	**19-21**	**21-23**	**23-25**	**25-27**	**27-29**	**29-31**	**31-33**
Id. No.	013076	013077	013078	013079	013080	013081	013082	013093	013083	013084	013085	013086	013087
Ø	**33-35**	**35-37**	**37-39**	**39-41**	**41-43**								
Id. No.	013088	013089	013090	013091	013092								

* Concentricity according to DIN 6343.
** Concentricity has to be agreed.

Collets for KSZ-MB 60

Steel collets DIN 6343 series 185 E

ROUND*

Ø	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Id. No.	013112	013113	013114	013115	013116	013117	013118	013119	013120	013121	013122	013123	013124
Ø	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**
Id. No.	013125	013126	013127	013128	013129	013130	013131	013132	013133	016434	013134	013135	013136
Ø	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**
Id. No.	013137	013138	013139	013140	013141	013142	013143	013144	016435	013145	013146	013147	013148
Ø	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**
Id. No.	013149	013150	013151	013152	013153	013154	013155	013156	013157	013158	013159	013160	013161
Ø	**56**	**57**	**58**	**59**	**60**								
Id. No.	013162	013163	013164	013165	013166								

HEXAGONAL**

⬡	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**19**	**22**	**24**
Id. No.	013167	013168	013169	013170	013171	013172	013173	013174	013175	013176	013177	013178	013179
⬡	**27**	**30**	**32**	**36**	**41**	**50**							
Id. No.	013180	013181	013182	013183	019312	019592							

SQUARE**

□	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**20**
Id. No.	013184	013185	013186	013187	013188	013189	013190	013191	013192	013193	019110	013194	013195
□	**22**	**25**	**28**	**30**	**32**	**35**	**36**	**40**					
Id. No.	013196	013197	013198	013199	013200	019111	013201	017800					

Rubberflex collets series 52 (recommended for raw part clamping)

ROUND

Ø	**35-37**	**37-39**	**39-41**	**41-43**	**43-45**	**45-47**	**47-49**	**49-51**	**51-53**	**53-55**	**55-57**	**57-59**	**59-61**
Id. No.	013203	013204	013205	013206	013207	013208	013209	013210	013211	013212	013213	013214	013215

Collets for KSZ-MB 80

Steel collets DIN 6343 series 193 E

ROUND*

Ø	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**
Id. No.	013237	013238	013239	013240	013241	013242	013243	013244	013245	013246	013247	013248	013249
Ø	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**
Id. No.	013250	013251	013252	013253	013254	013255	013256	013257	013258	013259	013260	013261	013262
Ø	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**	**57**	**58**
Id. No.	013263	013264	013265	013266	013267	013268	013269	013270	013271	013272	013273	013274	013275
Ø	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**	**68**	**69**	**70**	**71**
Id. No.	013276	013277	013278	013279	013280	013281	013282	013283	013284	013285	013286	013287	013288
Ø	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**				
Id. No.	013289	013290	013291	013292	013293	013294	013295	013296	013297				

Further collets are available on request.

* Concentricity according to DIN 6343.
** Concentricity has to be agreed.

COMOT-DZ

Flexible collet chuck

Collet chuck

■ Use of standard collets

Application/customer benefits

- Use of vulcanize standard collets
- Clamping of thin walled work pieces
- Long service life due to case hardened componenets and lubrication
- Ideal for bar loader machines
- Best tool accessability
- Seal against contamination of the collet
- Low weight = low inertia

Ordering example

Collet chuck
with bolt

Application Examples

**Collet chuck COMOT-DZ 65
with collet for O.D. Clamping**

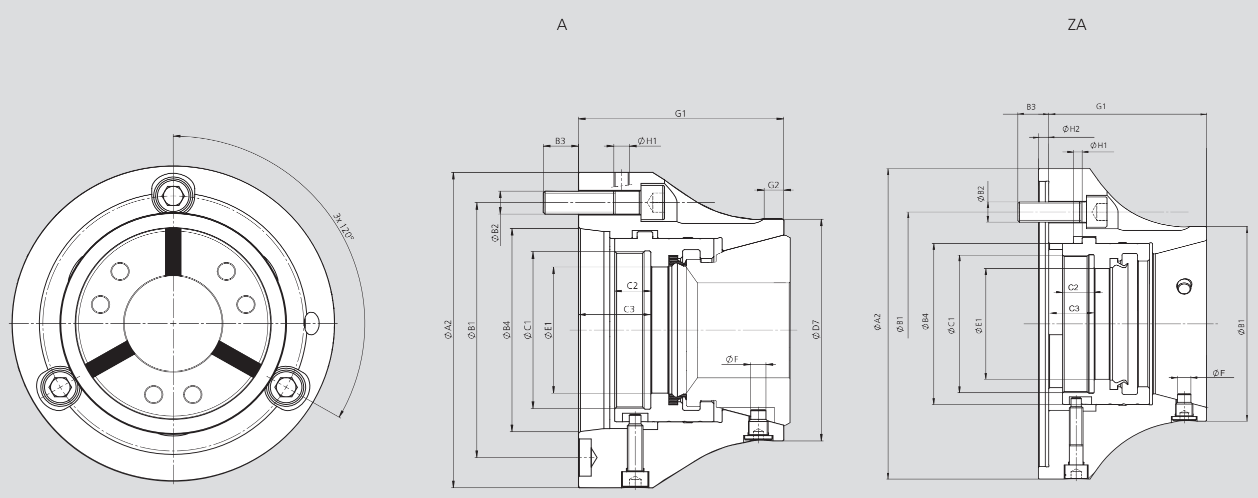
Collet chuck COMOT-DZ 65 with collet for O.D. Clamping removed with manual changing unit

Collet chuck

■ Use of standard collets

COMOT-DZ

Flexible collet chuck



* Use only with protective sleeve or workpiece stop

SMW-AUTOBLOK Type		COMOT-DZ-42		COMOT-DZ-65	
Id-No. COMOT		**9710210005**	**9710210140**	**9710410006**	**9710410170**
Spindle size		**A05**	**Z140**	**A06**	**Z170**
A2	mm	133	150	165	185
B1	mm	104,8		133,4	
B2	3 x 120°	3 x M10		3 x M12	
B3	mm	15		18	
B4	mm	A05	Z140	A06	Z170
B5	mm	-	5	-	6
C1	mm	M62 x 1,5		M82 x 1,5	
C2	mm	17		18,5	
C3 In open position (right end position)	mm	34,5	19,5	39,5	26,5
D7	mm	96		116	
E1	mm	43		66	
F	mm	5,8		7,8	
G1	mm	86	72	105	92
G2	mm	20		10	
H1	3 x 120°	-		M8	

SMW-Autoblok Type		COMOT-DZ-42		COMOT-DZ-65	
Axial stroke	mm	4,5		5	
Loading clearance in Ø*	mm	1		1	
Reserve stroke in Ø*	mm	1		1	
Max. Actuating force	kN	35		45	
Max. Clamping force radial	kN	80		105	
Max. Speed rpm	1/min	7000		6000	
Weight	kg	4,1	3,8	8,1	8,4

* from nominal collet dia.

COMOT-AZ

Flexible collet chuck

Collet chuck

- Radial fine adjustment
- Use of standard collets
- Air sensing

Application/customer benefits

- Large selection of standard collets
- Low deformation clamping of thin walled workpieces
- Rigid axial stop, central or front stop
- Long lifetime due to case hardened parts and manual lubrication
- Sealed against the ingress of chips and coolant
- Use of high-precision collets when using premium adapter PA
- Use of expanding mandrels of the „Connect" series

Technical features

- Air sensing (central or front)
- Radial fine adjustment

Standard equipment

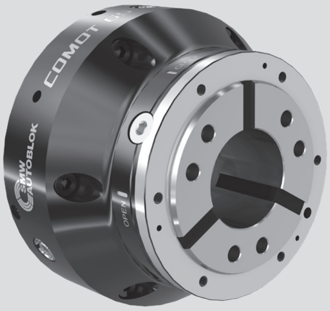
Collet chuck
with bolts
with basic workstop (central M12)
with protection sleeve (with through-hole)

Ordering example

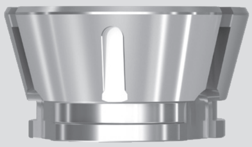
COMOT-AZ-65-Z170

Application Examples

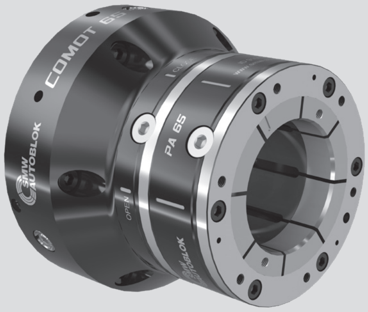
Collet chuck COMOT-AZ with standard collet for O.D. Clamping



Clamping with standard collet



Collet chuck COMOT-AZ with premium adapter PA* for O.D. Clamping



*For the premium adapters please see the page of PA-Comot

Clamping with slotted high-precision collet

Collet chuck COMOT-AZ* with extension mandrel EMX-F-CO „Connect" for I.D. Clamping

*For the mandrels please see th epage of the mandrels EMX-F-CO

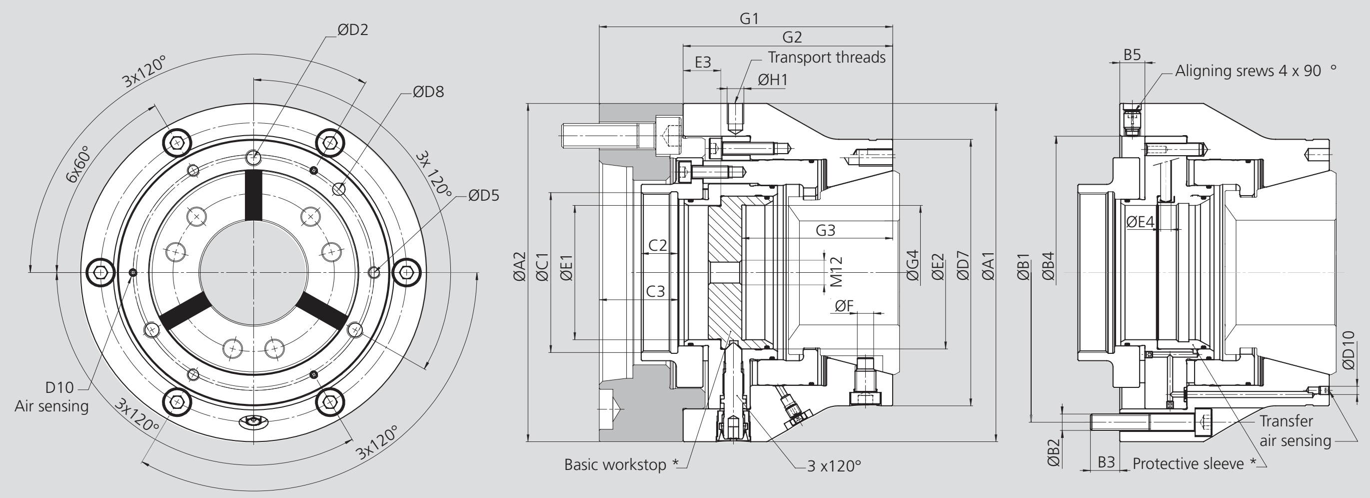
Clamping with extension mandrel „Connect"

Collet chuck

- Radial fine adjustment
- Use of standard collets
- Air sensing

COMOT-AZ

Flexible collet chuck



* Use only with protective sleeve or workpiece stop

SMW-AUTOBLOK Type			COMOT-AZ-42				COMOT-AZ-65						COMOT-AZ-100				
Id-No. COMOT without flange			9700210000				9700410000						9700610000				
Spindle size**			A05	A06	Z140	Z170	A05	A06	A08	Z140	Z170	Z220	A06	A08	A11	Z170	Z220
A1		mm	144				165						230				
A2		mm	144	165	150	180	165	165	210	165	180	230	230	230	280	230	235
B1		mm	126				146						208				
B2	6 x 60°		6 x M8				6 x M8						6 x M10				
B3		mm	12				14						19.5				
B4	0.01	mm	110				133						185				
B5		mm	12				12						12				
C1			M54 x 1.5				M78 x 1.5						M115 x 2				
C2		mm	17				17.5						24				
C3	In open position (right end position)	mm	38	38	24	24	40	40	40	26	26	26	55	50	52	55	41
D2	Thread / depth / Pitch circle	3 x 120°	M8 / 16 / 93				M8 / 16 /112						M8 / 18 / 162				
D5	Thread / depth / Pitch circle	3 x 120°	M6 / 12 / 95				M6 / 12 / 115						M8 / 18 / 162				
D7	-0,02 / -0,05	mm	110				130						180				
D8	Diameter / depth / pitch circle	3 x 120°	Ø 6 /10 / 95				Ø 6 / 10 / 115						Ø 6 / 10 / 162				
D10	Thread / pitch circle	3 x 120°	M4 / 95				M4 / 115						M4 / 165				
E1		mm	43				65.5						101				
E2	H7	mm	49.5				74.5						111.5				
E3		mm	17				18						18				
E4	Orientation for workstop	mm	5				5						5				
F		mm	5.8				7.8						7.8				
G1		mm	126	126	112	112	140	140	140	126	126	126	174	169	171	174	160
G2		mm	88				100						115				
G3			61				72						102				
G4			43				65.5						90				
H1		3 x 120°	M8				M8						M10				

SMW-AUTOBLOK Type		COMOT-AZ-42	COMOT-AZ-65	COMOT-AZ-100
Axial stroke	mm	5.5	5.5	8
Loading clearance in Ø min.*	mm	1	1	2
Reserve stroke in Ø min.*	mm	1	1	1.5
Max. Actuating force in kN	mm	35	45	65
Max. Clamping force radial	KN	80	105	150
Max. Speed rpm	1/min	7000	6000	5000
Weight without collets in kg	kg	6,9	9,2	19,8

* from nominal collet dia.
** For complete Id. No`s see the page of the flanges (ordering review chuck with flange)

COMOT-NZ

Flexible collet chuck

Collet chuck

- ■ Radial fine adjustment
- ■ Use of standard collets
- ■ Air sensing

Application/customer benefits

- Large selection of standard collets
- Low deformation clamping of thin walled workpieces
- ohne axialen Niederzug
- Long service life due to case hardened components and lubrication
- Sealed against contamination
- Rigid axial stop front or in the bore
- Optional use of expanding mandrels of the connect series EMX-F-CO-NZ

Technical features

- Air sensing (central or front)
- Radial fine adjustment

Standard equipment

Collet chuck
with bolts
with basic workstop (central M12)
with protection sleeve (with fall through-hole)

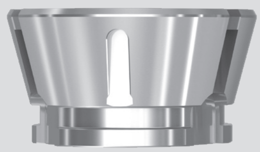
Ordering example

COMOT-NZ-65-Z170

Application Examples

Collet chuck COMOT-NZ 65

Clamping with standard collet



Collet chuck COMOT-NZ 65 with collet

Collet chuck COMOT-NZ with extension mandrel EMX-F-CO-NZ„Connect“ for I.D. Clamping

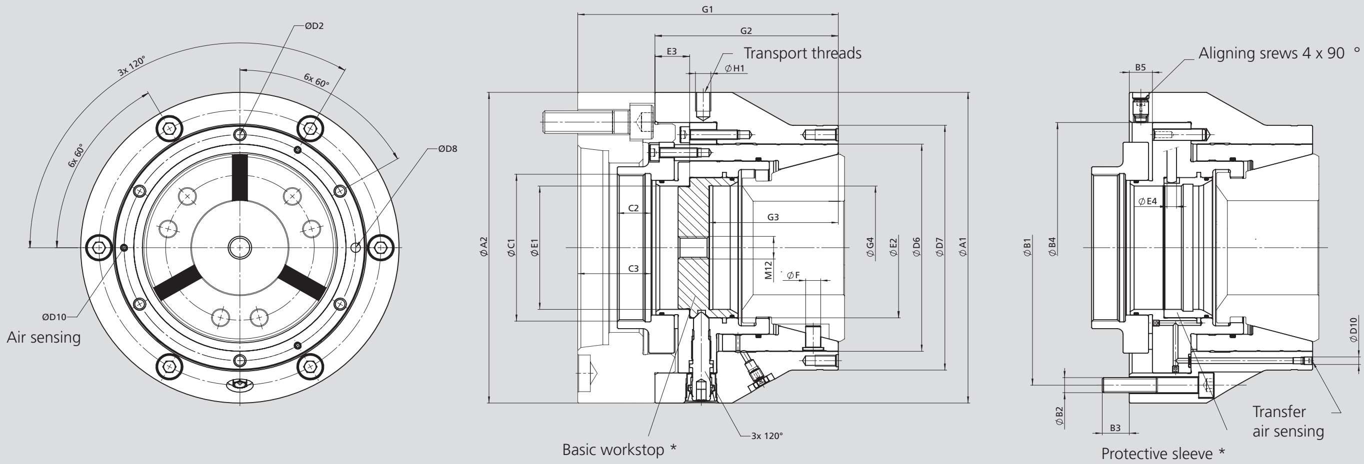
Clamping with extension mandrel „Connect“ (quick change, spring actuated)

Collet chuck

- Radial fine adjustment
- Use of standard collets
- Air sensing

COMOT-NZ

Flexible collet chuck



* Use only with protective sleeve or workpiece stop

SMW-AUTOBLOK Type			COMOT-NZ-42				COMOT-NZ-65						COMOT-NZ-100				
Id-No. COMOT without flange			9720210000				9720410000						9720610000				
Spindle size**			A05	A06	Z140	Z170	A05	A06	A08	Z140	Z170	Z220	A06	A08	A11	Z170	Z220
A1		mm	144				165						230				
A2		mm	144	165	150	180	165	165	210	165	180	230	230	230	280	230	235
B1		mm	126				146						208				
B2	6 x 60°		6 x M8				6 x M8						6 x M10				
B3		mm	15				14						20				
B4	+0.01	mm	110				133						185				
B5		mm	12				12						12				
C1			M54 x 1.5				M78 x 1.5						M115 x 2				
C2		mm	17				17.5						24				
C3	In open position (right end position)	mm	33,5	33,5	19,5	19,5	35,5	35,5	35,5	21,5	21,5	21,5	47	42	44	47	33
D2	Thread / depth / Pitch circle	6 x 60°	M6 / 12 / 98				M6 / 12 /120						M8 / 18 / 173				
D6			88				110						158				
D7	-0,02 / -0,05	mm	110				130						188				
D8		mm	Ø5 / 10 / 98				Ø5 / 10 / 120						Ø6 / 12 / 173				
D10	Thread / pitch circle	3 x 120°	M4 / 98				M4 / 120						M4 / 173				
E1		mm	43				65.5						101				
E2	H7	mm	49.5				74.5						111.5				
E3		mm	17				18						18				
E4		mm	4				5						5				
F		mm	5.8				7.8						7.8				
G1		mm	123	123	109	109	135	135	135	121	121	121	169	164	166	169	155
G2		mm	85				95						110				
G3		mm	58				67						97				
G4		mm	42,5				65.5						90				
H1		3 x 120°	M8				M8						M10				

SMW-AUTOBLOK Type		COMOT-NZ-42	COMOT-NZ-65	COMOT-NZ-100
Axial stroke	mm	4.5	4.5	8
Loading clearance in Ø*	mm	1	1	1
Reserve stroke in Ø*	mm	1	1	1,5
Max. Actuating force	kN	35	45	65
Max. Clamping force radial	kN	80	105	150
Max. Speed rpm	1/min	7000	6000	5000
Weight	kg	7,0	9,1	21,5

* from nominal collet dia.

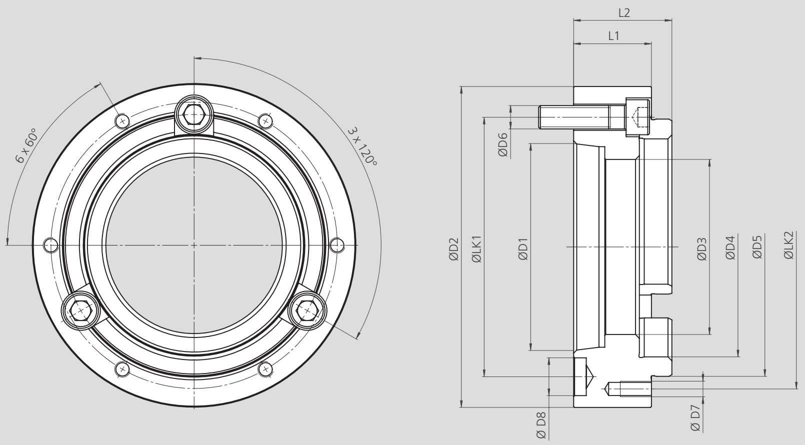
** For complete Id. No`s see the page of the flanges (ordering review chuck with flange)

Adapters

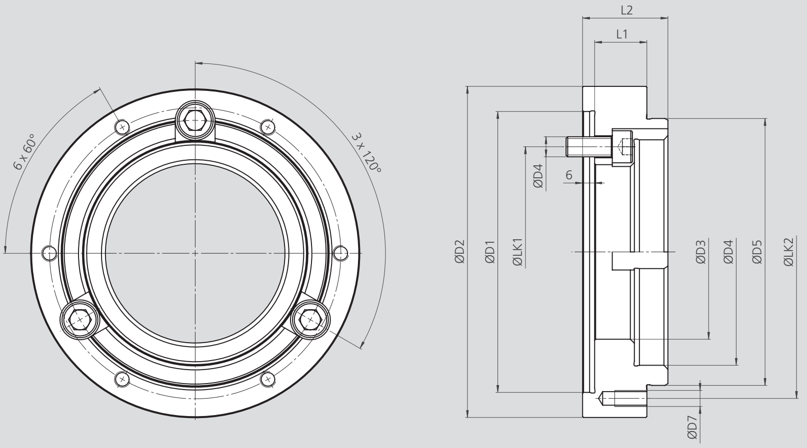
ISO-A for expanding mandrels

- COMOT have cylindrical mounting
- Adapters for DIN 55026 / ISO-A 702-1 / ISO-A 702-1 spindle noses

A



ZA



Subject to technical changes.
For more detailed information please ask our customer service.

Technical data

Id. No.	SMW-AUTOBLOK Type		Spindle head ISO 702-1 (A)	Spindle head ISO 702-4 (ZA)	D1	D2	D3	D4	D5	LK1	D6	LK2	D7	D8	L1	L2
9700220005	COMOT 42	mm	A5	-	82.563	144	65	90	110	104.8	3 x M10	126	6 x M8	16.3	38	48.5
9700220006		mm	A6	-	106.375	165	65	90	110	133.4	3 x M12	126	6 x M8	19.45	38	48.5
9700220140		mm	-	140	140	150	65	90	110	104.8	3 x M10	126	6 x M8	-	24	40.5
9700220170		mm	-	170	170	180	65	90	110	133.4	3 x M12	126	6 x M8	-	24	40.5
9700420005	COMOT 65	mm	A5	-	82.563	165	90	113	133	104.8	3 x M10	146	6 x M8	16.3	40	50.5
9700420006		mm	A6	-	106.375	165	90	113	133	133.4	3 x M12	146	6 x M8	19.45	40	50.5
9700420008		mm	A8	-	139.719	210	90	113	133	171.4	3 x M16	146	6 x M8	24.2	40	50.5
9700420140		mm	-	140	140	165	87	113	133	104.8	3 x M10	146	6 x M8	-	26	42.5
9700420170		mm	-	170	170	180	90	113	133	133.4	3 x M12	146	6 x M8	-	26	42.5
9700420220		mm	-	220	220	230	90	113	133	171.4	3 x M16	146	6 x M8	-	26	42.5
9700620006	COMOT 100	mm	A6	-	106.375	230	130 / 103	163	185	133.4	3 x M12	208	6 x M10	19.45	59	70
9700620008		mm	A8	-	139.719	230	130	163	185	171.4	3 x M16	208	6 x M10	24.2	54	65
9700620011		mm	A11	-	196.869	280	130	163	185	235	3 x M20	208	6 x M10	29.4	56	67
9700620170		mm	-	Z170	170	230	130	163	185	133.4	3 x M12	208	6 x M10	-	59	76
9700620220		mm	-	Z220	220	235	130	163	185	171.4	3 x M16	208	6 x M10	-	45	62

Ordering review (chuck with flange)

SMW-AUTOBLOK Type	COMOT-AZ-42	COMOT-NZ-42	COMOT-AZ-65	COMOT-NZ-65	COMOT-AZ-100	COMOT-NZ-100
Id No. Chuck without flange	**9700210000**	**9720210000**	**9700410000**	**9720410000**	**9700610000**	**9720610000**
A05	9700200005	9720200005	9700400005	9720400005	-	-
A06	9700200006	9720200006	9700400006	9720400006	9700600006	9720600006
A08	-	-	9700400008	9720400008	9700600008	9720600008
A11	-	-	-	-	9700600011	9720600011
Z140	9700200140	9720200140	9700400140	9720400140	-	-
Z170	9700200170	9720200170	9700400170	9720400170	9700600170	9720600170
Z220	-	-	9700400220	9720400220	9700600220	9720600220

Parts included: Collet chuck + Standard flange + mounting bolts

Collets for COMOT 42

Steel collets with axial and radial grooves (△ smooth, △△ radial grooves)

ROUND*

Ø	**4△**	**5△**	**6△**	**7△**	**8△△**	**9△△**	**10△△**	**11**	**12**	**13**	**14**	**15**	**16**
Id. No.	192173	192174	192175	192176	192177	192178	192179	192180	192181	192182	192183	192184	192185
Ø	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**
Id. No.	192186	192187	192188	192189	192190	192191	192192	192193	192194	192195	192196	192197	192198
Ø	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**
Id. No.	192199	192200	192201	192202	192203	192204	192205	192206	192207	192208	192209	192210	192211

Collets in 0.5 mm increments on request.

Steel collets with smooth clamping surface

ROUND*

Ø	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Id. No.	192173	192174	192175	192176	193135	193136	193137	193138	193139	193140	193141	193142	193143
Ø	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**
Id. No.	193144	192807	193145	192808	193146	193147	193148	193149	193150	193151	193152	193153	193154
Ø	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**
Id. No.	193155	193156	193083	193157	193158	193159	193160	193161	193162	193163	193164	193165	193219

Collets in 0.5 mm increments on request.

SQUARE**

☐	**7△**	**8△△**	**9△△**	**10△△**	**11△△**	**12△△**	**13△△**	**14△△**	**15△△**	**16△△**	**17△△**	**18△△**	**19△△**
Id. No.	192212	192213	192214	192215	192216	192217	192218	192219	192220	192221	192222	192223	192224
☐	**20△△**	**21△△**	**22△△**	**23△△**	**24△△**	**25△△**	**26△△**	**27△△**	**28△△**	**29△△**	**30△△**		
Id. No.	192225	192226	192227	192228	192229	192230	192231	192232	192233	192234	192235		

HEXAGONAL**

⬡	**7△**	**8△△**	**9△△**	**10△△**	**11△△**	**12△△**	**13△△**	**14△△**	**15△△**	**16△△**	**17△△**	**18△△**	**19△△**
Id. No.	192236	192237	192238	192239	192240	192241	192242	192243	192244	192245	192246	192247	192248
⬡	**20△△**	**21△△**	**22△△**	**23△△**	**24△△**	**25△△**	**26△△**	**27△△**	**28△△**	**29△△**	**30△△**	**31△△**	**32△△**
Id. No.	192249	192250	192251	192252	192253	192254	192255	192256	192257	192258	192259	192260	192261

Soft steel collets (pre-bored)

ROUND

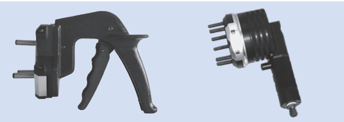
Ø	**5**	**15**	**30**										
Id. No.	192262	192263	192264										

Boring ring 42 for soft steel collets

Id. No.	193399												

* Concentricity similar DIN 6343.
** Concentricity has to be agreed.

Changing unit



Accessories \ Size	COMOT 42
Manual	196842
Pneumatic	192151

Collets for COMOT 65

Steel collets with axial and radial grooves (△ smooth, △△ radial grooves)
ROUND*

Ø	**5△**	**6△**	**7△**	**8△△**	**9△△**	**10△△**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
Id. No.	192265	192266	192267	192268	192269	192270	192271	192272	192273	192274	192275	192276	192277
Ø	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
Id. No.	192278	192279	192280	192281	192282	192283	192284	192285	192286	192287	192288	192289	192290
Ø	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**
Id. No.	192291	192292	192293	192294	192295	192296	192297	192298	192299	192300	192301	192302	192303
Ø	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**
Id. No.	192304	192305	192306	192307	192308	192309	192310	192311	192312	192313	192314	192315	192316
Ø	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**				
Id. No.	192317	192318	192319	192320	192321	192322	192323	192324	192325				

Collets in 0.5 mm increments on request.

Steel collets with smooth clamping surface
ROUND*

Ø	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
Id. No.	192265	192266	192267	193172	193173	192682	193174	192787	193175	193176	193177	193169	193178
Ø	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
Id. No.	193179	193180	193181	193182	192683	193183	193170	193065	193184	193066	193068	193069	193070
Ø	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**
Id. No.	193185	192684	193186	193187	193188	193189	193190	193191	193192	192685	193193	193194	193171
Ø	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**	**55**	**56**
Id. No.	193196	193197	193198	193199	193200	193201	193202	193203	193204	193205	193206	193207	193208
Ø	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**				
Id. No.	193195	193209	193210	193211	193212	193213	193214	193215	193216				

Collets in 0.5 mm increments on request.

SQUARE**

□	**8△△**	**9△△**	**10△△**	**11△△**	**12△△**	**13△△**	**14△△**	**15△△**	**16△△**	**17△△**	**18△△**	**19△△**	**20△△**
Id. No.	192326	192327	192328	192329	192330	192331	192332	192333	192334	192335	192336	192337	192338
□	**21△△**	**22△△**	**23△△**	**24△△**	**25△△**	**26△△**	**27△△**	**28△△**	**29△△**	**30△△**	**31△△**	**32△△**	**33△△**
Id. No.	192339	192340	192341	192342	192343	192344	192345	192346	192347	192348	192349	192350	192351
□	**34△△**	**35△△**	**36△△**	**37△△**	**38△△**	**39△△**	**40△△**	**41△△**	**42△△**	**43△△**	**44△△**	**45△△**	**46△△**
Id. No.	192352	192353	192354	192355	192356	192357	192358	192359	192360	192361	192362	192363	192364

HEXAGONAL**

⬡	**10△△**	**11△△**	**12△△**	**13△△**	**14△△**	**15△△**	**16△△**	**17△△**	**18△△**	**19△△**	**20△△**	**21△△**	**22△△**
Id. No.	192365	192366	192367	192368	192369	192370	192371	192372	192373	192374	192375	192376	192377
⬡	**23△△**	**24△△**	**25△△**	**26△△**	**27△△**	**28△△**	**29△△**	**30△△**	**31△△**	**32△△**	**33△△**	**34△△**	**35△△**
Id. No.	192378	192379	192380	192381	192382	192383	192384	192385	192386	192387	192388	192389	192390
⬡	**36△△**	**37△△**	**38△△**	**39△△**	**40△△**	**41△△**	**42△△**	**43△△**	**44△△**	**45△△**	**46△△**	**47△△**	**48△△**
Id. No.	192391	192392	192393	192394	192395	192396	192397	192398	192399	192400	192401	192402	192403
⬡	**49△△**	**50△△**											
Id. No.	192404	192405											

Soft steel collets (pre-bored)
ROUND

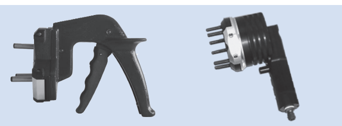
Ø	**8**	**20**	**40**										
Id. No.	192406	192407	192408										

Boring ring 65 for soft steel collets

Id. No.	193400												

* Concentricity similar DIN 6343.
** Concentricity has to be agreed.

Changing unit



Accessories / Size	COMOT 65
Manual	196844
Pneumatic	192153

Collets for COMOT 100

Steel collets with axial and radial grooves
ROUND*

Ø	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**
Id. No.	195081	195082	195083	195084	195085	195086	195087	195088	195089	195090	195091	195092	195093
Ø	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**
Id. No.	195094	195095	195096	195097	195098	195099	195100	195101	195102	195103	195104	195105	195106
Ø	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**
Id. No.	195107	195108	195109	195110	195111	195112	195113	195114	195115	195116	195117	195118	195119
Ø	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**	**91**	**92**	**93**
Id. No.	195120	195121	195122	195123	195124	195125	195126	195127	195128	195129	195130	195131	195132
Ø	**94**	**95**	**96**	**97**	**98**	**99**	**100**						
Id. No.	195133	195134	195135	195136	195137	195138	194742						

Steel collets with smooth clamping surface
ROUND*

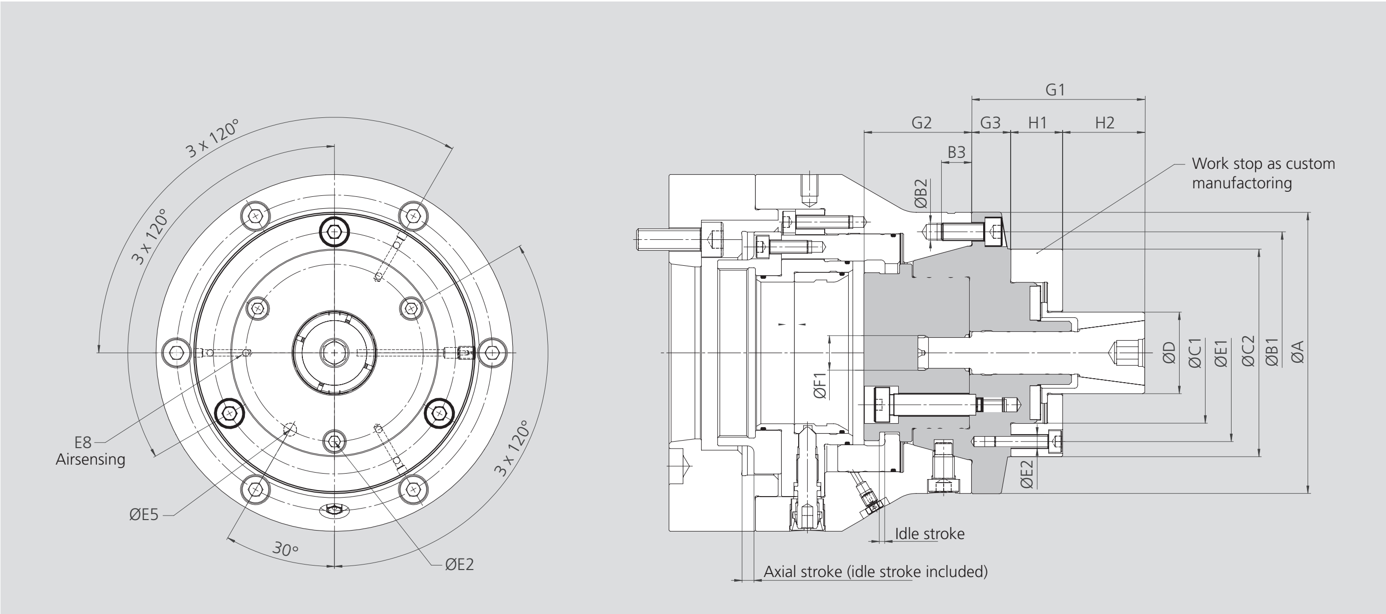
Ø	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**
Id. No.	195141	195142	195143	195144	195145	195146	195147	195148	195149	195150	195151	195152	195153
Ø	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**
Id. No.	195154	195155	195156	195157	195158	195159	195160	195161	195162	195163	195164	195165	195166
Ø	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**
Id. No.	195167	195168	195169	195170	195171	195172	195173	195174	195175	195176	195177	195178	195179
Ø	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**	**91**	**92**	**93**
Id. No.	195180	195181	195182	195183	195184	195185	195186	195187	195188	194743	195189	195190	195191
Ø	**94**	**95**	**96**	**97**	**98**	**99**	**100**						
Id. No.	195192	195193	195194	195195	195196	195197	195198						

* Concentricity similar DIN 6343.

Changing unit

Size / Accessories	COMOT 100
Pneumatic	194744

Extension sleeve mandrels EMX-F-CO for COMOT-AZ

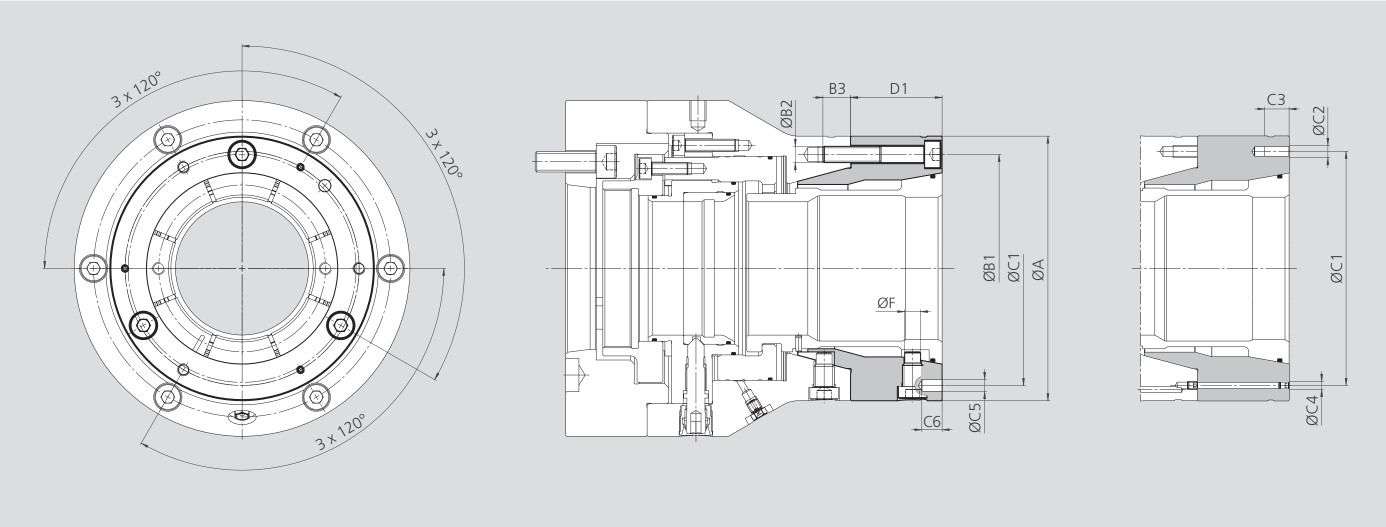


SMW-AUTOBLOK Chuck type		**COMOT-AZ-42**			**COMOT-AZ-65**				**COMOT-AZ-100**				
SMW-AUTOBLOK Mandrel type		**EMX-F-1-CO-42**	**EMX-F-2-CO-42**	**EMX-F-3-CO-42**	**EMX-F-1-CO-65**	**EMX-F-2-CO-65**	**EMX-F-3-CO-65**	**EMX-F-4-CO-65**	**EMX-F1-CO-100**	**EMX-F2-CO-100**	**EMX-F3-CO-100**	**EMX-F4-CO-100**	**EMX-F5-CO-100**
Id. No.		9700251100	9700251200	9700251300	9700451100	9700451200	9700451300	9700451400	9700651100	9700651200	9700651300	9700651400	9700651500
A		110			130				180				
B1		93			112				162				
B2		3 x M8			3 x M8				3 x M8	3 x M8	6 x M8	6 x M8	6 x M8
B3		12,6	12.6	14	12.6	12,6	12.6	12.6	12	12	12	12.6	12.6
C1		42	52	65	42	52	65	88	42	52	65	88	112
C2		110			130				130	130	130	180	180
D	Clamping range	20 - 30	28 - 40	35 - 55	20 - 30	28 - 40	35 - 55	50 - 75	20 - 30	28 - 40	35 - 55	50 - 75	70 - 95
E1		65 / 93	75	90	65 / 112	75 / 112	90 / 112	112 / 162	65 / 112	75 / 112	90 / 112	112 / 162	162
E2	3 x 120° / depth / pitch circle E1	M6 / 12			M6 / 12			M8 / M6	M6 / 12	M6 / 12	M6 / 12	M8 / 16	M8 / 16
E4		65	75	90	65	75	90	112	65	75	90	112	135
E5	H7 / depth / pitch circle E4	Ø 6 / 12			Ø 6 / 12				Ø 6 / 12				
E7		65	75	90	65	75	90	115	65	75	90	112	135
E8	3 x 120° pitch circle E7	Ø3			Ø3				Ø3				
F1		M10 x 1	M14 x 1.5	M16 x 1.5	M10 x 1	M14 x 1.5	M16 x 1.5	M16 x 1.5	M10 x 1	M14 x 1.5	M16 x 1.5	M16 x 1.5	M20 x 1.5
G1		61	68	76	61	68	76	93	65	72	80	93	115
G2	Unclamped position	39	39.6	39	50	50.4	49.8	49.8	57	57.6	57	57	55
G3		16			16				20	20	20	16	16
H1	min.	18	18	22	18	18	22	25	18	18	22	25	30
H2	max.	27	34	38	27	34	38	52	27	34	38	52	69

SMW-AUTOBLOK Chuck type	**COMOT-AZ-42**			**COMOT-AZ-65**				**COMOT-AZ-100**				
Axial stroke chuck	5.5			5.5				8				
Idle stroke	2.5	2.7	2.5	2.5	2.7	2.5	2,5	5	5.6	5	5	3
Axial stroke mandrel	3	2.4	3	3	2.4	3	3	3	2.4	3	3	5
Expansion in Ø	0.6	0.6	0.8	0.6	0.6	0.8	0,8	0.6	0.6	0.8	0.8	1.2
Max. Actuating force in kN	12	20	25	12	20	25	25	12	20	25	25	30
Max. Clamping force radial in kN	61	90	113	61	90	113	113	61	90	113	113	159
Max. Speed r.p.m.	5000			4000				3500				

Note: Taper, Sleeve, disc see mandrel EMX-F.
A work stop must be specifically adapted to the workpiece.

Premium adapter PA COMOT

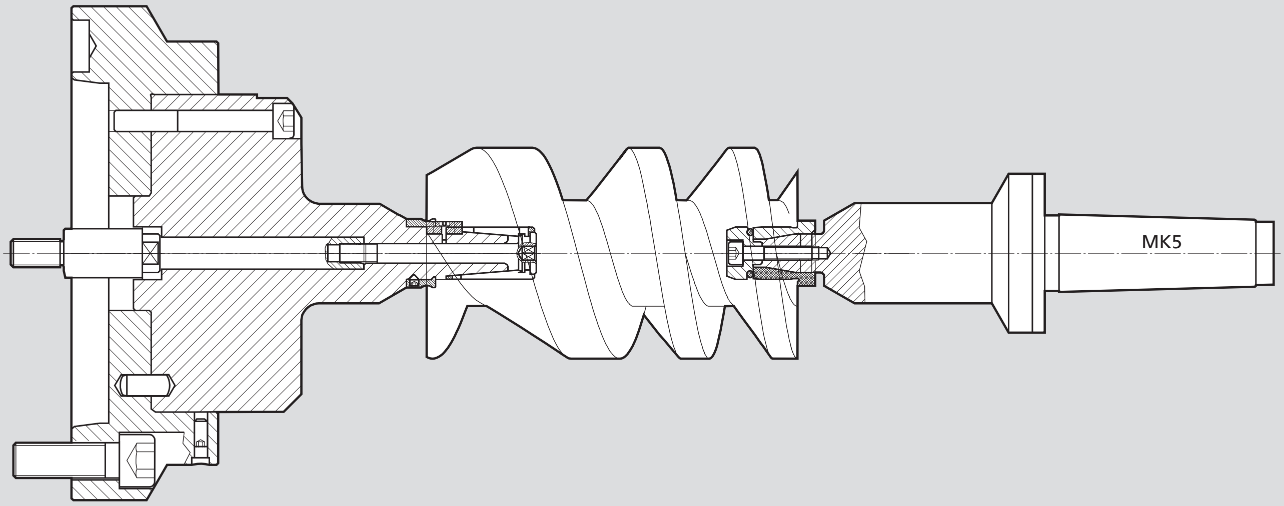


SMW-AUTOBLOK Chuck-Type			COMOT-AZ-65	COMOT-AZ-100
SMW-AUTOBLOK Premium adapter-Type			PA-65	PA-100
Id. No. Premium adapter			9700430000	9700630000
A	-0,02 / -0,05	mm	130	180
B1		mm	112	162
B2	3 x 120°		3 x M8	6 x M8
B3		mm	13.6	13.6
C1		mm	115	162
C2	3 x 120°		3 x M6	6 x M6
C3		mm	12	12
C4	3 x 120°		3 x M4	3 x M4
C5	H7	mm	6	6
C6		mm	10	10
D1		mm	45	55
F		mm	7.8	7.8

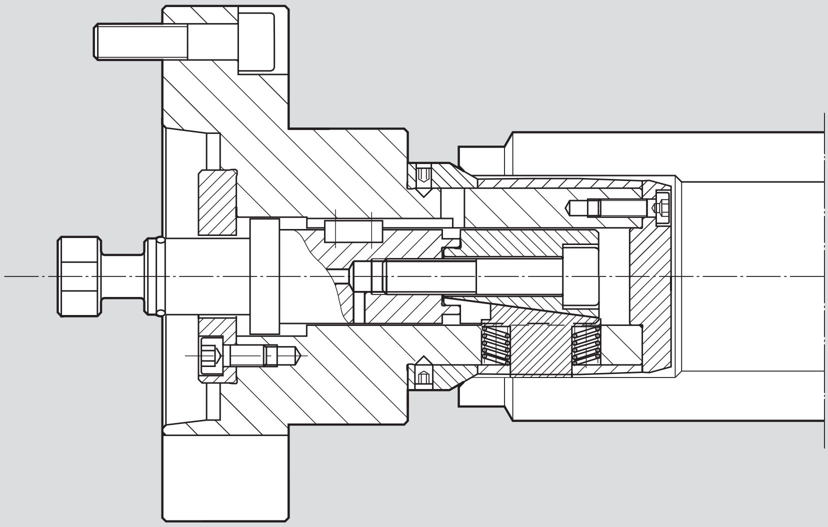
Special mandrels

Besides our standard range, we offer special solutions for your applications

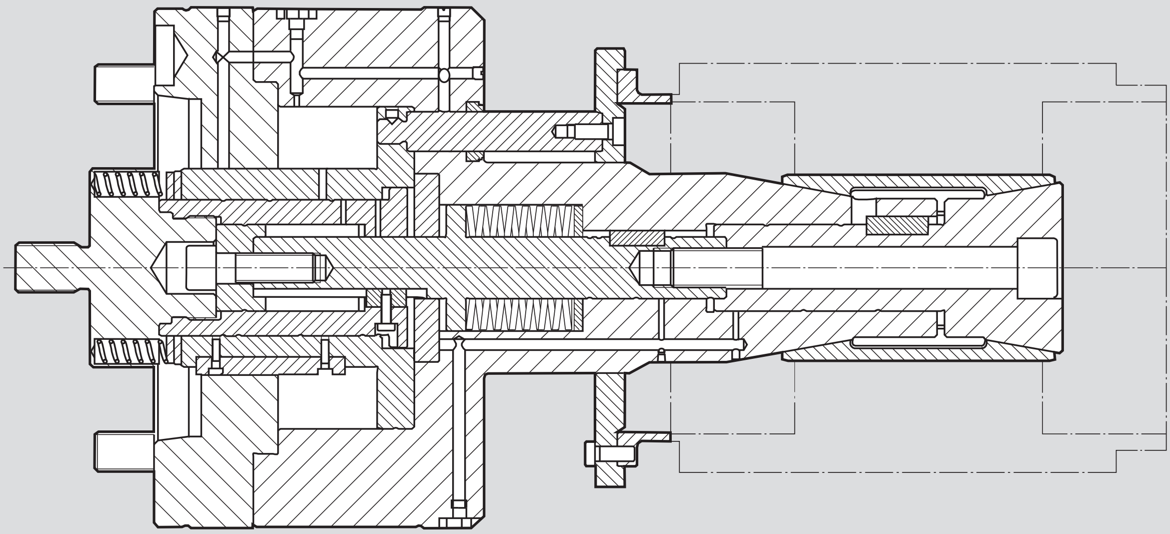
Example: Special expanding mandrel, sleeve design, on spindle and tailstock side for screw rotors



Example: Special mandrel segment design for tubes



Example: Special expanding mandrel, double taper design with retractable stop, for clamping of stators



Notes

EC-G

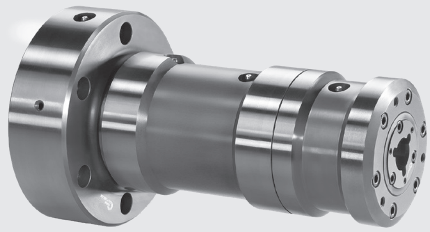
Special clamping solutions

Sliding jaw collet chuck

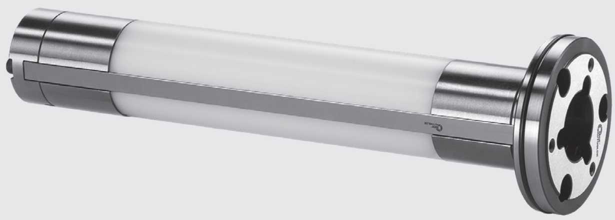
Application/customer benefits

- Power operated sliding jaw collet chuck
- 2 clamping areas
- Spring compensation
- For clamping of shafts on 2 clamping levels
- Preparation for air sensing
- Exchangeable cartridge with adapter sleeve

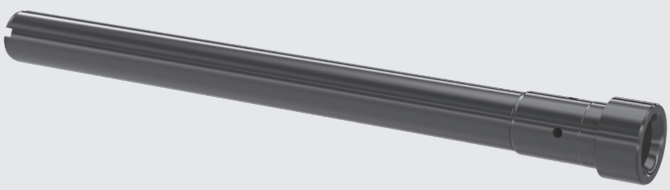
Sliding jaw collet chuck

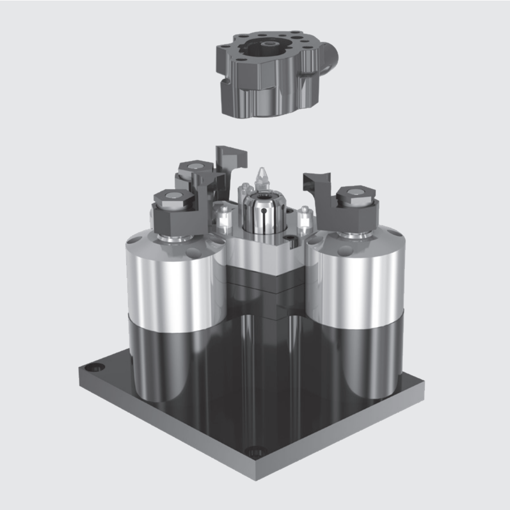


Exchangeable cartridge with adapter sleeve



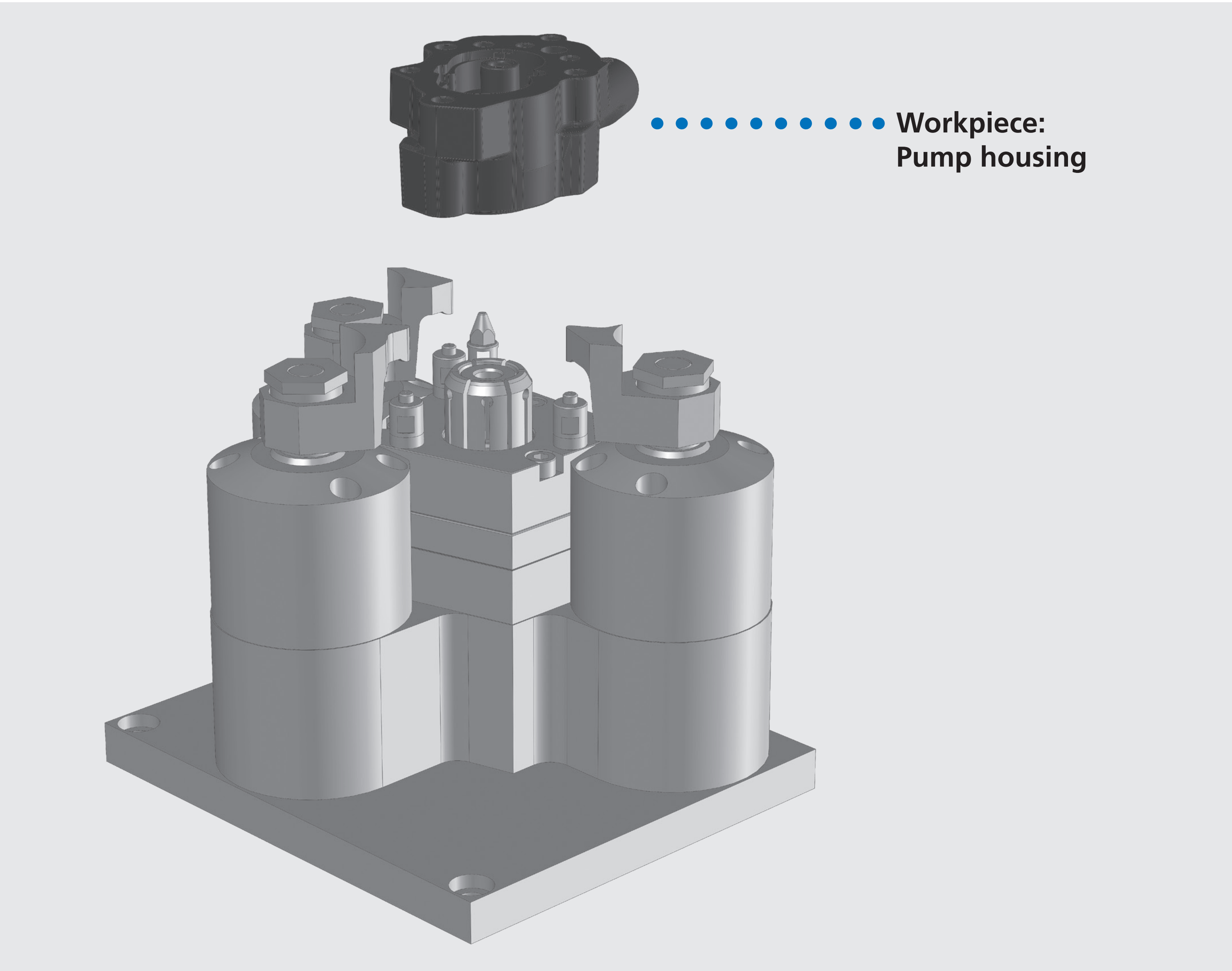
Work piece: Camshaft tube





Application/customer benefits

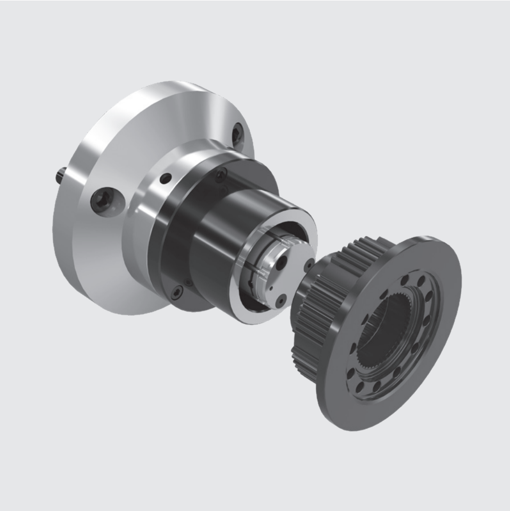
- Hydraulic, power operated, stationary clamping via adapter sleeve in inner diameter (center of the case) without pull down with additional, hydraulic operated rotating collet fingers for pull down against 3-point-surface with position orientation and air sensing
- For drilling and milling at case



EM-G

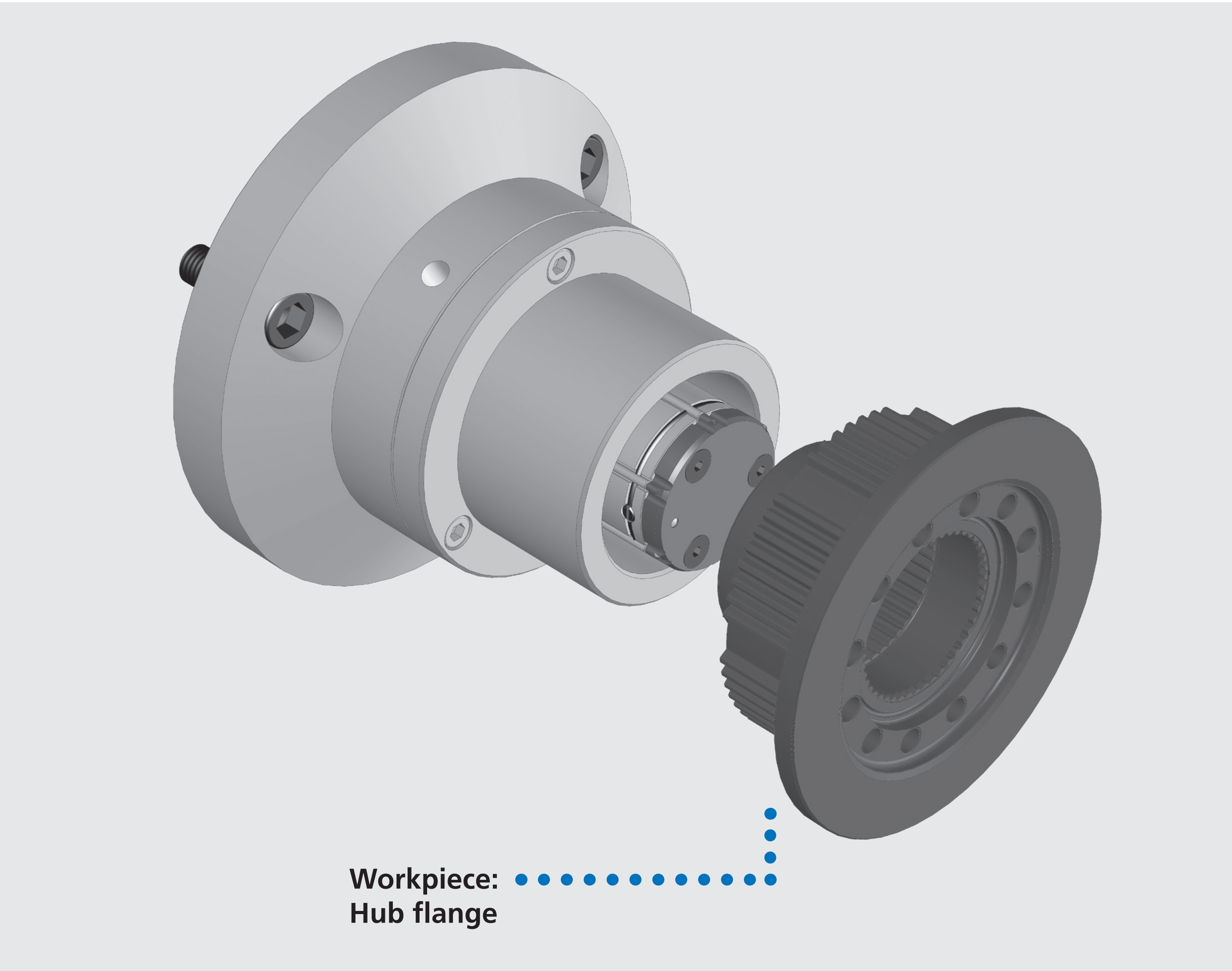
Special clamping solutions

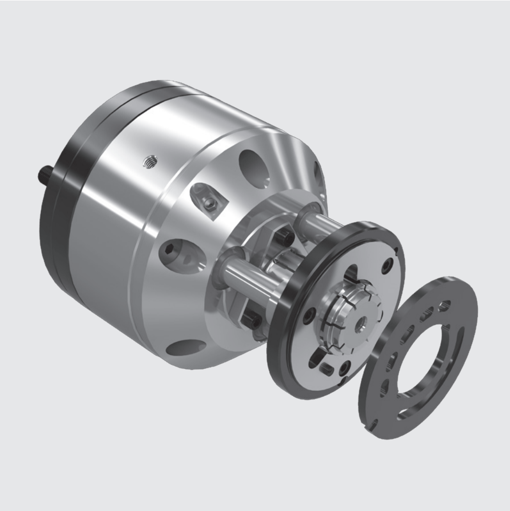
Sliding jaw mandrel



Application/customer benefits

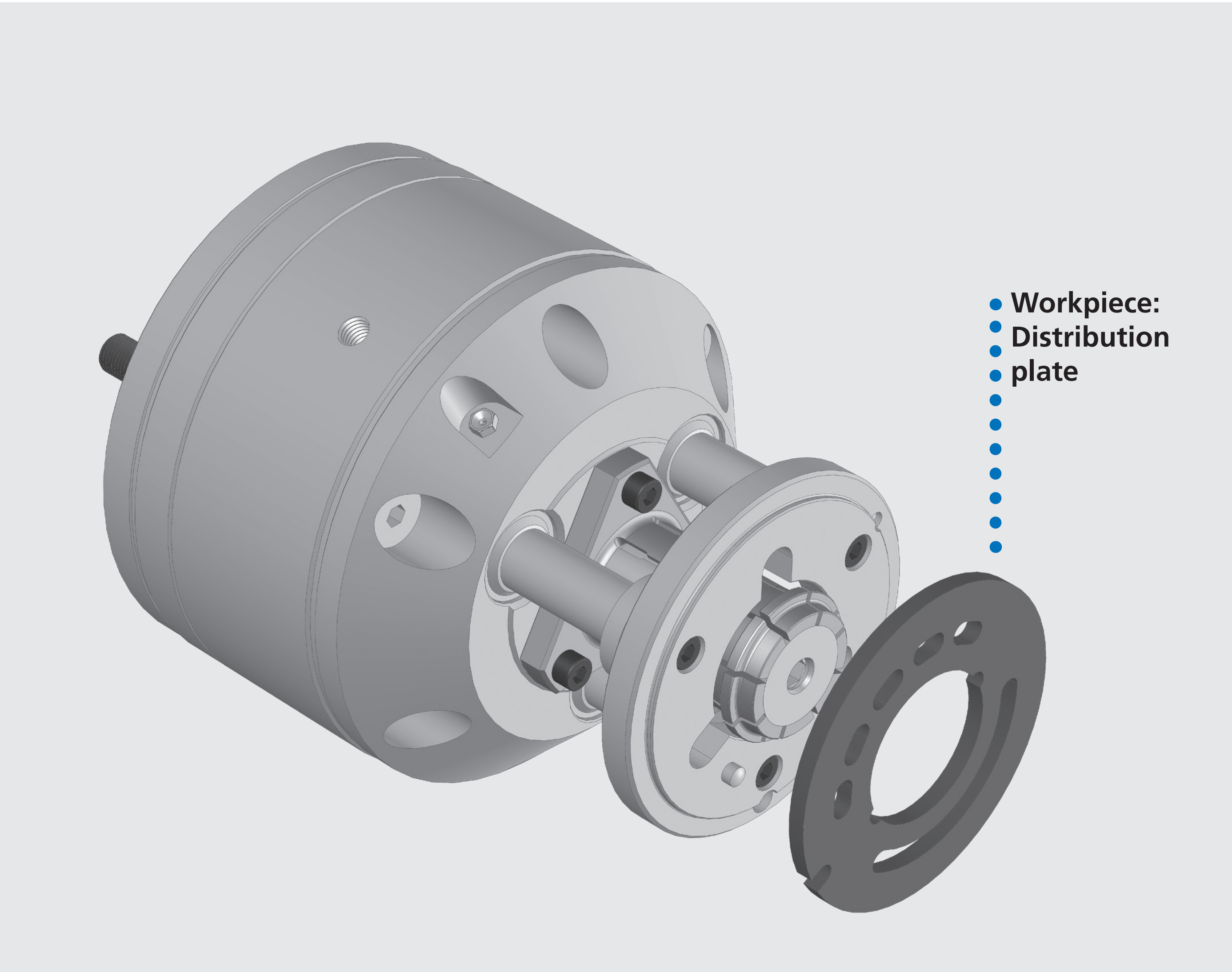
- Power operated, centric clamping via sliding jaws in the internal gearing without pull down
- For hard turning of the outer contour of a work piece with very high accuracy and repeatability
- Power operated clamping with profiled jaws
- High repeatability <0,005
- Insensitive to contamination
- Low maintenance





Application/customer benefits

- Power operated, very short centric clamping via clamping sleeves in inner diameter without pull down with retractable stop and position orientation
- For rough cut turning of the frontside and outer diameter, plan sided drilling operations and following finish of the complete outer contour incl. both plan sides through retractable stop
- Power operated clamping with expanding sleeve
- Without pull down
- With retractable stop
- Two-sided plan processing possible



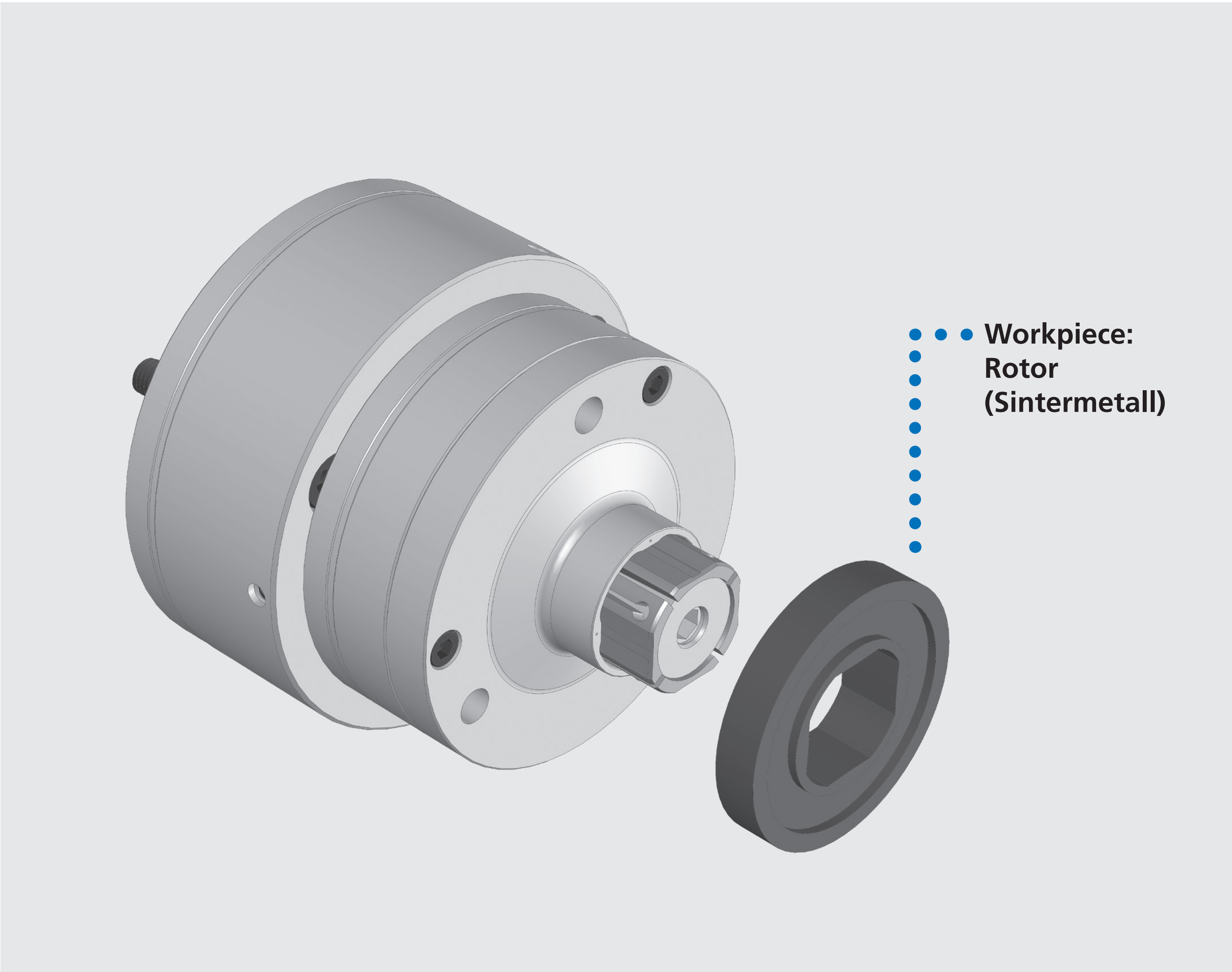
EM-B-S

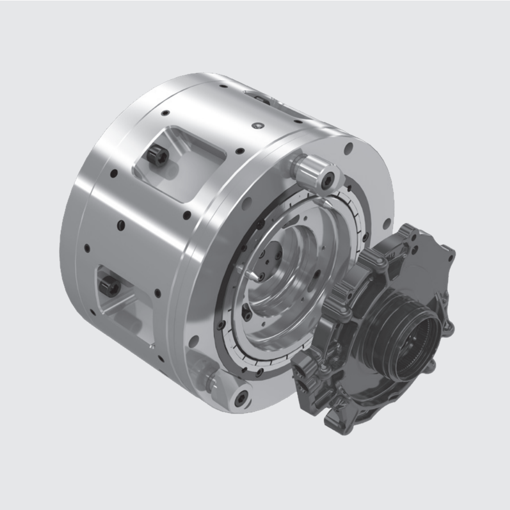
Special clamping solutions

Special sleeve mandrel

Application/customer benefits

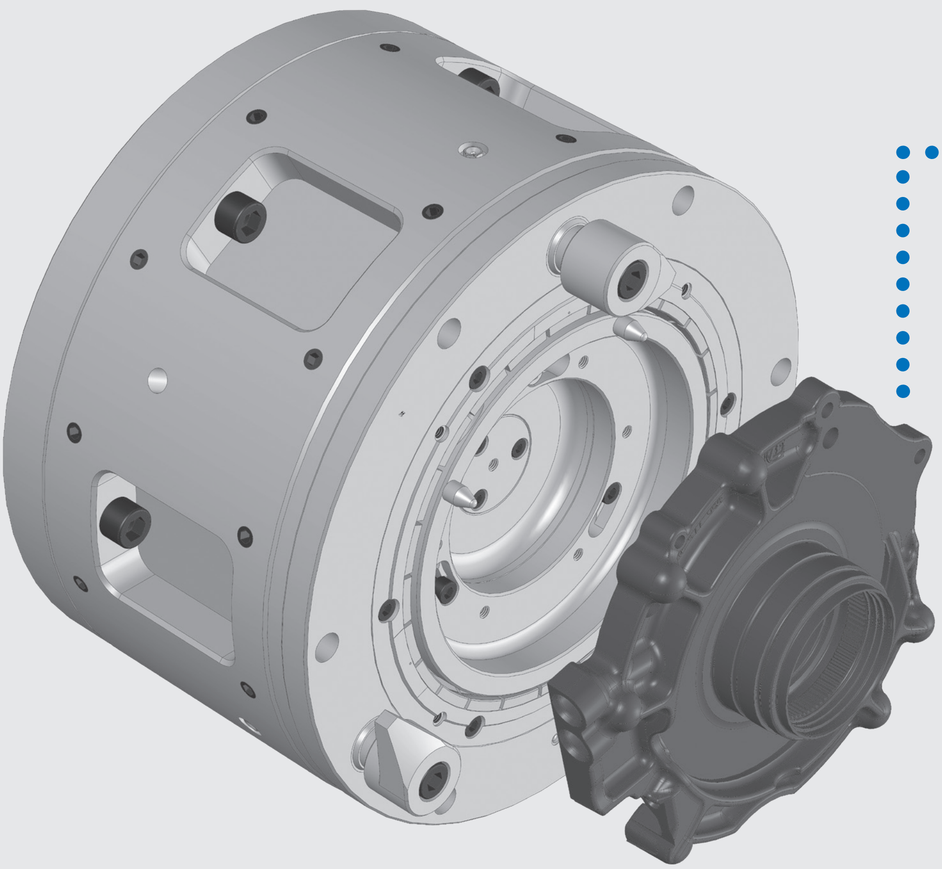
- Power operated, centric clamping via clamping sleeve in a spherical 4-square inner contour with air sensing
- For processing of the outer contour of a Sintermetall workpiece with profiled inner contour
- Power operated clamping with profiled sleeve
- Without axial components
- Two-sided plan processing possible





Application/customer benefits

- Pneumatic, power operated centering via collet chuck in outer diameter with pull down with additional, power operated pivot fingers with pull down against the stop, with position orientation, air purge and air sensing
- For centrical turning of non-symmetrical cases
- Position orientation without deforming the workpiece
- Pneumatic centering with collet chuck
- Power operated plan clamping with plan collet fingers
- Position orientation
- High repeatability
- Huge machining forces
- Insensitive to contamination



Workpiece: Bearing support

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