



NEW

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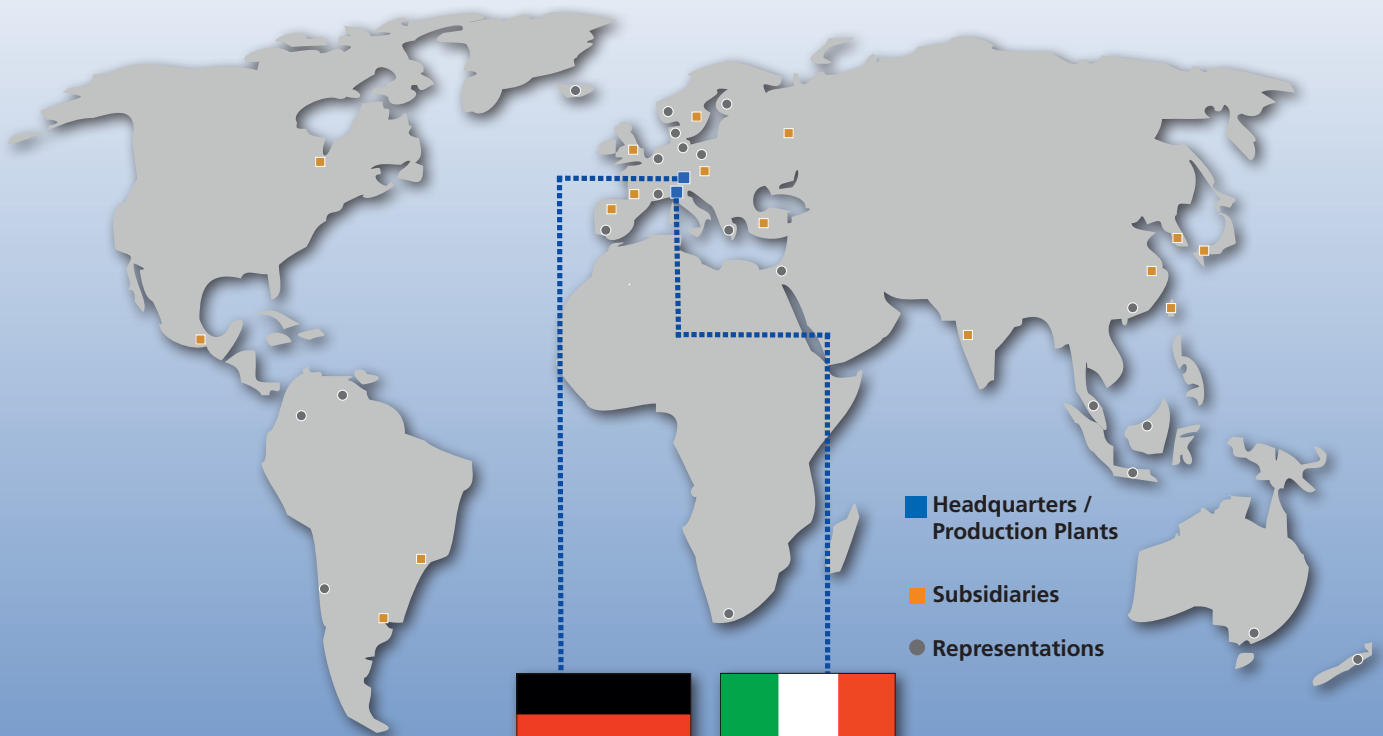
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Manual or power operated expanding mandrels / Adapter flanges



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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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Adapter flanges EM-A, EM-B

ISO-A
for expanding mandrels

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



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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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Special clamping solutions

Application examples

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



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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 sleeve expanding mandrels

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



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EM-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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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

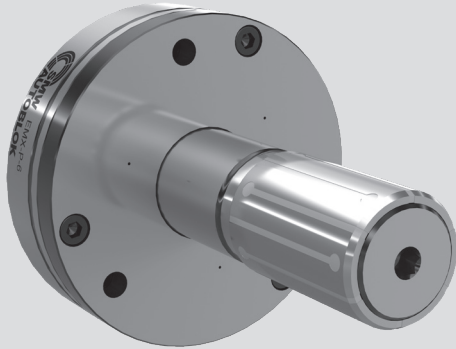
- Size 0 - 4
- Large expansibility
- Flange mounting
- Very rigid design

EMX-P

Expanding mandrel
Power operated

Expanding mandrels Ø 14.7 - 131.7 mm

- Size 1 - 11
- Highest concentricity
- Air sensing



Application/customer benefits

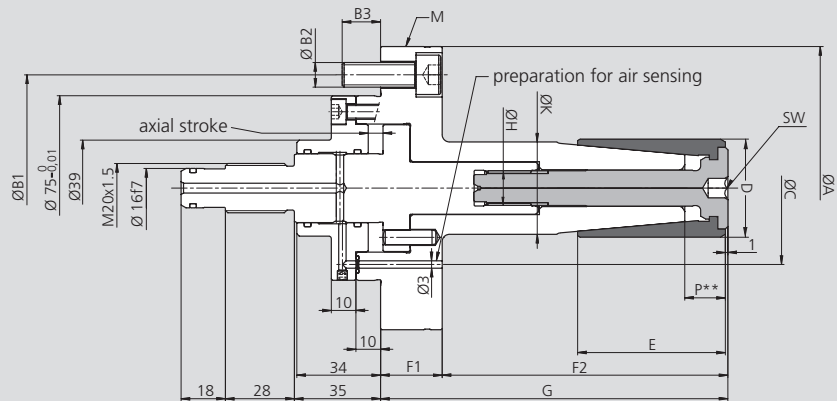
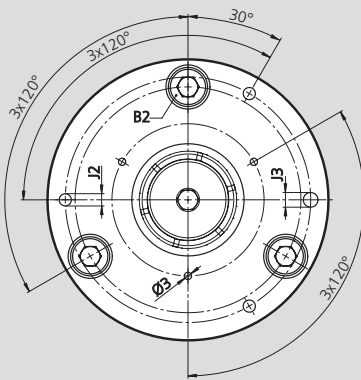
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission due to fixed arbor
- Axial pull down by axial movement of the clamping sleeve during actuation
- Quick set-up

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 length	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	76	86	97	106	116	116	152	158	192	218	245
G	101	111	122	131	141	141	177	183	217	243	270
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	26
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	15	35	75	100	120	150	200	250	275	320	500
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 nominal dimension.

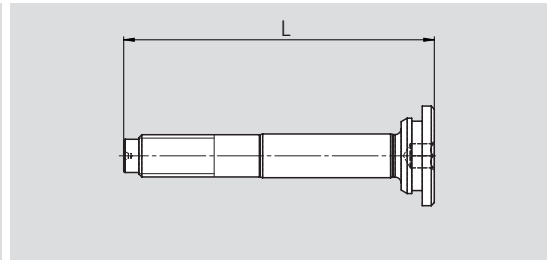
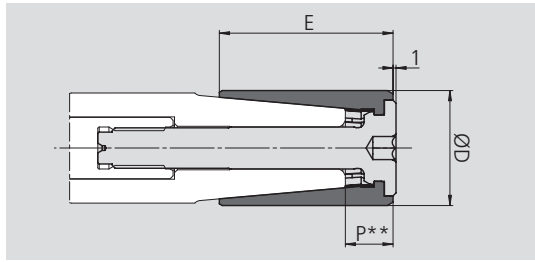
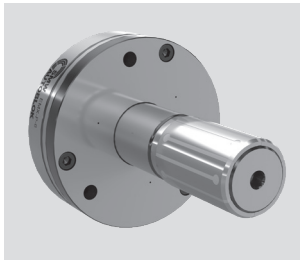
** Clamping on area P only is not allowed.

Expanding mandrels Ø 14.7 - 131.7 mm

EMX-P

Expanding mandrel
Power operated

Ordering review



For basic mandrel							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	9312000	76,5
			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	9322000	81
			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	9332000	87,5
			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	9342000	93
			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	9352000	103
			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	9362000	103
			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	9372000	117
			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	9382000	127
			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	9392000	137
			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 mandrels Ø 14.7 - 131.7 mm

Expanding mandrel
Manual or power operated

■ 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	9302000	165
			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		
			EMX-P-11	9310010	101.7-131.7	101.7	140		
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

A large area of horizontal stripes in two shades of blue, alternating between a medium blue and a light blue. This area is intended for writing notes.

EMX-F/FP

Expanding mandrel
Power operated

Expanding mandrels Ø 19.7 - 132.9 mm

- Size 1 - 6
- Highest concentricity
- Air sensing



Application/customer benefits

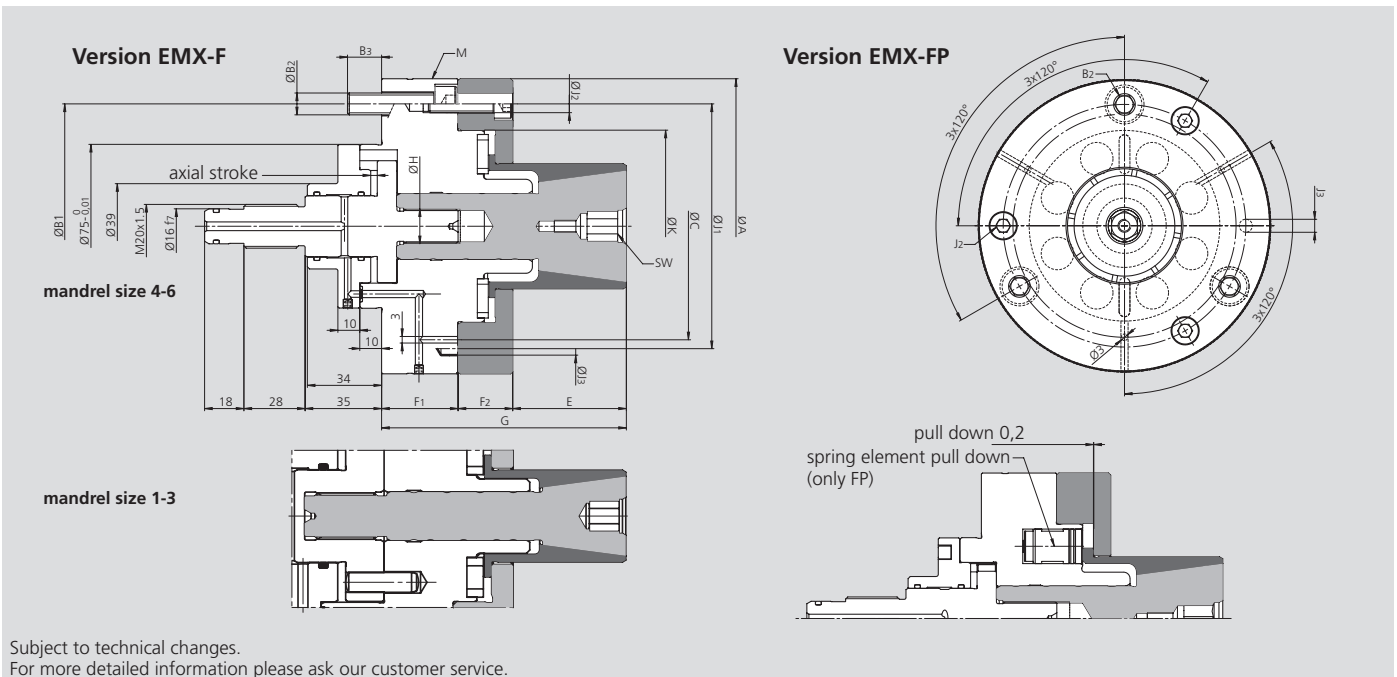
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission
- Clamping of very short workpieces on the front section of the sleeve possible
- FP: with axial pull down for best face run out

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



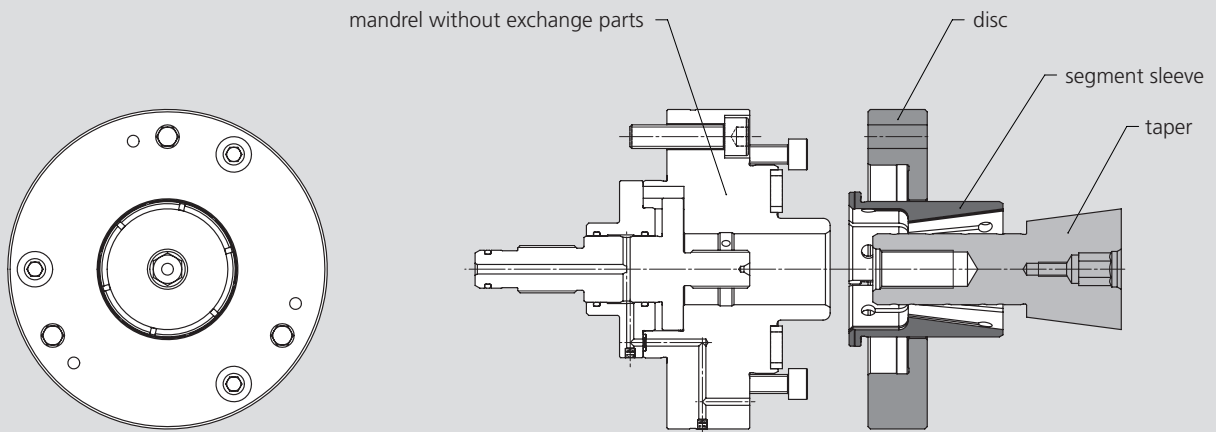
Subject to technical changes.
For more detailed information please ask our customer service.

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	182
D	Clamping length	19.7-30.3	27.7-40.3	34.7-55.5	49.7-75.5	69.7-95.9
E		27	34	38	52	69
F1		30	30	30	35	40
F2		18	18	22	25	30
G		75	82	90	112	139
H		M10 x 1	M14 x 1.5	M16 x 1.5	M16 x 1.5	M20 x 1.5
J1		100	100	100	112	140
J2	3 x 120°	M6	M6	M6	M8	M8
J3	H7	6	6	6	8	8
K	g6	42	52	65	88	112
M transport	3 x 120°	-	-	-	M8	M10
WS (hex)		WS6	WS8	WS10	WS12	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 in Nm (dep. on clamping Ø)	51-80	110-165	175-280	250-380	420-580	520-800
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

■ Ordering review



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

mandrel without exchange parts						taper	disc	segment sleeve*		
without pull-down				with pull-down						
type	Id. No.	clamping range	sleeve expansion Ø	type	Id. No.					Id. No.
EMX-F-1	9110000	19.7-30.3	0.6	EMX-FP-1	9210000	9112016	9113021	9110197	19.7	
							9113022	9110202	20.2	
							9113023	9110207	20.7	
							9110212	9110212	21.2	
							9110217	9110217	21.7	
							9110222	9110222	22.2	
							9110227	9110227	22.7	
							9112020	9110232	9110232	23.2
								9110237	9110237	23.7
								9110242	9110242	24.2
								9110247	9110247	24.7
								9110252	9110252	25.2
9110257	9110257	25.7								
9112023	9110262	9110262	26.2							
	9110267	9110267	26.7							
	9110272	9110272	27.2							
	9110277	9110277	27.7							
	9110282	9110282	28.2							
	9110287	9110287	28.7							
	9110292	9110292	29.2							
	9110297	9110297	29.7							
	9122024	9120277	9120277	27.7						
		9120282	9120282	28.2						
		9120287	9120287	28.7						
		9120292	9120292	29.2						
9120297		9120297	29.7							
9120302		9120302	30.2							
9120307		9120307	30.7							
9120312		9120312	31.2							
9122028		9120317	9120317	31.7						
		9120322	9120322	32.2						
		9120327	9120327	32.7						
		9120332	9120332	33.2						
	9120337	9120337	33.7							
	9120342	9120342	34.2							
9122032	9120347	9120347	34.7							
	9120352	9120352	35.2							
	9120357	9120357	35.7							
	9120362	9120362	36.2							
	9120367	9120367	36.7							
	9120372	9120372	37.2							
	9120377	9120377	37.7							
	9120382	9120382	38.2							
9123041	9120387	9120387	38.7							
	9120392	9120392	39.2							
	9120397	9120397	39.7							

* Id. No. XXXXX-Y = Clamping sleeve vulcanized.

Expanding mandrel
Power operated

■ Ordering review

mandrel without exchange parts						taper	disc	segment sleeve*							
without pull-down				with pull-down											
type	Id. No.	clamping range	sleeve expansion Ø	type	Id. No.										
EMX-F-3	9130000	34.7-55.5	0.8	EMX-FP-3	9230000	9132030	9133037	9130347	34.7						
							9133038	9130352	35.2						
								9130357	35.7						
								9130362	36.2						
								9130367	36.7						
								9130372	37.2						
								9130377	37.7						
								9130382	38.2						
								9130387	38.7						
								9130392	39.2						
								9130397	39.7						
								9130402	40.2						
						9132037	9133044	9130412	41.2	9130417	41.7	9132044	9133044	9130412	41.2
														9130417	41.7
														9130422	42.2
														9130427	42.7
														9130432	43.2
														9130437	43.7
														9130442	44.2
														9130447	44.7
														9130452	45.2
														9130457	45.7
														9130462	46.2
														9130467	46.7
						9132044	9133050	9130472	47.2	9130477	47.7	9142044	9133050	9130472	47.2
														9130482	48.2
														9130487	48.7
														9130492	49.2
														9130497	49.7
														9130502	50.2
														9130507	50.7
														9130512	51.2
														9130517	51.7
														9130522	52.2
														9130527	52.7
														9130532	53.2
9142051	9143052	9140497	49.7	9140502	50.2	9142051	9143052	9140497	49.7						
								9140507	50.2						
								9140512	50.7						
								9140517	51.2						
								9140522	51.7						
								9140527	52.2						
								9140532	52.7						
								9140537	53.2						
								9140542	53.7						
								9140547	54.2						
								9140552	54.7						
								9140557	55.2						
9142060	9143059	9140562	56.2	9140567	56.7	9142060	9143059	9140562	56.2						
								9140567	56.7						
								9140572	57.2						
								9140577	57.7						
								9140582	58.2						
								9140587	58.7						
								9140592	59.2						
								9140597	59.7						
								9140602	60.2						
								9140607	60.7						
								9140612	61.2						
								9140617	61.7						
	9140622	62.2													
	9140627	62.7													
	9140632	63.2													
	9140637	63.7													
	9140642	64.2													
	9140647	64.7													
	9140652	65.2													
	9140657	65.7													
	9140662	66.2													
	9140667	66.7													
	9140672	67.2													
	9140677	67.7													
	9140682	68.2													
	9140687	68.7													
	9140692	69.2													
	9140697	69.7													
	9140702	70.2													
	9140707	70.7													
	9140712	71.2													
	9140717	71.7													
	9140722	72.2													
	9140727	72.7													
	9140732	73.2													
	9140737	73.7													
	9140742	74.2													
	9140747	74.7													

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

■ Ordering review

mandrel without exchange parts						taper	disc	segment sleeve*							
without pull-down				with pull-down											
type	Id. No.	clamping range	sleeve expansion Ø	type	Id. No.										
EMX-F-5	9150000	69.7-95.9	1.2	EMX-FP-5	9250000	9152063	9153072	9150697	69.7						
							9153073	9150707	70.7						
							9153074	9150717	71.7						
							9153075	9150727	72.7						
							9153076	9150737	73.7						
							9153077	9150747	74.7						
							9153078	9150757	75.7						
							9153079	9150767	76.7						
							9153080	9150777	77.7						
						9152071	9153081	9150787	78.7						
							9153082	9150797	79.7						
							9153083	9150807	80.7						
							9153084	9150817	81.7						
							9153085	9150827	82.7						
							9153086	9150837	83.7						
							9153087	9150847	84.7						
							9153088	9150857	85.7						
							9153089	9150867	86.7						
						9152080	9153090	9150877	87.7						
							9153091	9150887	88.7						
							9153092	9150897	89.7						
							9153093	9150907	90.7						
							9153094	9150917	91.7						
							9153095	9150927	92.7						
							9153096	9150937	93.7						
							9153097	9150947	94.7						
							9163092	9160897	89.7						
						EMX-F-6	9160000	89.7-132.9	1.2	EMX-FP-6	9260000	9162082	9163092	9160907	90.7
													9163093	9160917	91.7
													9163094	9160927	92.7
													9163095	9160937	93.7
													9163096	9160947	94.7
													9163097	9160957	95.7
													9163098	9160967	96.7
													9163099	9160977	97.7
													9163100	9160987	98.7
9163101	9160997	99.7													
9162092	9163102	9161007	100.7												
	9163103	9161017	101.7												
	9163104	9161027	102.7												
	9163105	9161037	103.7												
	9163106	9161047	104.7												
	9163107	9161057	105.7												
	9163108	9161067	106.7												
	9163109	9161077	107.7												
	9163110	9161087	108.7												
9163111	9161097	109.7													
9162103	9163112	9161107	110.7												
	9163113	9161117	111.7												
	9163114	9161127	112.7												
	9163115	9161137	113.7												
	9163116	9161147	114.7												
	9163117	9161157	115.7												
	9163118	9161167	116.7												
	9163119	9161177	117.7												
	9163120	9161187	118.7												
9163121	9161197	119.7													
9162114	9163122	9161207	120.7												
	9163123	9161217	121.7												
	9163124	9161227	122.7												
	9163125	9161237	123.7												
	9163126	9161247	124.7												
	9163127	9161257	125.7												
	9163128	9161267	126.7												
	9163129	9161277	127.7												
	9163130	9161287	128.7												
9163131	9161297	129.7													
9163132	9161307	130.7													
9163133	9161317	131.7													
9163134															

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

EMX-C

Segment sleeve mandrel
Power operated

Segment sleeve mandrel $\varnothing 25 - 121 \text{ mm}$

- Size 1 - 5
- Large expansibility



Application/customer benefits

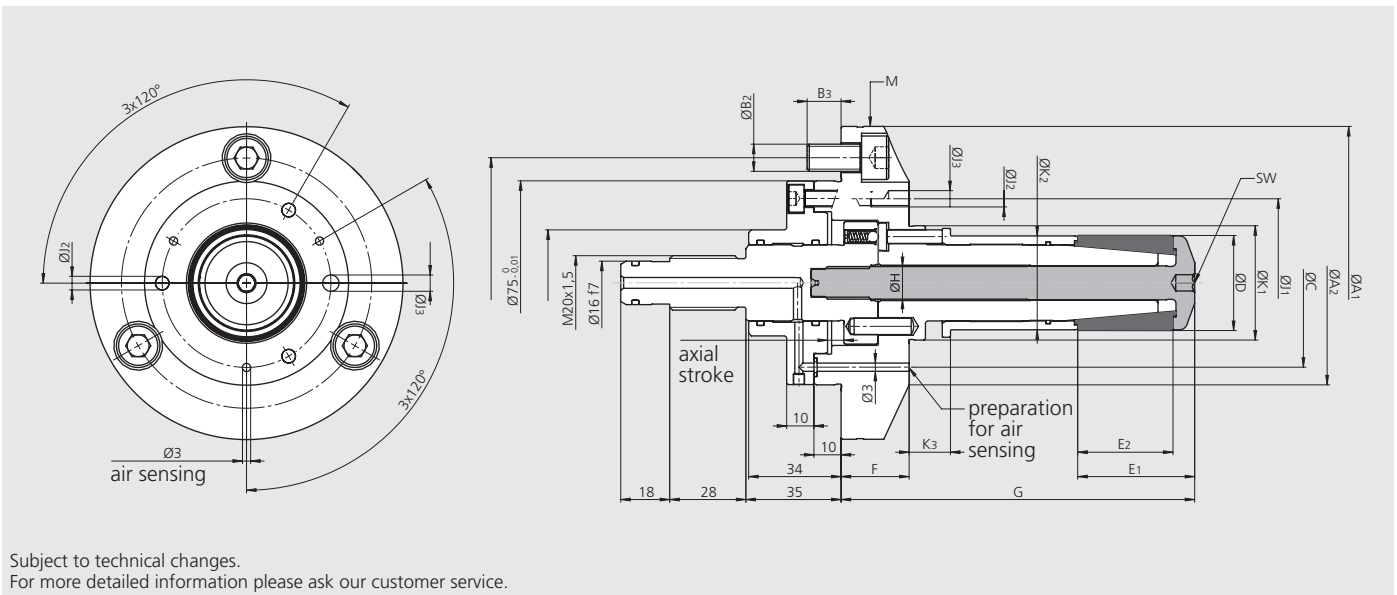
- Ideal for volume production and hard turning / grinding with wear resistant, case hardened and vulcanised clamping sleeves
- Highest accuracy and high torque transmission by means of fixed mandrel body
- Axial pull down by the axial clamping movement of the clamping sleeve = best face run out
- Clamping 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. \varnothing)
- Case hardened and vulcanized segment sleeves
- Power operated / manual lubrication
- Rigid design with flange mounting

Standard equipment

Base mandrel with mounting bolts
Clamping screw



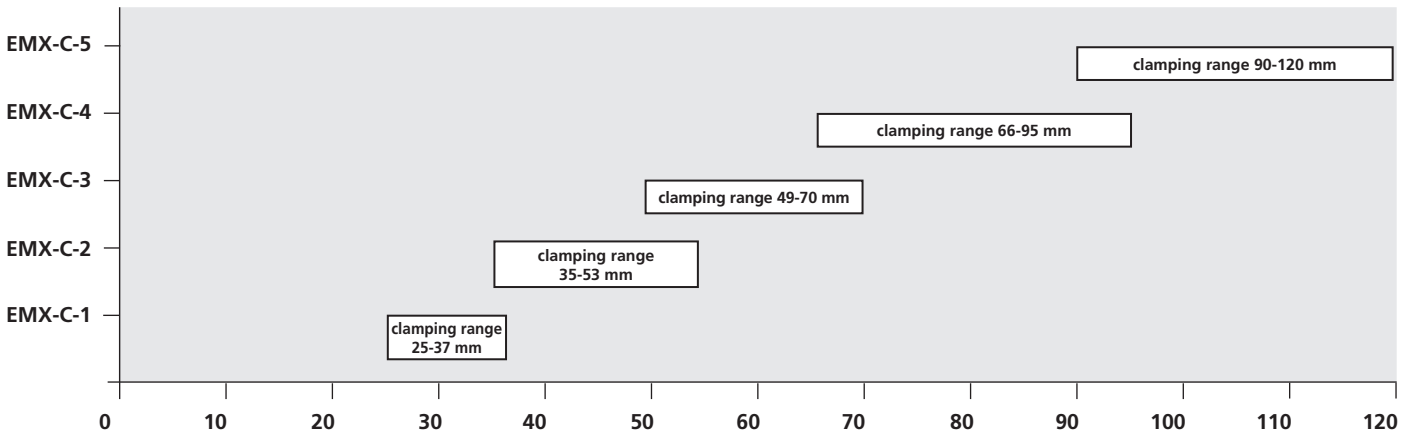
Subject to technical changes.
For more detailed information please ask our customer service.

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° $\varnothing 3$	62	75	95	120	
D	Clamping length	25-37	35-53	49-70	66-95	90-120
E1		37	43	55	64	86
E2	Clamping range	30	35	45	50	70
F		25	25	25	25	32
G		119	130	156.5	175.5	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
SW (hex)		SW5	SW6	SW10	SW12	SW14

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	35	90	120	250	400
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

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*

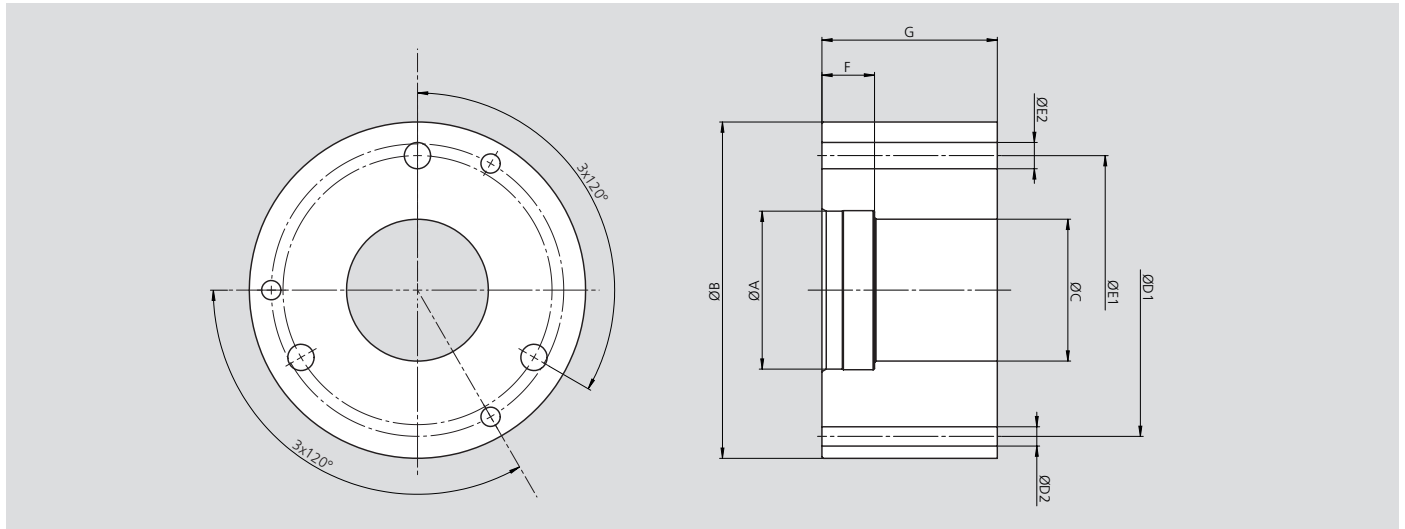
Ø	90	91	92	93	94	95	96	97	98	99	100	101	102
Id. No.	9450900	9450910	9450920	9450930	9450940	9450950	9450960	9450970	9450980	9450990	9451000	9451010	9451020
Ø	103	104	105	106	107	108	109	110	111	112	113	114	115
Id. No.	9451030	9451040	9451050	9451060	9451070	9451080	9451090	9451100	9451110	9451120	9451130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

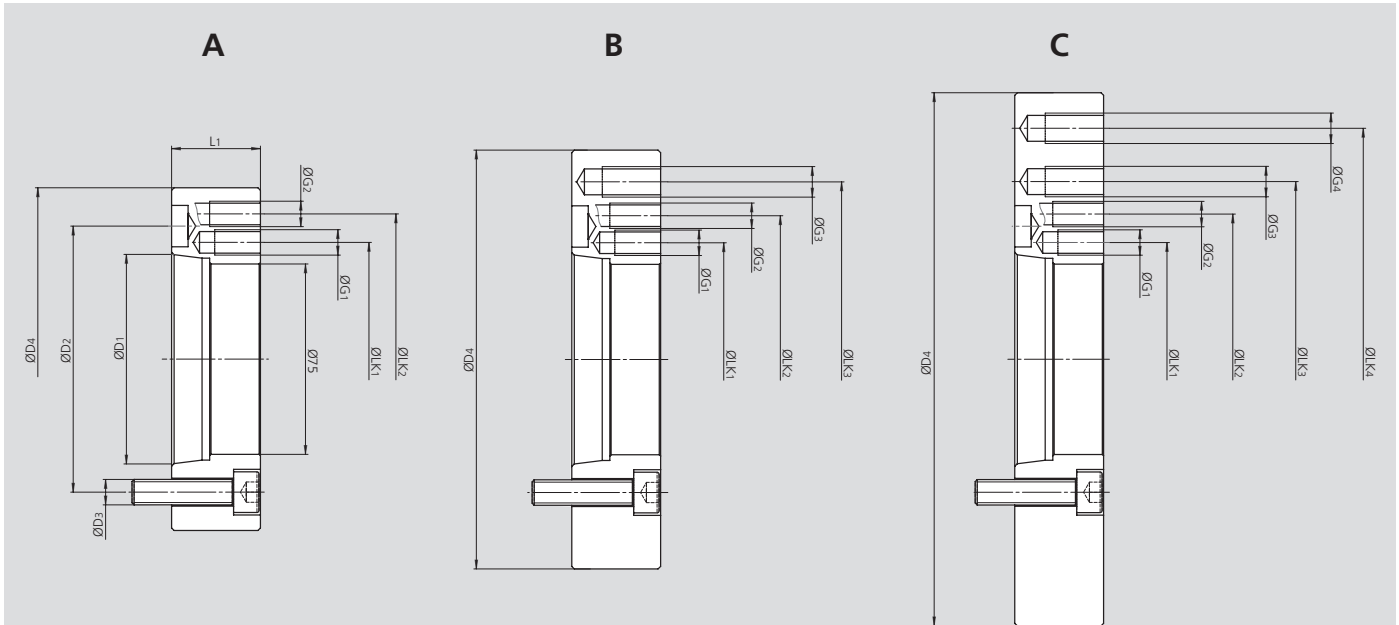


mandrel size	EMX-C-1		EMX-C-2		EMX-C-3		EMX-C-4		EMX-C-5	
	short	long	short	long	short	long	short	long	short	long
Id. No.	9413000	9413001	9423000	9423001	9433000	9433001	9443000	9443001	9453000	9453001
ØA	35	35	42	42	54	54	73	73	96	96
ØB	75	75	75	75	115	115	135	135	165	165
ØC	24.5	24.5	34.5	34.5	48.5	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

Adapters

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

ISO-A for sleeve expanding mandrels

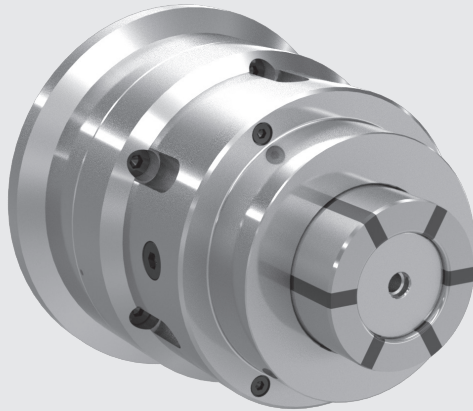


Subject to technical changes.
For more detailed information please ask our customer service.

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 M10	165	36	92	3 x M10	112	3 x M10	140	3 x M12	-	-
9000062	mm A6	106.375	133.4	3 x M10	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 M10	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



Application/customer benefits

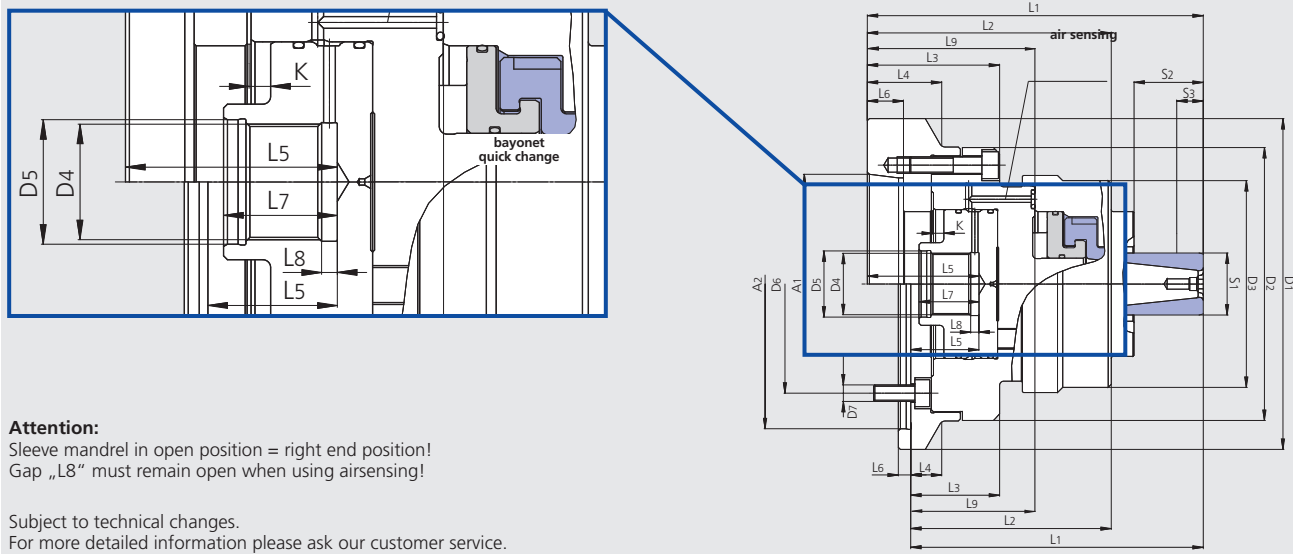
- Ideal for volume production and hard turning / grinding with wear resistant, case hardened and vulcanised clamping sleeves
- Highest accuracy and high torque transmission by means of fixed mandrel body
- Axial pull down by the axial clamping movement of the clamping sleeve = best face run out
- Clamping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

Technical details

- Large expansibility 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



Attention:
Sleeve mandrel in open position = right end position!
Gap „L8“ must remain open when using air sensing!

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

SMW-AUTOBLOK Type	EM-S-1			EM-S-2			EM-S-3					EM-S-4				
mounting	A5	A6	Z140	A5	A6	Z140	A5	A6	A08	Z140	Z170	A5	A6	A8	Z140	Z170
Id. No.	202734	202735	205082	202737	202738	205085	202740	202741	203132	205086	205134	203384	203385	203427	205088	205089
Short taper mounting DIN 55026	A1	A5	A6	-	A5	A6	-	A5	A6	A8	-	-	A5	A6	A8	-
Center mounting	A2 H5	-	-	140	-	-	140	-	-	-	140	170	-	-	-	140
D1	132	160	150	132	160	150	132	160	202	150	180	157	157	202	157	180
D2	132	132	132	132	132	132	132	132	132	132	132	157	157	157	157	157
D3	82	82	82	100	100	100	114	114	114	114	114	143	143	143	143	143
D4	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5	M30 x 1.5
D5 H7	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
D6	104.8	133.4	104.8	104.8	133.4	104.8	104.8	133.4	171.4	104.8	133.4	104.8	133.4	171.4	104.8	133.4
D7	4 x M10	4 x M12	3 x M10	4 x M10	4 x M12	3 x M10	4 x M10	4 x M12	4 x M16	3 x M10	6 x M12	4 x M10	4 x M12	4 x M16	3 x M10	6 x M12
L1	138.5	138.5	123.5	162.5	162.5	147.5	177.5	177.5	179.5	162.5	162.5	193	191	195	193	191
L2	113.5	113.5	98.5	118	118	103	123	123	126	108	108	132.5	130.5	134.5	132.5	130.5
L3	61	61	46	64	64	49	75	75	77	60	60	80	78	82	80	78
L4	-	36	15	-	36	15	-	36	47	15	30	-	-	47	-	13
L5	53	53	38	54	54	39	50	50	52	35	35	54	52	56	54	52
L6	16.5	17.5	6	16.5	17.5	6	16.5	17.5	20	6	6	19	17.5	20	5	5
L7	30	30	30	29	29	29	25	25	25	25	25	29	29	29	29	29
Gap	L8	4	4	4	4	4	4	4	4	4	4	5	5	5	5	5
	L9	79	79	64	81	81	66	75	75	77	60	60	80	78	82	80

Technical data

Type		EM-S-1				EM-S-2				EM-S-3					EM-S-4					
Clamping range	S1	18-23	>23-35	18-23	>23-35	18-23	>23-35	30-55	30-55	30-55	45-80	45-80	45-80	45-80	45-80	70-105	70-105	70-105	70-105	70-105
Max. clamping length	S2	17.5	23	17.5	23	17.5	23	41.5	41.5	41.5	51.5	51.5	51.5	51.5	51.5	57.5	57.5	57.5	57.5	57.5
Min. clamping length	S3	7		7		7		8	8	8	8	8	8	8	8	8	8	8	8	8
Axial stroke	K	4		4		4		6	6	6	6	6	6	6	6	6	6	6	6	6
Expansibility in dia.		0.8		0.8		0.8		1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Max. actuating force	kN	15		15		15		20	20	20	25	25	25	25	25	35	35	35	35	35
Max. speed	r.p.m.	5000		5000		5000		5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000
Max. transmittable torque	Nm	50-90				105-190				195-350					395-595					
Rec. actuating cylinders		SIN-S 70				SIN-S 85				SIN-S 85					SIN-S 85					

Segment sleeve mandrel Ø 18 - 105 mm

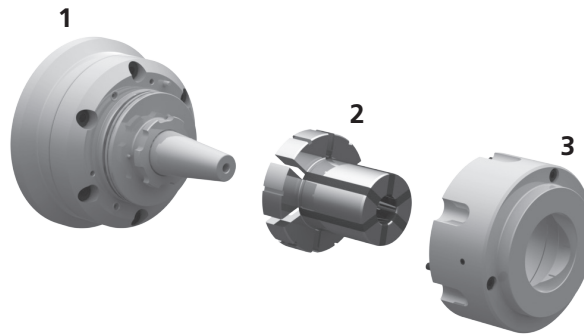
EM-S

Segment sleeve mandrel
Power operated

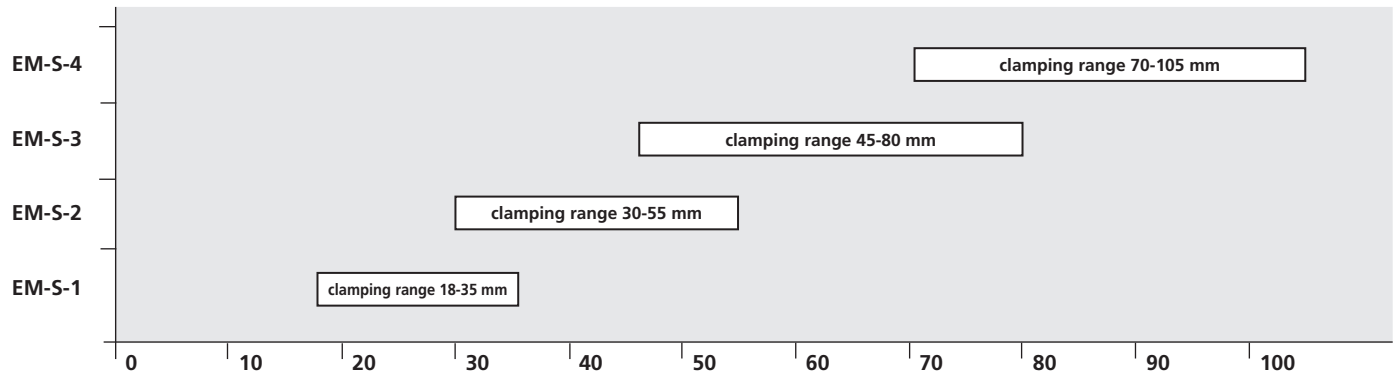
- Size 1 - 4
- Large expansibility

Technical design

1. Basic body EM-S with spindle adapter
2. Segment sleeve mandrel (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



Overview clamping ranges



Clamping sleeves

EM-S-1*

Ø	18	19	20	21	22	23	24	25	26	27	28	29	30
Id. No.	204716	203026	203027	203028	203029	203030	203031	203032	203033	203034	203035	203036	203037
Ø	31	32	33	34	35								
Id. No.	203038	203039	203040	203041	203042								

EM-S-2**

Ø	30	31	32	33	34	35	36	37	38	39	40	41	42
Id. No.	206313	203044	203045	203046	203047	203048	203049	203050	203051	203052	203053	203054	203055
Ø	43	44	45	46	47	48	49	50	51	52	53	54	55
Id. No.	203056	203057	203058	203059	203060	203061	203062	203063	203064	203065	203066	203067	203068

EM-S-3**

Ø	45	46	47	48	49	50	51	52	53	54	55	56	57
Id. No.	203069	203070	203071	203072	203073	203074	203075	203076	203077	203078	203079	203080	203081
Ø	58	59	60	61	62	63	64	65	66	67	68	69	70
Id. No.	203082	203083	203084	203085	203086	203087	203088	203089	203090	203091	203092	203093	203094
Ø	71	72	73	74	75	76	77	78	79	80			
Id. No.	203095	203096	203097	203098	203099	203100	203101	203102	203103	203104			

EM-S-4**

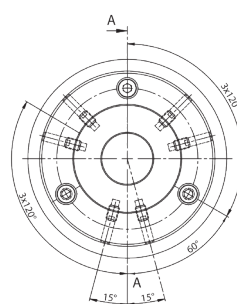
Ø	70	71	72	73	74	75	76	77	78	79	80	81	82
Id. No.	203434	203435	203436	203437	203438	203439	203440	203441	203442	203443	203444	203445	203446
Ø	83	84	85	86	87	88	89	90	91	92	93	94	95
Id. No.	203447	203448	203449	203450	203451	203452	203453	203454	203455	203456	203457	203458	203459
Ø	96	97	98	99	100	101	102	103	104	105			
Id. No.	203460	203461	203462	203463	203464	203465	203466	203467	203468	203469			

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

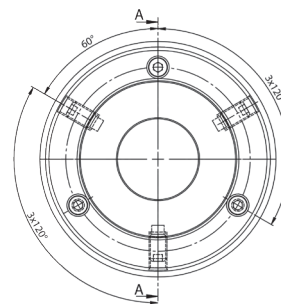
** The clamping sleeves have a max. radial expansibility in diameter of ± 0.6 mm from the nominal diameter.

Soft work stop blank

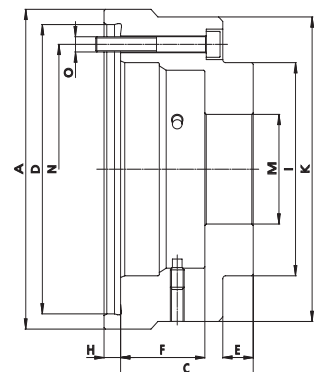
Type	EM-S-1	EM-S-2	EM-S-3	EM-S-4
Id. No.*	9100321	9100322	9100323	9100324
Id. No.**	5301416	5301417	5301418	5301419
A	93	105	113	142
C	47	59	75	82.5
D	80	95	88	115
E	12.5	22	27	30
F	27.5	30.5	40.5	45
H	6	6	-	-
I	50	70	88	116
K	82	100	114	143
M	19	31	46	71
N	66	82	100	128
O	M5	M5	M5	M5



EM-S-1



EM-S-2 / EM-S-3 / EM-S-4



* Soft, finish machined on mandrel side, pre machined on workpiece side.

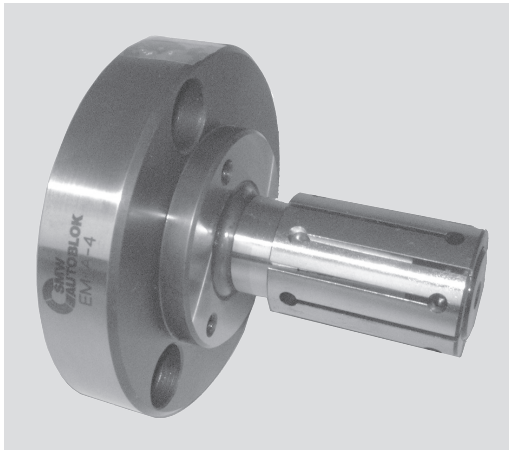
** Soft, with stock material (0.3 mm) for case hardening and grinding

EM-A / EM-AL

Expanding mandrel
Manual or power operated

Expanding mandrels Ø 14.7 - 129.7 mm

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



Application/customer benefits

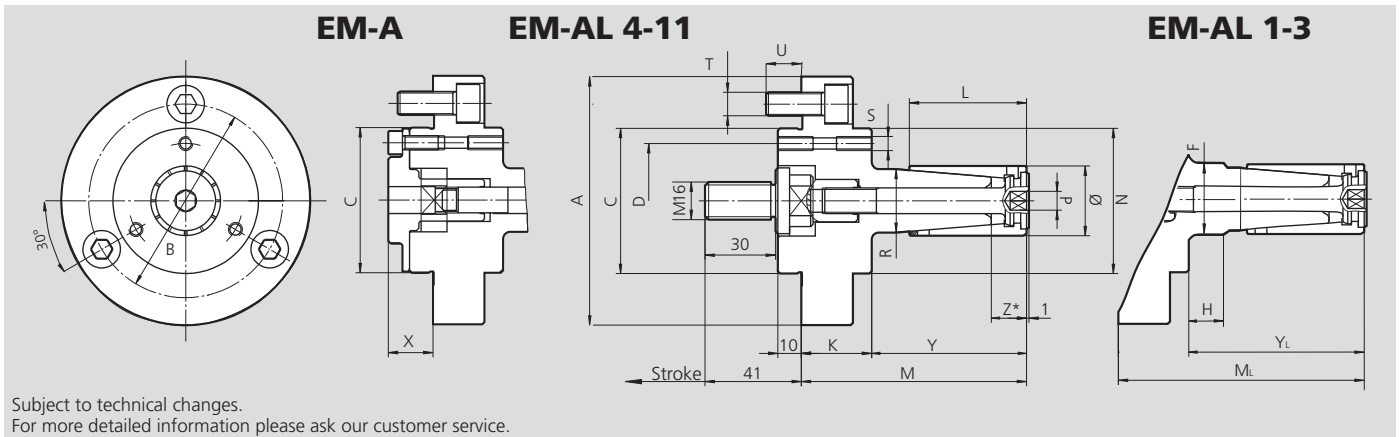
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission because of fixed arbor
- Axial pull down by axial movement of the clamping sleeve during actuation
- Quick set-up

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
ML	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
YL	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

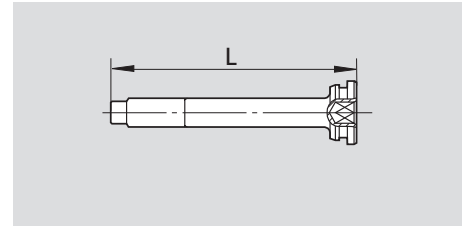
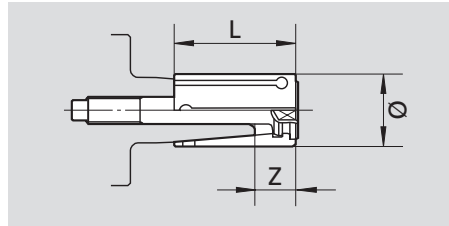
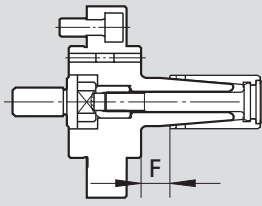
* Clamping on area Z only is not allowed.

Technical data

Stroke	mm	6	6	6	6	6	6	12	12	12	12	12
Max. actuating force	kN	7	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.

■ Ordering review



basic mandrel		
type	Id. No.	F
EM-A-1	68100110	16
EM-AL-1	68100111	41
EM-A-2	68100210	16
EM-AL-2	68100211	46
EM-A-3	68100310	16
EM-AL-3	68100311	51
EM-A-4	68100410	16
EM-AL-4	68100411	56
EM-A-5	68100510	16
EM-AL-5	68100511	56
EM-A-6	68100610	16
EM-AL-6	68100611	56
EM-A-7	68100710	22
EM-AL-7	68100711	72
EM-A-8	68100810	22
EM-AL-8	68100811	68
EM-A-9	68100910	22
EM-AL-9	68100911	92
EM-A-10	68101010	22
EM-AL-10	68101011	96
EM-A-11	68101110	25
EM-AL-11	68101111	105

clamping sleeve cpl. with actuating screw						
Id. No.	Ø	L	expansibility	Z		
68300147	14.7	35	1	12.5		
68300157	15.7	35	1	12.5		
68300167	16.7	35	1	12.5		
68300177	17.7	35	1	12.5		
68300187	18.7	35	1	12.5		
68300197	19.7	40	1	14.5		
68300207	20.7	40	1	14.5		
68300217	21.7	40	1	14.5		
68300227	22.7	40	1	14.5		
68300237	23.7	40	1	14.5		
68300247	24.7	46	1	14.5		
68300257	25.7	46	1	14.5		
68300267	26.7	46	1	14.5		
68300277	27.7	46	1	14.5		
68300287	28.7	46	1	14.5		
68300297	29.7	50	1	15		
68300307	30.7	50	1	15		
68300317	31.7	50	1	15		
68300327	32.7	50	1	15		
68300337	33.7	50	1	15		
68300347	34.7	60	1	15.5		
68300357	35.7	60	1	15.5		
68300367	36.7	60	1	15.5		
68300377	37.7	60	1	15.5		
68300387	38.7	60	1	15.5		
68300397	39.7	60	1	16		
68300407	40.7	60	1	16		
68300417	41.7	60	1	16		
68300427	42.7	60	1	16		
68300437	43.7	60	1	16		
68300447	44.7	80	2	24		
68300467	46.7	80	2	24		
68300487	48.7	80	2	24		
68300497	49.7	80	2	24		
68300507	50.7	80	2	24		
68300527	52.7	80	2	24		
68300547	54.7	90	2	26		
68300567	56.7	90	2	26		
68300587	58.7	90	2	26		
68300597	59.7	90	2	26		
68300607	60.7	90	2	26		
68300627	62.7	90	2	26		
68300647	64.7	100	2	26.5		
68300667	66.7	100	2	26.5		
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		
68300817	81.7	122	2	27.5		
68300837	83.7	122	2	27.5		
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		
68301017	101.7	140	2	32		
68301037	103.7	140	2	32		
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		

actuating screw	
Id. No.	L
68030110	76.5
68030210	81
68030310	87.5
68030410	93
68030510	103
68030610	103
68030710	117
68030810	127
68030910	137
68031010	165
68031110	183

EM-B

Expanding mandrel
Manual or power operated

Expanding mandrels Ø 16 - 129.5 mm

- Size 0 - 4
- Large expansibility



Application/customer benefits

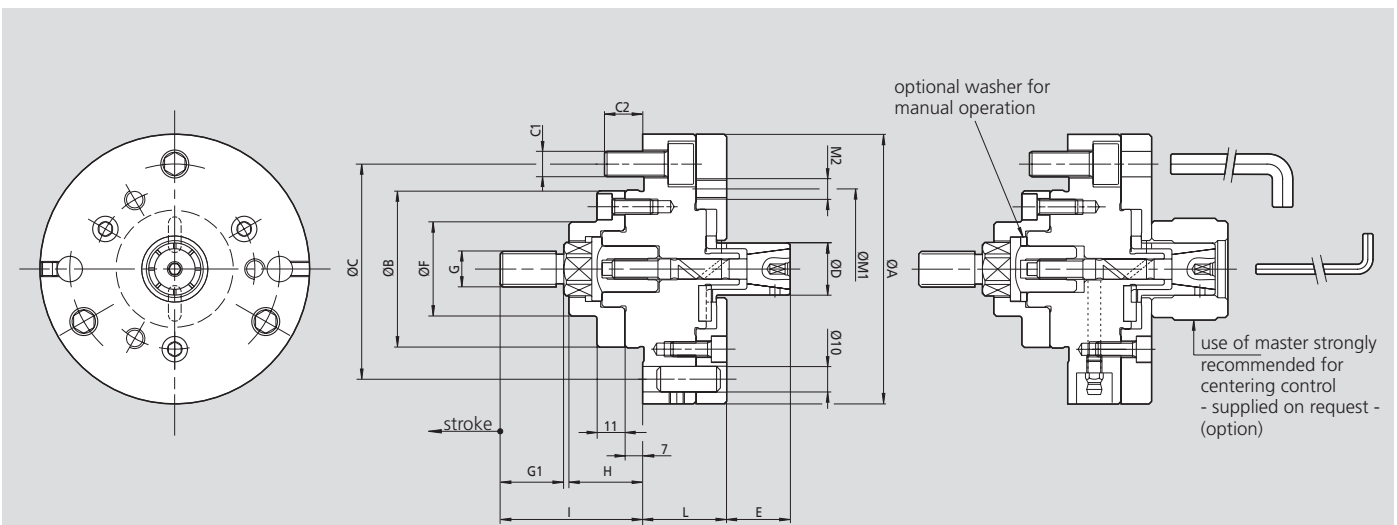
- For turning, milling, grinding and gear cutting operations
- High flexibility by means of modular system
- High torque transmission and concentricity
- No axial movement of clamping sleeve during operation
- Clamping of very short workpieces on the front section of the sleeve possible

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

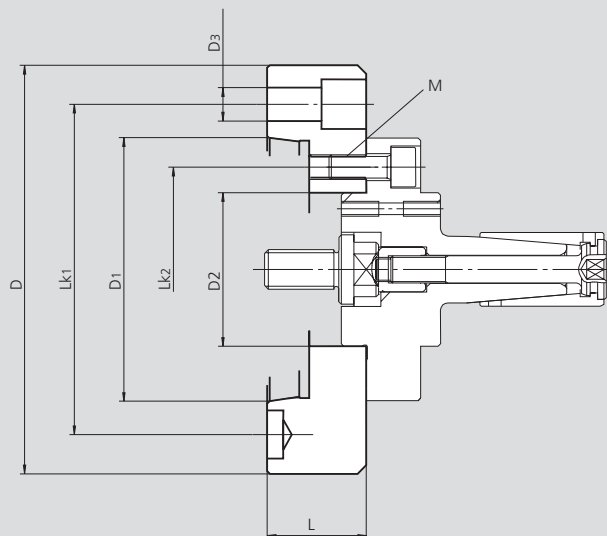
SMW-AUTOBLOK Type		EM-B 0	EM-B 1	EM-B 2	EM-B 3	EM-B 4
Axial stroke	mm	2.5	2.5	2.5	5	6.5
Sleeve expansion on Ø	mm	0.5	0.5	0.5	1	1.5
Max. axial force	kN	7	12	20	20	25
Recommended actuating cylinders	CSN	150	200	200	200	250
	SIN-S	70	70	85	85	100

Adapters

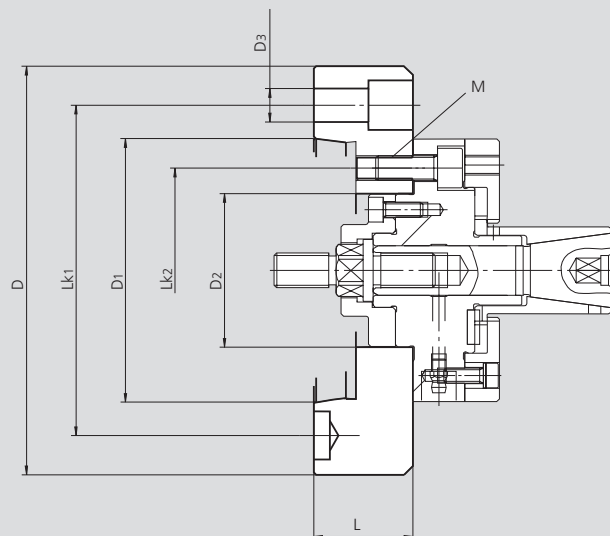
ISO-A for expanding mandrels

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

EM-A



EM-B



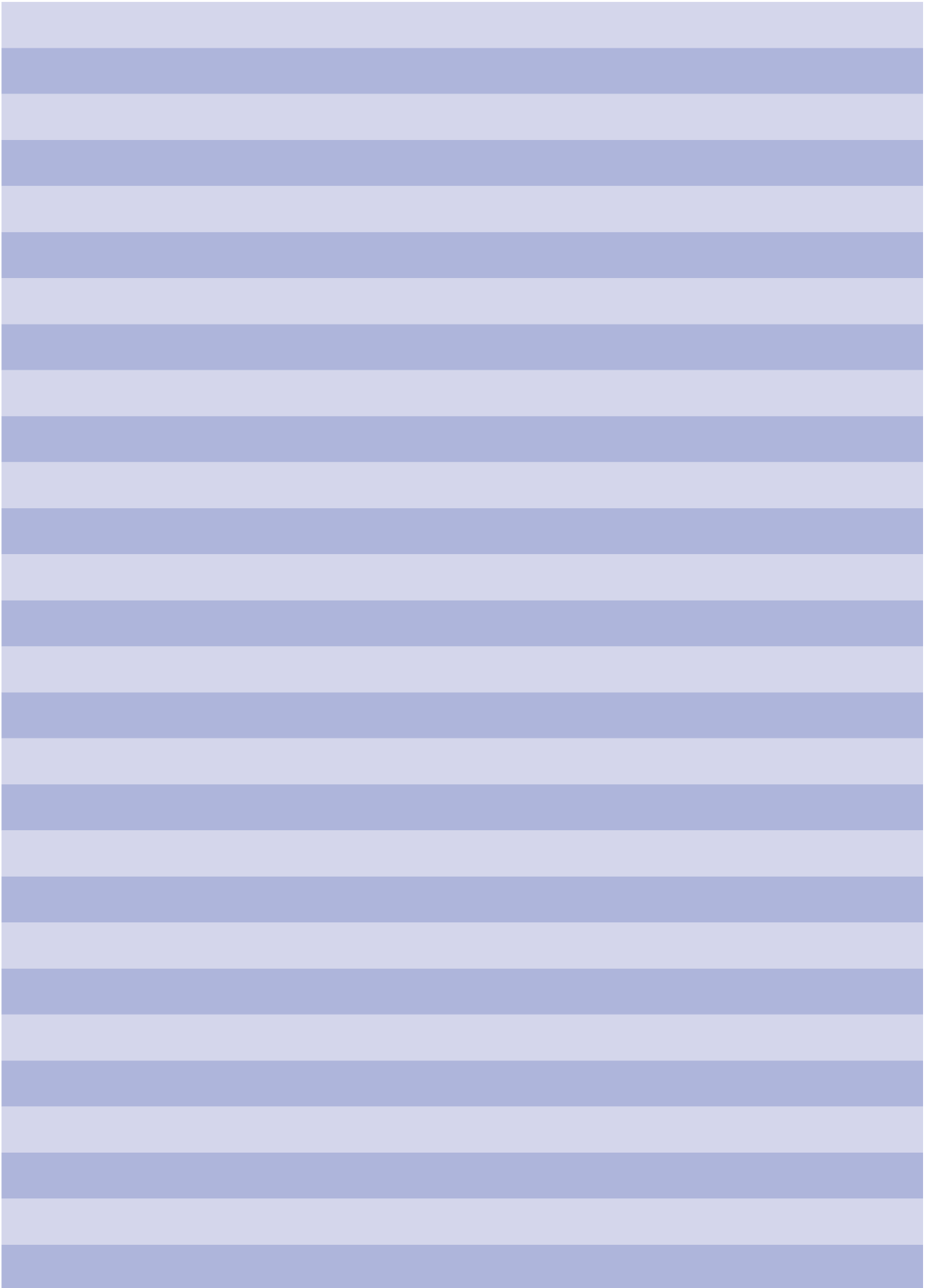
Subject to technical changes.
For more detailed information please ask our customer service.

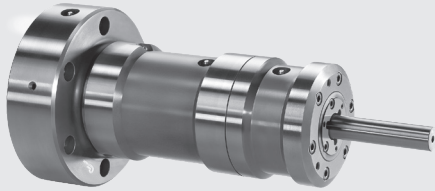
Technical data

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

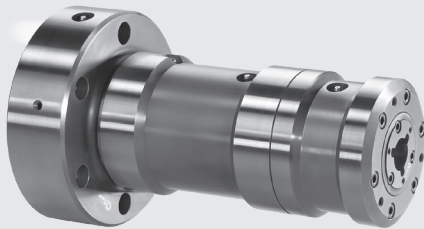
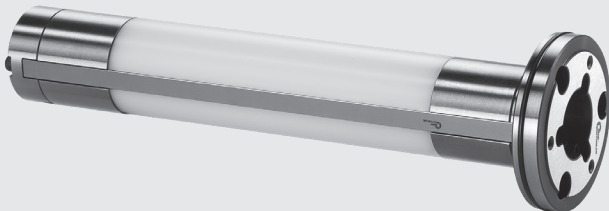
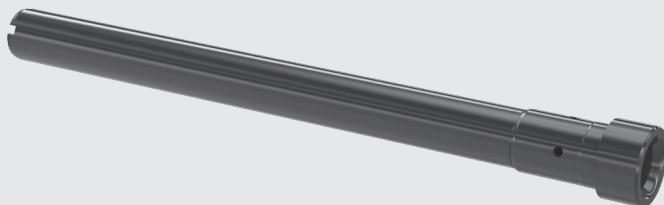
appropriate adapter flanges	EM-A	EM-B
24150100 ISO-A5		
24160100 ISO-A6	1-2-3-4-5-6	0-1-2-3
24180100 ISO-A8		
24150400 ISO-A5		
24160400 ISO-A6	7-8-9-10-11	4
24180400 ISO-A8		

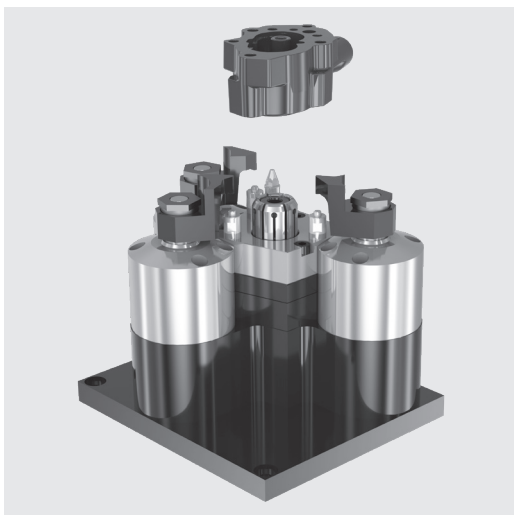
Notes



**Application/customer benefits**

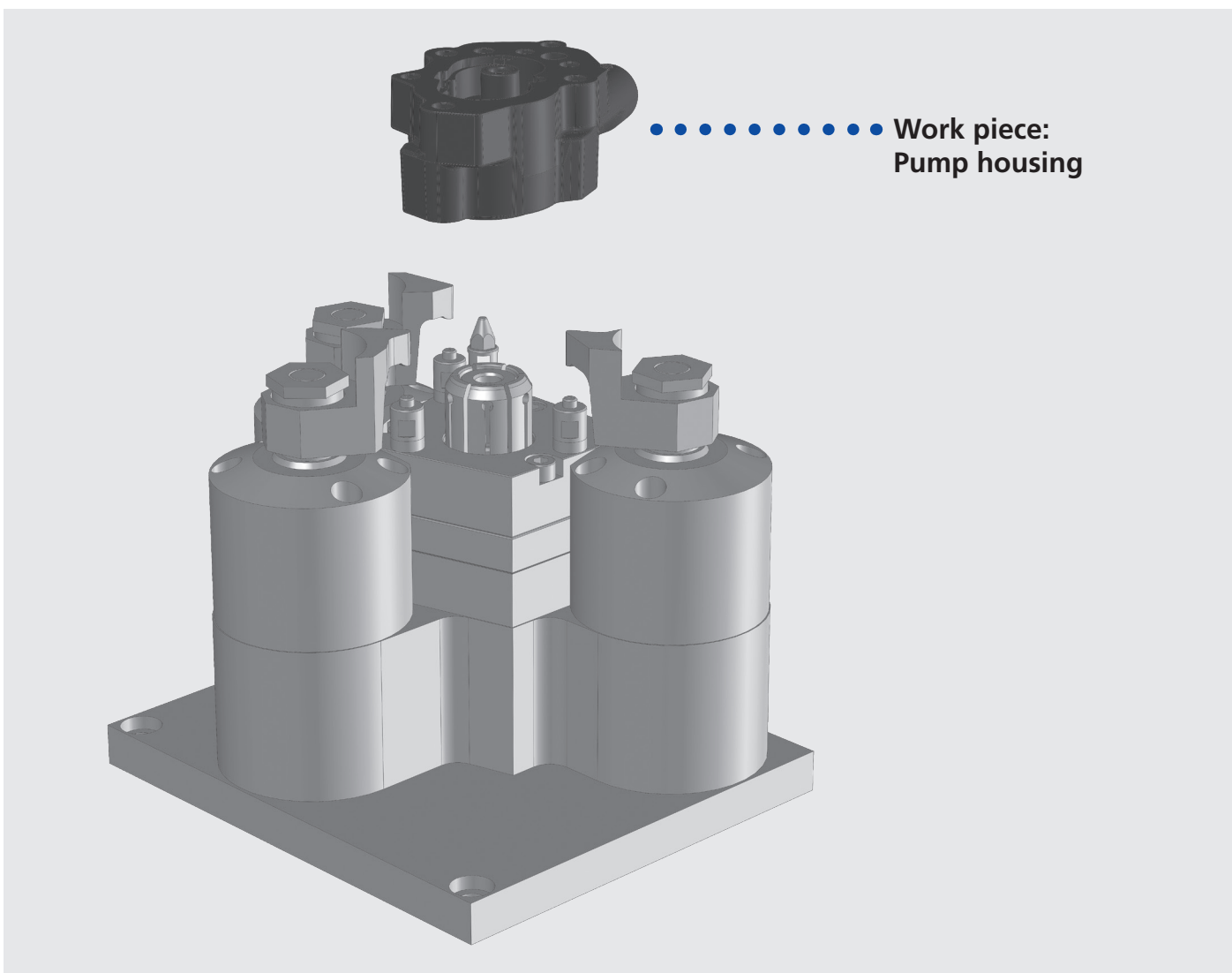
- Power operated sliding jaw collet chuck
- 2 clamping areas
- Spring compensation
- For clamping of shafts on 2 clamping levels
- Preparation for air sensing
- Exchangeable cartridge with adapter sleeve

Sliding jaw collet chuck**Exchangeable cartridge with adapter sleeve****Work piece: Camshaft tube**



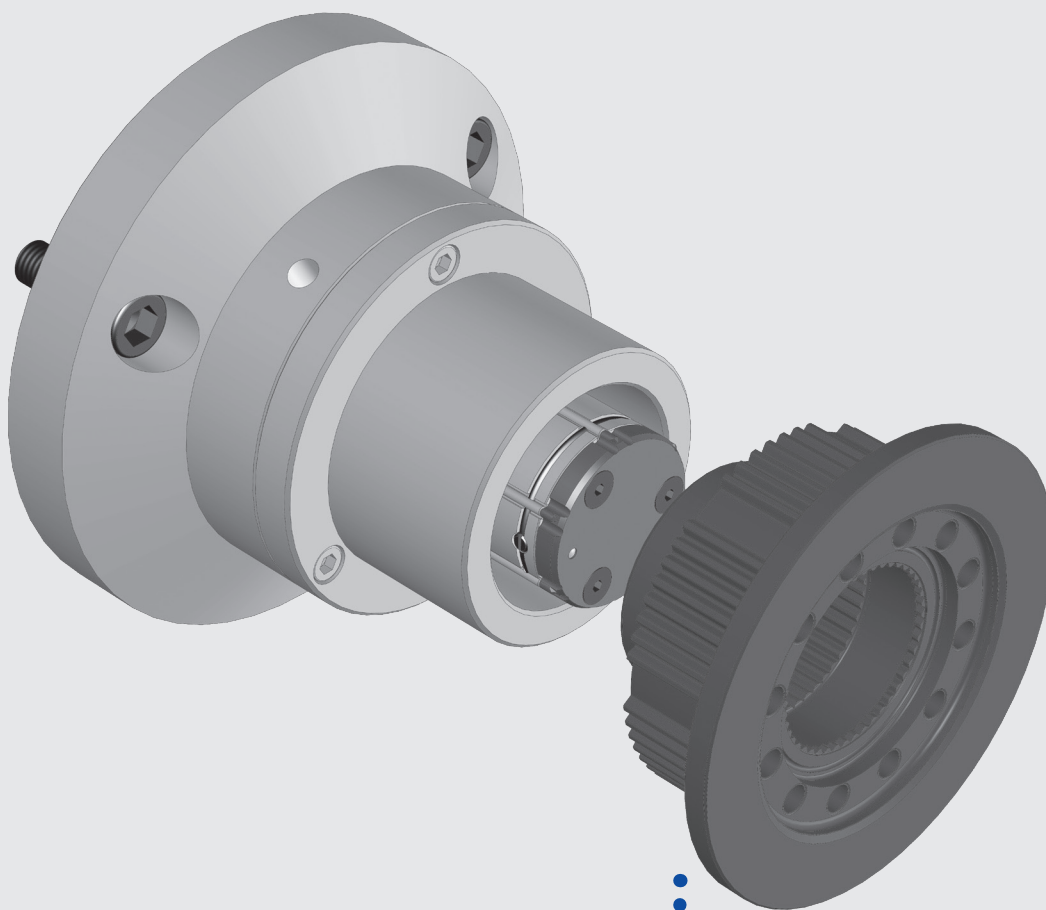
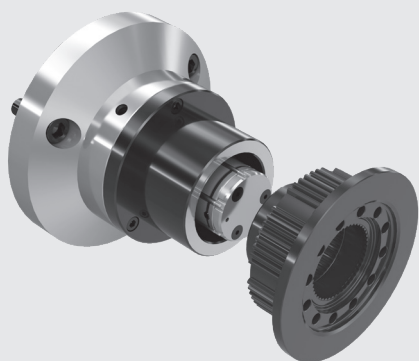
Application/customer benefits

- 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



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 <math><0,005</math>
- Insensitive to contamination
- Low maintenance

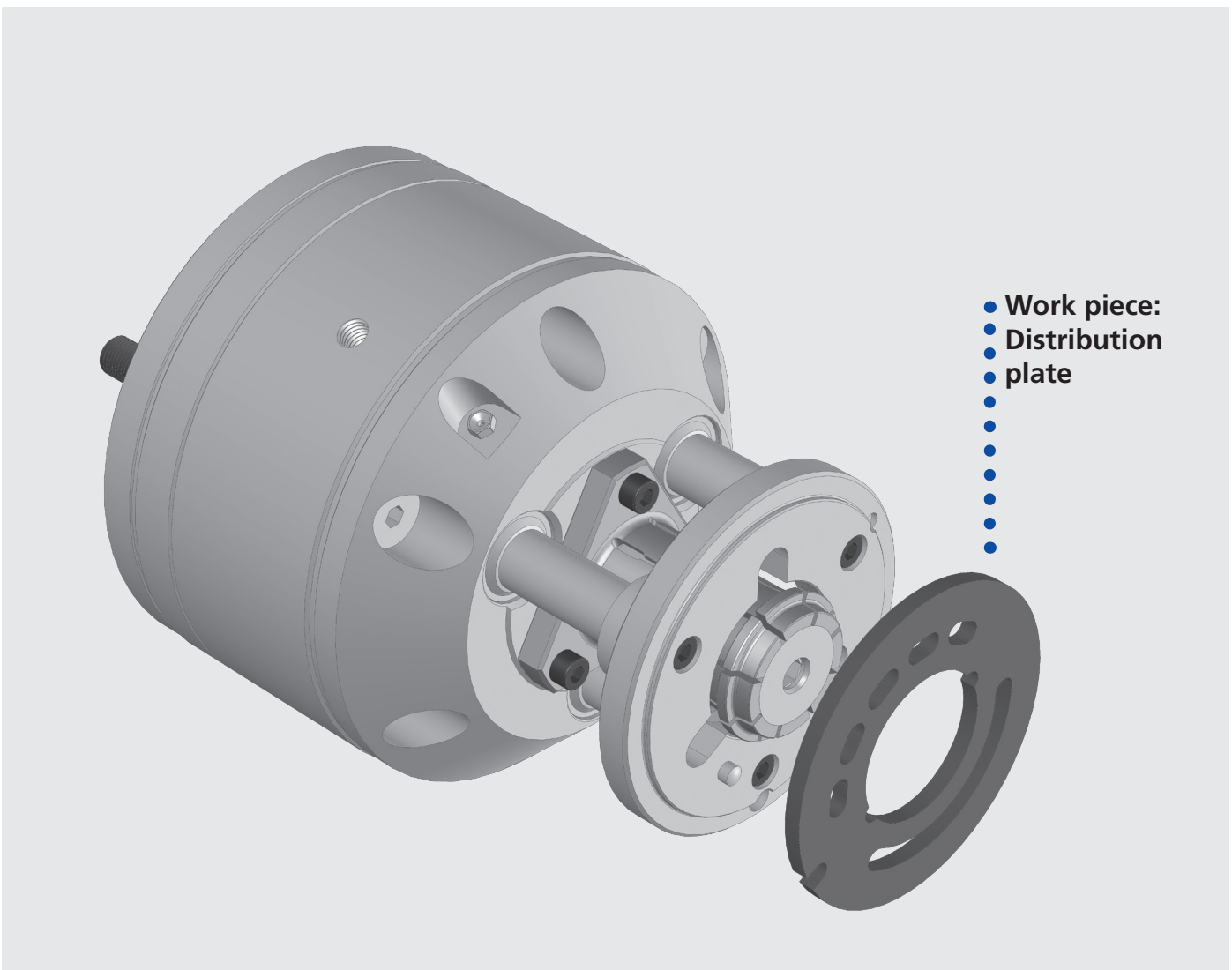


Work piece:
Hub flange

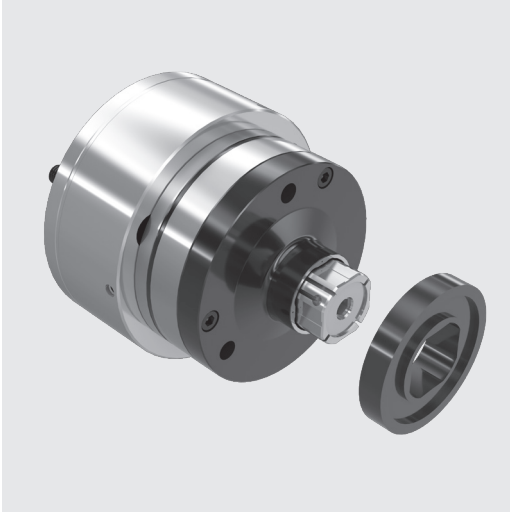


Application/customer benefits

- 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

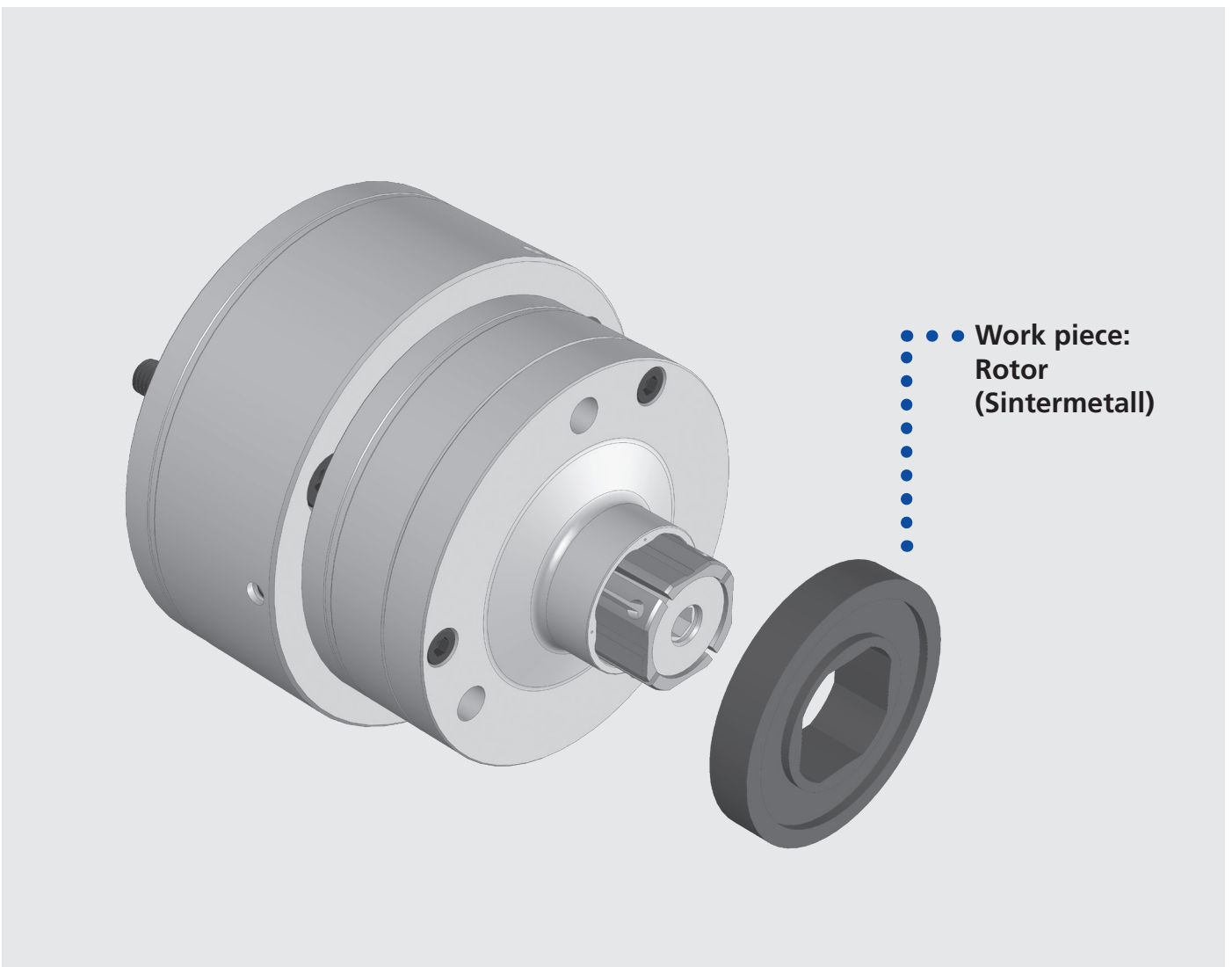


• Work piece:
• Distribution
• plate



Application/customer benefits

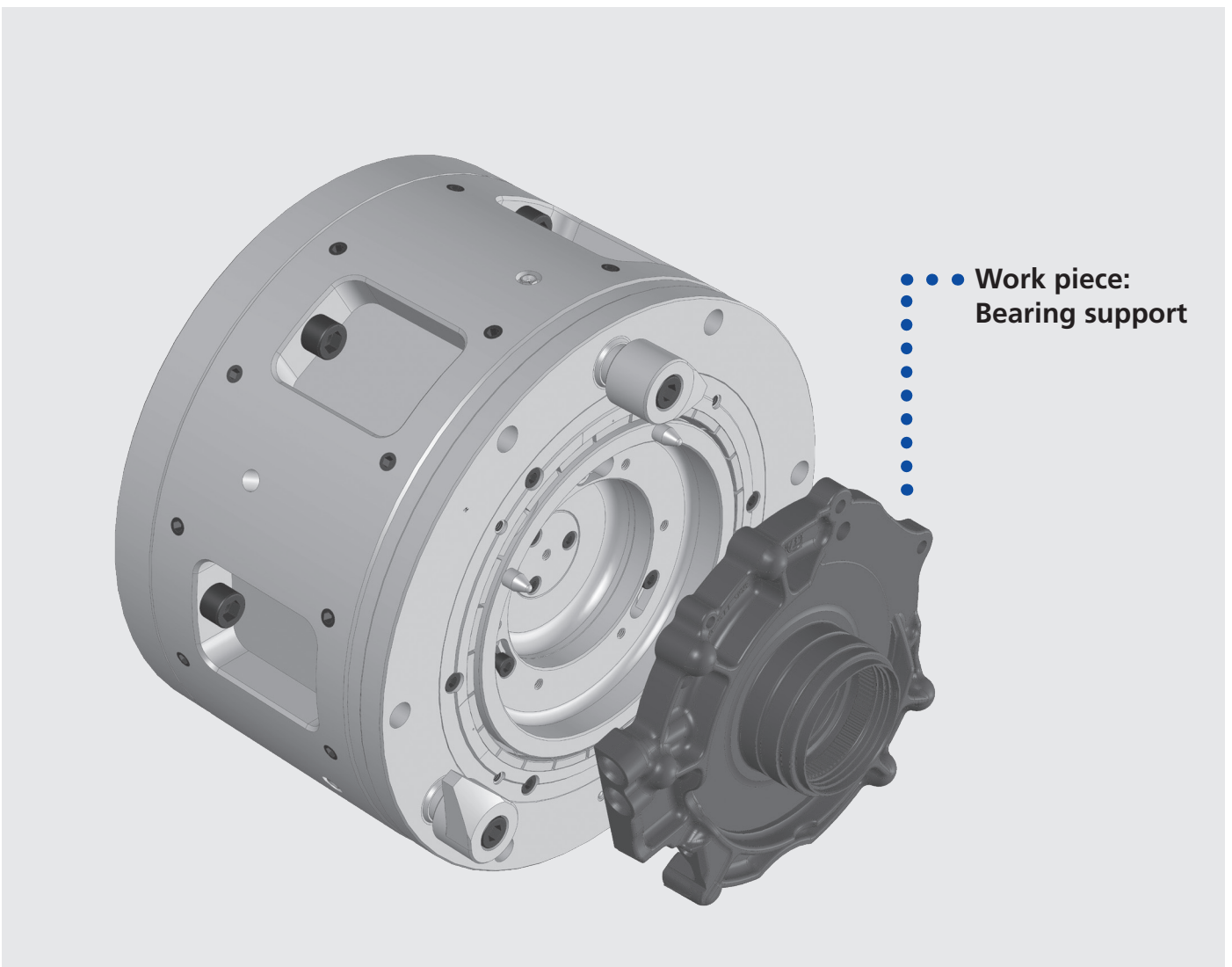
- Power operated, centric clamping via clamping sleeve in a spherical 4-Square inner contour with air sensing
- For processing of the outer contour of a Sintermetall work piece with profiled inner contour
- Power operated clamping with profiled sleeve
- Without axial components
- Two-sided plan processing 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 central turning of non-symmetrical cases
- Position orientation without deforming the work piece
- Pneumatic centering with collet chuck
- Power operated plan clamping with plan collet fingers
- Position orientation
- High repeatability
- Huge machining forces
- Insensitive to contamination



• • • Work piece:
Bearing support

Notes

A large area of horizontal stripes in two shades of blue, alternating between a medium blue and a light blue. This area is intended for taking notes.

Notes

A large rectangular area filled with horizontal stripes in two shades of blue: a medium blue and a light blue. The stripes alternate from top to bottom, creating a template for writing notes.

**Germany**

SMW-AUTOBLOK Spannsysteme GmbH
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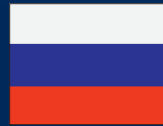
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