

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

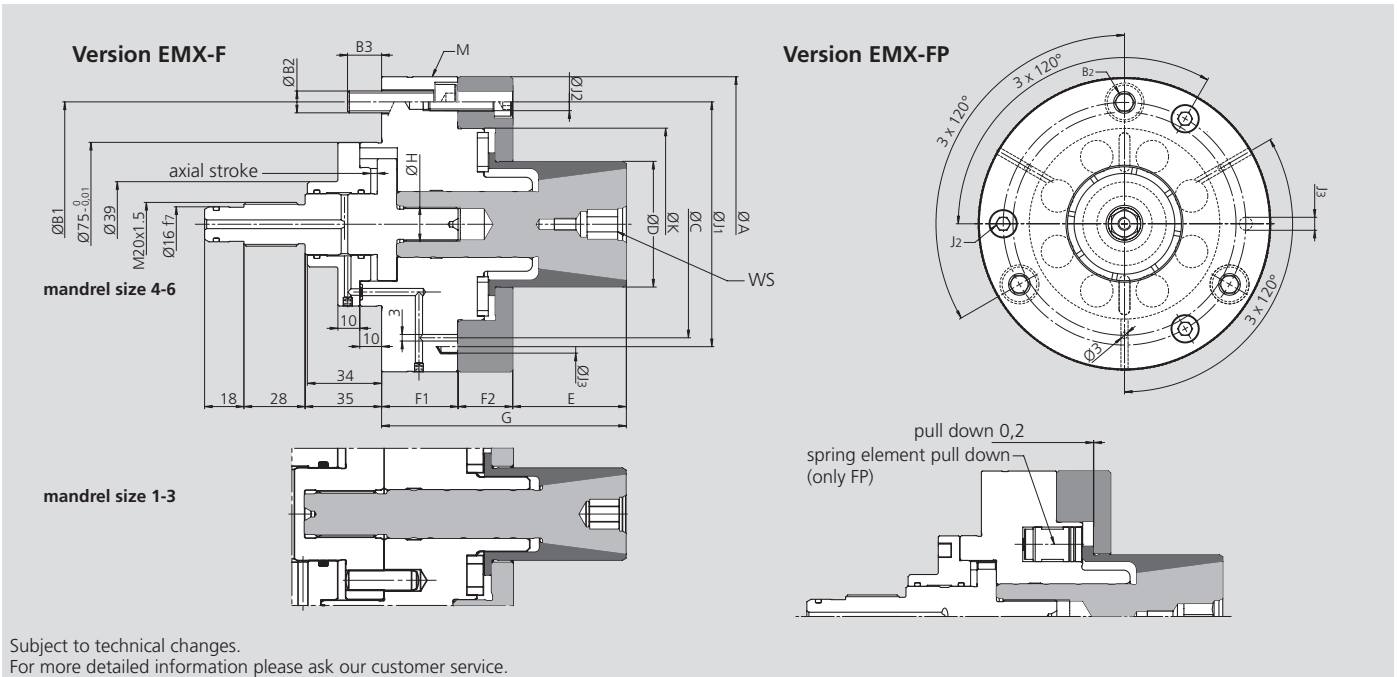
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission
- Clamping of very short workpieces on the front section of the sleeve possible
- FP: With axial pull down for best face run out

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

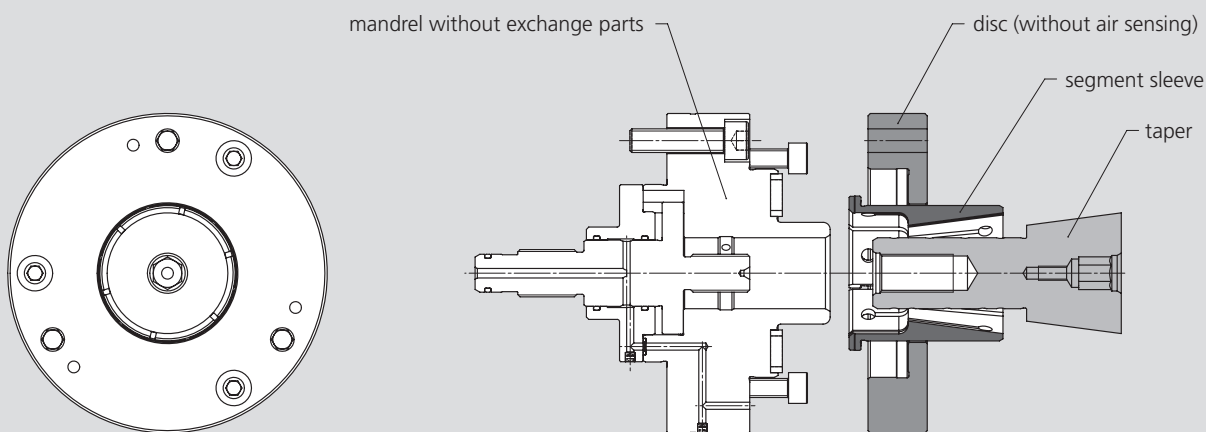
Technical data

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 in Nm*	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	4
	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	200			200			250			250			250			250			
	CSN			CSN			SIN-S			SIN-S			SIN-S			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				Id. No.	Id. No.	Id.-No.	ØD
Type	Id. No.	clamping range	sleeve expansion Ø	Type	Id. No.						
EMX-F-1	9110000	19.7 - 30.3	0.6	EMX-FP-1	9210000	9112016	9113021 / 9213021	9110197	19.7		
							9113022 / 9213022	9110202	20.2		
							9113023 / 9213023	9110207	20.7		
							9113024 / 9213024	9110212	21.2		
								9110217	21.7		
								9110222	22.2		
								9110227	22.7		
								9110232	23.2		
								9110237	23.7		
								9110242	24.2		
								9110247	24.7		
								9110252	25.2		
	9110257	25.7									
	9110262	26.2									
	9110267	26.7									
	9110272	27.2									
	9110277	27.7									
	9110282	28.2									
	9110287	28.7									
	9110292	29.2									
	9110297	29.7									
	9120277	27.7									
	9120282	28.2									
	9120287	28.7									
	9120292	29.2									
	9120297	29.7									
	9120302	30.2									
	9120307	30.7									
	9120312	31.2									
	9120317	31.7									
	9120322	32.2									
	9120327	32.7									
	9120332	33.2									
	9120337	33.7									
	9120342	34.2									
	9120347	34.7									
	9120352	35.2									
	9120357	35.7									
	9120362	36.2									
	9120367	36.7									
	9120372	37.2									
	9120377	37.7									
	9120382	38.2									
	9120387	38.7									
	9120392	39.2									
	9120397	39.7									

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

EMX-F/FP

Expanding mandrel Ø 19.7 - 132.9 mm

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Power operated

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Mandrel without exchange parts						Taper	Disc F / FP	Segment sleeve*		
without pull-down				with pull-down				Id. No.	ØD	
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 / 9233037	9130347	34.7	
							9133038 / 9233038	9130352	35.2	
								9130357	35.7	
							9133039 / 9233039	9130362	36.2	
								9130367	36.7	
							9133040 / 9233040	9130372	37.2	
								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		9130412	41.2
								9133044 / 9233044	9130417	41.7
								9130422	42.2	
						9133045 / 9233045		9130427	42.7	
								9130432	43.2	
						9133046 / 9233046		9130437	43.7	
								9130442	44.2	
						9133047 / 9233047		9130447	44.7	
								9130452	45.2	
						9133048 / 9233048		9130457	45.7	
								9130462	46.2	
						9133049 / 9233049		9130467	46.7	
						9132044		9130472	47.2	
							9133050 / 9233050	9130477	47.7	
								9130482	48.2	
							9133051 / 9233051	9130487	48.7	
								9130492	49.2	
							9133052 / 9233052	9130497	49.7	
								9130502	50.2	
							9133053 / 9233053	9130507	50.7	
	9130512	51.2								
9133054 / 9233054	9130517	51.7								
	9130522	52.2								
9133055 / 9233055	9130527	52.7								
	9130532	53.2								
9133056 / 9233056	9130537	53.7								
9142044		9130542	54.2							
	9133057 / 9233057	9130547	54.7							
		9140497	49.7							
	9143052 / 9243052	9140502	50.2							
		9140507	50.7							
	9143053 / 9243053	9140512	51.2							
		9140517	51.7							
	9143054 / 9243054	9140522	52.2							
		9140527	52.7							
	9143055 / 9243055	9140532	53.2							
		9140537	53.7							
	9143056 / 9243056	9140542	54.2							
		9140547	54.7							
	9143057 / 9243057	9140552	55.2							
		9140557	55.7							
	9143058 / 9243058	9140562	56.2							
	9142051		9140567	56.7						
		9143059 / 9243059	9140572	57.2						
		9140577	57.7							
9143060 / 9243060		9140582	58.2							
		9140587	58.7							
9143061 / 9243061		9140592	59.2							
		9140597	59.7							
9143062 / 9243062		9140602	60.2							
		9140607	60.7							
9143063 / 9243063		9140612	61.2							
		9140617	61.7							
9143064 / 9243064		9140622	62.2							
		9140627	62.7							
9143065 / 9243065		9140632	63.2							
9142060			9140637	63.7						
	9143066 / 9243066	9140642	64.2							
		9140647	64.7							
	9143067 / 9243067	9140652	65.2							
		9140657	65.7							
	9143068 / 9243068	9140662	66.2							
		9140667	66.7							
	9143069 / 9243069	9140672	67.2							
		9140677	67.7							
	9143070 / 9243070	9140682	68.2							
		9140687	68.7							
	9143071 / 9243071	9140692	69.2							
9142070		9140697	69.7							
	9143072 / 9243072	9140702	70.2							
		9140707	70.7							
	9143073 / 9243073	9140712	71.2							
		9140717	71.7							
	9143074 / 9243074	9140722	72.2							
		9140727	72.7							
	9143075 / 9243075	9140732	73.2							
		9140737	73.7							
	9143076 / 9243076	9140742	74.2							
		9140747	74.7							
	9143077 / 9243077									

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

■ Ordering review

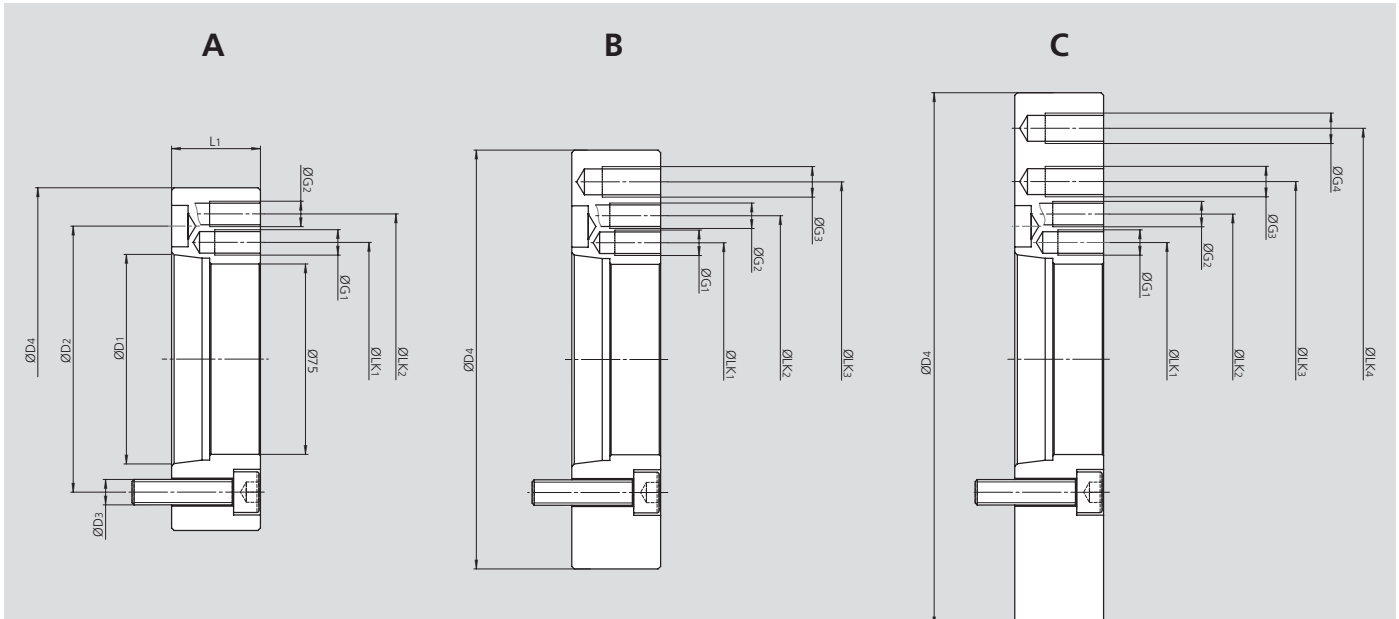
Mandrel without exchange parts						Taper	Disc F / FP	Segment sleeve*		
without pull-down				with pull-down						
Type	Id. No.	Clamping range	Sleeve expansion Ø	Type	Id. No.					
EMX-F-5	9150000	69.7 - 95.9	1.2	EMX-FP-5	9250000	9152063	9153072 / 9253072	9150697	69.7	
							9153073 / 9253073		9150707	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
							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								
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
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								
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								
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.

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.	mm	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