

# 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

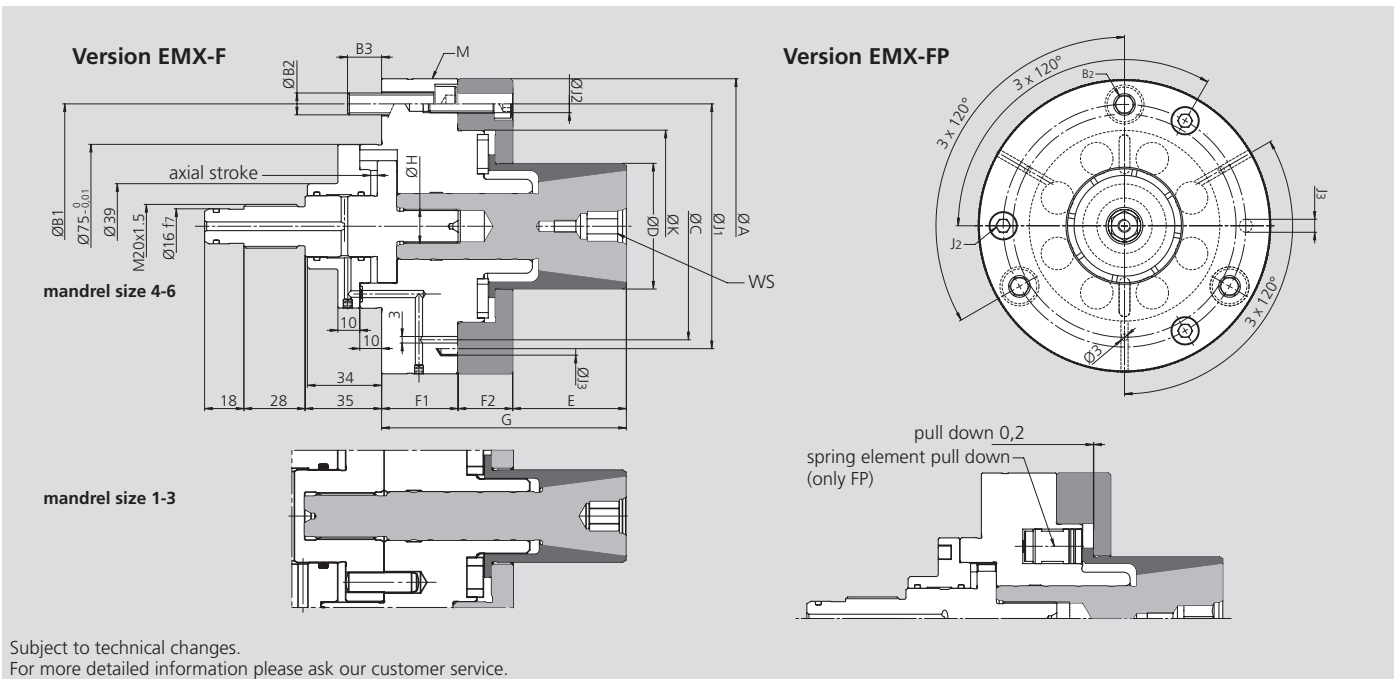
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission
- Clamping of very short workpieces on the front section of the sleeve possible
- FP: With axial pull down for best face run out

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

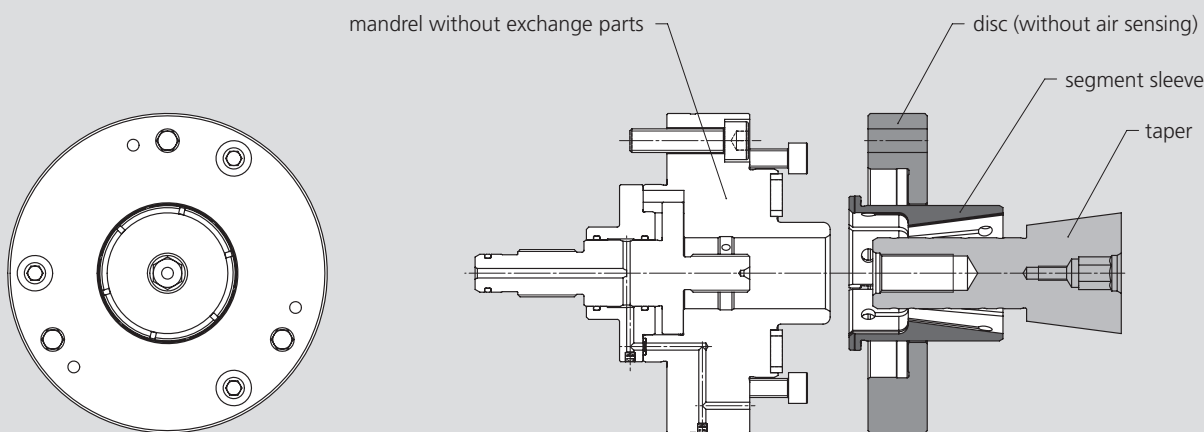
### Technical data

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			
<b>Axial stroke</b>	3.0			2.4			3.0			3.0			5.0			5.0			
<b>Expansibility in dia.</b>	0.6			0.6			0.8			0.8			1.2			1.2			
<b>Max. axial force in kN</b>	12			20			25			25			30			30			
<b>Max. transmittable torque in Nm*</b>	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
<b>Weight in kg</b>	3.3			3.4			3.5			5.3			8.5			14.2			
<b>Actuating cylinders</b>	200			200			250			250			250			250			
	CSN			SIN-S			70			85			100			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										
EMX-F-2	9120000	27.7 - 40.3	0.6	EMX-FP-2	9220000	9112020	9113028 / 9213028	9110267	26.7		
							9113029 / 9213029	9110272	27.2		
							9113030 / 9213030	9110277	27.7		
							9113031 / 9213031	9110282	28.2		
							9123029 / 9223029	9110287	28.7		
							9123030 / 9223030	9110292	29.2		
							9123031 / 9223031	9110297	29.7		
							9123032 / 9223032	9120277	27.7		
							9123033 / 9223033	9120282	28.2		
							9123034 / 9223034	9120287	28.7		
							9123035 / 9223035	9120292	29.2		
							9123036 / 9223036	9120297	29.7		
EMX-F-2	9120000	27.7 - 40.3	0.6	EMX-FP-2	9220000	9122024	9123037 / 9223037	9120302	30.2		
							9123038 / 9223038	9120307	30.7		
							9123039 / 9223039	9120312	31.2		
							9123040 / 9223040	9120317	31.7		
							9123041 / 9223041	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.



■ Ordering review

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-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.