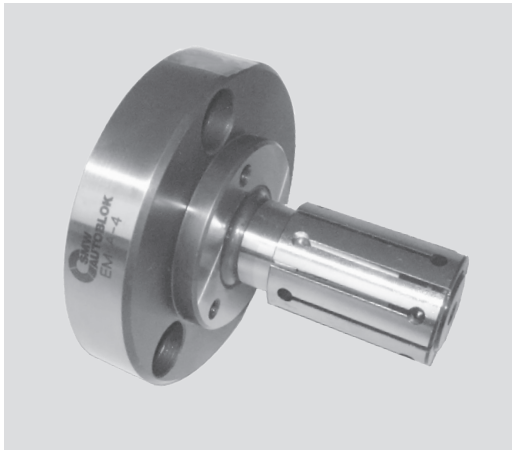


EM-A / EM-AL

Expanding mandrel
Manual or power operated

Expanding mandrel Ø 14.7 - 200 mm

- Size 1 - 13
- Large expansibility
- EM-AL: Body lengthened



Application/customer benefits

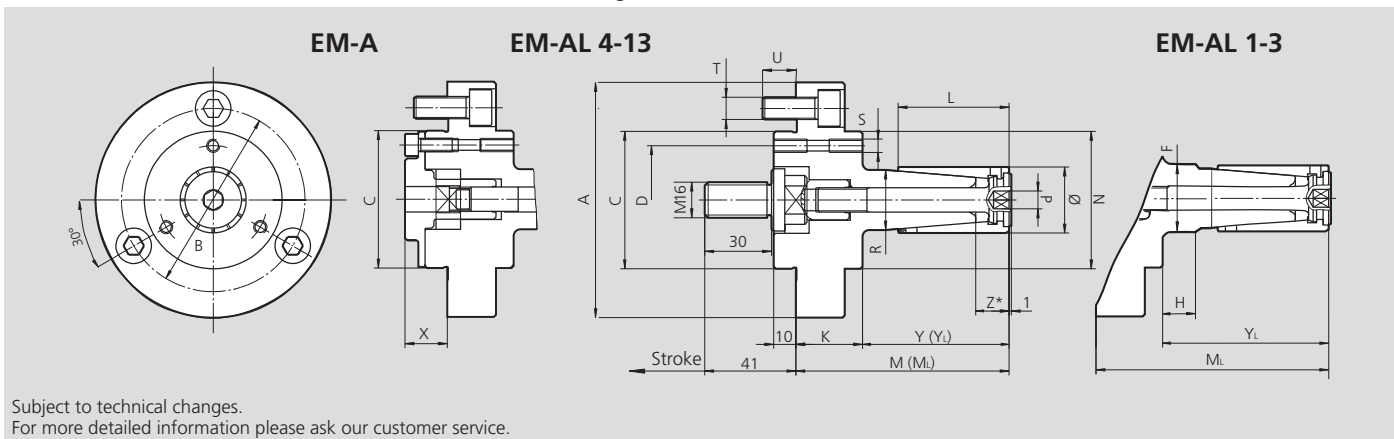
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission because of fixed arbor
- Axial pull down by axial movement of the clamping sleeve during actuation
- Quick set-up

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-AL 12	EM-AL 13
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	001936162	001936163
A	106	106	106	106	106	106	130	130	130	130	130	203	203
B	82.6	82.6	82.6	82.6	82.6	82.6	104.8	104.8	104.8	104.8	104.8	171.4	171.4
C	g5 62	62	62	62	62	62	86	86	86	86	86	142	142
D	49	49	49	49	49	49	73	73	73	100	100	180	180
F	22	23	26	-	-	-	-	-	-	-	-	-	-
H	25	30	35	-	-	-	-	-	-	-	-	-	-
K	30	30	30	30	30	30	30	30	30	30	30	45	45
L	35	40	46	50	60	60	80	90	100	122	140	160	160
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	325	325
N	62	62	62	62	62	62	86	86	86	-	-	140	140
Ø	mm 14.7-18.7	19.7-23.7	24.7-28.7	29.7-33.7	34.7-38.7	39.7-43.7	44.7-52.7	54.7-62.7	64.7-80.7	81.7-99.7	101.7-129.7	160 max	200 max
P	SW 4	4	6	8	8	8	8	10	10	10	10	22	22
R	h6 14	19	23	27	31.5	36	42	50	60	73	86	115	145
S	(3 x 120°) M6	M6	M6	M6	M6	M6	M6	M6	M6	M6	M6	M8 6x	M8 6x
T	(3 x 120°) M10	M10	M10	M10	M10	M10	M10	M10	M10	M10	M10	M16 6x	M16 6x
U	15	15	15	15	15	15	15	15	15	17	17	25	25
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	154	158	196.5	218	245	291	291
Z*	12.5	14.5	14.5	15	15.5	16	24	26	26.5	27.5	32	41	41
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	**	**

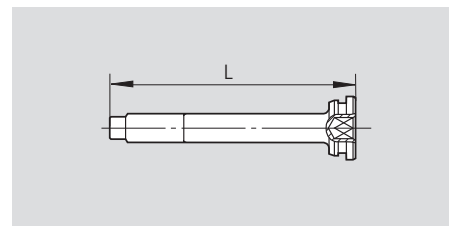
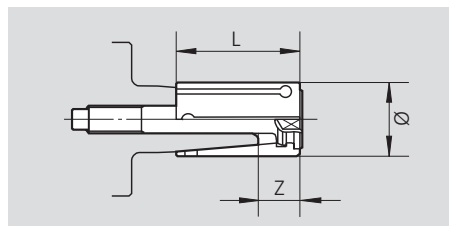
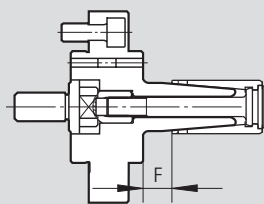
* Clamping on area Z only is not allowed. ** on Request

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	EM-A 12	EM-A 13
Stroke	mm 6	6	6	6	6	6	12	12	12	12	12	12	12
Max. actuating force	kN 7	7	12	12	15	20	20	20	25	25	30	30	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-S 100	SIN-S 100	SIN-S 100	SIN-S 125	SIN-S 125	SIN-S 125

All dimensions in unclamped position = Right end 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.	\varnothing	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

For more detailed information about EM-AL 12 and 13 please ask our customer service.

