

Manual or power operated expanding mandrels

Adapter flanges



EM-A EM-AL

Hand or power operated
expanding mandrels Ø 14.7 - 129.7 mm

- Size 1 - 11
- Large expansibility 1 - 2 mm depending on size
- Flange mounting
- Very rigid design

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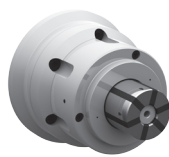


EM-B

Hand or power operated
expanding mandrels Ø 16.0 - 129.5 mm

- Size 0 - 4
- Large expansibility 0.5 - 1.5 mm depending on size
- Flange mounting
- Very rigid design

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EM-S

Power operated segment sleeve mandrels
Ø 18 - 105 mm

- For turning grinding and milling
- Size 1 - 4
- Case hardened / wear resistant segment sleeves
- Large expansibility 0.8 - 1.2 mm depending on size
- Quick change for segment sleeves
- Very rigid design

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Adapter flanges EM-A, EM-B

ISO-A
for expanding mandrels

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

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Special expanding mandrels

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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

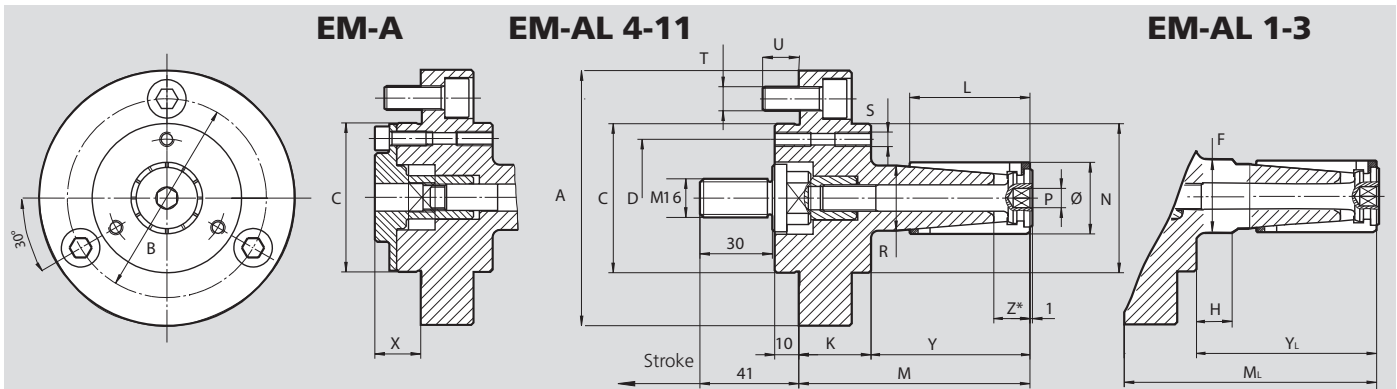
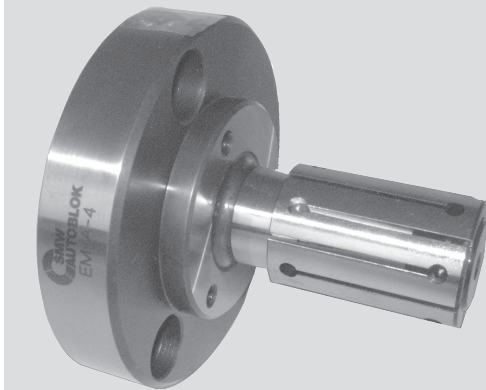
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission because of fixed arbor
- Axial pull down by axial movement of the clamping sleeve during actuation
- Quick set-up

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 for customer drawing.

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	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	(3x120°) M6	M6	M6	M6	M6	M6	M6	M6	M6	M6	M6
T	(3x120°) 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	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-S 100	SIN-S 100	SIN-S 100	SIN-S 125

All dimensions in unclamped position



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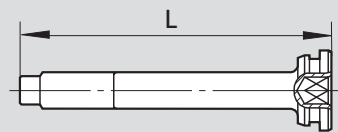
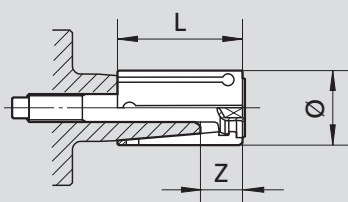
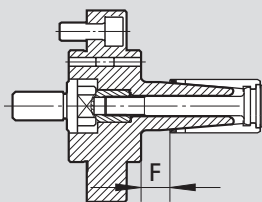
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Expanding mandrels Ø 14.7 - 129.7 mm

- size 1 - 11
- large expansibility
- EM-AL: body lengthened

EM-A/ EM-AL

Expanding mandrel
Manual or power operated



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

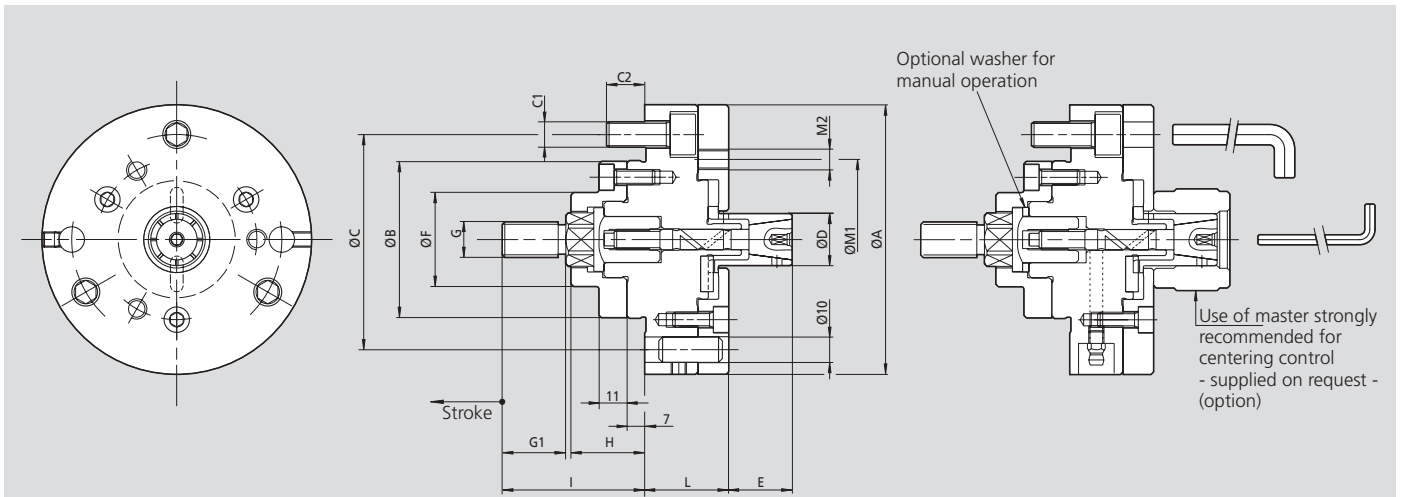
- For turning, milling, grinding and gear cutting operations
- High flexibility by means of modular system
- High torque transmission and concentricity
- No axial movement of clamping sleeve during operation
- Clamping of very short workpieces on the front section of the sleeve possible

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

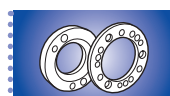
Standard equipment

Basic mandrel with draw bolt for power operation
Mounting bolts



Subject to technical changes.
For more detailed information please ask for customer drawing.

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	see tables	see tables	see tables	see tables	see tables
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
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
Clamping range Ø	mm	16-25.5	20-40.5	35-60.5	55-81	80-131
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



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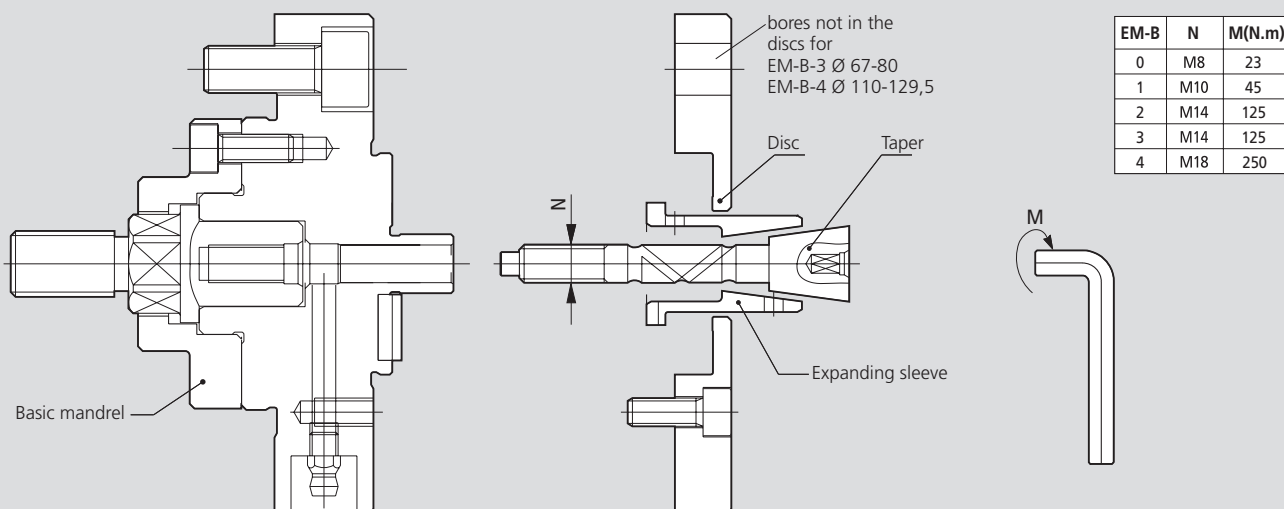
SMW-AUTOBLOK
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Expanding mandrels Ø 16 - 129.5 mm

EM-B

- size 0 - 4
- large expansibility

Expanding mandrel
Manual or power operated



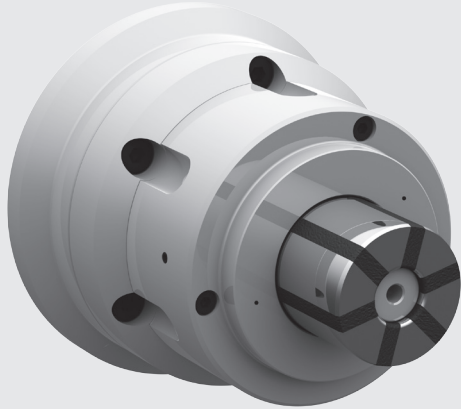
Subject to technical changes.
For more detailed information please ask for customer drawing.

EM-B-0				EM-B-1				EM-B-2				EM-B-3				EM-B-4			
Basic mandrel 68100021 Expanding sleeve Ø D16-Ø D25				Basic mandrel 68101021 Expanding sleeve Ø D20-Ø D40				Basic mandrel 68102021 Expanding sleeve Ø D35-Ø D60				Basic mandrel 68103021 Expanding sleeve Ø D55-Ø D80				Basic mandrel 68104021 Expanding sleeve Ø D80-Ø D129.5			
Taper 68020120				Taper 68021120				Taper 68022120				Taper 68023120				Taper 68024120			
Disc 68040121	68040221	68040321		Disc 68041121	68041221	68041321		Disc 68042121	68042221			Disc 68043121	68043221			Disc 68044121	68044221		
D16 68200160				D20 68210200				D35 68220350				D55 68230550				D80 68240800			
D16.5 68200165				D20.5 68210205				D35.5 68220355				D56 68230560				D81.5 68240815			
D17 68200170				D21 68210210				D36 68220360				D57 68230570				D83 68240830			
D17.5 68200175				D21.5 68210215				D36.5 68220365				D58 68230580				D84.5 68240845			
D18 68200180				D22 68210220				D37 68220370				D59 68230590				D86 68240860			
D18.5 68200185				D22.5 68210225				D37.5 68220375				D60 68230600				D87.5 68240875			
D19 68200190				D23 68210230				D38 68220380								D89 68240890			
D19.5 68200195				D23.5 68210235				D38.5 68220385								D90.5 68240905			
D20 68200200				D24 68210240				D39 68220390				Taper 68023220							
				D24.5 68210245				D39.5 68220395				Disc 68043321	68043421	68043521					
				D25 68210250				D40 68220400				D61 68230610							
Taper 68020220				Taper 68021220				Taper 68022220				D62 68230620				Taper 68024220			
Disc 68040421	68040521	68040621		Disc 68041421	68041521	68041621		Disc 68042321	68042421	68042521		D63 68230630				Disc 68044321	68044421		
D21 68200210				D25.5 68210255				D40.5 68220405				D64 68230640				D92 68240920			
D21.5 68200215				D26 68210260				D41 68220410				D65 68230650				D93.5 68240935			
D22 68200220				D26.5 68210265				D41.5 68220415				D66 68230660				D95 68240950			
D22.5 68200225				D27 68210270				D42 68220420				D67 68230670				D96.5 68240965			
D23 68200230				D27.5 68210275				D42.5 68220425				D68 68230680				D98 68240980			
D23.5 68200235				D28 68210280				D43 68220430				D69 68230690				D99.5 68240995			
D24 68200240				D28.5 68210285				D43.5 68220435				D70 68230700				D101 68241010			
D24.5 68200245				D29 68210290				D44 68220440								D102.5 68241025			
D25 68200250				D29.5 68210295				D44.5 68220445											
				D30 68210300				D45 68220450				Taper 68023320							
				D30.5 68210305				D45.5 68220455				Disc 68043621	68043721	68043821		Taper 68024320			
				D31 68210310				D46 68220460				D71 68230710				Disc 68044521	68044621		
				D31.5 68210315				D46.5 68220465				D72 68230720				D104 68241040			
				D32 68210320				D47 68220470				D73 68230730				D105.5 68241055			
				D32.5 68210325				D47.5 68220475				D74 68230740				D107 68241070			
				D33 68210330				D48 68220480				D75 68230750				D108.5 68241085			
				D33.5 68210335				D48.5 68220485				D76 68230760				D110 68241100			
				D34 68210340				D49 68220490				D77 68230770				D111.5 68241115			
				D34.5 68210345				D49.5 68220495				D78 68230780				D113 68241130			
				D35 68210350				D50 68220500				D79 68230790				D114.5 68241145			
												D80 68230800							
				Taper 68021320				Taper 68022320								Taper 68024420			
				Disc 68041721	68041821			Disc 68042621	68042721	68042821						Disc 68044721	68044821		
				D35.5 68210355				D50.5 68220505								D116 68241160			
				D36 68210360				D51 68220510								D117.5 68241175			
				D36.5 68210365				D51.5 68220515								D119 68241190			
				D37 68210370				D52 68220520								D120.5 68241205			
				D37.5 68210375				D52.5 68220525								D122 68241220			
				D38 68210380				D53 68220530								D123.5 68241235			
				D38.5 68210385				D53.5 68220535								D125 68241250			
				D39 68210390				D54 68220540								D126.5 68241265			
				D39.5 68210395				D54.5 68220545								D128 68241280			
				D40 68210400				D55 68220550								D129.5 68241295			
								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											

Ordering example:

Component ID = Ø 30
Basic mandrel EM-B-1
Expanding sleeve AD = Ø 30
Taper
Disc

Id. No. 68101021
Id. No. 68210300
Id. No. 68021220
Id. No. 68041521



Application/ customer benefits

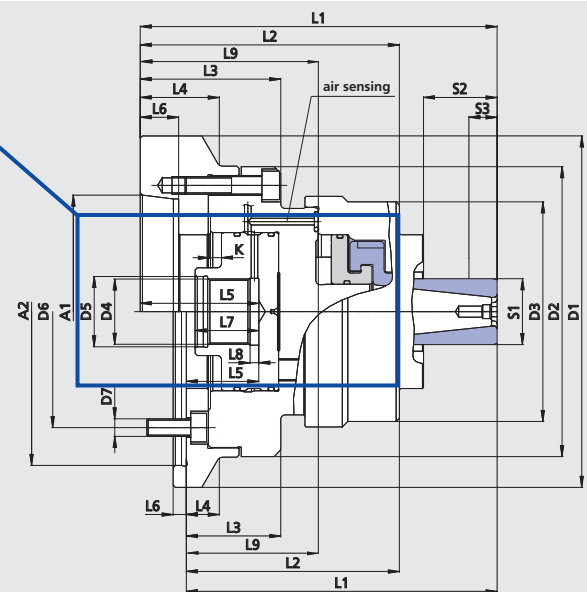
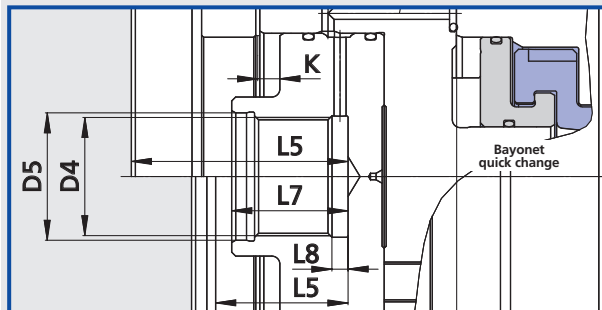
- Ideal for volume production and hard turning / grinding with wear resistant, case hardened and vulcanised clamping sleeves
- Highest accuracy and high torque transmission by means of fixed mandrel body
- Axial pull down by the axial clamping movement of the clamping sleeve = best face run out
- Clamping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

Subject to technical changes.
For more detailed information please ask for customer drawing.

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
		A5	A6	-	A5	A6	-	A5	A6	A8	-	-	A5	A6	A8	-	-
Short taper mounting DIN 55026	A1	A5	A6	-	A5	A6	-	A5	A6	A8	-	-	A5	A6	A8	-	-
	A2 H5	-	-	140	-	-	140	-	-	-	140	170	-	-	-	140	170
Center mounting	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	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5	M30x1.5
	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	4	5	5	5	5	5
	L9	79	79	64	81	81	66	75	75	77	60	60	80	78	82	80	78

Technical data

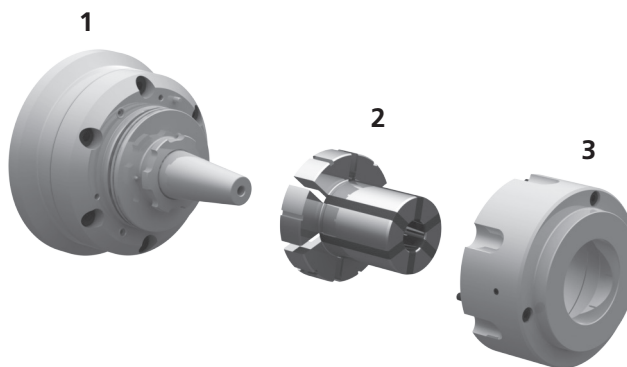
Type		EM-S-1			EM-S-2			EM-S-3					EM-S-4				
Clamping range	S1	18-23	23-35	18-23	23-35	18-23	23-35	30-55	30-55	30-55	45-80	45-80	45-80	45-80	70-105	70-105	70-105
max. clamping length	S2	17.5	23	17.5	23	17.5	23	41.5	41.5	41.5	51.5	51.5	51.5	51.5	57.5	57.5	57.5
min. clamping length	S3	7		7		7		8	8	8	8	8	8	8	8	8	8
Axial stroke	K	4		4		4		6	6	6	6	6	6	6	6	6	6
Expansibility in dia.		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
max. actuating force	kN	15		15		20	20	20	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
max. transmittable torque	Nm			57			102				180				395-595		
rec. actuating cylinders		SIN-S 70			SIN-S 85			SIN-S 85					SIN-S 85				

- Size 1 - 4
- Large expansibility

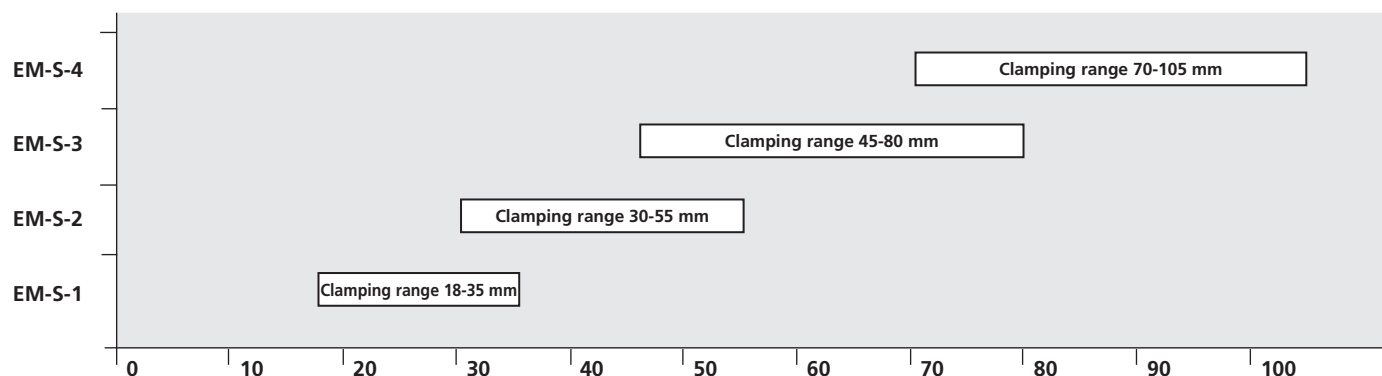
Segment sleeve mandrel
power operated

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.	203043	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**

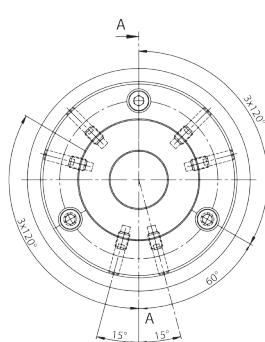
Ø	70	71	72	73	74	75	76	77	78	79	80	81	82
Id. No.	203434	203435	203436	203437	203438	203439	203440	203441	203442	203443	203444	203445	203446
Ø	83	84	85	86	87	88	89	90	91	92	93	94	95
Id. No.	203447	203448	203449	203450	203451	203452	203453	203454	203455	203456	203457	203458	203459
Ø	96	97	98	99	100	101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

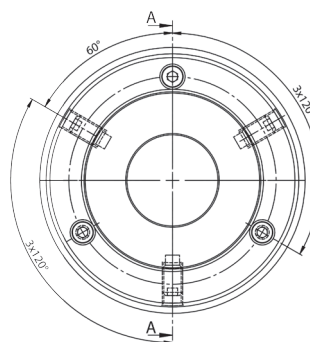
** The clamping sleeves have a max. radial expansibility in diameter of ± 0.6 mm from the nominal diameter.

Soft work stop blank

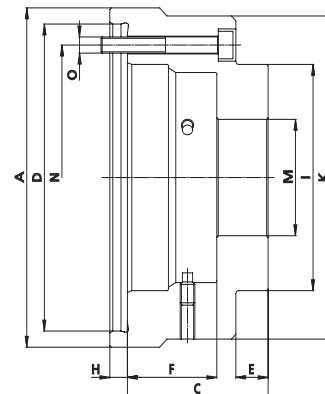
Type	EM-S-1	EM-S-2	EM-S-3	EM-S-4
Id. No.	203106	203107	203108	203433
A	93	105	113	142
C	47	59	75	82.5
D	80	95	88	115
E	12.5	22	27	30
F	27.5	30.5	40.5	45
H	6	6	-	-
I	50	70	88	116
K	82	100	114	143
M	19	31	46	71
N	66	82	100	128
O	M5	M5	M5	M5



EM-S-1



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

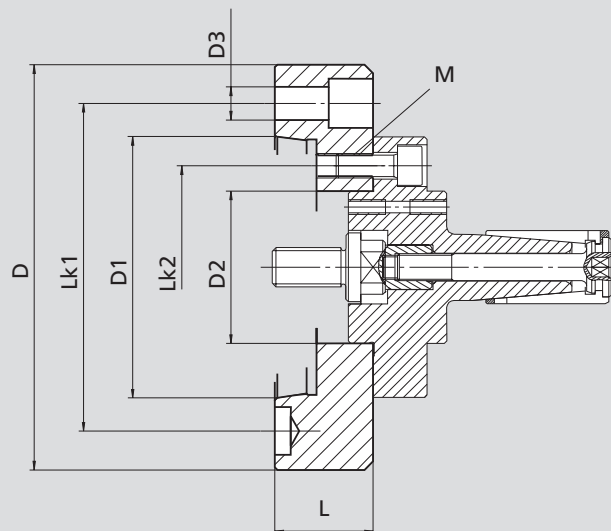


Adapters

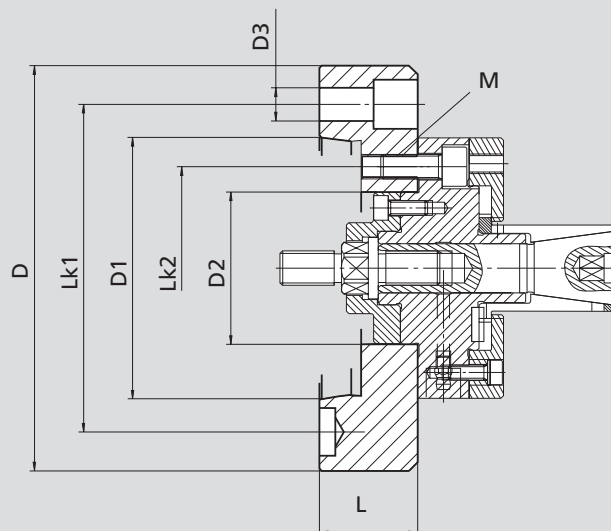
ISO-A for expanding mandrels

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

EM-A



EM-B



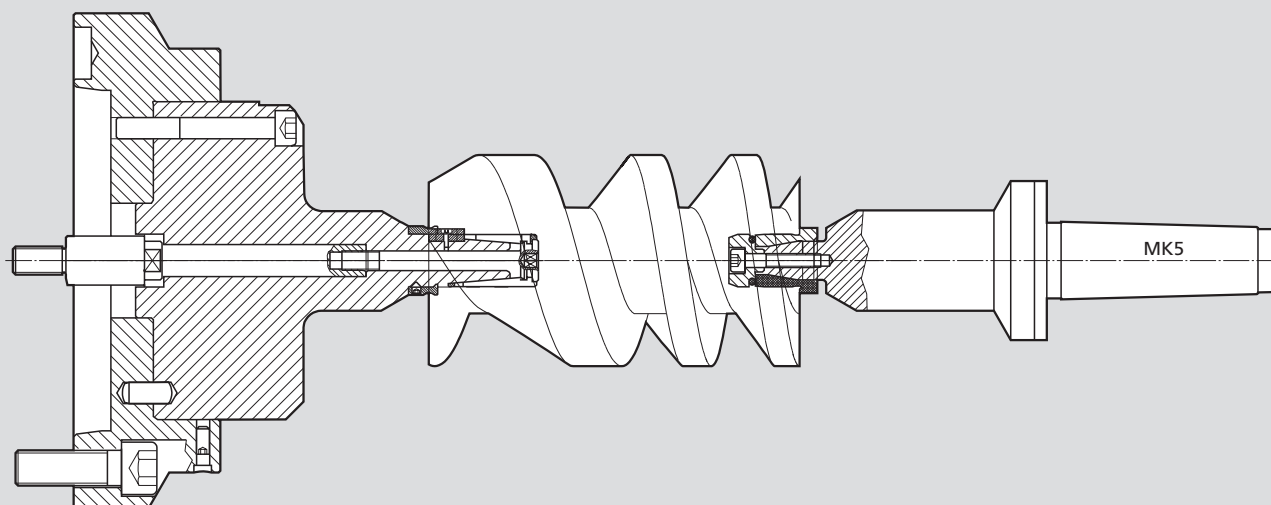
Subject to technical changes.
For more detailed information please ask for customer drawing.

Technical data

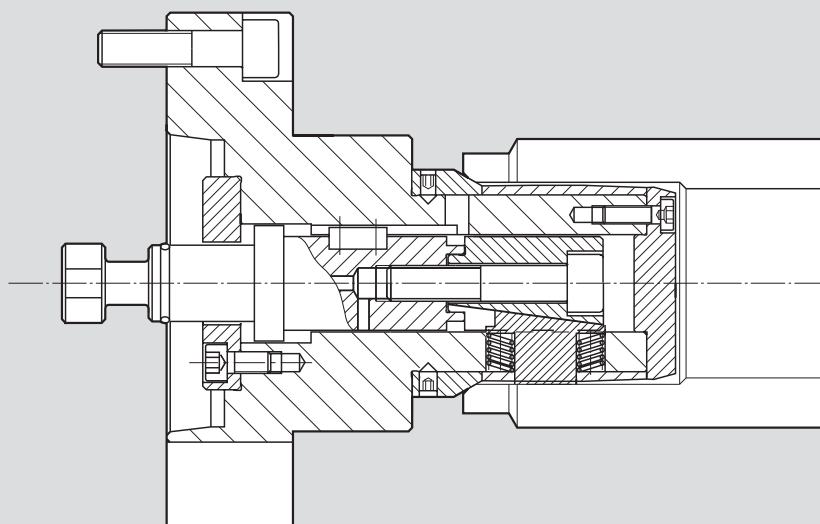
Adapter flange Id. No.		Spindle nose ISO	D	D1	D2	D3	LK1	LK2	L	M
24150100	mm	A5	127	82.563	62 ^{H6}	12	104.8	82.6	40	3 x M10
24150400	mm	A5	135	82.563	86 ^{H6}	12	104.8	104.8	40	3 x M10
24160100	mm	A6	165	106.375	62 ^{H6}	13.5	133.4	82.6	40	3 x M10
24160400	mm	A6	165	106.375	86 ^{H6}	13.5	133.4	104.8	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	1 - 2 - 3 - 4 - 5 - 6	0 - 1 - 2 - 3
24160100 ISO-A6		
24180100 ISO-A8		
24150400 ISO-A5	7 - 8 - 9 - 10 - 11	4
24160400 ISO-A6		
24180400 ISO-A8		

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

