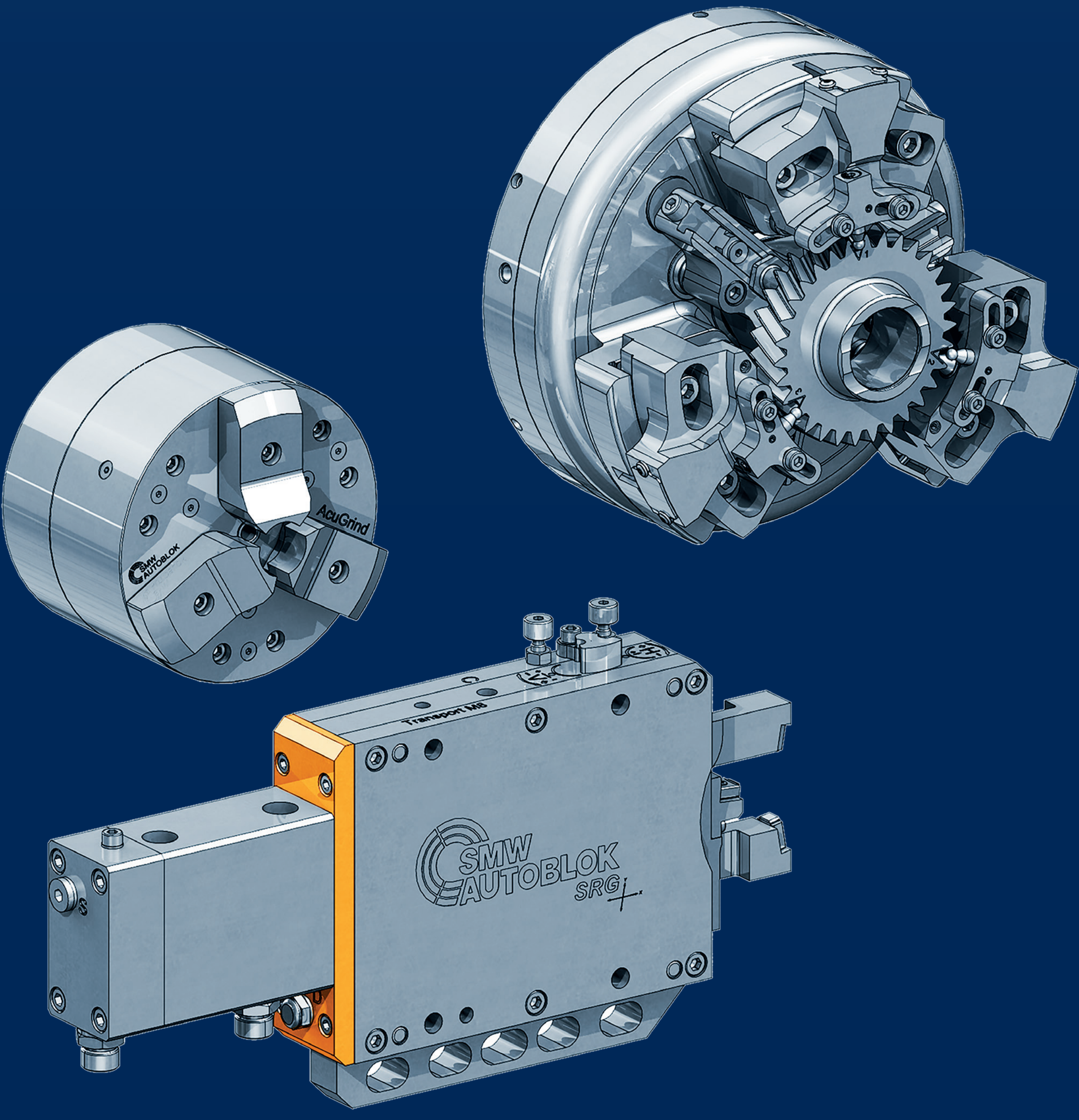
SMW AUTOBLOK

GRINDING



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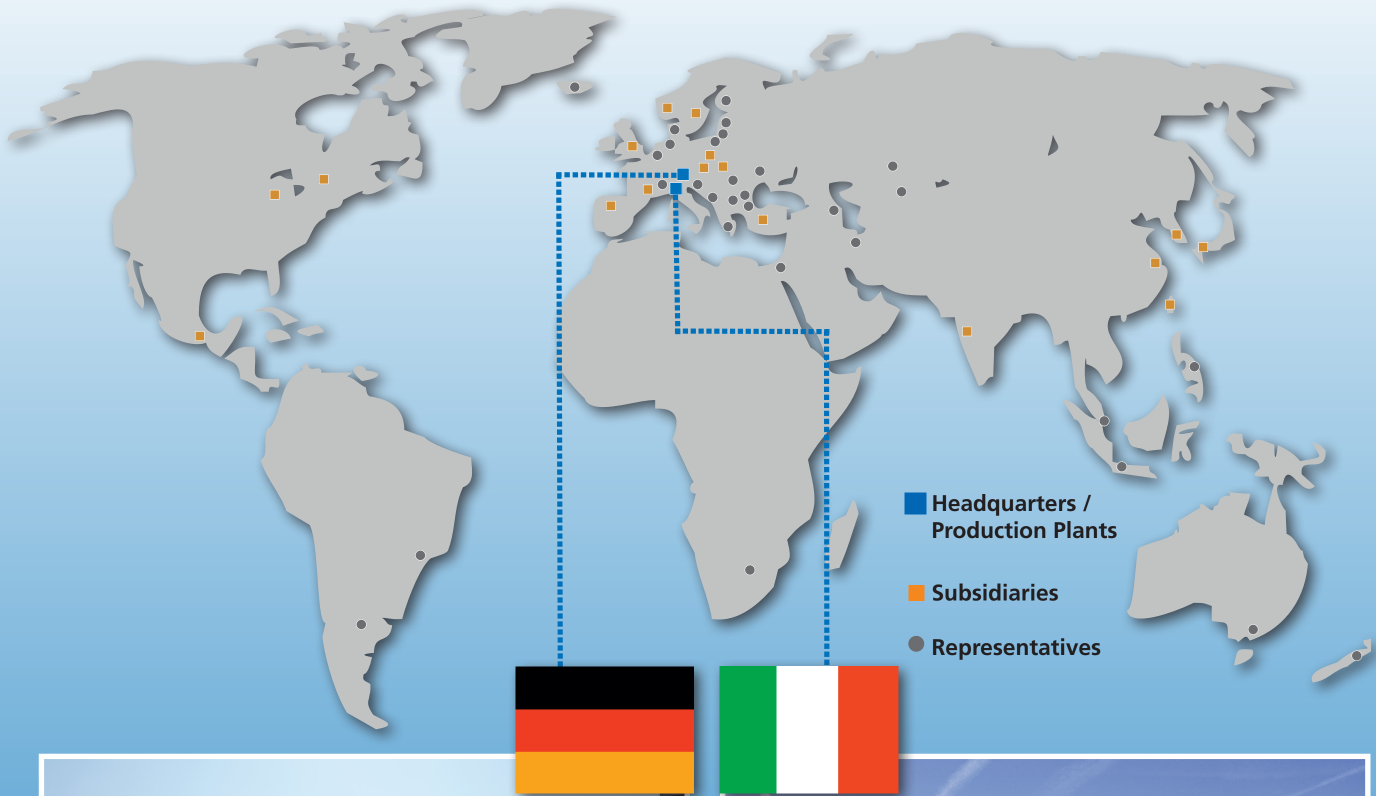

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Overview Grinding Applications

Steady Rests

High precision grinding Steady Rests
Grinding diameter Ø 3 - 126 mm

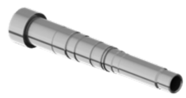
- Fine adjustment of the grinding center
- Retractable arms
- Suitable for follow down grinding
- High rigidity

Workpieces

Cam shafts

Crank shafts

Rotor shafts for e-motors



Jaw chucks

High precision air chucks
Chuck sizes Ø 80 - 250 mm

- Centric and compensating clamping
- For O.D. and I.D. clamping
- Hydraulic or pneumatic actuation
- Proofline - fully sealed and low maintenance

Workpieces

Bearing rings
Bearing parts

Crank shafts

Rotor shafts
Cam shafts

Diaphragm chucks

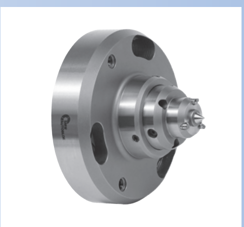
Diaphragm chucks
Chuck sizes Ø 160 - 400 mm

- Diaphragm technology for highest precision
- External or pitchline clamping
- With or without open center

Workpieces

Gears

Gear shafts



Face drivers

High precision face drivers
for machining between center pins

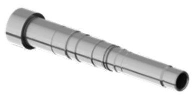
- Machining of the entire surface of the workpiece with one single operation
- Power operated
- Highest run-out accuracy

Workpieces

Cam shafts

Gear shafts

Rotor shafts for e-motors



Pancake cylinders

Pneumatic pancake cylinder for diaphragm chuck D-VARIO and face driver FDG

- Easy installation for grinding and turning machines without hydraulic unit
- Operating pressure 2 - 8 bar
- Medium feed for air / coolant

I.D. Clamping

Sleeve mandrel Ø 15 - 132 mm and
Collet chucks Ø 4 - 100 mm

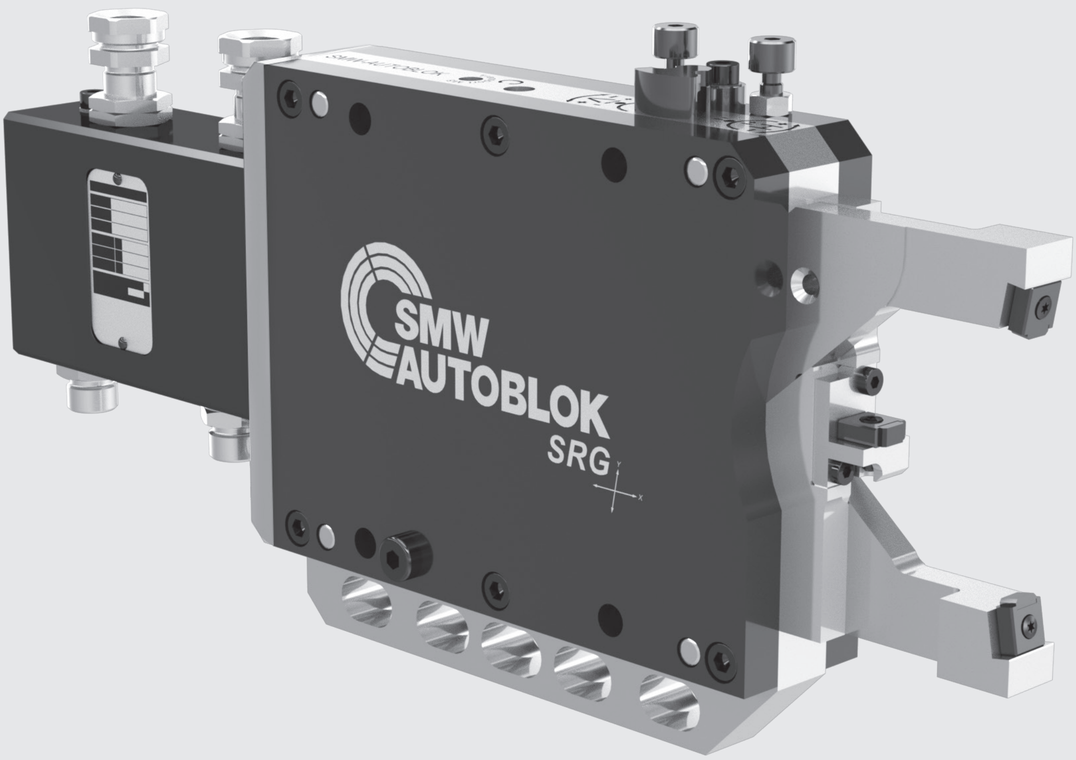
- For I.D. and O. D. Clamping
- High precision
- Very rigid design

Workpieces

Bearing rings
Bearing parts

Gears

Motor housings



Steady Rests

High precision grinding Steady Rests
Grinding diameter Ø 3 - 126 mm

- Fine adjustment of the grinding center
- Retractable arms
- Suitable for follow down grinding
- High rigidity

SRG / SRG-B

Grinding Steady Rests

Grinding Steady Rest

- Fine adjustment of the center
- Retractable Steady Rest arms

Application/customer benefits

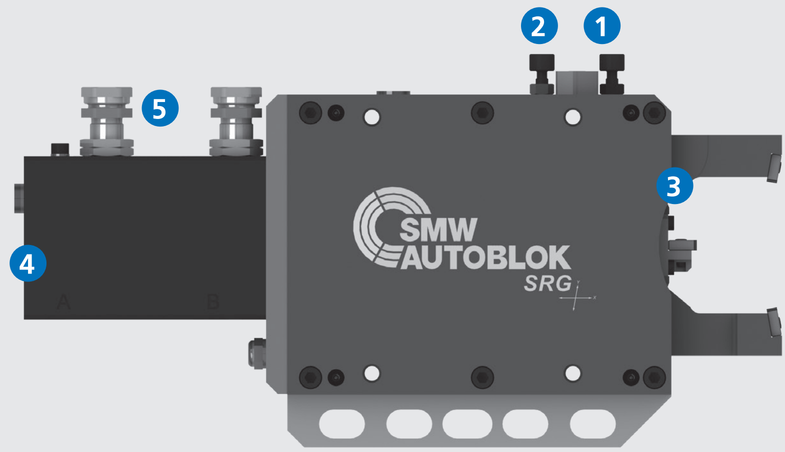
- Support of shaft type workpieces on grinding machines
- Particularly suitable for the machining of crankshafts and camshafts
- Rapid set up of the Steady Rest to the grinding center with the sensitive fine adjustment of the grinding center
- Suitable for follow down grinding
- Retractable Steady Rest arms for autoloading of workpieces
- Monitoring of end positions for process safety

Standard equipment

Basic grinding Steady Rest SRG

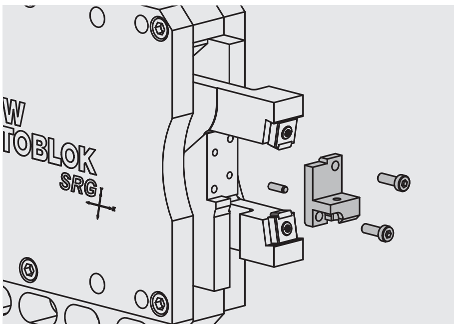
(Padholder for the middle piece, clamping kit and pad kits are not scope of delivery. For these parts please see the overview for the configurations below)

Technical details



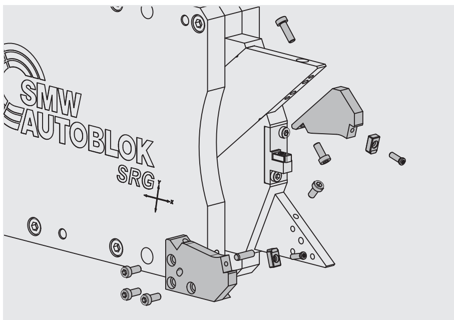
1. Horizontal fine adjustment of the grinding center.
2. Vertical fine adjustment of the grinding center.
3. Retractable Steady Rest arms.
4. Port for compressed air against dust and coolant.
5. Monitoring of end positions with proximity switches (switches not included).

Overview Configuration



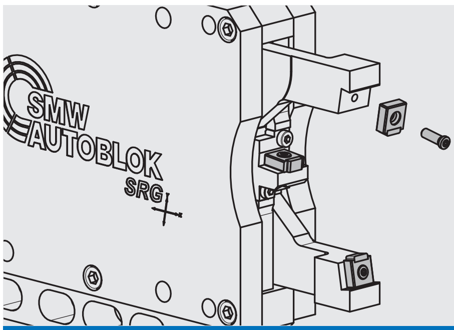
Select padholder for the middle piece (SRG 1, 1S, 2)

- Consisting of padholder middle piece (incl. mounting material).
- 3 versions available: 0 degree, ± 5 degree, ± 7 degree.
- Can be rotated by 180 degrees.



Select clamping kit (SRG 2F, 3F, 4F, 5F, 5.1FS | SRG-B 4F, 5F)

- Consisting of 2 nests for the arms and 1 padholder for the middle piece (incl. mounting material).
- The different clamping ranges can be covered with different clamping kits.



Select Pad kit

- Consisting of 3 pads incl. 3 mounting screws.
- Standard for clamping range as shown on the Steady Rest.
- Special pad kit for shifting of the clamping range -5 mm available.

Overview clamping range

Type	Clamping range in mm	Page
SRG 0.8	3 - 18	9
SRG 1	20 - 35	10
SRG 1 S	20 - 35	11
SRG 2	30 - 60	12
SRG 2 F		13
I Kit	12 - 28	
II Kit	28 - 44	
III Kit	44 - 60	
SRG 3 F		14
I Kit	10 - 30	
II Kit	30 - 50	
III Kit	50 - 70	
IV Kit	70 - 90	
SRG 4 F SRG 4.1 FS SRG-B 4 F		15-16
I Kit	22 - 35	
II Kit	35 - 48	
III Kit	48 - 61	
IV Kit	61 - 74	
V Kit	74 - 87	
VI Kit	87 - 100	
SRG 5 F SRG-B 5 F		17-18
I Kit	48 - 70	
II Kit	70 - 92	
III Kit	92 - 114	
IV Kit	114 - 136	
SRG 5.1 FS		19
I Kit	96 - 102	
II Kit	102 - 108	
III Kit	108 - 114	
IV Kit	114 - 120	
V Kit	120 - 126	
	0 10 20 30 40 50 60 70 80 90 100 110 120 130 140	

SRG / SRG-B

Grinding Steady Rests

■ Ordering review

SMW-AUTOBLOK type Basic Steady Rest		SRG 0.8 223250	SRG 1 221175	SRG 1 S 223060	SRG 2 221871
Clamping range	mm	**3-18**	**20-35**	**20-35**	**30-60**
Padholder 0 degree*	Id. No.	-	203977	205191	203985
Padholder ± 5 degree*	Id. No.	-	203978	205196	203986
Padholder ± 7 degree*	Id. No.	-	203979	205197	203987
Pad Kit Standard	Id. No.	205439	203976	204161	203976
Pad Kit Special ***	Id. No.	-	203939	-	203939
Working pressure	bar	20-50	15-30	20-50	15-30
Follow down grinding		Yes	Yes	Yes	Yes
Dosing element kit	Id. No.	224379 (0.03 cm³)	224360 (0.1 cm³)	224379	224360

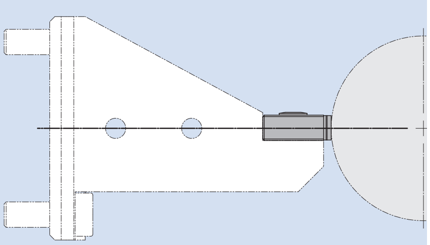
SMW-AUTOBLOK type Basic Steady Rest		SRG 2 F 222260			SRG 3 F 224450				SRG 4 F 221930			SRG-B 4 F 223140		
Clamping range	mm	**12-60********			**10-90********				**22-100**					
Clamping kit		**I**	**II**	**III**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**V**	**VI**
Clamping range	mm	**12-28**	**28-44**	**44-60**	**10-30**	**30-50**	**50-70**	**70-90**	**22-35**	**35-48**	**48-61**	**61-74**	**74-87**	**87-100**
Clamping kit 0 degree**	Id. No.	204383	204382	204381	224298	224297	224296	224295	205000	205001	205002	205003	205004	205005
Clamping kit ±2degree**	Id. No.	-	-	-	-	-	-	-	205006	205007	205008	205009	205010	205011
Clamping kit ±3degree**	Id. No.	-	-	-	-	-	-	-	-	-	-	-	-	-
Clamping kit ±5degree**	Id. No.	206349	206348	206347	224302	224301	224300	224299	224453	224454	224455	224456	224457	224458
Clamping kit ±7degree**	Id. No.	206346	206345	206344	224306	224305	224304	224303	224459	224460	224461	224462	224463	224464
Pad Kit Standard	Id. No.	203976			203976				204161					
Pad Kit Special***	Id. No.	203939			203939				-					
Working pressure	bar	15-30			10-30				7-25					
Follow down grinding		Yes			Yes				Yes					
Dosing element kit	Id. No.	224360			224360				-			-		

SMW-AUTOBLOK type Basic Steady Rest		SRG 4.1 FS 222410						SRG 5 F 223774		SRG-B 5 F 222530		SRG 5.1 FS 222665				
Clamping range	mm	**22-100**						**48-136**				**96-126**				
Clamping kit		**I**	**II**	**III**	**IV**	**V**	**VI**	**I**	**II**	**III**	**IV**	**I**	**II**	**III**	**IV**	**V**
Clamping range	mm	**22-35**	**35-48**	**48-61**	**61-74**	**74-87**	**87-100**	**48-70**	**70-92**	**92-114**	**114-136**	**96-102**	**102-108**	**108-114**	**114-120**	**120-126**
Clamping kit 0 degree**	Id. No.							-	-	-	-	-	-	-	-	-
Clamping kit ±2degree**	Id. No.	204719	204720	204721	204722	204723	204724	205018	205019	205020	205021	-	-	-	-	-
Clamping kit ±3degree**	Id. No.							-	-	-	-	205200	205201	205202	205203	205204
Clamping kit ±5degree**	Id. No.											-	-	-	-	-
Clamping kit ±7degree**	Id. No.											-	-	-	-	-
Pad Kit Standard	Id. No.	205228						204161				204161				
Pad Kit Special***	Id. No.							-				-				
Working pressure	bar							10-30				7-25				
Follow down grinding		Yes						Yes				Yes				

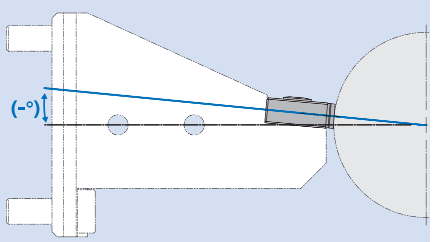
* Consisting of padholder for the middle piece incl. mounting material.
** Consisting of padholder for the middle piece and the nests for the arms incl. mounting material.
*** Clamping range -5 mm.
**** Padholder middle piece pivoting for contact angle.
SRG-B Side mounted cylinder.

Pad position middle piece / contact angle

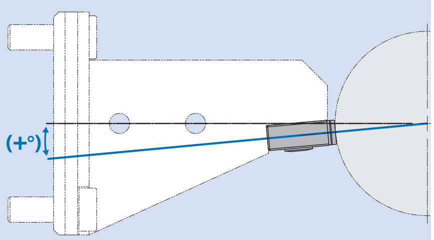
Pad position = 0 degree



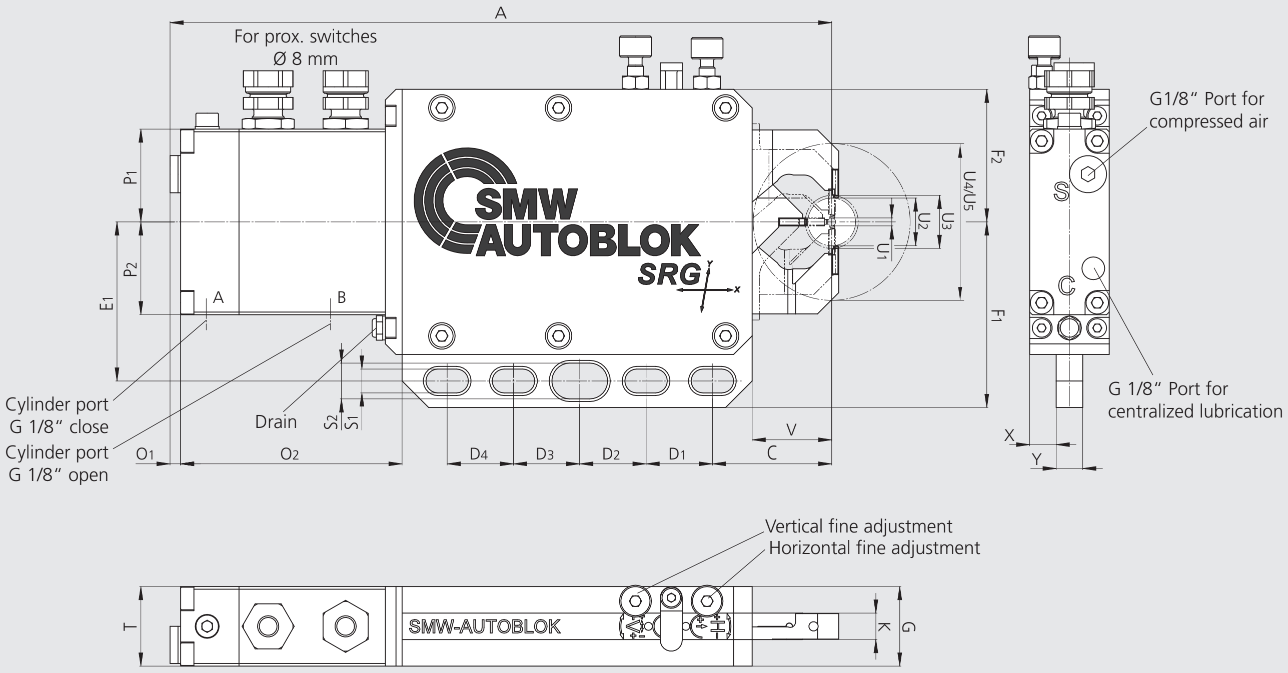
Pad position = (-) degree



Pad position = (+) degree



■ Dimensions and technical data



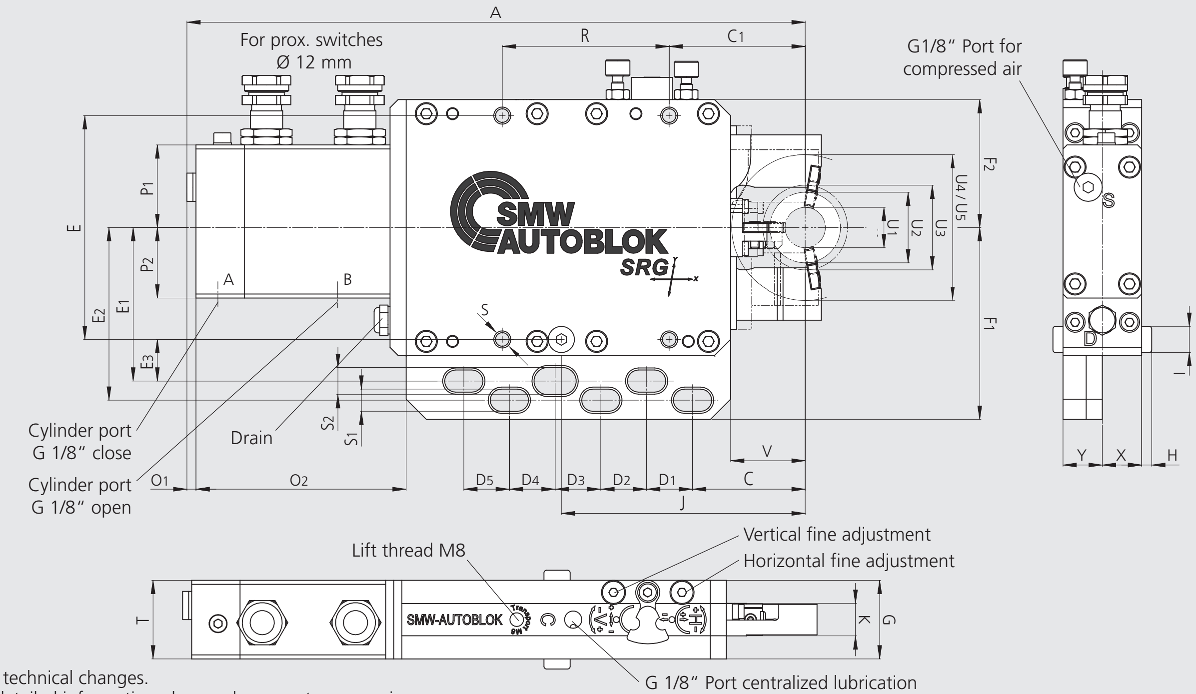
Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type Id. No.			SRG 0.8 223250
Min. clamping diameter	U1	mm	3
Max. clamping diameter	U2	mm	18
Max. loading diameter (vertical, steady open)	U3	mm	58
Max. axial clearance diameter (steady open)	U4	mm	58
Max. swing diameter	U5	mm	58
Horizontal adjustment range		mm	±0.05
Vertical adjustment range		mm	±0.05
	A	mm	249.5
	C	mm	45
	D1	mm	25
	D2	mm	25
	D3	mm	25
	D4	mm	25
	E1	mm	60
	F1	mm	70
	F2	mm	50
	G	mm	30
	K	mm	10
	O1	mm	4
	O2	mm	83.5
	P1	mm	35
	P2	mm	35
	S1	mm	9 (4x)
	S2	mm	13.46 (1x)
	T	mm	30
	V	mm	30
	X	mm	10
	Y	mm	10
Cylinder stroke		mm	43
Piston area		cm²	3.14
Operating pressure max.		bar	50
Working pressure		bar	20 - 50
Repeatability accuracy		mm	±0.001
Weight		kg	4.3

SRG 1

Grinding Steady Rests

■ Dimensions and technical data



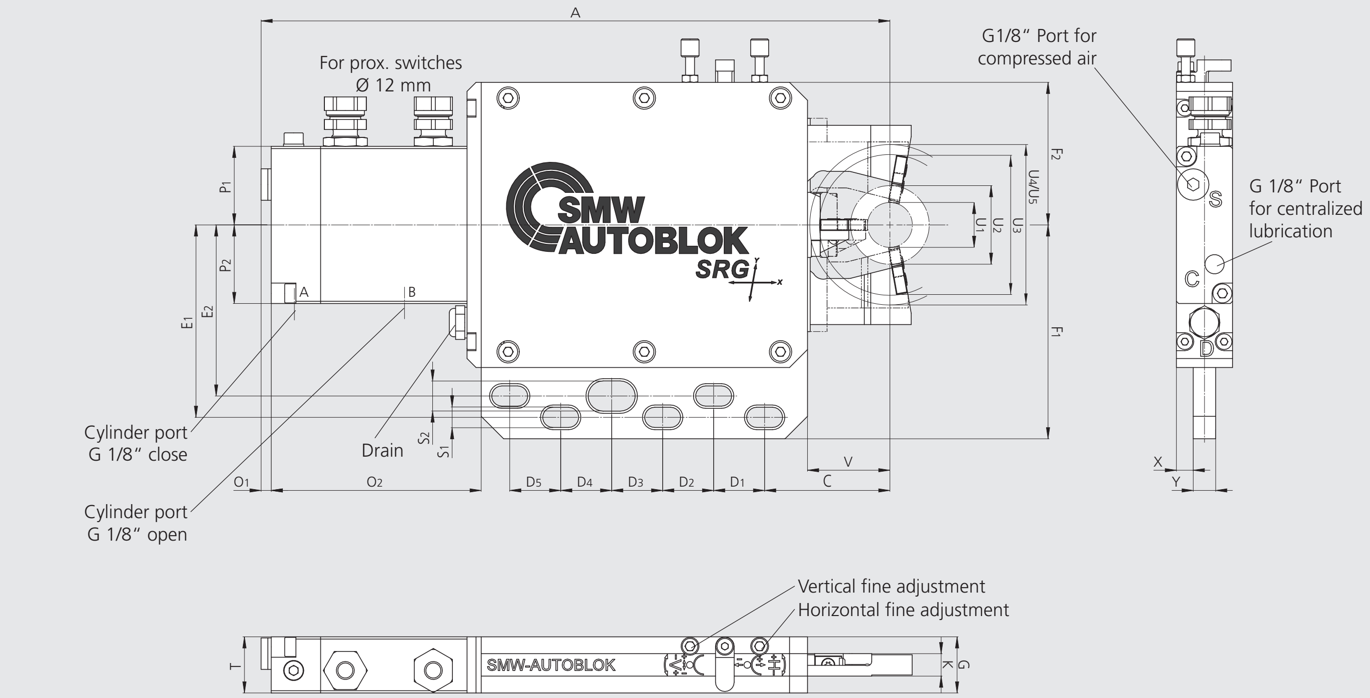
Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type Id. No.			SRG 1 221175
Min. clamping diameter	U1	mm	20
Max. clamping diameter	U2	mm	35
Max. loading diameter (vertical, steady open)	U3	mm	72
Max. axial clearance diameter (steady open)	U4	mm	72
Max. swing diameter	U5	mm	72
Horizontal adjustment range		mm	±0.20
Vertical adjustment range		mm	±0.10
	A	mm	306.8
	C	mm	55.9
	C1	mm	67.5
	D1	mm	22.8
	D2	mm	22.7
	D3	mm	22.7
	D4	mm	22.7
	D5	mm	22.6
	E	mm	111.1
	E1	mm	76.2
	E2	mm	85.7
	E3	mm	20.65
	F1	mm	95.2
	F2	mm	63.5
	G	mm	39
	H	mm	5
	I	mm	13
	J	mm	121
	K	mm	16.1
	O1	mm	4.5
	O2	mm	104.3
	P1	mm	41
	P2	mm	35
	R	mm	82.8
	S	mm	M8 (4x)
	S1	mm	11 (5x)
	S2	mm	13.46 (1x)
	T	mm	39
	V	mm	37
	X	mm	19.5
	Y	mm	19.5
Cylinder stroke		mm	73.4
Piston area		cm²	7.07
Operating pressure max.		bar	45
Working pressure		bar	15-30
Repeatability accuracy		mm	±0.001
Weight		kg	8.5

SRG 1 S

Grinding Steady Rests

■ Dimensions and technical data



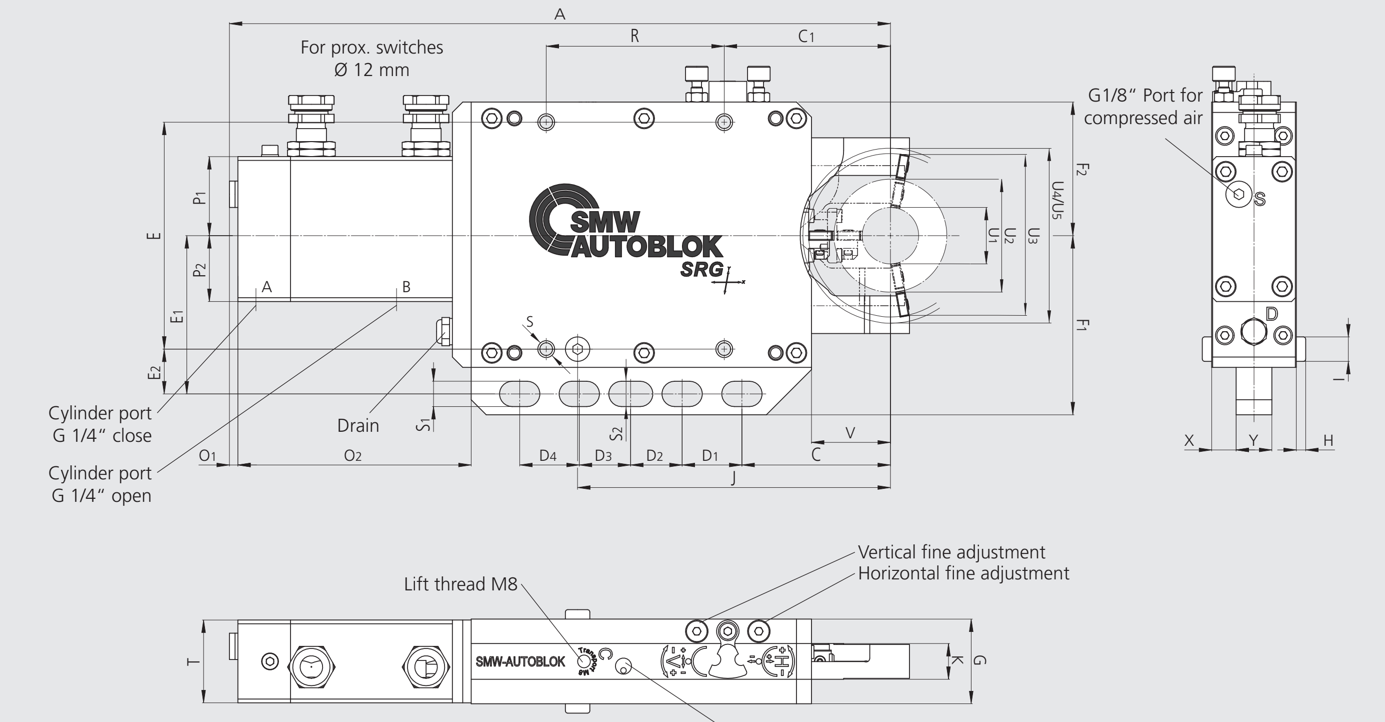
Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type Id. No.			SRG 1 S 223060
Min. clamping diameter	U1	mm	20
Max. clamping diameter	U2	mm	35
Max. loading diameter (vertical, steady open)	U3	mm	62
Max. axial clearance diameter (steady open)	U4	mm	72
Max. swing diameter	U5	mm	72
Horizontal adjustment range		mm	±0.20
Vertical adjustment range		mm	±0.10
	A	mm	280
	C	mm	55.8
	D1	mm	22.7
	D2	mm	22.7
	D3	mm	22.7
	D4	mm	22.7
	D5	mm	22.7
	E1	mm	85.7
	E2	mm	76.2
	F1	mm	95.25
	F2	mm	63.5
	G	mm	25
	K	mm	10
	O1	mm	4.5
	O2	mm	93.5
	P1	mm	35
	P2	mm	35
	S1	mm	9 (5x)
	S2	mm	13.46 (1x)
	T	mm	25
	V	mm	36.7
	X	mm	7.5
	Y	mm	10
Cylinder stroke		mm	53
Piston area		cm^2	2.01
Operating pressure max.		bar	50
Working pressure		bar	20-50
Repeatability accuracy		mm	±0.001
Weight		kg	4.8

SRG 2

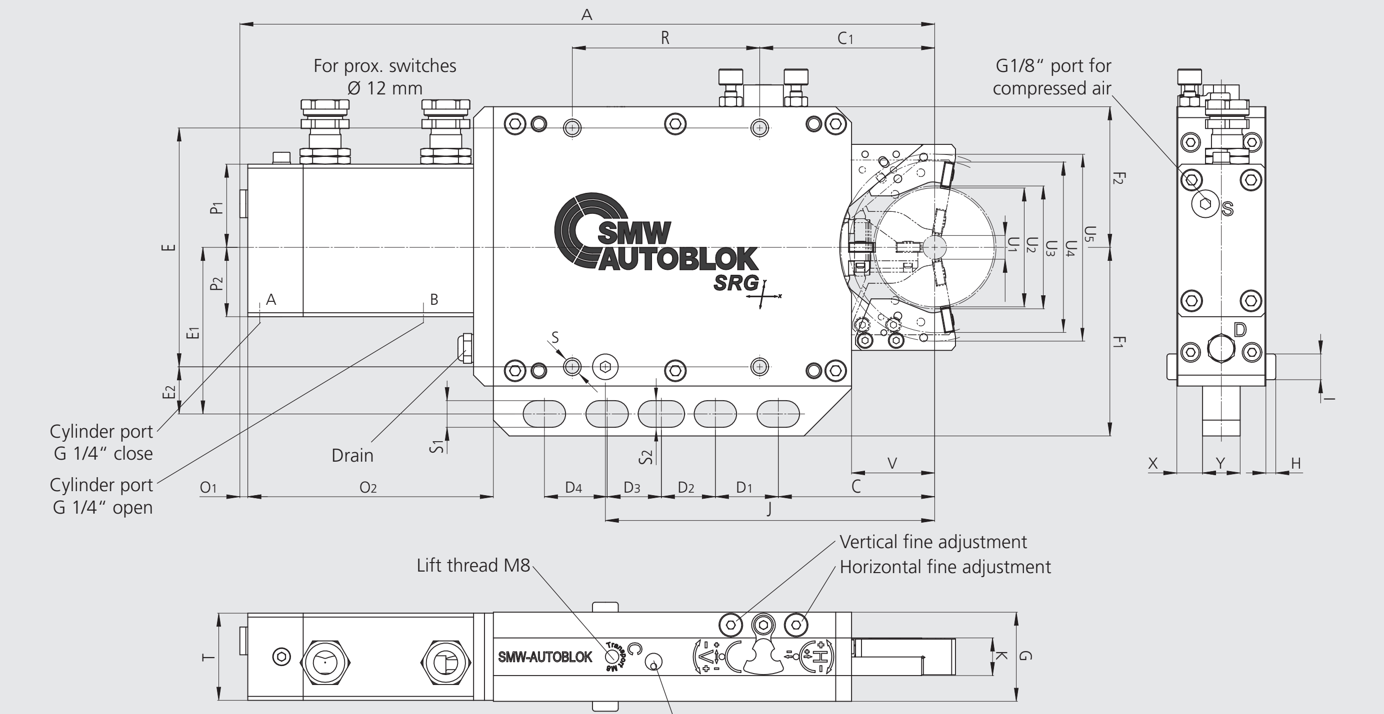
Grinding Steady Rests

■ Dimensions and technical data



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

SMW-AUTOBLOK Type Id. No.			SRG 2 221871
Min. clamping diameter	U1	mm	30
Max. clamping diameter	U2	mm	60
Max. loading diameter (vertical, steady open)	U3	mm	82
Max. axial clearance diameter (steady open)	U4	mm	95
Max. swing diameter	U5	mm	95
Horizontal adjustment range		mm	±0.20
Vertical adjustment range		mm	±0.14
	A	mm	351.6
	C	mm	79
	C1	mm	88.4
	D1	mm	31.8
	D2	mm	27.4
	D3	mm	27.3
	D4	mm	31.7
	E	mm	120.6
	E1	mm	84.1
	E2	mm	23.8
	F1	mm	95.2
	F2	mm	71
	G	mm	45
	H	mm	5
	I	mm	13
	J	mm	166.4
	K	mm	19
	O1	mm	4.5
	O2	mm	124.1
	P1	mm	42
	P2	mm	35
	R	mm	94.7
	S	mm	M8 (4x)
	S1	mm	12.5 (4x)
	S2	mm	13.46 (1x)
	T	mm	44
	V	mm	42
	X	mm	13
	Y	mm	19
Cylinder stroke		mm	73.4
Piston area		cm²	7.07
Operating pressure max.		bar	45
Working pressure		bar	15-30
Repeatability accuracy		mm	±0.001
Weight		kg	11.8



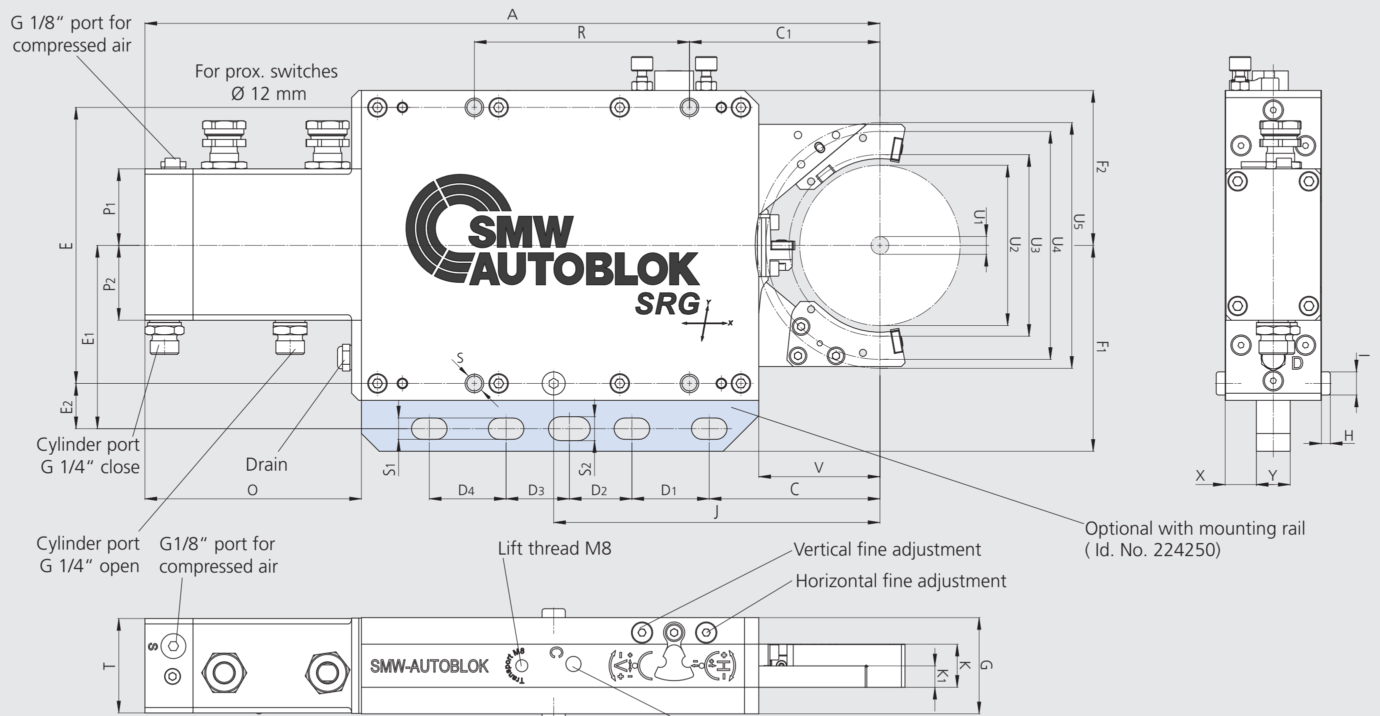
Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type Id. No.			SRG 2 F 222260		
Clamping kit			I	II	III
Min. clamping diameter	U1	mm	12	28	44
Max. clamping diameter	U2	mm	28	44	60
Max. loading diameter (vertical, steady open)	U3	mm	82	82	82
Max. axial clearance diameter (steady open)	U4	mm	94	94	94
Max. swing diameter	U5	mm		94	
Horizontal adjustment range		mm		±0.20	
Vertical adjustment range		mm		±0.14	
	A	mm		351.1	
	C	mm		79	
	C1	mm		88.4	
	D1	mm		31.8	
	D2	mm		27.3	
	D3	mm		27.4	
	D4	mm		31.7	
	E	mm		120.6	
	E1	mm		84.1	
	E2	mm		23.8	
	F1	mm		95.2	
	F2	mm		71	
	G	mm		45	
	H	mm		5	
	I	mm		13	
	J	mm		166.4	
	K	mm		19	
	O1	mm		4.5	
	O2	mm		124.1	
	P1	mm		42	
	P2	mm		35	
	R	mm		94.7	
	S	mm		M8 (4x)	
	S1	mm		12.5 (4x)	
	S2	mm		13.46 (1x)	
	T	mm		44	
	V	mm		42	
	X	mm		13	
	Y	mm		19	
Cylinder stroke		mm		66.4	
Piston area		cm²		7.07	
Operating pressure max.		bar		45	
Working pressure		bar		15-30	
Repeatability accuracy		mm		±0.001	
Weight		kg		11.2	

SRG 3 F

Grinding Steady Rests

■ Dimensions and technical data



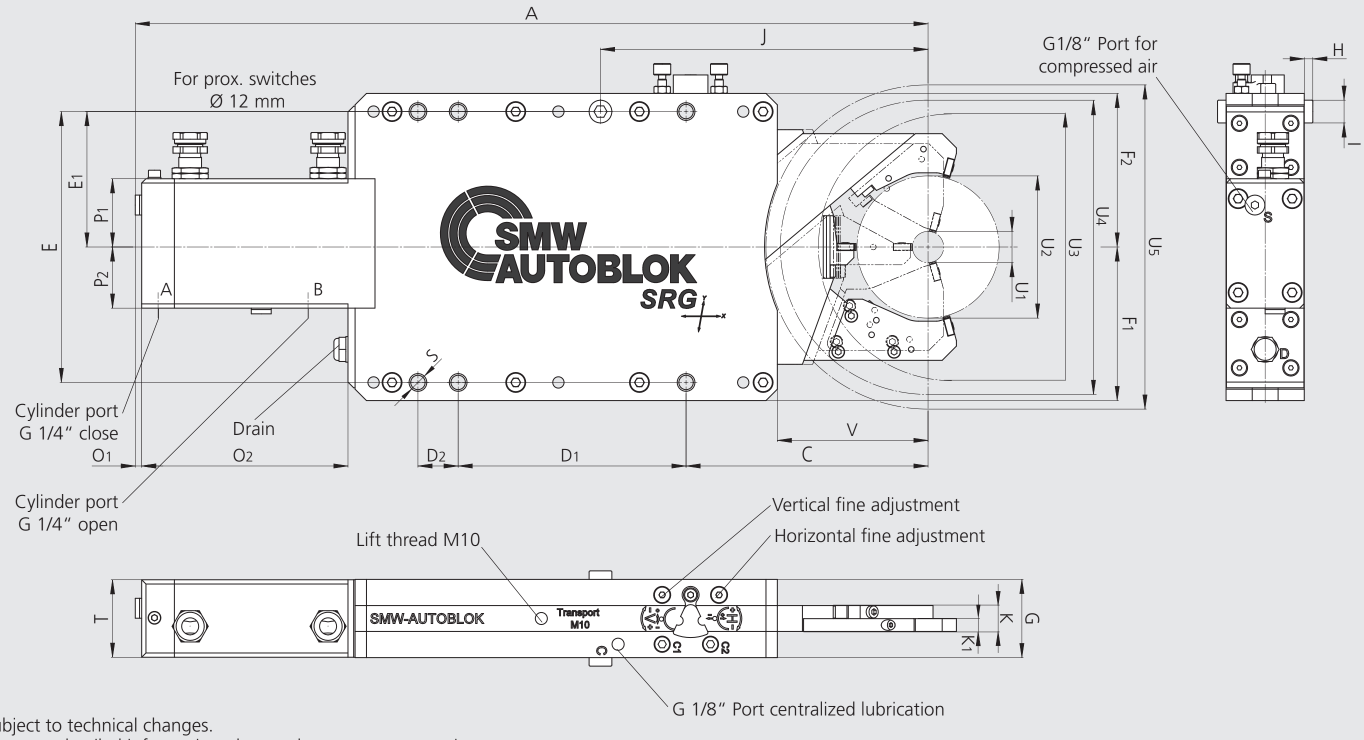
Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type Id. No.			SRG 3 F 224450			
Clamping kit			**I**	**II**	**III**	**IV**
Min. clamping diameter	U1	mm	10	30	50	70
Max. clamping diameter	U2	mm	30	50	70	90
Max. loading diameter (vertical, steady open)	U3	mm	111	110	106	102
Max. axial clearance diameter (steady open)	U4	mm	125	129	135	138
Max. swing diameter	U5	mm	138			
Horizontal adjustment range		mm	±0.20			
Vertical adjustment range		mm	±0.15			
	A	mm	412.5			
	C	mm	95.8			
	C1	mm	106.9			
	D1	mm	43.4			
	D2	mm	35.1			
	D3	mm	35.5			
	D4	mm	43.1			
	E	mm	155			
	E1	mm	102.9			
	E2	mm	25.4			
	F1	mm	115.6			
	F2	mm	87			
	G	mm	54			
	H	mm	5			
	I	mm	13			
	J	mm	183.1			
	K	mm	24			
	K1	mm	12			
	O	mm	121.5			
	P1	mm	43			
	P2	mm	42			
	R	mm	120.7			
	S	mm	M10 (4x)			
	S1	mm	13.46			
	S2	mm	13.46			
	T	mm	53			
	V	mm	68			
	X	mm	17.5			
	Y	mm	19			
Cylinder stroke		mm	79.8			
Piston area		cm²	12.56			
Operating pressure max.		bar	45			
Working pressure		bar	10 - 30			
Repeatability accuracy		mm	±0.001			
Weight		kg	19.1			

■ Dimensions and technical data

SRG 4 F

Grinding Steady Rests



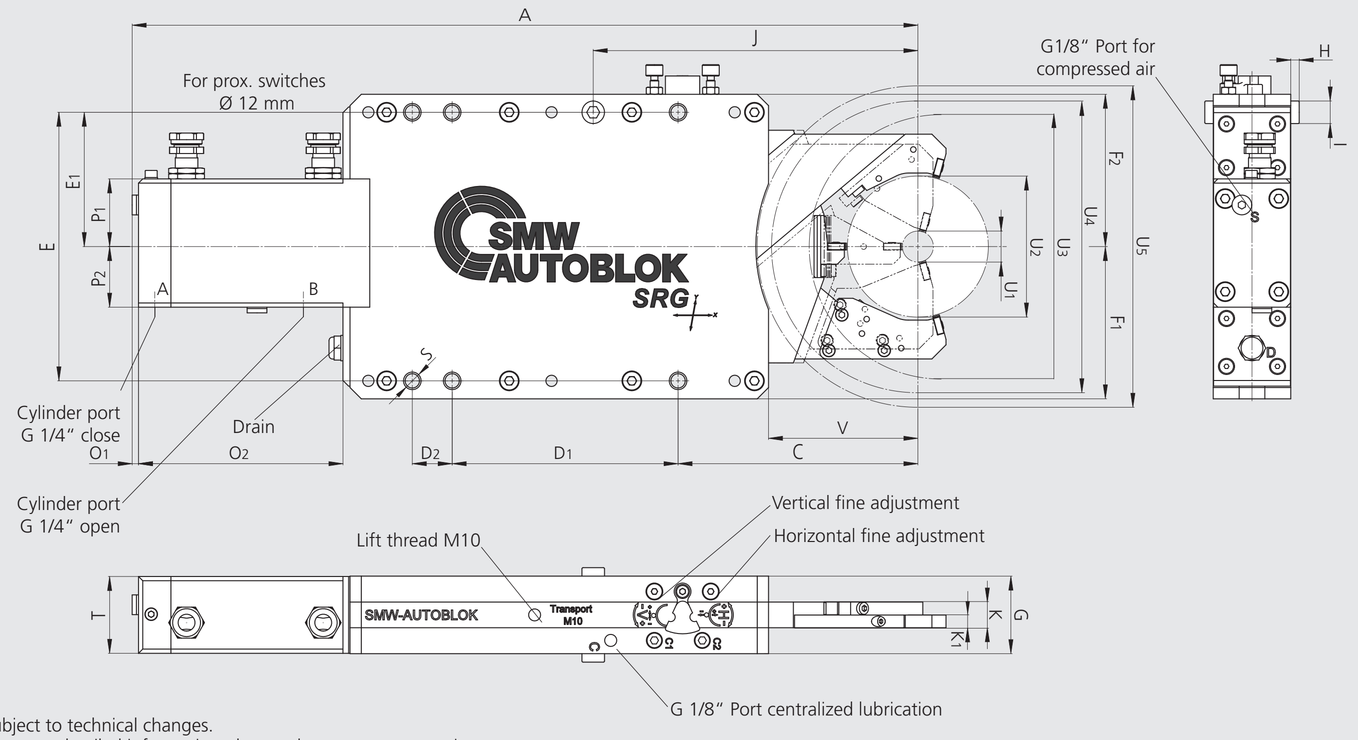
Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type Id. No.			SRG 4 F 221930					
Clamping kit			**I**	**II**	**III**	**IV**	**V**	**VI**
Min. clamping diameter	U1	mm	22	35	48	61	74	87
Max. clamping diameter	U2	mm	35	48	61	74	87	100
Max. loading diameter (vertical, steady open)	U3	mm	206	204	200	196	194	190
Max. axial clearance diameter (steady open)	U4	mm	218	219	219	220	222	224
Max. swing diameter	U5	mm	228					
Horizontal adjustment range		mm	±0.20					
Vertical adjustment range		mm	±0.14					
	A	mm	557.6					
	C	mm	170.2					
	D1	mm	160.3					
	D2	mm	28.3					
	E	mm	190.5					
	E1	mm	95.25					
	F1	mm	108					
	F2	mm	108					
	G	mm	55					
	H	mm	6					
	I	mm	16					
	J	mm	230.4					
	K	mm	18.2					
	K1	mm	9					
	O1	mm	4.5					
	O2	mm	145.1					
	P1	mm	48					
	P2	mm	43					
	S	mm	M12 (6x)					
	T	mm	54.5					
	V	mm	106					
Cylinder stroke		mm	127.2					
Piston area		cm²	12.56					
Operating pressure max.		bar	30					
Working pressure		bar	7 - 25					
Repeatability accuracy		mm	±0.001					
Weight		kg	30					

SRG 4.1 FS

Grinding Steady Rests

■ Dimensions and technical data



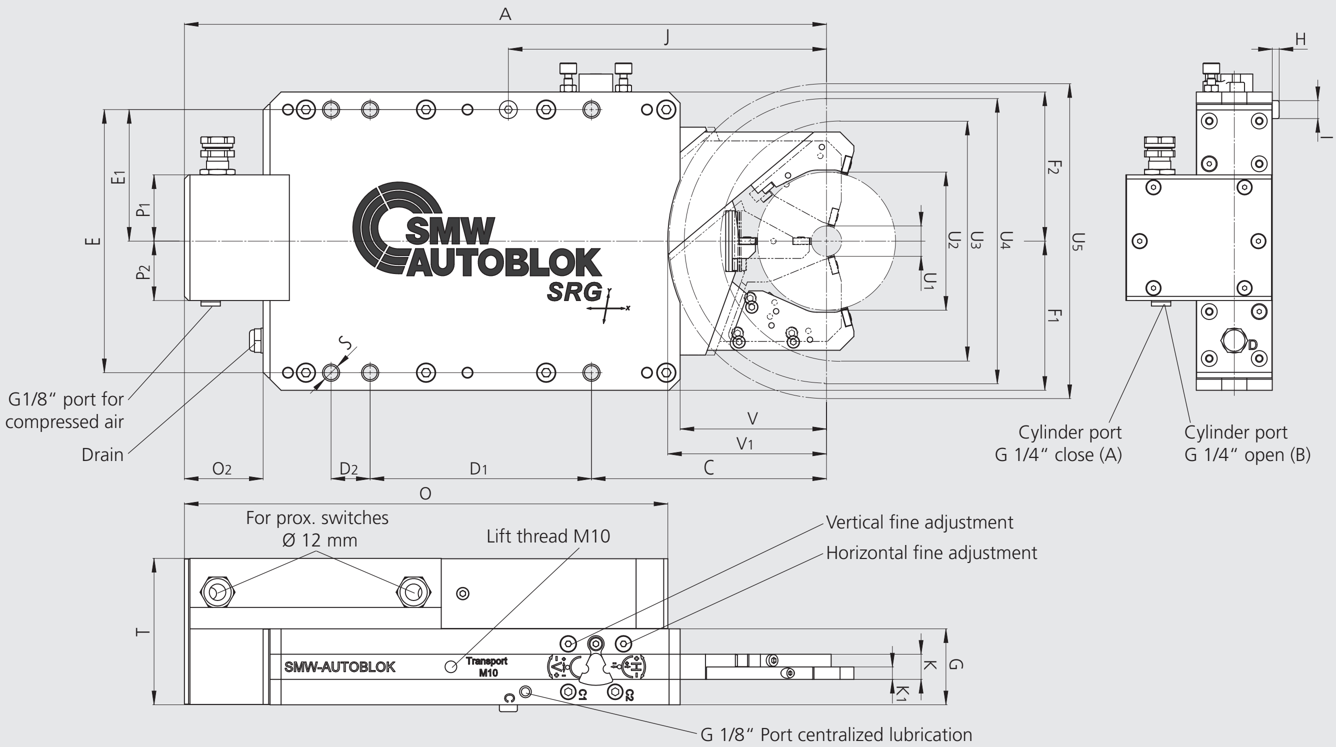
Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type Id. No.			SRG 4.1 FS 222410					
Clamping kit			I	II	III	IV	V	VI
Min. clamping diameter	U1	mm	22	35	48	61	74	87
Max. clamping diameter	U2	mm	35	48	61	74	87	100
Max. loading diameter (vertical, steady open)	U3	mm	206	201	197	195	190	189
Max. axial clearance diameter (steady open)	U4	mm	216	216	217	218	220	223
Max. swing diameter	U5	mm	250					
Horizontal adjustment range		mm	±0.22					
Vertical adjustment range		mm	±0.175					
	A	mm	565.5					
	C	mm	161.7					
	D1	mm	170.8					
	E	mm	190.5					
	E1	mm	95.25					
	F1	mm	108					
	F2	mm	108					
	G	mm	50.3					
	H	mm	6					
	I	mm	16					
	J	mm	230.8					
	K	mm	15.3					
	K1	mm	7.4					
	O1	mm	4.5					
	O2	mm	135					
	P1	mm	47					
	P2	mm	43					
	S	mm	M12 (6x)					
	T	mm	49.3					
	V	mm	114					
Cylinder stroke		mm	126					
Piston area		cm^2	12.56					
Operating pressure max.		bar	35					
Working pressure		bar	8 - 28					
Repeatability accuracy		mm	±0.001					
Weight		kg	26.5					

SRG-B 4 F

Grinding Steady Rests

■ Dimensions and technical data



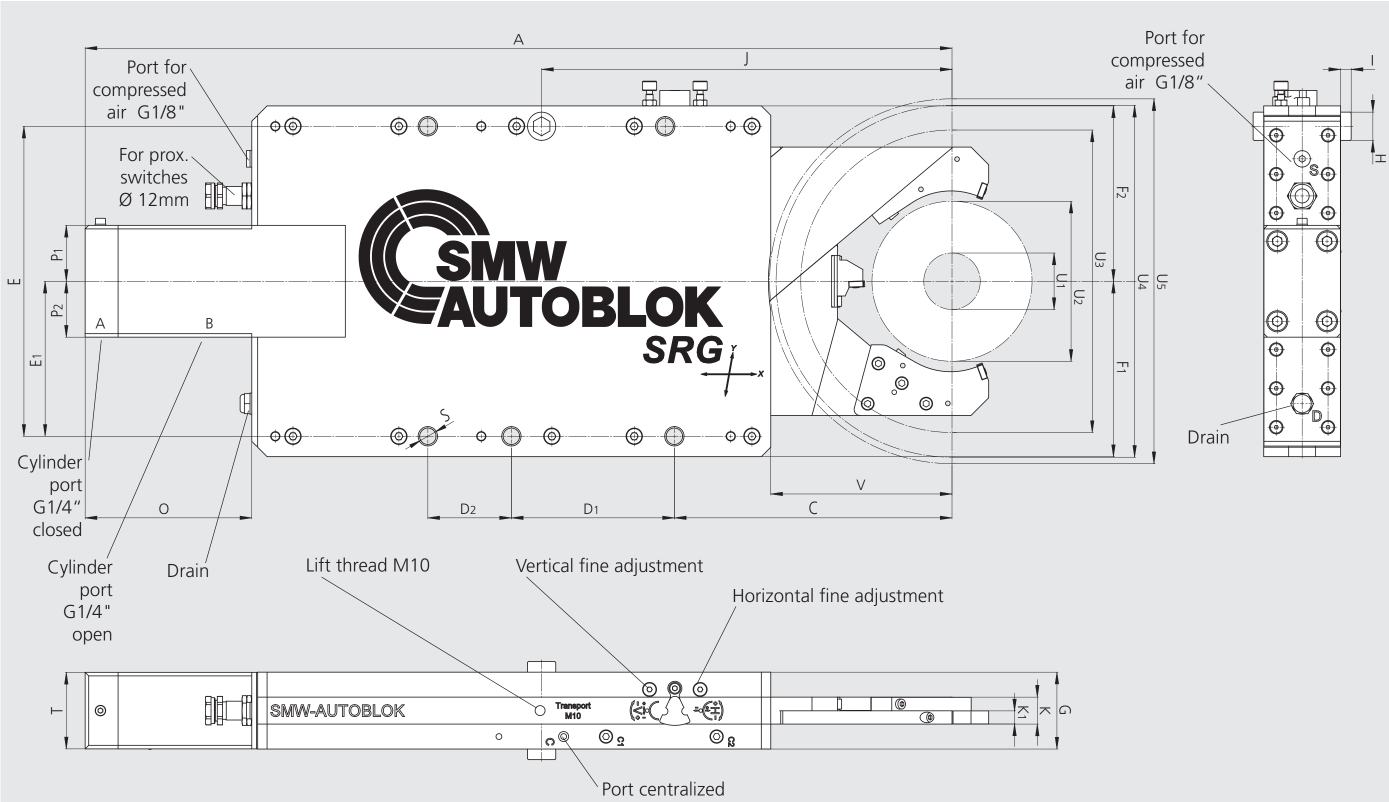
Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type **Id. No.**			**SRG-B 4 F** **223140**					
Clamping kit			**I**	**II**	**III**	**IV**	**V**	**VI**
Min. clamping diameter	U1	mm	22	35	48	61	74	87
Max. clamping diameter	U2	mm	35	48	61	74	87	100
Max. loading diameter (vertical, steady open)	U3	mm	206	204	200	196	194	190
Max. axial clearance diameter (steady open)	U4	mm	218	218	218	220	222	224
Max. swing diameter	U5	mm	228					
Horizontal adjustment range		mm	±0.20					
Vertical adjustment range		mm	±0.14					
	A	mm	465					
	C	mm	170.2					
	D1	mm	160.3					
	D2	mm	28.3					
	E	mm	190.5					
	E1	mm	95.25					
	F1	mm	108					
	F2	mm	108					
	G	mm	55					
	H	mm	5					
	I	mm	13					
	J	mm	230.4					
	K	mm	18.2					
	K1	mm	9					
	O	mm	350.1					
	O2	mm	57					
	P1	mm	48					
	P2	mm	43					
	S	mm	M12 (6x)					
	T	mm	106					
	V	mm	106					
	V1	mm	115					
Cylinder stroke		mm	127.2					
Piston area		cm²	10.02					
Operating pressure max.		bar	35					
Working pressure		bar	10-30					
Repeatability accuracy		mm	±0.001					
Weight		kg	37.8					

SRG 5 F

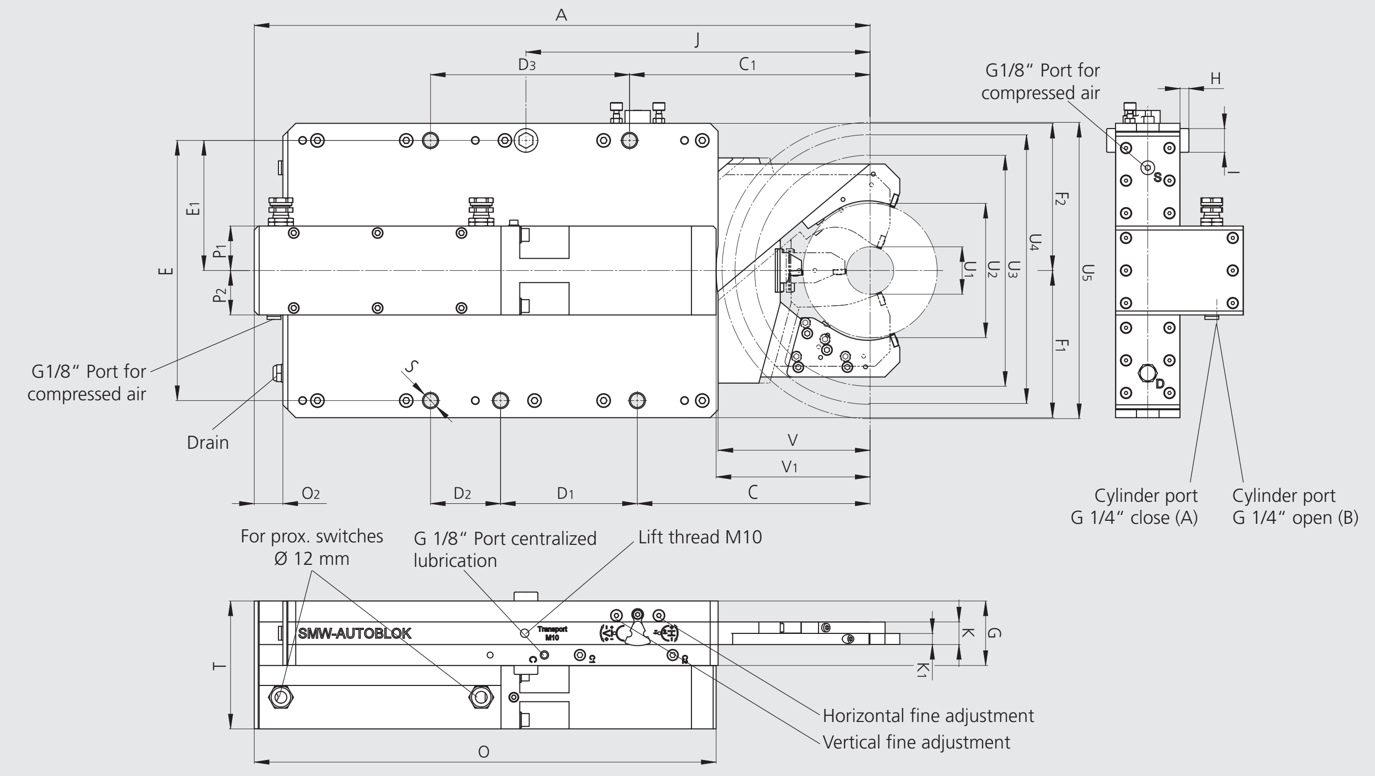
Grinding Steady Rests

■ Dimensions and technical data



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

SMW-AUTOBLOK Type Id. No.			SRG 5 F 223774			
Clamping kit			I	II	III	IV
Min. clamping diameter	U1	mm	48	70	92	114
Max. clamping diameter	U2	mm	70	92	114	136
Max. loading diameter (vertical, steady open)	U3	mm	273	267	263	257
Max. axial clearance diameter (steady open)	U4	mm	298	298	298	299
Max. swing diameter	U5	mm	310			
Horizontal adjustment range		mm	±0.20			
Vertical adjustment range		mm	±0.14			
	A	mm	736.6			
	C	mm	235.9			
	D1	mm	138.5			
	D2	mm	71			
	E	mm	263.4			
	E1	mm	131.7			
	F1	mm	149			
	F2	mm	149			
	G	mm	65.3			
	H	mm	24			
	I	mm	9			
	J	mm	348.7			
	K	mm	22.9			
	K1	mm	11.3			
	O	mm	141.6			
	P1	mm	47.5			
	P2	mm	47.5			
	S	mm	14			
	T	mm	65			
	V	mm	154			
Cylinder stroke		mm	179			
Piston area		cm²	19.63			
Operating pressure max.		bar	30			
Working pressure		bar	7-25			
Repeatability accuracy		mm	±0.002			
Weight		kg	62.6			



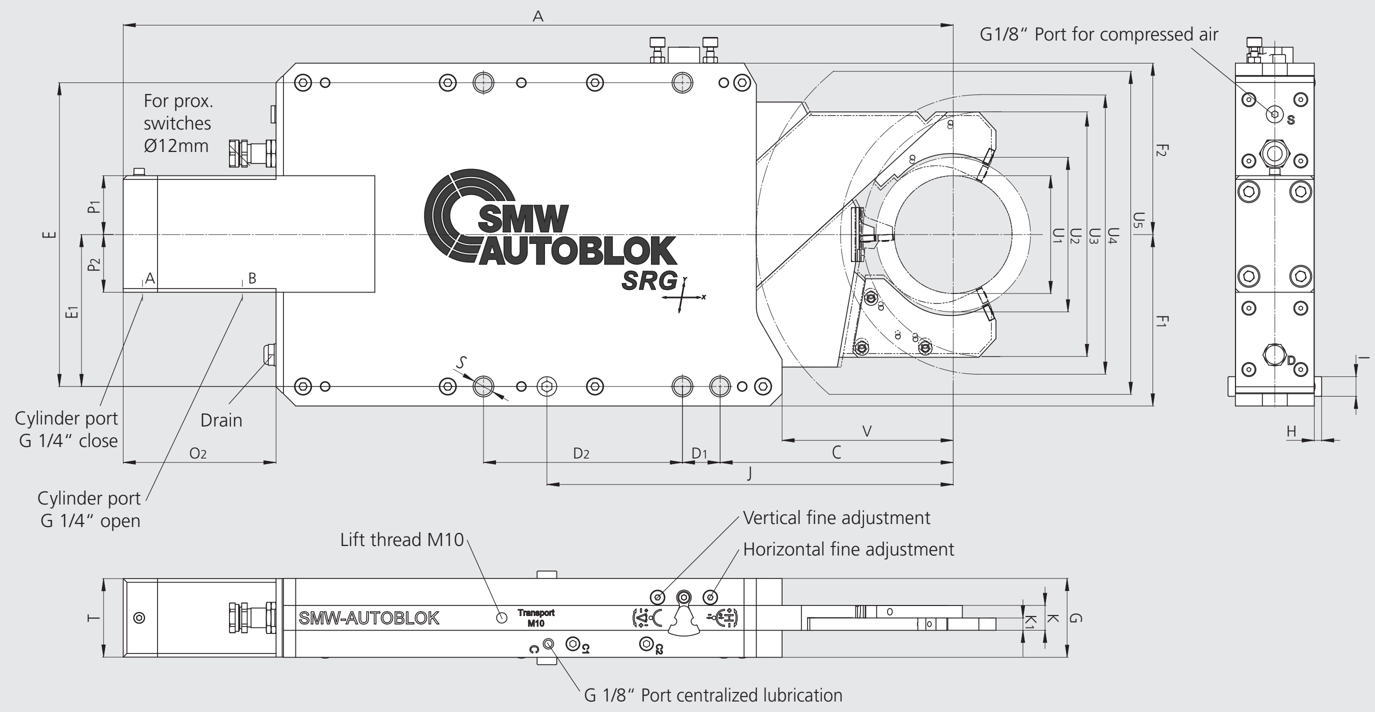
Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type Id. No.			SRG-B 5 F 222530			
Clamping kit			I	II	III	IV
Min. clamping diameter	U1	mm	48	70	92	114
Max. clamping diameter	U2	mm	70	92	114	136
Max. loading diameter (vertical, steady open)	U3	mm	273	267	263	257
Max. axial clearance diameter (steady open)	U4	mm	298	298	298	299
Max. swing diameter	U5	mm	310			
Horizontal adjustment range		mm	± 0.20			
Vertical adjustment range		mm	± 0.14			
	A	mm	624			
	C	mm	235.9			
	C1	mm	243.7			
	D1	mm	138.5			
	D2	mm	71			
	D3	mm	201.7			
	E	mm	263.4			
	E1	mm	131.7			
	F1	mm	149			
	F2	mm	149			
	G	mm	65.3			
	H	mm	9			
	I	mm	24			
	J	mm	348.7			
	K	mm	22.9			
	K1	mm	11.1			
	O	mm	468			
	O2	mm	29			
	P1	mm	45			
	P2	mm	45			
	S	mm	M16 (5x)			
	T	mm	129.5			
	V	mm	154			
	V1	mm	156			
Cylinder stroke		mm	179			
Piston area		cm²	16.49			
Operating pressure max.		bar	35			
Working pressure		bar	10-30			
Repeatability accuracy		mm	±0.002			
Weight		kg	76.4			

SRG 5.1 FS

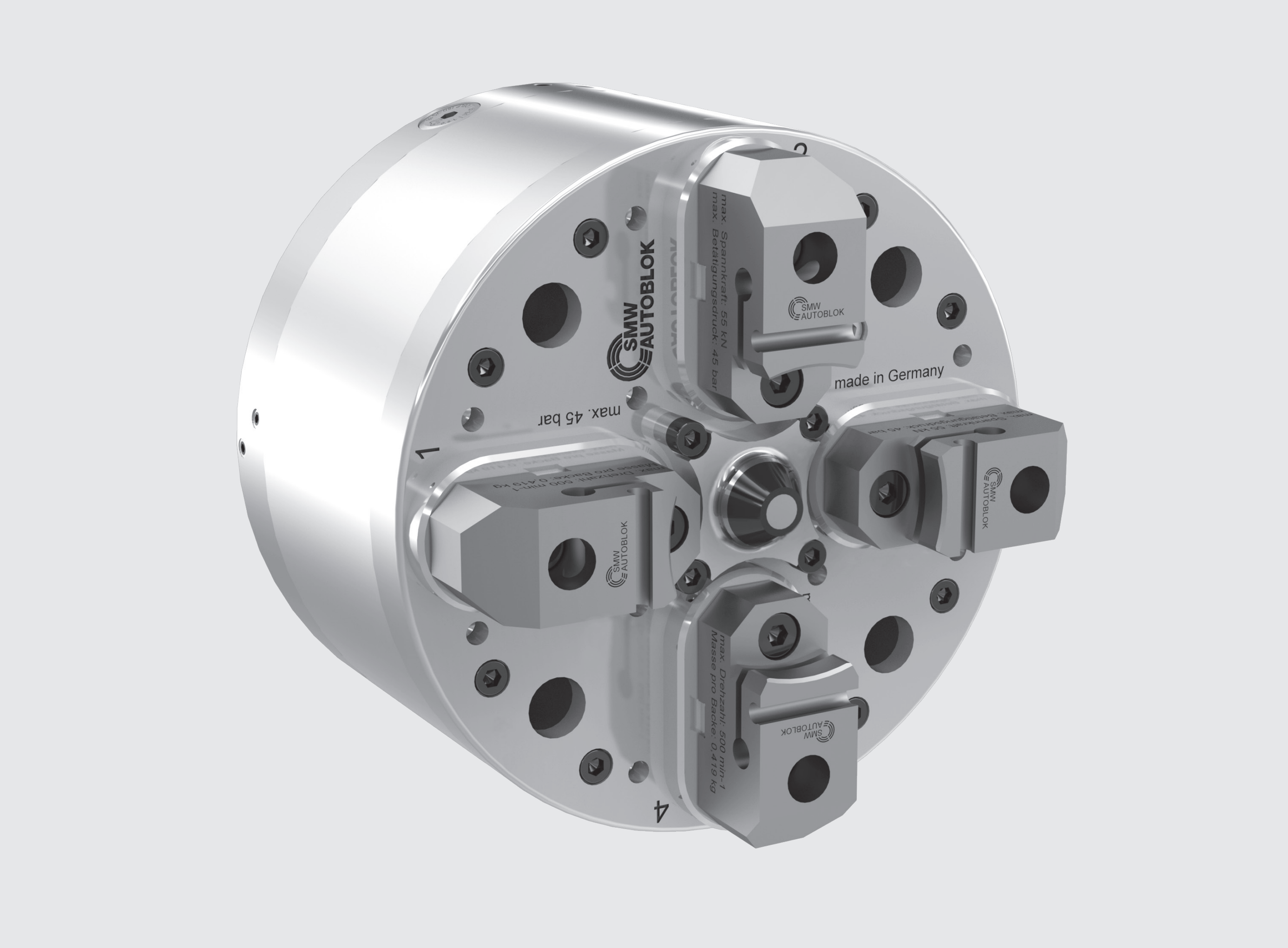
Grinding Steady Rests

■ Dimensions and technical data



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

SMW-AUTOBLOK Type Id. No.			SRG 5.1 FS 222665				
Clamping kit			**I**	**II**	**III**	**IV**	**V**
Min. clamping diameter	U1	mm	96	102	108	114	120
Max. clamping diameter	U2	mm	102	108	114	120	126
Max. loading diameter (vertical, steady open)	U3	mm	236	234	232	229	228
Max. axial clearance diameter (steady open)	U4	mm	272	272	272	272	272
Max. swing diameter	U5	mm	320				
Horizontal adjustment range		mm	±0.22				
Vertical adjustment range		mm	±0.17				
	A	mm	676.6				
	C	mm	190				
	D1	mm	30.7				
	D2	mm	162.2				
	E	mm	247.6				
	E1	mm	123.8				
	F1	mm	139.7				
	F2	mm	139.7				
	G	mm	64.3				
	H	mm	6				
	I	mm	16				
	J	mm	331.2				
	K	mm	20.25				
	K1	mm	10				
	O2	mm	124.6				
	P1	mm	48				
	P2	mm	47				
	S	mm	17 (5x)				
	T	mm	64				
	V	mm	139.5				
Cylinder stroke		mm	167.1				
Piston area		cm²	19.63				
Operating pressure max.		bar	23				
Working pressure		bar	8 - 18.5				
Repeatability accuracy		mm	±0.002				
Weight		kg	54.8				



Jaw chucks

High precision air chucks

Chuck sizes Ø 80 - 250 mm

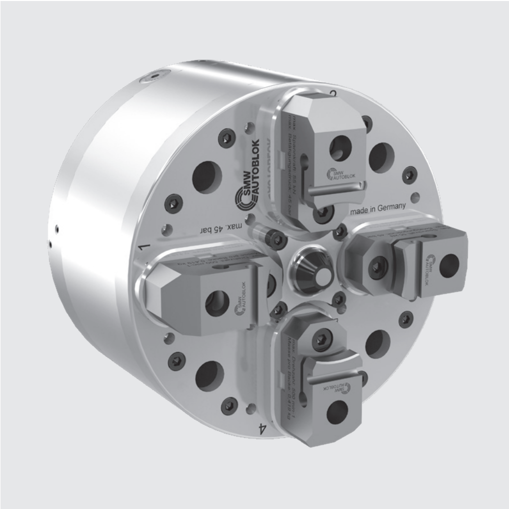
- Centric and compensating clamping
- For O.D. and I.D. clamping
- Hydraulic or pneumatic actuation
- Proofline - fully sealed and low maintenance

SCG

2+2 jaw hydraulic actuation

2+2 jaw compensating chuck

- 2+2 jaw hydraulic actuation
- Quick change center or adjustable
- For grinding
- Sealed and low maintenance



Application/customer benefits

- For grinding of shafts

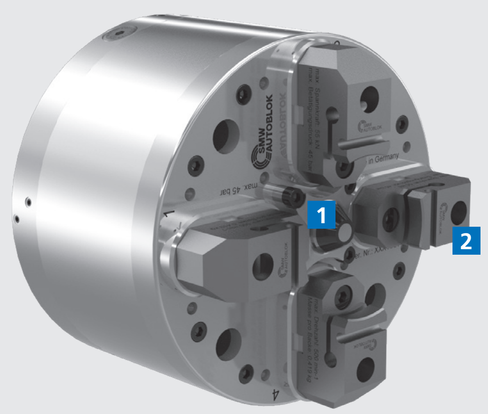
Technical features

- 2+2 jaw hydraulic actuation
- Oil distribution via hydraulic manifold
- Quick change center or adjustable
- Sealed, oil bath lubricated and low maintenance

Standard equipment

2+2 jaw compensating chuck
without center
without top jaws

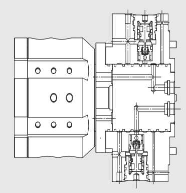
Product features SCG



1 Quick change center, TIR « 0,003 mm, for higher accuracy also adjustable

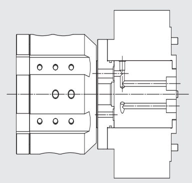
2 Clamping jaws with pull-down effect

Rotary distributor adaption versions



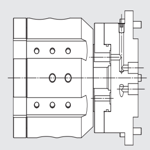
Version 1:
Rotary distributor with flange with safety valves

Id. No. 046881



Version 2:
Rotary distributor with flange two-pieced

Id. No. 046880

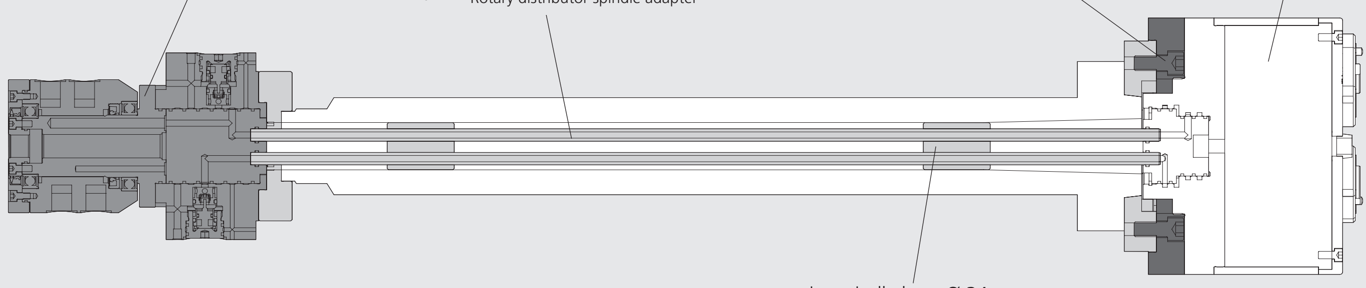


Version 3:
Rotary distributor with flange compact

Id. No. 046879

Ordering review

Item	Order number
Chuck	055505
Intermediate flange / intermediate flange adjustable	055522 / 055500
Rotary distributor cpl.	046879 / 046880 / 046881
spindle-specific components	tbd.

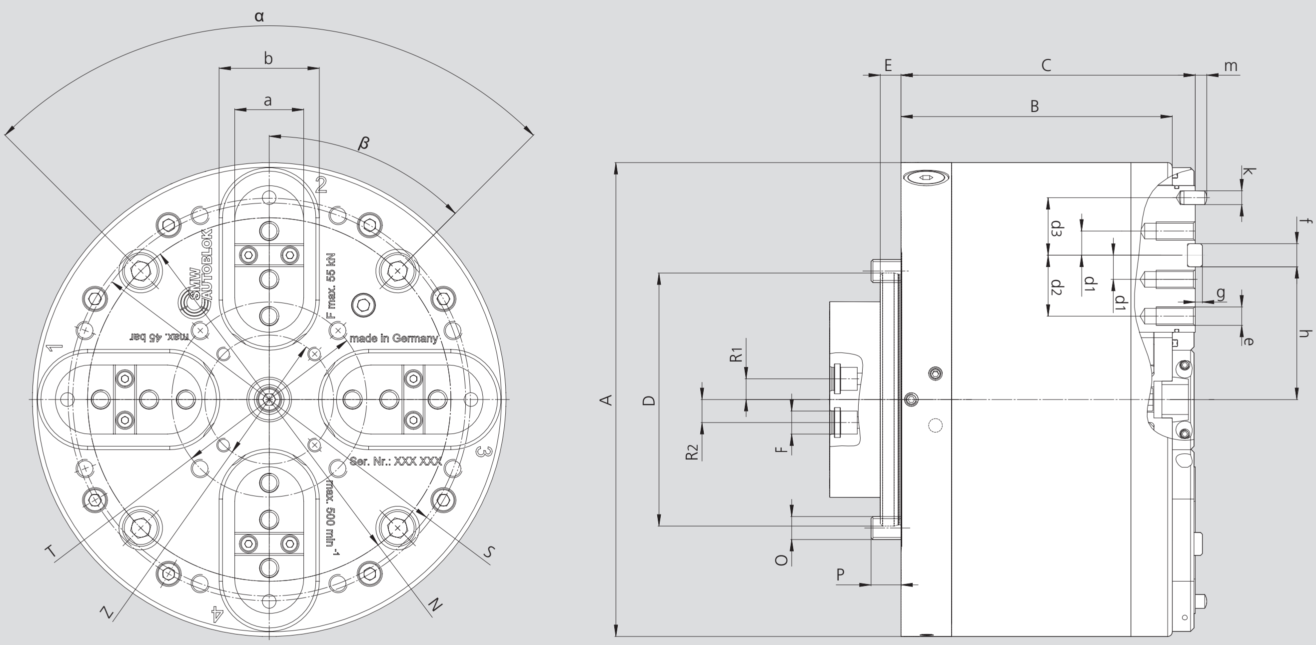


2+2 jaw compensating chuck

- 2+2 jaw hydraulic actuation
- Quick change center
- For grinding
- Sealed and low maintenance

SCG

2+2 jaw hydraulic actuation



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

SMW-AUTOBLOK Type			SCG 206
Mounting		**Size**	**Z110**
	A	mm	206
	B	mm	118
	C	mm	128
Centering	**D**	mm	110
	E	mm	9
Connection bore for tube bundle (dia. - depth - No.)	**F**	mm	Ø10 x 12mm - 4 x 90°
Fixing bolt circle	**N**	mm	158
Fixing bolt	**O**	mm	M10 (4x)
Min. thread engagement of the fixing bolt	**P**	mm	13
Bolt-circle for centerpoint (dia. - size - depth - No.)	**Z**	mm	Ø56 - M6 x 8 - 4 x 90°
Bolt-circle for tube bundle (3x) Radius	**R1**	mm	18
Bolt-circle for tube bundle (1x / clamping jaws 1+3) Radius	**R2**	mm	20
Bolt-circle (dia. - size - depth)	**S**	mm	Ø170.9 - M8 x 8
Bolt-circle (dia. - size - depth)	**T**	mm	Ø84.8 - M8 x 8
	a	mm	30
	b	mm	43.6
	d1	mm	10.5
	d2	mm	26.5
	d3	mm	25
Thread jaws (3x)	**e**	mm	M8 x 17
Notch	**f** h6	mm	10
	g	mm	3.1
Distance between notch and center of chuck (chuck opened)	**h**	mm	57.75
Pin	**k** h6	mm	6
	m	mm	5
	α	deg.	90
	β	deg.	45
Radial jaw stroke		mm	2
Pressure max.		bar	45
Gripping force max.		kN	55
Speed max.		r.p.m.	500
Weight (without top jaws)		kg	31
Moment of inertia		kg·m²	0.22

AcuGrind

High precision air chuck Ø 80 - 250 mm AcuGrind

- with built-in pneumatic actuating cylinder
- fully sealed

Application/customers benefits

- Sealed standard chuck for high-precision grinding
- Highest accuracy - runout and repeatability
- Built-in pneumatic actuation, no hydraulic cylinder required

Technical features

- Base jaws case hardened
- Repeatability < 0.002 mm
- **proofline® chucks** = fully sealed - low maintenance

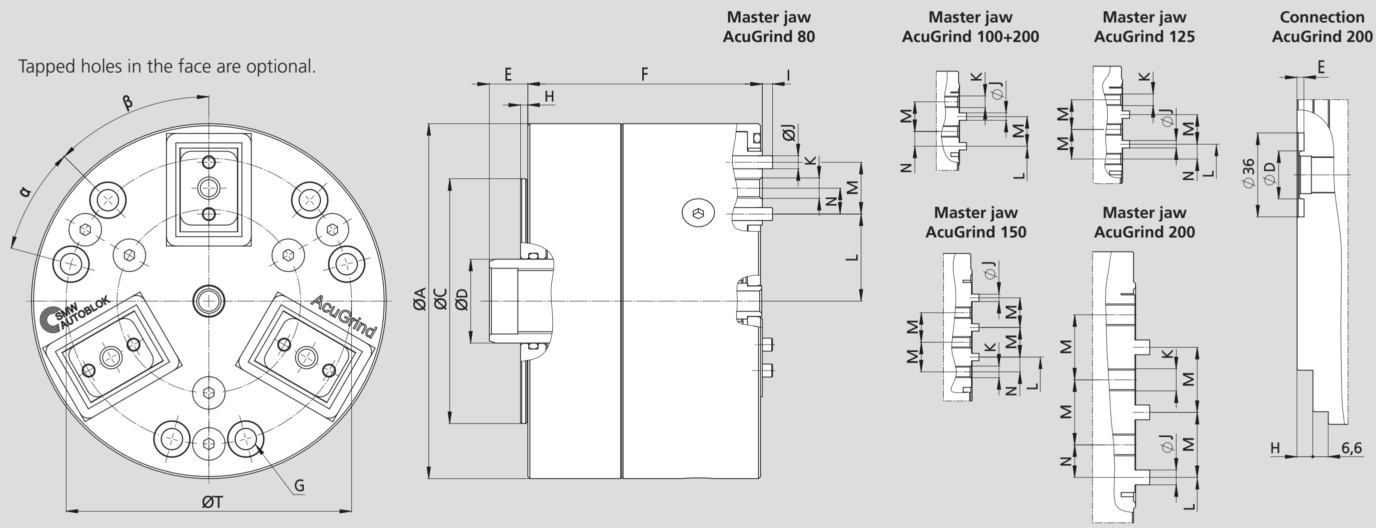
Standard equipment

Power chuck
Boring ring for I.D. clamping
Boring ring for O.D. clamping
Lubricating oil

Odering example

AcuGrind 150, Id. No. 5302503

Tapped holes in the face are optional.



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

Technical data

SMW-AUTOBLOK Type		AcuGrind 80	AcuGrind 100	AcuGrind 125	AcuGrind 150	AcuGrind 200	AcuGrind 250
Order number	**Id. No.**	5302500	5302501	5302502	5302503	5302504	5302505
Outside Ø	**A**	87	107	135	157	214	265
Centering Ø	**C**	60	82.55	101.6	125	167.6	215.8
Distributor Ø	**D**	20.55	20.55	20.6	20.6	20.6	20.6
min. / max.	**E**	9.5 / 17.0	10 / 17.5	8 / 15.5	10.5 / 18	-3 / 10.5	12.75 / 20.25
Height	**F**	57.5	56.5	60.3	56.2	81.5	74.6
Chuck mounting bolts	**G**	6 x M5	6 x M5	6 x M6	6 x M6	6 x M10	6 x M10
	H	1.8	2	2.2	2.2	6.8	7.2
	I	2.5	3.2	3.2	3.2	6.35	6.35
Pin Ø	**J**	3.18	3.18	3.18	3.18	6.35	6.35
Jaw mounting bolts	**K**	M5	M5	M5	M5	3/8" - 24 UNF	3/8" - 24 UNF
Distance to 1. pin max. / min.	**L**	21.34 / 20.09	21.34 / 20.09	34.05 / 32.8	34.05 / 32.8	38.05 / 36.8	35.7 / 34.45
	M	12.7	12.7	12.7	12.7	27.9	27.9
	N	6.35	6.35	6.35	6.35	13.95	13.95
Bolt circle Ø	**T**	70	88.9	110	135.75	183	233.7
	α	30°	6 x 60°	6 x 60°	6 x 60°	6 x 60°	6 x 60°
	β	45°	30°	30°	30°	30°	30°
Repeatability	**mm**	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Radial jaw stroke	**mm**	1.25	1.25	1.25	1.25	1.25	1.25
Speed max.	**min⁻¹**	1500	1000	900	900	900	800
Clamping force at 6 bar	**kN**	2.65	4.85	9.5	10.5	28	31
Operating pressure	**bar**	1 - 6	1 - 6	1 - 6	1 - 6	1 - 6	1 - 6
Weight	**kg**	2.5	3.5	6.5	7.5	21	28

2-jaw and 4-jaw power chucks available on request.

Top jaws for AcuGrind power chucks

AcuGrind

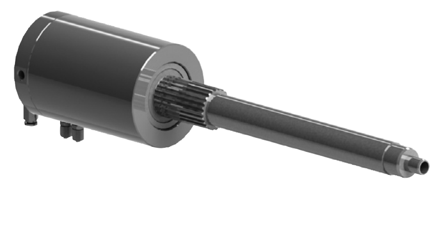
Top jaws for AcuGrind

		WAK Soft top jaws		SBK Segment jaws 120°	
Chuck type	Material	Id. No.	Height	Id. No.	Height
AcuGrind 80	Aluminium	5302511	25	5302545	25
		5302512	38	5302546	38
	Steel	5302513	25	5302547	25
		5302514	38	5302548	38
AcuGrind 100	Aluminium	5302515	25	5302549	25
		5302516	38	5302550	50
				5302551	75
				5302552	100
	Steel	5302517	25	5302553	20
		5302518	38	5302554	38
		5302519	50	5302555	50
AcuGrind 125	Aluminium	5302520	25	5302556	25
		5302521	38	5302557	38
		5302522	50	5302558	50
		5302523	75	5302559	75
	Steel	5302524	25	5302560	20
		5302525	38	5302561	25
		5302526	50	5302562	38
				5302563	50
AcuGrind 150	Aluminium	5302527	25	5302564	25
		5302528	38	5302565	38
		5302529	50	5302566	50
		5302530	75	5302567	75
				5302568	100
	Steel	5302531	25	5302569	25
		5302532	38	5302570	38
		5302533	50	5302571	50
		5302534	75	5302572	75
AcuGrind 200	Aluminium	5302535	50	5302573	38
		5302536	75	5302574	50
		5302537	100	5302575	75
	Steel	5302538	50	5302576	50
		5302539	75	5302577	75
		5302540	100		
AcuGrind 250	Aluminium	5302541	50	5302578	75
		5302542	75	5302579	100
	Steel	5302543	50	5302580	75
		5302544	75	5302581	100

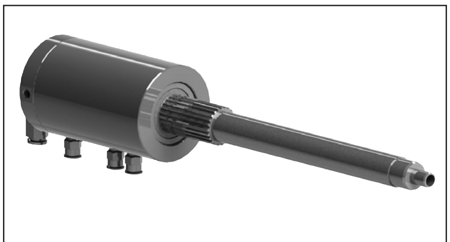
Top jaws in special version on request.

AcuGrind

Air feed tubes fix (AP)



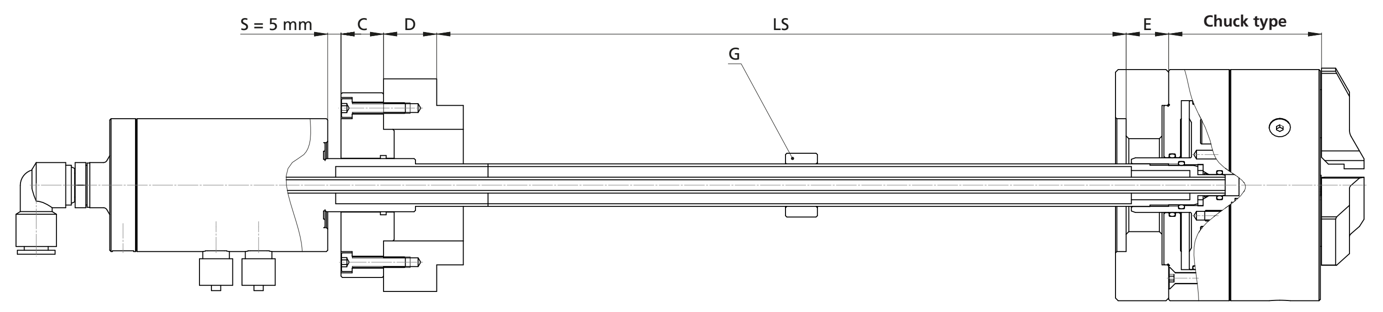
AP2S



AP3S

SMW-AUTOBLOK Type	Speed max. (min^{-1})	Version
AP2S	5.000	2 airways
AP3S	5.000	3 airways

AP2S / AP3S = with serration



LS	Spindle length
E	Chuck adaptor
C	Bushing (included in scope of delivery of the air feed tubes type AP)
D	Adaptor (mounting ring manufactured by the customer)
S	Safety distance
F	AcuGrind chuck
G	Support ring for tube bundle longer 600mm

Ordering example

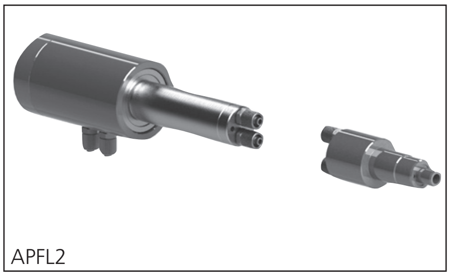
NOTE **In case of an order of the air feed tubes type AP, the length of the air feed tube is necessary.**

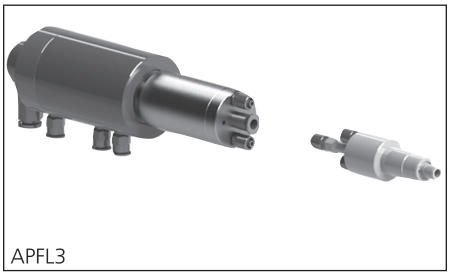
For calculating the correct length of the air feed tube (LR) are the following dimensions necessary: LS, E, C, D and the chuck type!

NOTE **Use only with clean and oiled air.**

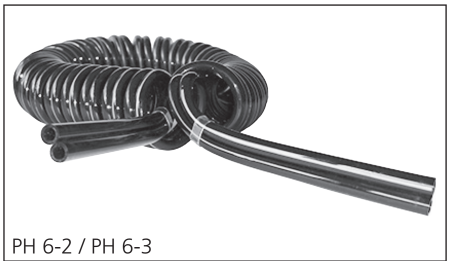
Air feed tubes flex (APFL)

AcuGrind

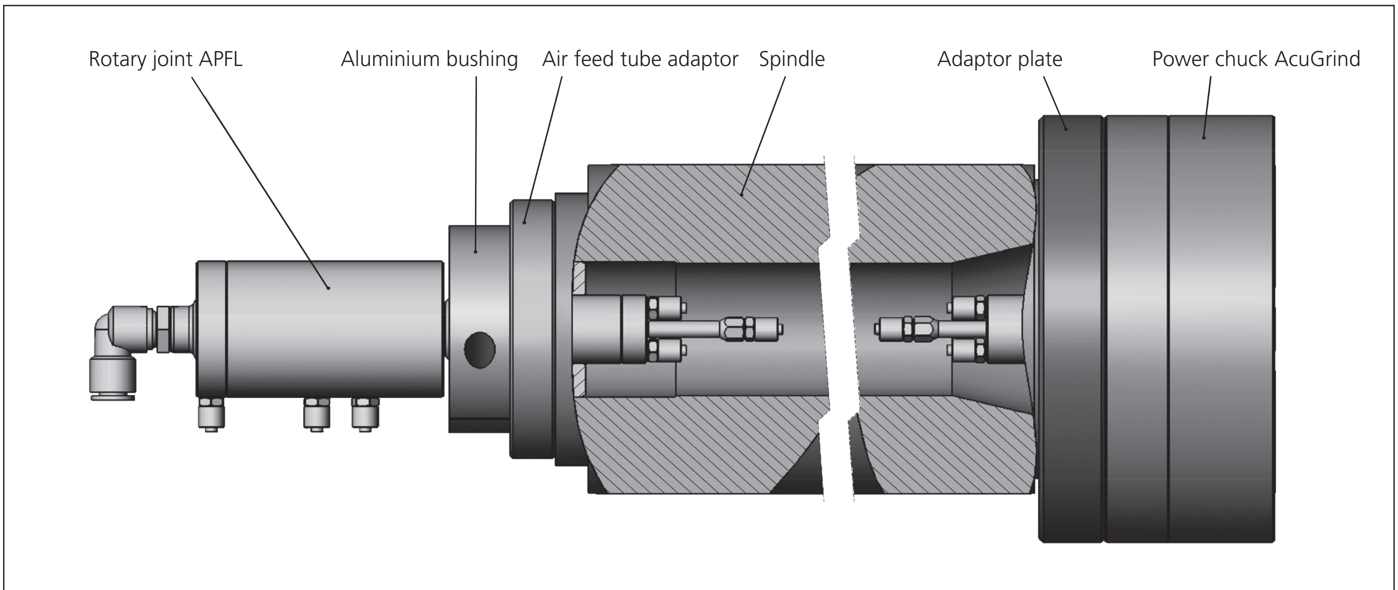

APFL2

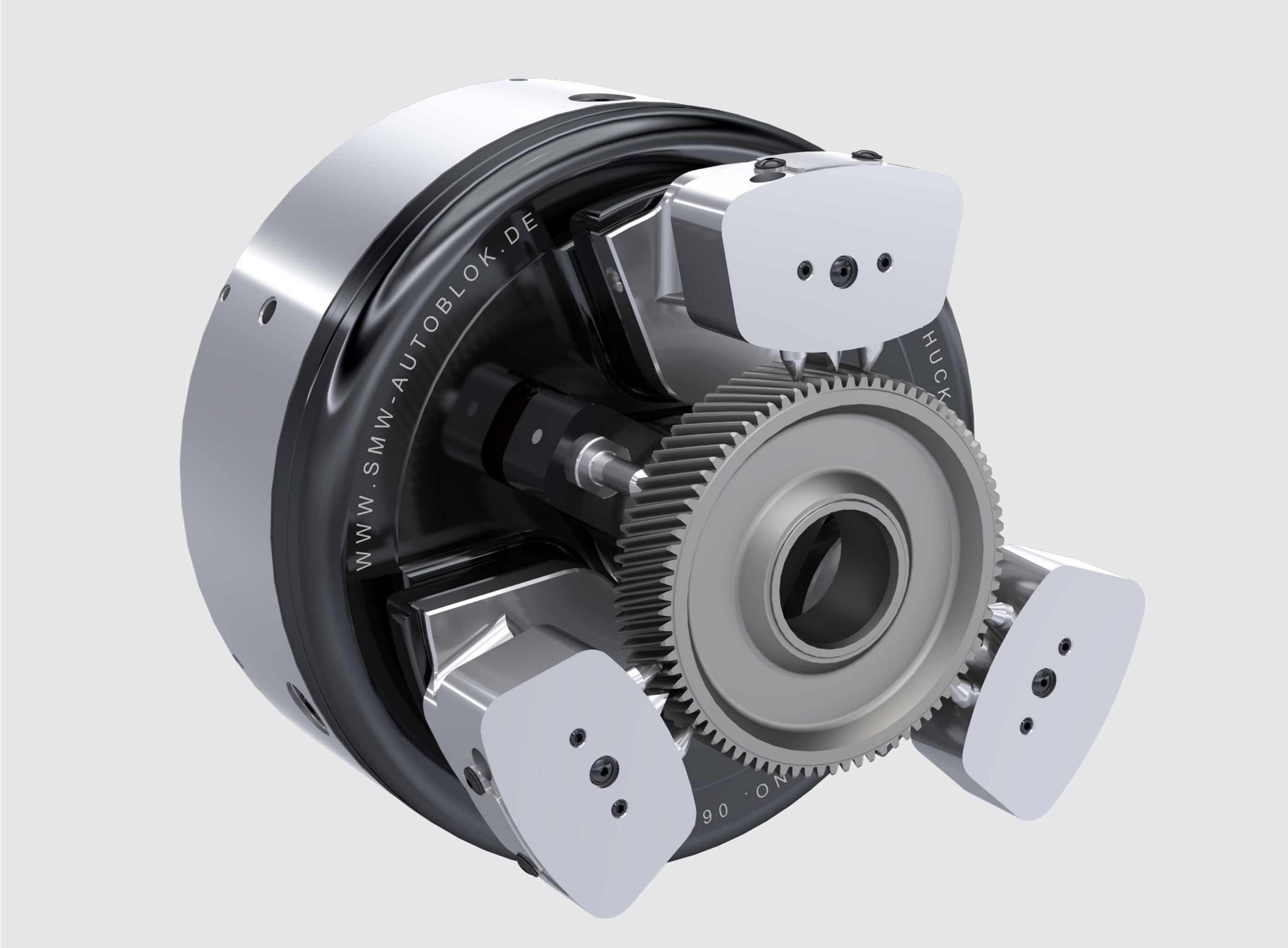

APFL3

SMW-AUTOBLOK Type	Id. No.	Speed max. (min^{-1})	Version
APFL2	5302594	6.000	2 airways
APFL3	5302595	6.000	3 airways


PH 6-2 / PH 6-3

SMW-AUTOBLOK Typ Id.-Nr.	PH 6-2 5302585	PH 6-3 5302586
Number of airways	2	3
Airways outside Ø (mm)	6	6
Airways inside Ø (mm)	4	4
Medium	air	air
Max. operating pressure (MPa) at 20 °C	0.8	0.8
Operating temperature	-20 °C - +60 °C	-20 °C - +60 °C
Length (mm)	525	505
Max. working distance (mm)	1.500	1.000
Outside Ø coil (mm)	37	37
Material	Polyurethan	Polyurethan
Colour	black	black



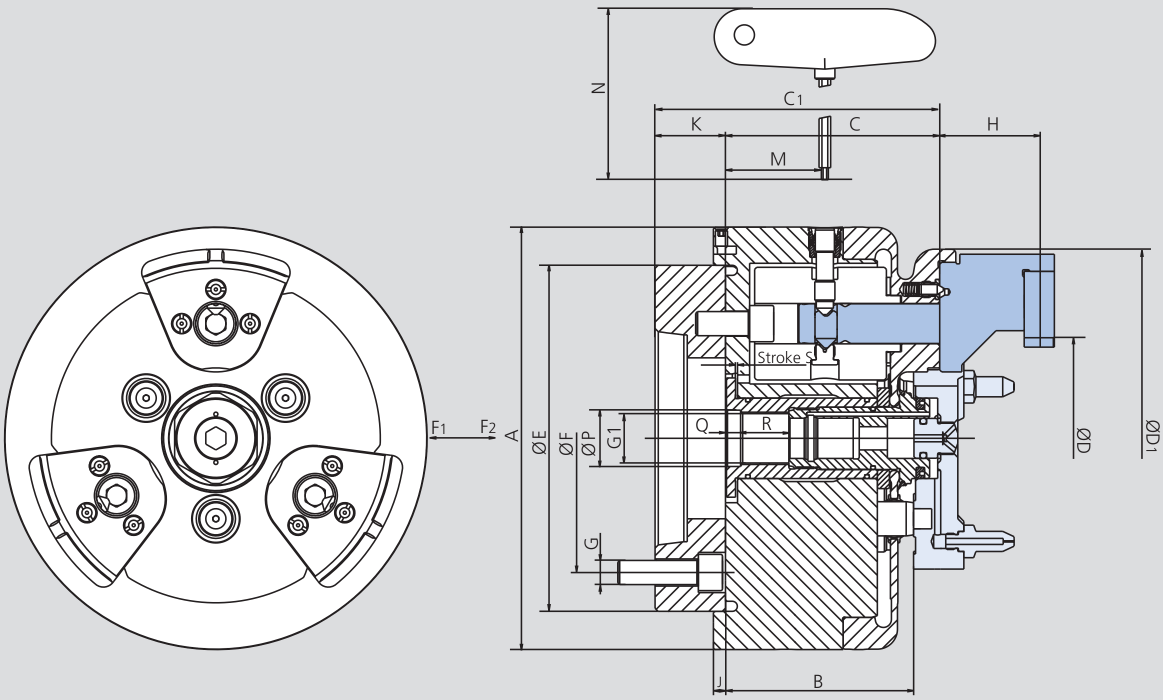


Diaphragm chucks

Diaphragm chuck
Chuck sizes Ø 160 - 400 mm

- Diaphragm technology for highest precision
- Pitch line clamping or O.D. clamping
- With or without open center

■ Main dimensions and technical data



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

SMW-AUTOBLOK Type			D 160		D 210		D 260		D 315	D 400	
Mounting		Size	A5	A6	A5	A6	A6	A8	A8	A8	A11
	A	mm	160		210		260		315	400	
	B	mm	79.5		93.5		111		111	118	
	C	mm	86.5		106.5		125		125	131	
	C1**	mm	116.5		146.5		156	170	173	181	
Clamping range min. / max.	D	mm	10 - 140***		15 - 195***		40 - 225***		55 - 275***	125 - 350***	
	D1	mm	143		188		227		275	354	
	E	mm	130		172		225		275	350	
	F	mm	104.8	133.4	104.8	133.4	133.4	171.4	171.4	171.4	235
	G		M10	M12	M10	M12	M12	M16	M16	M16	M20
	G1		M20 x 1.5		M26 x 1.5		M26 x 1.5		M30 x 1.5	M30 x 1.5	
Jaw height	H	mm	40.5		52		62		64	64	
	J	mm	6		6		6		6	6	
	K**	mm	30		40		48		48	50	
	M	mm	40.9		49.4		56,9		56,9	60.9	
	N	mm	185		185		185		185	185	
	P H8	mm	21		28		28		32	32	
	Q	mm	5		7		7		7	7	
	R	mm	21,7		24		23		28.5	34.5	
Piston stroke	S	mm	0.9		1.0		1.5		1.5	1.5	
Jaw stroke at distance H			0.93		1.2		1.4		1.2	0.87	
Draw pull min. / max.*	F1	kN	0 - 10		0 - 20		0 - 25		0 - 25	0 - 25	
Draw push for chuck open	F2	kN	13		30		30		30	20	
Moment of inertia		kg·m²	0.04		0.16		0.45		0.75	2.09	
Weight without top tooling		kg	11.6		30		44		60	104	
Recommended actuating cylinders		Type	SIN-DFR		SIN-DFR		SIN-DFR		SIN-DFR	SIN-DFR	

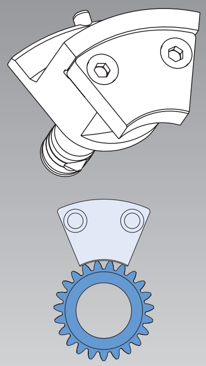
* Additional actuation force to the diaphragm spring clamping force applied by the clamping cylinder.
** Rec. dimensions, exact dimensions are depending on the machine.
*** jaws typ A

Advice: The max. allowed speed for the application is permanently marked on the corresponding top jaws and must not be exceeded.

Advice: Please note, it is important, that the cylinder force for pushing and pulling can be set to different values independently.

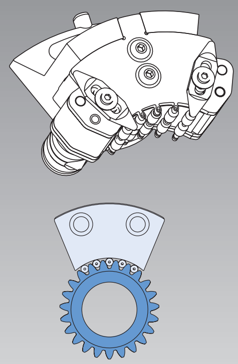
Important: Never rotate the chuck without inserted jaws, otherwise the centrifugal force compensation mechanism will get damaged.

Jaws **Type A**



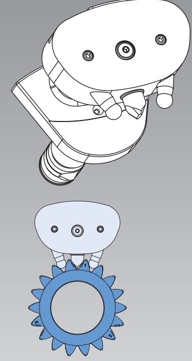
External clamping

Jaws **Type B**



Pitchline clamping with roller cage

Jaws **Type C**



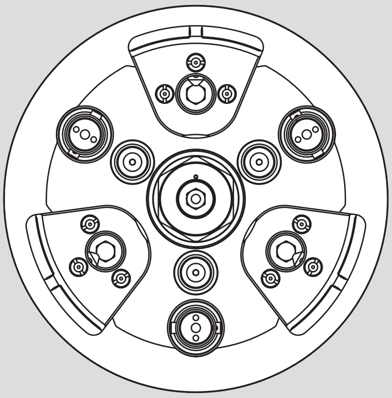
Pitchline clamping with clamping pin

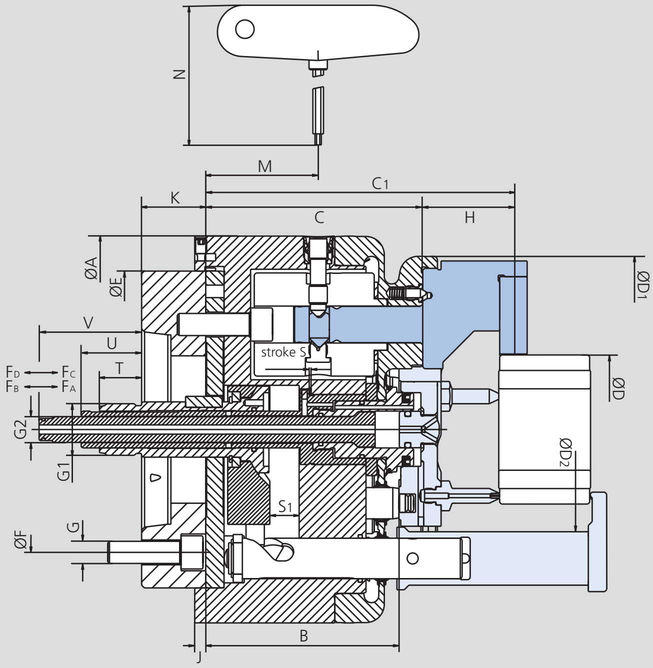
D-KOMBI®

Diaphragm chuck
QUICK JAW CHANGE SYSTEMS

Diaphragm Chuck with radial-axial clamping

■ Main dimensions and technical data





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

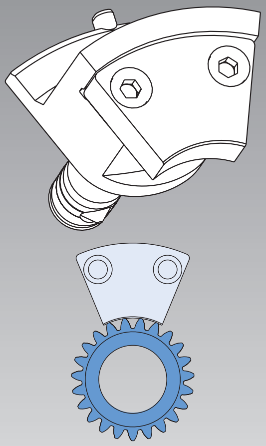
SMW-AUTOBLOK Type			D-KOMBI 210		D-KOMBI 260		D-KOMBI 315	D-KOMBI 400	
Mounting		Size	A5	A6	A6	A8	A8	A8	A11
	A	mm	210		260		315	400	
	B	mm	105.5		116		116	123	
	C	mm	118.5		130		130	136	
	C1	mm	170.5		187		192	-	
Clamping range without fingers	D	mm	15 - 195**		40 - 225**		55 - 275**	125 - 350**	
	D1	mm	188		227		275	354	
Clamping range with fingers	D2	mm	100		142		190	254	
	E	mm	172		225		275	350	
	F	mm	104.8	133.4	133.4	171.4	171.4	171.4	235
	G		M10	M12	M12	M16	M16	M16	M20
	G1		M28 x 1.5		M28 x 1.5		M28 x 1.5	M28 x 1.5	
	G2		M14 x 1.0		M14 x 1.0		M14 x 1.0	M14 x 1.0	
Jaw height	H	mm	52		62		64	64	
	J	mm	6		6		6	6	
	K	mm	40		48		48	50	
	M	mm	61.4		61.9		61.9	65.9	
	N	mm	185		185		185	185	
Piston stroke	S	mm	1.0		1.5		1.5	1.5	
Axial stroke swing clamps	S1	mm	16		16		16	16	
	T	mm	18		10		10	8	
	U	mm	28		20		20	18	
	V	mm	51		43		43	41	
Jaw stroke at distance H		mm	1.0		1.1		1.2	0.87	
Draw pull min. / max.*	FD	kN	0 - 20		0 - 25		0 - 25	0 - 25	
Draw push for chuck open	FC	kN	15		30		30	20	
Draw pull swing clamps max.	FB	kN	6		9		9	18	
Draw push swing clamps open	FA	kN	2		2		2	2	
Moment of inertia		$kg \cdot m^2$	0.16		0.45		0.75	2.26	
Weight without top tooling		kg	30		44		60	109	
Recommended actuating cylinder		Type	**ZHVD-DFR**		**ZHVD-DFR**		**ZHVD-DFR**	**ZHVD-DFR**	

* Additional draw pull to the diaphragme force actuated by the actuating cylinder.
** aws type A

Advice: The max. allowed speed for the application is permanently marked on the corresponding top jaws and must not be exceeded.

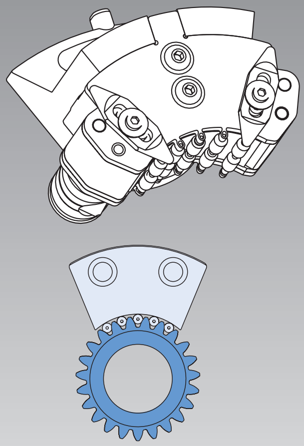
Important: Never rotate the chuck without inserted jaws, otherwise the centrifugal force compensation mechanism will get damaged.

Jaws Type A



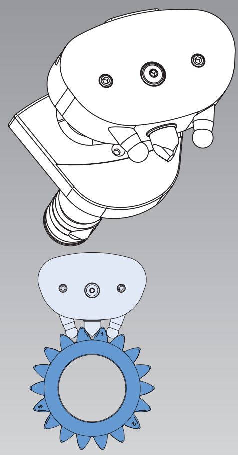
External clamping

Jaws Type B



Pitchline clamping with roller cage

Jaws Type C



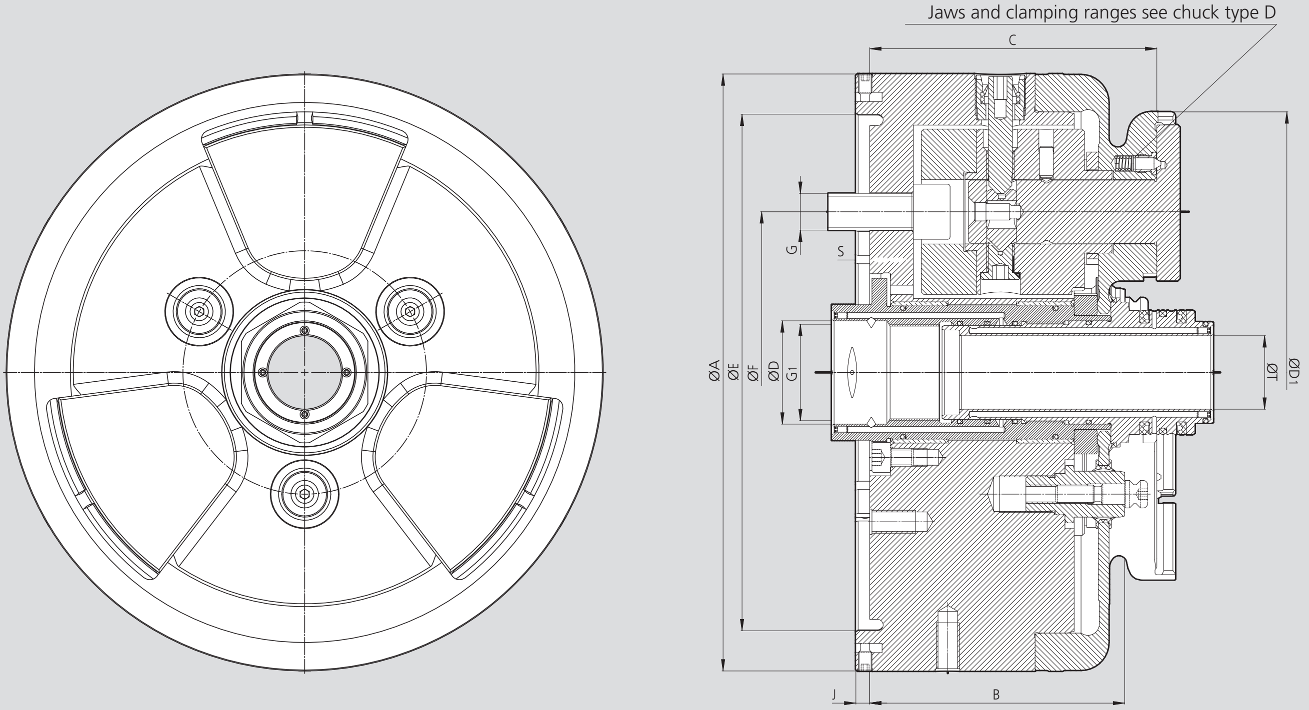
Pitchline clamping with clamping pin

D-PLUS

Diaphragm chuck
QUICK JAW CHANGE SYSTEMS

Open center diaphragm chuck

■ Main dimensions and technical data



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

SMW-AUTOBLOK Type			D-PLUS 260	D-PLUS 315
Mounting		**Size**	**225**	**275**
	A	mm	260	315
	B	mm	111	111
	C	mm	125	125
	D1	mm	227	275
	E	mm	225	275
	F	mm	140	171.4
	G		M16	M16
	G1		M42 x 1.5	M60 x 1.5
	J	mm	6	6
	P H6	mm	45	63
Piston stroke	**S**	mm	1.5	1.5
Through-hole	**T**	mm	32	50
Draw pull min. / max.*	**F1**	kN	0-25	0-30
Draw push for chuck open	**F2**	kN	25	30
Moment of inertia		$kg \cdot m^2$	0.45	0.75
Weight without top tooling		kg	44	65
Recommended actuating cylinders		**Type**	**SIN-DFR**	**SIN-DFR**

* Additional actuation force to the diaphragm spring clamping force applied by the clamping cylinder.

Advice: The max. allowed speed for the application is permanently marked on the corresponding top jaws and must not be exceeded.

Advice: Please note, that it is important, that the cylinder force for pushing and pulling can be set to different values independently!

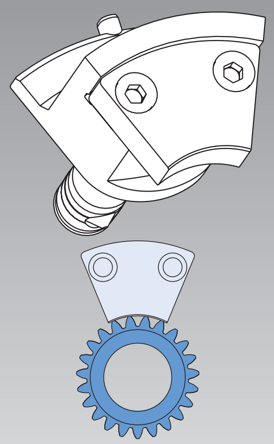
Important: Never rotate the chuck without inserted jaws, otherwise the centrifugal force compensation mechanism will get damaged.

- Radial O.D. or pitch line clamping
- With central bore
- Centrifugal force compensation

D-PLUS

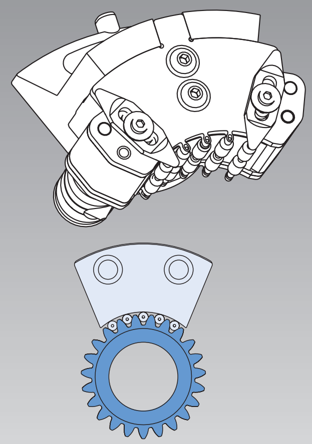
Diaphragm chuck
QUICK JAW CHANGE SYSTEMS

Jaws — Type A



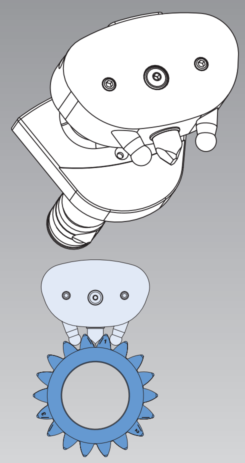
External clamping

Jaws — Type B



Pitchline clamping with roller cage

Jaws — Type C



Pitchline clamping with clamping pin

D-VARIO

Diaphragm chuck
FLEXIBLE MODULAR SYSTEM

■ Main dimensions and technical data

Application/customer benefits

- Flexible solution for grinding with quick adjustment for short set up times

Technical features

- Adjustable, modular jaw system for clamping different workpieces with the same jaws
- Key Lock System for quick positioning of the pitch of different workpieces
- Micrometer fine adjustment of the center line
- For small, medium and large batch sizes
- Workstop with medium feed for air sensing and integrated coolant nozzles optional
- Jaws for O.D. clamping (Type A) optional
- D-VARIO Configurator: Free application to configurate your set up (www.smw-autoblok.de/qr/vario)

Standard equipment

Diaphragm chuck D-VARIO (with mounting bolts)

Optional accessories in the modular system:

Pitch line clamping

- 6 different jaw sets for different outside diameters
- Key Lock System for different pitches of gears (see figure A, B and C)
- Clamping pins for different modules (Dia. of ball Ø 3.0 mm to 6.0 mm)
- Locators

O.D. clamping (Type A)

- 6 different jaw blanks for different outside diameters
- Factory finished jaws
- Locators

D-VARIO Configurator Software:

- Safe and quick configuration of all set ups for different gears
- Web-APP: from anywhere with any device feasible (internet access needed)
- Data export possible

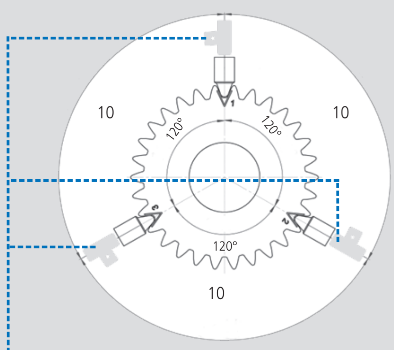
With this free of charge D-VARIO configurator a complete top jaw and the corresponding locator with the locator pins can be configured for your gears.

The export function allows you to safe your results on your PC.

Start Web-App: **www.smw-autoblok.de/qr/dvario**

A: Number of teeth is divisible by 3

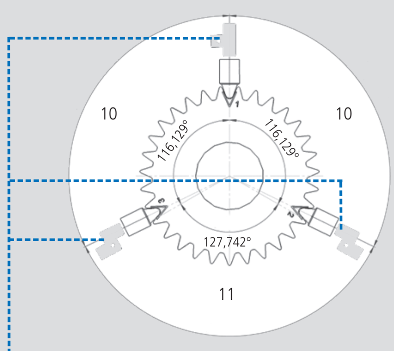
Example of application:
gear with number of teeth [z] = 30



▶ Specification of Key Lock System:
3x Key straight

B: Number of teeth is not divisible by 3

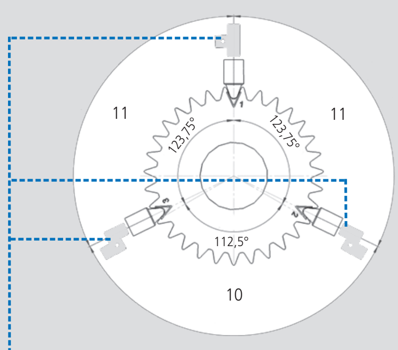
Example of application:
gear with number of teeth [z] = 31



▶ Specification of Key Lock System:
1x Key straight,
2x Key for number of teeth 31

C: Number of teeth is not divisible by 3

Example of application:
gear with number of teeth [z] = 32



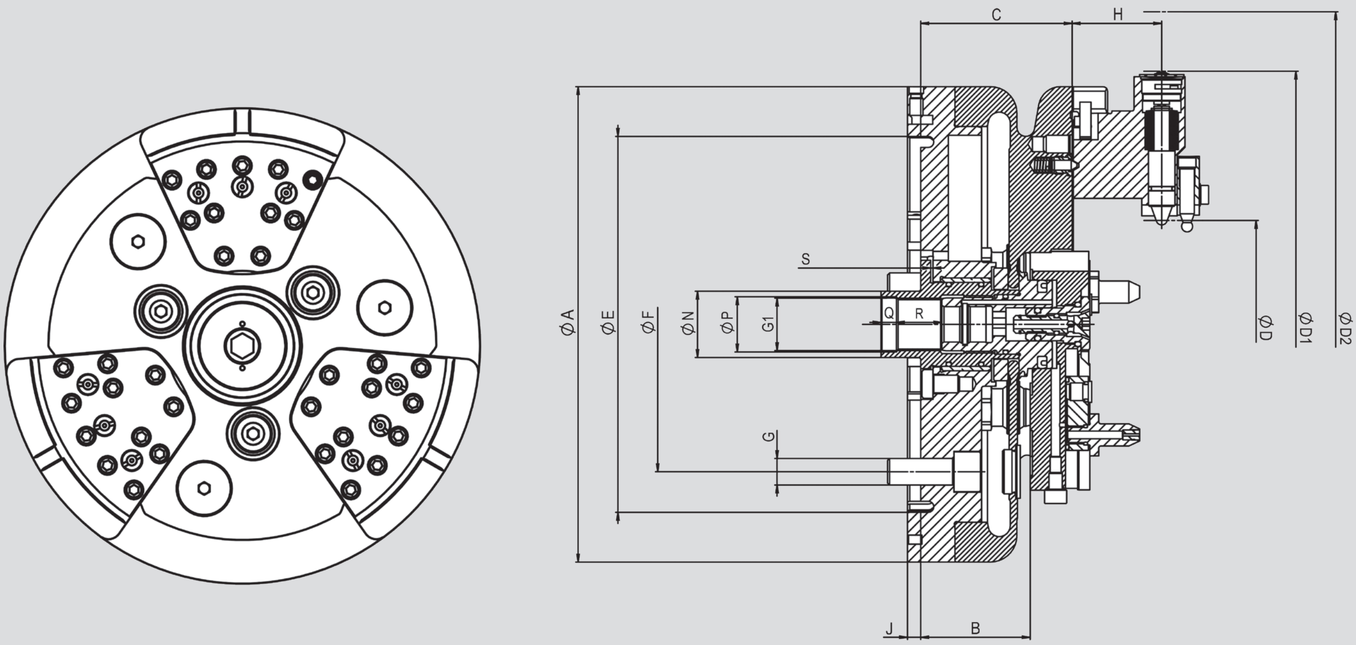
▶ Specification of Key Lock System:
1x Key straight,
2x Key for number of teeth 32

D-VARIO

Diaphragm chuck
FLEXIBLE MODULAR SYSTEM

■ Main dimensions and technical data

Top jaws and locator base are optional.



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

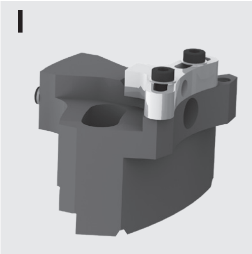
SMW-AUTOBLOK Type			D-VARIO 215
Mounting			**Z170**
Id. No.			069100
	A	mm	215
Locating face for locator	**B**	mm	49.5
	C	mm	68.5
Clamping range min. / max.	**D**	mm	24 - 144
Swing min.	**D1**	mm	215
Swing max.	**D2**	mm	264
	E	mm	170
	F	mm	133.4
	G		M12
	G1		M24 x 1.5
Jaw height	**H**	mm	40.5
	J	mm	6
	P H8	mm	25
	Q	mm	7
	R	mm	20
Piston stroke	**S**	mm	1.0
Jaw stroke at distance H		mm	0.95
Draw pull min. / max.*		kN	0 - 15
Draw push for chuck open		kN	15
Moment of inertia		kg·m²	0.082
Weight without top jaws		kg	12.2
Recommended actuating cylinders		**Type**	**SIN-DFR**

* Additional draw pull to the diaphragme force actuated by the actuating cylinder.

Advice: Please note: It is important, that the cylinder force for pushing and pulling can be set to different values independently.

Configuration of the set up for pitch line clamping within only 5 steps:

I



At first you need to choose your matching top jaw (size 1 - 6) for the outside diameter [da] of the gear to be machined. Each size of top jaw can cover 20 mm outside diameter using two different types of clamping pins (Type A and B).
One set of top jaw consists of 3 pieces including 1 straight key lock insert.

II

The determination of the spherical clamping pins is made according to the ball dimension of the gear.
There are 2 types of clamping pins:
Type A for the first 10 mm of the clamping range of the top jaws.
Type B for the second 10 mm of the clamping range of the top jaws.

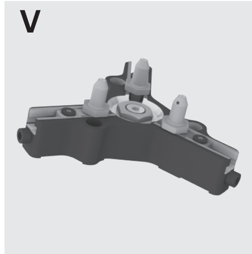
III

Optionally prelocator pins are available. Prelocator pins are used at automatic loading.
The determination is made according to the clamping pins used.

IV

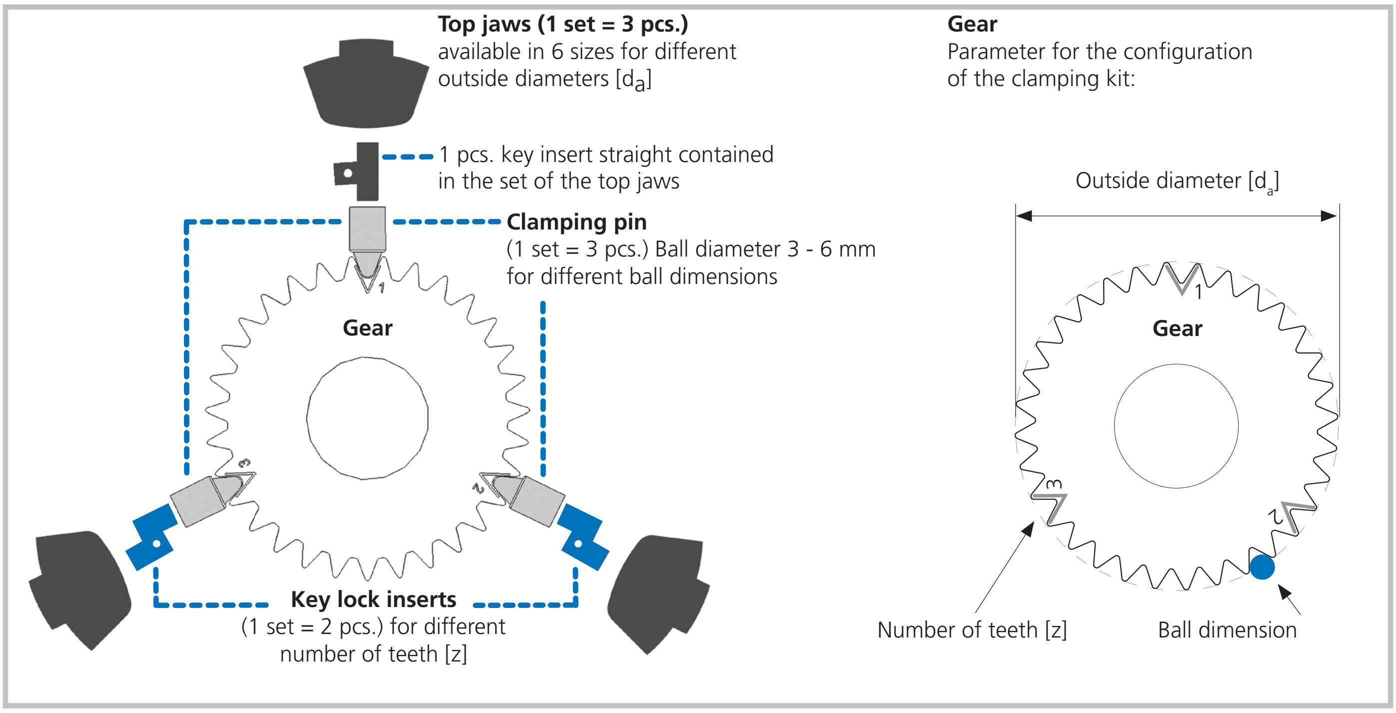
One set of Key Lock insert consists of 2 keys. Gears, which number of teeth that is divisible by 3 can be machined with 3 of the same type Key Lock insert (straight).
For all gears, which number of teeth is not divisible by 3, there are different key insert sets available according to the number of teeth. The Key Lock inserts are the same for all 6 sizes of top jaws.

V



The following types of locator bases are available:
Type A: Without air sensing / without nozzle for coolant
Type B: Without air sensing / with nozzle for coolant
Type C: With air sensing / with nozzle for coolant
The height of the locator posts is depending on the gear.

Overview of the clamping kit:



D-Vario Configurator

free application to configurate your set up

www.smw-autoblok.de

I. Determination of the top jaws

Top Jaws	Size	1	2	3	4	5	6
Outside diameter of gear d_a	mm	**24 - 44**	**44 - 64**	**64 - 84**	**84 - 104**	**104 - 124**	**124 - 144**
Number of teeth z	number	16 - 37	14 - 44	13 - 86	13 - 86	13 - 86	13 - 86
Inside clearance diameter of jaws	mm	48	68	88	108	128	148
Swing diameter	mm	164	184	204	224	244	264
Weight / set	kg	2.9	3.0	3.0	3.1	3.1	3.1
Order number (set of 3 pieces)	Id. No.	**630741**	**630742**	**630743**	**630744**	**630745**	**630746**

Clamping pin Type		A	B	A	B	A	B	A	B	A	B	A	B
Clamping range	mm	24 - 34	34 - 44	44 - 54	54 - 64	64 - 74	74 - 84	84 - 94	94 - 104	104 - 114	114 - 124	124 - 134	134 - 144

II. / III. Determination of the clamping pins (and optional prelocator pins)

Clamping pin type	Set	Type A	Available prelocator pins	Type B	Available prelocator pins
Ball diameter Ø 3,0	Id. No.	**630851B**	339835	**630844B**	339843
Ball diameter Ø 3,5	Id. No.	**630852B**	339836	**630845B**	339844
Ball diameter Ø 4,0	Id. No.	**630853B**	339837	**630846B**	339845
Ball diameter Ø 4,5	Id. No.	**630854B**	339838	**630847B**	339846
Ball diameter Ø 5,0	Id. No.	**630855B**	339839	**630848B**	339847
Ball diameter Ø 5,5	Id. No.	**630856B**	339840	**630849B**	339848
Ball diameter Ø 6,0	Id. No.	**630857B**	339841	**630850B**	339849

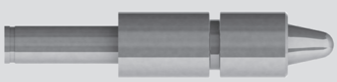
Clamping pins

Clamping pin type A

Ball diameter
Ø 3; 3,5; 4; 4,5; 5; 5,5; 6

Top jaw 1	**Ø 24 - 34 mm**
Top jaw 2	**Ø 44 - 54 mm**
Top jaw 3	**Ø 64 - 74 mm**
Top jaw 4	**Ø 84 - 94 mm**
Top jaw 5	**Ø 104 - 114 mm**
Top jaw 6	**Ø 124 - 134 mm**

Clamping pin type B



Ball diameter
Ø 3; 3,5; 4; 4,5; 5; 5,5; 6

Top jaw 1	**Ø 34 - 44 mm**
Top jaw 2	**Ø 54 - 64 mm**
Top jaw 3	**Ø 74 - 84 mm**
Top jaw 4	**Ø 94 - 104 mm**
Top jaw 5	**Ø 114 - 124 mm**
Top jaw 6	**Ø 134 - 144 mm**

▸ **Clamping pin type A**
For the first 10 mm of the clamping range of the top jaws.

▸ **Clamping pin type B**
For the second 10 mm of the clamping range of the top jaws.

▸ **Compatibility**
All types and sizes of clamping pins are compatible to all top jaws.

IV. Key Lock inserts for different number of teeth of gears

Id. No. Key Lock insert for gears which number of teeth is not divisible by 3 (1 set = 2 pieces)									
z = 10	**z = 11**	**z = 13**	**z = 14**	**z = 16**	**z = 17**	**z = 19**	**z = 20**	**z = 22**	**z = 23**
339911	339912	339913	339914	339915	339916	339917	339918	339919	339920
z = 25	**z = 26**	**z = 28**	**z = 29**	**z = 31**	**z = 32**	**z = 34**	**z = 35**	**z = 37**	**z = 38**
339921	339922	339923	339924	338725	339925	339926	339927	339928	339929
z = 40	**z = 41**	**z = 43**	**z = 44**	**z = 46**	**z = 47**	**z = 49**	**z = 50**	**z = 52**	**z = 53**
339930	339931	339932	339933	339934	339935	339936	339937	339938	339939
z = 55	**z = 56**	**z = 58**	**z = 59**	**z = 61**	**z = 62**	**z = 64**	**z = 65**	**z = 67**	**z = 68**
339940	339941	339942	339943	339944	339945	339946	339947	339948	339949
z = 70	**z = 71**	**z = 73**	**z = 74**	**z = 76**	**z = 77**	**z = 79**	**z = 80**	**z = 82**	**z = 83**
339950	339951	339952	339953	339954	339955	339956	339957	339958	339959
z = 85	**z = 86**								
339960	339961								

Id. No. Key Lock insert for gears which number of teeth is divisible by 3 (1 set = 2 pieces)									
straight									
338724									

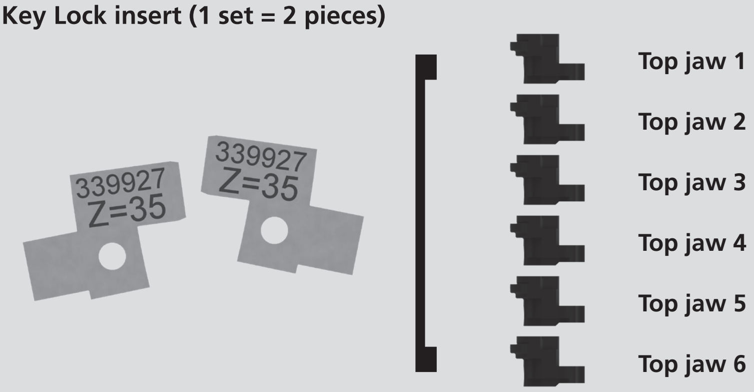
Order Example:

Gear with number of teeth 32 ► not divisible by 3 ► Id. No. 339925 (1 set = 2 pieces)

Gear with number of teeth 33 ► divisible by 3 ► Id. No. 338724 (1 set = 2 pieces)

1 straight Key Lock that comes with the jaws always remains in use.

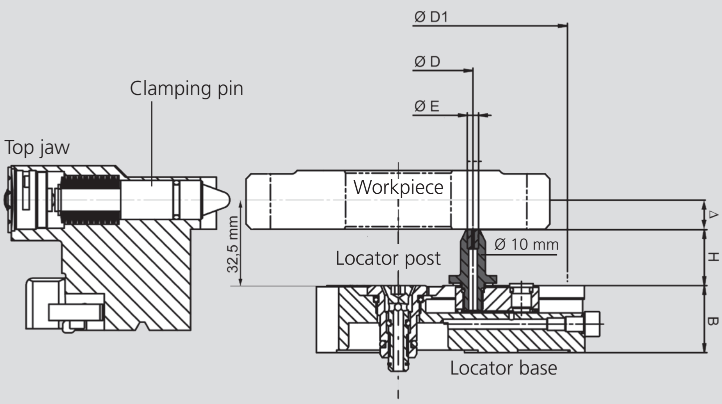
Key Lock insert (1 set = 2 pieces)

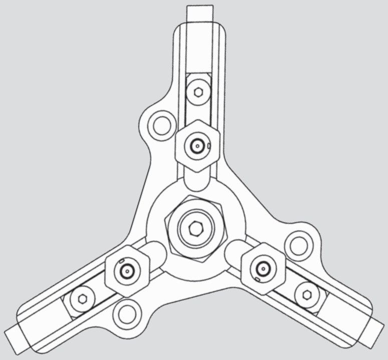


► **Compatibility**
All Key Lock inserts are compatible to all top jaws.

V. Locator base

Locator base





Determination of height of locator posts:
Δ = Distance between clamping position and locating face
Height of locator posts [H] = 32.5 mm - Δ

Clamping position = 1/2 serration length / at longer serrations it is the requested clamping position.
In case the lowest face is not the locating face, please ask our customer service.

Locator base			Type A	Type B	Type C
Medium feed for air sensing			-	-	X
Noozle for coolant			-	X	X
Locating diameter min.	**D**	min.	22	47	47
Locating diameter max.	**D1**	max.	136	136	136
Width	**B**	mm	27	27	27
Order Number		Id. No.	339860	339859	339858

Locator posts with contact face diameter [E] = Ø 2.5 mm	
Height [H] = 12.5 mm	339861
Height [H] = 15.0 mm	339862
Height [H] = 17.5 mm	339863
Height [H] = 20.0 mm	339864
Height [H] = 22.5 mm	339865
Height [H] = 25.0 mm	339866
Height [H] = 27.5 mm	339867
Height [H] = 30.0 mm	339868
Height [H] = 32.5 mm	339869
Height [H] = 35.0 mm	339870
Height [H] = 37.5 mm	339871
Height [H] = 40.0 mm	339872
Height [H] = 42.5 mm	339873
Height [H] = 45.0 mm	339874
Height [H] = 47.5 mm	339875
Height [H] = 50.0 mm	339876

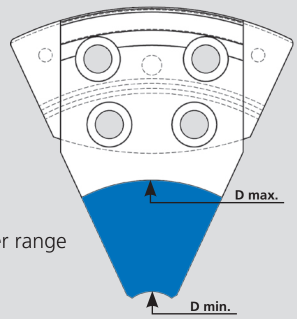
Id No. is for one set (= 3 pieces)

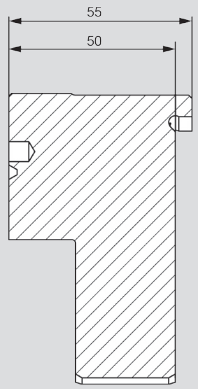
Locator posts with contact face diameter [E] = Ø 4.5 mm	
Height [H] = 12.5 mm	339877
Height [H] = 15.0 mm	339878
Height [H] = 17.5 mm	339879
Height [H] = 20.0 mm	339880
Height [H] = 22.5 mm	339881
Height [H] = 25.0 mm	339882
Height [H] = 27.5 mm	339883
Height [H] = 30.0 mm	339884
Height [H] = 32.5 mm	339885
Height [H] = 35.0 mm	339886
Height [H] = 37.5 mm	339887
Height [H] = 40.0 mm	339888
Height [H] = 42.5 mm	339889
Height [H] = 45.0 mm	339890
Height [H] = 47.5 mm	339891
Height [H] = 50.0 mm	339892

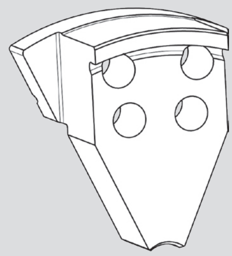
Id No. is for one set (= 3 pieces)

Jaws type A

Clamping diameter range



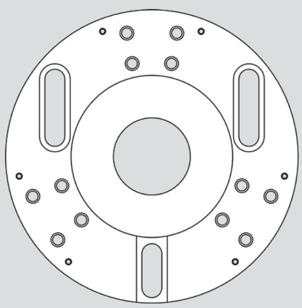


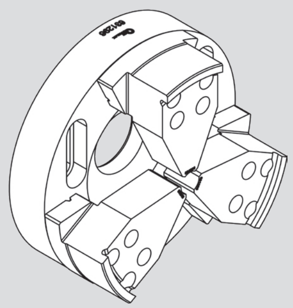


Jaws type A		1	2	3	4	5	6
Clamping Range Ø D min. - D max.	mm	20 - 40	40 - 60	60 - 80	80 - 100	100 - 120	120 - 140
Weight / set	kg	1.1	1.1	1.0	1.0	1.0	0.8
Blank jaws (set of 3 pieces)	Id. No.	631484		631485		631486	631487
Jaws factory finished* (set of 3 pieces)	Id. No.	631488	631489	631490	631491	631492	631493

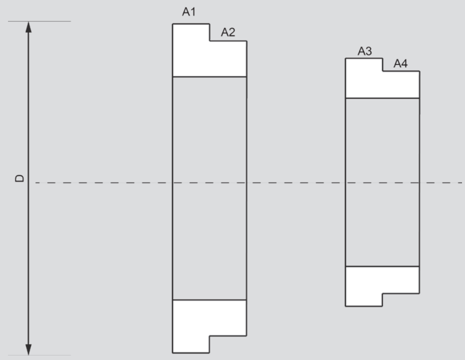
* Jaws are factory finished according to the specified clamping diameter.
Note: The clamping diameter must be specified in case of order.

Device





Grinding rings (1 Set = 2 pieces)



Device for machining of the blank jaws type A	
Jaws type A sizes 1 - 6	631296

The device is needed to pre-machine the blank jaws type A. Then, the jaws must be finish ground to the clamping diameter on the D-VARIO chuck. For this operation, the jaws have to be clamped with the grinding rings.

Recommended grinding rings (1 set = 2 pieces)	
Jaws type A sizes 1 - 6	631309

Grinding data:

1. Grinding	A1	D = 177.0 mm	residual jaw stroke 0.25 mm
2. Grinding	A2	D = 176.9 mm	residual jaw stroke 0.20 mm
3. Grinding	A3	D = 176.8 mm	residual jaw stroke 0.15 mm
4. Grinding	A4	D = 176.7 mm	residual jaw stroke 0.10 mm

The clamping diameter A1 is used for the first finish grinding process. The smaller clamping diameter of the grinding rings (A2-A4) are used to regrind worn or damaged existing jaws.

Face drivers

High precision face drivers
for machining between center pins

- Machining of the entire surface of the workpiece with one single operation
- Power operated
- Highest run-out accuracy

FDG

Face drivers for grinding between center pins

■ Power operated on the side of the spindle

Application/cutomers benefits

- Machining of the entire surface of the workpiece in one single operation
- For the machining of the surface of soft and hardened workpieces
- Center pin with carbide insert for highest running accuracy

Technical features

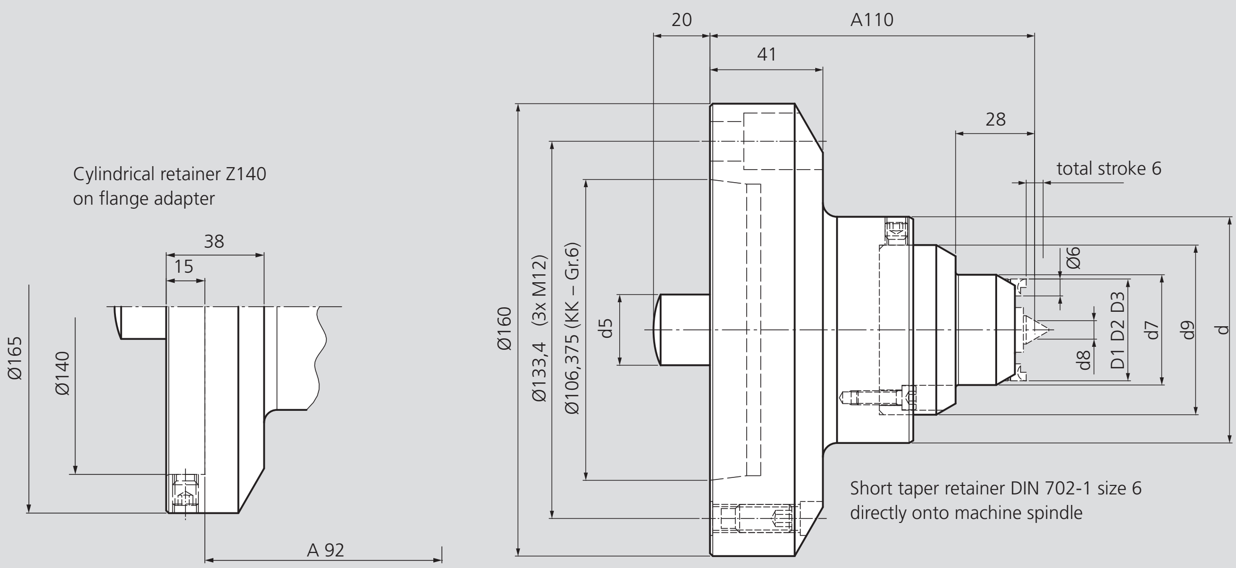
- Highest run-out accuracy < 0.003 mm
- Compensating drive elements
- Retractable drive pins in case of on- or off-loading
- Fine adjustment at face drivers for highest run-out requirements

Standard euipment

Face driver FDG
without changeable parts

Ordering example

Pneumatic pancake cylinder CPG-FDG
Id. No. 045891



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

Technical Data

Id. No. Z140	Id. No. KK Gr. 6	Type	d	Center Ø	d5	d7	d8	d9	Clamping-Ø		
									D1	D2	D3
204869	204876	FDG 0	65	1 - 3	18	16	1,5	48	6	9	15
204870	204877	FDG 1	65	1 - 5	18	18	3	48	8	11	17
204871	204878	FDG 2	65	2 - 6.5	18	21	4.25	48	11	14	20
204872	204879	FDG 3	65	4 - 8.5	18	25	6.25	48	15	18	24
204873	204880	FDG 4	77	4 - 9	25	38	6.5	60	27	30	36
204874	204881	FDG 5	85	6 - 11	25	46	8.5	68	35	38	44
204875	204882	FDG 6	110	10 - 15	25	62	12.5	85	50	53	59

Face drivers with morse taper retainer according to DIN 228 available on request.

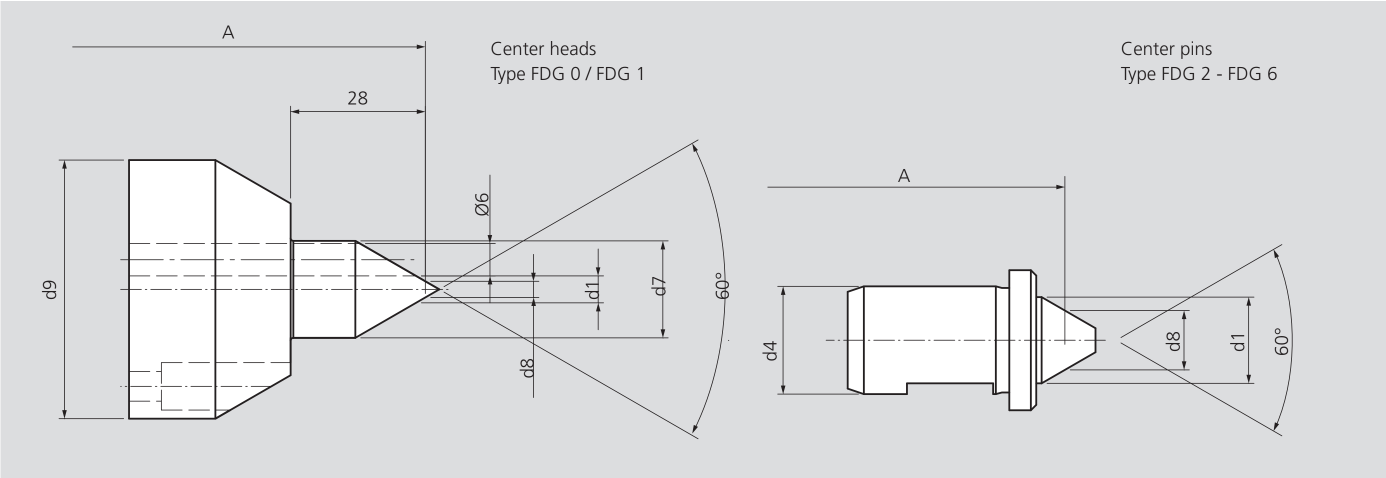
Note **Pancake cylinder CPG for the pneumatic actuation of face drivers FDG available.**

Center heads / Center pins

Application/customer benefits

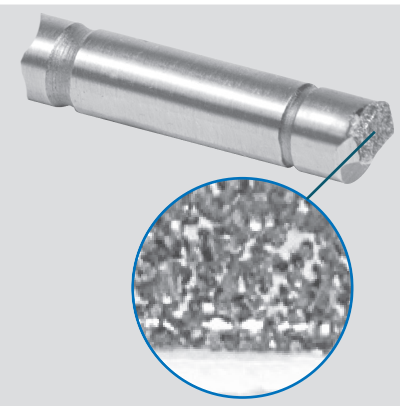
- Center pin with carbide insert
- Maximum rigidity
- Highest change accuracy
- Fixed safely via set screw and plane surface inside the face driver

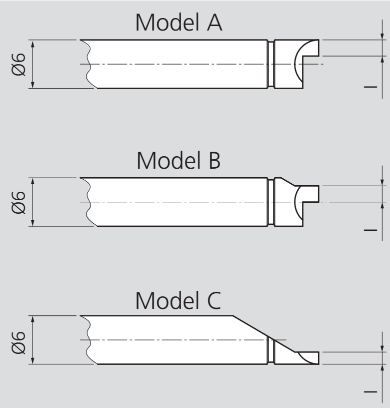
Center heads Type FDG 0 and FDG 1 60° center with carbide coating.
Center pins Type FDG 2 to FDG 6 carbide design.

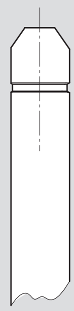


Id.-No. Center pin	Type	d1	d4	Center Ø	d7	d8	d9
204883	FDG 0	3	-	1 - 3	18	1.5	48
204884	FDG 1	5	-	1 - 5	20	3	48
204885	FDG 2	7.8	6	2 - 6.5	-	4.25	-
204886	FDG 3	9.8	8	4 - 8.5	-	6.25	-
204887	FDG 4	10	14	4 - 9	-	6.5	-
204888	FDG 5	12	18	6 - 11	-	8.5	-
204889	FDG 6	16	20	10 - 15	-	12.5	-

Drive pins with diamond coating







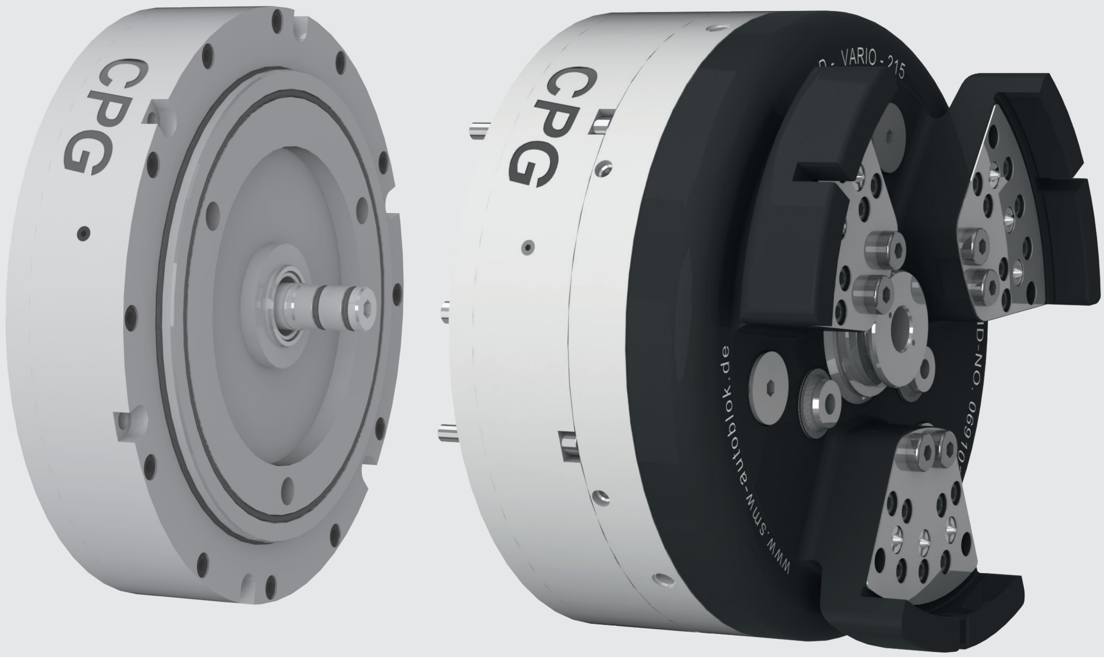
Drive pins
diamond

Id. No. drive pin	Type	Clamping diameter	l	Model
204890	diamond	D1	1.5	C
204891	diamond	D2	3	B
204892	diamond	D3	3	A

Further dimensions on request.

- Drive pins for torque transmission onto the workpiece
- Drive pins with diamond coating
- High frictional coefficient

Clamping diameter D1 / D2 / D3 see technical data.



Example: CPG with D-VARIO diaphragm chuck

Pancake cylinders

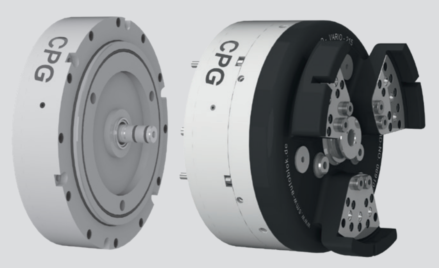
Pneumatic pancake cylinder
for diaphragm chuck D-VARIO and face driver FDG

- Easy installation for grinding and turning machines without hydraulic unit
- Operating pressure 2 - 8 bar
- Medium feed for air / coolant

Pneumatic pancake cylinder D-VARIO / FDG

CPG

- Pneumatic actuation (2 - 8 bar)
- Easy installation for grinding and turning machines



Application example:
CPG with D-VARIO diaphragm chuck

Application/customer benefits

- For the actuation of diaphragm chuck D-VARIO and face driver FDG
- Easy installation for grinding and turning machines without hydraulic unit
- Compact design

Technical features

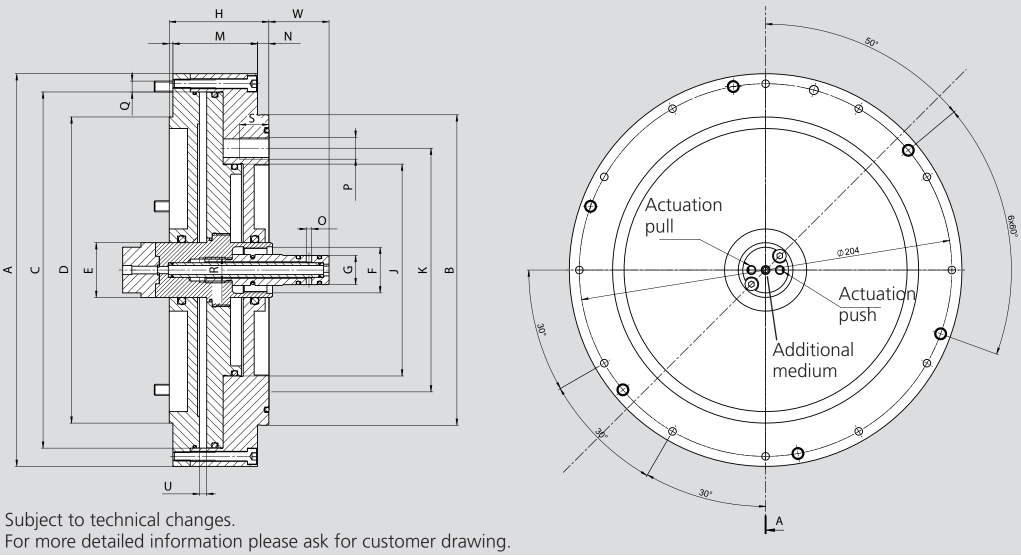
- Operating pressure 2-8 bar
- Maximum axial piston force push 21 kN and pull 7 kN
- 1 additional medium feed for air / coolant
- Air service unit with water separator and oil feed necessary
- Air feed tube necessary

Standard equipment

Pneumatic pancake cylinder
(without air feed tube)

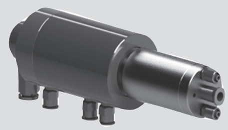
Odering example

Version D-VARIO Id.No. 045863
Version FDG Id.No. 045891
APFL3 Id.No. 5302595



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

Accessory



APFL3 Air feed tube

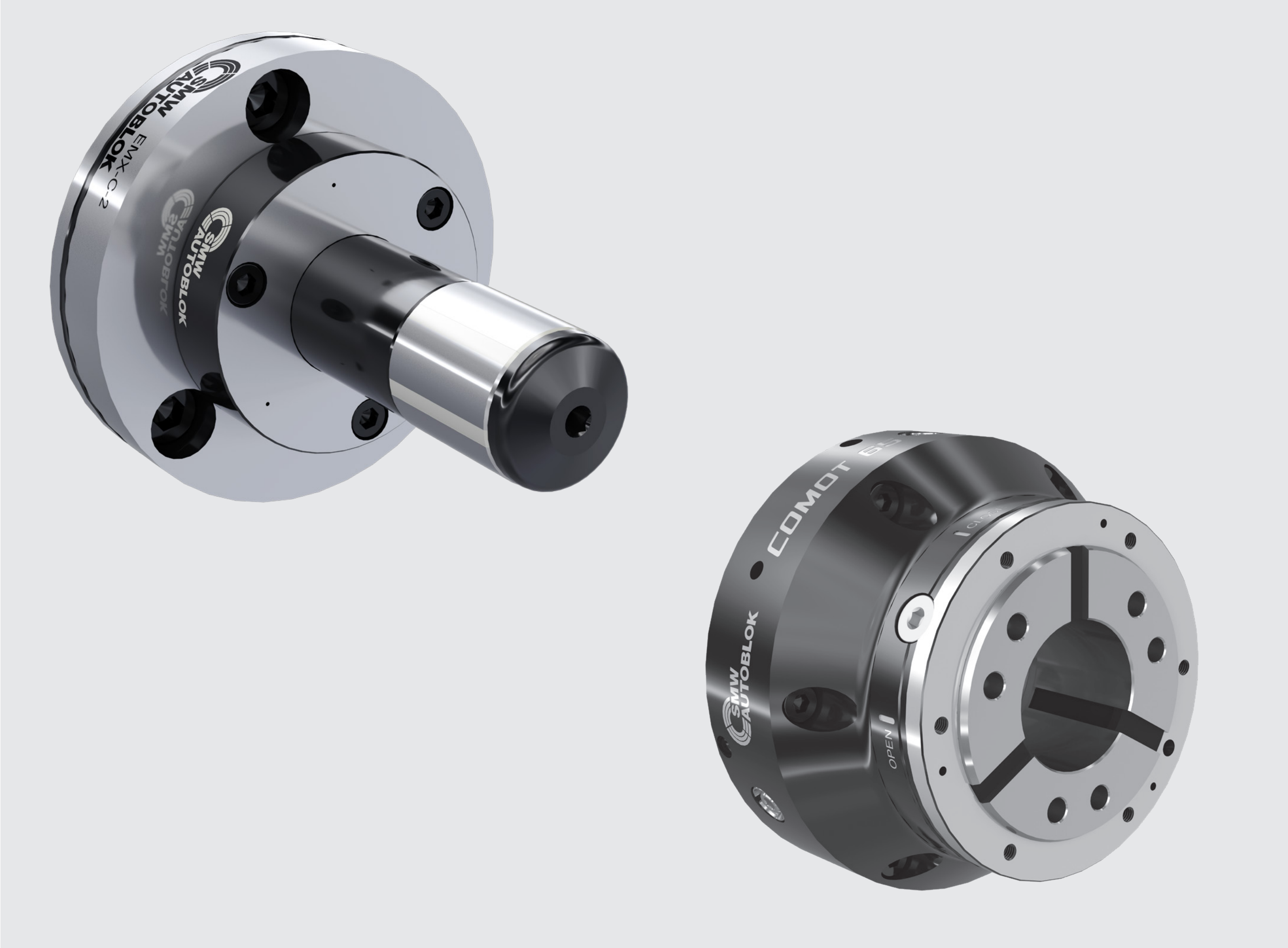
3 Connections:
1x Actuation „push“
1x Actuation „pull“
1x Additional medium channel for air / coolant

Id. No. 5302595

Technical Data

SMW-AUTOBLOK Type			CPG 215
	A	mm	215
	B	mm	170
	C	mm	195
	D	mm	167.6
	E	mm	30
	F	mm	M25 x 1.5
	G	mm	16
	H	mm	54.5
	J	mm	116
	K	mm	133.4
	L	mm	2
	M	mm	46.3
	N	mm	6.2
	O	mm	3
	P	mm	3 x M12 x 120°
	Q	mm	M6
	R	mm	M14
	S	mm	16
Piston stroke	U	mm	4
Axial force 6 bar (pull)		kN	5
Axial force at 6 bar (push)		kN	16
Moment of inertia		kg·m²	0.09
Max. speed		r.p.m.	2.500
Piston area (piston pull)		cm²	98
Piston area (piston push)		cm²	291
Operating pressure (**)		bar	2 - 8
Weight		kg	11.1

(*) Version FDG contains reducing fl ange Z140. Total stroke max. 4 mm.
(**) Operating pressure for opening the D-VARIO chuck min. 6 bar



I.D. Clamping

Sleeve mandrels Ø 15 - 132 mm
Collet chucks Ø 4 - 100 mm

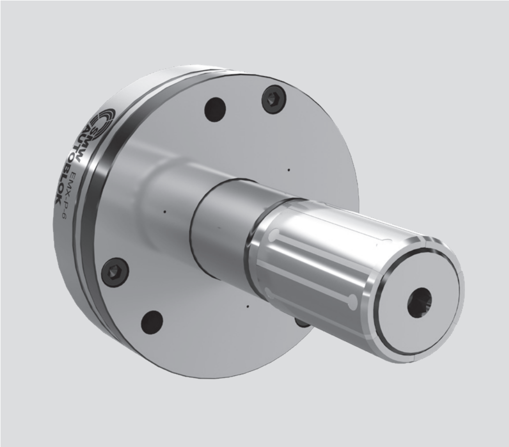
- For I.D. and O. D. clamping
- High precision
- Rigid design

EMX-P

Expanding mandrel
Power operated

Expanding mandrel Ø 14.7 - 131.7 mm

- Size 1 - 11
- Highest concentricity
- Air sensing



Application/customer benefits

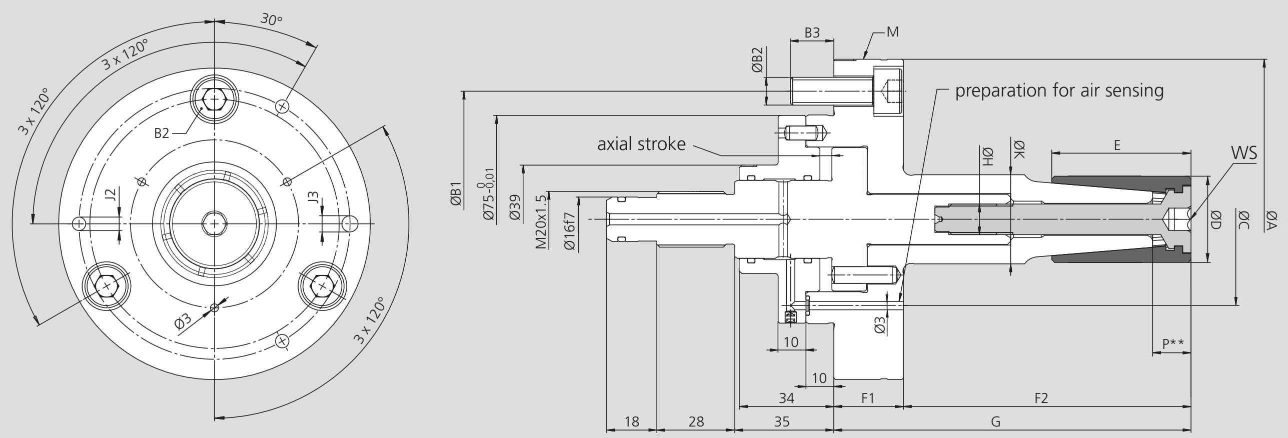
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission due to fixed arbor
- Axial pull down by axial movement of the clamping sleeve during actuation
- Quick set-up

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 range**	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		75	85	96	105	115	115	151	157	191	217	244
G		100	110	121	130	140	140	176	182	216	242	269
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	25.2
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	20	28	60	70	100	150	170	210	320	400	570
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 dimension of clamping sleeve.

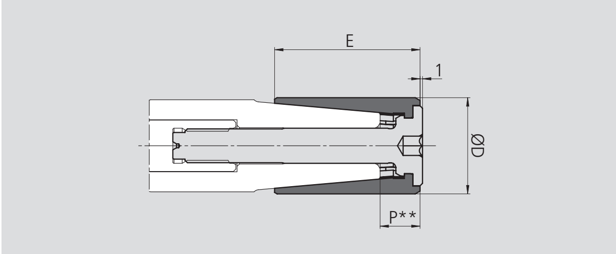
** Clamping on area P only is not allowed.

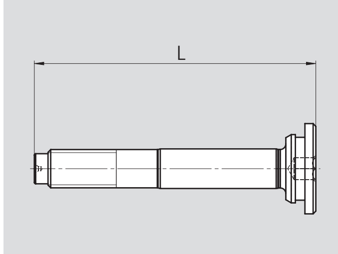
Expanding mandrel Ø 14.7 - 131.7 mm

EMX-P

Expanding mandrel
Power operated

■ Ordering review





Basic mandel							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	9310002000	75.5
			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	9320002000	80
			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	9330002000	86.5
			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	9340002000	92
			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	9350002000	102
			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	9360002000	102
			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	9370002000	116
			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	9380002000	126
			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	9390002000	136
			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.

Chapter 6

EMX-P

Expanding mandrel
Power operated

Expanding mandrel Ø 14.7 - 131.7 mm

■ 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	9300002000	164
			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		
			100.7	122	1	21.7	9301007		
EMX-P-11	9310010	101.7 - 131.7	101.7	140	1	26.2	9311017	9310002010	182
			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

Chapter 6

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

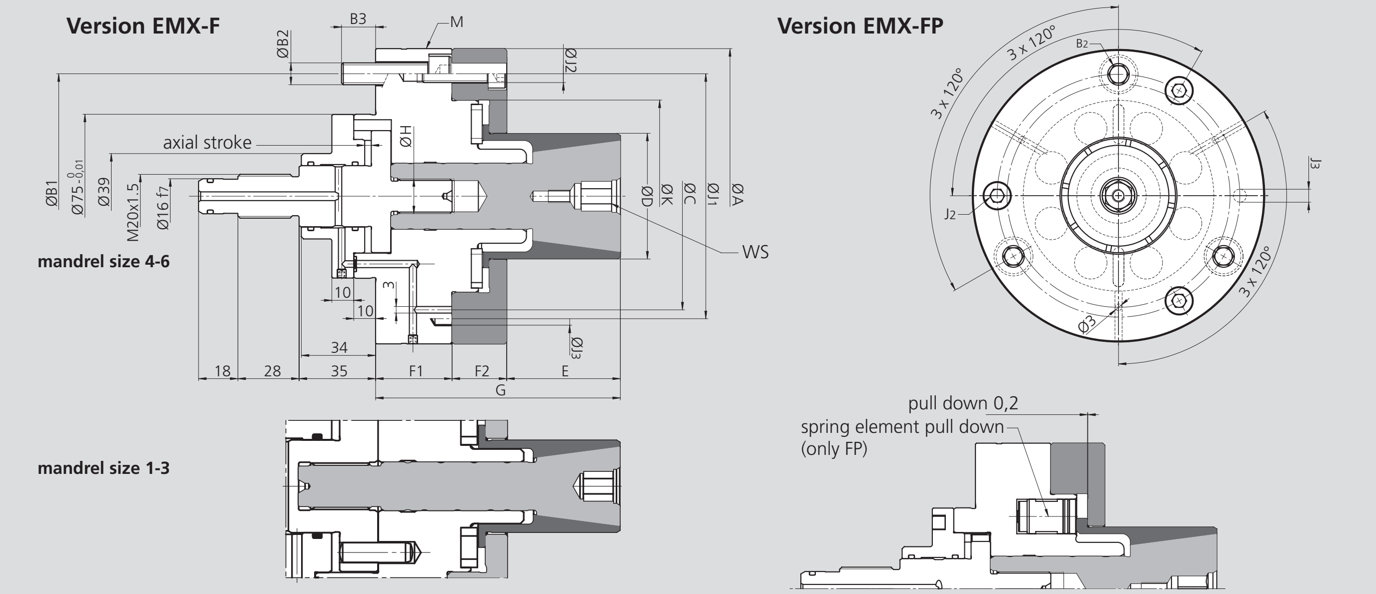
- For turning, milling, grinding and gear cutting operations
- High accuracy and torque transmission
- Clamping of very short workpieces on the front section of the sleeve possible
- FP: With axial pull down for best face run out

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

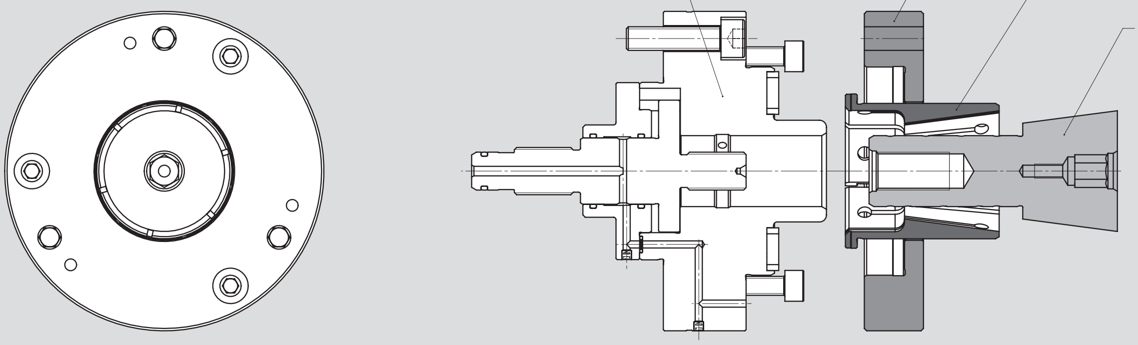
Technical data

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		1 / 2 / 3	1 / 2 / 3	1 / 2 / 3	1 / 2 / 3	1 / 2 / 3	1 / 2 / 3 / 4
in Nm*		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	CSN	200	200	250	250	250	250
	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	Segment sleeve*	
without pull-down				with pull-down			F / FP		
Type	Id. No.	clamping range	sleeve expansion Ø	Type	Id. No.	Id. No.	Id. No.	Id.-No.	ØD
EMX-F-1	9110000	19.7 - 30.3	0.6	EMX-FP-1	9210000	9112016	9113021 / 9213021	9110197	19.7
								9110202	20.2
							9113022 / 9213022	9110207	20.7
								9110212	21.2
							9113023 / 9213023	9110217	21.7
								9110222	22.2
							9113024 / 9213024	9110227	22.7
						9112020		9110232	23.2
							9113025 / 9213025	9110237	23.7
								9110242	24.2
							9113026 / 9213026	9110247	24.7
								9110252	25.2
							9113027 / 9213027	9110257	25.7
								9110262	26.2
						9112023	9113028 / 9213028	9110267	26.7
								9110272	27.2
							9113029 / 9213029	9110277	27.7
								9110282	28.2
							9113030 / 9213030	9110287	28.7
								9110292	29.2
							9113031 / 9213031	9110297	29.7
EMX-F-2	9120000	27.7 - 40.3	0.6	EMX-FP-2	9220000	9122024	9123029 / 9223029	9120277	27.7
								9120282	28.2
							9123030 / 9223030	9120287	28.7
								9120292	29.2
							9123031 / 9223031	9120297	29.7
								9120302	30.2
							9123032 / 9223032	9120307	30.7
								9120312	31.2
						9122028	9123033 / 9223033	9120317	31.7
								9120322	32.2
							9123034 / 9223034	9120327	32.7
								9120332	33.2
							9123035 / 9223035	9120337	33.7
								9120342	34.2
							9123036 / 9223036	9120347	34.7
								9120352	35.2
						9122032	9123037 / 9223037	9120357	35.7
								9120362	36.2
							9123038 / 9223038	9120367	36.7
								9120372	37.2
							9123039 / 9223039	9120377	37.7
								9120382	38.2
							9123040 / 9223040	9120387	38.7
								9120392	39.2
							9123041 / 9223041	9120397	39.7

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

Chapter 6

EMX-F/FP

Expanding mandrel
Power operated

Expanding mandrel Ø 19.7 - 132.9 mm

■ 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.	Id. No.	Id. No.	Id. No.	ØD
EMX-F-3	9130000	34.7 - 55.5	0.8	EMX-FP-3	9230000	9132030	9133037 / 9233037	9130347	34.7
								9130352	35.2
							9133038 / 9233038	9130357	35.7
								9130362	36.2
							9133039 / 9233039	9130367	36.7
								9130372	37.2
							9133040 / 9233040	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	9133044 / 9233044	9130412	41.2
								9130417	41.7
							9133045 / 9233045	9130422	42.2
								9130427	42.7
							9133046 / 9233046	9130432	43.2
								9130437	43.7
							9133047 / 9233047	9130442	44.2
								9130447	44.7
							9133048 / 9233048	9130452	45.2
								9130457	45.7
							9133049 / 9233049	9130462	46.2
								9130467	46.7
							9133050 / 9233050	9130472	47.2
								9130477	47.7
						9132044	9133051 / 9233051	9130482	48.2
								9130487	48.7
							9133052 / 9233052	9130492	49.2
								9130497	49.7
							9133053 / 9233053	9130502	50.2
								9130507	50.7
							9133054 / 9233054	9130512	51.2
								9130517	51.7
							9133055 / 9233055	9130522	52.2
								9130527	52.7
							9133056 / 9233056	9130532	53.2
								9130537	53.7
							9133057 / 9233057	9130542	54.2
								9130547	54.7
EMX-F-4	9140000	49.7 - 75.5	0.8	EMX-FP-4	9240000	9142044	9143052 / 9243052	9140497	49.7
								9140502	50.2
							9143053 / 9243053	9140507	50.7
								9140512	51.2
							9143054 / 9243054	9140517	51.7
								9140522	52.2
							9143055 / 9243055	9140527	52.7
								9140532	53.2
							9143056 / 9243056	9140537	53.7
								9140542	54.2
							9143057 / 9243057	9140547	54.7
								9140552	55.2
							9143058 / 9243058	9140557	55.7
								9140562	56.2
							9143059 / 9243059	9140567	56.7
								9140572	57.2
						9142051	9143060 / 9243060	9140577	57.7
								9140582	58.2
							9143061 / 9243061	9140587	58.7
								9140592	59.2
							9143062 / 9243062	9140597	59.7
								9140602	60.2
							9143063 / 9243063	9140607	60.7
								9140612	61.2
							9143064 / 9243064	9140617	61.7
								9140622	62.2
							9143065 / 9243065	9140627	62.7
								9140632	63.2
							9143066 / 9243066	9140637	63.7
								9140642	64.2
							9143067 / 9243067	9140647	64.7
								9140652	65.2
						9142060	9143068 / 9243068	9140657	65.7
								9140662	66.2
							9143069 / 9243069	9140667	66.7
								9140672	67.2
							9143070 / 9243070	9140677	67.7
								9140682	68.2
							9143071 / 9243071	9140687	68.7
								9140692	69.2
							9143072 / 9243072	9140697	69.7
								9140702	70.2
							9143073 / 9243073	9140707	70.7
								9140712	71.2
							9143074 / 9243074	9140717	71.7
								9140722	72.2
							9143075 / 9243075	9140727	72.7
								9140732	73.2
							9143076 / 9243076	9140737	73.7
								9140742	74.2
							9143077 / 9243077	9140747	74.7

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

Expanding mandrel Ø 19.7 - 132.9 mm

■ Ordering review

EMX-F/FP

Expanding mandrel
Power operated

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.	Id. No.	Id. No.	Id. No.	ØD
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
						9152071	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
						9152080	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
						9162092	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
						9162103	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
						9162114	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.

EMX-C

Segment sleeve mandrel
Power operated

Segment sleeve mandrel Ø 25 - 121 mm

- **Size 1 - 5**
- **Large expansibility**

Application/customer benefits

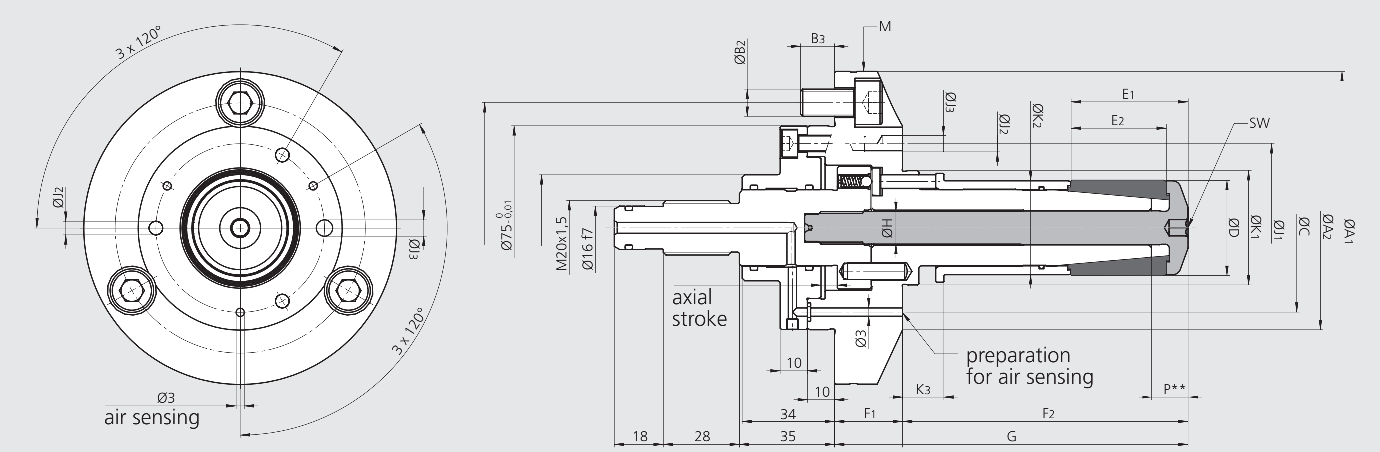
- Ideal for volume production and hard turning / grinding with wear resistant, case hardened and vulcanised clamping sleeves
- Highest accuracy and high torque transmission by means of fixed mandrel body
- Axial pull down by the axial clamping movement of the clamping sleeve = best face run out
- Clamping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

Standard equipment

Basic mandrel with draw bolt for power operation + actuating screw;
Mounting bolts



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° Ø 3	62	62	75	95	120
D Clamping range	25 - 37	35 - 53	49 - 70	66 - 95	90-120
E1	37	43	55	64	86
E2 Clamping length	30	35	45	50	70
F1	25	25	25	25	32
F2	94	105	131.5	150.7	185.5
G	119	130	156.5	175.7	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
P**	12.5	13.5	15.5	19.5	21.5
WS (hex)	WS5	WS6	WS10	WS12	WS14

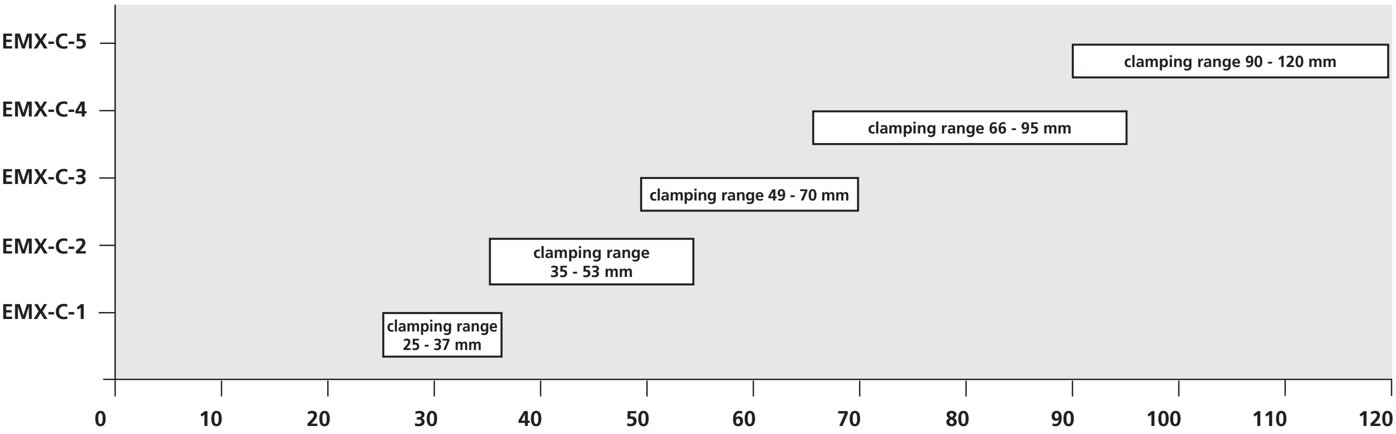
Technical data

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	36	74	120	281	467
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

All measurements in unclamped position = Right end position.

** Clamping on area P only is not allowed.

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*

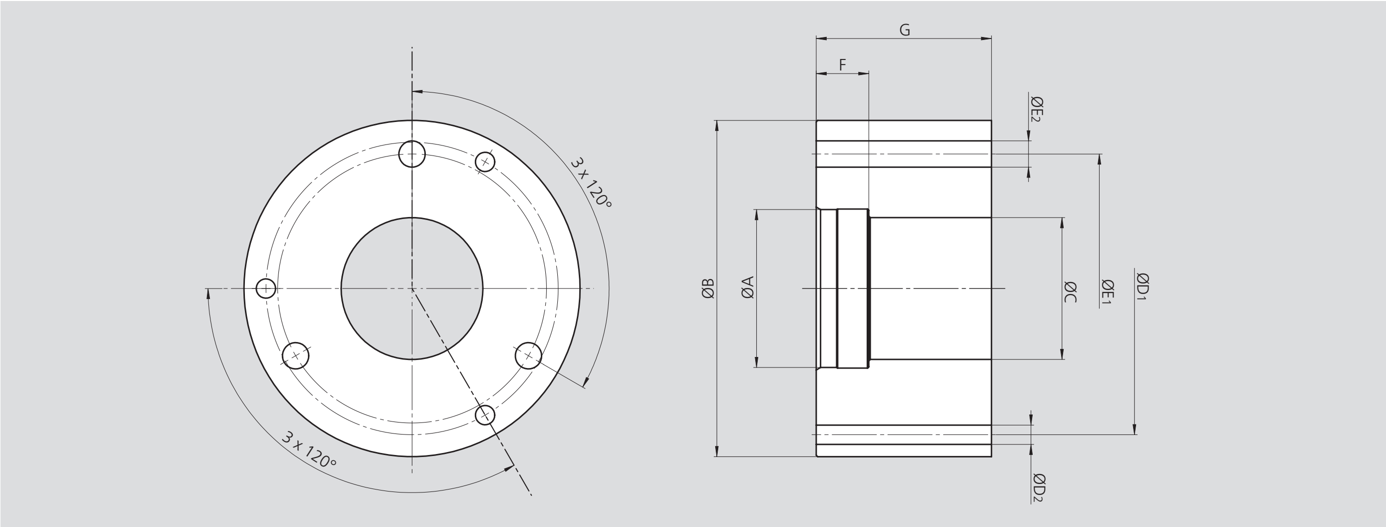
Ø	**90**	**91**	**92**	**93**	**94**	**95**	**96**	**97**	**98**	**99**	**100**	**101**	**102**
Id. No.	9450900	9450910	9450920	9450930	9450940	9450950	9450960	9450970	9450980	9450990	9451000	9451010	9451020
Ø	**103**	**104**	**105**	**106**	**107**	**108**	**109**	**110**	**111**	**112**	**113**	**114**	**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

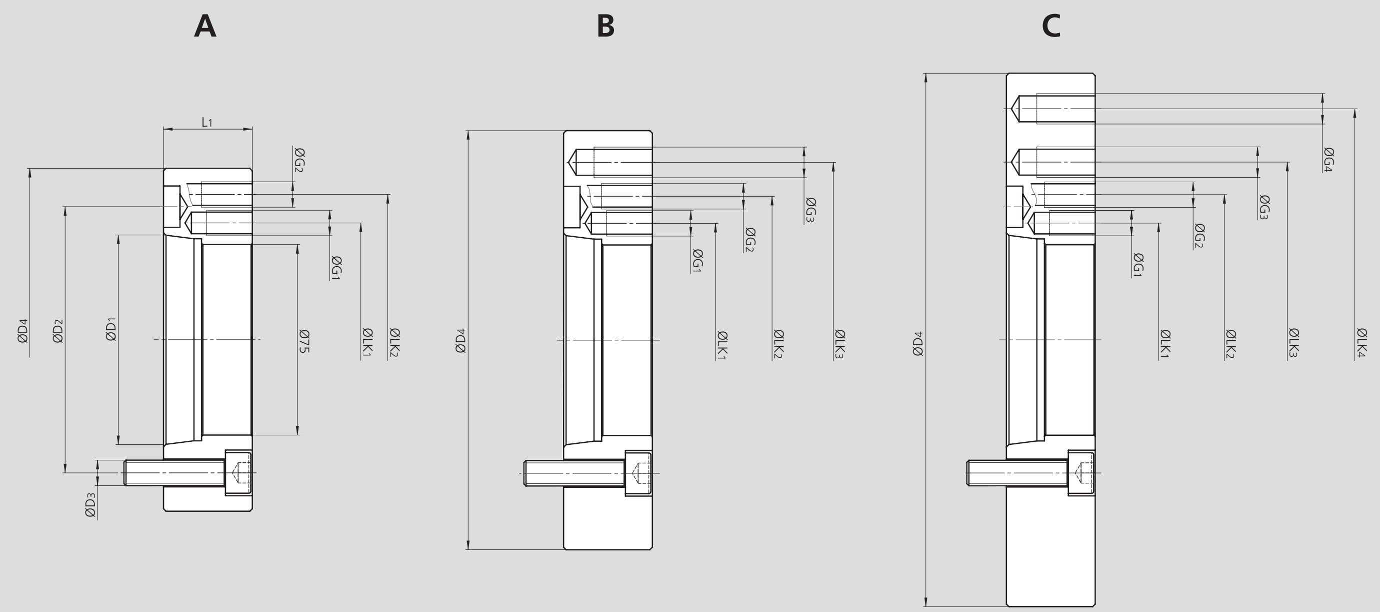
Workstop blanks soft for EMX-C



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

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 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

EMX-S

Segment sleeve mandrel
Power operated

Segment sleeve mandrel Ø 18 - 105 mm

- Size 1 - 4
- Large expansibility

Application/customer benefits

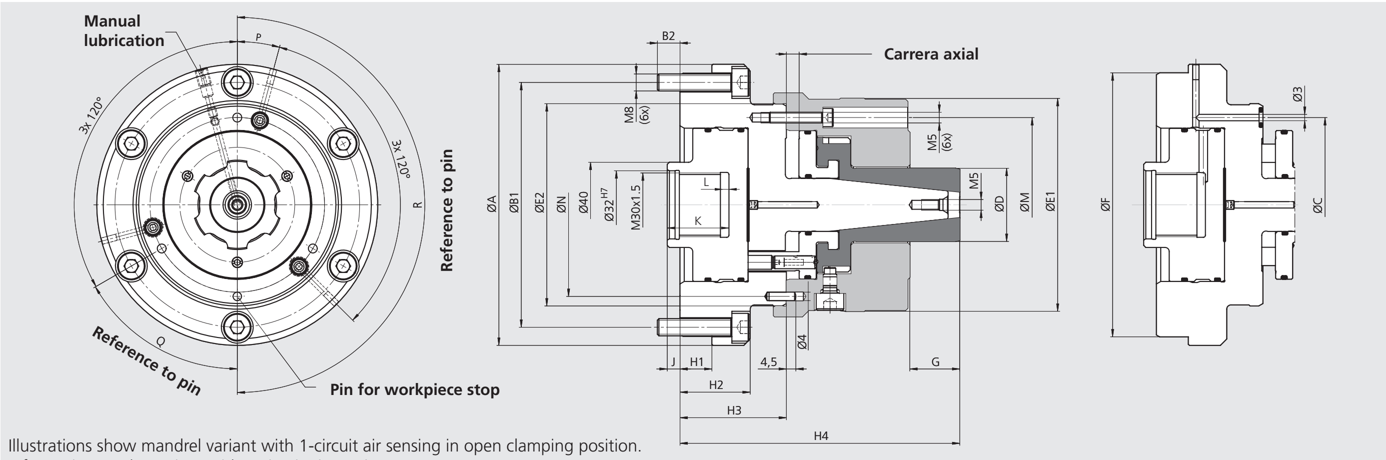
- Ideal for volume production and hard turning / grinding with wear resistant, case hardened and vulcanised clamping sleeves
- Highest accuracy and high torque transmission by means of fixed mandrel body
- Axial pull down by the axial clamping movement of the clamping sleeve = best face run out
- Clamping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

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



Illustrations show mandrel variant with 1-circuit air sensing in open clamping position.
Information on the variant with 2-circuit air sensing on request.

SMW-Autoblok Type			EMX-S-1			EMX-S-2	EMX-S-3	EMX-S-4
Id. No.	EMX-S (1-circuit-AS)		9601100000			9602100000	9603100000	9604100000
	EMX-S (2-circuit-AS)		9621100000			9622100000	9623100000	9624100000
	A	mm	132			132	132	157
	B1	mm	115			115	115	137
	B2	mm	13.6			10.6	12.5	12.5
3x120° Ø3,0	C	mm	66			82	100	128
	E1	mm	82			100	114	143
f8	E2	mm	80			95	88	115
	F	mm	124 - 0.01			124 - 0.01	124 - 0.01	147 - 0.01
Clamping range	D	mm	18	>18 - 23	>23 - 35	30 - 55	48 - 80	70 - 105
Clamping length max.	G_{max}	mm	10.5	17.5	23	41	51	57
Clamping length min.	G_{min}	mm	7			8	8	8
	H1	mm	15			15	15	14.3
	H2	mm	30			33	44	49
	H3	mm	48			50	44	49
	H4	mm	107.5			131.5	146.5	162
	J	mm	8			6	6	6
	K	mm	30			29	25	29
Ring gap	L	mm	4			4	4	5
	M	mm	66			82	100	128
	N	mm	70			86	104	128
	P	deg.	15			15	90	15
	Q	deg.	30			30	15	60
	R	deg.	180			180	30	30

SMW-Autoblok Type		EMX-S-1	EMX-S-2	EMX-S-3	EMX-S-4
Axial stroke	mm	4	6	6	6
Expansion in dia.	mm	0.8	1.2	1.2	1.2
Max. actuating force	kN	15	20	25	35
Max. torque	Nm	50	90	160	410
Weight	kg	3.9	4.4	5.3	9.4
Recommended clamping cylinders		SIN-S-70	SINS-S-85	SINS-S-85	SINS-S-85

All measurements in unclamped position = Right end position.

Segment sleeve mandrel Ø 18 - 105 mm

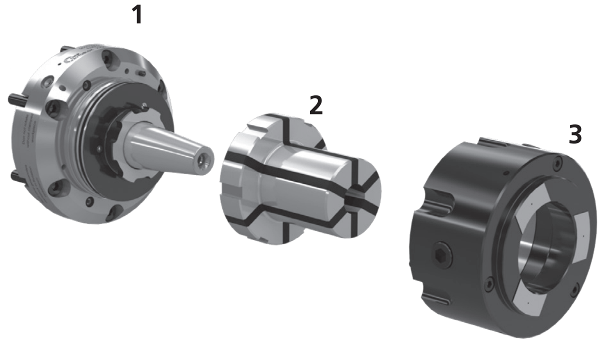
- Size 1 - 4
- Large expansibility

EMX-S

Segment sleeve mandrel
Power operated

Technical design

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



Clamping sleeves

EMX-S-1*

Ø	18	19	20	21	22	23	24	25	26	27	28	29	30
Id. No.	9601301800	9601301900	9601302000	9601302100	9601302200	9601302300	9601302400	9601302500	9601302600	9601302700	9601302800	9601302900	9601303000
Ø	31	32	33	34	35								
Id. No.	9601303100	9601303200	9601303300	9601303400	9601303500								

EMX-S-2**

Ø	30	31	32	33	34	35	36	37	38	39	40	41	42
Id. No.	9602303000	9602303100	9602303200	9602303300	9602303400	9602303500	9602303600	9602303700	9602303800	9602303900	9602304000	9602304100	9602304200
Ø	43	44	45	46	47	48	49	50	51	52	53	54	55
Id. No.	9602304300	9602304400	9602304500	9602304600	9602304700	9602304800	9602304900	9602305000	9602305100	9602305200	9602305300	9602305400	9602305500

EMX-S-3**

Ø	45	46	47	48	49	50	51	52	53	54	55	56	57
Id. No.	9603304500	9603304600	9603304700	9603304800	9603304900	9603305000	9603305100	9603305200	9603305300	9603305400	9603305500	9603305600	9603305700
Ø	58	59	60	61	62	63	64	65	66	67	68	69	70
Id. No.	9603305800	9603305900	9603306000	9603306100	9603306200	9603306300	9603306400	9603306500	9603306600	9603306700	9603306800	9603306900	9603307000
Ø	71	72	73	74	75	76	77	78	79	80			
Id. No.	9603307100	9603307200	9603307300	9603307400	9603307500	9603307600	9603307700	9603307800	9603307900	9603308000			

EMX-S-4**

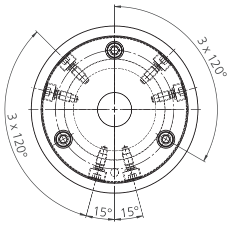
Ø	70	71	72	73	74	75	76	77	78	79	80	81	82
Id. No.	9604307000	9604307100	9604307200	9604307300	9604307400	9604307500	9604307600	9604307700	9604307800	9604307900	9604308000	9604308100	9604308200
Ø	83	84	85	86	87	88	89	90	91	92	93	94	95
Id. No.	9604308300	9604308400	9604308500	9604308600	9604308700	9604308800	9604308900	9604309000	9604309100	9604309200	9604309300	9604309400	9604309500
Ø	96	97	98	99	100	101	102	103	104	105			
Id. No.	9604309600	9604309700	9604309800	9604309900	9604310000	9604310100	9604310200	9604310300	9604310400	9604310500			

* 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.

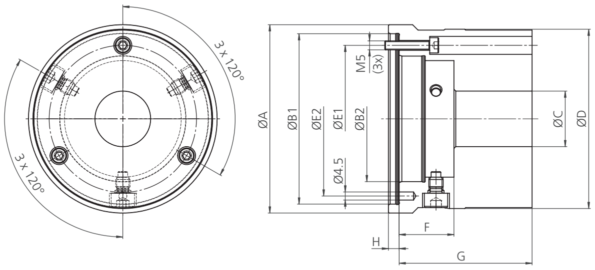
Soft work stop blanks

Type	EMX-S-1	EMX-S-2	EMX-S-3	EMX-S-4
Id. No.*	9100321	9100322	9100323	9100324
Id. No.**	5301416	5301417	5301418	5301419
A	93	105	113	142
B1	80	95	-	-
B2	-	-	88	115
C	19	31	46	71
D	82	100	114	143
E1	66	82	100	128
E2	70	86	104	128
F	27.5	30.5	41	45
G	53	74	95	105
H	6	6	-	-

EMX-S-1



EMX-S-2 / -3 / -4



* Soft, finish machined on mandrel side, pre machined on workpiece side.
** Soft, with stock material (0.3 mm) for case hardening and grinding

Ordering review set articles (1-circuit-Air sensing (AS) basic mandrel + adapter)

Type	EMX-S-1	EMX-S-2	EMX-S-3	EMX-S-4
A05	9601000005	9602000005	9603000005	9604000005
A06	9601000006	9602000006	9603000006	9604000006
A08	9601000008	9602000008	9603000008	9604000008
Z140	9601000140	9602000140	9603000140	9604000140
Z170	9601000170	9602000170	9603000170	9604000170

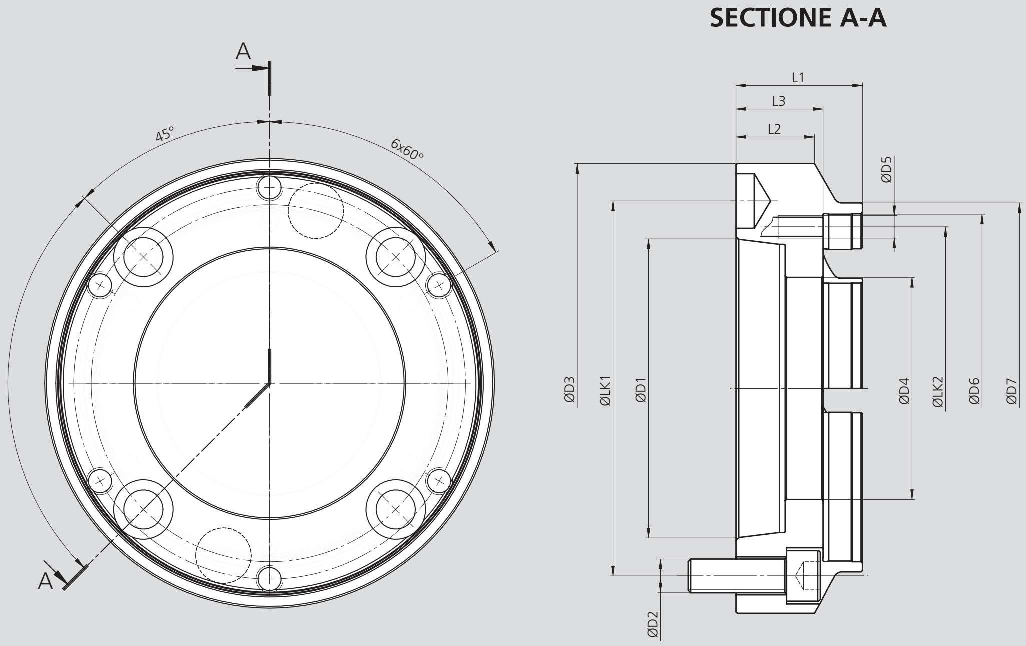
Parts included: Basic mandrel + standard flange + mounting bolts
For mandrels with 2-circuit-AS use Id. No. on page 310 for basic mandrel and code for adapters on page 312!
For mandrels with 2-circuit-AS use Id. no. of the basic mandrel on the previous page and code for adapters on the following page!

Adapters

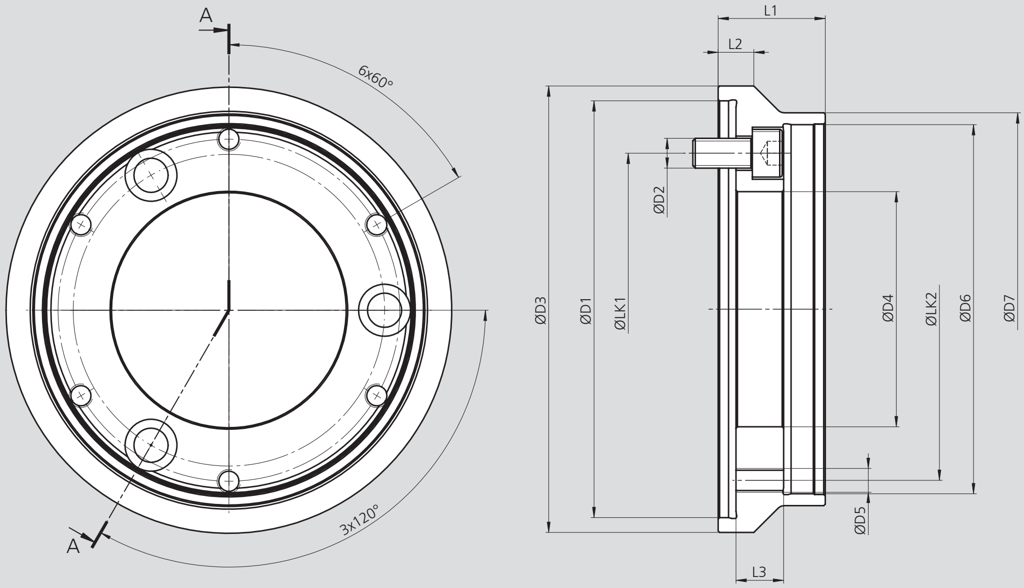
ISO-A for expanding mandrels

■ Mandrels EMX-S have cylindrical mounting
■ Adapters for DIN 55026 / ISO-A 702-1 / ISO-A 702-1 spindle noses

A



ZA



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

Technical data

Flange Id. No.	Mandrel size		Spindle nose ISO 702-1 (A)	Spindle nose ISO 702-4 (ZA)	D1	LK1	D2	D3	D4	LK2	D5	D6	D7	L1	L2	L3
9600200005	EMX-S-1 / 2 / 3	mm	A5	-	82.563	104.8	4 x M10	132	79	115	6 x M8	124	D3	45	-	31
9600200006		mm	A6	-	106.375	133.4	4 x M12	160	79	115	6 x M8	124	132	45	28	31
9600200008		mm	A8	-	139.719	171.4	4 x M16	202	79	115	6 x M8	124	140	47	29	33
9600200140		mm	-	140	140	104.8	3 x M10	150	79	115	6 x M8	124	132	36	12	16
9600200170		mm	-	170	170	133.4	6 x M12	180	79	115	6 x M8	124	157	36	24.5	16
9604200005	EMX-S-4	mm	A5	-	82.563	104.8	4 x M10	157	79	137	6 x M8	147	D3	45	-	31
9604200006		mm	A6	-	106.375	133.4	4 x M12	157	102.5	137	6 x M8	147	D3	43	-	29
9604200008		mm	A8	-	139.719	171.4	4 x M16	202	103	137	6 x M8	147	157	47	17	33
9604200140		mm	-	140	140	104.8	3 x M10	157	80	137	6 x M8	147	D3	50	-	31
9604200170		mm	-	170	170	133.4	6 x M12	180	103	137	6 x M8	147	157	48	11.5	29

Notes

Chapter 6

COMOT-AZ

Flexible collet chuck

Collet chuck

- Radial fine adjustment
- Use of standard collets
- Air sensing

Application/customer benefits

- Large selection of standard collets
- Low deformation clamping of thin walled workpieces
- Rigid axial stop, central or front stop
- Long lifetime due to case hardened parts and manual lubrication
- Sealed against the ingress of chips and coolant
- Use of high-precision collets when using premium adapter PA
- Use of expanding mandrels of the „Connect“ series

Technical features

- Air sensing (central or front)
- Radial fine adjustment

Standard equipment

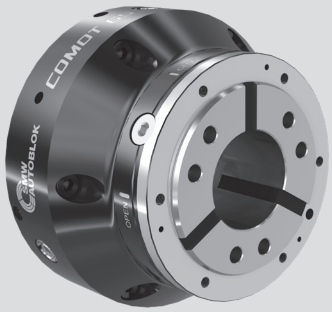
Collet chuck
with bolts
with basic workstop (central M12)
with protection sleeve (with through-hole)

Ordering example

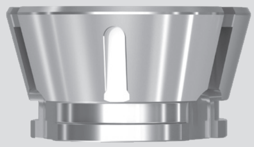
COMOT-AZ-65-Z170

Application Examples

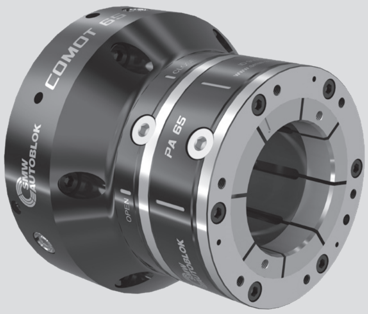
Collet chuck COMOT-AZ with standard collet for O.D. Clamping



Clamping with standard collet



Collet chuck COMOT-AZ with premium adapter PA* for O.D. Clamping



*For the premium adapters please see the page of PA-Comot

Clamping with slotted high-precision collet

Collet chuck COMOT-AZ* with extension mandrel EMX-F-CO „Connect“ for I.D. Clamping

*For the mandrels please see th epage of the mandrels EMX-F-CO

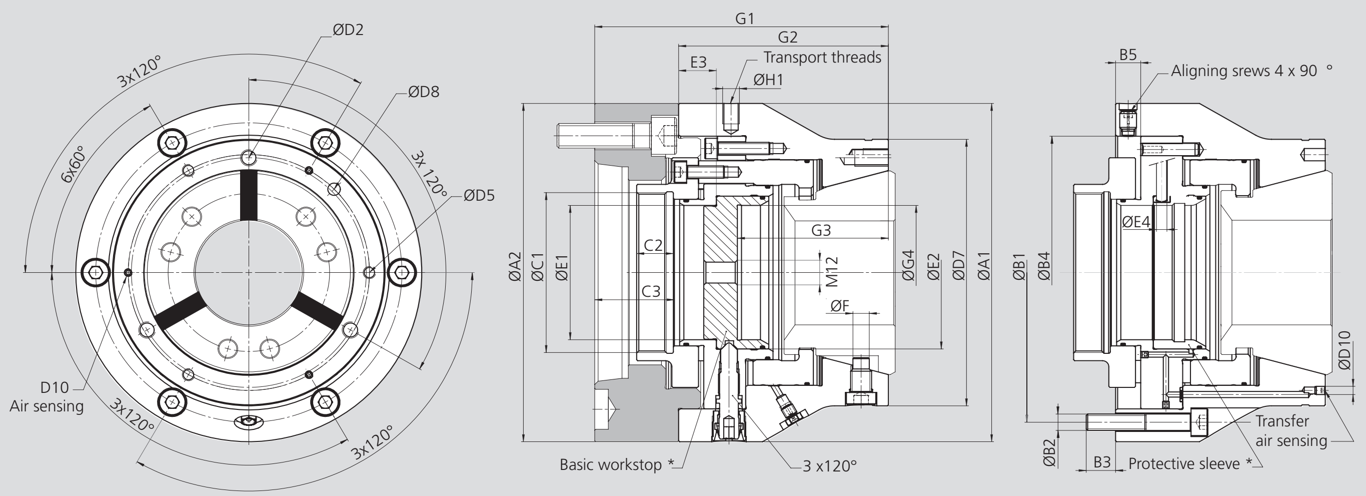
Clamping with extension mandrel „Connect“

Collet chuck

- Radial fine adjustment
- Use of standard collets
- Air sensing

COMOT-AZ

Flexible collet chuck



* Use only with protective sleeve or workpiece stop

SMW-AUTOBLOK Type		COMOT-AZ-42				COMOT-AZ-65						COMOT-AZ-100				
Id-No. COMOT without flange		9700210000				9700410000						9700610000				
Spindle size**		A05	A06	Z140	Z170	A05	A06	A08	Z140	Z170	Z220	A06	A08	A11	Z170	Z220
A1	mm	144				165						230				
A2	mm	144	165	150	180	165	165	210	165	180	230	230	230	280	230	235
B1	mm	126				146						208				
B2 6 x 60°		6 x M8				6 x M8						6 x M10				
B3	mm	12				14						19.5				
B4 0.01	mm	110				133						185				
B5	mm	12				12						12				
C1		M54 x 1.5				M78 x 1.5						M115 x 2				
C2	mm	17				17.5						24				
C3 In open position (right end position)	mm	38	38	24	24	40	40	40	26	26	26	55	50	52	55	41
D2 Thread / depth / Pitch circle	3 x 120°	M8 / 16 / 93				M8 / 16 /112						M8 / 18 / 162				
D5 Thread / depth / Pitch circle	3 x 120°	M6 / 12 / 95				M6 / 12 / 115						M8 / 18 / 162				
D7 -0,02 / -0,05	mm	110				130						180				
D8 Diameter / depth / pitch circle	3 x 120°	Ø 6 /10 / 95				Ø 6 / 10 / 115						Ø 6 / 10 / 162				
D10 Thread / pitch circle	3 x 120°	M4 / 95				M4 / 115						M4 / 165				
E1	mm	43				65.5						101				
E2 H7	mm	49.5				74.5						111.5				
E3	mm	17				18						18				
E4 Orientation for workstop	mm	5				5						5				
F	mm	5.8				7.8						7.8				
G1	mm	126	126	112	112	140	140	140	126	126	126	174	169	171	174	160
G2	mm	88				100						115				
G3		61				72						102				
G4		43				65.5						90				
H1	3 x 120°	M8				M8						M10				

SMW-AUTOBLOK Type		COMOT-AZ-42	COMOT-AZ-65	COMOT-AZ-100
Axial stroke	mm	5.5	5.5	8
Loading clearance in Ø min.*	mm	1	1	2
Reserve stroke in Ø min.*	mm	1	1	1.5
Max. Actuating force in kN	mm	35	45	65
Max. Clamping force radial	KN	80	105	150
Max. Speed rpm	1/min	7000	6000	5000
Weight without collets in kg	kg	6,9	9,2	19,8

* from nominal collet dia.
** For complete Id. No`s see the page of the flanges (ordering review chuck with flange)

Chapter 6

COMOT-NZ

Flexible collet chuck

Collet chuck

- Radial fine adjustment
- Use of standard collets
- Air sensing

Application/customer benefits

- Large selection of standard collets
- Low deformation clamping of thin walled workpieces
- ohne axialen Niederzug
- Long service life due to case hardened components and lubrication
- Sealed against contamination
- Rigid axial stop front or in the bore
- Optional use of expanding mandrels of the connect series EMX-F-CO-NZ

Technical features

- Air sensing (central or front)
- Radial fine adjustment

Standard equipment

Collet chuck
with bolts
with basic workstop (central M12)
with protection sleeve (with fall through-hole)

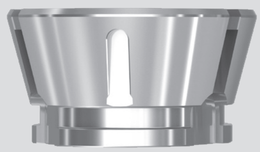
Ordering example

COMOT-NZ-65-Z170

Application Examples

Collet chuck COMOT-NZ 65

Clamping with standard collet



Collet chuck COMOT-NZ 65 with collet

Collet chuck COMOT-NZ with extension mandrel EMX-F-CO-NZ„Connect“ for I.D. Clamping

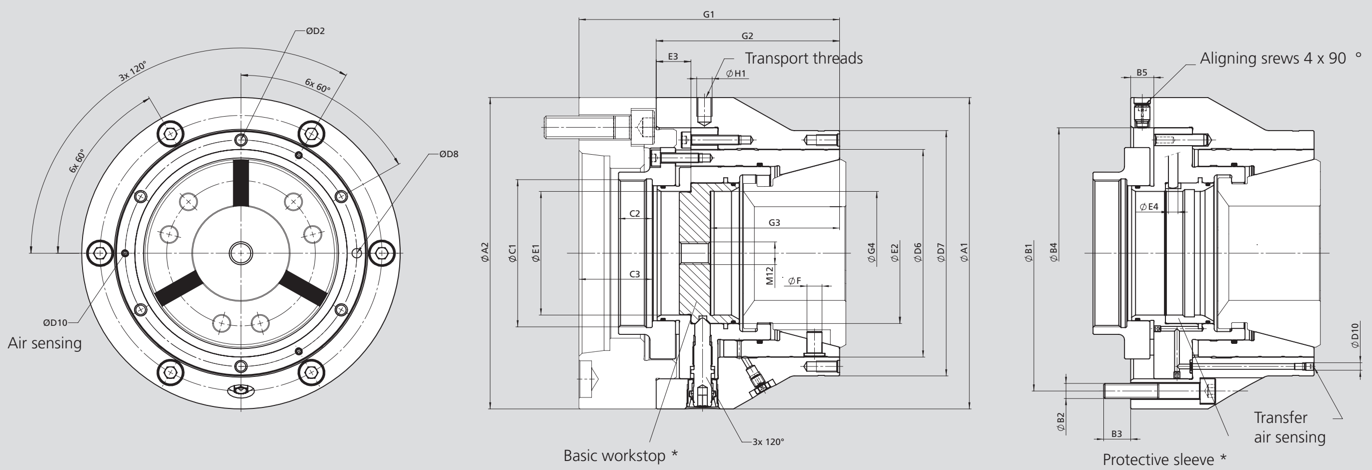
Clamping with extension mandrel „Connect“ (quick change, spring actuated)

Collet chuck

- Radial fine adjustment
- Use of standard collets
- Air sensing

COMOT-NZ

Flexible collet chuck



* Use only with protective sleeve or workpiece stop

SMW-AUTOBLOK Type			COMOT-NZ-42				COMOT-NZ-65						COMOT-NZ-100				
Id-No. COMOT without flange			9720210000				9720410000						9720610000				
Spindle size**			A05	A06	Z140	Z170	A05	A06	A08	Z140	Z170	Z220	A06	A08	A11	Z170	Z220
A1		mm	144				165						230				
A2		mm	144	165	150	180	165	165	210	165	180	230	230	230	280	230	235
B1		mm	126				146						208				
B2	6 x 60°		6 x M8				6 x M8						6 x M10				
B3		mm	15				14						20				
B4	+0.01	mm	110				133						185				
B5		mm	12				12						12				
C1			M54 x 1.5				M78 x 1.5						M115 x 2				
C2		mm	17				17.5						24				
C3	In open position (right end position)	mm	33,5	33,5	19,5	19,5	35,5	35,5	35,5	21,5	21,5	21,5	47	42	44	47	33
D2	Thread / depth / Pitch circle	6 x 60°	M6 / 12 / 98				M6 / 12 /120						M8 / 18 / 173				
D6			88				110						158				
D7	-0,02 / -0,05	mm	110				130						188				
D8		mm	Ø5 / 10 / 98				Ø5 / 10 / 120						Ø6 / 12 / 173				
D10	Thread / pitch circle	3 x 120°	M4 / 98				M4 / 120						M4 / 173				
E1		mm	43				65.5						101				
E2	H7	mm	49.5				74.5						111.5				
E3		mm	17				18						18				
E4		mm	4				5						5				
F		mm	5.8				7.8						7.8				
G1		mm	123	123	109	109	135	135	135	121	121	121	169	164	166	169	155
G2		mm	85				95						110				
G3		mm	58				67						97				
G4		mm	42,5				65.5						90				
H1		3 x 120°	M8				M8						M10				

SMW-AUTOBLOK Type		COMOT-NZ-42	COMOT-NZ-65	COMOT-NZ-100
Axial stroke	mm	4.5	4.5	8
Loading clearance in Ø*	mm	1	1	1
Reserve stroke in Ø*	mm	1	1	1,5
Max. Actuating force	kN	35	45	65
Max. Clamping force radial	kN	80	105	150
Max. Speed rpm	1/min	7000	6000	5000
Weight	kg	7,0	9,1	21,5

* from nominal collet dia.

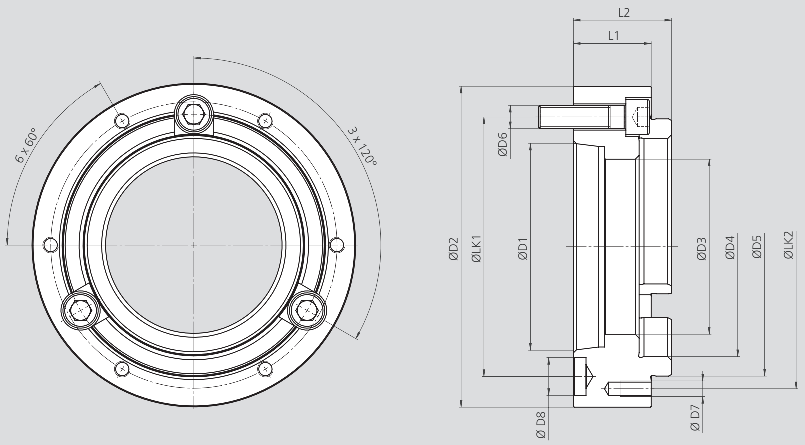
** For complete Id. No`s see the page of the flanges (ordering review chuck with flange)

Adapters

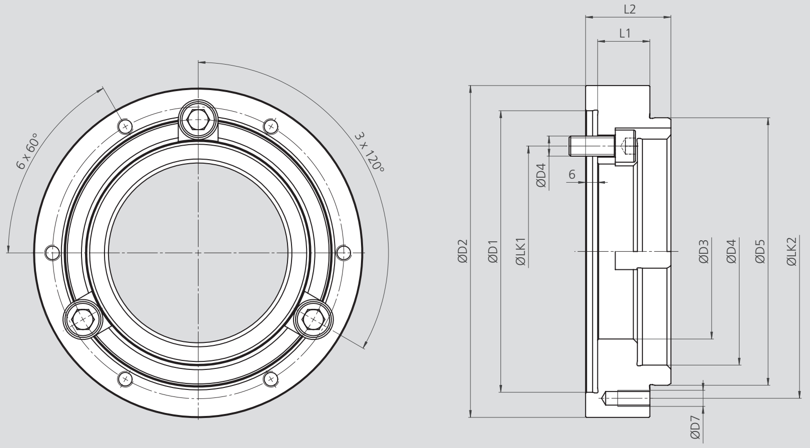
ISO-A for expanding mandrels

■ COMOT have cylindrical mounting
■ Adapters for DIN 55026 / ISO-A 702-1 / ISO-A 702-1 spindle noses

A



ZA



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

Technical data

Id. No.	SMW-AUTOBLOK Type		Spindle head ISO 702-1 (A)	Spindle head ISO 702-4 (ZA)	D1	D2	D3	D4	D5	LK1	D6	LK2	D7	D8	L1	L2
9700220005	COMOT 42	mm	A5	-	82.563	144	65	90	110	104.8	3 x M10	126	6 x M8	16.3	38	48.5
9700220006		mm	A6	-	106.375	165	65	90	110	133.4	3 x M12	126	6 x M8	19.45	38	48.5
9700220140		mm	-	140	140	150	65	90	110	104.8	3 x M10	126	6 x M8	-	24	40.5
9700220170		mm	-	170	170	180	65	90	110	133.4	3 x M12	126	6 x M8	-	24	40.5
9700420005	COMOT 65	mm	A5	-	82.563	165	90	113	133	104.8	3 x M10	146	6 x M8	16.3	40	50.5
9700420006		mm	A6	-	106.375	165	90	113	133	133.4	3 x M12	146	6 x M8	19.45	40	50.5
9700420008		mm	A8	-	139.719	210	90	113	133	171.4	3 x M16	146	6 x M8	24.2	40	50.5
9700420140		mm	-	140	140	165	87	113	133	104.8	3 x M10	146	6 x M8	-	26	42.5
9700420170		mm	-	170	170	180	90	113	133	133.4	3 x M12	146	6 x M8	-	26	42.5
9700420220		mm	-	220	220	230	90	113	133	171.4	3 x M16	146	6 x M8	-	26	42.5
9700620006	COMOT 100	mm	A6	-	106.375	230	130 / 103	163	185	133.4	3 x M12	208	6 x M10	19.45	59	70
9700620008		mm	A8	-	139.719	230	130	163	185	171.4	3 x M16	208	6 x M10	24.2	54	65
9700620011		mm	A11	-	196.869	280	130	163	185	235	3 x M20	208	6 x M10	29.4	56	67
9700620170		mm	-	Z170	170	230	130	163	185	133.4	3 x M12	208	6 x M10	-	59	76
9700620220		mm	-	Z220	220	235	130	163	185	171.4	3 x M16	208	6 x M10	-	45	62

Ordering review (chuck with flange)

SMW-AUTOBLOK Type	COMOT-AZ-42	COMOT-NZ-42	COMOT-AZ-65	COMOT-NZ-65	COMOT-AZ-100	COMOT-NZ-100
Id No. Chuck without flange	**9700210000**	**9720210000**	**9700410000**	**9720410000**	**9700610000**	**9720610000**
A05	9700200005	9720200005	9700400005	9720400005	-	-
A06	9700200006	9720200006	9700400006	9720400006	9700600006	9720600006
A08	-	-	9700400008	9720400008	9700600008	9720600008
A11	-	-	-	-	9700600011	9720600011
Z140	9700200140	9720200140	9700400140	9720400140	-	-
Z170	9700200170	9720200170	9700400170	9720400170	9700600170	9720600170
Z220	-	-	9700400220	9720400220	9700600220	9720600220

Parts included: Collet chuck + Standard flange + mounting bolts

Collets for COMOT 100

Steel collets with axial and radial grooves
ROUND*

Ø	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**
Id. No.	195081	195082	195083	195084	195085	195086	195087	195088	195089	195090	195091	195092	195093
Ø	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**
Id. No.	195094	195095	195096	195097	195098	195099	195100	195101	195102	195103	195104	195105	195106
Ø	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**
Id. No.	195107	195108	195109	195110	195111	195112	195113	195114	195115	195116	195117	195118	195119
Ø	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**	**91**	**92**	**93**
Id. No.	195120	195121	195122	195123	195124	195125	195126	195127	195128	195129	195130	195131	195132
Ø	**94**	**95**	**96**	**97**	**98**	**99**	**100**						
Id. No.	195133	195134	195135	195136	195137	195138	194742						

Steel collets with smooth clamping surface
ROUND*

Ø	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**	**52**	**53**	**54**
Id. No.	195141	195142	195143	195144	195145	195146	195147	195148	195149	195150	195151	195152	195153
Ø	**55**	**56**	**57**	**58**	**59**	**60**	**61**	**62**	**63**	**64**	**65**	**66**	**67**
Id. No.	195154	195155	195156	195157	195158	195159	195160	195161	195162	195163	195164	195165	195166
Ø	**68**	**69**	**70**	**71**	**72**	**73**	**74**	**75**	**76**	**77**	**78**	**79**	**80**
Id. No.	195167	195168	195169	195170	195171	195172	195173	195174	195175	195176	195177	195178	195179
Ø	**81**	**82**	**83**	**84**	**85**	**86**	**87**	**88**	**89**	**90**	**91**	**92**	**93**
Id. No.	195180	195181	195182	195183	195184	195185	195186	195187	195188	194743	195189	195190	195191
Ø	**94**	**95**	**96**	**97**	**98**	**99**	**100**						
Id. No.	195192	195193	195194	195195	195196	195197	195198						

* Concentricity similar DIN 6343.

Changing unit

Accessories / Size	COMOT 100
Pneumatic	194744

Collets for COMOT 42

Steel collets with axial and radial grooves (△ smooth, △△ radial grooves)
ROUND*

Ø	**4△**	**5△**	**6△**	**7△**	**8△△**	**9△△**	**10△△**	**11**	**12**	**13**	**14**	**15**	**16**
Id. No.	192173	192174	192175	192176	192177	192178	192179	192180	192181	192182	192183	192184	192185
Ø	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**
Id. No.	192186	192187	192188	192189	192190	192191	192192	192193	192194	192195	192196	192197	192198
Ø	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**
Id. No.	192199	192200	192201	192202	192203	192204	192205	192206	192207	192208	192209	192210	192211

Collets in 0.5 mm increments on request.

Steel collets with smooth clamping surface
ROUND*

Ø	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
Id. No.	192173	192174	192175	192176	193135	193136	193137	193138	193139	193140	193141	193142	193143
Ø	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**
Id. No.	193144	192807	193145	192808	193146	193147	193148	193149	193150	193151	193152	193153	193154
Ø	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**
Id. No.	193155	193156	193083	193157	193158	193159	193160	193161	193162	193163	193164	193165	193219

Collets in 0.5 mm increments on request.

SQUARE**

□	**7△**	**8△△**	**9△△**	**10△△**	**11△△**	**12△△**	**13△△**	**14△△**	**15△△**	**16△△**	**17△△**	**18△△**	**19△△**
Id. No.	192212	192213	192214	192215	192216	192217	192218	192219	192220	192221	192222	192223	192224
□	**20△△**	**21△△**	**22△△**	**23△△**	**24△△**	**25△△**	**26△△**	**27△△**	**28△△**	**29△△**	**30△△**		
Id. No.	192225	192226	192227	192228	192229	192230	192231	192232	192233	192234	192235		

HEXAGONAL**

⬡	**7△**	**8△△**	**9△△**	**10△△**	**11△△**	**12△△**	**13△△**	**14△△**	**15△△**	**16△△**	**17△△**	**18△△**	**19△△**
Id. No.	192236	192237	192238	192239	192240	192241	192242	192243	192244	192245	192246	192247	192248
⬡	**20△△**	**21△△**	**22△△**	**23△△**	**24△△**	**25△△**	**26△△**	**27△△**	**28△△**	**29△△**	**30△△**	**31△△**	**32△△**
Id. No.	192249	192250	192251	192252	192253	192254	192255	192256	192257	192258	192259	192260	192261

Soft steel collets (pre-bored)
ROUND

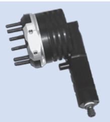
Ø	**5**	**15**	**30**										
Id. No.	192262	192263	192264										

Boring ring 42 for soft steel collets

Id. No.	193399												

* Concentricity similar DIN 6343.
** Concentricity has to be agreed.

Changing unit

Accessories / Size	COMOT 42
Manual	196842
Pneumatic	192151

Collets for COMOT 65

Steel collets with axial and radial grooves (△ smooth, △△ radial grooves)
ROUND*

Ø	5△	6△	7△	8△△	9△△	10△△	11	12	13	14	15	16	17
Id. No.	192265	192266	192267	192268	192269	192270	192271	192272	192273	192274	192275	192276	192277
Ø	18	19	20	21	22	23	24	25	26	27	28	29	30
Id. No.	192278	192279	192280	192281	192282	192283	192284	192285	192286	192287	192288	192289	192290
Ø	31	32	33	34	35	36	37	38	39	40	41	42	43
Id. No.	192291	192292	192293	192294	192295	192296	192297	192298	192299	192300	192301	192302	192303
Ø	44	45	46	47	48	49	50	51	52	53	54	55	56
Id. No.	192304	192305	192306	192307	192308	192309	192310	192311	192312	192313	192314	192315	192316
Ø	57	58	59	60	61	62	63	64	65				
Id. No.	192317	192318	192319	192320	192321	192322	192323	192324	192325				

Collets in 0.5 mm increments on request.

Steel collets with smooth clamping surface
ROUND*

Ø	5	6	7	8	9	10	11	12	13	14	15	16	17
Id. No.	192265	192266	192267	193172	193173	192682	193174	192787	193175	193176	193177	193169	193178
Ø	18	19	20	21	22	23	24	25	26	27	28	29	30
Id. No.	193179	193180	193181	193182	192683	193183	193170	193065	193184	193066	193068	193069	193070
Ø	31	32	33	34	35	36	37	38	39	40	41	42	43
Id. No.	193185	192684	193186	193187	193188	193189	193190	193191	193192	192685	193193	193194	193171
Ø	44	45	46	47	48	49	50	51	52	53	54	55	56
Id. No.	193196	193197	193198	193199	193200	193201	193202	193203	193204	193205	193206	193207	193208
Ø	57	58	59	60	61	62	63	64	65				
Id. No.	193195	193209	193210	193211	193212	193213	193214	193215	193216				

Collets in 0.5 mm increments on request.

SQUARE**

□	8△△	9△△	10△△	11△△	12△△	13△△	14△△	15△△	16△△	17△△	18△△	19△△	20△△
Id. No.	192326	192327	192328	192329	192330	192331	192332	192333	192334	192335	192336	192337	192338
□	21△△	22△△	23△△	24△△	25△△	26△△	27△△	28△△	29△△	30△△	31△△	32△△	33△△
Id. No.	192339	192340	192341	192342	192343	192344	192345	192346	192347	192348	192349	192350	192351
□	34△△	35△△	36△△	37△△	38△△	39△△	40△△	41△△	42△△	43△△	44△△	45△△	46△△
Id. No.	192352	192353	192354	192355	192356	192357	192358	192359	192360	192361	192362	192363	192364

HEXAGONAL**

⬡	10△△	11△△	12△△	13△△	14△△	15△△	16△△	17△△	18△△	19△△	20△△	21△△	22△△
Id. No.	192365	192366	192367	192368	192369	192370	192371	192372	192373	192374	192375	192376	192377
⬡	23△△	24△△	25△△	26△△	27△△	28△△	29△△	30△△	31△△	32△△	33△△	34△△	35△△
Id. No.	192378	192379	192380	192381	192382	192383	192384	192385	192386	192387	192388	192389	192390
⬡	36△△	37△△	38△△	39△△	40△△	41△△	42△△	43△△	44△△	45△△	46△△	47△△	48△△
Id. No.	192391	192392	192393	192394	192395	192396	192397	192398	192399	192400	192401	192402	192403
⬡	49△△	50△△											
Id. No.	192404	192405											

Soft steel collets (pre-bored)
ROUND

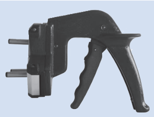
Ø	8	20	40										
Id. No.	192406	192407	192408										

Boring ring 65 for soft steel collets

Id. No.	193400												

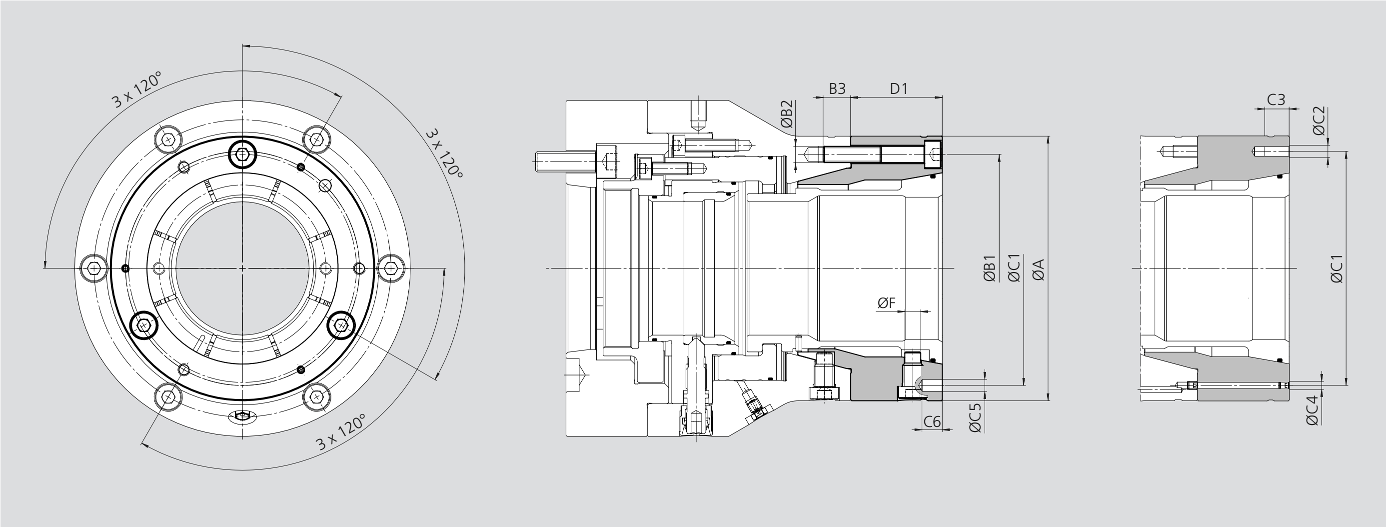
* Concentricity similar DIN 6343.
** Concentricity has to be agreed.

Changing unit




Accessories / Size	COMOT 65
Manual	196844
Pneumatic	192153

Premium adapter PA COMOT



SMW-AUTOBLOK Chuck-Type			COMOT-AZ-65	COMOT-AZ-100
SMW-AUTOBLOK Premium adapter-Type			PA-65	PA-100
Id. No. Premium adapter			9700430000	9700630000
A	-0,02 / -0,05	mm	130	180
B1		mm	112	162
B2	3 x 120°		3 x M8	6 x M8
B3		mm	13.6	13.6
C1		mm	115	162
C2	3 x 120°		3 x M6	6 x M6
C3		mm	12	12
C4	3 x 120°		3 x M4	3 x M4
C5	H7	mm	6	6
C6		mm	10	10
D1		mm	45	55
F		mm	7.8	7.8

Notes

SMW-AUTOBLOK
Service Benefits

- **Service hotline**
  Hotline +49 (0) 7542 - 405 - 140
- **Worldwide**
  Service and support on site
- **Rapid task force**
  Global reach in less time,
  technical problem-solving skills
- **Repair**
  Quick Repair, express service on request
- **Original spare parts**
  Relevant spare parts are available from stock
- **Training**
  Individual training courses
- **Run-off**
  Run-off and support at the point of use
- **Maintenance**
  Scheduled maintenance, at SMW-AUTOBLOK or at the customer
- **Warranty**
  Warranty of 24 month on request

- **Contact**
  SMW-AUTOBLOK Serviceteam
  Tel.: +49 (0) 7542 - 405 - 140
  Fax: +49 (0) 7542 - 405 - 179
  E-mail: service@smw-autoblok.de

zertifiziert DIN EN ISO 9001 certified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