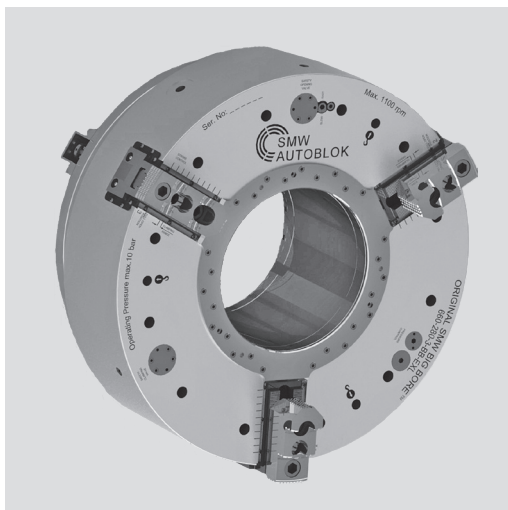


BIG BORE® BB-EXL2G

INCH SERRATION

Front-end pneumatic power chuck EXTRA large through-hole Ø 191 - 390 mm

- Chuck size 510 - 900
- 3 jaws
- Extended extra long jaw stroke



Application/customer benefits

- End machining of long pipes with collars
- Rapid and clamping stroke for short clamping cycles
- Full spindle bore can be used

Technical features

- Suitable for jaw jog mode
- Air chuck for external clamping with built-in pneumatic cylinder
- Air feed via distributor ring and SMW-profile seals at stopped spindle
- Built-in non-return valves maintain the air pressure during machining
- Clamping pressure level constantly checked by a safety control system (only for external clamping)
- Clamping stroke control (no clamping in rapid stroke) is monitored
- Extra long jaw stroke (1 1/2" total)

Standard equipment

3-jaw chuck
2 elbow unions G 1/2"
12 mounting bolts
3 lifting eye bolt, 1 set T-nuts with bolts
1 set soft top jaws
Without distributor ring bracket

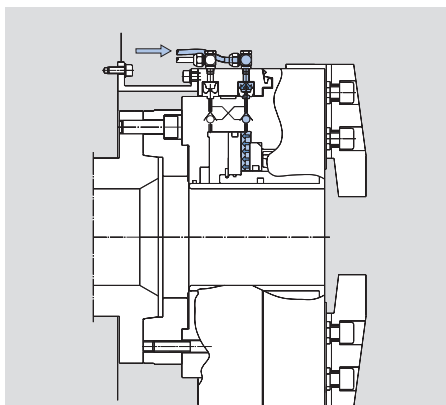
Ordering example

Big Bore BB-EXL2G 660 / Z450

Accessories

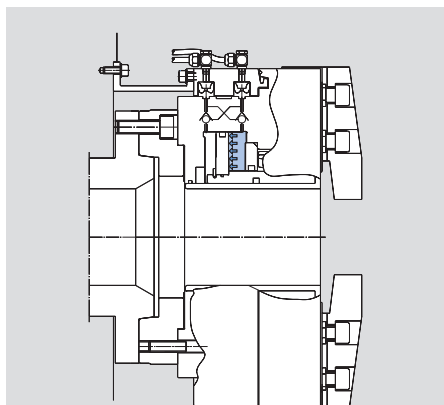
Control unit AC-BB / AC-XN
(see general catalog pages 378-381)

The principle invented by SMW: Air supply via distributor ring and SMW profile seal rings



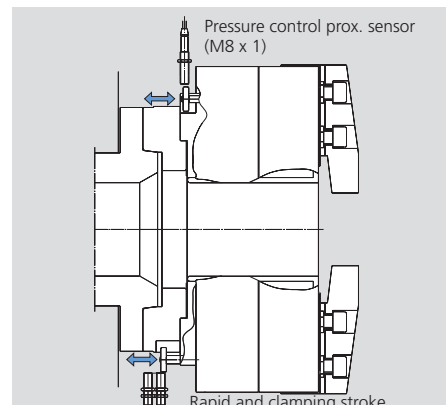
Picture 1

Open / close movement (only possible at stopped spindle). The profile seals deform radially under the pneumatic pressure, sealing on the chuck body and filling the cylinder chamber.
When the clamping pressure is reached, the air feed is stopped, closing the non-return valve.



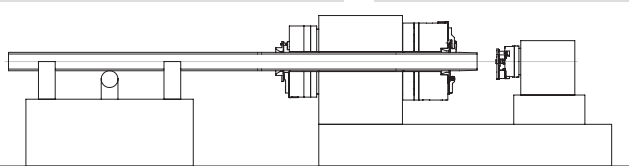
Picture 2

The SMW profile seals lift to the expanded position, not touching the chuck body anymore.
The clamping pressure is maintained by the twin non-return valve.
The chuck can start to rotate.

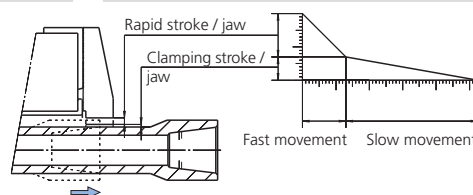


Picture 3

Safety pressure control: If the pressure is less than a pre-set safety level, the switch ring moves into the proximity switch field, sending an alarm signal.
Jaw stroke control: If the part is clamped in a not correct jaw stroke position, the switch ring moves into the proximity switch field sending an alarm signal.



End machining of pipe with front and rear chucks



Technical data

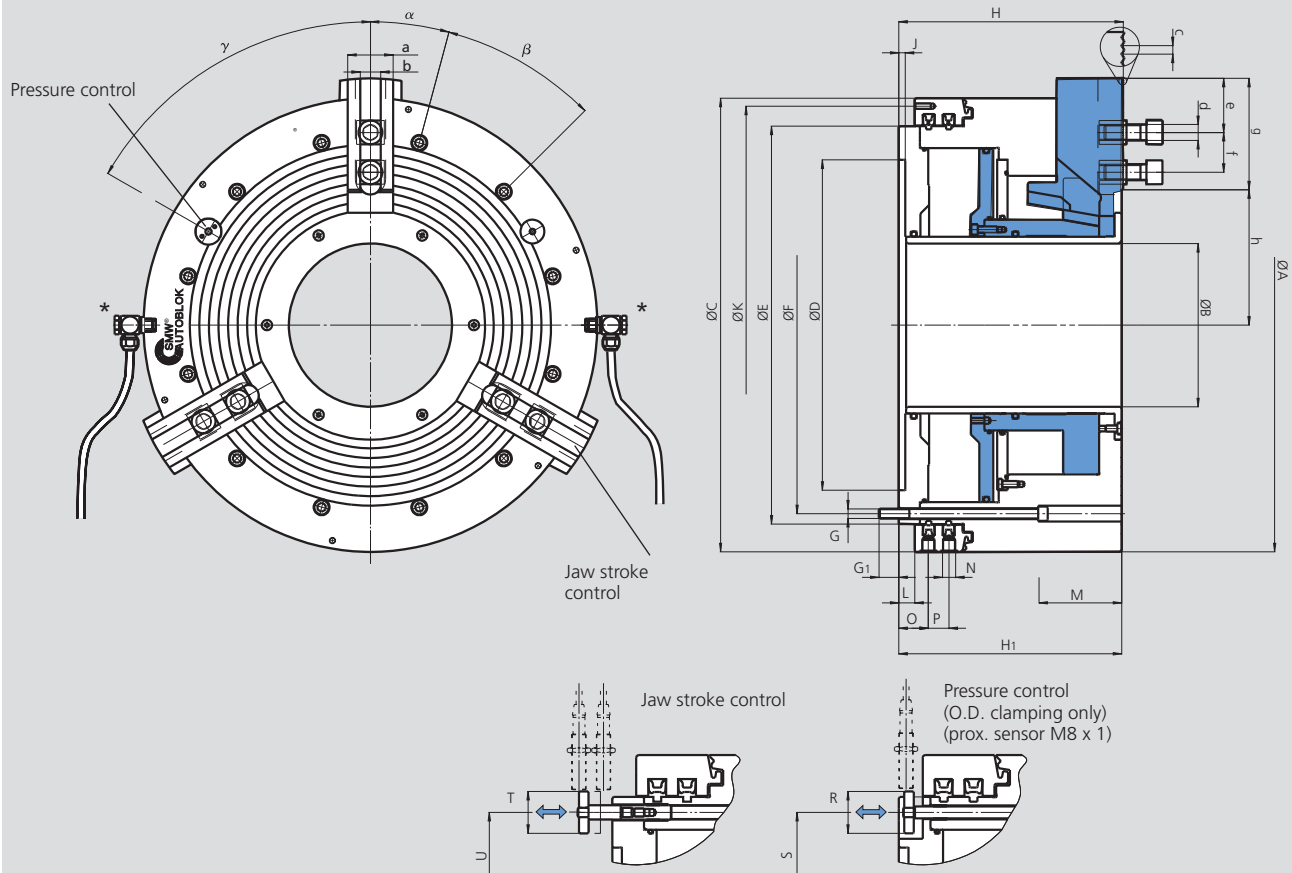
SMW-AUTOBLOK Type		BB-EXL2G 510-191	BB-EXL2G 660-280	BB-EXL2G 900-390
Id. No.		77784553	77784566	77784588
Through-hole	mm (inch)	191 (7.52")	280 (11.02")	390 (15.35")
Total stroke per jaw	mm (inch)	38.5 (1.52")	38.5 (1.52")	38.5 (1.52")
Rapid stroke per jaw*	mm (inch)	30 (1.18")	30 (1.18")	30 (1.18")
Clamping stroke per jaw	mm (inch)	8.5 (0.33")	8.5 (0.33")	8.5 (0.33")
Operating pressure min. / max.	bar (psi)	2 / 10 (29 / 145)	2 / 10 (29 / 145)	2 / 10 (29 / 145)
Piston area	cm ²	760	1300	1800
Gripping force at 6 bar (87 psi)	kN (lbf)	115 (25853)	195 (43838)	270 (60698)
Max. speed	r.p.m.	1300	1100	750
Air consumption / jaw stroke at 6 bar (87 psi)	liter	37	58	78
Weight (without top jaws)	kg (lbs)	260 (573)	470 (1036)	950 (2094)
Moment of inertia	kg·m ²	10	30.4	112

* May not be used for clamping.



■ Main dimensions and technical data

Jaw position: Open for external clamping



enlarged illustration

Subject to technical changes.

For more detailed information please ask for customer drawing.

SMW-AUTOBLOK Type			BB-EXL2G 510-191	BB-EXL2G 660-280	BB-EXL2G 900-390
Mounting			Z310	Z450	Z700
Fixing bolts circle	A	mm	520	673	900
	B	mm	191	280	390
	C	mm	520	665	852
	D H6	mm	310	450	700
	E	mm	446	585	775
	F	mm	414	558	745
	G	mm	M12	M12	M16
	G1	mm	25	25	29
	H	mm	277	292	323
	H1	mm	270	285	314
Thread circle 6 x M8	J	mm	8	8	8
	K	mm	500	640	830
	L	mm	25	25	33
Pneumatic connection	M	mm	115	110	143
	N	inch	G 1/2"	G 1/2"	G 1/2"
	O	mm	46,5	46	54,5
	P	mm	36	36	33
	R	mm	35	35	35
	S	mm	414	554	745
	T	mm	35	35	35
	U	mm	414	554	745
	a	mm	57	62	75
	b	mm	25,5	25,5	30
Serration	c	inch	3/32" x 90°	3/32" x 90°	3/32" x 90°
Bolts ISO 4762 12.9	d	mm	M20	M20	M24
Min.	e	mm	15	15	18
T-nuts distance min. / max.	f	mm	30 / 84	30 / 107	36 / 150
Serration length	g	mm	110	142	194
Min. / max.	h	mm	151,5 / 190	199,5 / 238	262 / 300,5
	α	deg.	20	15	15
	β	deg.	9 x 40	12 x 30	12 x 30
(Pressure control)	γ	deg.	83	60	60

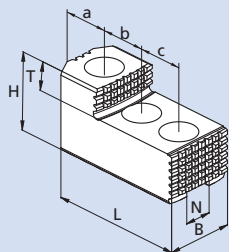
BIG BORE® BB-EXL2G

INCH SERRATION

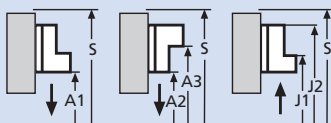
■ Top jaws

MHB-D

Hard reversible top jaws



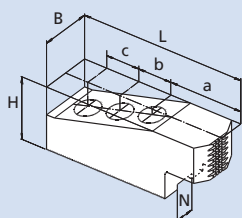
Gripping ranges



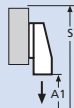
Chuck BB-EXL2G	510-191	660-280	900-390
Jaw type	MHB-D 500	MHB-D 500	MHB-D 800
Id. No.	12084546	12084546	12088046
B	60	60	75
H	75	75	85
L	140	140	220
T	2 x 19	2 x 19	30
N	25.5	25.5	30
Serration	3/32" x 90°	3/32" x 90°	3/32" x 90°
a	46	46	51
b	38	38	62
c	38	38	62
kg / set	6.6	6.6	19.5
A1			
A2			
A3			
J1			
J2			
S			

GAB

Hard top jaws



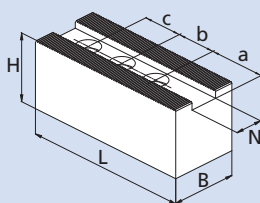
Gripping ranges



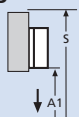
Chuck BB-EXL2G	510-191	660-280	900-390
Jaw type	GAB 500*	GAB 660	GAB 800
Id. No.	12085146	12086646	12089046
B	55	55	75
H	73	73	82
L	195	255	320
N	25.5	25.5	30
Serration	3/32" x 90°	3/32" x 90°	3/32" x 90°
a	96	156	165
b	38	38	60
c	38	38	60
kg / set	16.5	26.7	40.5
A1			
S			

WBSA-D / WBC-D

Soft top jaws



Gripping ranges



Chuck BB-EXL2G	510-191	660-280	900-390
Jaw type	WBSA-D 500	WBSA-D 500	WBC 800
Id. No. (pc.)	12075050	12075050	12078040
B	60	60	80
H	60	60	80
L	170	170	320
N	25.5	25.5	30
Serration	3/32" x 90°	3/32" x 90°	3/32" x 90°
a	69	69	165
b	38	38	60
c	38	38	60
kg / piece	3.6	3.6	15
A1			
S			

* For small clamping dia. please use hard top jaws type GAB-660.

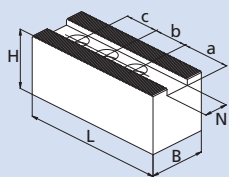


JAWS-CATALOG

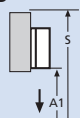
Request or
download:
www.smw-autoblok.de

- Top jaws
- T-nuts
- Adapters

WBC-D, WBCL-D Soft top jaws long version

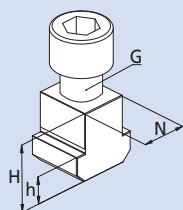


Gripping ranges



Chuck BB-EXL2G	510-191	660-280	900-390
Jaw type	WBC-D 502	WBC-D 502	WBCL-D 800
Id. No. (piece)	12075140	12075140	12079040
B	60	60	80
H	60	60	80
L	205	205	390
N	25.5	25.5	30
Serration	3/32" x 90°	3/32" x 90°	3/32" x 90°
a	104	104	230
b	38	38	60
c	38	38	60
kg / piece	4.5	4.5	18
A1			
S			

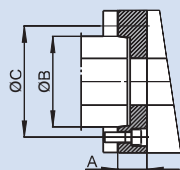
NST T-nuts



Chuck BB-EXL2G	510-191	660-280	900-390
T-nut type	NST	NST	NST
Id. No. (piece)	12065020	12065020	13063900
N	25.5	25.5	30
H	34	34	44
h	15	15	18
G	M 20	M 20	M24
Bolt ISO 4762 12.9	M20 x 40	M20 x 40	M24 x 60

Spindle adapters for BIG BORE BB-EXL2G chucks

ISO-A DIN 55026 Spindle adapters



BB-EXL2G	510-191			660-280			900-390	
Spindle nose	A11	A15	A20	A11	A15	A20	A15	A20
Id. No.	24115120	24125120	24175120	24116620	24126620	24176620	24128020	24178020

Bayonet and camlock spindle adapters are available on request.

JAWS-CATALOG

Request or
download:
www.smw-autoblok.de

