

BIG BORE® BB-EXL-SC2G

INCH SERRATION

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

- Chuck size 510 - 900
- Clamping with gas springs
- Extra long rapid and clamping stroke

Application/customer benefits

- End machining of long pipes / self centering clamping
- Highest productivity / open and clamp time < 3 sec.
- Low maintenance = High availability of the machine
- Step mode for partial opening / clamping for shimming
- Full spindle bore can be used

Technical features

- Self centering clamping with either 9 / 6 / 3 gas springs
- Opening via integrated cylinder
- Permanent grease lubricated for constant grip force
- EXTRA long rapid and clamping stroke
- Low air consumption
- Stroke control
- **proofline® chucks** = fully sealed - low maintenance

Standard equipment

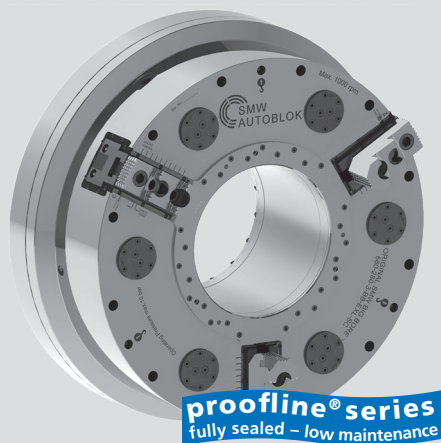
Chuck with mounting bolts
1 set of soft top jaws
1 set of T-nuts and bolts

Ordering example

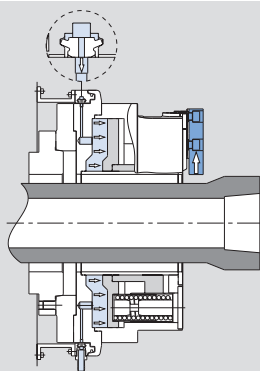
Big Bore BB-EXL-SC2G 900-390
Id. No. 77784388

Accessories

Air control

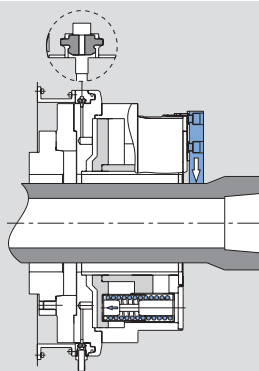


The reliable principle: Clamping via spring / opening via air cylinder



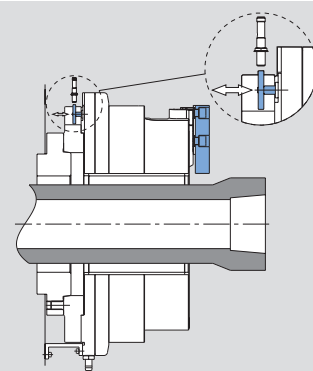
Picture 1

Chuck open (only at stopped spindle). The SMW profile seal collapses radially under the air pressure and seals against the chuck body. The cylinder chamber is filled. The piston is compressing the springs, the jaws open.



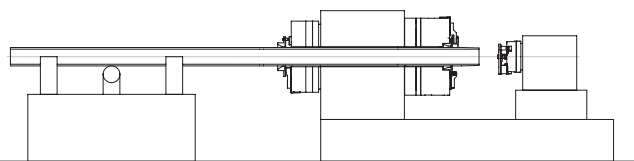
Picture 2

The SMW profile seal lifts off the chuck body due to elastic force. The springs expand and transmit their force onto the jaws via the wedge hook drive. The spindle can rotate.

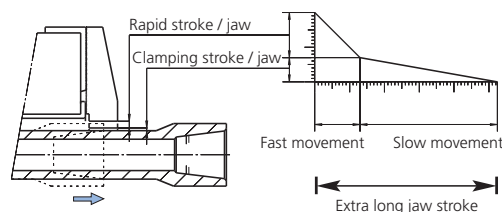


Picture 3

Stroke control. The position of the jaws can be monitored via a mechanical cam by 1 or 2 proximity switches.



End machining of tubes with front and rear chucks



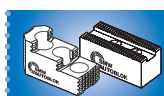
Technical data

SMW-AUTOBLOK Type		BB-EXL-SC2G 510-191			BB-EXL-SC2G 660-280			BB-EXL-SC2G 900-390		
Id. No.		77784353			77784366			77784388		
Chuck 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")		
Opening pressure with all springs	bar (psi)	5 (73)			5 (73)			5 (73)		
Max. gripping force at 3 / 6 / 9 springs	kN (lbf)	57 (12814)	114 (25628)	-	82 (18434)	164 (36869)	-	82 (18434)	164 (36869)	245 (55078)
Max. speed	r.p.m.	1100			1000			680		
Air consumption to open at 5 bar (73 psi)	liter	37			92			125		
Weight (without top jaws)	kg (lbs)	318 (701)			500 (1102)			950 (2094)		
Moment of inertia	kg·m²	14			36			117		

* May not be used for clamping.



SMW-AUTOBLOK
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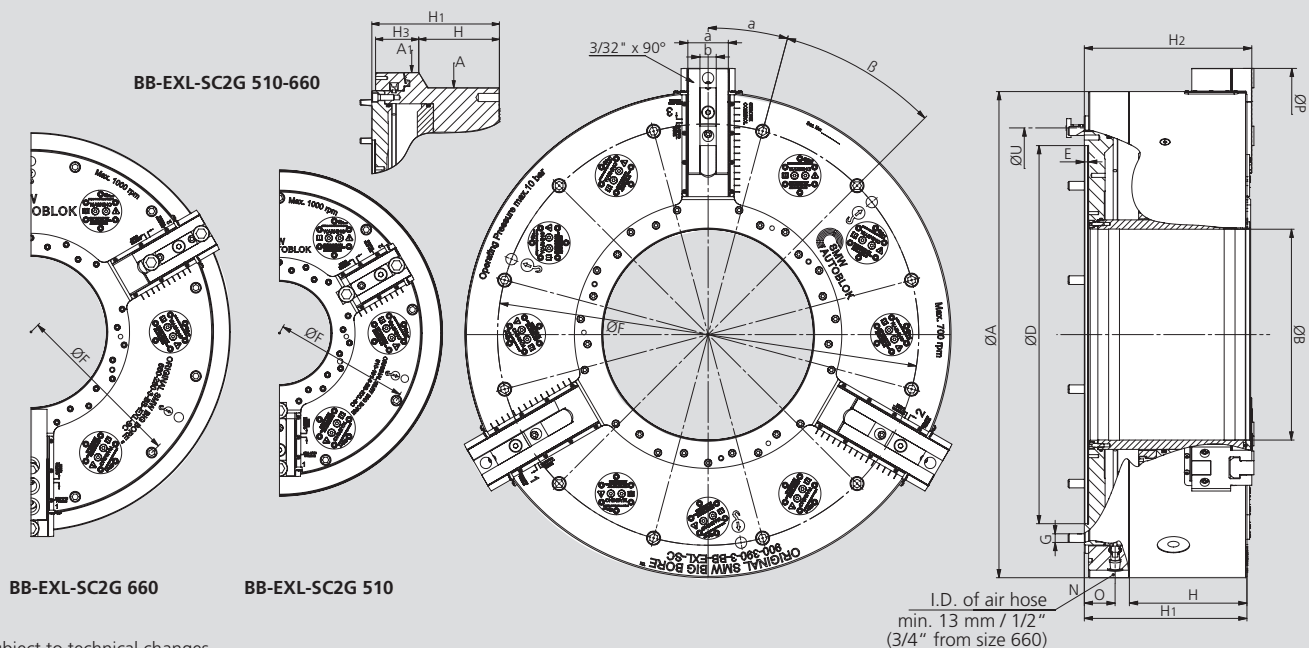
SMW-AUTOBLOK
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BIG BORE® BB-EXL-SC2G

INCH SERRATION

■ Main dimensions and technical data

Opening pressure with all springs mounted
Min. 5 bar, max. 8 bar

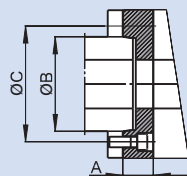


Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type			BB-EXL-SC2G 510-191		BB-EXL-SC2G 660-280		BB-EXL-SC2G 900-390	
Mounting			Z310		Z450		Z700	
Through-hole	A	mm	532		673		900	
	A1	mm	610		738		-	
	B	mm	191		280		390	
	D H6	mm	310		450		700	
	E	mm	8		8		8	
	F	mm	502		632		780	
	G	mm	M12 (9x)		M12 (12x)		M16 (12x)	
	H	mm	170		152		215	
	H1	mm	272		272		301	
	H2	mm	279		279		310	
Max. swing	N	inch	G 1/2"		G 1/2"		G 1/2"	
	O	mm	47		47		57	
	P	mm	604		760		986	
	a	mm	57		62		75	
	b	mm	25.5		25.5		30	
	α	deg.	20		15		15	
Rapid stroke	β	deg.	9 x 40°		12 x 30°		12 x 30°	
	U	mm	414		554		765	
		mm	30		30		30	
		mm	8.5		8.5		8.5	
Total clamping stroke			38.5		38.5		38.5	

Spindle adapters

Spindle adapters
ISO-A DIN 55026



SMW-AUTOBLOK Type	BB-EXL-SC2G 510-191			BB-EXL-SC2G 660-280			BB-EXL-SC2G 900-390	
Spindle nose	A11	A15	A20	A11	A15	A20	A15	A20
Id. No.	24115130	24125130	24175130	24116630	24126630	24176630	24128830	24178830