

BIG BORE® BB-SC

INCH SERRATION

Front-end spring clamp power chuck EXTRA large through-hole Ø 275 - 565 mm

- Chuck size 600 - 1020
- Clamping with spring packs
- Rapid and clamping stroke

Application/customer benefits

- End machining of long pipes / self centering clamping
- Long jaw stroke to clear upset piping
- Highest productivity / open and clamp time < 3 sec.
- Low maintenance = high availability of the machine
- Step mode for partial opening / clamping for shimming possible
- Full spindle bore can be used

Technical features

- Self centering clamping with either 9 / 6 / 3 spring packs
- Encapsulated spring packs
- Opening via integrated cylinder
- Permanently grease lubricated for constant grip force
- Long jaw stroke with rapid and clamping stroke
- Low air consumption
- Stroke control
- **proofline® chucks** = fully sealed - low maintenance

Standard equipment

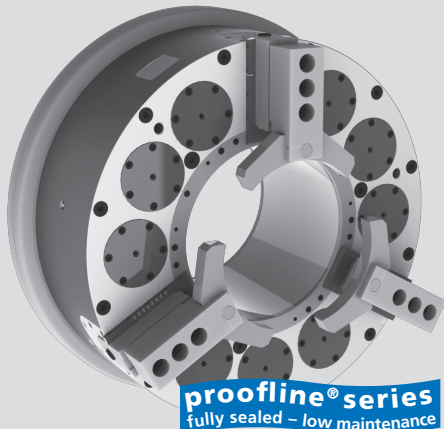
Chuck with mounting bolts
1 set of soft top jaws
1 set of T-nuts and bolts

Ordering example

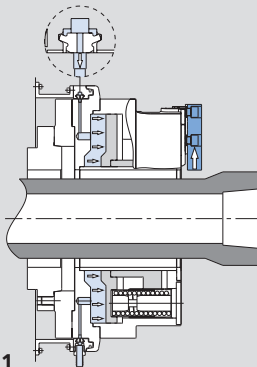
Big Bore SC 850-395
Id. No. 053350

Accessories

Air control AC-SC

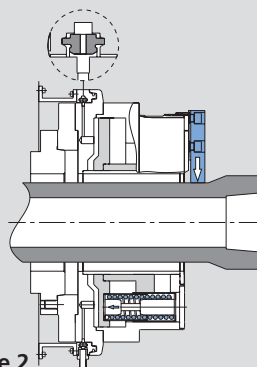


The reliable principle: Clamping via encapsulated spring packs / opening via air cylinder



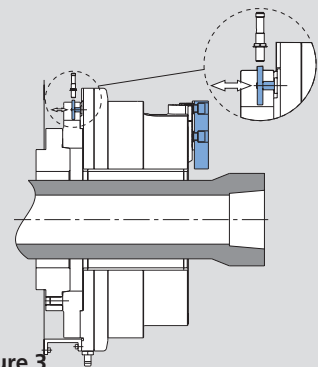
Picture 1

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



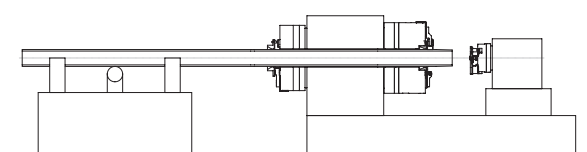
Picture 2

Chuck clamped. 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.

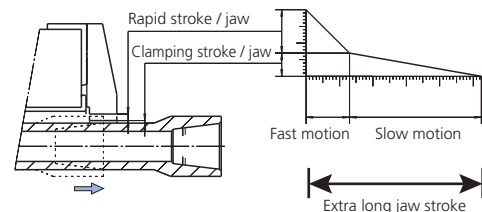


Picture 3

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



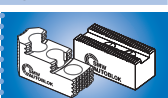
Technical data

SMW-AUTOBLOK Type		BB-SC 600-275			BB-SC 850-395			BB-SC 1020-565		
Id. No.		053540			053350			053570		
Through-hole	mm (inch)	275 (10.83")			395 (15.55")			565 (22.24")		
Total stroke per jaw	mm (inch)	25.4 (1")			27 (1.06")			27 (1.06")		
Rapid stroke per jaw*	mm (inch)	16.9 (0.67")			15 (0.59")			15 (0.59")		
Clamping stroke per jaw	mm (inch)	8.5 (0.33")			12 (0.47")			12 (0.47")		
Operating pressure at 9 springs	bar (psi)	5 (73)			5 (73)			5 (73)		
Max. gripping force at 3 / 6 / 9 springs	kN (lbf)	50 (11240)	100 (22480)	150 (33721)	57 (12814)	113 (25403)	170 (38218)	57 (12814)	113 (25403)	170 (38218)
Max. speed	r.p.m.	1000			700			420		
Air consumption to open at 5 bar (73 psi)	liter	60			115			139		
Weight (without jaws)	kg (lbs)	510 (1124)			930 (2050)			1260 (2779)		
Moment of inertia	kg-m²	34			101			223		

* May not be used for clamping.

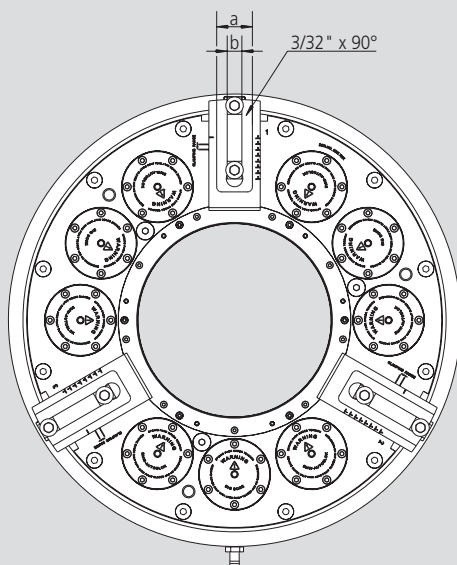


SMW-AUTOBLOK
363

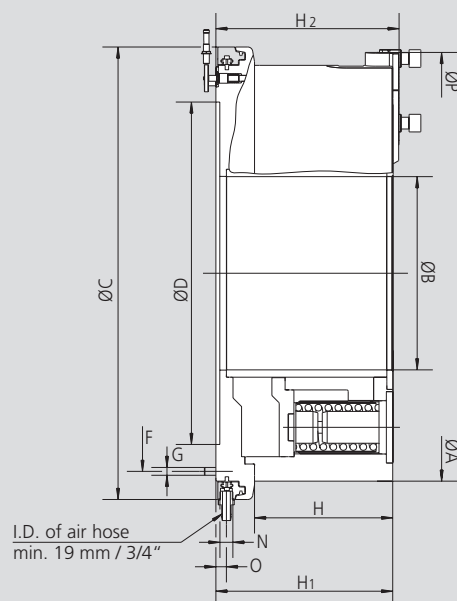
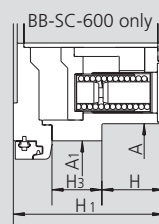


SMW-AUTOBLOK
360

■ Main dimensions and technical data



Opening pressure with all springs mounted
Min. 5 bar (73 psi), max. 8 bar (116 psi)

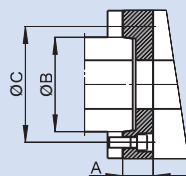


Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type			BB-SC 600-275	BB-SC 850-395	BB-SC 1020-565
Mounting			Z520	Z700	Z870
(BB-SC-600-275)	A	mm	605	850	1020
	A1	mm	675	-	-
	B	mm	275	395	565
	C	mm	750	925	1095
	D H6	mm	520	700	870
	F	mm	640	810	980
(BB-SC-600-275)	G		M12 (12x)	M16 (12x)	M16 (12x)
	H		126.7	282.5	282.5
	H1		307.5	361.5	361.5
	H2		320.5	374.5	374.5
	H3		102	-	-
	N		G 3/4"	G 3/4"	G 3/4"
Max. swing	O		21.5	21.5	21.5
	P		655.8	902.8	1074
	a		58	73	73
Rapid stroke	b		25.5	30	30
		mm	16.9	15	15
		mm	8.5	12	12
Total clamping stroke			25.4	27	27

Spindle adapters

Spindle adapters
ISO-A DIN 55026



BB-SC	600-275			850-395		1020-565		
Spindle nose	A11	A15	A20	A15	A20	A15	A20	A28
Id. No.	on request	053590	053591	053362	053358	on request	053595	053596