

BIG BORE® BB-SC

INCH serration

Front-end spring clamp power chucks 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 pipe/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
- 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
- Permanent grease lubricated for constant grip force
- Step mode for opening/clamping for shimming
- 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

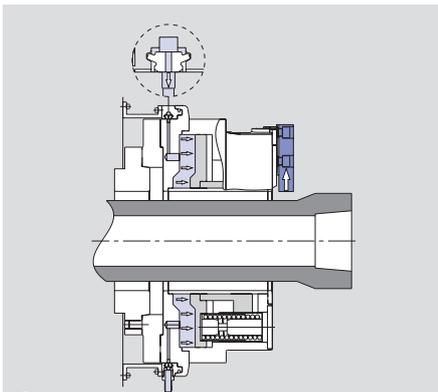


Fig. 1
Chuck open (only at stopped spindle).
The SMW profile seal collapses radial under the air pressure and seals against the chuck body. The cylinder chamber is filled. The piston is compressing the springs, the jaws open.

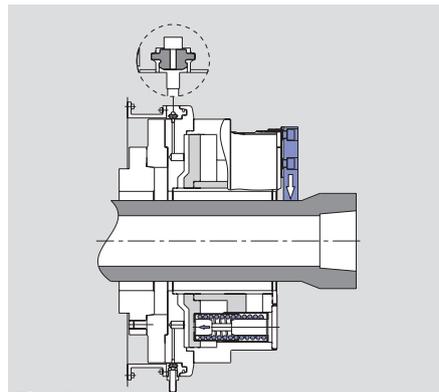


Fig. 2
Chuck clamped.
The SMW profile seal lifts off the chuck body due to elastic force. The springs expand and transmit their force onto the jaws via the wedge hook drive. The spindle can rotate.

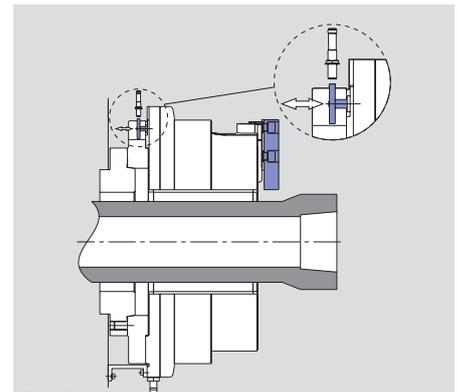
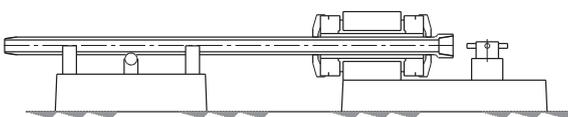
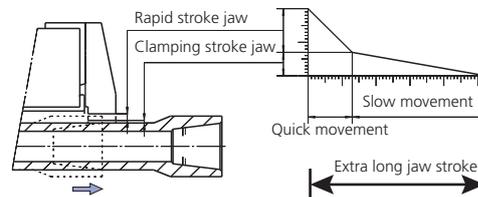


Fig. 3
Stroke control.
The position of the jaws can be monitored via a mechanical cam by 1 or 2 proximity switches.



End machining of tubes with front and rear chucks



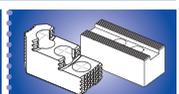
Technical data

SMW-AUTOBLOK Type		BB-SC 600-275			BB-SC 850-395			BB-SC 1020-565		
Id. No.		053540			053350			053570		
Chuck trough hole	mm	275			395			565		
Total stroke per jaw	mm	25.4			27			27		
Rapid stroke per jaw*	mm	16.9			15			15		
Clamping stroke per jaw	mm	8.5			12			12		
Operating pressure at 9 springs	bar	5 bar			5 bar			5 bar		
Max. gripping force at 3/6/9 springs	kN	50	100	150	57	113	170	57	113	170
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	510			930			1260		
Moment of inertia	kg·m ²	34			101			223		

*must not be used for clamping

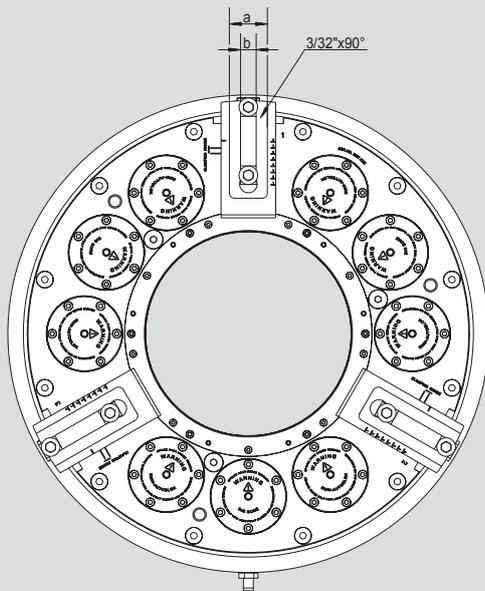


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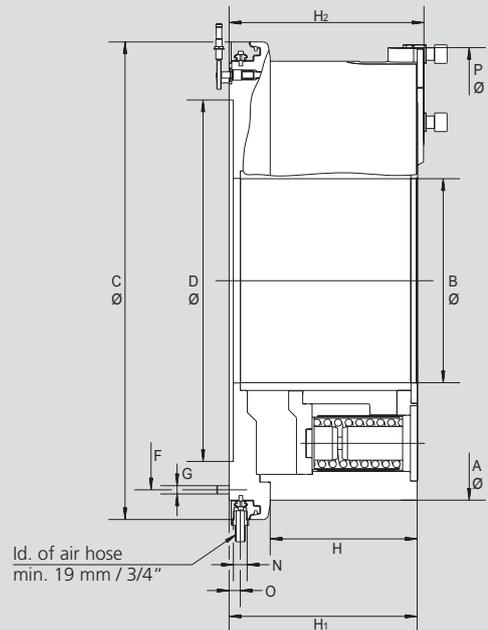
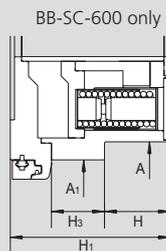
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Main dimensions and technical data



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

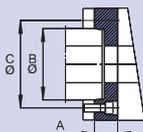
Subject to technical changes
For more detailed information please ask for customer drawing



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
Through hole	A1	mm	675	-	-
	B	mm	275	395	565
	C	mm	750	925	1095
	D H6	mm	520	700	870
	F	mm	640	810	980
	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
(BB-SC-600-275)	H3		102	-	-
	N		G 3/4"	G 3/4"	G 3/4"
	O		21.5	21.5	21.5
max. swing	P		655.8	902.8	1074
	a		58	73	73
	b		25.5	30	30
Rapid stroke		mm	16.9	15	15
Clamping stroke		mm	8.5	12	12
Total clamping stroke		mm	25.4	27	27

Spindle adapters

Mounting
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