

Bell Hydromatics

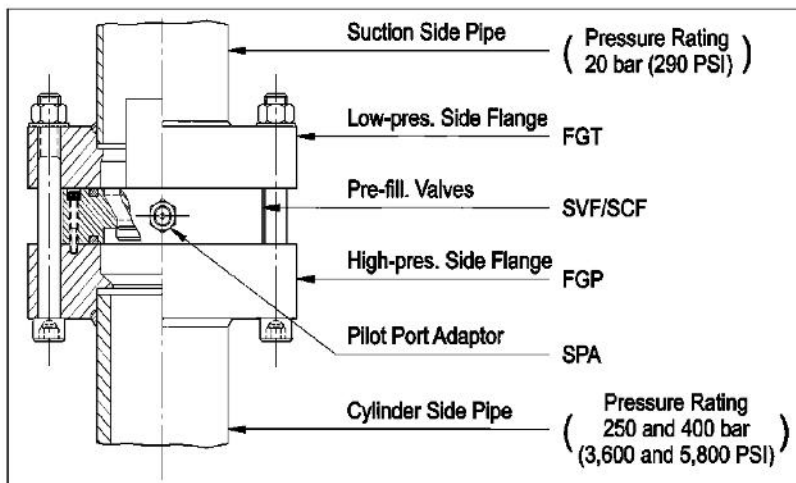
Pre Fill Valve

Pre Fill Valves SVF/SCF



Features

- Small size , and easy to install.
- Low pressure loss with high flow capacity.
- Compact and robust.
- Steel body with steel components , available with 8 models for selection options.
- Ductile iron body with steel Components , available with 6 models for selection options.
- Good for directly intergrated onto the cylinder cap side.



Pre-fill valve

Ordering Code

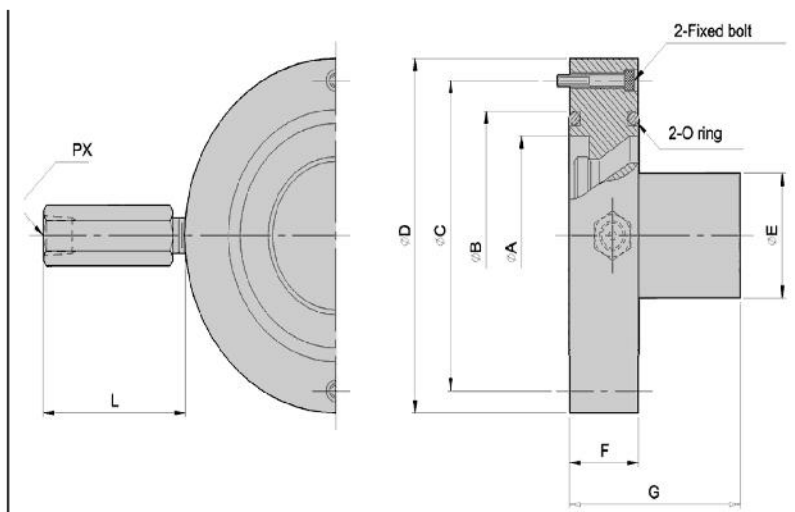
SVF	100	21C
Series No.	Size	Design Number
SVF – Steel body	SVF – 32~200	SVF – 21C
SCF – Ductile iron body	SCF – 32~125	SCF – 22C

Pipe Flange

Ordering Code

FGP	100	2	M22	5B
Series No.	Size	Pressure range	Normal bolt diameter	Normal pipe diameter
FGP – High – pres. side flange		2: 250 bar (3,600 PSI)		
FGT -Low – pres. side flange		4: 400 bar (5,800 PSI)		

Dimensions

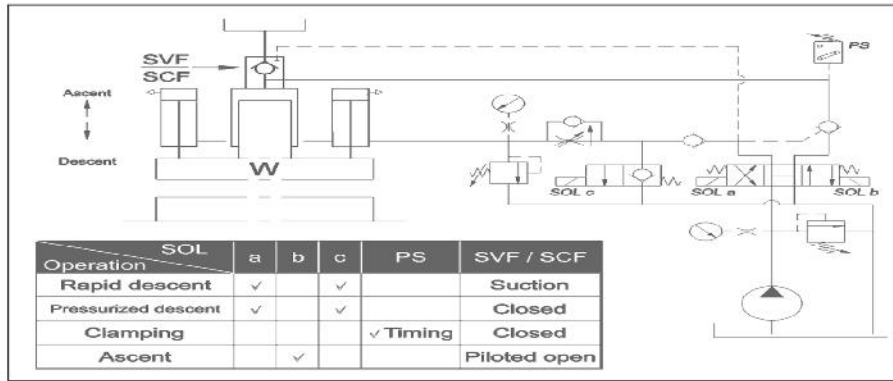


Model	ΦA	ΦB	ΦC	ΦD	ΦE	ΦF	ΦG	L	PX	Fixed Bolt	O-ring
SVF-32, SCF-32	48 (1.89)	63 (2.48)	-	82 (3.23)	32 (1.26)	28 (1.10)	55 (2.17)	62 (2.44)	PT1/4"	-	1517-6
SVF-50, SCF-50	72 (2.83)	90 (3.54)	112 (4.41)	128 (5.04)	45 (1.77)	29 (1.14)	72 (2.83)			M 4X30	G 85
SVF-63, SCF-63	87 (3.43)	105 (4.13)	125 (4.92)	143 (5.63)	50 (1.97)	33.5 (1.32)	84 (3.31)			M 5X35	G 95
SVF-80, SCF-80	108 (4.25)	130.5 (5.14)	150 (5.91)	169 (6.65)	57 (2.24)	38.5 (1.52)	100 (3.94)			M 5X40	G 120
SVF-100, SCF-100	130 (5.12)	155 (6.10)	185 (7.28)	212 (8.35)	70 (2.76)	44 (1.73)	122 (4.80)			M 6X45	G 145
SVF-125, SCF-125	170 (6.69)	200 (7.87)	226 (8.90)	248 (9.76)	89 (3.50)	51 (2.01)	155 (6.10)			M 6X60	G 185
SVF-160, SCF-160	218 (8.58)	250 (9.84)	284 (11.18)	310 (12.20)	120 (4.72)	70 (2.76)	233 (9.17)	70 (2.76)	PT3/8"	M 8X70	G235
SVF-200, SCF-200	272	310	355	390	145	95	268	85	PT1/2"	M 10X95	G295

Pre-fill Valves Pilot Port adaptor

Model	Orifice	Plug
SVF(SCF)-32,50	∅0.7(.03)	PT1/8"
SVF(SCF)-63	∅0.8(.03)	
SVF(SCF)-80	∅1.0(.04)	
SVF(SCF)-100	∅1.2(.05)	
SVF(SCF)-125,160	∅1.5(.06)	
SVF(SCF)-200	∅1.8(.07)	

Reference



Example for model selection:

Given

1. Main cylinder dia.:350mm.
2. Ascending cylinder:2-B063XR035(mm).
3. Weight of platen: 1500kg.
4. Pump capacity:25 lpm(6 USgpm).

Analysis

Area of main cylinder:961.625cm². Two ascending cylinder area:43.081cm² Ascent speed:580cm/min(96.6mm/sec). Flow thru pre-fill valve to tank :558 lpm(135 USgpm). Selectable model: SVF-63-21C or SCF-63-22C
 The induced pressure in ascending cylinder is 36 bar(520 PSI). For a free descending operation,the flow capacity. 630 lpm(152 USgpm) for SVF(SCF)-63,will allow a descending speed at 650cm/min(108mm/sec).

Flanges

