D Е φP F Ports Ports (x6) B/B' A/A \oplus \oplus \oplus \oplus Check Facing the motor valve Ν G thread Relief Ò \oplus valve cartridge н Port L В Κ Port G (size 1 and 2) С Μ M22x1.5; min 16 deep

SR pressure relief anti-cavitation valve, Dimensions

Dim. [mm]	Size 1 (³ / ₄ ")	Size 2 (1")	Size 3 (1¼")					
А	55	57	57					
В	55	55	25					
С	32	32	26					
D	157	160	160					
Е	66	75	83					
F	23.8	27.8	31.8					
G	50.8	57.15	66.7					
Н	103	109	88					
J	140	150	135					
K	18	18	-					
L	18	18	18					
М	78.5	80	-					
Ν	M10	M12	M14					
	x18	x20	x23					
Р	11	13	15.5					
Weight	Size 1 (³ / ₄ ")	Size 2 (1")	Size 3 (1¼")					

7.4

[kg]

9.1

8.5

SV pressure relief valve

General information

The SV pressure relief valve block for series F12 motors is designed to protect the motor and adjacent hydraulic components from short duration pressure peaks.

It installs directly on the motor port flange and is available in two sizes:

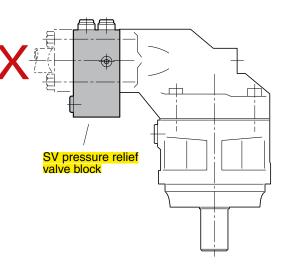
- '1': ³/₄" for F12-30/-40/-60
- '2': 1" for F12-80/ -90

The valve block consists of a housing containing two high pressure relief cartridges with anti-cavitation function. Cartridges are available in non-adjustable pressure settings between 280 and 420 bar.

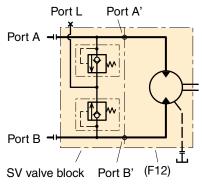
A make-up/drain port, L, is also provided. In certain operating conditions the motor may cavitate because of in-sufficient inlet pressure. To prevent this, the L port can be pressurized. When there is a risk of over-heating, the L port can also be utilized to take out part of the flow for cooling. Contact Parker Hannifin for further information.

The pressure drop through the main ports (A–A' or B–B') is low. As an example, the pressure drop on size 1 $({}^{3}/_{4}")$ is 0.45 bar (6,5 psi) at 175 l/min (45 gpm), and on size 2 (1") 0.7 bar (10 psi) at 250 l/min (65 gpm).

- **NOTE:** The valve block includes main port O-rings (facing the motor) but no mounting screws.
 - The valve blocks can be used on all versions of series F12 motors.

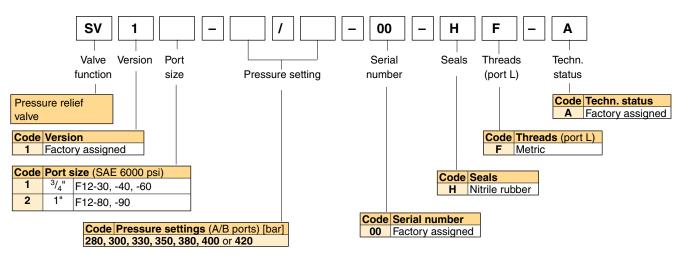


SV valve block installed on an F12 motor.

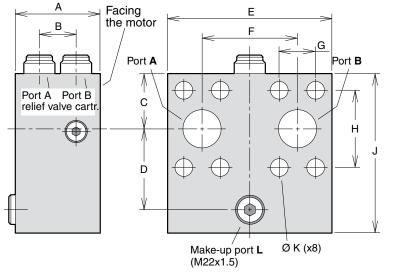


Hydraulic schematic.





SV pressure relief valve, Dimensions



Dim. [mm]	SV11	SV12	
A	71	73	
В	31	31	
С	36	41	
D	47	51	
E	130	127	
F	66	75	
G	23.8	27.8	
Н	50.8	57.2	
J	99	109	
K	11	13	
Weight [kg]	4.2	5.0	

MV Anti-cavitation valve / make up valve block

The make-up valve block for series F12 motors is designed to prevent cavitation inside motor by directing flow to inlet port from return side.

The manifold is uni-directional but can be installed in either motor direction

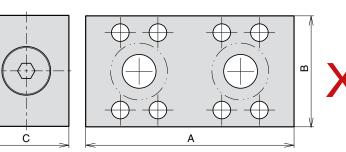
The valve block installs directly on the motor port flange, and is available in 2 sizes:

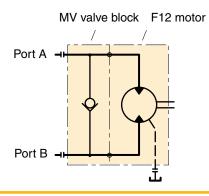
The valve block consists of one check valve for makeup function.

The make-up valve opens at a pressure of approx. 0,2 bar.

NOTE: The valve block includes main port O-rings (facing the motor) but no mounting screws.

Size	For Motor	A	В	С	Order number	
1"	F12-80, -90	<mark>154</mark>	82	<mark>63</mark>	<mark>3720140</mark>	Х
1 ½"	F12-152, -162, -182, -250	208.5	105	47	3784195	







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