

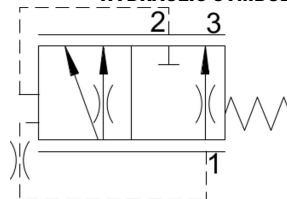
# FRP\*.S10 VALVE SERIES

SAE Cartridge - 350 bar

Direct acting - Pressure Compensated



HYDRAULIC SYMBOL



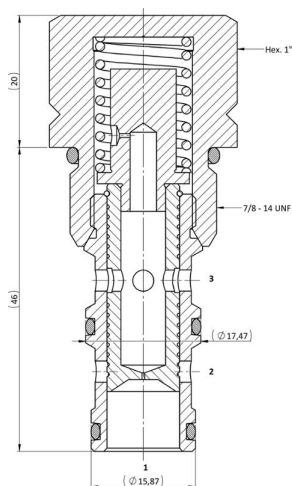
## DESCRIPTION

A screw-in, cartridge style, direct acting, 3-way pressure compensated flow control valve. The flow rate of this valve in the 1 to 3 flow path is largely independent of the system pressure or in the the bypass-way and is determined by the dimension of a calibrated orifice. The FRP0.S10 is a priority type regulator, delivering the pump flow to port 3 first, then bypassing excess to port 2. All ports may be fully pressurized.

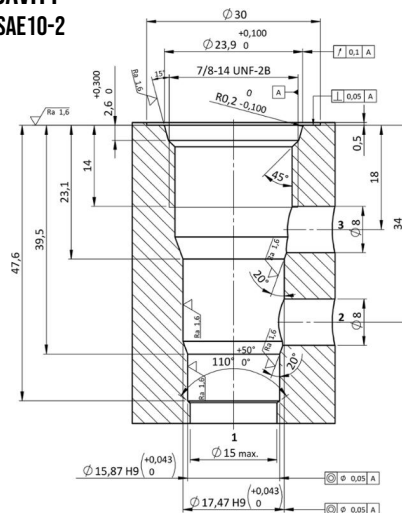
Flow out of priority port 3 may vary based on input flow amount, particularly with lower temperatures and increased fluid viscosities.

The valve cannot be adjusted for variable flow output. Free flow in the 2 to 1 path is allowed and not pressure compensated.

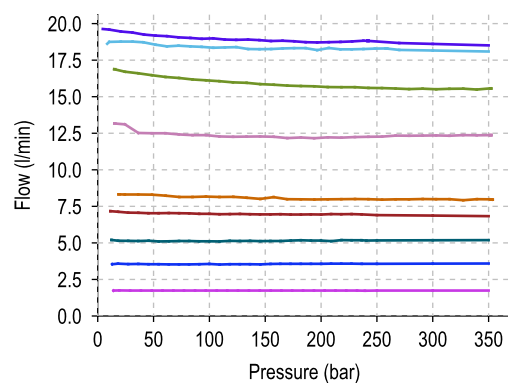
## CROSS SECTION



CAVITY  
SAE10-2



## PERFORMANCE DETAILS



LEGEND

- Q<sub>regulated</sub> = 5 l/min
- Q<sub>regulated</sub> = 7 l/min
- Q<sub>regulated</sub> = 8 l/min
- Q<sub>regulated</sub> = 12 l/min
- Q<sub>regulated</sub> = 16 l/min
- Q<sub>regulated</sub> = 1,7 l/min
- Q<sub>regulated</sub> = 18 l/min
- Q<sub>regulated</sub> = 19 l/min
- Q<sub>regulated</sub> = 3,5 l/min

### NOTE

The performance chart illustrates flow handling capacity in the pressure compensated mode for a few significant flow settings. p,Q curves are recorded at T<sub>oil</sub> = 40°C and 46 cSt.

## TECHNICAL DATA

MAXIMUM OPERATING PRESSURE	350 bar
MAXIMUM FLOW	60 l/min
EXTERNAL COMPONENT TREATMENT	Zn/Fe - Standard (96h) Zn/Ni (720h) (Upon customer request)
O-RING TEMPERATURE RANGE	-30° C to 110° C (standard sealing NBR - BUNA - N) -35° C to 140° C (HNBR - Upon customer request) -23° C to 225° C (FKM - Upon customer request)
OIL TEMPERATURE RANGE	-30° C to 110° C
FLUIDS	Mineral - based or synthetics with lubricating properties
VISCOSITIES	7,4 to 420 cSt
FILTRATION	20/18/15 ISO 4406 (maximum filtration admitted)
ORIENTATION	No restrictions
INSTALLATION TORQUE	50-55 Nm  Hex. 1"
TECH. SPEC. FOR CHARACTERIZATION	see page 811
OIL TESTING CONDITIONS	ISO VG 46 cSt
SEAL KIT CODE	SK.049 (standard sealing NBR-BUNA-N)
WEIGHT	0,143 kg

## ORDERING CODE

F R P \*

VALVE BASIC CODE

FLOW SETTING RANGE

0 = 12-25 l/min

1 = 0,3-11 l/min

S 1 0

SIZE

S10 = 7/8 UNF with Ø15,87 nose size

0 N

FIXED FLOW SETTING  
(l/min with 1 decimal)

\* \* \* \*

STEEL WIRE OPTION

\*\*\*W = If requested, leave blank if not.

FRP0		FRP1	
12 l/min	120	0,6 l/min	006
13 l/min	130	0,8 l/min	008
14 l/min	140	0,4 l/min	004
15 l/min	150	1 l/min	010
16 l/min	160	2 l/min	020
17 l/min	170	3 l/min	030
18 l/min	180	4 l/min	040
19 l/min	190	5 l/min	050
20 l/min	200	6 l/min	060
21 l/min	210	7 l/min	070
22 l/min	220	8 l/min	080
23 l/min	230	9 l/min	090
24 l/min	240	10 l/min	100
25 l/min	250	11 l/min	110
		0,3 l/min	003

### NOTE

Customized fixed flow can be provided upon request

Specifications may change without notice.