

SERIES - MV8-3

Basic Characteristics

Operating Pressure (maximum) - 250 bar (3600 psi)

Rated Capacity (maximum) - 40 L/min

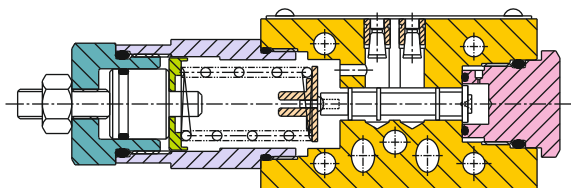
Approx. Weights

MV8-3 = 1.2 kg

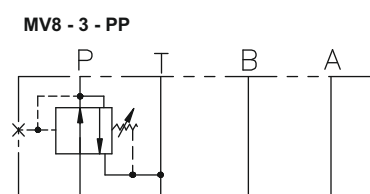
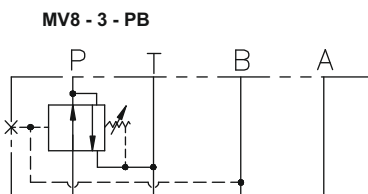
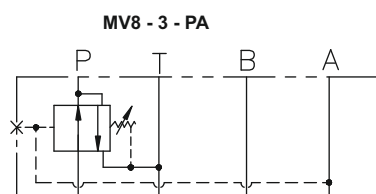
General Description

MV8-3 Modular Pressure Control Valves are designed as self operated spool-type pressure control units. Rising system pressure acts against the spring to close the flow path. The leakage oil is internally drained to the tank line. Pressure setting is adjustable by means of a screw with securing lock nut. Different spring ratings cover an overall pressure range from 3.5 to 250 bar (50-3600 psi).

Note:- These valves drain to the tank line. Any pressure in the line to which they are drained is additive to the valve pressure setting.



Functional Symbols



ORDERING INFORMATION

MV 8 - 3 - ** - * - W - 20

1 2 3 4 5 6 7

1. Model Code - MV

2. Model Series - 8

3. Arrangement - CETOP 3

4. Control Type -

PA = Pilot operated upon P port,
Pilot control A port

PB = Pilot operated upon P port,
Pilot control B port

PP = Pilot operated upon P port,
Pilot control P port

5. Pressure Range -

HR = 50 - 425 psi

DY = 225 - 1000 psi

DD = 225 - 2000 psi

DR = 225 - 3600 psi

6. Adjustment type -

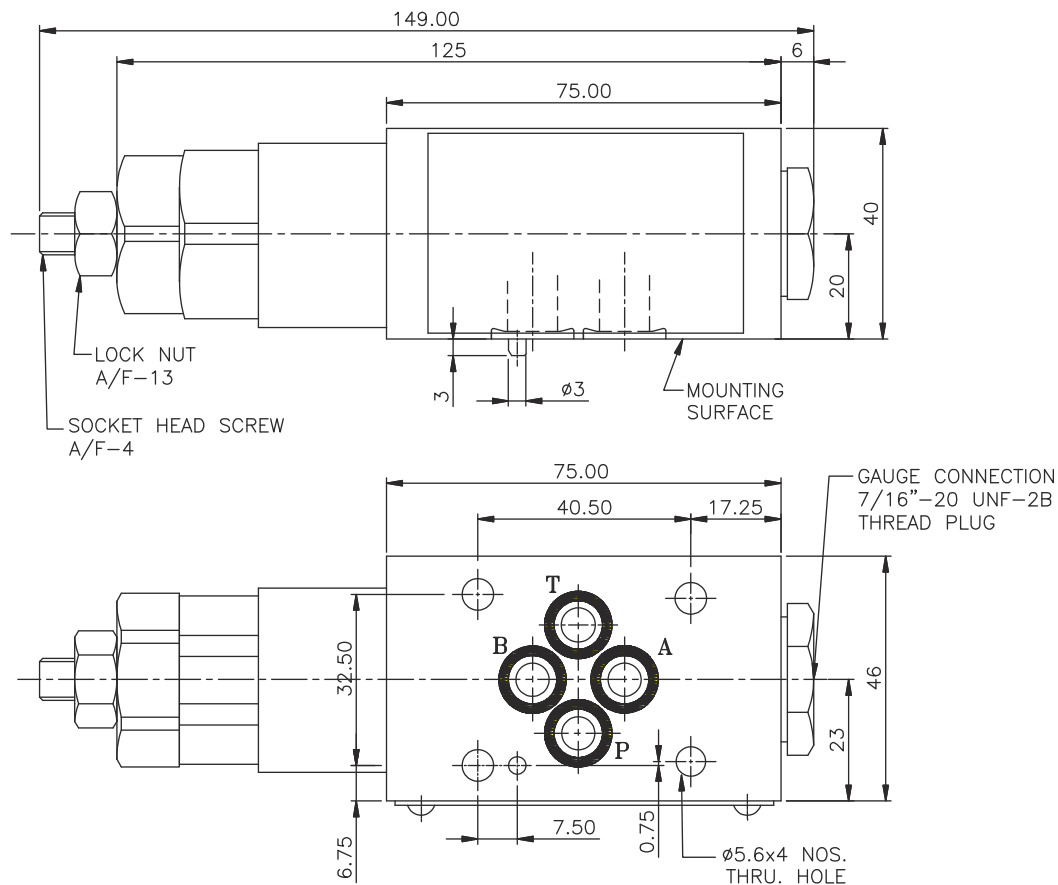
W = Screw & Locknut (standard)

7. Design No - 20 (Subject to change)

20-SPL (Subject to change)

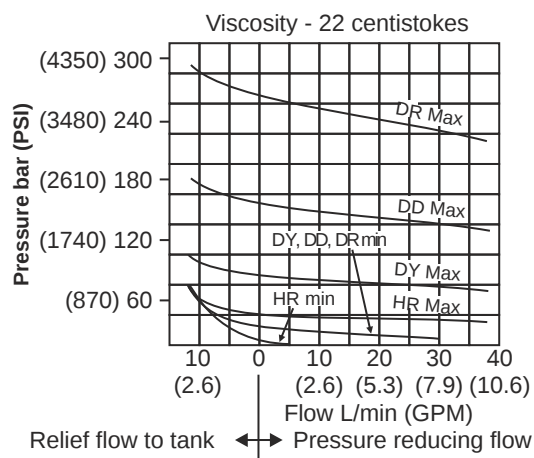
Typical Model Code :- MV8 - 3 - PA - HR - W - 20

ALL DIMENSIONS ARE IN mm.



MV8-3 Models

Drain flow to tank
normally <1000 cm³/min.
(61 in³/min.)

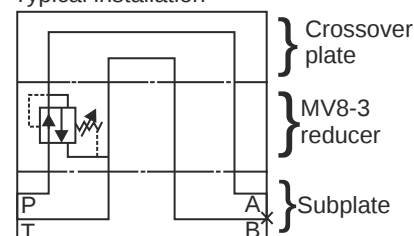


Max. flow rates at low reduced pressure settings, MV8-3 models

Limited when the back-pressure from flow passing through the reducer valve to the system (out of A in the example below) equals the reduced pressure setting.

The effect is illustrated below:

Typical installation



PERFORMANCE

MV8-3 maintains a constant reduced outlet pressure against a variation of inlet pressure above valve setting; Pilot control may be from P, A, or B ports. The curves show the "HR" "DD" and "DR" pressure range spool vent feature which prevents undesirable pressure rise in a trapped volume, or on a cam type system where the cylinder could be pushed back. They show the degree of pressure override for different flow rates and the pressure change from a reducing to a vent function.

Note

As with all pressure reducing valves, attention should be paid to external downstream circuitry when very low reduced pressure levels are required. If back pressure created under dynamic conditions is greater than the reduced pressure setting, the valve will close. Care should be taken when applying the low rate "HR" on applications where the minimum pressure setting is required.