

Oilgear

HYDRAULIC MODULAR VALVE

REDUCING VALVE MPR



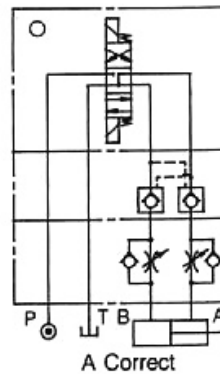
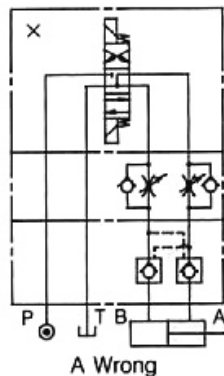
FEATURES

Modular type of pressure controls, flow controls, and check valves are sandwiched between directional control valves and their subplates or manifolds. They use no piping and share a common mounting surface, and are the ultimate in modern design, compactness and efficiency. They reduce the possibility of leakage, vibration, flow noise caused by piping. The compactness takes less space, ease the installation and maintenance.

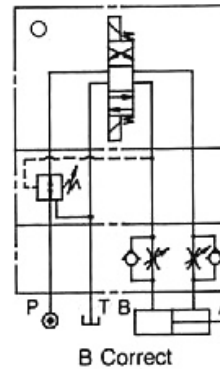
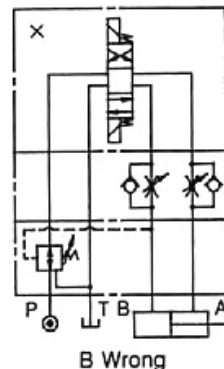
They are available in both D03 and D05 sizes.

CIRCUITRY EXAMPLES

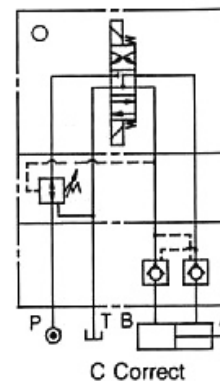
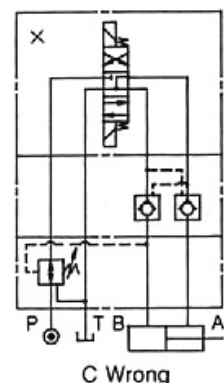
A.
Solenoid directional valve
Pilot operated modular
check valve (for A, B lines)
Modular reducing valve (for B
line)



B.
Solenoid directional valve
Modular flow control valve (for
A, B lines, metering out)
Modular reducing valve (for B
line)



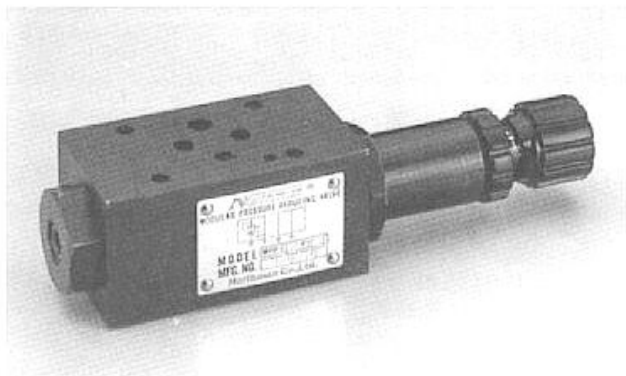
C.
Solenoid directional valve
Modular flow control valve (for
A, B lines, metering out)
Modular pilot operated check
valve (for A, B lines)



A.
When MT-***B and MPC-***W are used together in same circuit, the right circuit is correct usage, and left is wrong, as the MPC would not be totally closed.

B.
When MPR-***B and MT-***W are used together in same circuit, the right circuit is correct usage, and left is wrong, as the function of pressure reducing valve will be affected when oil flow from B to T. Because the metering out throttle/check valve will create a pressure which will cause pressure reducing valve to reduce the pressure too low, and the cylinder then can not operate with enough force or move smoothly.

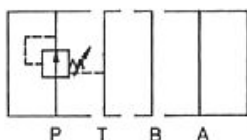
C.
When MT-***W and MPC-***W are used together in same circuit, the MT should be installed closer to the cylinder ports, otherwise cylinder may have a "knocking" phenomenon happened.



SPECIFICATIONS

Max. operating pressure	210Kgf/cm ² (3000PSI)
Max. flow capacity	35 LPM (9.3 GPM)

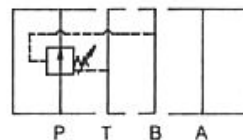
SYMBOLS



MPR-02P



MPR-02A



MPR-02B

HOW TO ORDER

MPR - 02P - K - 1 - 20

DESIGN NUMBER

PRESSURE ADJUSTMENT RANGE :

0 : 1.5-35KGF/CM² (20-500PSI)

1 : 8-70KGF/CM² (120-1000PSI)

2 : 35-140KGF/CM² (500-2000PSI)

3 : 70-210KGF/CM² (1000-3000PSI)

ADJUSTMENT MODEL :

K : WITH KNOB

NO CODE: WITHOUT KNOB

FUNCTION PORT :

P : P PORT

A : A PORT

B : B PORT

PORT SIZE : 1/4" (D03)

MODULAR PRESSURE REDUCING VALVE

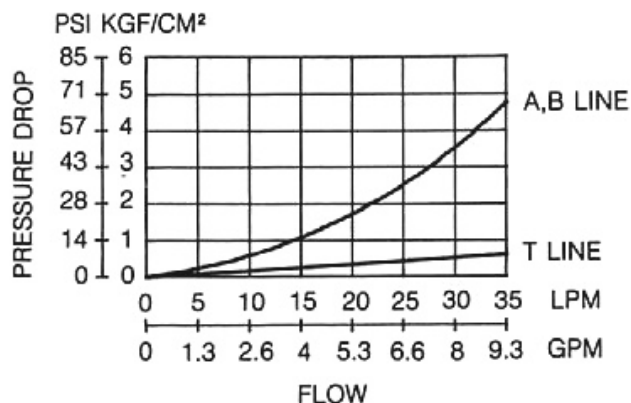
PERFORMANCE CURVES

TEST CONDITIONS

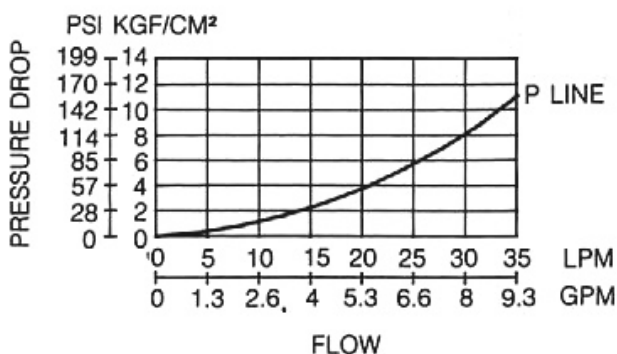
Viscosity: 35 CST

Temperature: 50°C

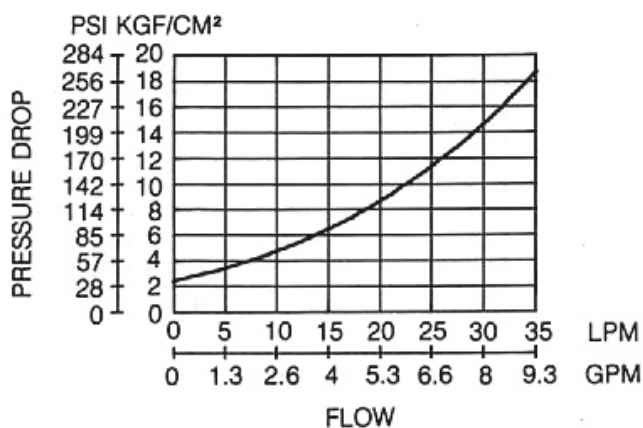
PRESSURE DROP



PRESSURE DROP AT SPOOL FULLY OPENED



MIN. ADJUSTMENT PRESSURE VS. MAX. FLOW

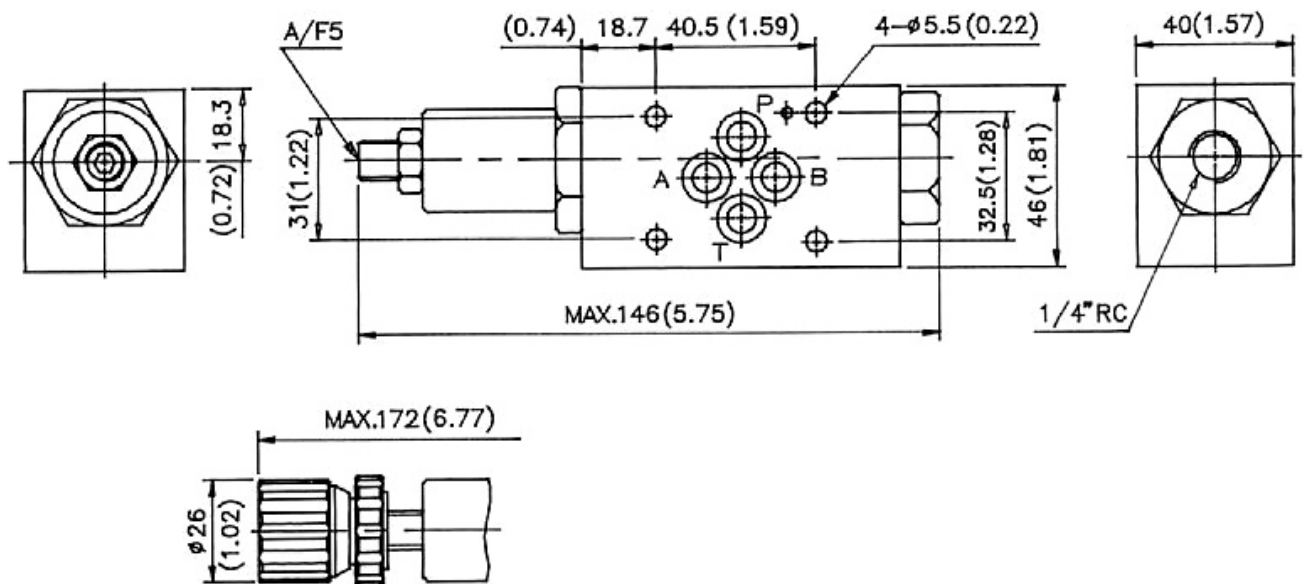


INSTALLATION DIMENSIONS

UNIT: mm (inch)

WEIGHT: 1.2 kgs (2.65 lbs)

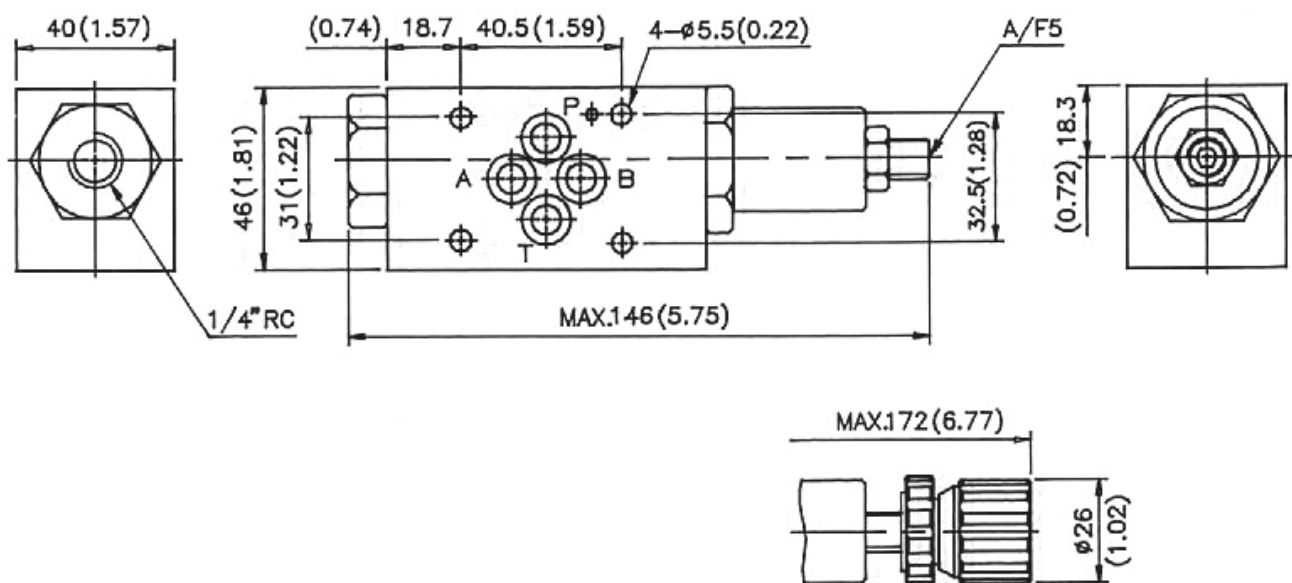
MPR-02B-※-※-20

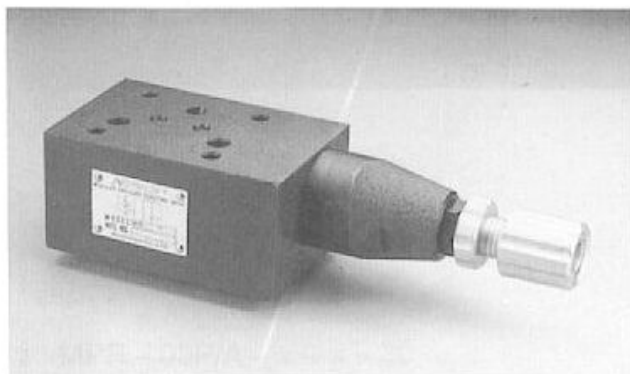


INSTALLATION DIMENSIONS

UNIT: mm (inch)
WEIGHT: 1.2 kgs (2.65 lbs)

MPR-02P/A-**-**-20

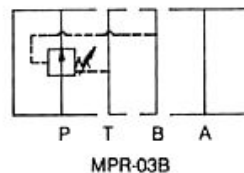
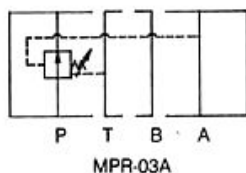




SPECIFICATIONS

Max. operating pressure	210 Kg/cm ² (3000PSI)
Max. flow capacity	70 LPM (20 GPM)

SYMBOLS



HOW TO ORDER

MPR - 03P - K - 0 - 30

DESIGN NUMBER

PRESSURE ADJUSTMENT RANGE:

0 : 3-35KGF/CM² (40-500PSI)

1 : 8-70KGF/CM² (120-1000PSI)

2 : 35-140KGF/CM² (500-2000PSI)

3 : 70-210KGF/CM² (1000-3000PSI)

ADJUSTMENT MODEL:

K : WITH KNOB

NO CODE : WITHOUT KNOB

FUNCTION PORT :

P : P PORT

A : A PORT

B : B PORT

PORT SIZE : 3/8" (D05)

MODULAR PRESSURE REDUCING VALVE

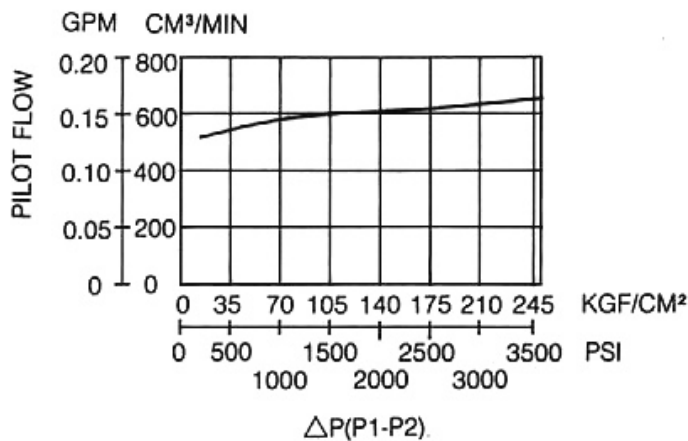
PERFORMANCE CURVES

TEST CONDITIONS

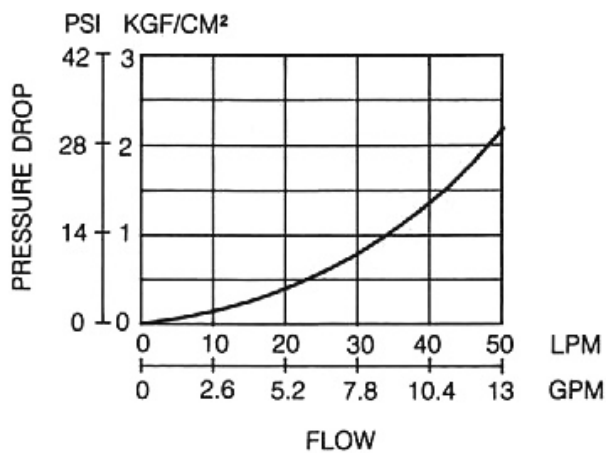
Viscosity: 35 CST

Temperature: 50°C

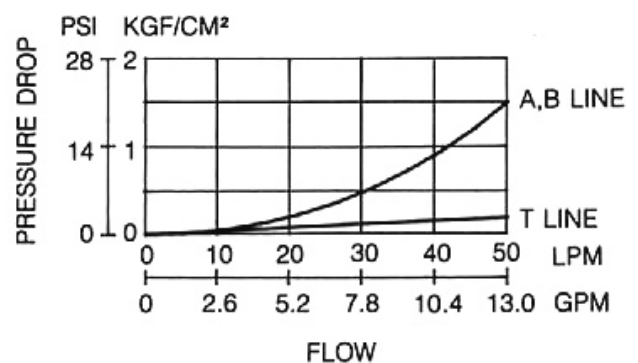
PILOT FLOW CHART



PRESSURE DROP AT SPOOL FULLY OPENED (P-LINE)



PRESSURE DROP

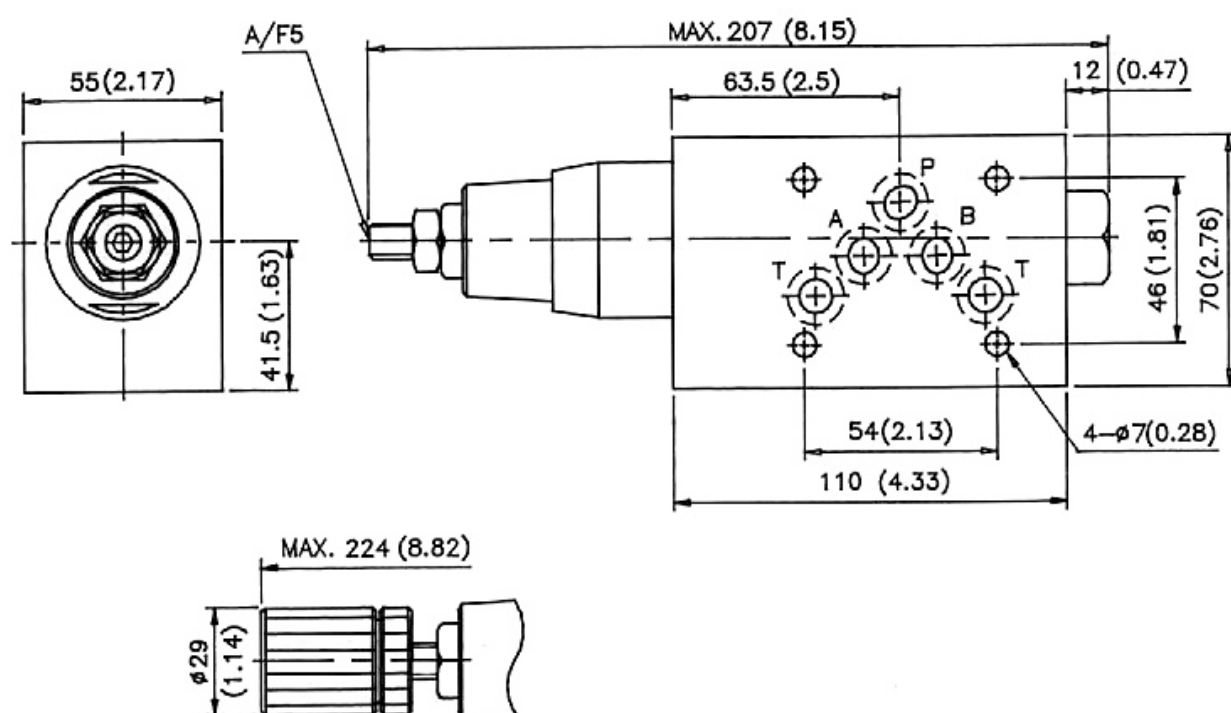


INSTALLATION DIMENSIONS

UNIT: mm(inch)

WEIGHT: 3.4 kgs (7.5 lbs)

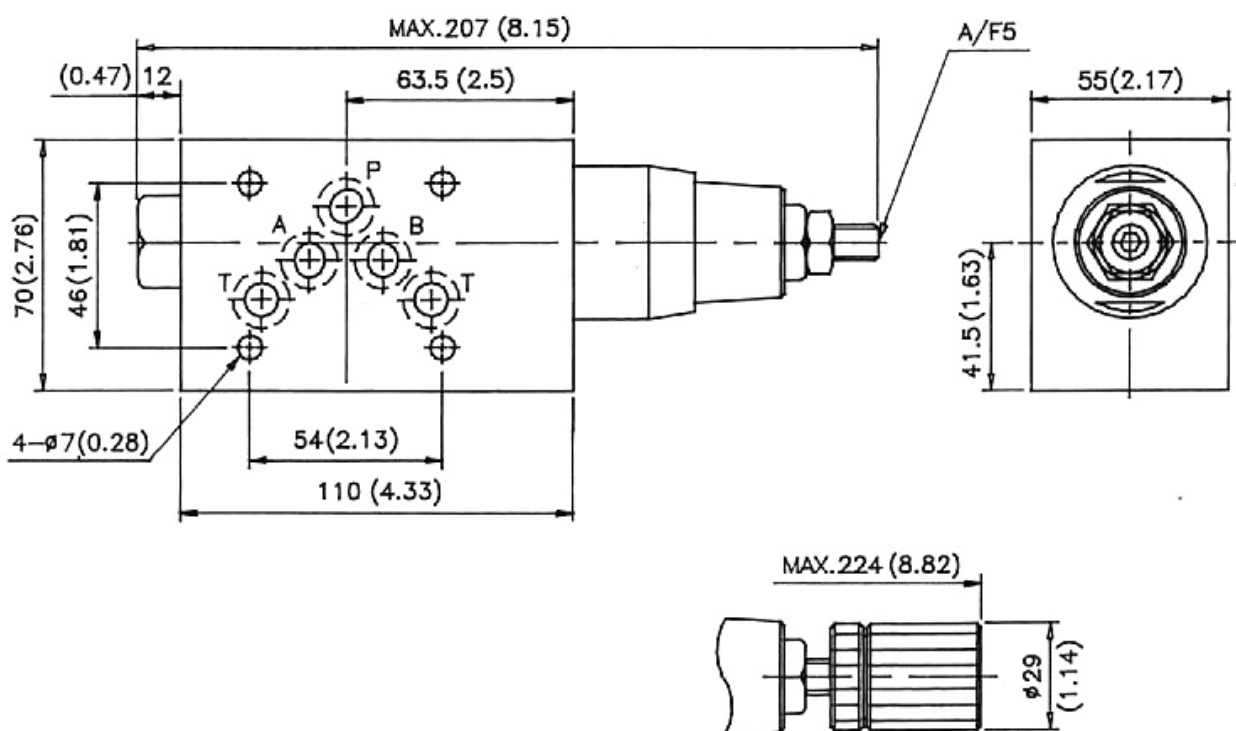
MPR-03P/A-**-**-30



INSTALLATION DIMENSIONS

UNIT: mm (inch)
WEIGHT: 3.4 kgs (7.50 lbs)

MPR-03B-**-**-30



MODULAR PRESSURE REDUCING VALVE

MPR-04 SERIES

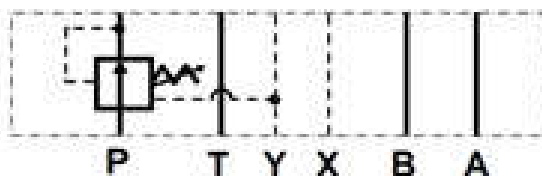
The modular adjustable pressure reducing valve will ensure that the operating pressure in a branch of a hydraulic system will be maintained at a lower setting than that of the main system pressure. The valve functions on the P port and is internally drained. Adjustment is made with a calibrated knob, standard with the valve.

As a modular valve, this valve mounts between an NFPA D07 size directional control valve and the subplate. A longer than standard bolt kit is required when mounting modular valves in a stack. Refer to [bolt kits](#).



Symbols

MPR-04P



Model Code

MPR – 04 P – K – 2 – **

1 2 3 4 5 6

1 Series

MPR: Modular Pressure Reducing Valve

2 Mounting Style

04: NFPA Size D07

3 Function Port

P: P Port

4 Adjustment Style

K: Adjusting Knob

5 Pressure Adj. Range

2: 35-40 BAR (500-2000 PSI)

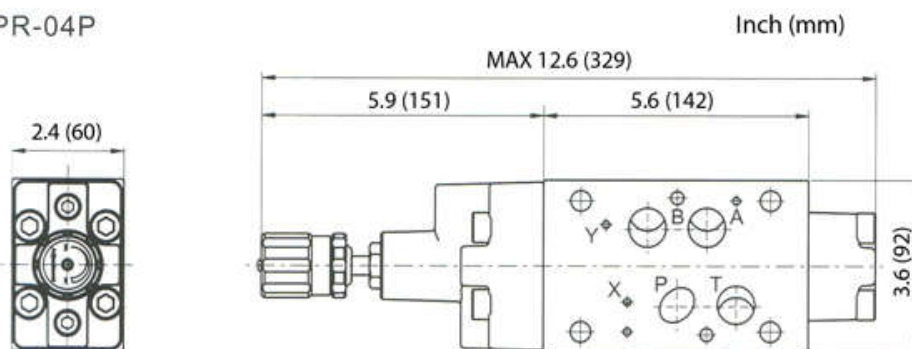
6 Design Number

Features

Max. operating pressure	250 BAR (3675 PSI)
Max. flow capacity	190 LPM (50 GPM)

Dimensions

MPR-04P





Sede Mundial

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Para obter informações adicionais sobre seu aplicativo ou sobre os produtos referenciados neste manual, entre em contato com a Oilgear mais próxima. Acesse o website da Oilgear para obter uma relação completa de nossos endereços.