DYNEX
High Pressure Hydraulics

ENGINEERING SPECIFICATIONS

8820 Series Panel Mounted Pressure Control Valves

8820 SERIES
0.75 gpm (2,8 L/min) to 1.5 gpm (5,7 L/min)
5000 psi (350 bar) Max Pressure

These direct-spring acting valves can be used for basic safety relief in low-flow applications or for remote control of larger pilot-operated valves in a circuit.

SPECIFICATIONS

Rated Flow

Size 01 for Remote Pressure Control:
Nominal, 0.75 U.S.gpm (2,8 L/min);
Maximum, 1.0 U.S. gpm (3,8 L/min)

Size 02 for Safety Relief:
Nominal, 1.5 U.S. gpm (5,7 L/min);
Maximum, 2.5 U.S. gpm (9,5 L/min)

Pressure Adjustment

Standard Pressure Range:
100 to 3000 psi (7 to 210 bar)

HP Option:
100 to 5000 psi (7 to 350 bar)

LP Option:
50 to 1000 psi (4 to 70 bar)

LLP Option:
40 to 500 psi (3 to 35 bar)

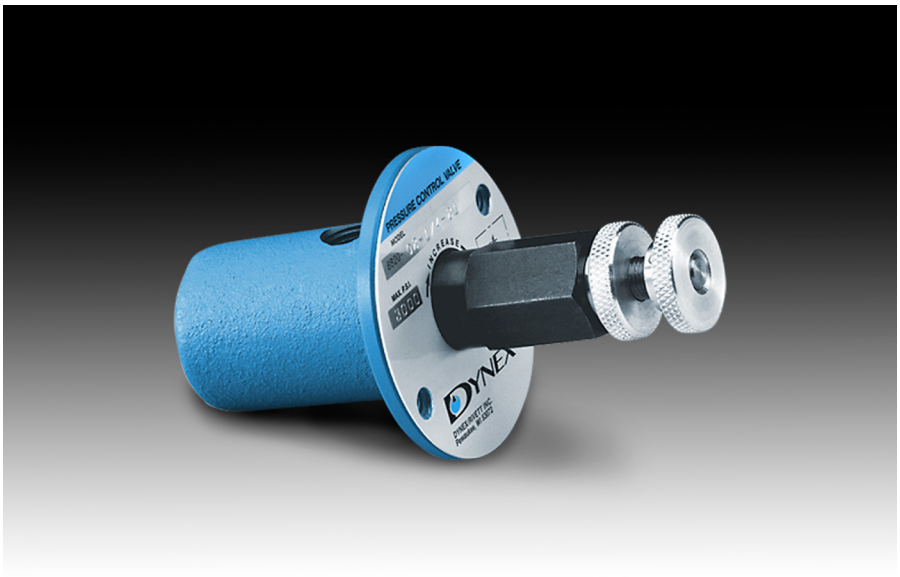
Pressure is manually set by turning the maximum pressure adjustment (standard knurled knob or optional handwheel). Turning clockwise increases pressure. The setting is held by a locknut.

An optional cam operated version is available. Refer to the installation drawing and *Typical Model Code* on page 2.

PRESSURE DROP (ΔP)

Size	Flow U.S. gpm	Flow L/min	ΔP① psi	ΔP① bar
01	0.75	2,8	350	24
	1.00	3,8	400	28
02	1.50	5,7	600	41
	2.50	9,5	1100	76

① *Crack to full flow at 3000 psi (210 bar).*

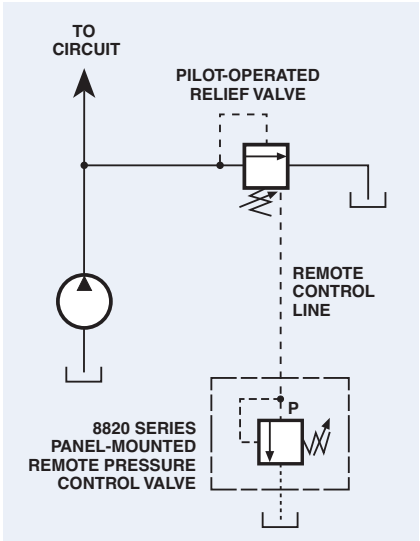


8820 Series
Standard Knurled Knob

REMOTE PRESSURE CONTROL

The 01 Size valve can be used as a remote pressure source to control larger pilot-operated valves.

The pressure setting for the main valve should be adjusted 5% higher than the pressure setting for the 8820 valve, to prevent interaction between the valves.



APPLICATION NOTES

Mounting

Orientation:
Unrestricted for all models.

Seals

Standard fluorocarbon (Viton® or Fluorel®) or equivalent. EPR (Ethylene-Propylene Rubber) for use with some phosphate ester fluids.

Fluid Recommendations

Viscosity:
50 to 1500 SUS (7 to 325 cSt)

Temperature Range:
-20° to +200° F (-29° to +93° C)

Filtration

Use filtration to provide fluid which meets ISO cleanliness level 19/17/14 (ISO Code 4406) or cleaner.

INSTALLATION & DIMENSIONS

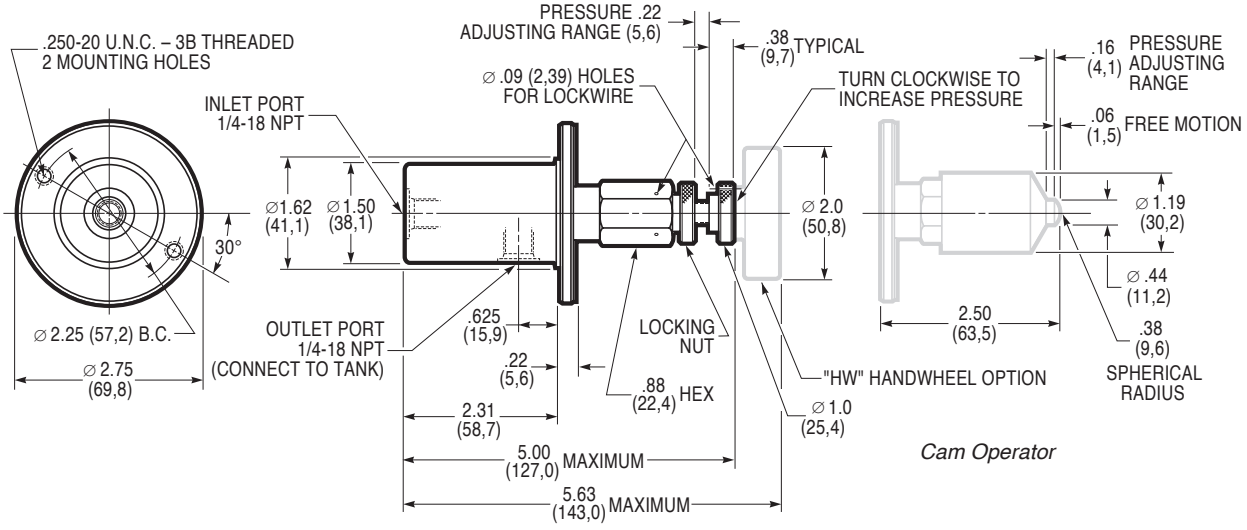
The drawing shows the standard knurled knob pressure adjustment with the "HW" handwheel option printed in gray.

The "CO" cam operator option is also printed in gray.

Dimensions are shown in inches (millimeters in parentheses) and are nominal.

Weight (Mass)

1.2 lb (0,5 kg)



8820 Series Pressure Control

TYPICAL MODEL CODE

88 20 – 01 – .25 – LP – HW – E – 2 1

Valve Type	
88	Pressure Control

Actuator	
20	Direct Operated (Panel Mounted)

Application/Size	
01	Remote Controller
02	Relief

Pressure Options	
No Code	Standard, adjustable 100 psi (7 bar) to 3000 psi (210 bar)
LP	Adjustable 50 psi (4 bar) to 1000 psi (70 bar)
LLP	Adjustable 40 psi (3 bar) to 500 psi (35 bar)
HP	Adjustable 100 psi (7 bar) to 5000 psi (350 bar)

Control Options	
No Code	Standard Adjustment Knob 1"
CO	Cam Operator
HW	Handwheel
CR	Corrosion Resistant Handwheel

Seals	
No Code	Fluorocarbon (Viton® or Fluorel®)
E	EPR (Ethylene-Propylene Rubber)

Design Number

Modification Number



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Specifications shown were in effect when published. Since errors or omissions are possible, contact your Dynex Sales representative or the Dynex Sales department for the most current specifications before ordering. Dynex reserves the right to discontinue products or change designs at any time without incurring any obligation.

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