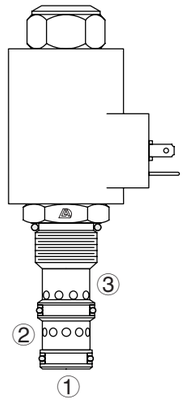
DAPV72-30 Proportional Flow Contorl Cartridge



DESCRIPTION

A solenoid-operated, electrically-variable, three-port, pressure-compensated, spooltype,normally closed when de-energized, proportional flow control valve. It can be used as a priority-type flow regulator with pressure-compensated, regulated and bypass flow. It can also be used as a restrictive-type 2-way, pressure-compensated flow regulator when the bypass line (port 2) is blocked.

OPERATION

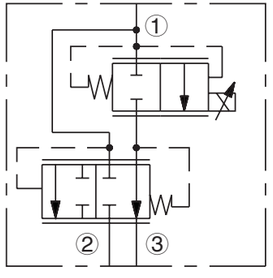
The DAPV72-30 will regulate flow out of port 3 regardless of system working pressure.With increasing current applied to the solenoid, the DAPV72-30 will increase output flow.Note: When used as a bypass flow control in applications where the priority flow port will be blocked by external valving, bypass pressure drop will increase unless a small amount of leakage is provided for the priority port. Consult factory.Operation of Manual Override:To Engage: Turn clockwise approximately 1 turn to reach start point. Continue another approximately 5 turns to full shift.To Disengage: Turn counterclockwise approximately 6 turns to positive stop.

FEATURES

- Excellent linearity and hysteresis .
- Hardened spool and cage for long life.
- Efficient wet armature construction.
- Optional coil voltages and terminations.
- Cartridges voltage interchangeable.
- Unitized, molded coil design.
- Coil waterproofing standard.
- Manual override option.

ISO SYMBOL

USASI/ISO:



RATINGS

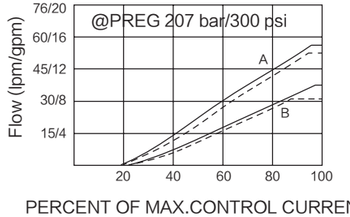
Operating Pressure: Port 1: 240 bar (3500 psi); Ports 2 and 3: 207 bar (3000 psi)
Regulated Flow Rate in 3-Port Mode: Range A: 57 lpm (15 gpm)
Range B: 38 lpm (10 gpm)
Maximum Input Flow in 3-Port Mode: Range A and B: 114 lpm (30 gpm)
Maximum Flow Rate in 2-Port Mode: Range A: 53 lpm (14 gpm)
Range B: 31 lpm (8 gpm)
Note: For increased flow capacity in a 2-port flow control, see model DAPV72-20
Internal Leakage: .38 lpm (0.1 gpm) fully closed at 207 bar (3000 psi)
Electrical: 2 standard voltage ratings

Coil Voltage	Threshold Current	Max. Control Current
12 VDC	350 ± 100 mA	1600 ± 200 mA
24 VDC	175 ± 50 mA	800 ± 100 mA

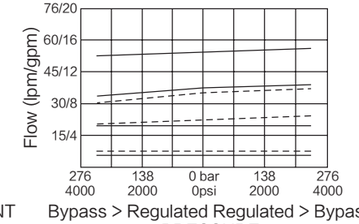
Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus);
Installation: No restrictions;
Cavity: T12-3A;See page 305.

PERFORMANCE (Cartridge Only)

Flow vs. Current
Input Flow: 76 lpm/20 gpm
12V Coil; 110 Hz PWM
3-Ported ——— ; 2 Ported – – – –
32 cSt/150 sus oil at 40° C



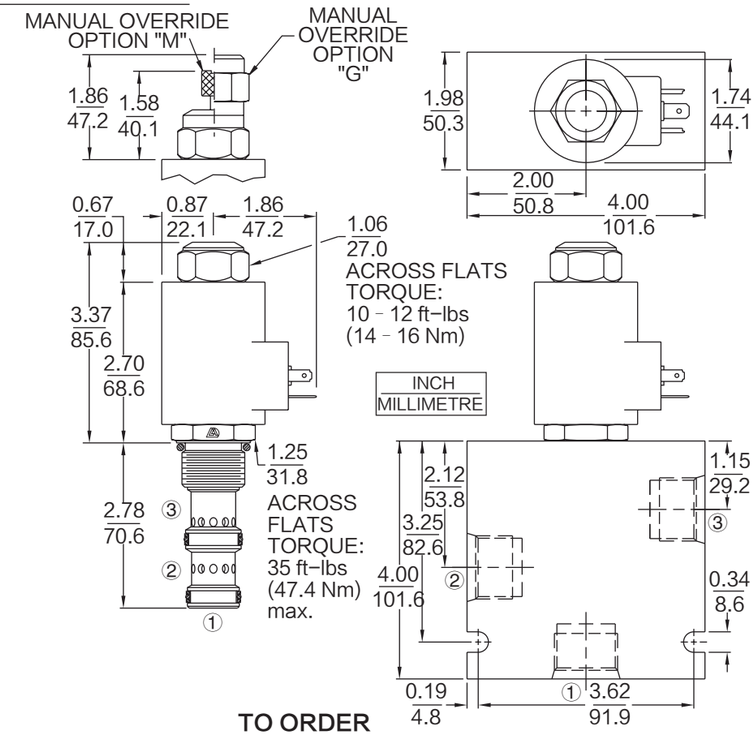
Regulated Flow vs. Pressure
Input Flow: 76 lpm/20 gpm
12V Coil; 110 Hz PWM
32 cST/150 sus oil at 40° C



Recommended Electronic Controllers:

输入信号 带 12V 线圈	DIN 线圈 安装	PCB 板	金属盒式	DIN 导轨安装
0-5 VDC 0-10 VDC 4-20mA PWM	7114950 4000070 4000123 —	4000046 4000141 4000143 4000144	4000049 4000124 4000130 4000133	4000136 4000137 4000139 4000140
带 12V 线圈				
0-5 VDC 0-10 VDC 4-20 mA PWM	4000161 4000165 4000169 —	4000194 4000141 4000143 4000144	4000174 4000182 4000186 4000133	4000136 4000137 4000139 4000140

DIMENSIONS



MATERIALS

Cartridge: Weight: 0.36 kg.(0.80 lbs.) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard.
Standard Ported Body: Weight: 1.09 kg. (2.4 lbs.) Anodized highstrength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ.
70-Size "D" Coil: Weight: 0.32 kg. (0.7 lbs.) Unitized thermoplastic encapsulated, Class H high temperature magnet-wire.
70-Size "E" Coil: Weight: 0.41 kg. (0.9 lbs.) Fully encapsulated with rugged external metal shell. IP69K rated.

TO ORDER

DAPV72-30 ___ - ___ - ___ - ___

Flow Range
Required. See Performance Curves. A, B

Porting
None (Blank)
Manual Override M
Manual Override with Guard G

Voltage Std. Coil
0 Cartridge Only
10T SAE 10
12T SAE 12
16T SAE 16
4B 1/2 in. BSP*
6B 3/4 in. BSP*
*BSP Body; U.K. Mfr. Only

Seals
Buna N (Std.) N
Polyurethane P
Fluorocarbon V

Termination D-Coil
DS Dual Spades
DG DIN 43650
DL Leadwires (2)
DL/W Leads w/Weatherpak® Connectors

Termination E-Coil
IP69K Rated
ER Deutsch DT04-2P
EY Metri-Pack® 150

Voltage
0 Less Coil
12 12 VDC
24 24 VDC