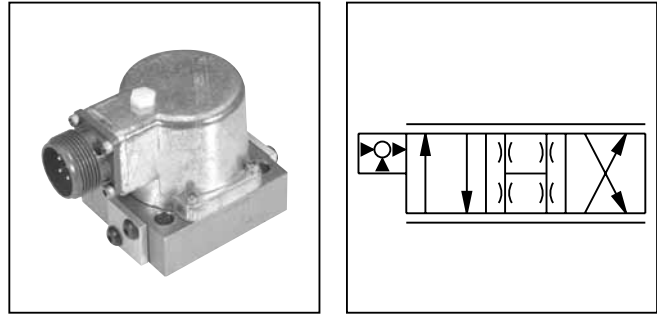


General Description

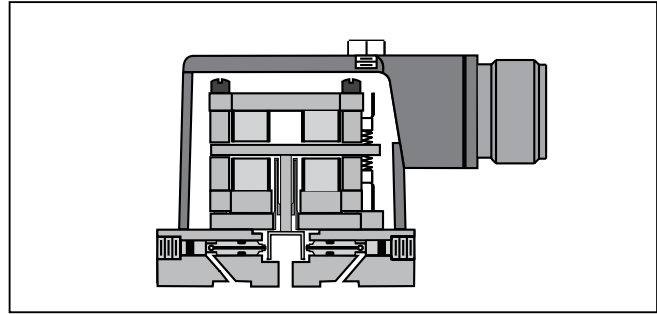
Series DY1S are open center, single stage differential pressure control valves. They are operated by a current driven torque motor. These valves controls the pressure difference between the two actuator ports, C1 and C2, by varying the resistance to flow through their nozzles.



Features

C

- No mechanical wear points.
- High frequency response.
- Nozzle and flapper design.
- Versatile 21.59 mm (0.850 in.) port circle, can mount to standard 19.81 mm (0.780 in.) and 23.62 mm (0.930 in.) port circle patterns.



Specifications

Flow Rating @ 90 Bar (1300 PSI)	0.4 LPM (0.1 GPM)	Null Shift with temperature with pressure	≤ 2% per 55°C (100°F) ≤ 2% per 70 Bar (1000 PSI)
Quiescent Flow @ 90 Bar (1300 PSI)	1.3 – 1.9 LPM (0.3 – 0.5 GPM)	Pressure Gain % change in pressure per 1% change in input command	1% minimum
Supply Pressure	7 – 90 Bar (100 – 1300 PSI)	Step Response	10 – 90%, < 5 ms
Tank Port Pressure	90 Bar (1300 PSI) Max. < 10 Bar (145 PSI) for best performance	Fluid	Mineral Oil, 60 – 225 SSU 1000 SSU maximum
Input Command	±50 mA std.	Operating Temperature	-1°C to +82°C (+30°F to +180°F)
Frequency Response @ 90° phase shift	> 100 Hz	Protection Class	NEMA 4, IP65
Non-Linearity	≤ 10%	Filtration	ISO 4406 15/12 or better
Threshold	≤ 0.5%		

DY1S
 Series

Description
 0.4 LPM (0.1 GPM)
 90 Bar (1300 PSI)

Material Options

Coils

Wiring

Seal

Special Options

Factory Code for Special Options

Code	Description
A	Standard
Z	Special (specify)

Code	Description	Parallel	Series
D	200 ohm (Std.)	50 mA	25 mA
G	22 ohm	200 mA	100 mA
K	40 ohm	150 mA	75 mA
F	80 ohm	80 mA	40 mA
L	360 ohm	30 mA	15 mA
M	475 ohm	40 mA	20 mA
R	650 ohm	30 mA	15 mA
T	1000 ohm	10 mA	5 mA
V	1200 ohm	40 mA	20 mA
Z	Special (specify)		

Code	Description
Omit	Standard
D	(Specify) See list below

Code	Description
N	Nitrile
V	Fluorocarbon (standard)
E *	EPR
Z *	Special (specify)

* Consult factory for delivery

Code	Description
C	Standard
Z	Special



Accessories

- Cable with Mating Connector:** EHC154S
- Mating Connector:** MS3106E-14S-2S
- Bolt Kit:** Included with valve
- Flushing Valve:** 11-0500
- Subplate:** 55-0100-2 SAE-6 Side ports
- Null Adjust Tool:** 6522A13
- Electronic Drivers:** 23-7030, BD90*, BD101*

When used in conjunction with Series BD90 and BD101 servo amplifiers or a motion controller, Series BD valves will provide accurate control of rotary and linear actuators.

* For output currents >15 mA

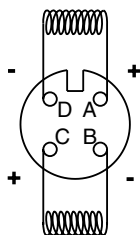
Special Options:

Consult factory for price, delivery and availability of special options.

- Special coil
- Special wiring
- Special seals

Weight: 0.5 kg (1.2 lbs.)

Wiring Option C
 (Standard)

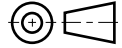
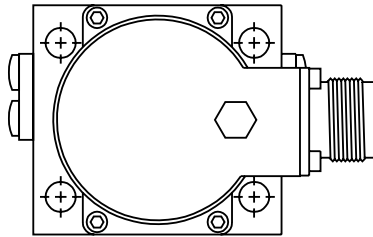


Polarity shown connects P to C2 port.

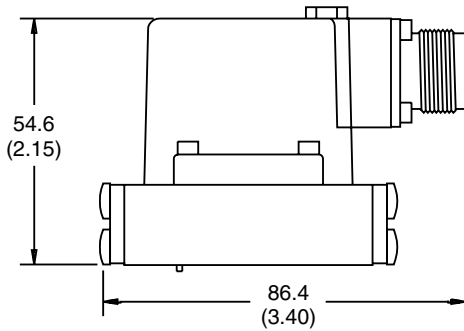


Flushing valve is rated for 3000 psi operation.

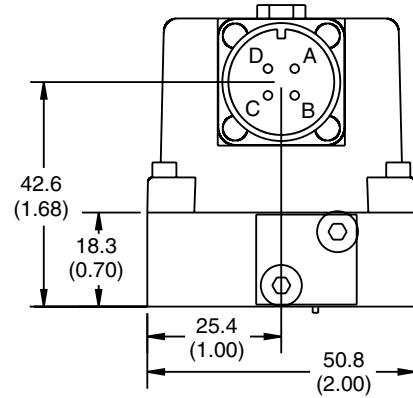
Inch equivalents for millimeter dimensions are shown in (**)



C



Connector over C1 port



Mounting Interface

Inch equivalents for millimeter dimensions are shown in (**)

