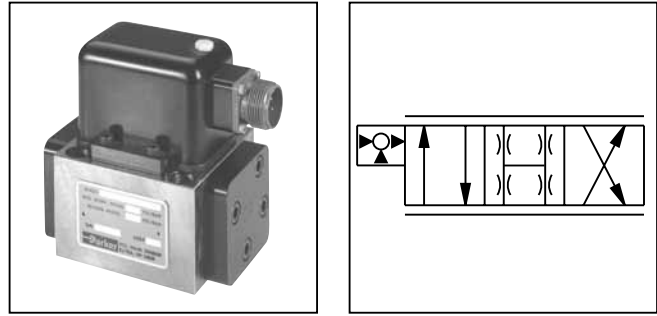


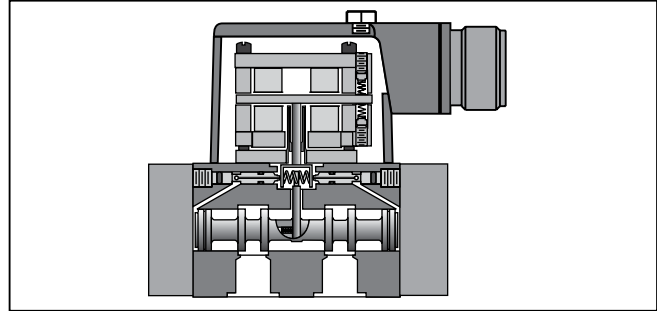
General Description

Series DY25 are two stage, 4-way, flapper and nozzle style servovalves. They have the same port pattern and body dimensions as the DY15, but use a higher force torque motor pilot. These valves are rated for 210 Bar (3000 PSI) standard, or can be built for 350 Bar (5000 PSI) service. The pressure ratings are the same for both the tool steel construction, and the optional stainless steel spool and body.



Features

- Lapped spool and body.
- No ball glitch.
- Tool steel, or stainless steel, spool and body.
- Nozzle and flapper design.
- Unique port pattern (see next page). (1 in. port circle)
- Survives high tank port pressures.



Specifications

Flow Rating @ 70 Bar (1000 PSID)	57 and 75 LPM (25 and 30 GPM)	Null Shift with temperature with pressure	≤ 2% per 55°C (100°F) ≤ 2% per 70 Bar (1000 PSI)
Supply Pressure	10 – 210 Bar (145 – 3000 PSI) opt. 350 Bar (5000 PSI)	Pressure Gain % change in pressure per 1% change in input command	30% minimum, 70% maximum
Leakage Flow @ 70 Bar (1000 PSID)	0.95 – 1.7 LPM (0.25 – 0.45 GPM)	Step Response	10 – 90%, < 18 ms @ 95 LPM (25 GPM) < 20 ms @ 114 LPM (30 GPM)
Tank Port Pressure	210 Bar (3000 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	> 35 Hz (See Performance Curves)	Protection Class	NEMA 4, IP65
Non-Linearity	≤ 10%	Filtration	ISO 4406 15/12 or better
Threshold	≤ 0.5%		

DY25

Series

Material
 Options

Coils

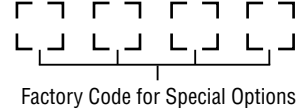
Wiring

Seal

Operating
 Pressure

Flows

Special
 Options



Factory Code for Special Options

Code	Description
A	Steel (standard)
B	Stainless Steel
Z*	Special (specify)

* Material selection does not affect operating pressure

Code	Description
Omit	Standard
D	(Specify) See list below

Code	Description
25	95 LPM (25 GPM)
30	114 LPM (30 GPM)

Code	Description
A	210 Bar (3000 PSI)
B	350 Bar (5000 PSI)
Z	Special (specify)

Operating pressure is independent of material selection.

Code	Description	Parallel	Series
D	200 ohm (Std.)	50 mA	25 mA
F	80 ohm	80 mA	40 mA
G	22 ohm	200 mA	100 mA
K	40 ohm	150 mA	75 mA
R	750 ohm	30 mA	15 mA
Z	Special (specify)		

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

* Consult factory for delivery

Code	Connector over:	Flow P to C2 with:
C	Port C1	(+) Signal to A, C
D	Port C1	(+) Signal to B, D
Z	Special (specify)	

Weight: 1.9 kg (4.2 lbs.)

Special Options:

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

- Special coil
- Special wiring
- Special seals
- Special flow rate
- Dual flow rate
- Dual gain
- Zener barriers

Accessories

Cable with Mating Connector: EHC154S

Mating Connector: MS3106E-14S-2S

Bolt Kit: Included with valve

Flushing Valve: 11-0600

Subplate: 55-0300-2 SAE-16 Side ports

Null Adjust Tool: 6522A13

Electronic Drivers: 23-7030, BD90*, BD101*

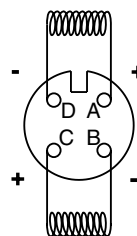
When used in conjunction with Series BD90 and BD101 servo amplifiers or a motion controller, Series BD valves will provide accurate control of rotary and linear actuators.

* For output currents >15 mA



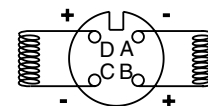
Flushing valve is rated for 3000 psi operation.

**Wiring Option C
 (Standard)**



Dyval and Pegasus standard.

Wiring Option D

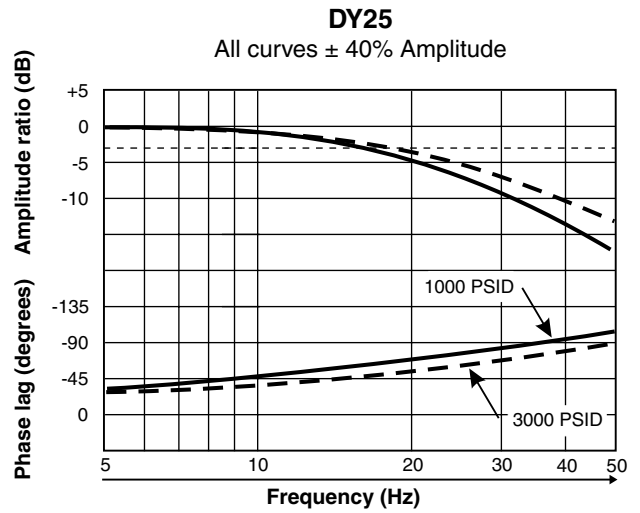
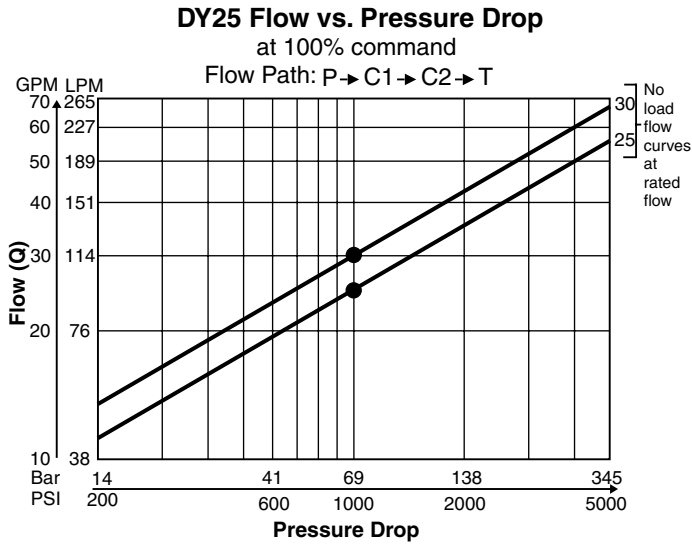


Moog, Atchley and Vickers standard.

In both cases, polarity shown connects P to C2 port.

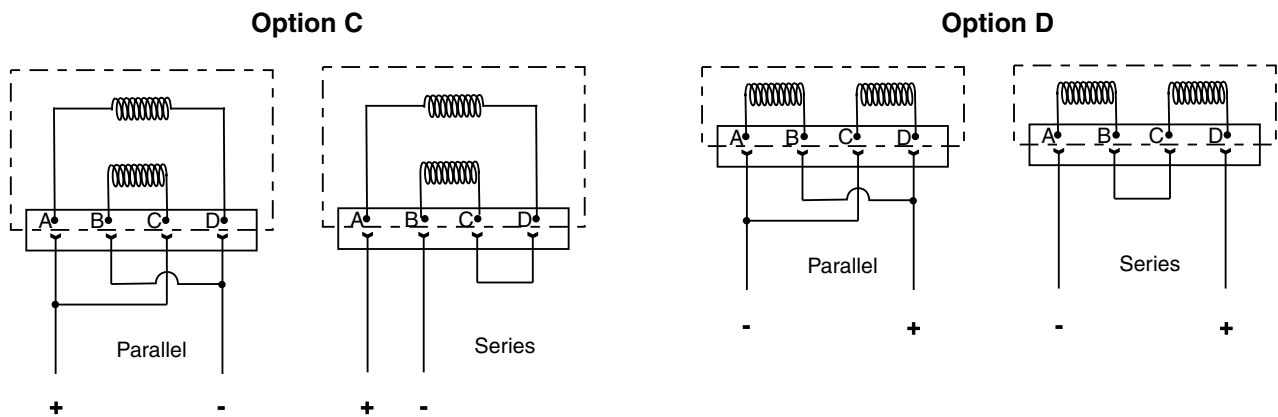
Performance Curves

Frequency Response



Installation Wiring Options

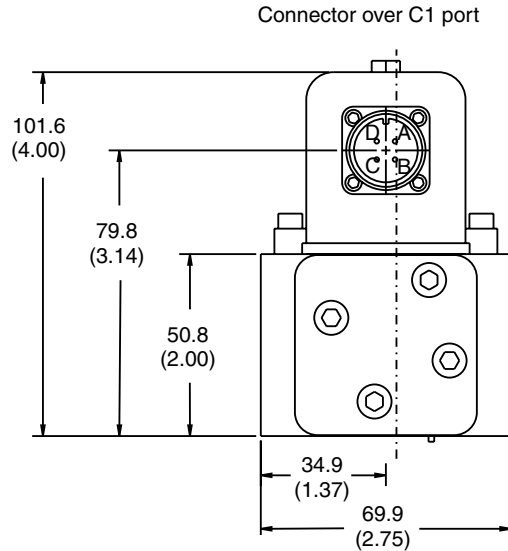
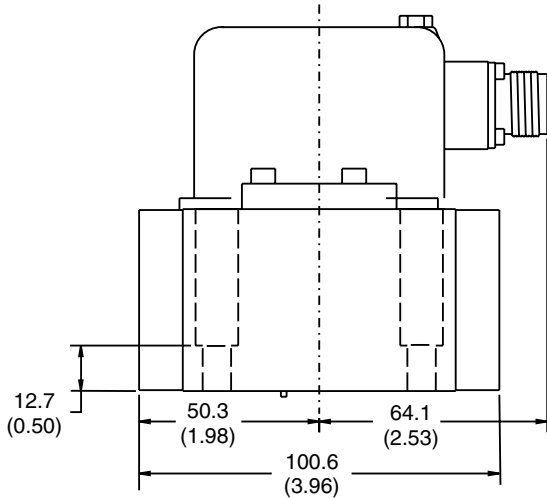
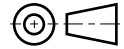
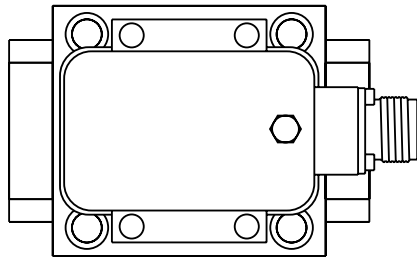
This servovalve has two coils. This illustration shows the internal wiring configurations for options C and D. When connecting the valve to a drive amplifier, the user's external wiring may put the coils either in parallel or in series as needed. Refer to the illustrations below and to the mounting pattern for this valve to insure proper control phasing.



Polarity shown connects flow from P to C2 port.

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

C



Mounting Interface

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

