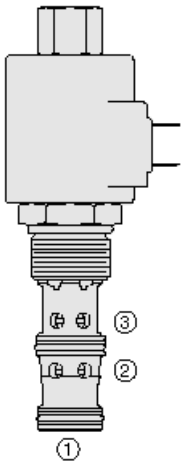




## Overview



### Description

This is a pilot operated spool type, proportional pressure reducing/relieving valve. It is intended for use in mineral based or synthetic (with lubricating properties) hydraulic fluids.

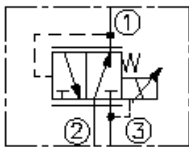
### Operation

The regulated pressure is proportional to the input electrical current in the pressure ranges shown below. Maximum operating pressure port 1 and port 2: 4000 psi [275,8 bar] maximum tank pressure port 3: 1000 psi [68,9 bar] (tank pressure is additive to regulated pressure).

### Features

- o 12 and 24 volt coils standard.
- o Standard waterproof coils or optional waterproof E-Coils.

## Symbol



## Ratings

### Pressure Ratings

Reduced pressure range	6.9 to 207 bar (100 to 3000 psi)	- <b>Note:</b> A
	6.9 to 172 bar (100 to 2500 psi)	- <b>Note:</b> B
	6.9 to 138 bar (100 to 2000 psi)	- <b>Note:</b> C

### Flow Ratings

Maximum pilot flow	0.42 lpm (0.11 gpm)	- <b>Note:</b> With maximum control current and with inlet pressure of
	241 bar (3500 psi)	- <b>Note:</b> At regulated flow
	3.8 lpm (1 gpm)	

### Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °C)	- <b>Note:</b> With buna N seals
	-26 to 204 °C (-15 to 400 °C)	- <b>Note:</b> With viton seals
	-54 to 107 °C (-65 to 225 °C)	- <b>Note:</b> Less than 5% performance degradation over 1 million cycles (based on simulated test at with polyurethane seals 37.8 lpm (10 gpm) flow and maximum pressure setting

## Operating Parameters

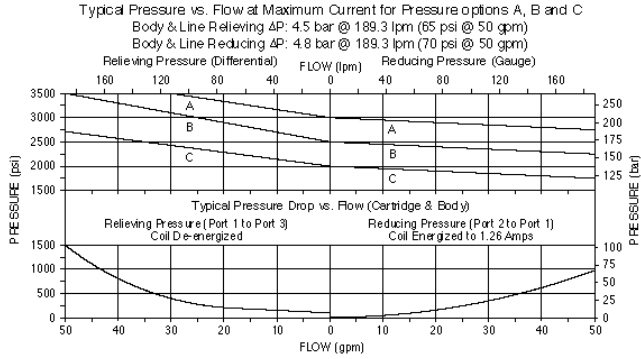
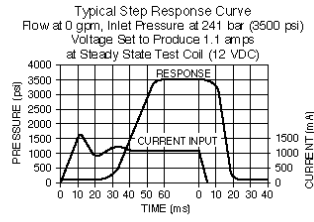
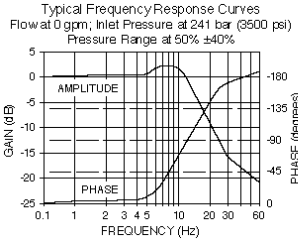
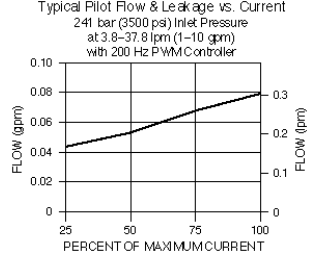
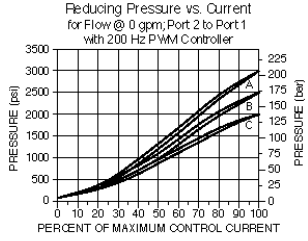
Recommended system filtration	10 µm	- <b>Note:</b> Or better
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## Electrical Parameters

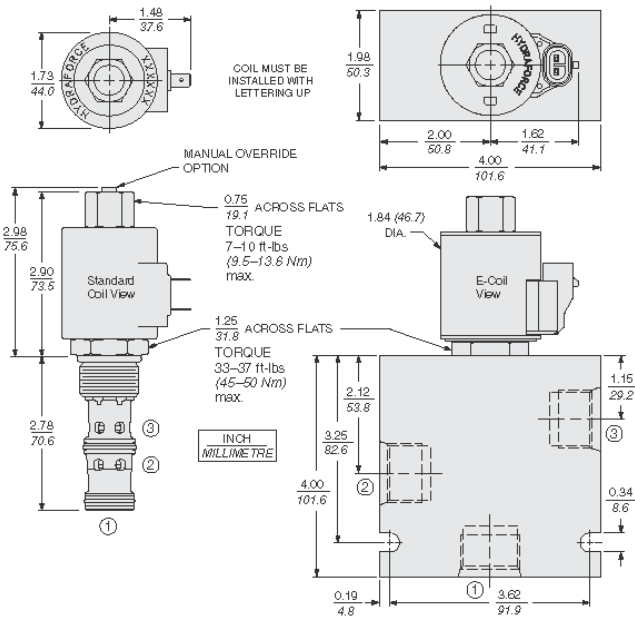
Maximum control current	1.04 A	- <b>Note:</b> D-series coil 12 Vdc
	0.96 A	- <b>Note:</b> D-series coil 12 Vdc
	0.53 A	- <b>Note:</b> D-series coil 24 Vdc
	0.50 A	- <b>Note:</b> D-series coil 24 Vdc
	1.29 A	- <b>Note:</b> E-series coil 12 Vdc
	1.22 A	- <b>Note:</b> E-series coil 12 Vdc
	0.70 A	- <b>Note:</b> E-series coil 24 Vdc
	0.66 A	- <b>Note:</b> E-series coil 24 Vdc
Valve inductance	167 mH	- <b>Note:</b> D-series coil 12 Vdc
	624 mH	- <b>Note:</b> D-series coil 24 Vdc
	159 mH	- <b>Note:</b> E-series coil 12 Vdc
	550 mH	- <b>Note:</b> E-series coil 24 Vdc



**Performance**



**Dimensions**



**Order Code**

<b>TS12-36</b>		Termination Std. Coil	
Maximum Reducing Pressure		DS	Dual Spades
207 bar (3000 psi) A		DG	DIN 43650
172 bar (2500 psi) B		DL	Leadwires (2)
138 bar (2000 psi) C		DL/W	Leads w/ Weatherpak Connectors
Option		DR	Deutsch DT04-2P
None (Blank)		Termination E-Coil	
Manual Override M		ER	Deutsch DT04-2P (IP69K Rated)
Porting		EY	Metri-Pack® 150 (IP69K Rated)
Cartridge Only 0		Coils with internal diode are available. Consult factory	
SAE 8 8T		Voltage	
SAE 10 10T		0	Less Coil*
SAE 12 12T		12	12 VDC * Includes Coil int
1/2 in. BSP* 4B	Seals	24	24 VDC
3/4 in. BSP* 6B	N		
*BSP Body; U.K. Mfr. Only	V		

POSITION	CODE	DESCRIPTION
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POSITION	CODE	DESCRIPTION
		TS12-36DE-H-J-L
D		Regulating Pressure Range
D	A	6.9 to 206.8 bar (100 to 3000 psi) Pressure Range
D	B	6.9 to 172.4 bar (100 to 2500 psi) Pressure Range
D	C	6.9 to 138.0 bar (100 to 2000 psi) Pressure Range
E		Manual Override
E	BLANK	NONE
E	M	Minimum Regulated Pressure Override, 3/16" Internal Hex
H		Line Body
H	0	No Body
H	8T	Aluminum SAE 8
H	10T	Aluminum SAE 10
H	12T	Aluminum SAE 12
H	12TD	Ductile Iron SAE 12
H	6B	Aluminum BSPP 3/4" (6)
J		Seal
J	N	Buna-N
J	V	Fluorocarbon
J	P	Polyurethane
J	U	PPDI Urethane
L		Coil
L	0	No Coil
L	10DG	10 VDC, D-Coil, DIN 43650
L	10DL	10 VDC, D-Coil, Dual Lead Wires
L	10DS	10 VDC, D-Coil, Dual Spade
L	10EL	10 VDC, E-Coil, Dual Lead Wires
L	10ER	10 VDC, E-Coil, Deutsch
L	12DG	12 VDC, D-Coil, DIN 43650
L	12DL	12 VDC, D-Coil, Dual Lead Wires, 18 inches long
L	12DL/36	12 VDC, D-Coil, Dual Lead Wires, 36 inches long
L	12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
L	12DR	12 VDC, D-Coil, Deutsch
L	12DS	12 VDC, D-Coil, Dual Spade
L	12EG	12 VDC, E-Coil, DIN 43650
L	12EJ	12 VDC, E-Coil, AMP Jr.
L	12EL	12 VDC, E-Coil, Dual Lead Wires, 18 inches long
L	12EL/36	12 VDC, E-Coil, Dual Lead Wires, 36 inches long
L	12ER	12 VDC, E-Coil, Deutsch
L	12EY	12 VDC, E-Coil, Metri-Pack 150
L	20DS	20 VDC, D-Coil, Dual Spade
L	20ER	20 VDC, E-Coil, Deutsch
L	24AG	24 VDC, D-Coil, DIN 43650
L	24AP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires



POSITION	CODE	DESCRIPTION
L	24DG	24 VDC, D-Coil, DIN 43650
L	24DL	24 VDC, D-Coil, Dual Lead Wires
L	24DL/W	24 VDC, D-Coil, Dual Lead Wires with Weatherpak
L	24DP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
L	24DR	24 VDC, D-Coil, Deutsch
L	24DS	24 VDC, D-Coil, Dual Spade
L	24EG	24 VDC, E-Coil, DIN 43650
L	24EJ	24 VDC, E-Coil, AMP Jr.
L	24EL	24 VDC, E-Coil, Dual Lead Wires, 18 inches long
L	24EL/36	24 VDC, E-Coil, Dual Lead Wires, 36 inches long
L	24ER	24 VDC, E-Coil, Deutsch
L	24EY	24 VDC, E-Coil, Metri-Pack 150
L	36DS	36 VDC, D-Coil, Dual Spade