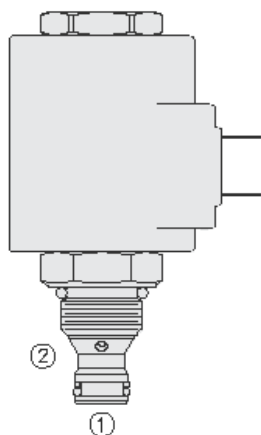




Overview



Description

Description: TS38-21 is a direct-acting, spool-type, proportional, pressure relieving valve. The regulated pressure is inversely proportional to the input electrical current. Port 1 is protected by 150 mesh screen.

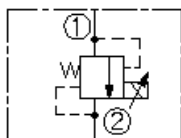
Operation

The TS38-21 blocks flow from port 1 to port 2 until sufficient pressure is present at port 1 to open the valve by overcoming the preset induced spring force. With no current applied, the valve will relieve range maximum. Applying current to the coil decreases the induced spring force, thereby reducing the valve setting.

Features

- 12 and 24 volt coils standard.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Hardened parts for long life.

Symbol



Ratings

Pressure Ratings

Pressure rating	248.2 bar (3600 psi)	- Note: A (at port 1)
	172.4 bar (2500 psi)	- Note: B (at port 1)
	75.8 bar (1100 psi)	- Note: C (at port 1)
	289.6 bar (4200 psi)	- Note: D (at port 1)
Proof pressure	344.7 bar (5000 psi)	- Note: Port 1
	241.3 bar (3500 psi)	- Note: Port 2
	758.4 bar (11000 psi)	
Burst pressure	6.9 to 206.8 bar (100 to 3000 psi)	- Note: (a)
	6.9 to 137.9 bar (100 to 2000 psi)	- Note: (b)
	6.9 to 68.9 bar (100 to 1000 psi)	- Note: (c)
	6.9 to 241.3 bar (100 to 3500 psi)	- Note: (c)
Adjustable pressure range		

Flow Ratings

Flow rating	1.1 lpm (0.3 gpm)	
Hysteresis per cent	2.5 %	- Note: (a) and (d)
	4 %	- Note: (b)
	5 %	- Note: (c)

Temperature Ratings

Operating fluid temperature	-40 to 100 °C (-40 to 212 °F)	- Note: With buna N seals
	-26 to 204 °C (-15 to 400 °F)	- Note: With fluorocarbon seals
	-54 to 107 °C (-65 to 225 °F)	- Note: With polyurethane and urethane seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 100 °C (-40 to 212 °F)	

Other Ratings

Corrosion protection	960 hr salt spray per ASTM b117
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Operating Parameters

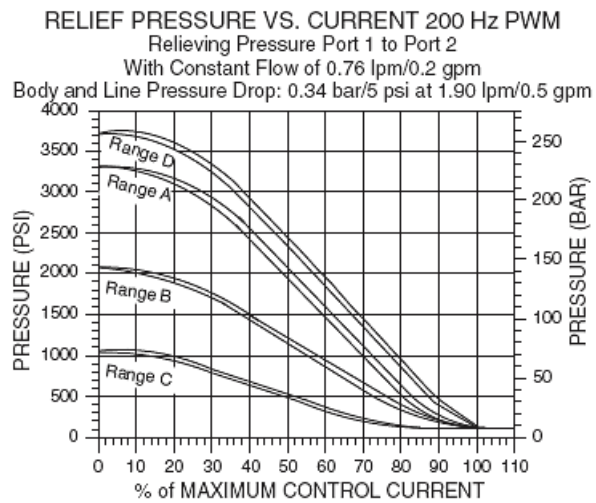
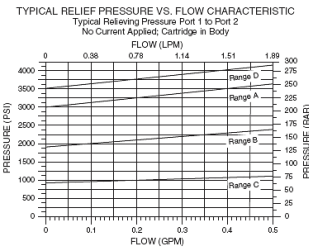
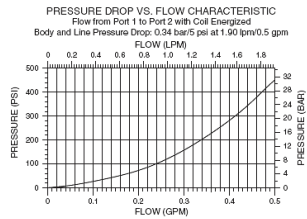
Fluids	Mineral based or synthetic with lubricating properties
Fluid viscosity range	7.4 to 420 cSt
Maximum operating contamination level	18/16/13 per ISO 4406



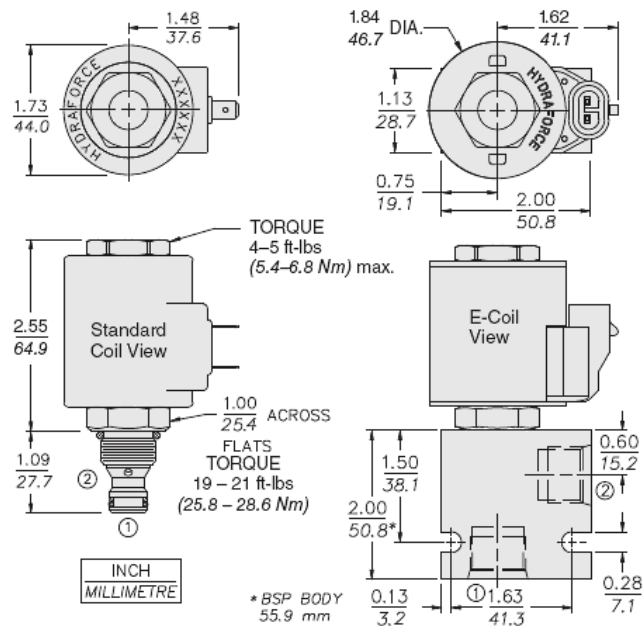
Properties

Unit weight	0.16 kg (0.35 lb)
Internal wetted surface area	107 cm ² (16.6 in ²)

Performance



Dimensions



Installation Specifications

Cavity	VC08-2
Cartridge installation torque	25.8 to 28.6 N-m (19 to 21 ft-lb)
Coil nut torque	5.4 to 6.8 N-m (4 to 5 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK08-2N-B SK08-2V-B SK08-2P-B SK08-2U-O
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Order Code



CODE	DESCRIPTION
10DS	10 VDC, D-Coil, Dual Spade
10EL	10 VDC, E-Coil, Dual Lead Wires
10ER	10 VDC, E-Coil, Deutsch
12DG	12 VDC, D-Coil, DIN 43650
12DL	12 VDC, D-Coil, Dual Lead Wires, 18 inches long
12DL/36	12 VDC, D-Coil, Dual Lead Wires, 36 inches long
12DL/W	12 VDC, D-Coil, Dual Lead Wires with Weatherpak
12DR	12 VDC, D-Coil, Deutsch
12DS	12 VDC, D-Coil, Dual Spade
12EG	12 VDC, E-Coil, DIN 43650
12EJ	12 VDC, E-Coil, AMP Jr.
12EL	12 VDC, E-Coil, Dual Lead Wires, 18 inches long
12EL/36	12 VDC, E-Coil, Dual Lead Wires, 36 inches long
12ER	12 VDC, E-Coil, Deutsch
12EY	12 VDC, E-Coil, Metri-Pack 150
20DS	20 VDC, D-Coil, Dual Spade
20ER	20 VDC, E-Coil, Deutsch
24AG	24 VDC, D-Coil, DIN 43650
24AP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
24DG	24 VDC, D-Coil, DIN 43650
24DL	24 VDC, D-Coil, Dual Lead Wires
24DL/W	24 VDC, D-Coil, Dual Lead Wires with Weatherpak
24DP	24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires
24DR	24 VDC, D-Coil, Deutsch
24DS	24 VDC, D-Coil, Dual Spade
24EG	24 VDC, E-Coil, DIN 43650
24EJ	24 VDC, E-Coil, AMP Jr.
24EL	24 VDC, E-Coil, Dual Lead Wires, 18 inches long
24EL/36	24 VDC, E-Coil, Dual Lead Wires, 36 inches long
24ER	24 VDC, E-Coil, Deutsch
24EY	24 VDC, E-Coil, Metri-Pack 150
36DS	36 VDC, D-Coil, Dual Spade