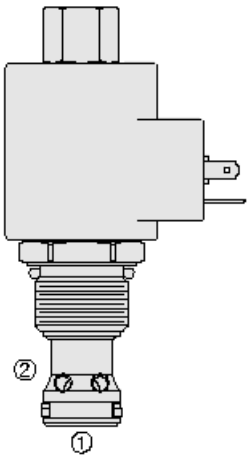




Overview



Description

The TS12-26X is a screw-in, cartridge style, pilot-operated, spool-type, relief valve which CAN be infinitely adjusted across a prescribed range using a variable electric current. The regulated pressure is proportional to the input electrical current.

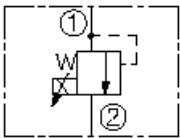
Operation

The TS12-26X blocks flow from port 1 to port 2 until sufficient pressure is present at port 1 to open the pilot section by offsetting the electrically induced solenoid force. With no current applied, the valve will relieve at approximately 100 psi [6,9].

Features

- 12 and 24 volt coils standard.
- Optional waterproof E-Coils rated up to IP69K.
- Industry common cavity.
- Optional manual override.

Symbol



Ratings

Pressure Ratings

Pressure rating	241.3 bar (3500 psi)	- Note: At port 1
	206.8 bar (3000 psi)	- Note: At port 2
Proof pressure	344.7 bar (4000 psi)	
Burst pressure	827.4 bar (12000 psi)	- Note: With coil assembled
Adjustable pressure range	6.9 to 206.8 bar (100 to 3000 psi)	- Note: Model code A (from zero to maximum control current)
	6.9 to 138.0 bar (100 to 2000 psi)	- Note: Model code b (from zero to maximum control current)
	2.1 to 68.9 bar (30 to 1000 psi)	- Note: Model code c (from zero to maximum control current)

Flow Ratings

Flow rating	189 lpm (50 gpm)	- Note: Delta-p (cartridge only) port 1-2 (coil de-energized) 12.4 bar (180 psi)
Hysteresis per cent	3 %	- Note: Maximum
Maximum pilot flow	0.76 lpm (0.2 gpm)	

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 viton seals
Storage temperature	-40 to 70 °C (-40 to 160 °F)	
Ambient temperature	-40 to 70 °C (-40 to 160 °F)	

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

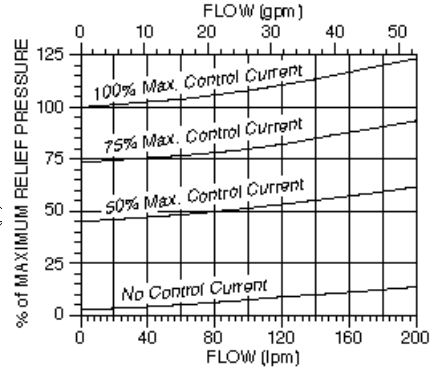
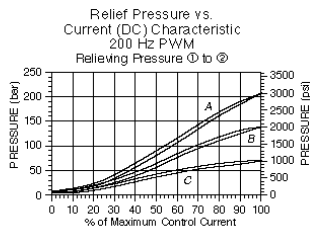
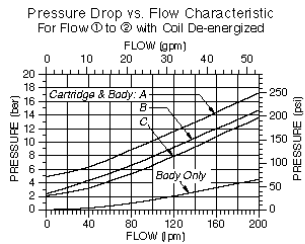


Properties

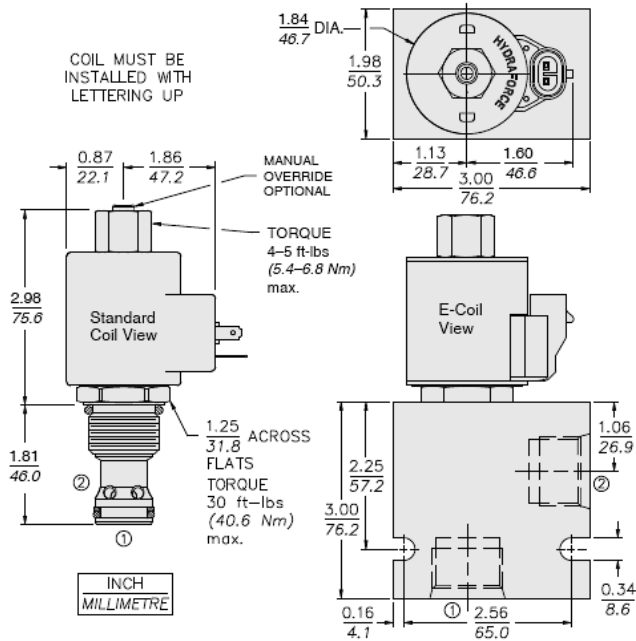
Unit weight	0.56 kg (1.23 lb)
Internal wetted surface area	163 cm ² (36.8 in ²)

Performance

Typical Relief Pressure vs. Flow Characteristic
Typical Relieving Pressure ① to ②
at Various %'s of Maximum Control Current
Pressure Range "A" (207 bar/3000 psi)
Cartridge in Body



Dimensions



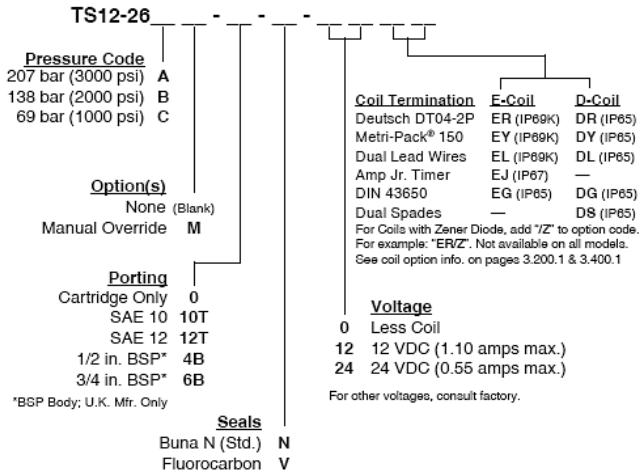
Installation Specifications

Cavity	VC12-2
Cartridge installation torque	44.9 to 50.2 N-m (33 to 37 ft-lb)
Coil nut torque	9.5 to 13.6 N-m (7 to 10 ft-lb)
Orientation restriction	None

Accessories

Seal kit	SK12-2X-B	- Note: X=seal option
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Order Code



Model Options

TS12-26DE-H-J-L

D Regulating Pressure Range

CODE	DESCRIPTION
A	6.9 to 206.8 bar (100 to 3000 psi) Pressure Range
B	6.9 to 138.0 bar (100 to 2000 psi) Pressure Range
C	2.1 to 68.9 bar (100 to 1000 psi) Pressure Range

E Manual Override

CODE	DESCRIPTION
BLANK	NONE
M	Minimum Regulated Pressure Override, 3/16" Internal Hex

H Line Body

CODE	DESCRIPTION
0	No Body
10T	Aluminum SAE 10
12T	Aluminum SAE 12
16T	Aluminum SAE 16
12TD	Ductile Iron SAE 12
16TD	Ductile Iron SAE 16
8B	Aluminum BSPP 1" (8)
8BD	Ductile Iron BSPP 1" (8)

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon
P	Polyurethane
U	PPDI Urethane

L Coil

CODE	DESCRIPTION
0	No Coil



CODE	DESCRIPTION
10DG	10 VDC, D-Coil, DIN 43650
10DL	10 VDC, D-Coil, Dual Lead Wires
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