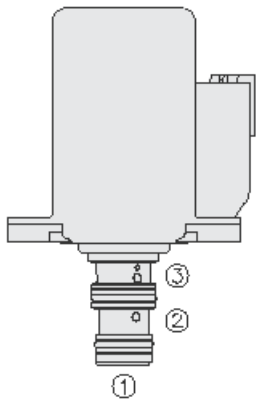




Overview



Description

This is a direct-acting, spool-type, proportional, pressure-reducing/relieving valve. It is a drop-in, flange mounted cartridge type valve for use with mineral based or synthetic (with lubricating properties) hydraulic fluids. The coil is an integral part of the valve and is not serviceable. The regulated pressure is proportional to the input electrical current in the pressure ranges shown.

Operation

The EHPR98-T35 allows free flow from 1 to 3 when no current is applied to the coil. When the coil is energized, 2 is connected to 1. Increasing current applied to the coil will increase the control (reduced) pressure proportionally. If pressure at 1 exceeds the setting induced by the coil, pressure from 1 is relieved to 3.

Note: Back pressure on port 3 becomes additive to the pressure setting at a 1:1 ratio.

Manual Override Operation

Rotate manual override screw clockwise until desired regulated pressure is achieved.

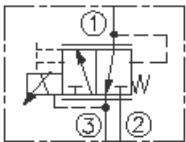
Features

- o 10, 12, 20 or 24 VDC coils.
- o 960 hour salt spray protection.
- o Economical drop-in style.
- o Several push-on termination options.
- o Higher inlet pressure option A available.
- o Manual override and screen options.

Application Notes

- o Newer G3 products have better pull-in/drop-out performance, lower current draw, and improved hysteresis.
- o G3 products install into a new cavity, however an adapted mounting plate is available for use with the T cavity.
- o For new applications consider using:
 - o [EHPR98-G35](#) for inlet pressures below 103 bar (1500 psi).
 - o [EHPR98-G35A](#) for inlet pressures above 103 bar (1500 psi).

Symbol



Ratings

Pressure Ratings

Pressure rating	103 bar (1500 psi) 34.5 bar (500 psi) 17.2 bar (250 psi)	- Note: Maximum supply pressure - Note: Maximum tank port pressure (standard valve) - Note: Maximum tank port pressure (manual override option)
Control pressure at maximum control current	20.7 bar (300 psi)	

Flow Ratings

Flow rating	5.7 lpm (1.5 gpm)	
Hysteresis per cent	4 %	
Maximum internal leakage	75 ml/min (4.58 in ³ /min) 125 ml/min (7.63 in ³ /min)	- Note: At de-energized, oil 25 bar (365 psi) 32 cSt (150 SUS) - Note: Energized at imax, at 25 bar (365 psi)

Temperature Ratings

Operating fluid temperature	-40 to 120 °C (-40 to 250 °F)
Storage temperature	-40 to 80 °C (-40 to 176 °F)
Ambient temperature	-40 to 80 °C (-40 to 176 °F)

Other Ratings

Corrosion protection	960 hour Salt-spray
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Operating Parameters

Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt (50 to 2000 SUS)
Maximum operating contamination level	20/18/14 per ISO 4406

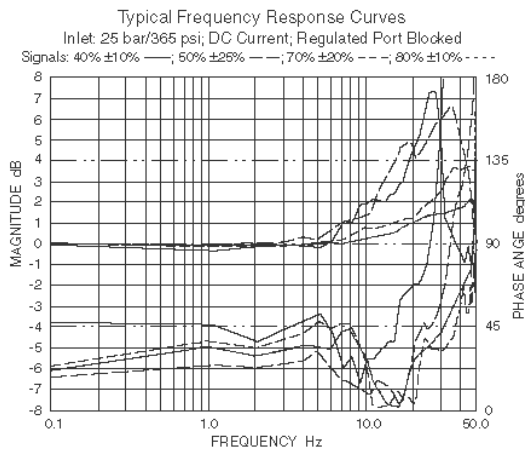
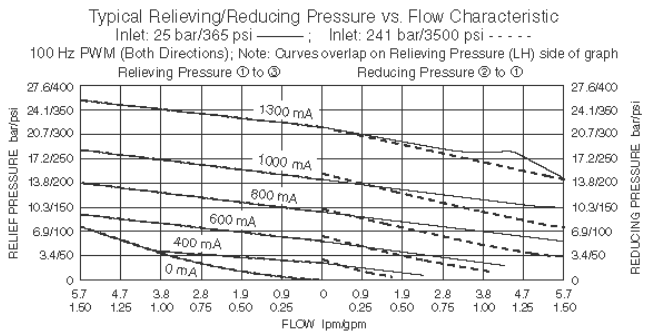
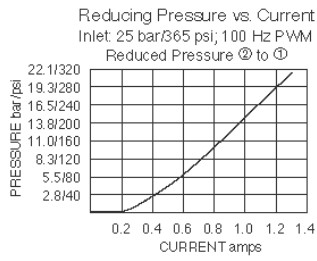
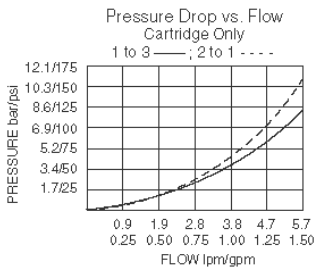
Properties

Unit weight	0.20 kg (0.44 lb)
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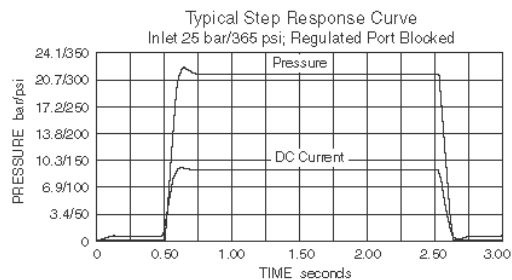
Electrical Parameters

Maximum control current	1.38 A - Note: 10 V
	1.30 A - Note: 12 V
	0.69 A - Note: 20 V
	0.65 A - Note: 24 V
Note	For other voltages, consult HydraForce
Dither PWM frequency	100 Hz
Valve inductance	80 mH - Note: 12 V coil

Performance

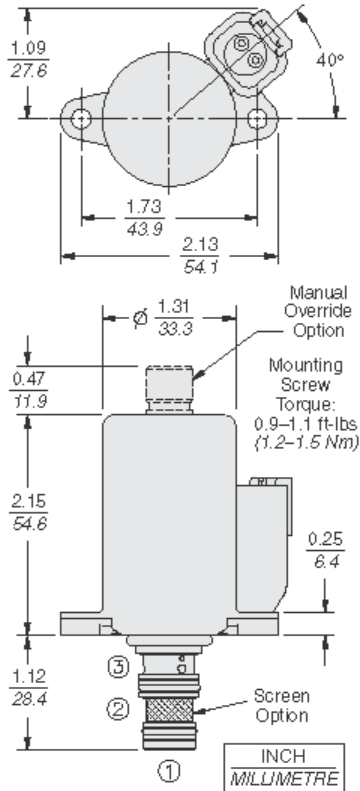


Note: For additional Frequency Response or Step Response information, consult factory.





Dimensions



Installation Specifications

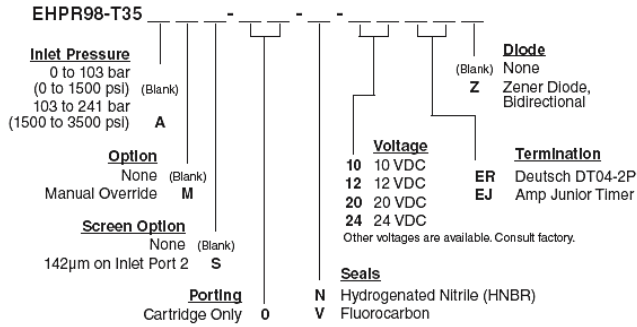
Orientation restriction: None

Accessories

Seal kit: SKEHPR98-T3N - **Note:** HNBR



Order Code



Model Options

EHPR98-T35DEG-H-J-KL

D Inlet Pressure Range

CODE	DESCRIPTION
A	1500 to 3500 psi Inlet Pressure
BLANK	0 to 1500 psi Inlet Pressure

E Manual Override

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

G Screen

CODE	DESCRIPTION
BLANK	NONE
S	100 Mesh Screen

H Line Body

CODE	DESCRIPTION
0	No Body

J Seal

CODE	DESCRIPTION
N	Buna-N
V	Fluorocarbon

K Coil Voltage

CODE	DESCRIPTION
10	10 VDC
12	12 VDC
20	20 VDC
24	24 VDC

L Coil Termination

CODE	DESCRIPTION
EJ	E-Coil, AMP Jr.
ER	E-Coil, Deutsch