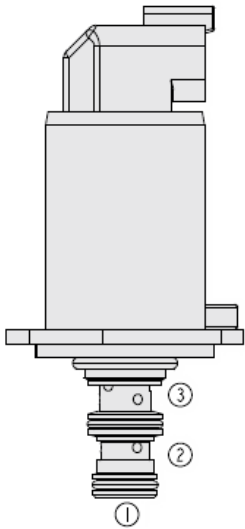




Overview



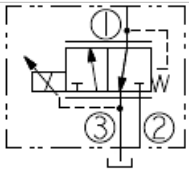
Description

The ehpr98-g33xx is a direct-acting, spool-type, proportional, pressure reducing relieving valve. It is a 3rd generation HydraForce 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

Features

- Economical drop-in style.
- Mounting plate option.
- Compact size.
- Retrofit option for EhPR98-T33.
- Quick response time.
- Inlet screen and pressure options.
- Top-mounted connector.
- Low leakage.

Symbol



Ratings

Pressure Ratings

Pressure rating	103 bar (1500 psi)	- Note: Port 2
	45 bar (650 psi)	- Note: Ports 1, 3
Proof pressure	54 bar (780 psi)	- Note: Port 3
	345 bar (5000 psi)	- Note: Ports 1, 2
Burst pressure	258 bar (3750 psi)	- Note: All ports pressurized
Control pressure at maximum control current	30 bar (435 psi)	

Flow Ratings

Flow rating	3.8 lpm (1.0 gpm)	
Maximum internal leakage	60 ml/min (3.6 in ³ /min)	- Note: At 34.5 bar (500 psi)
Hysteresis per cent	4 %	

Other Ratings

Cycle life	10 million cycles
Environmental rating	Ip69k
Corrosion protection	960 hour salt spray per ASTM b117

Temperature Ratings

Operating fluid temperature	-40 to 149 °C (-40 to 300 °F)	- Note: HNBR
	-26 to 204 °C (-15 to 400 °F)	- Note: Fluorocarbon
	-54 to 107 °C (-65 to 225 °F)	- Note: Polyurethane
Storage temperature	-40 to 70 °C (-40 to 158 °F)	
Ambient temperature	-40 to 80 °C (-40 to 176 °F)	



Operating Parameters

Fluids	Mineral based or synthetic hydraulic fluid with lubricating properties
Fluid viscosity range	7.4 to 420 cSt

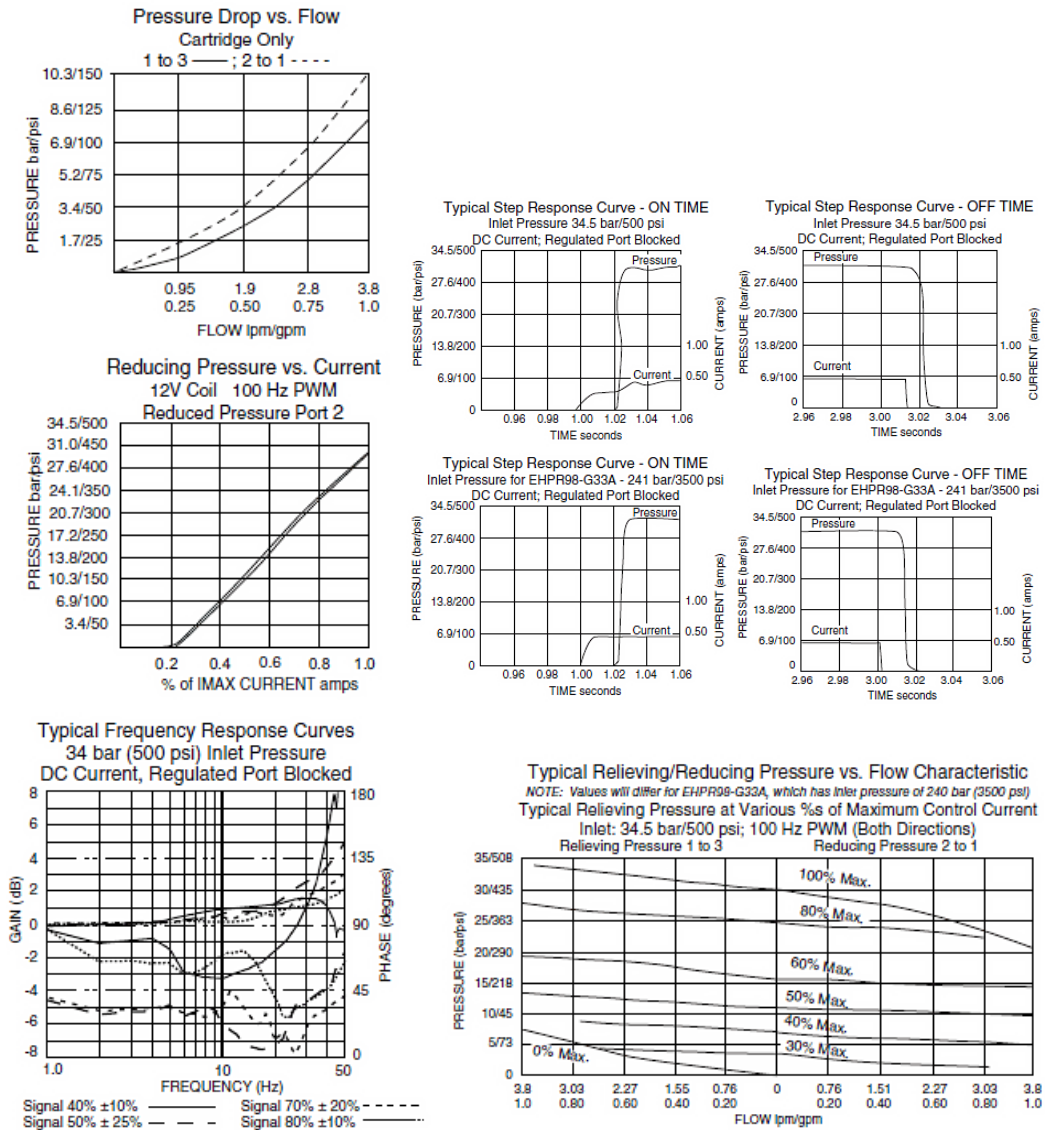
Properties

Unit weight	0.26 kg (0.57 lb)
Internal wetted surface area	90 cm ² (14 in ²)

Electrical Parameters

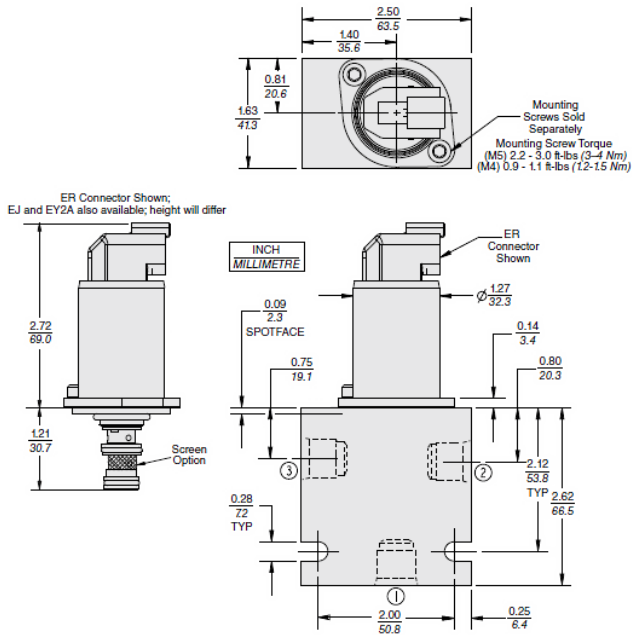
Maximum control current	1.130 A	- Note: Coil 10 V
	0.940 A	- Note: Coil 12 V
	0.780 A	- Note: Coil 14 V
	0.565 A	- Note: Coil 20 V
	0.470 A	- Note: Coil 24 V
	0.390 A	- Note: Coil 28 V
Valve inductance	68 mH	- Note: 10 V coil
	104 mH	- Note: 12 V coil
	152 mH	- Note: 14 V coil
	284 mH	- Note: 20 V coil
	433 mH	- Note: 24 V coil
	645 mH	- Note: 28 V coil

Performance





Dimensions



Materials

Materials

Cartridge Including Coil: Weight: 0.26 kg. (0.57 lbs.) Steel with hardened work surfaces. Zinc-nickel plated exposed surfaces. HNBR seals standard. Coil is encapsulated, Class N high-temperature magnet wire, with zinc-nickel plated shell.

Ported Test Body: Part No. 71611X0

Mounting Screws: Must be ordered separately; M5 x 0.8 x 12 mm Long, Part No. 4002609 (with standard VC-G027 cavity); M4 x 0.7 x 12 Long; Part No. 4001015 (with retrofit application VC-T009 cavity).

Installation Specifications

Cavity	VC-G027
Installation type	Flange mounted
Orientation restriction	None
Mounting screw torque	3 to 4 N-m (2.2 to 3.0 ft-lb)
Note	For retro-fitting into older drop-in cavities and other mounting options, see "g3_mounting_options" technical reference

Accessories

Mounting plate	Hf p/n 4595096
Mounting screw	M5 x 0.8 x 12 mm long, hf p/n: 4002609 (sold separately)
Valve body	Hf p/n 71611x0 (sold separately)
Seal kit	SK-G027-X - Note: X=seal option



Order Code

POSITION	CODE	DESCRIPTION
		EHPR98-G33G-H-J-KL-U
G		Screen
G	BLANK	NONE
G	S	100 Mesh Screen
H		Line Body
H	0	No Body
J		Seal
J	G	HNBR (Hydrogenated Nitrile Butadiene Rubber)
J	V	Fluorocarbon
J	P	Polyurethane
K		Coil Voltage
K	10	10 VDC
K	12	12 VDC
K	14	14 VDC
K	20	20 VDC
K	24	24 VDC
K	28	28 VDC
L		Coil Termination
L	EJ	E-Coil, AMP Jr.
L	ER	E-Coil, Deutsch
L	EY2A	E-Coil, Metri-Pack 150.2
U		Coil Termination
U	BLANK	None
U	G	Standard Single Valve Plate
U	T	Retro-Fit Plate

