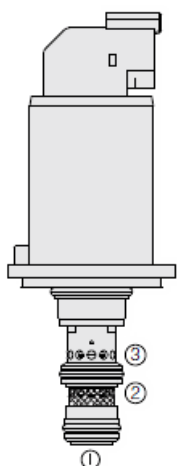




## Overview



### Description

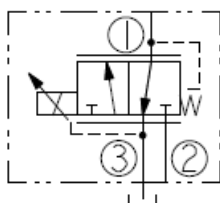
The EHPR98-G38HXX is a direct-acting, spool-type, proportional, pressure reducing relieving valve. It is a 3rd generation hydraforce drop-in, flange mounted cartridge type valve for use with mineral based or synthetic (with lubricating properties) hydraulic fluids. The coil is an integral part of the valve and is not serviceable the regulated pressure is proportional to the input electrical current in the pressure ranges shown.

**NOTE:** \* The 'H' pressure option is to be used in applications with inlet pressures that exceed 69 bar (1000 psi) at port 2. See standard and 'D' options for inlet pressures below 69 bar (1000 psi).

### Features

- Economical drop-in style
- Mounting plate option
- Several regulated pressure ranges
- Retrofit option for EHPR98-T38
- Quick response time
- Screen option
- Top-mounted connector
- Low leakage

### Symbol



## Ratings

### Pressure Ratings

Pressure rating	69 to 241 bar (1000 to 3500 psi)	- <b>Note:</b> Port 2
	45 bar (650 psi)	- <b>Note:</b> Port 1
	34.5 bar (500 psi)	- <b>Note:</b> At port 3
Proof pressure	345 bar (5000 psi)	- <b>Note:</b> Ports 1, 2 pressurized
	54 bar (780 psi)	- <b>Note:</b> Port 3
Burst pressure	380 bar (5500 psi)	- <b>Note:</b> Ports 1, 2 pressurized
	250 bar (3625 psi)	- <b>Note:</b> Port 3
Control pressure at maximum control current	21 bar (305 psi)	- <b>Note:</b> EHPR98-G38HA
	25 bar (363 psi)	- <b>Note:</b> EHPR98-G38HB
	30 bar (435 psi)	- <b>Note:</b> EHPR98-G38HC

### Flow Ratings

Flow rating	23 lpm (6 gpm)	
Maximum internal leakage	200 ml/min (12.2 in <sup>3</sup> /min)	- <b>Note:</b> At 241 bar (3500 psi) de-energized

### 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)	- <b>Note:</b> HNBR
	-26 to 204 °C (-15 to 400 °F)	- <b>Note:</b> Fluorocarbon
Storage temperature	-40 to 70 °C (-40 to 158 °F)	
Ambient temperature	-40 to 120 °C (-40 to 248 °F)	

## Operating Parameters

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



## Properties

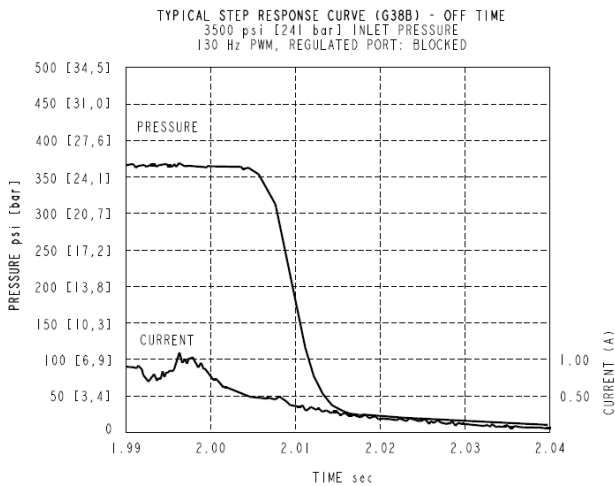
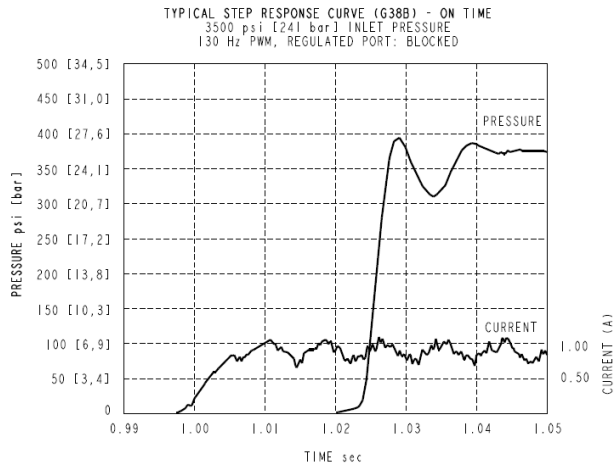
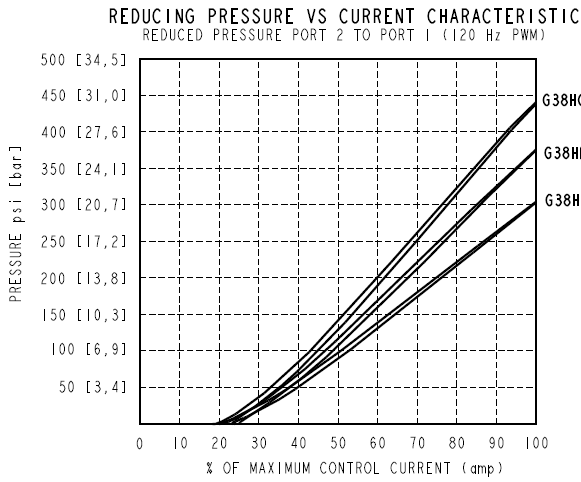
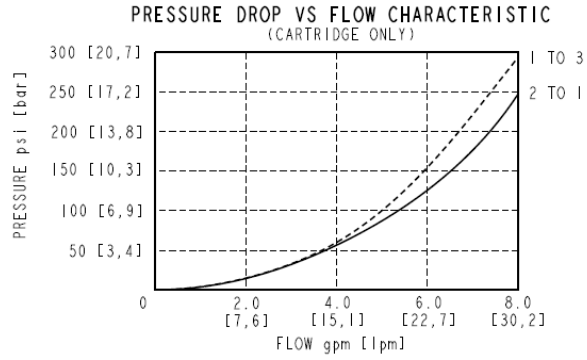
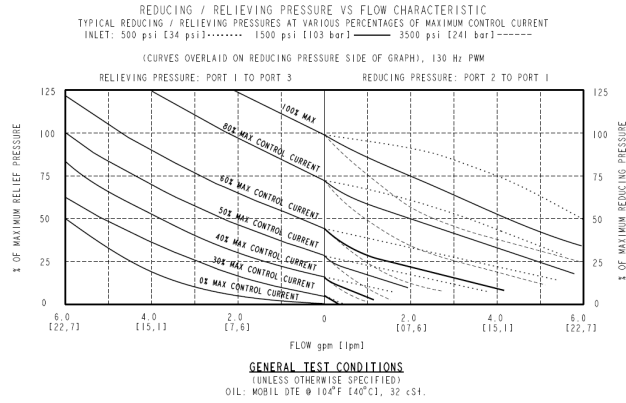
Unit weight	0.27 kg (0.60 lb)
Internal wetted surface area	148 cm <sup>2</sup> (23.0 in <sup>2</sup> )

## Electrical Parameters

Maximum control current	1.050 A	- <b>Note:</b> At 10 V
	0.0880 A	- <b>Note:</b> At 12 V
	0.720 A	- <b>Note:</b> At 14 V
	0.525 A	- <b>Note:</b> At 20 V
	0.440 A	- <b>Note:</b> At 24 V
	0.360 A	- <b>Note:</b> At 28 V
Coil resistance	4.83 ohm	- <b>Note:</b> 10 V coil
	7.28 ohm	- <b>Note:</b> 12 V coil
	10.05 ohm	- <b>Note:</b> 14 V coil
	18.35 ohm	- <b>Note:</b> 20 V coil
	29.54 ohm	- <b>Note:</b> 24 V coil
	40.36 ohm	- <b>Note:</b> 28 V coil
Valve inductance	77 mH	- <b>Note:</b> 10 V coil
	118 mH	- <b>Note:</b> 12 V coil
	165 mH	- <b>Note:</b> 14 V coil
	301 mH	- <b>Note:</b> 20 V coil
	446 mH	- <b>Note:</b> 24 V coil
	680 mH	- <b>Note:</b> 28 V coil
Hysteresis	4 %	- <b>Note:</b> At 120 Hz PWM

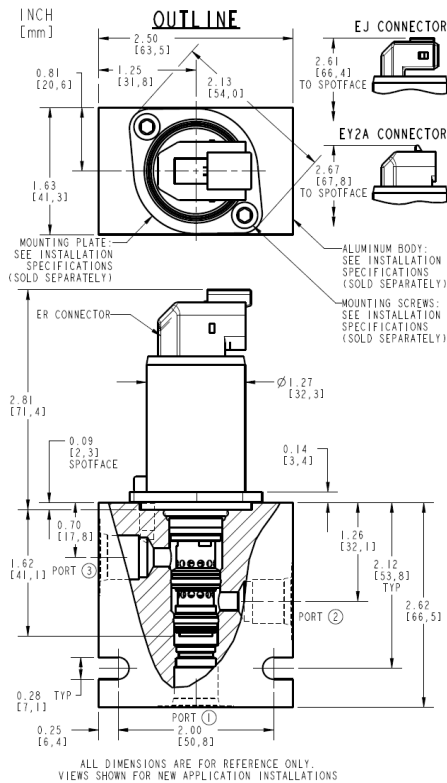


**Performance**





## Dimensions



## Installation Specifications

Cavity	VC-G028	- <b>Note:</b> Standard configuration
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 "Mounting-options-for-G3-valves" technical reference	

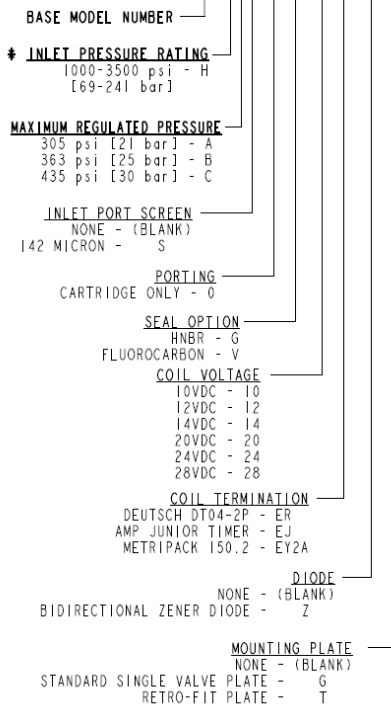
## Accessories

Mounting plate	HF P/N 4595096	- <b>Note:</b> Use with standard VC-G028 cavity
	HF P/N 4210226	- <b>Note:</b> Use with retrofit VC-T011 cavity
Mounting screw	M5 x 0.8 x 12 mm long, HF P/N: 4002609 (sold separately)	- <b>Note:</b> Use with standard VC-G028 cavity
	M4 x 00.7 x 12 mm long, HF P/N: 4001015 (sold separately)	- <b>Note:</b> Use with retrofit VC-T011 cavity
Seal kit	SK-G028-X	- <b>Note:</b> X=seal option
Ported test body	HF P/N: 71612X0	

## Order Code



**ORDERING INFORMATION**  
**EHPR98-G38HXX-0-X-XXXX/X-X**



POSITION	CODE	DESCRIPTION
		EHPR98-G38HDG-H-J-KL-U
D		Max Regulated Pressure
D	A	21 bar (305 psi)
D	B	25 bar (363 psi)
D	C	30 bar (435 psi)
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



POSITION	CODE	DESCRIPTION
U		Mounting Plate
U	BLANK	None
U	G	Standard Single Valve Plate
U	T	Retro-Fit Plate