



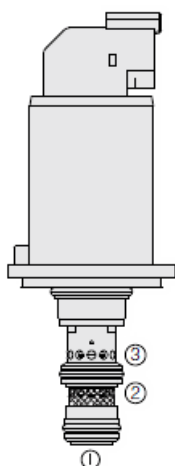
## Overview

### Description

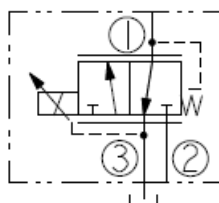
The EHPR98-G38HDX is a direct-acting, spool-type, proportional, pressure reducing relieving valve. It is a 3rd generation hydraforce drop-in, flange mounted cartridge type valve for use with mineral based or synthetic (with lubricating properties) hydraulic fluids. The coil is an integral part of the 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
- 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	241 bar (3500 psi)	- <b>Note:</b> Port 2
	75.8 bar (1100 psi)	- <b>Note:</b> Port 1
	34.5 bar (500 psi)	- <b>Note:</b> 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	59 bar (855 psi)	- <b>Note:</b> EHPR98-G38HD

### Flow Ratings

Flow rating	19 lpm (5 gpm)	
Maximum internal leakage	100 ml/min (6 in <sup>3</sup> /min)	- <b>Note:</b> At 241 bar (3500 psi) de-energized

### Other Ratings

Cycle life	1 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 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



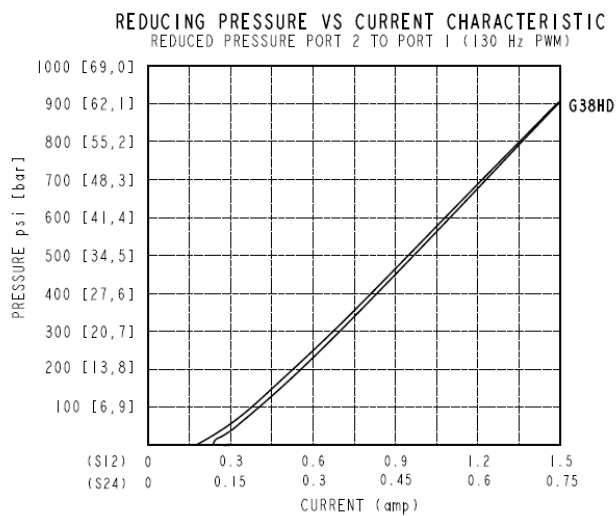
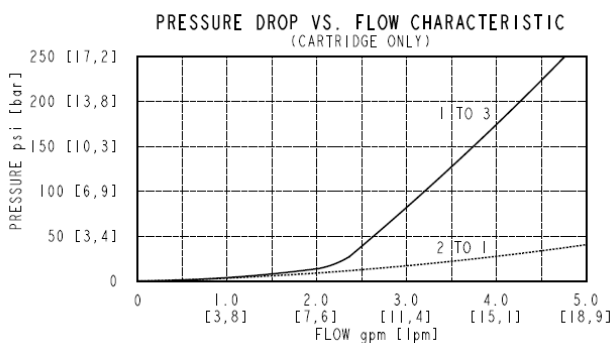
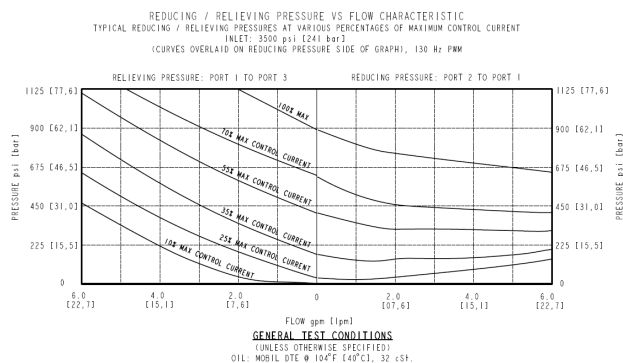
## Properties

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

## Electrical Parameters

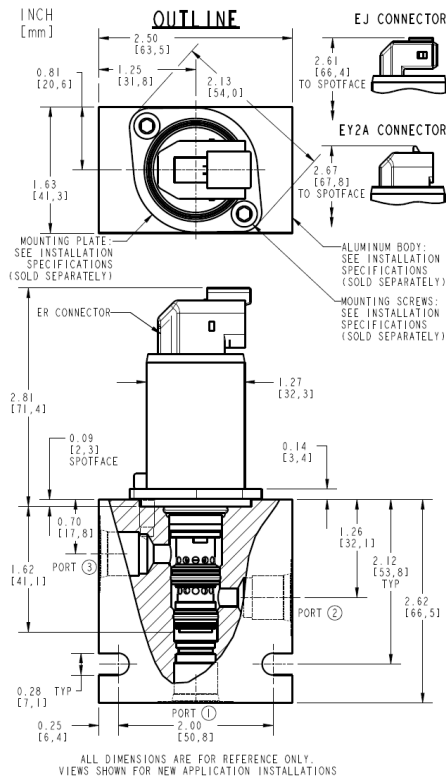
Maximum control current	1.44 A	- Note: At 12 V
	0.720 A	- Note: At 24 V
Coil resistance	4.83 ohm	- Note: 12 V coil
	18.35 ohm	- Note: 24 V coil
Valve inductance	77 mH	- Note: 12 V coil
	301 mH	- Note: 24 V coil
Hysteresis	4 %	- Note: At 130 Hz PWM

## 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-G38HDX-0-X-XXXX/X-X**

<b>BASE MODEL NUMBER</b>							
<b>INLET PRESSURE RATING</b> 3500 psi [241 bar] - H							
<b>MAXIMUM REGULATED PRESSURE</b> 855 psi [59 bar] - D							
<b>INLET PORT SCREEN</b> NONE - (BLANK) 142 MICRON - S							
<b>PORTING</b> CARTRIDGE ONLY - 0							
<b>SEAL OPTION</b> HNBR - G FLUOROCARBON - V							
<b>COIL VOLTAGE</b> 12V SYSTEMS - S12 24V SYSTEMS - S24							
<b>COIL TERMINATION</b> DEUTSCH DT04-2P - ER AMP JUNIOR TIMER - EJ METRIPACK 150.2 - EY2A							
<b>DIODE</b> NONE - (BLANK) BIDIRECTIONAL ZENER DIODE - Z							
<b>MOUNTING PLATE</b> NONE - (BLANK) STANDARD SINGLE VALVE PLATE - G RETRO-FIT PLATE - T							

### Model Options

#### EHPR98-G38HDG-H-J-KL-U

##### G Screen

CODE	DESCRIPTION
BLANK	NONE
S	100 Mesh Screen

##### H Line Body

CODE	DESCRIPTION
0	No Body

##### J Seal

CODE	DESCRIPTION
G	HNBR (Hydrogenated Nitrile Butadiene Rubber)
V	Fluorocarbon
P	Polyurethane

##### K Coil Voltage

CODE	DESCRIPTION
10	10 VDC
12	12 VDC
14	14 VDC
20	20 VDC
24	24 VDC
28	28 VDC

##### L Coil Termination

CODE	DESCRIPTION
EJ	E-Coil, AMP Jr.



CODE	DESCRIPTION
ER	E-Coil, Deutsch
EY2A	E-Coil, Metri-Pack 150.2

**U Mounting Plate**

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