

EHPR08-33

Proportional Reducing/Relieving Valve, 207 BAR Rated

A screw-in, cartridge-style, direct acting, spool-type reducing/relieving valve, which can be infinitely adjusted across a prescribed range using a variable electric input. Pressure output is proportional to DC current input. This valve is intended for use as a pressure control device in demanding applications.



Voltage	Hydraforce code	Article no.
CARTRIDGE VERSION		
24V DC	EPHR08-33-0-N-24DG	EPHR0833C24
INLINE WITH BODY 3/8" BSP		
24V DC	EPHR08-33-3B-N-24DG	EPHR08333B24
INLINE WITH BODY 1/2" BSP		
24V DC	EPHR08-33-4B-N-24DG	EPHR08334B24
with nitril seals		
WITH 'G' DIN CONNECTOR PLUG		

On request - Viton Seals - Screen filter protection - Manual Override
On request - For DC coils with spade or push on connections

Materials

Cartridge:

Weight: 0.25 kg. (0.55 lbs.)
Steel with hardened work surfaces.
Zinc-plated exposed surfaces.
Buna N O-rings standard.

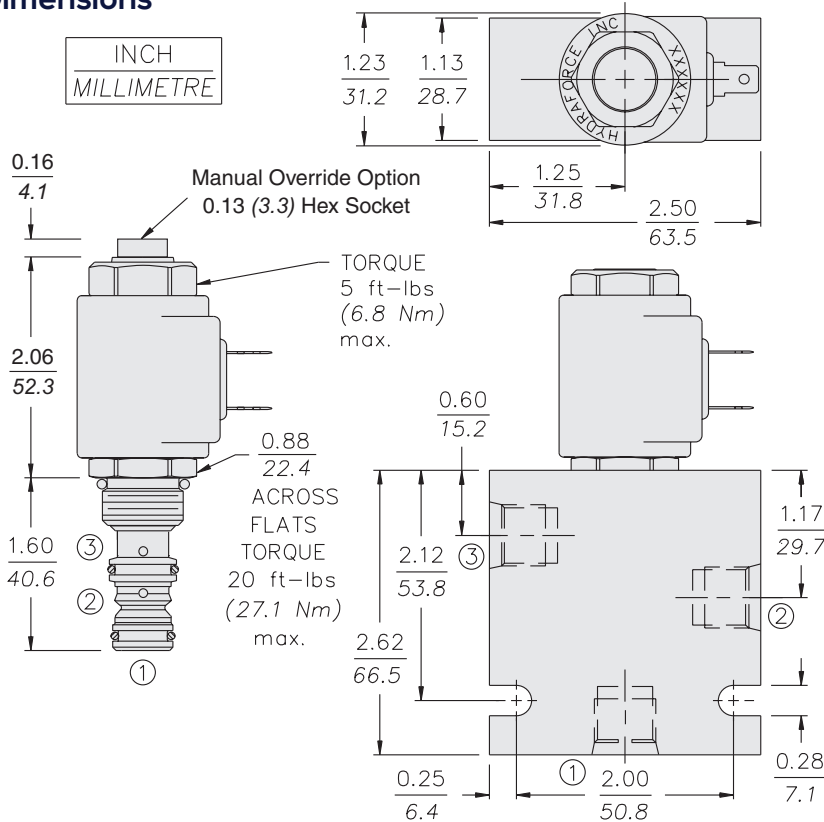
Standard Ported Body:

Weight: 0.16 kg. (0.35 lbs.)
Anodized high strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi).
Ductile iron bodies available; dimensions may differ.

EHPR Series Coil:

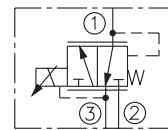
D-Coil: Weight: 0.11 kg. (0.25 lbs.)
Unitized, thermoplastic encapsulated.

Dimensions



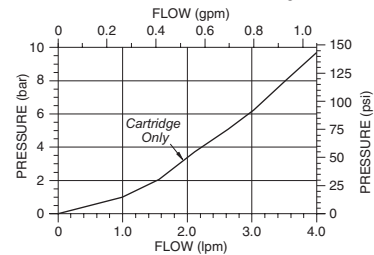
Symbols

USASI/ISO:

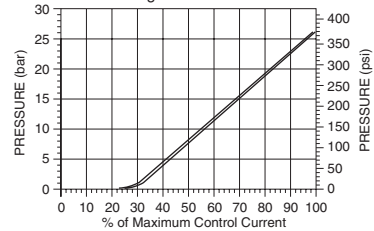


Performance

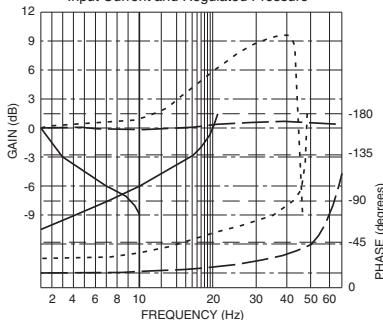
Pressure Drop vs. Flow Characteristic
For Flow ① to ③ with Coil De-energized



Relief Pressure vs. Current (DC) Characteristic
Reducing Pressure ② to ①



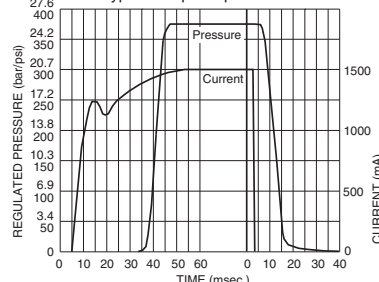
Typical Frequency Response Curves
Input Current and Regulated Pressure



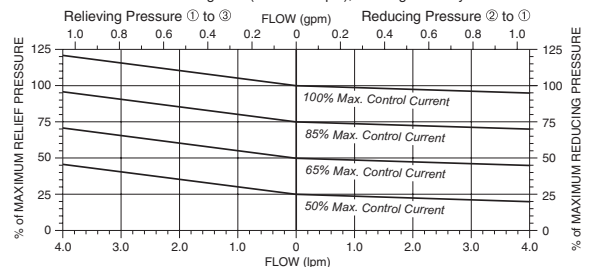
Signal 25% ±10% ————
Signal 50% ±50% - - - - -
Signal 85% ±10% ······

Inlet: 35 bar (500 psi),
4 lpm (1 gpm)
Regulated: Blocked
Tank: ≤ 0.15 bar (2 psi)
Input Signal: Sinusoidal

Typical Step Response Curve



Typical Relieving/Reducing Pressure vs. Flow Characteristic
Typical Relieving Pressure at Various %s of Maximum Control Current
Pressure Range "A" (26 bar/375 psi); Cartridge in Body



Please contact our technical sales team for electronic controller options