

EDE-RDM 2 WAY, NORMALLY OPEN, ELECTRO-PROPORTIONAL RELIEF VALVE WITH PRESET MECHANICAL MAXIMUM
DESCRIPTION

10 size, 7/8-14 thread, "Delta" series, solenoid operated, 2 way normally open, pilot operated relief valve with electro proportional controlled output until it reaches a mechanical preset maximum. Once it reaches mechanical maximum proportional behavior is disabled. The mechanical maximum will limit the proportionality range in the reverse direction.

OPERATION

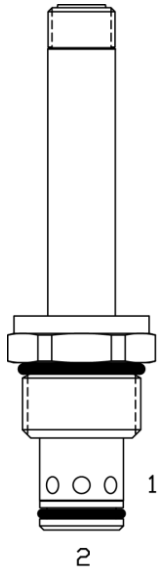
The EDE-RDM blocks flow from (2) to (1) until sufficient pressure is present at (2) to offset the lower of: the electrically induced solenoid force or the mechanical preset maximum setting.

Can be infinitely adjusted in a prescribed range using a variable electric input. Pressure output is proportional to DC current input as current up to mechanical maximum. Can be step adjusted in current in increments up to the mechanical preset maximum.

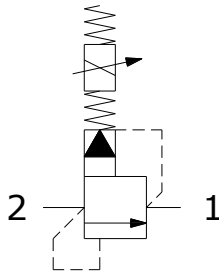
Can be used as a solenoid operated relief valve or a motion control device through a change in electrical signal. Once valve reaches mechanical relief setting, proportional capability is disabled.

With no current applied to the solenoid, the valve will free flow from (2) to (1) at approximately 50 PSI.

Note: Backpressure on port (1) becomes additive to the pressure setting at a 1:1 ratio.


FEATURES

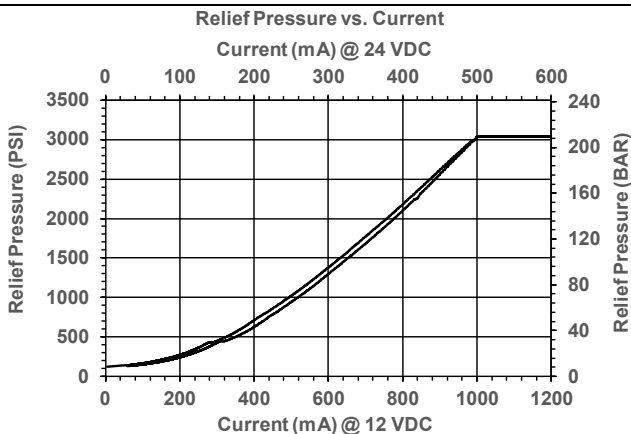
- Efficient wet-armature construction.
- Cartridges are voltage interchangeable.
- Industry common cavity.
- Unitized, molded coil design.
- Continuous duty rated solenoid.
- Optional coil voltages and terminations.

HYDRAULIC SYMBOL


- If low voltage is expected on the machine, 12 or 24 volt systems will require the use of 10 volt or 20 volt coils respectively. Consult Factory for availability of these coil and "PI" coil options.
- **For best performance valve must be purged of air.** Locate below reservoir or add check valve to return. Recommended vehicle installation is Tube Up or Horizontal after purging. Fastest purging position during bleed/start-up is with tube up.
- PWM Frequency: 100-200 Hz (200 Hz recommended). For other set positions consult factory
- Consult factory for different mechanical maximum settings.

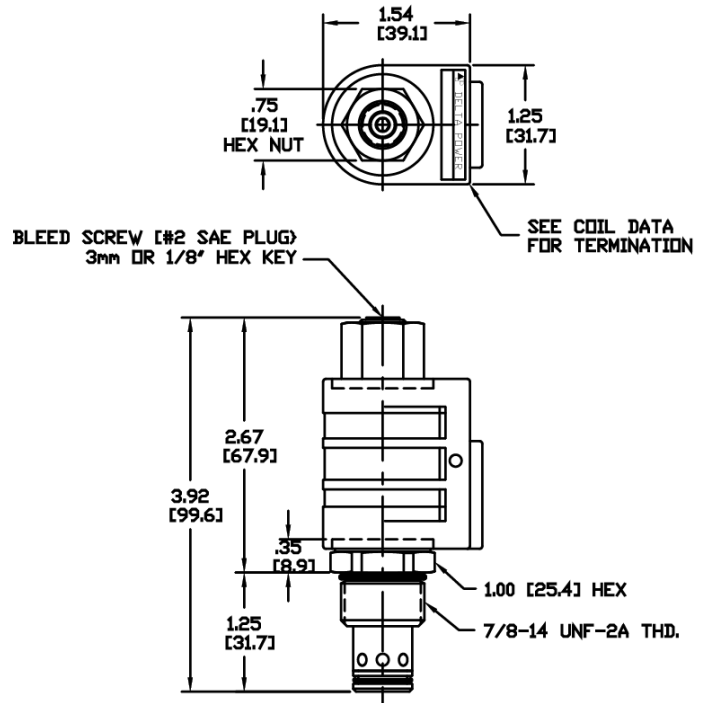
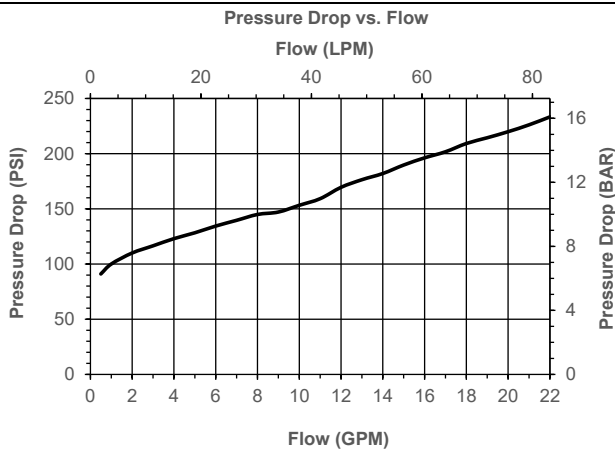
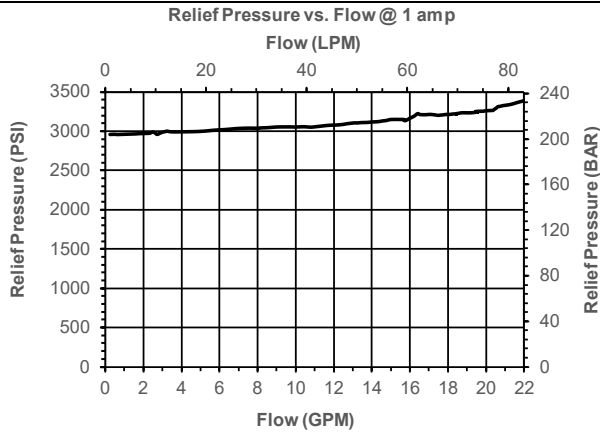
PERFORMANCE

Actual Test Data (Cartridge Only)


VALVE SPECIFICATIONS

Nominal Flow	0-20 GPM (0-76 LPM)
Operating Range	50-3000 PSI (3-207 bar)
Typical Hysteresis	5%
Viscosity Range	36 to 3000 SSU (3 to 647 cSt)
Filtration	ISO 18/16/13
Media Operating Temperature Range	-40° to 250° F (-40° to 120° C)
Weight	0.30 lbs. (0.13 kg)
Operating Fluid Media	General Purpose Hydraulic Fluid
Cartridge Torque Requirements	30 ft-lbs (40.6 Nm)
Coil Nut Torque Requirements	4-6 ft-lbs (5.4-8.1 Nm)
Cavity	DELTA 2W
Cavity Form Tool (Finishing)	40500000

DIMENSIONS



ORDERING INFORMATION

EDE-RDM

OPTIONS

Buna Standard **00**
Viton Standard **V0**

BODIES

Blank
N Without Body
S 1/4 NPT Ports
S #6 SAE Ports

PRESSURE RANGE

100-3000 PSI **30**

VOLTAGE

06 6 VDC
12 12 VDC
24 24 VDC
36 36 VDC
48 48 VDC

"P" COIL TERMINATION

- | | |
|------------------------------------|--------------------------------------|
| DL Double Lead | SS Single Spade |
| DT Deutsch on Leads DT04-2P | DS Double Spade |
| ML Metri-Pack on Leads | HC DIN 43650 (Hirschmann) |
| PL Packard on Leads | DI Deutsch – Integral DT04-2P |
| WL Weatherpack on Leads | |

Approximate Coil Weight: 0.74 Lbs. (0.33 Kg.)

WARNING: the specifications/application data shown in our catalogs and data sheets are intended only as a general guide for the product described (herein). Any specific application should not be undertaken without independent study, evaluation, and testing for suitability.