

**EDE-RDS 2 WAY, NORMALLY OPEN, ELECTRO-PROPORTIONAL RELIEF VALVE WITH PRESET 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.

**OPERATION**

The EDE-RDS 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.

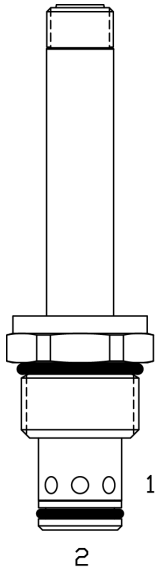
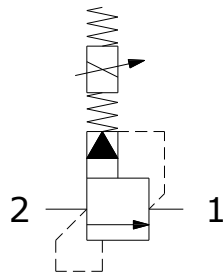
Can be used as a solenoid operated relief valve or a motion control device through a change in electrical signal. Once valve reaches mechanical relief setting, proportional capability is disabled.

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.**

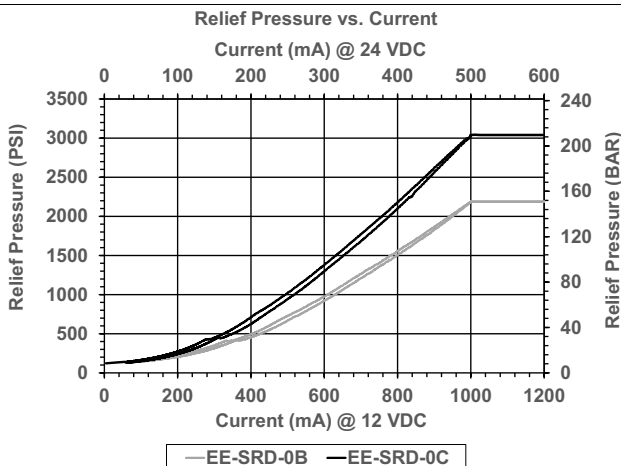
Locate below reservoir or add check valve to return.

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

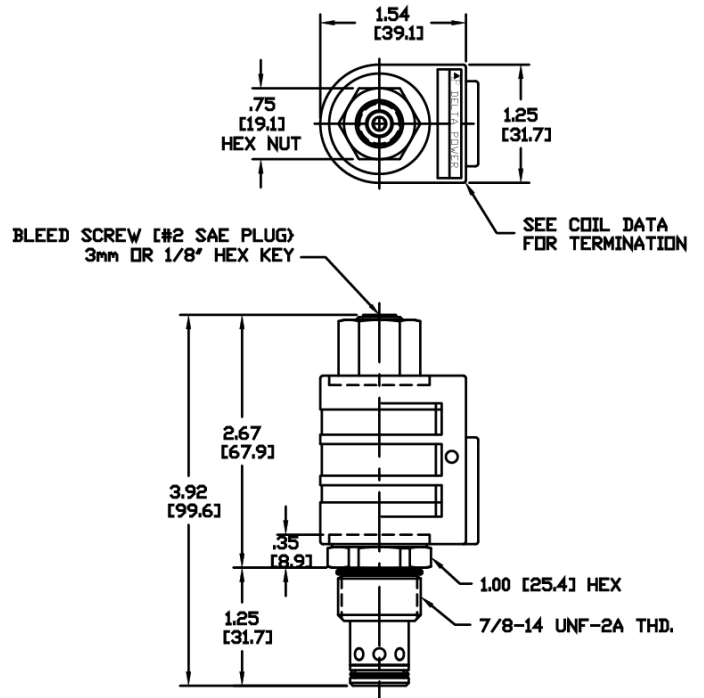
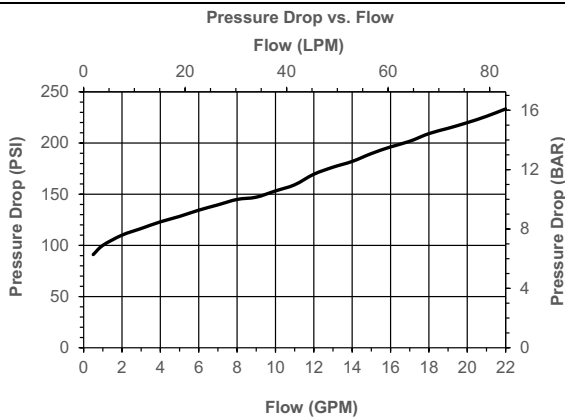
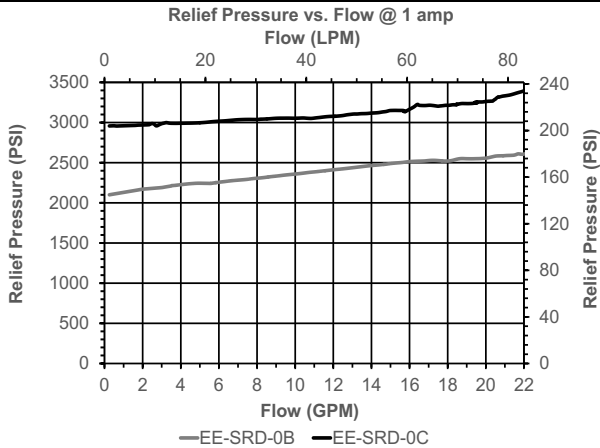
**PERFORMANCE**

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	<a href="#">DELTA 2W</a>
Cavity Form Tool (Finishing)	40500000
Seal Kit	21191202

**DIMENSIONS**



**ORDERING INFORMATION**

**EDE-RDS**

**OPTIONS**

Buna, 100-2175 PSI range	<b>0B</b>
Viton, 100-2175 PSI range	<b>VB</b>
Buna, 100-3000 PSI range	<b>0C</b>
Viton, 100-3000 PSI range	<b>VC</b>

**BODIES**

Blank	Without Body
<b>N</b>	3/8 NPT Ports
<b>S</b>	#8 SAE Ports

**VOLTAGE**

<b>06</b>	6 VDC
<b>12</b>	12 VDC
<b>24</b>	24 VDC
<b>36</b>	36 VDC
<b>48</b>	48 VDC

**"P" COIL TERMINATION**

<b>DL</b> Double Lead	<b>SS</b> Single Spade
Deutsch on Leads	
<b>DT</b> DT04-2P	<b>DS</b> Double Spade
Metri-Pack on Leads	DIN 43650 (Hirschman)
<b>ML</b> Packard on Leads	<b>HC</b> Deutsch - Integral DT04-2P
<b>PL</b> Weatherpack on Leads	<b>DI</b>
<b>WL</b> Leads	

Approximate Coil Weight: .74 lbs. (.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.