

EN043-PRR DIRECT ACTING PROPORTIONAL, PRESSURE REDUCING/RELIEVING, SLIP-IN TYPE
DESCRIPTION

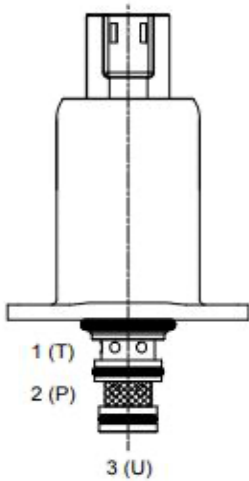
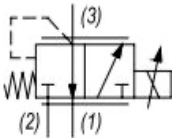
Special cavity, slip-in style flange retained, direct acting proportional pressure reducing/relieving valve.

OPERATION

The EN043-PRR generates a variable pressure in response to a PWM (Pulse Width Modulated) current signal. With no current applied to the proportional solenoid, the inlet port #2 (P) is blocked and the regulated port #3 (U) is vented to port #1 (T). As current is increased, fluid pressure is proportionally controlled at the regulated port #3 (U). On attainment of proportionally determined pressure at #3 (U), the cartridge shifts to block flow at #2 (P), thereby regulating pressure at #3 (U). In this mode, the valve also will relieve #3 (U) to #1 (T) at a variable value over the set reducing pressure.

FEATURES

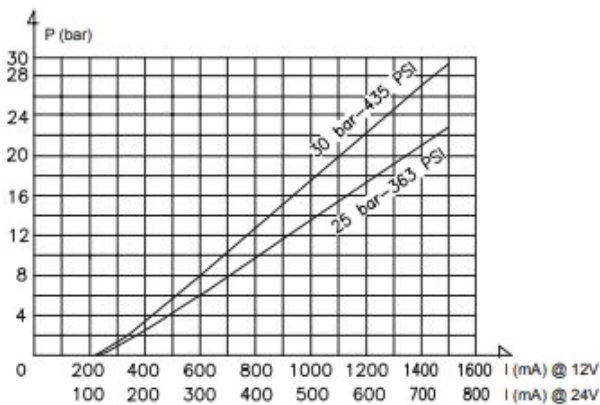
- Slip-in style.
- Efficient wet-armature construction.
- Integral waterproof coil.
- Continuous duty rated solenoid.


HYDRAULIC SYMBOL


Flange retained product. The coil is an integral part of the valve and is not serviceable. Eventual tank pressure exceeding 0 PSI has to be added to the reduced pressure value.

PERFORMANCE

Reduced pressure (bar) vs. Current (mA)
12 V and 24 V Coil


VALVE SPECIFICATIONS

| | |
|-----------------------------------|--|
| Nominal Flow | 1 GPM (4 LPM) @ 8 bar Delta P |
| Max inlet Pressure "H" version | 5000 PSI (345 bar) |
| Max Inlet Pressure "L" version | 700 PSI (50 bar) |
| Controlled Pressure Range | 0 - 25 bar / 0 - 30 bar (see graph) |
| Reduced Pressure Tolerance | +5% |
| Max. Back Pressure at T Port | 290 PSI (20 bar) |
| Internal Leakage | 15 ml/min @ 500 PSI (35 bar) inlet 35 ml/min @ 5000 PSI (350 bar) inlet |
| Viscosity Range | 36 to 3000 SSU (3 to 647 cSt) |
| Filtration | ISO 18/15/13 (ISO 4406) |
| Media Operating Temperature Range | -77° to 194° F (-25° to +90° C) |
| Weight | 0.54 lbs. (0.25 kg) |
| Operating Fluid Media | General Purpose Hydraulic Fluid |
| Cavity | 40200043 |
| Flange Mounting Screws/Torque | M4x10 / 3 Ft.-Lbs. (4 Nm) |

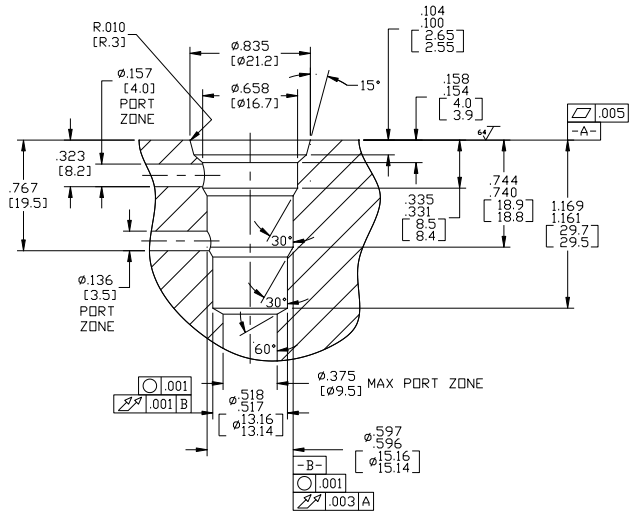
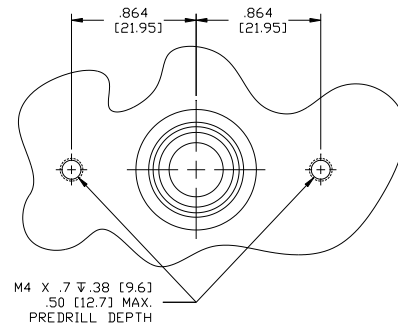
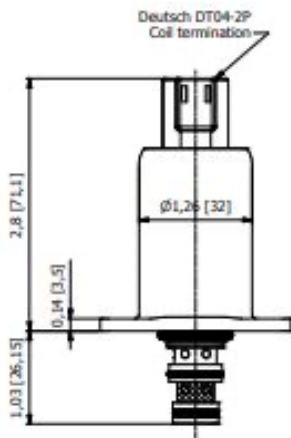
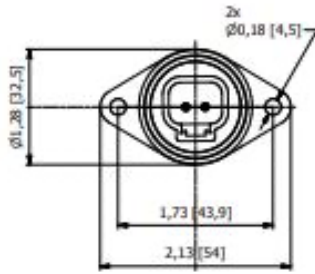
COIL SPECIFICATIONS

| | |
|---------------------------------------|---|
| Current Supply Characteristics | PWM (Pulse Width Modulation) |
| Rated Current Range | 200 – 1500 mA (12 VDC coil) 100 – 750 mA (24 VDC coil) |
| PWM or Super-imposed Dither Frequency | 100 - 200 Hz |
| Coil Resistance (12 VDC) | 5.4 Ohms +5% at 68°F (20°C) |
| (24 VDC) | 22 Ohms +5% at 68°F (20°C) |
| Max. Power Consumption | 12 Watts (20°C) |
| Protection Degree | IP67 according to IEC 529 |
| Coil Termination | Deutsch-Integral DT04-2P |

Connector Color

Black

DIMENSIONS



ORDERING INFORMATION

EN043-PRR

| COIL TERMINATION | VOLTAGE | INLET PRESSURE | MAX REGULATED PRESSURE | OPTIONS |
|-------------------|--------------------------|---|--------------------------|--------------------------|
| DT – Deutsch DT04 | 1 – 12 VDC 2 – 24 VDC | L – up to 700 PSI H – up to 5000 PSI | 1 – 25 bar 2 – 30 bar | 00 – Buna A0 – Screen |

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.