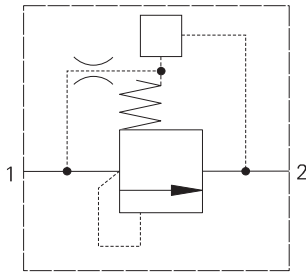


LE402 - Logic element

Spool type with control cartridge cavity
 350 L/min (95 USgpm) • 350 bar (5000 psi)



Operation

With a pilot valve fitted the valve will only open when flow is allowed across the orifice in the middle of the spool. Flow passing across this orifice will cause there to be a pressure difference that acts over the

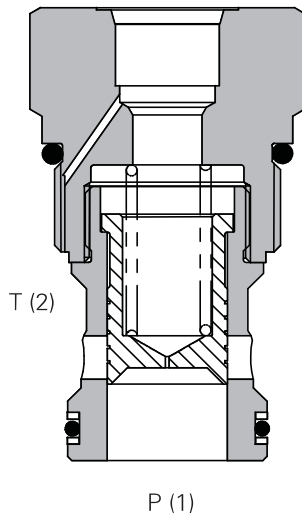
full area of the spool to move it back against the spring that biases it closed. By controlling the pressure in the spring chamber you can control the pressure at which the valve opens.

Features

Very versatile in its application using hardened and ground spool and sleeve giving minimal internal leakage and long life.

High flow and pressure rating increases the variety of applications into which it can fit.

Sectional view



Performance data

Ratings and specifications

Performance data is typical with fluid at 32,0 cSt (150 SUS)

Figures based on oil temperature of 40° C and viscosity of 40 cSt

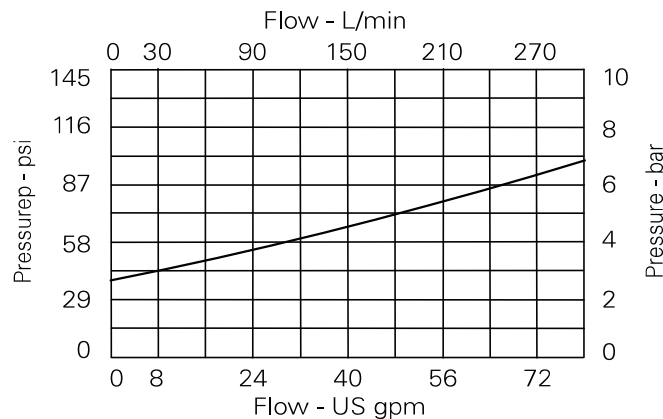
Rated Flow	350 liters/min (95 USgpm)
Maximum load induced pressure	P1: 350 bar (5000 psi), P2: 210 bar (3000 psi)
Cartridge material	Working parts hardened and ground steel. External surfaces zinc plated
Body material	Standard aluminum (up to 210 bar*). Add suffix '377' for steel option
Mounting position	Unrestricted
Cavity number	C-20-2 (see Section M)
Torque cartridge into cavity	60 Nm (44 lbs. ft.)
Weight	LE402: 0.29 kg (0.63 lbs), LE452: 1.35 kg (2.97 lbs)
Seal kit number	SK633 (Nitrile), SK633V (Viton®) Viton is a registered trademark of E. I. DuPont
Recommended Filtration Level	BS5540/4 Class 18/16/13 (25 micron nominal)
Operating temperature	-30° to +90° C (-22° to 194° F)
Leakage	Up to 350 ml/min nominal
Nominal viscosity range	5 to 500 cSt

Description

For use in conjunction with pilot valves to allow control of larger flows. When used with a 2/2 solenoid valve the combination allows control of flows to 350 lts/min (95 US gpm). With a pilot relief valve or a proportional relief valve the element becomes a high flow pilot style relief. With a needle valve an on/off function is achieved. The outlet flow would normally go to tank because back pressure will act on the pilot cartridge to increase the switching pressure.

Pressure drop curve

Free flow 1-2

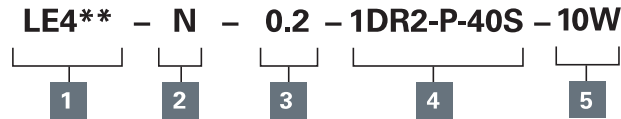


Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

LE402 - Logic element

Spool type with control cartridge cavity
350 L/min (95 USgpm) • 350 bar (5000 psi)

Model code



1 Basic code

LE402 - Cartridge (logic Element)

LE452 - Cartridge (Logic Element) and body

2 Seals

N - Nitrile (for use with most industrial hydraulic oils)

V - Viton® (for high temperature & most special fluid applications)

3 Spring

0.2 - 1.75

4 Pilot cartridge

Blank - None

1DR2-P-40S - See pg E-100

PDR21AN*6** - See pg B-270

S207N - See pg A-280

5 Port size

Omit - Cartridge only

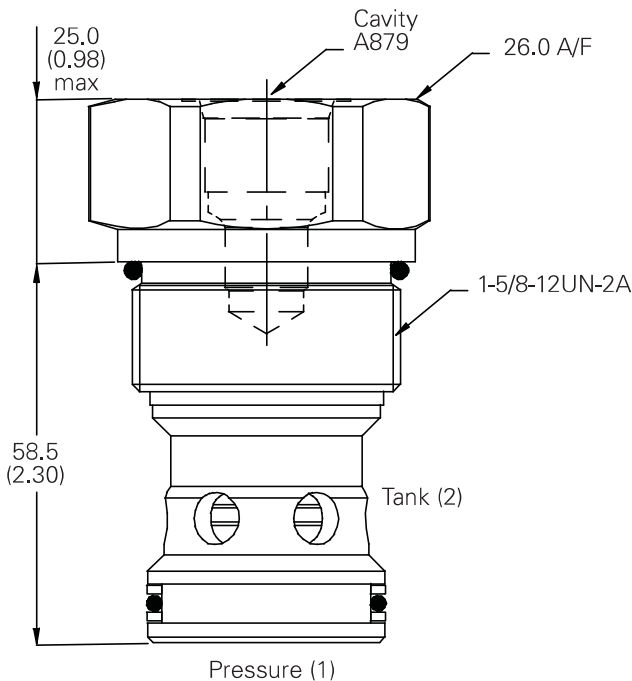
Code	Port size	Aluminum	Steel
10W	1-1/4" BSPP	C24005	C24006
12W	1-1/2" BSPP	C24007	C24008
20T	1-1/4" SAE	C24011	C24012
24T	1-1/2" SAE	C24013	C24014

Dimensions

mm (inch)

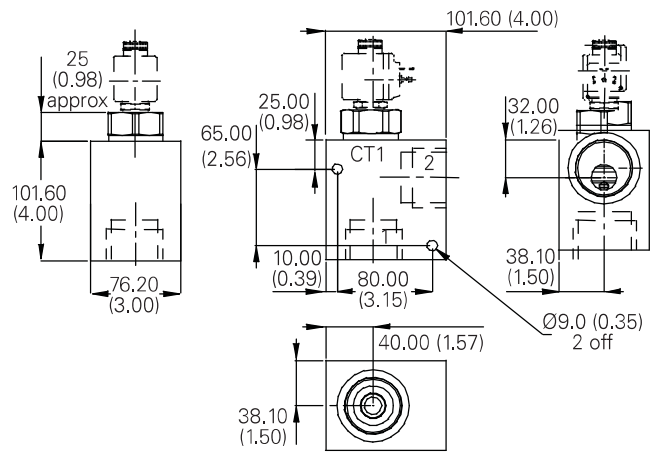
Cartridge only

Basic Code: LE402



Installation drawing

Basic Code: LE452 1 1/4" 1/2" Ports



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.