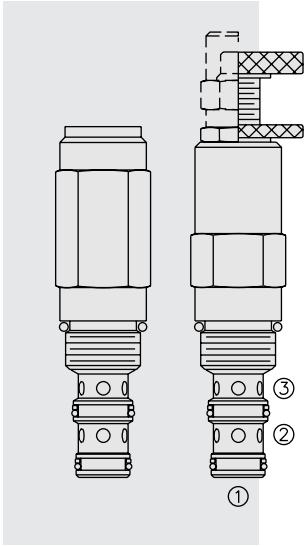# PS10-32 *Sequence, External Pilot, Internal Drain*

DESCRIPTION

A screw-in, cartridge-style, direct-acting, spool-type, hydraulic sequence valve with external pilot and internal spring chamber drain.

OPERATION

In its steady state, **PS10-32** blocks flow from ③ to ②.

On attainment of a pre-determined pressure at ①, the cartridge shifts to open ③ to ②.

Since the spring chamber is vented at ②, back pressure at ② will directly (1:1) affect the valve's setting.

FEATURES

• Adjustments cannot be backed out of the valve.
• Adjustments prohibit springs from going solid.
• Optional spring ranges to 145 bar (2100 psi).
• Hardened spool and cage for long life.
• Industry common cavity.

RATINGS

Operating Pressure: 207 bar (3000 psi)

Flow: See Performance Chart

Internal Leakage: 82 cc/minute (5 cu. in./minute) max. to 90% of nominal setting

Standard Spring Ranges:
   5.5 to 27.6 bar (80 to 400 psi)
   13.8 to 55.2 bar (200 to 800 psi)
   20.7 to 103.4 bar (300 to 1500 psi)
   27.6 to 144.8 bar (400 to 2100 psi)

Temperature: -40 to 120°C with standard Buna seals

Filtration: See page 9.010.1

Fluids: Mineral-based or synthetics with lubricating properties at viscosities of 7.4 to 420 cSt (50 to 2000 sus); See Temperature and Oil Viscosity, page 9.060.1

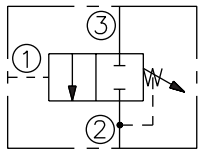**Installation:** No restrictions; See page 9.020.1

Cavity: VC10-3; See page 9.110.1

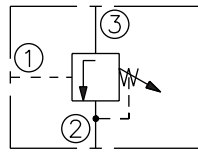**Cavity Tool:** CT10-3XX; See page 8.600.1
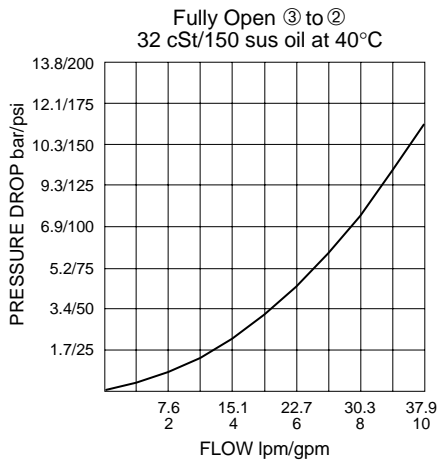
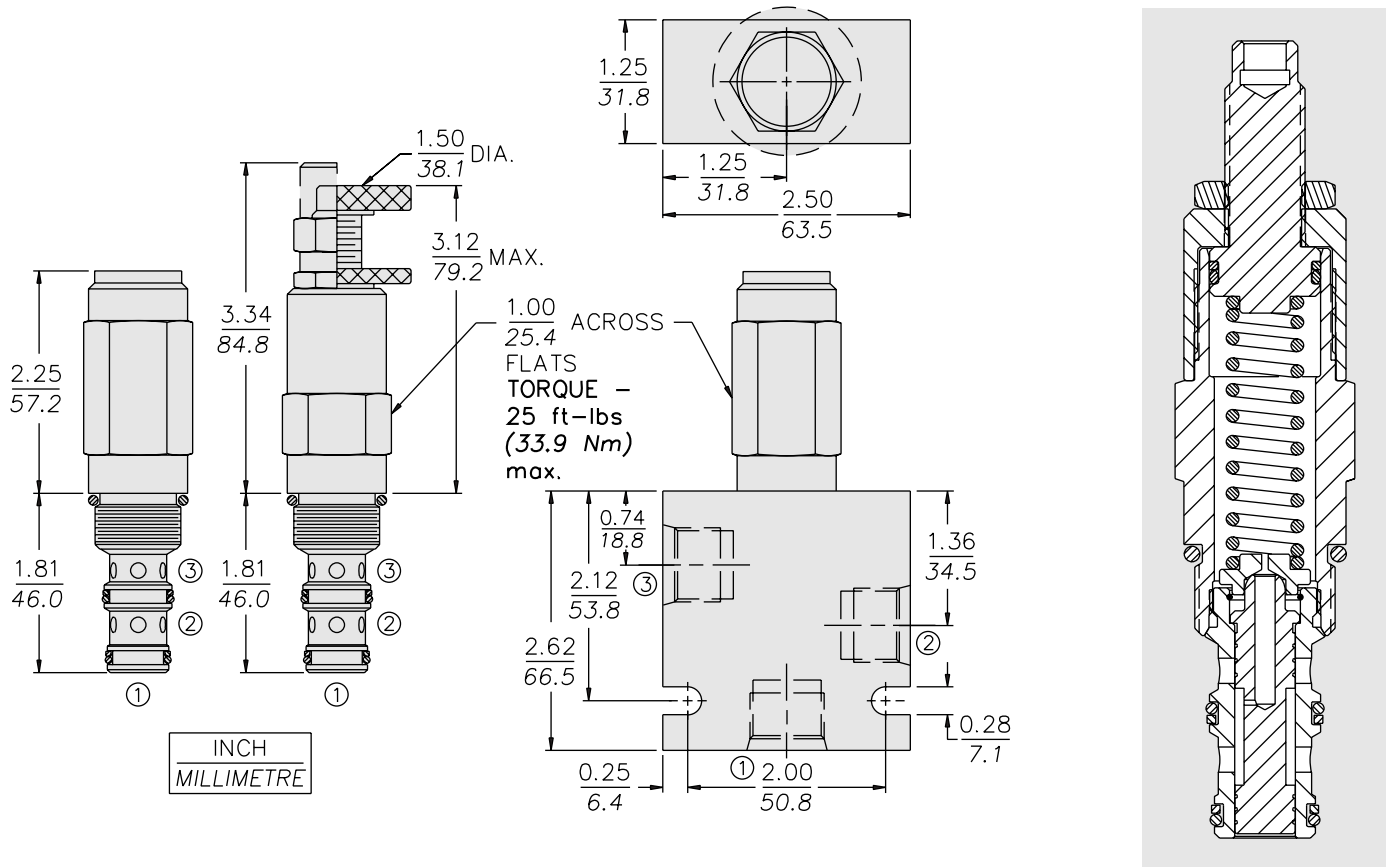**Seal Kit:** SK10-3X-TB; See page 8.650.1

SYMBOLS

USASI: **ISO:**

PERFORMANCE (Cartridge Only)

Fully Open ③ to ②
32 cSt/150 sus oil at 40°C

PRESSURE DROP bar/psi

FLOW lpm/gpm

DIMENSIONS

1.50 / 38.1 DIA.

3.12 / 79.2 MAX.

1.00 / 25.4 ACROSS FLATS TORQUE — 25 ft-lbs (33.9 Nm) max.

3.34 / 84.8

2.25 / 57.2

1.81 / 46.0

③ ② ①

1.81 / 46.0

③ ② ①

INCH / MILLIMETRE

1.25 / 31.8

1.25 / 31.8

2.50 / 63.5

0.74 / 18.8

2.12 / 53.8 ③

2.62 / 66.5

0.25 / 6.4

① 2.00 / 50.8

1.36 / 34.5

②

0.28 / 7.1

MATERIALS

Cartridge: Weight: 0.27 kg. (0.60 lbs.) Steel with hardened work surfaces. Zinc-plated exposed surfaces. Buna N O-rings and polyester elastomer back-ups standard. Anodized aluminum knobs.

Standard Ported Body: Weight: 0.36 kg. (0.80 lbs.) Anodized high-strength 6061 T6 aluminum alloy, rated to 207 bar (3000 psi). Ductile iron bodies available; dimensions may differ. See page 8.010.1

TO ORDER

PS10-32__ - ____ - _ - __ / _____

Adjustment Option

1/4 in. Hex Allen Head	**A**
1-1/2 in. Dia. Alum. Knob	**B**
Option A w/Cover Cap	**C**
Factory Preset Non-Adj.	**F**
Factory Preset Hidden Adj. (See page 6.003.1)	**H**
Option C w/Lockwire Holes	**L**

Porting

Cartridge Only	**0**
SAE 6	**6T**
SAE 8	**8T**
1/4 in. BSP*	**2B**
3/8 in. BSP*	**3B**

*BSP Body; U.K. Mfr. Only

Seals

Buna N (Std.)	**N**
Fluorocarbon	**V**

Setting in bar†

(Blank)	for Adjustable, or Specify, for example:
M25	25 bar
M100	100 bar

Setting in psi†

(Blank)	for Adjustable, or Specify, for example:
9.0	900 psi
21.0	2100 psi

Spring Range

4	5.5 to 27.6 bar (80 to 400 psi)
8	13.8 to 55.2 bar (200 to 800 psi)
15	20.7 to 103.4 bar (300 to 1500 psi)
21	27.6 to 144.8 bar (400 to 2100 psi)

† Adjustable valves will be preset to approx. 50% of spring max. potential.