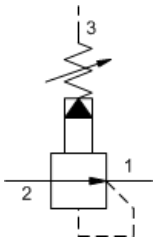
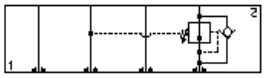
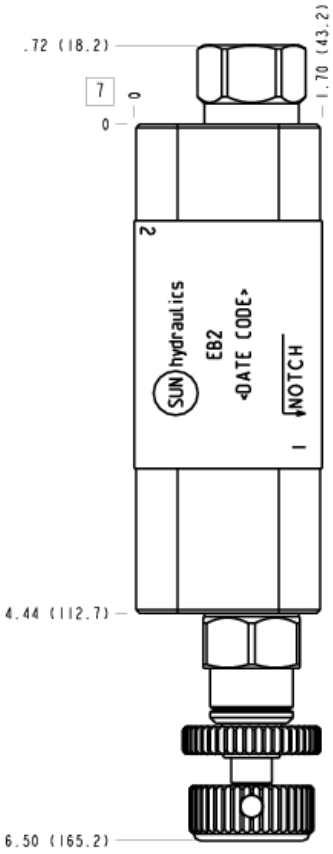
MODEL
PBDBKAN-EB2

Pilot-operated, pressure reducing valve
CAPACITY: 40 L/min. | CAVITY: T-11A







CARTRIDGE CONFIGURATION

K	Control	Handknob
A	Adjustment Range	100 - 3000 psi (7 - 210 bar), 200 psi (14 bar) Standard Setting
N	Seal Material	Buna-N
(none)	Material/Coating	

MANIFOLD CONFIGURATION

(none)	Modifier	6061-T651 Aluminum, Buna-N

NOTES

Maximum pressure differentials for spring ranges: A and B are 3000 psi (210 bar) N and Q are 2000 psi (140 bar) W is 5000 psi (350 bar)inlet pressure

For Series 1 cartridges configured with an O control (panel mount handknob), a .75 in. (19 mm) diameter hole is required in the panel.

Stack height value in technical data table includes seal retainer plate.

Important: Carefully consider the maximum system pressure. The pressure rating of the manifold is dependent on the manifold material, with the port type/size a secondary consideration. Manifolds constructed of aluminum are not rated for pressures higher than 3000 psi (210 bar), regardless of the port type/size specified.

Pilot-operated, pressure reducing valves reduce a high primary pressure at the inlet (port 2) to a constant reduced pressure at port 1, allowing circuits with multiple pressure requirements to be operated using a single pump.

CARTRIDGE TECHNICAL DATA

Cavity	T-11A
Series	1
Capacity	40 L/min.
Maximum Operating Pressure	350 bar
Factory Pressure Settings Established at	blocked control port (dead headed)
Control Pilot Flow	0,11 - 0,16 L/min.
Adjustment - No. of CW Turns from Min. to Max. setting	5
Valve Hex Size	22,2 mm
Valve Installation Torque	41 - 47 Nm
Adjustment Screw Internal Hex Size	4 mm
Locknut Hex Size	15 mm
Locknut Torque	9 - 10 Nm
Seal kit - Cartridge	Buna: 990-011-007
Seal kit - Cartridge	EPDM: 990-011-014

Seal kit - Cartridge	Polyurethane: 990-011-002
Seal kit - Cartridge	Viton: 990-011-006
Model Weight	0.20 kg.

MANIFOLD TECHNICAL DATA

Body Type	Sandwich
Interface	ISO 03
Body Features	Reducer on A with reverse flow check
Stack Height	44,5 mm
Open Cavities	1
Cavity	T-11A
Model Weight	0.56 kg.

CARTRIDGE TECHNICAL FEATURES

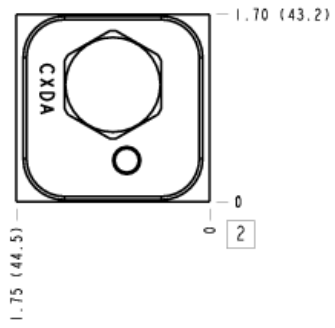
- All three-port pressure reducing and reducing/relieving cartridges are physically interchangeable (i.e. same flow path, same cavity for a given frame size). When considering mounting configurations, it is sometimes recommended that a full capacity return line (port 3) be used with reducing/relieving cartridges.
- Full reverse flow from reduced pressure (port 1) to inlet (port 2) may cause the main spool to close. If reverse free flow is required in the circuit, consider adding a separate check valve to the circuit.
- If pilot flow consumption is critical, consider using direct acting reducing/relieving valves.
- Main stage orifice is protected by a 150 micron stainless steel screen.
- Recommended maximum inlet pressure is determined by the adjustment range. Ranges D, E, N, and Q are tested with a 2000 psi (140 bar) maximum differential between inlet and reduced pressure. Ranges A, B, and H are tested with a 3000 psi (210 bar) maximum differential between inlet and reduced pressure. Ranges C and W are tested with 5000 psi (350 bar) of inlet pressure.
- Pilot operated valves exhibit exceptionally flat pressure/flow characteristics, are very stable and have low hysteresis.
- Pressure at port 3 is directly additive to the valve setting at a 1:1 ratio and should not exceed 5000 psi (350 bar).
- Pilot operated reducing, reducing/relieving valves by nature are not fast acting valves. For superior dynamic response, consider direct acting valves.
- W and Y controls (where applicable) can be specified with or without a special setting. When no special setting is specified, the valve is adjustable throughout its full range using the W or Y control. When a special setting is specified, this setting represents the maximum setting of the valve.
- Cartridges configured with EPDM seals are for use in systems with phosphate ester fluids. Exposure to petroleum based fluids, greases and lubricants will damage the seals.
- Corrosion resistant cartridge valves are intended for use in corrosive environments and are identified by the model code suffix /AP for external stainless steel components, or /LH for external zinc-nickel plated components. See the CONFIGURATION section for all options. For further details, please see the Materials of Construction page located under TECH RESOURCES.
- Incorporates the Sun floating style construction to minimize the possibility of internal parts binding due to excessive installation torque and/or cavity/cartridge machining variations.

ASSEMBLY FACES

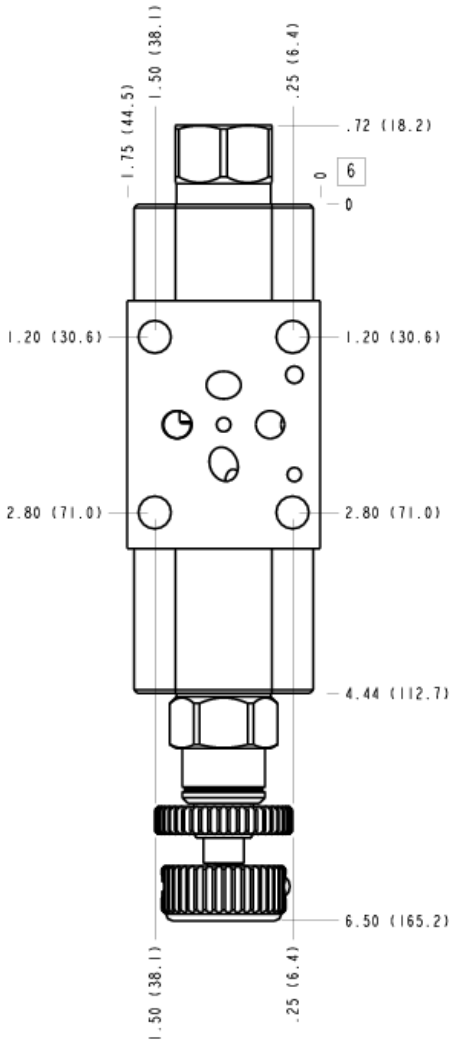
FACE GRID



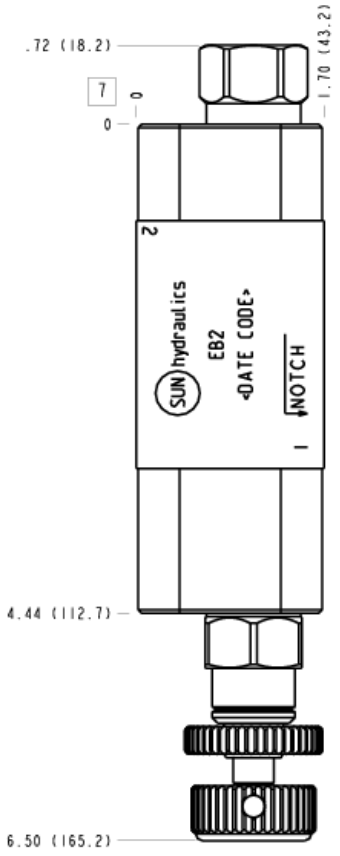
Face 2


1.70 (43.2)
CXDA
0
0
2
1.75 (44.5)

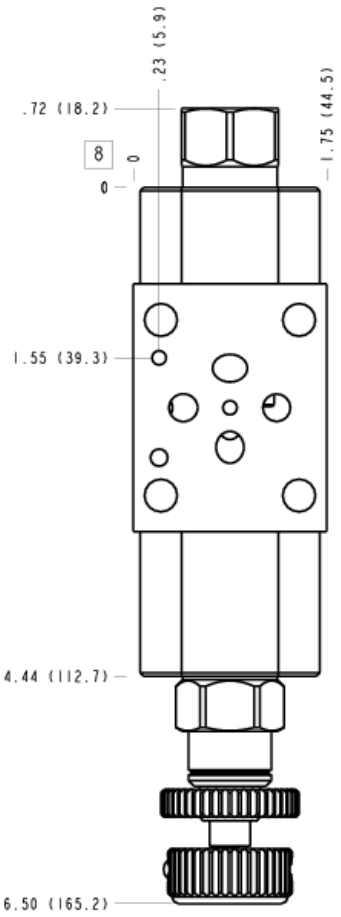
Face 6


1.50 (38.1)
.25 (6.4)
1.75 (44.5)
.72 (18.2)
0
6
0
1.20 (30.6)
1.20 (30.6)
2.80 (71.0)
2.80 (71.0)
4.44 (112.7)
6.50 (165.2)
1.50 (38.1)
.25 (6.4)

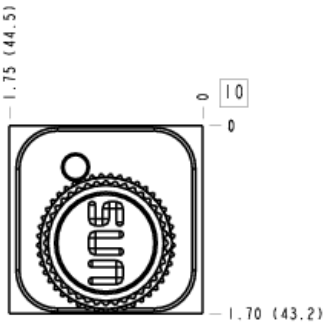
Face 7


.72 (18.2)
1.70 (43.2)
7
0
0
2
SUN hydraulics
EB2
<DATE CODE>
NOTCH
1
4.44 (112.7)
6.50 (165.2)

Face 8



Face 10



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