BEMCO FLUIDTECHNIK LLP Doc: f3.0/FDBD1x/R0

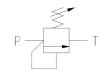
PRESSURE RELIEF VALVE - CARTRIDGE



Direct Operated | Cartridge | 315 bar

Specification/ Technical Data

Working Pressure	50315 bar
Size	NG 6NG 30
Max Flow	300 LPM
Туре	Screw-in Cartridge
Adjustment	Screw or Knob
Min Settable Pressure	10% of range
Body Material	Carbon Steel
Media	Mineral Oil
Oil Temperature Range	+10 to 60°C
Oil Viscosity	ISO VG 46-100
Oil Cleanliness (ISO 4406)	20/18 /15
Orientation	Any
Weight (approx.)	0.5 - 2.2 Kg





FDBD type valves are direct-operated pressure relief or pressure limiting valves used in hydraulic systems for limiting and/or controlling maximum system pressure. These valves are essential to prevent damages due to over pressurisation of the system.

The valves use a spring loaded ball or poppet that prevents oil flow through it. When the system pressure exceeds the value set by the spring force, the ball/ poppet begins to lift off its seat thereby allowing some oil to flow through it. This pressure is termed as cracking pressure. Any decrease is the pressure again lowers the ball/ poppet into its seat preventing oil flow.

Ordering Information

Basic Code	Relief Valve	FDBD
Size	NG 06/ 10/ 20/ 30	0630
Adjustment	Screw (S)/ Knob (H)	S/ H
Relief Pressure	50/100/200/315 bar	50315
Version		1x

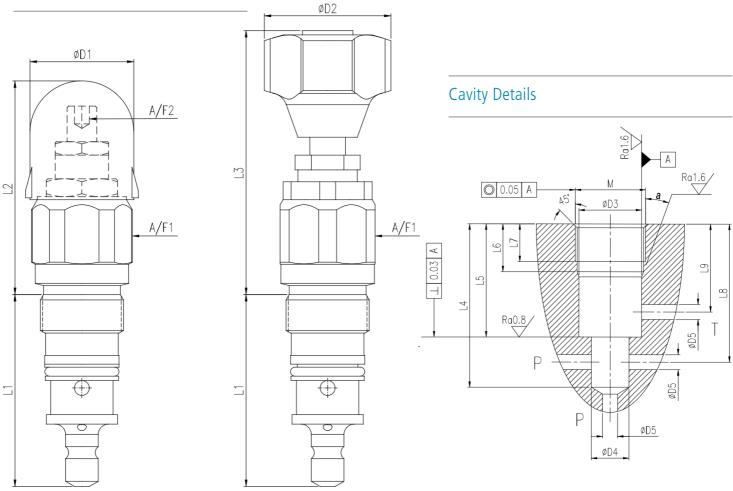
When the valve opens, hydraulic fluid is allowed to flow from the high-pressure inlet (P) to the lower-pressure outlet (T). By releasing excess fluid, the valve maintains the system pressure at or below the set value. The greater the flow, more the ball/ poppet lifts, creating a larger path for the fluid and preventing further pressure increase.

The back pressure in the lower pressure outlet port adds directly to the set pressure of the valve. This means that the actual system pressure at which the valve opens will be the sum of the spring setting and the pressure in the outlet line

www.fluidik.co Page 1 of 2

BEMCO FLUIDTECHNIK LLP Doc: f3.0/FDBD1x/R0

Cartridge Dimensions



Size	A/F1	A/F2		Μ	øD1	øD2	øD3	øD4	øD5	а	Torque	Weight
NG 06	30	6	M2	8 x 1.5	34	60	25 H9	15	6	15°	100 Nm	0.5 Kg
NG 10	36	6	M3	5 x 1.5	38	60	32 H9	19	10	15°	150 Nm	1.0 Kg
NG 20	46	6	M4	5 x 1.5	48	60	40 H9	24	20	20°	300 Nm	1.6 Kg
NG 30	60	8	M6	0 x 2.0	63	60	55 H9	39	30	20°	500 Nm	2.2 Kg
Size	L1	l	.2	L3	L	4	L5	L6		L7	L8	L9
NG 06	64	6	55	72	6	5	45	19		15	56.5	36
NG 10	77	3	30	80	8	0	52	23		18	67.5	42
NG 20	106	1	10	90	11	0	70	27		21	91.5	55
NG 30	131	1	30	100	14	10	84	29		23	113.5	63

Spare List

All dimensions in mm

SealKit - FDBD06	SSVFDBD061x
SealKit - FDBD10	SSVFDBD101x
SealKit - FDBD20	SSVFDBD201x
SealKit - FDBD30	SSVFDBD301x

BEMCO FLUIDTECHNIK LLP, Khanapur Road, Udyambag, Belgaum - 590 008 KA IN +91 831 4263001 info@fluidik.co

This document including the data, specifications and other product information are the exclusive property of BEMCO FLUIDTECHNIK LLP. It may not be reproduced or shared to third parties without written consent. The data specified above only serve to describe the product and no statements concerning a certain condition or suitability for a certain application can be derived from this information. The information given does not release the user from the obligation of own judgment and verification of suitability of the product for the application requirements.

