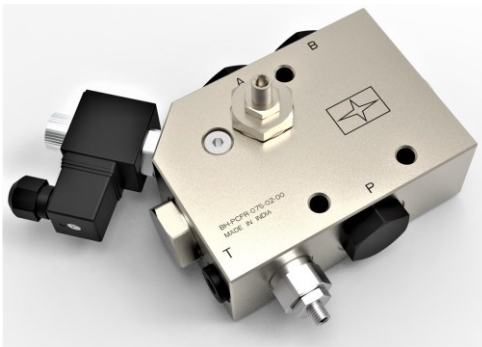


3 WAY PRESSURE COMPENSATED FLOW REGULATOR VALVE, WITH SOLENOID CONTROL AND RELIEF VALVE

BH-PCFR SERIES: SUITABLE FOR WITH AND WITHOUT LOAD SENSING MACHINES

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PRODUCT RENDERING

3 way, with one inlet "P" and two outlets "A" and "B", the first outlet "A" being priority, pressure compensated type, with pressure relief valve and available on demand through a solenoid cartridge; the second outlet "B" is the by-pass for all flow in excess of what demanded by priority.

Technical data

Max. operating pressure	350 bar (5000 psi)
Max. priority line pressure: limited by relief valve (2). See "priority pressure range"	
Back pressure at T port	max. 1.5 bar (20 psi)
Drain from T, with solenoid valve non-energized	up to 1.5 l/min. (0.4 gpm)
Weight	See "Dimensions"
Manifold material	Zinc plated steel
Fluid	Mineral oil (HL, HLP) according to DIN 51524
Fluid temperature range	-20 °C to 80 (-4 to 176 °F)
Viscosity range	20 to 380 mm ² /s (cSt)
Recommended degree of fluid contamination	Class 19/17/14 according to ISO 4406
Other technical data	see next page.

Note: for applications outside these parameters, please consult us.

CONNECTION TYPE # 1:

FIXED DISPLACEMENT PUMPS

"P" to be connected to pump input line

"A" to be connected to breaker line

"B" to be connected to other actuators (Excess flow)

"T" to be connected to tank line

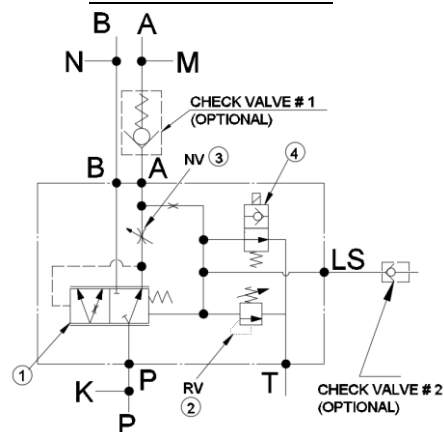
"NV"[3] to be adjustable to suit pressure/flow demand in "A" line

"RV"[2] can be adjustable to suit pressure requirement

Connector type - DIN 43650

(TYPICALLY USED ON 3DX)

HYDRAULIC SYMBOL



CONNECTION TYPE # 2:

VARIABLE DISPLACEMENT PUMPS

Follow type #1 connection except "M", "N", "K" OR "LS" to check line pressure respectively. Connect one of the line to LS line for pump (depending on application requirements).

(TYPICALLY USED ON 4DX MACHINES)

CONNECTION TYPE # 3:

INDEPENDENT VARIABLE DISPLACEMENT PUMP FOR BREAKER

follow type #1 connection except "B" to be blocked with closure plug.

"M", "K" or "LS" can be connected to LS line for pump.

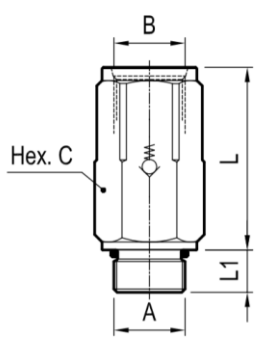
(TYPICALLY USED ON CAT MACHINES)

ORDERING CODE:

3 WAY PRESSURE COMPENSATED FLOW REGULATOR VALVE, WITH SOLENOID CONTROL AND RELIEF VALVE

BH-PCFR	075	02	00
3 WAY PRESSURE COMPENSATED FLOW REGULATOR VALVE, WITH SOLENOID CONTROL AND RELIEF VALVE	075: PORT SIZING" PORT P, A & B: G 3/4" PORT T: G 1/4" PORT INLET FLOW: 200 LPM MAX WORKING PRESSURE 350 BAR MAX REGULATED FLOW IN A 142 LPM MAX WEIGHT: 5KG COIL: 12VDC STD	RELIEF VALVE 02: RELIEF VALVE SETTING 150 BAR, RANGE 100 TO 350BAR PRESSURE INCREASE PER TURN OF RELIEF VALVE: 150 BAR/ TURN 01: RELIEF VALVE SETTING 10 TO 150 BAR, RELIEF VALVE SETTING 150 BAR, RANGE 100 TO 350BAR PRESSURE INCREASE PER TURN OF RELIEF VALVE: 87 BAR/ TURN	00: STANDARD VALVE WITHOUT LOAD SENSING ACCESSORIES 01: STANDARD VALVE WITH LOAD SENSING ARRANGEMENT ACCESSORIES (CHECK VALVE # 2)
	100: PORT SIZING" PORT P, A & B: G 1" PORT T: G 1/4" PORT INLET FLOW: 400 LPM MAX WORKING PRESSURE 350 BAR MAX REGULATED FLOW IN A 300 LPM MAX WEIGHT: 12KG COIL: 12VDC STD		

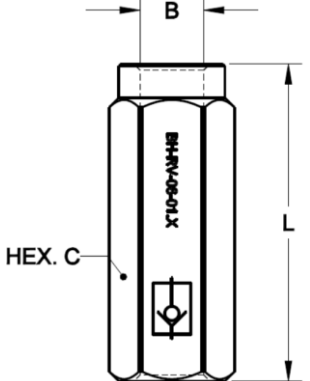
ORDERING CODE: CHECK VALVE # 1 [SLEEVE TYPE]

ORDERING CODE	PORT SIZES A (MALE) – B (FEMALE)	CRACKING PRESSURE BAR (PSI)	DIMENSIONS MM			IMAGE
			C	L	L1	
BH-RV-12-01.X/8-9BAR	G 3/4"	9 BAR	36	100	16	

Failure Mode: System malfunction (Breaker Activation when Solenoid Valve De energized, Pump ON).

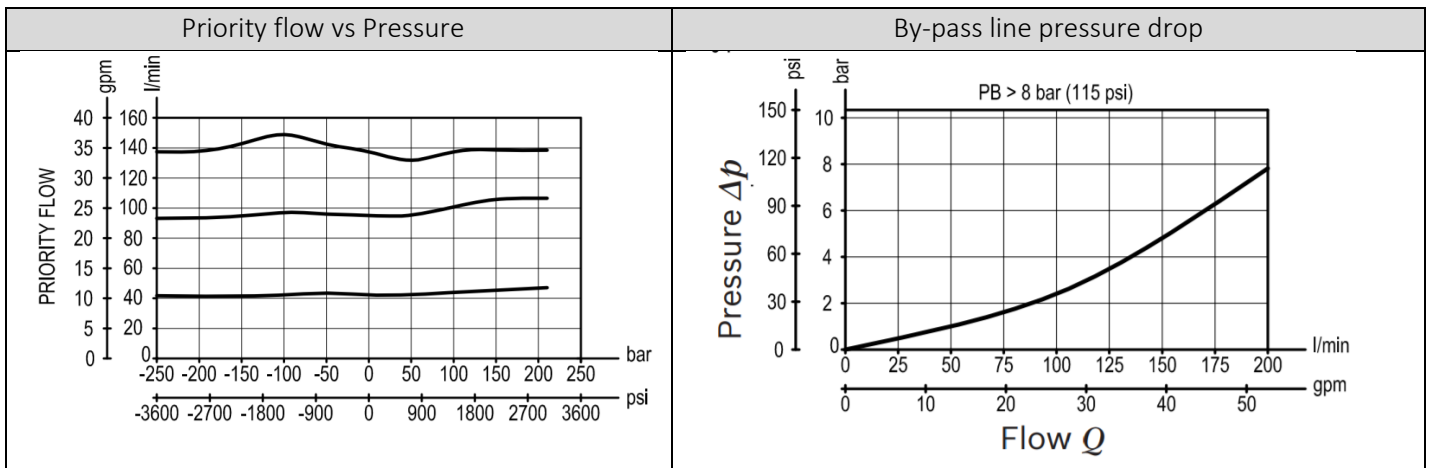
Recommended Action: Check Valve with 9bar cracking pressure must be used in "A" line to ensure optimal breaker operation when needed.

ORDERING CODE: CHECK VALVE # 2 [BOTH SIDE FEMALE]

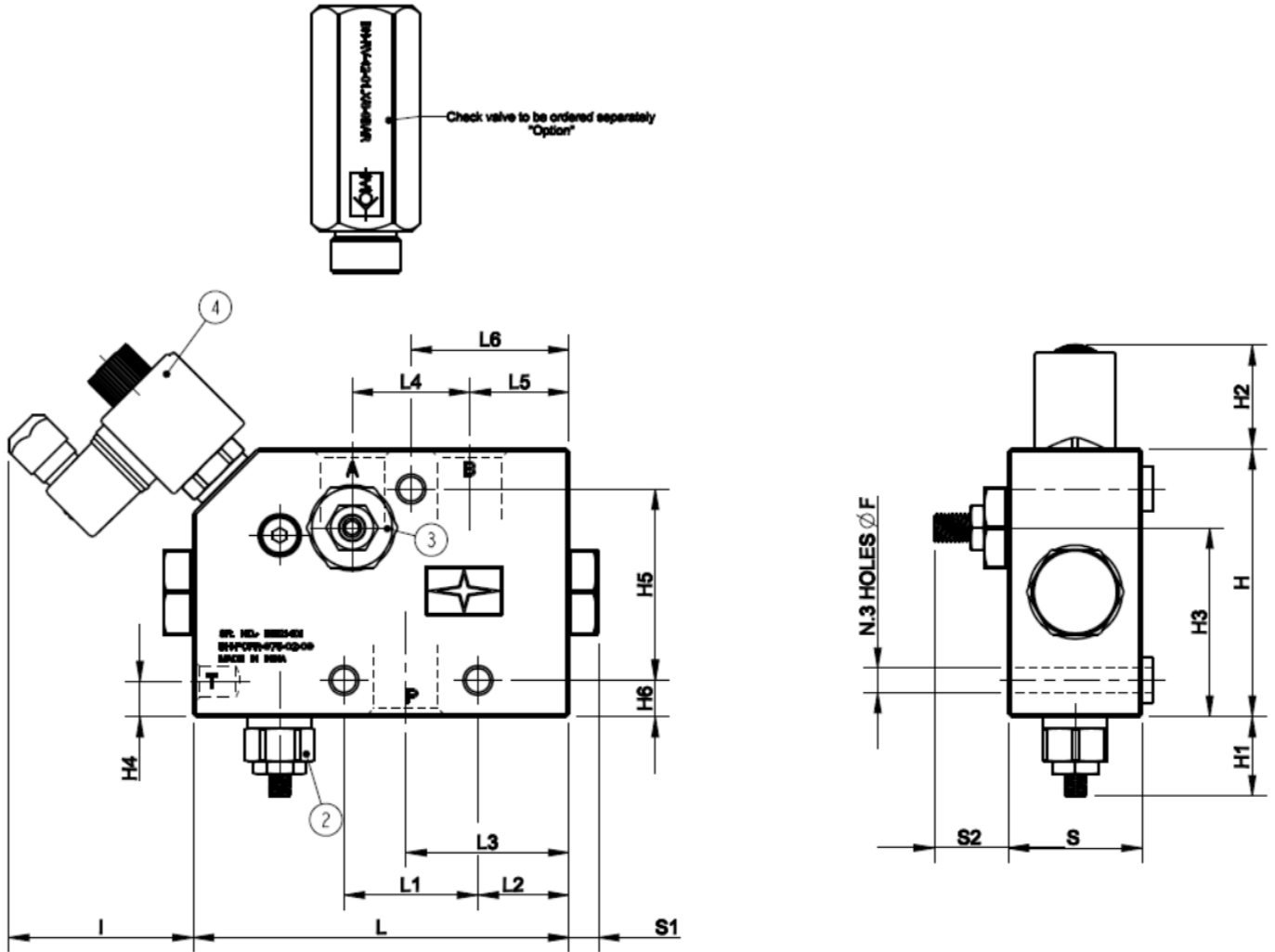
ORDERING CODE	PORT SIZES A (FEMALE) - B (FEMALE)	CRACKING PRESSURE BAR (PSI)	DIMENSIONS MM		IMAGE
			C	L	
BH-RV-06-01.X	G 3/8"	0 BAR	26	75	

if system has load sensing pump, and application demand LS connection from BH-PCFR, then this valve can be used to prevent reverse flow from Pump sensing port to BH-PCFR. Dowty washer (BH-DWY-38) & adapter (G 3/8" Male Both Side, BH-ADP-38-M)) needed to complete the circuit.

Characteristic Curves



Dimensions: Without Load Sensing (M & N connections can be used to achieve Load Sensing arrangement)
[refer page # 1]



SIZE	S2	S1	S	L6	L5	L4	L3	L2	L1	L	I	H6	H5	H4	H3	H2	H1	H	F
3/4" G	27.6	11	50	59	37	44	60.9	34	50	140.3	68.9	13.5	71.5	13	17.5	38.5	29.7	100	9