PBFC-10

PRESSURE COMPENSATED, NORMALLY CLOSED OR NORMALLY OPEN PROPORTIONAL, PRIORITY FLOW CONTROL VALVE.

UL approved coil, IP68 and IP69K rated when used with waterproof connector.

LIMITED RANGE ADJUSTMENT
( SCREW TYPE )

MANUAL OVERRIDE
( SCREW TYPE )

TYPE "L" COIL
SEE PAGE
10-001.2

NOTES:
1. SOLENOIDS AVAILABLE WITH DIODES — CONSULT FACTORY.

PBFC-10-X-X-XX-X-X-X-XXX-XXX X

BASIC
SIZE
10 = 7/8"-14UNF

SEALS
N = BUNA "N"
V = VITON

STYLE
C = NORMALLY CLOSED
O = NORMALLY OPEN

REGULATED FLOW
G4 = 0 TO 4.0 GPM
G8 = 0 TO 8.0 GPM
12 = 0 TO 12.0 GPM
16 = 0 TO 16.0 GPM

TERMINALS
L = 18GA. 24" LEADS
T = SPADE TERM.
B = BOLT TERM.
G = DIN43650
W = WEATHER PACK
D = DEUTSCH-DT04-2P
M = METRI-PACK CONN.

VOLTAGE AMPS
12D = 12 VDC 3.00
24D = 24 VDC 1.50

ADJUSTMENT OPTIONS
0-F-100 = NONE
M-F-100 = MANUAL OVERRIDE
O-S-160 = LIMITED RANGE ADJ.
M-S-160 = BOTH M0/LTD ADJ.

PORTS
10TX = SAE - #10
"A" = ALUM. HOUSING
"S" = STEEL HOUSING

AMPLERAGE (AMPS) @ 24 VDC
0.15 0.30 0.45 0.60 0.75 0.90 1.05 1.20

AMPLERAGE (AMPS) @ 12 VDC
0.30 0.60 0.90 1.20 1.50 1.80 2.10 2.40

REGULATED FLOW (GPM) @ 160 PSI
04 08 12 15 18 20 25 30

REGULATED FLOW @ 12 VDC
0.30 0.60 0.90 1.20 1.50 1.80 2.10 2.40

LIMITED RANGE ADJUSTMENT
( SCREW TYPE )

Reference: 520-P-112220-EN-00/09.2015
PRESSURE COMPENSATED, PROPORTIONAL, PRIORITY FLOW CONTROL VALVE.

DESCRIPTION
This valve is an electro–hydraulic, proportional, priority (By–Pass) type, pressure compensated, hydraulic flow control. Regulated flow normally closed 0 to 16.0 GPM [0 to 61.0 L/m] or normally open 16.0 to 0 GPM [61.0 to 0 L/m] @ 160 PSI DELTA P. is proportional to the current input regardless of load or system pressure. After the priority flow is satisfied the excess flow is diverted to a secondary circuit or to tank. Maximum inlet flow is 25.0 GPM [95.0 L/m].

OPERATIONS
This unit is a direct acting (NO PILOT FLOW), electro–hydraulic, proportional, pressure compensated, flow control valve. When the coil is energized the armature moves the metering orifice open or closed against a precision bias spring varying the flow. A pressure compensator spool (HYDROSTAT) modulates the flow at 160 PSI/11.0 Bar delta "P" providing pressure. When current is increased or decreased to the coil; the flow will increase or decrease proportionally.

IN THE EVENT OF POWER FAILURE THE VALVE WILL CLOSE OR OPEN RESPECTIVELY.

FEATURES AND BENEFITS
Continuous–duty, very low heat rise & waterproof solenoid coil. Interchangeable solenoid coils & terminations options available. Hardened precision fitted spool & sleeve provides reliable, long life. Very efficient wet – armature solenoid core tube construction. All external carbon steel parts are plated for longer life against the elements. All valves are 100% functionally tested.
<table>
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<th>SPECIFICATIONS</th>
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<tr>
<td>OPERATING PRESSURE: 5,000 PSI [350 Bar]</td>
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<td>PROOF PRESSURE: 10,000 PSI [700 Bar]</td>
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<td>REGULATED FLOW: 16.0 GPM [61.0 L/m] Max. See performance chart.</td>
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<td>INTERNAL LEAKAGE: 20 cu.in/min [330 cc/m] @ 5,000 PSI [350 Bar]</td>
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<td>5000 PSI [350 Bar] = Steel – Unplated.</td>
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<td>OPERATING TEMPERATURE: –40° to +250° F. [–40° to +120° C.]</td>
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<td>OPERATING MEDIA: All general purpose hydraulic fluids such as MIL–H–5606, SAE–#10, SAE–#20, etc.</td>
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<td>RESPONSE: The most efficient method to control this valve is with current control and a 50 Hz dither.</td>
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<td>POWER REQUIREMENTS: 12 VDC, Operating current 0.4 to 2.4 AMPS.</td>
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<td>24 VDC, Operating current 0.2 to 1.2 AMPS.</td>
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<td>SEAL KIT: Buna &quot;N&quot;: SKN–1022, SKN–1042</td>
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<td>VITON: SKV–1022, SKV–1042</td>
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<td>INSTALLATION: No restrictions.</td>
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<td>WEIGHT: 4.58 lbs [2.09 kg]. aluminum body.</td>
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<td>7.65 lbs [3.48 kg]. steel body.</td>
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