

Modular direct and pilot operated check valves

L6040... (LC04M-VR/AB-0A-0B-P-T)

RE 18305-07

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Description

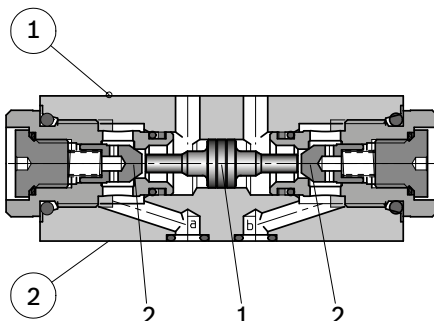
Function, section (1=component side, 2=plate side)

Type L60400AB-A-B...:

Isolator valve type L6040 is a pilot operated check valve of sandwich plate design. It is used for the leak-free closure of one or of two actuator ports, even during longer periods of standstill. The oil can freely flow from A1 to A or B1 to B, where as in the opposite direction the flow is blocked. When fluid flows through the valve from A1 to A or B1 to B, spool (1) is pressurised and therefore shifted to the right or to the left, which causes poppet (2) to be pushed off its seat. Hydraulic fluid can now flow from B to B1 or from A to A1. To allow reliable closing of poppets (2), the actuator ports of the directional valve must be unloaded to tank in the central position (see circuit example).

Type L60400P-T...:

Valve type L6040... is a direct operated check valve of sandwich plate design. It is used for leak-free checking in one direction and allows free flow in the opposite direction. When no fluid flows through the valve, spring holds poppet in the closed position.



Technical data

General		
Weight VR/AB	kg (lbs)	0.73 (1.61)
Weight VR/P or VR/T	kg (lbs)	0.59 (1.30)
Ambient Temperature	°C (°F)	-20....+50 (-50....+122) (NBR seals)
Hydraulic		
Maximum pressure	bar (psi)	310 (4495)
Maximum flow	l/min (gpm)	25 (6.6)
Cracking pressure in free direction	bar (psi)	1 (14.5)
Area ratio		2.8
Hydraulic fluid		Mineral oil based hydraulic fluids HL (DIN 51524 part 1).
General properties: it must have physical lubricating and chemical properties suitable for use in hydraulic systems such as, for example:		Mineral oil based hydraulic fluids HLP (DIN 51524 part 2). For use of environmentally acceptable fluids (vegetable or polyglycol base) please consult us.
Fluid Temperature	°C (°F)	-20....+80 (-50....+176) (NBR)
Permissible degree of fluid contamination		ISO 4572: $\beta_{x \geq 75} X = 12 \dots 15$ ISO 4406: class 20/18/15 NAS 1638: class 9
Viscosity range	mm ² /s	5....420

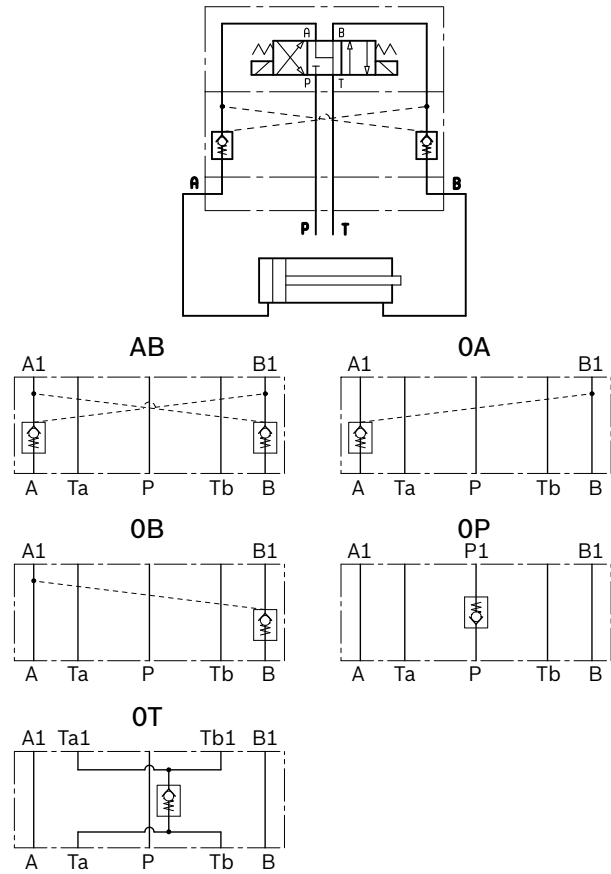
Note

For applications with different specifications consult us

Ordering details

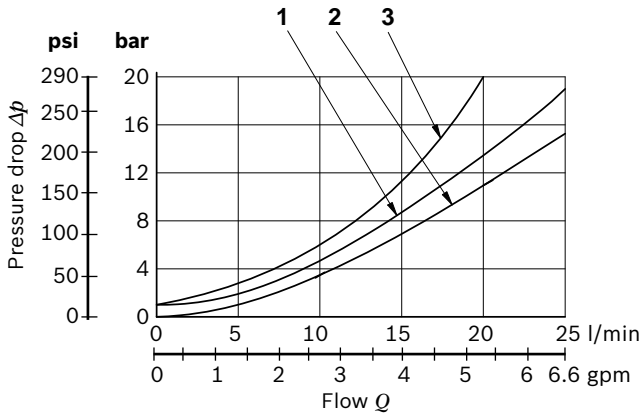
01	02	03	04	05	06
L	60	40	00		01 00 00
Family					
01	Directional Valve				L
Type					
02	Size 4 - NG4 (P02) CETOP RP 121 H-4.2-4 P02				60
Valve Type					
03	Relief Valve				40
Pilot Ratio					
04	2.8:1				00
Pilot Operated Check valves					
05	Pilot operated check valves on A and B lines				AB
	Pilot operated check valve on A line				0A
	Pilot operated check valve on B line				0B
	Pilot operated check valve on P line				0P
	Pilot operated check valve on T line				0T
Cracking pressure					
06	1bar (14.5psi)				01

Symbols



Characteristic curves

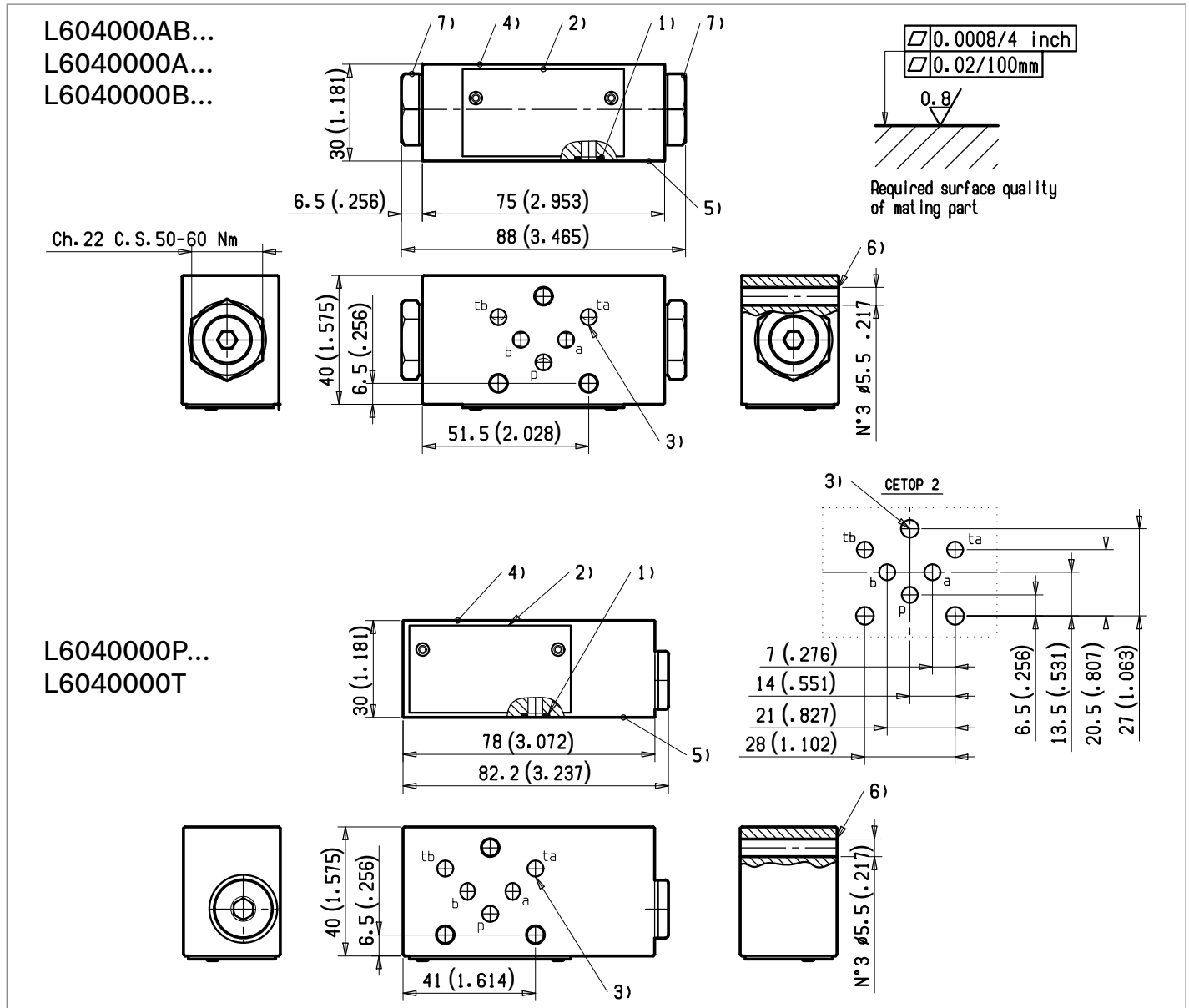
Pressure drop



Model	Connection	Curve No.
L604000AB010000	A1>A e B1>B	1
L6040000A010000		
L6040000B010000		
L604000AB010000	A>A1 e B>B1	2
L6040000A010000		
L6040000B010000		
L6040000P010000	P>P1 e Ta1/b1>Ta/b	3
L6040000T010000		

Measured with hydraulic fluid ISO-VG32 at $45^\circ \pm 5^\circ \text{C}$
 ($113^\circ \pm 9^\circ \text{F}$); ambient temperature 20°C (68°F).

External dimensions and fittings



- 1 Identical seals rings for ports A, B, P, T.
- 2 Nameplate.
- 3 Position of port to CETOP RP 121 H-4.2-4 P02.
- 4 Component side.
- 5 Plate side.

- 6 Valve fixing bores, for M5 DIN912-8.8.
 Tightening torque 5-6Nm (3.6-4.4 ft-lb).
 Check valve; hex 24mm (0.95 inch).
 Tightening torque 34-41 Nm (25-30 ft-lb).

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