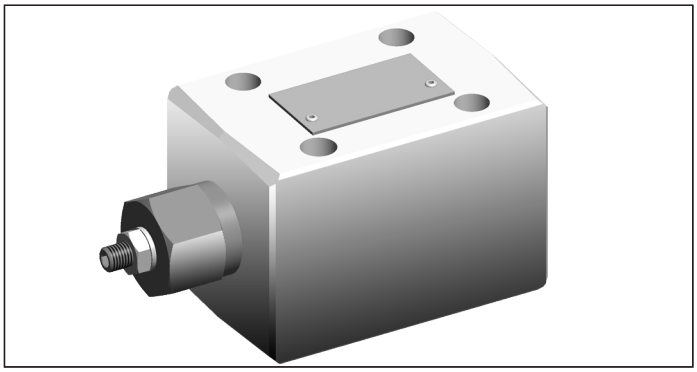
Automatic directional

V.LC2-IA12

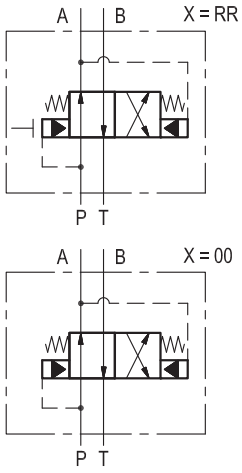
L5235 - X - 00000000

RE 18310-24
Edition: 03.2016
Replaces: 04.2013



Description

It is a directional valve which generates continuous reciprocating motion of a double acting actuator, with no need of external controls. When flow starts into P, the control spool opens wider P to A (and B to Tank); the delta p between P and A is employed to keep the spool in this wider open position. As load becomes excessive, or at end-stroke, the system relief valve opens, the oil is diverted to tank, flow P to A stops and the delta p vanishes; now the combined action of the centering springs and of the static pressure in hose A push back the spool, and make it shift to the other position. This opens P to B (and A to Tank) and the motion is reversed; the flow builds-up a delta p between P and B which holds the spool in the new position. When the system relief valve opens again the flow stops, the delta p vanishes, and the spool shifts to its "normal" P to A position: a new cycle starts.

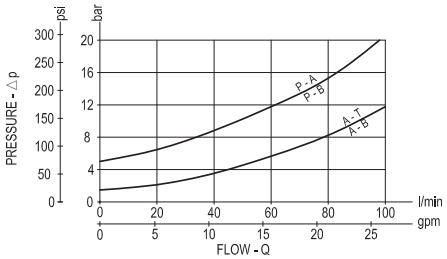


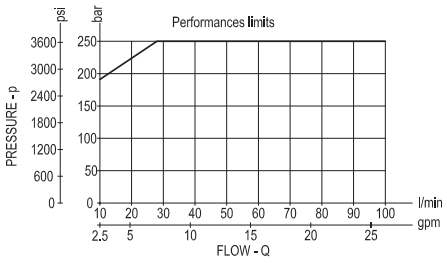
Technical data

Max. operating pressure	250 bar (3600 psi)
Flow range	10 - 100 l/min. (3 - 26 gpm)
Good and stable shifting from P -> A into P -> B requires that some oil returns back from port A as flow stops and A opens toward Tank: as a practical rule, please ensure that line A includes a portion of flexible hose at least 500 mm long to provide some "accumulator effect". For adjustment of the pressure setting of the system relief valve, the reciprocating function must be temporarily disabled: in order to lock the spool and prevent shifting, screw down the locking screw (if available) under the dome nut. This screw must be turned back up to the initial position, once the adjustment is finished. **Note:** this valve is available with features different from what here described; contact our Service Network for the relevant information: - Initial oil flow direction: P -> B (instead of P -> A).	
Weight	2.8 kg (6.2 lbs)
Manifold material	Cast iron (ISO 16112/JV/400)
Fluid	Mineral oil (HL, HLP) according DIN 51524
Fluid temperature range	-20 °C to 80 (-4 to 176 °F)
Viscosity range	5 to 420 mm^2/s (cSt)
Permissible degree of fluid contamination	ISO 4572: $\beta_x \geq 75$ X=12...15 ISO 4406: class 20/18/15 NAS 1638: class 9

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

Characteristic curve





Ordering code

L52	35	X	00000000

Automatic directional

00 Without end stroke

RR With end stroke

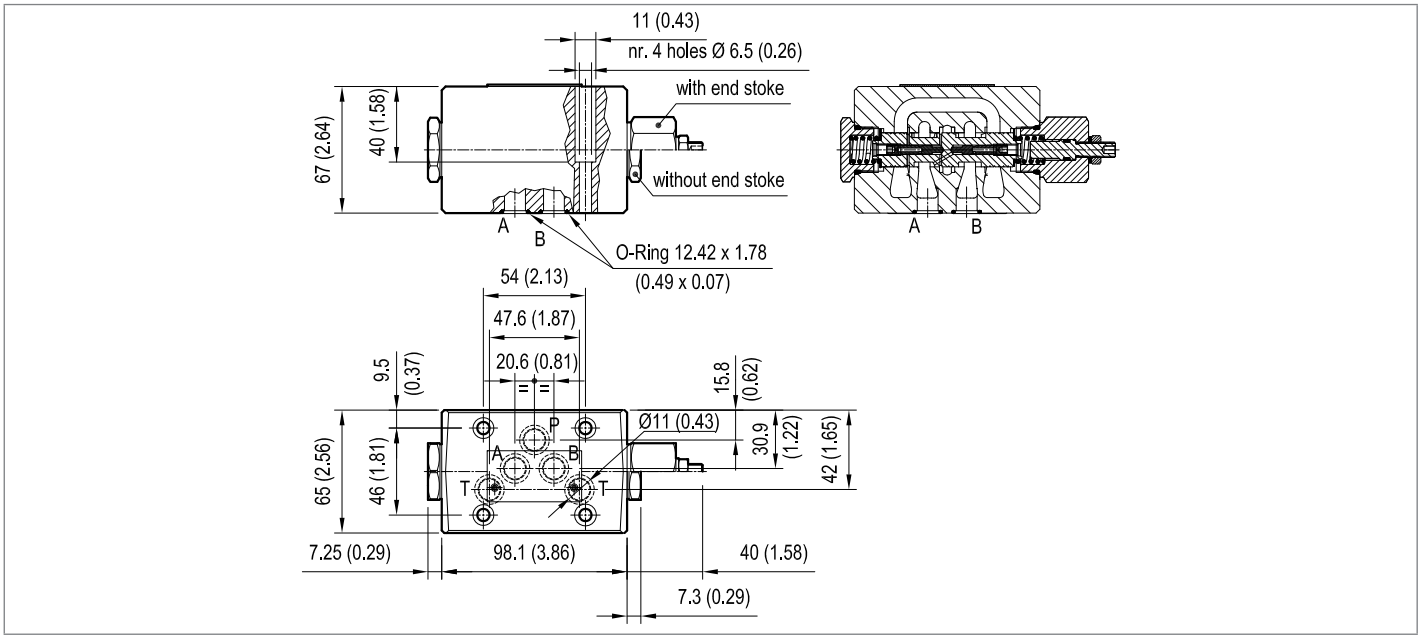
Port sizes	A	B	P	T
	CETOP 5 (F10)	CETOP 5 (F10)	CETOP 5 (F10)	CETOP 5 (F10)

Preferred types

Type	Material number
L52350000000000	R933007897
L5235RR00000000	R933007898

Type	Material number

Dimensions



Bosch Rexroth Oil Control S.p.A.
Via Leonardo da Vinci 5
P.O. Box no. 5
41015 Nonantola – Modena, Italy
Tel. +39 059 887 611
Fax +39 059 547 848
compact-hydraulics-pib@boschrexroth.com
www.boschrexroth.com/compacthydraulics