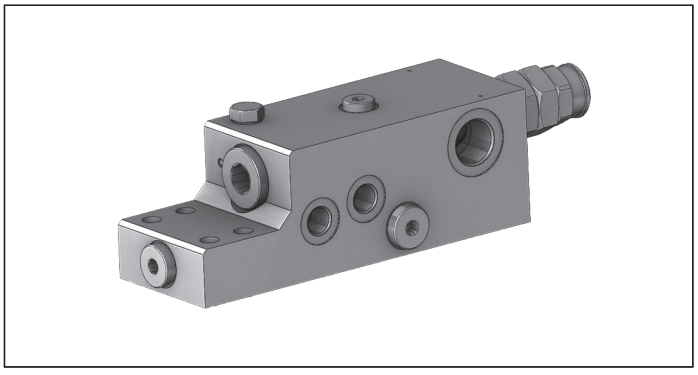
Check and metering valve flangeable

A-VBC-90-FC

08.47.83 - X - Y - Z

RE 18309-07
Edition: 03.2016
Replaces: 07.2012



Description

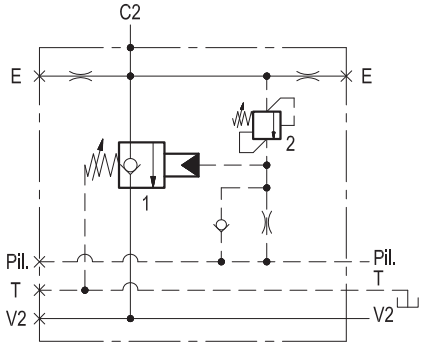
Upstream flow (V2 - C2) to the cylinder is free through a check valve, and reverse flow (C2 - V2) is locked/metered by a leak free spool (1) which provides fine metering in the initial opening stroke. The spool, normally held closed by an adjustable spring force, is remotely controlled by joystick pilot pressure; the pilot pressure required to move the spool is load independent because the spring is vented to Tank. The valve includes a small relief cartridge (2) which senses C2 pressure and opens under overload or shock conditions in order to pilot wide open the metering spool and to allow cylinder pressure to be relieved downstream through the main hose (V2) and through the main control valve. For better safety and compact assembly, the C2 port is gasket mounted directly on the actuator.

Technical data

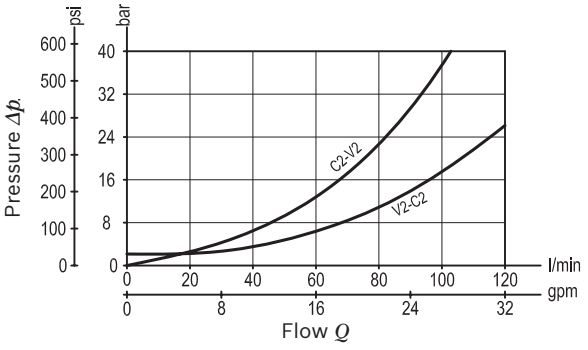
Max. operating pressure	420 bar (6000 psi)
Max. flow	120 l/min. (32 gpm)
Weight	4 kg (8.8 lbs)
Flange seal kit [1]	E00000000000001 (R930004531)
Manifold material	Zinc plated steel
Fluid	Mineral oil (HL, HLP) according DIN 51524
Fluid temperature range	-30 °C to 100 (-22 to 212 °F)
Viscosity range	10 to 500 mm^2/s (cSt)
Recommended degree of fluid contamination	Class 19/17/14 according to ISO 4406
This valve is designed to be pipe mounted on boom cylinders of hydraulic excavators, and, with specific adjustments, it can become part of load holding and load lowering systems designed to comply with ISO Standard 8643 (hose burst protection).	
Note: the Tank vented port must be connected to a “low pressure tank line” (to the joystick tank line, or to tank directly).	
The restricted “E” port must be connected to a “pressure equalizing line” in case of 2 valves fitted to 2 twin cylinders, and may be used as “outlet to tank” for emergency boom lowering in case of pilot pressure failure.	
Other technical data	see data sheet 18350-50

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

[1] Seals for 10 valves.



Characteristic curve



Dimensions [mm (inches)]

Ordering code

08.47.83	X	Y	Z

Check and metering valve

Adjustments

03 Leakproof inner hex. socket screw

		SPRINGS		
		Adj. pressure range bar (psi)	Pres. increase bar/turn (psi/turn)	Std. setting bar (psi)
40	Valve 1	7-15 (100-220)	4 (58)	7.5 (109) “cracking”
	Valve 2	350-460 (5000-6600)	228 (3306)	350 (5000) “5 l/min”

Port sizes	V2	C2	E-Pil-T
63	G 1/2	1/2” SAE 6000	G 1/4

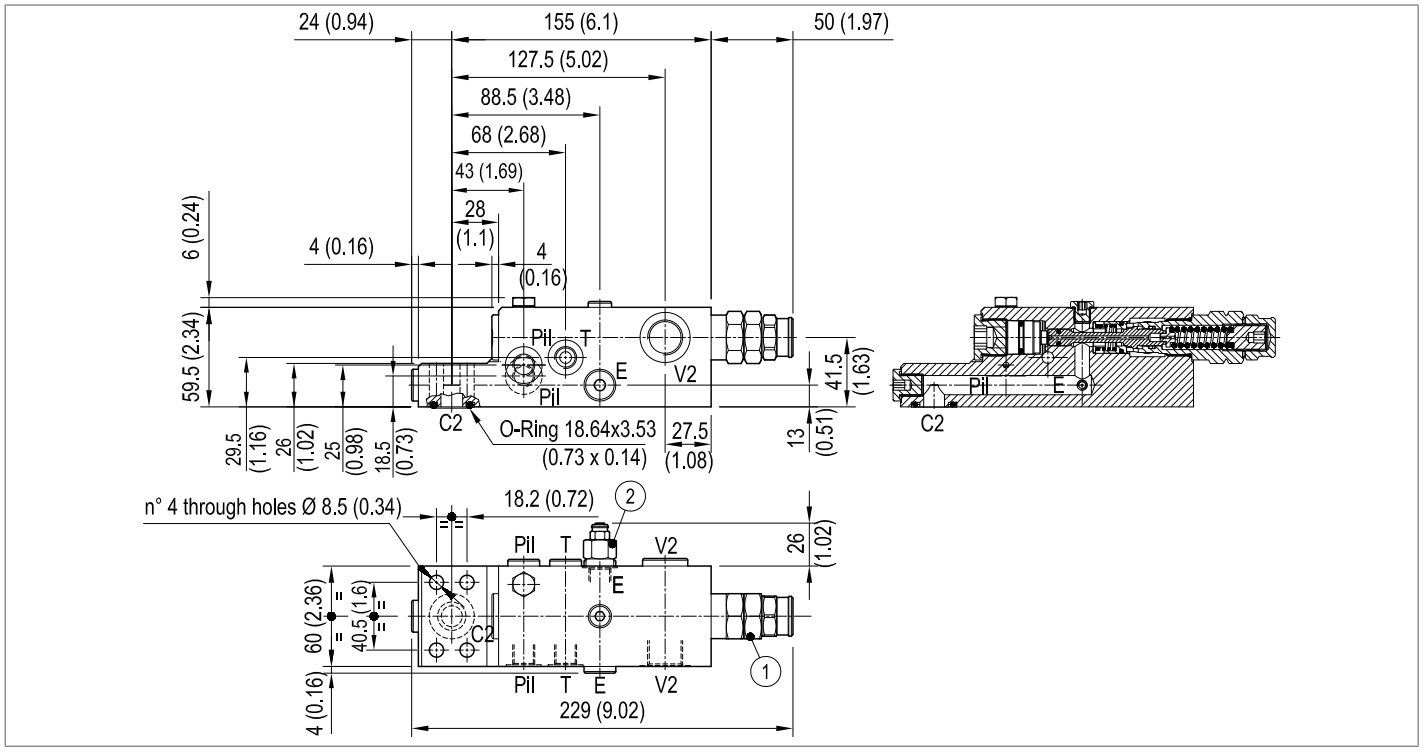
Tamper resistant cap
ordering code 11.04.31.001
Mat. no. R930000777
for Valve 2

Preferred types

Type	Material number
08478303634000B	R930043634

Type	Material number

Dimensions



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