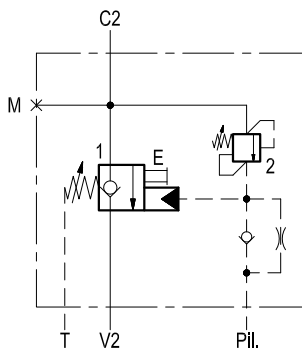


Check and metering valve



A-VBC-90-DX

08.47.97 - X - Y - Z



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.

Note: port identified with M are not protected with calibrated orifice but in direct connection with pressure channels.

Technical data

Hydraulic

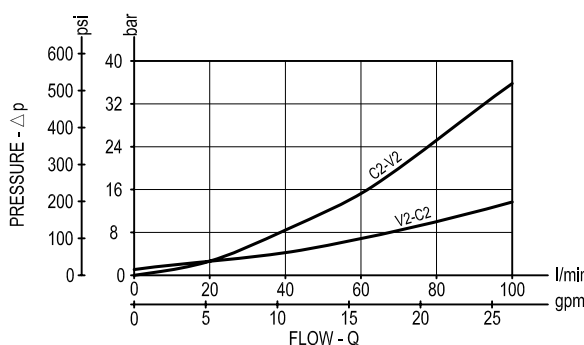
Max. operating pressure	bar (psi)	420 (6000)
Max. flow	l/min (gpm)	100 (26)

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 Factory sealed "E" screw can be used for Emergency spool opening and boom lowering, in case of pilot pressure failure; once the emergency boom lowering is completed, the "E" screw must be restored to its original position and locked.

Performance

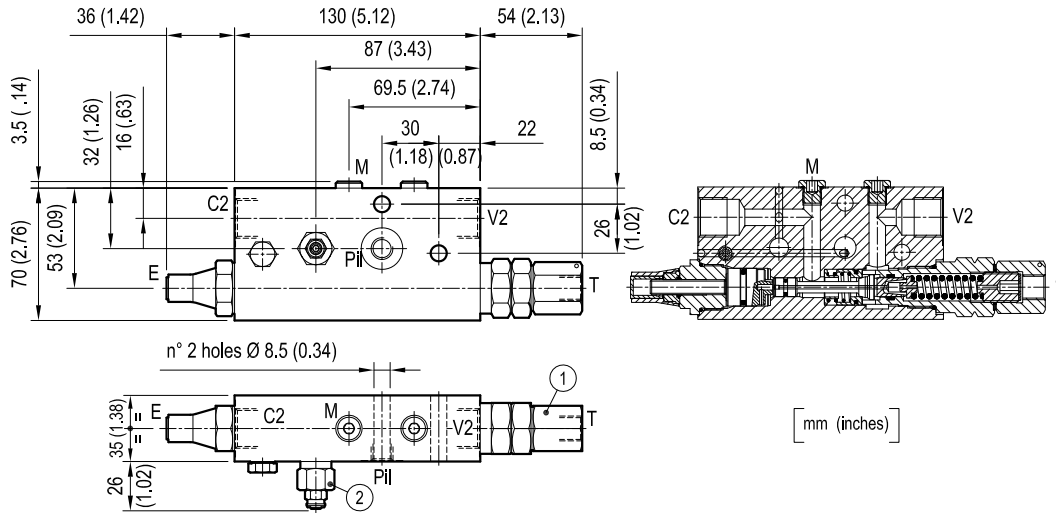


General

Manifold material		Steel
Weight	kg (lbs)	2.5 (5.5)
Fluid temperature range	°C (°F)	between -30 (-22) and +100 (212)
Other technical data		see data sheet RE 18350-50

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

Dimensions



Ordering code

08.47.97	X	Y	Z
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Check and metering valve

Adjustments

= 00 Inner hex. socket screw protected by locking nut

Port sizes	V2-C2	Pil	T	M
= 03	G 1/2	G 1/4	G 1/4	G 1/8

SPRINGS

		Adj. pressure range bar (psi)	Pres. increase bar/turn (psi/turn)	Std. setting bar (psi)
= 40	Valve 1	7-15 (102-220)	4 (58)	7.5 (109) "cracking"
	Valve 2	350-460 (5000-6600)	228 (3306)	350 (5000) "5 l/min"

Tamper resistant cap code 11.04.31.001 R930000777 for Valve 2



Type	Material number
08479700034000B	R987274542

Type	Material number