

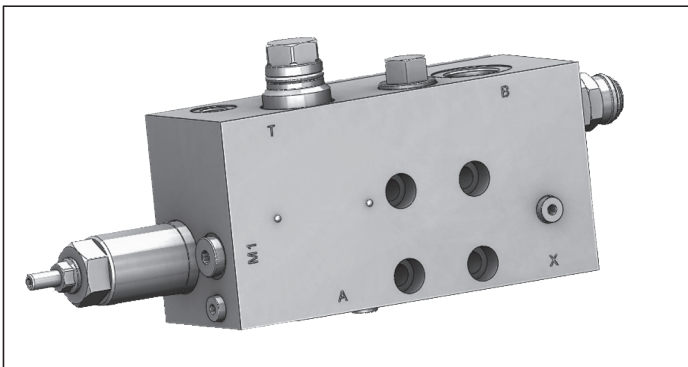
# Control Plus check and metering valve flangeable

A-VBC14-FC2

08.39.90 - X - Y - Z

**RE 18308-99**

Edition: 01.2016



## Technical data

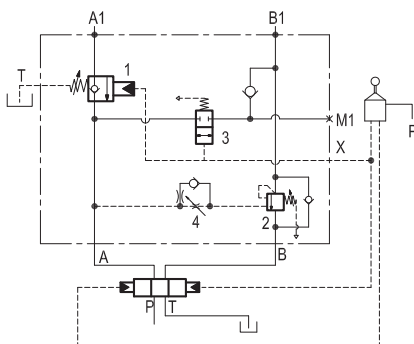
Max. operating pressure	350 bar (5000 psi)
Max. flow	150 l/min. (40 gpm)
Weight	9.6 kg (21.2 lbs)
Manifold material	Zinc plated steel
Flange seal kit <sup>1)</sup>	E00000000000035 (R930004539)
Fluid	Mineral oil (HL, HLP) according DIN 51524
Fluid temperature range	-30 °C to 100 (-22 to 212 °F)
Viscosity range	10 to 500 mm <sup>2</sup> /s (cSt)
Recommended degree of fluid contamination	Class 19/17/14 according to ISO 4406
Other technical data	see data sheet 18350-50
Relief setting:	at least 1.3 times the highest expected load.
The tank vented port must be connected to a "low pressure tank line" (to the joystick tank line, or to tank directly).	

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

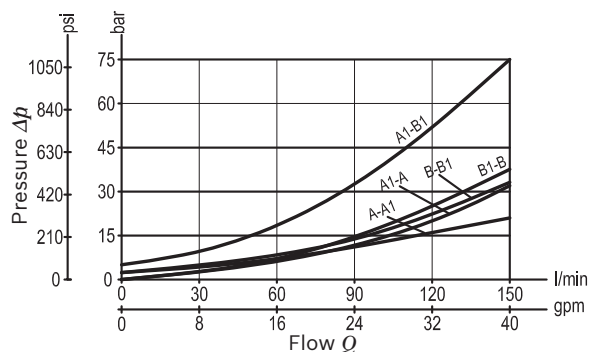
<sup>1)</sup> Seals for 10 valves.

## Description

The flow (A – A1) to the cylinder for lifting the boom is free through the check valve and reverse flow (A1 – A) is locked / metered by a leak-free spool (1) which provides quick response and very fine control. The spool, normally held closed by an adjustable spring force, is remotely controlled by joystick pilot pressure at port X; the low pilot pressure required to move the spool is load independent because valve (1) is not sensitive to load pressure and the spring is vented to tank (T). The valve includes a joystick-actuated by-pass (3), open while lowering, which ensures that the cylinder rod side is always re-filled in order to avoid cavitation effects. As a result, it is possible to get maximum lowering speed also when the pump is idling (gravity lowering) and the boom and the forks are always ready to push further downwards also after boom touchdown. A cross-piloted counterbalance valve (2) controls the boom cylinder rod side and prevents inadvertent movements due to the pulling effect of the compensator cylinder (anti-kick function). For better safety and compact assembly, the A1 and B1 ports are gasket mounted directly on the cylinder.



## Characteristic curve



**Ordering code**

<b>08.39.90</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
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Control Plus check and metering valve  
flangeable

Pilot ratio

**03** Valve 2 4:1

Port sizes	A - B	M1 - T - X	A1	B1
<b>04</b>	G 3/4	G 1/4	Ø 11 (0.43)	Ø 15 (0.59)

		SPRINGS		
		Adj. pressure range bar (psi)	Pres. increase bar/turn (psi/turn)	Std. setting bar (psi)
<b>02</b>	Valve 1	6-15 (87-220)	1.5 (22)	7.5 (109) "cracking"
	Valve 2	60-120 (870-1740)	46 (667)	80 (1160) "5 l/min"
	Valve 3	-	-	6 (87) "cracking"

Tamper resistant cap  
ordering code 11.04.23.002  
Mat. no. R930000752  
for Valve 1



Tamper resistant cap  
ordering code 11.04.30.001  
Mat. no. R930005194  
for Valve 2

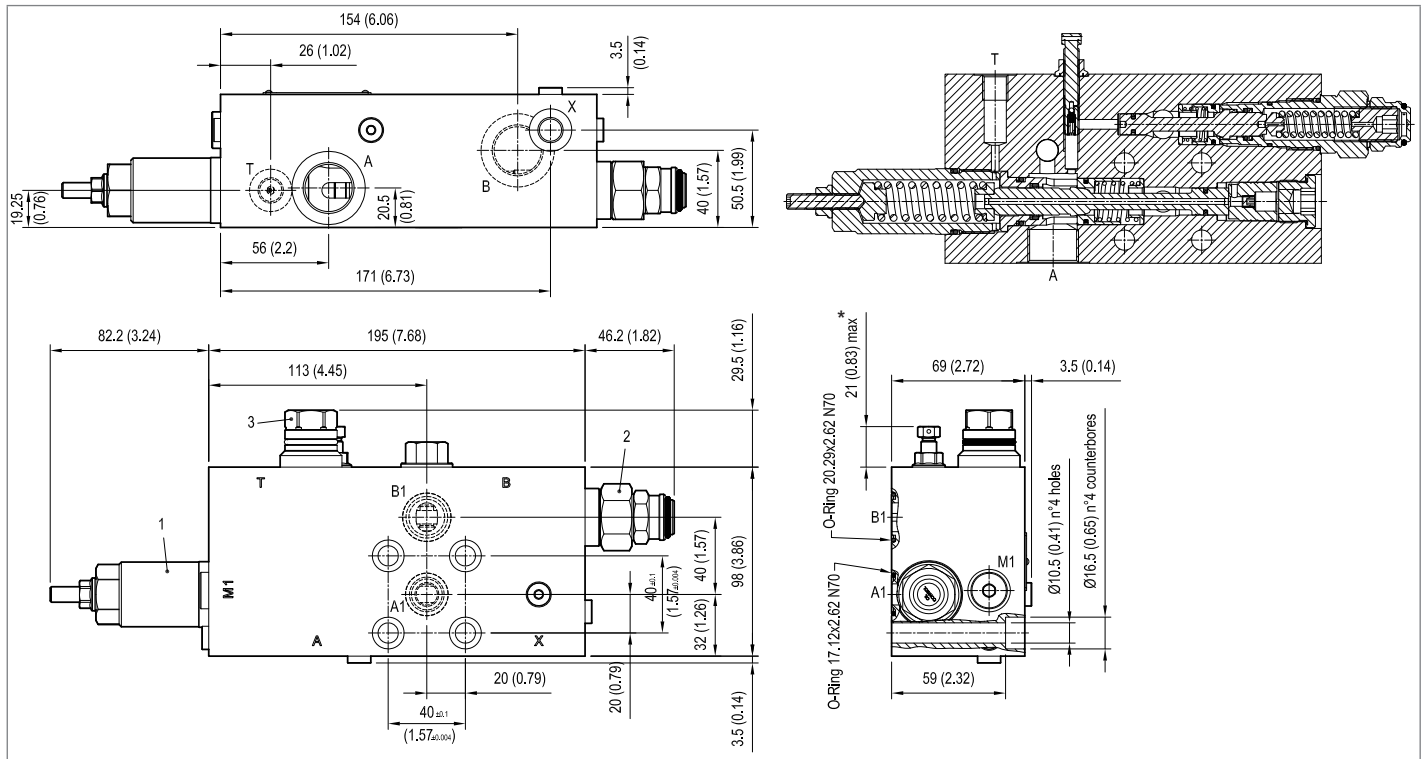


**Preferred types**

Type	Material number
083990030402000	R930060604

Type	Material number

**Dimensions**



\* The adjusting screw can be completely unscrewed. Do not exceed the indicated protrusion range of the adjusted screw.

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