

Check and Metering H-valve

H-valve 6.0

RE 18309-28

Edition: 11.2023



Size 6.0

Series H-valve

Maximum operative pressure: 460 bar (6672 psi)

Max. flow: 600 lpm (160 gpm)

Description

The Check and Metering H-valve for excavators prevents uncontrolled lowering of the actuator in case of hose failure and provides the load holding when the joystick is released in neutral position.

Lifting operations are performed with very limited pressure losses across the valve.

The valve includes also a pressure relief stage (1) which prevents any overloads into the cylinder.

The actuation of the valve is performed by operating the hydraulic pilot stage (2) with a low pilot pressure.

Based on the two stages opening principle (2, 3), the valve provides flow metering from the cylinder to the main control valve.

For safety reasons, the valve is directly mounted on the cylinder flange and provides a compact installation with the positioning of all hydraulic ports on the back surface.

The valve is also equipped with a by-pass function (4) which can be used for emergency boom lowering in case of pilot pressure failure.

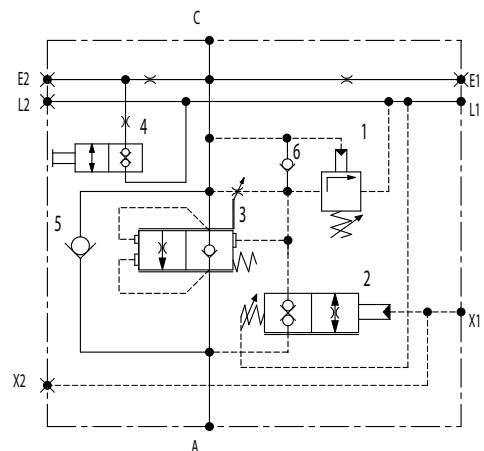
Main Field of Application

Excavators

Material Handlers

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Technical data

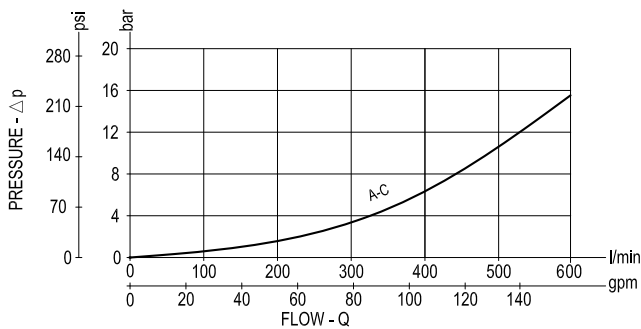
General		
Weight	kg (lbs)	12.4 (27.35)
Manifold material		Zinc plated cast iron
Ambient temperature range	°C (°F)	-30....+110 (-22....+230)
Hydraulic		
Max. operating pressure	bar (psi)	460 (6672)
Max. pressure at C-A ports	bar (psi)	460 (6672)
Max. pressure at L port	bar (psi)	25 (362.6)
Max. flow	l/min. (gpm)	600 (160)
Opening pressure range	bar (psi)	7 - 13 (101.5 - 188.5)
Setting	Setting is done at 5 l/min (C→A) with a pilot pressure which determines a load pressure reduction from 100 bar to 80 bar. Standard setting is 8,5 (0/+0,5) bar pilot pressure.	
Fluid	Mineral oil (HL, HLP) according DIN 51524	
Fluid temperature range	°C (°F)	-30....+100 (-22....+212)
Viscosity range	mm²/s	15....380
Permissible degree of fluid contamination	Class 19/17/14 according to ISO 4406	
Other technical data	see data sheet 18350-50	

Note

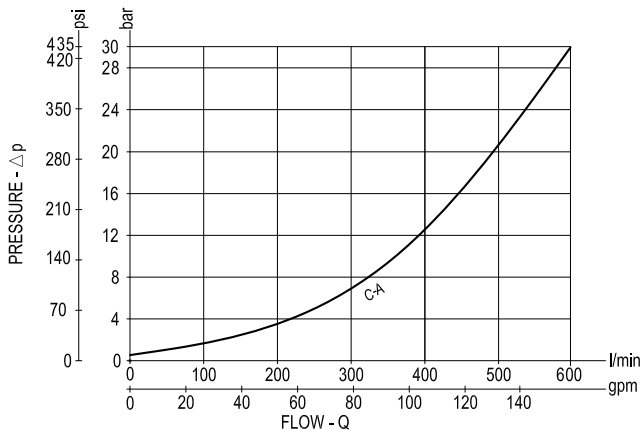
for applications outside these parameters, please consult us.

Characteristic curves

$\Delta p = f(Q)$ Pressure drop - Flow rate characteristic
Lifting (A→C)

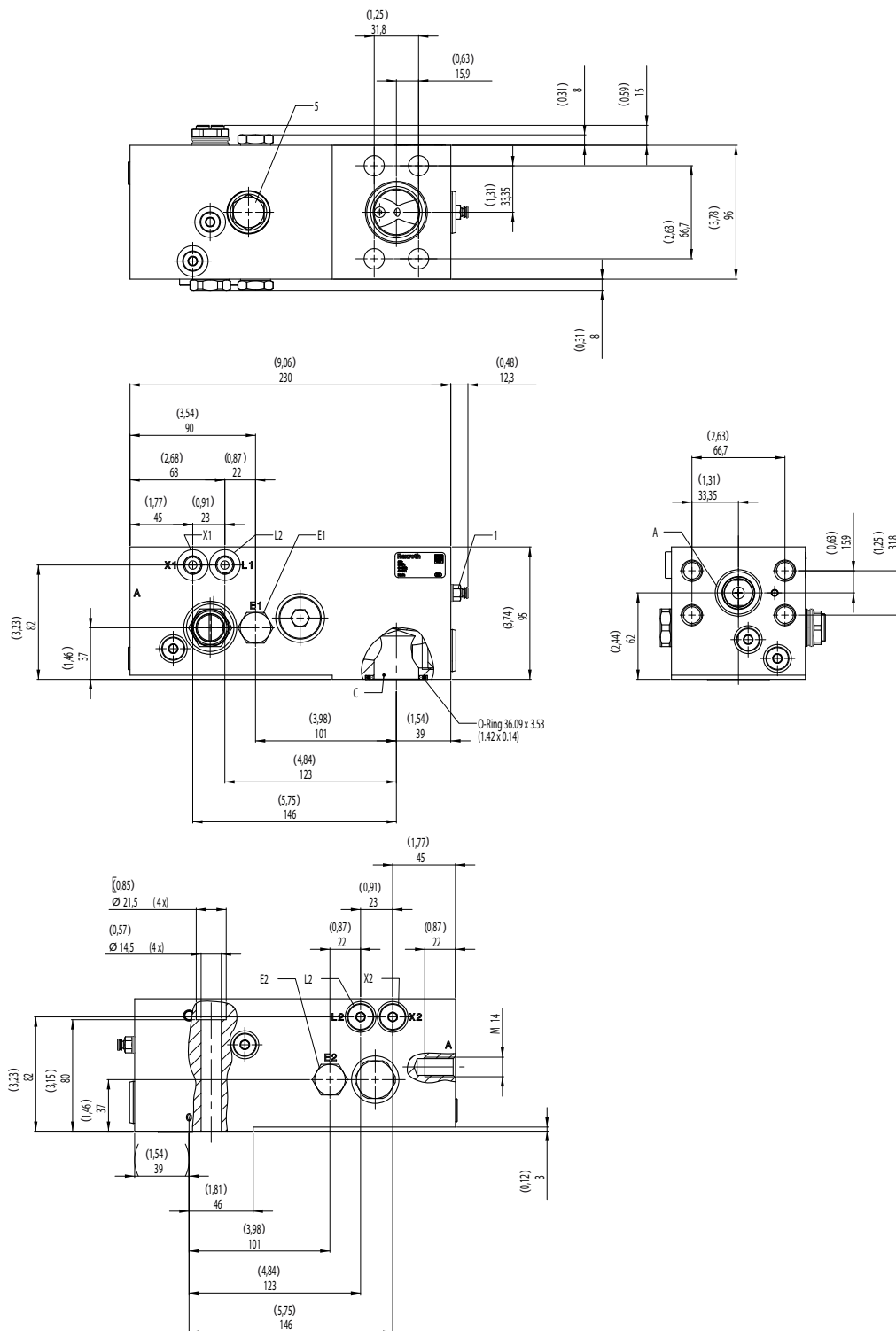


$\Delta p = f(Q)$ Pressure drop - Flow rate characteristic
Lowering (C→A), main stage (3) completely open.



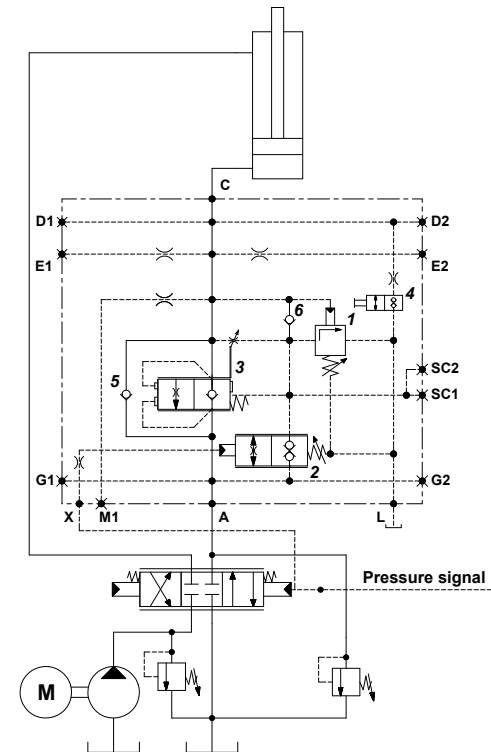
Measured with hydraulic fluid ISO-VG46 at 36° ±2 °C (97° ±36 °F); ambient temperature 23 °C (73 °F).

External dimensions and fittings

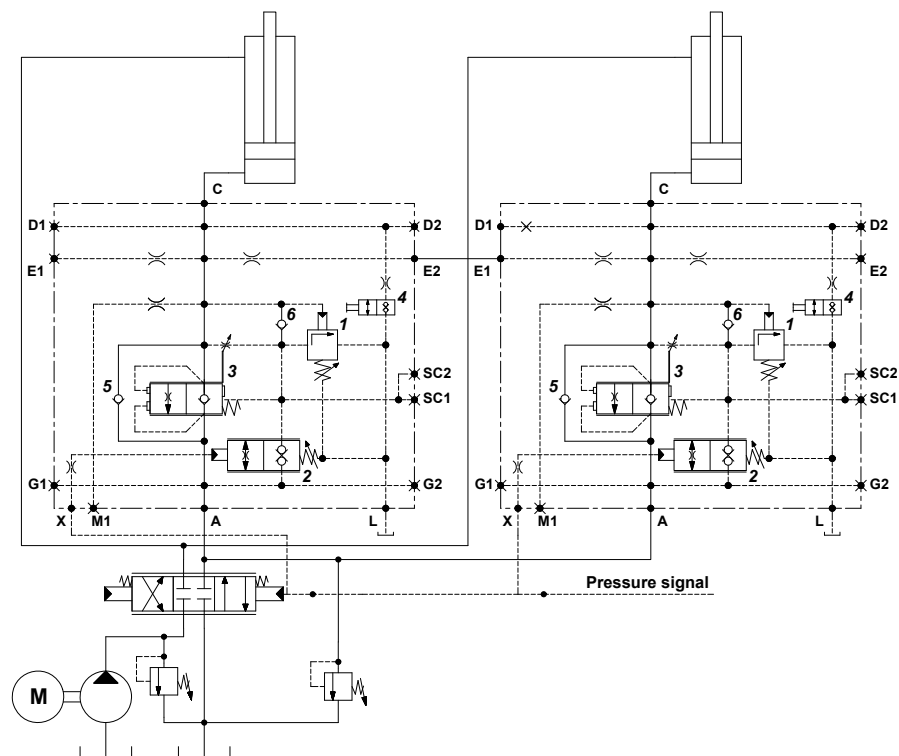


Application examples

Single Operation



Parallel Operation



Ordering details

01	02	03	04	05	06	07
0G.H6	4	83	G	0	0	--

Family

01	Check and Metering H-valve 6.0	0G.H6
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A-C Flange

02	1-1/4 SAE 6000	4
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Application

03	Single Operation	83
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Lateral Ports

04	G1/4 - BSPP ISO 1179-1	G
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Main stage

05	Spool Type	0
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Pilot stage

06	N/A	0
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Valve 1	Adj. pressure range bar (psi)	Pres. increase bar/turn (psi/turn)	Std. setting bar (psi) 5 l/min	
07	300-460 (4350-6700)	168 (2436)	350 (5000)	35
	300-460 (4350-6700)	168 (2436)	420 (6090)	42
	300-460 (4350-6700)	168 (2436)	460 (6672)	46

Flange seal kit

E00000000000004 (R930004534) C flange 1-1/4 SAE 6000
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Type	Material number
0GH6483G0035000	R930087498

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