Part number:

HYDROMA
HYDRAULICKÉ SYSTÉMY

HIDROMA SISTEMS
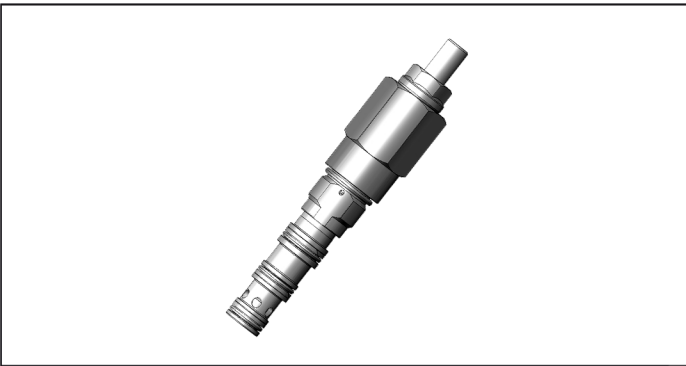UKŁADY HYDRAULICZNE

HYDROMA
ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ

Priority unloading pilot operated

Common cavity, Size 10

VMSP-78

04.75.10 - X - 99 - Z

RE 18318-17
Edition: 03.2016
Replaces: 11.2015

Technical data

Max. operating pressure port 1-3	350 bar (5000 psi)
Max. pressure admitted port 2	210 bar (3000 psi)
Flow range	5 - 30 l/min (1.3 - 8 gpm)
Max. internal leakage[1]	25 cm³/min. (1.5 cu.in./min.)
Fluid temperature range	-30 to 100 °C (-22 to 212 °F)
Installation torque	41 - 47 Nm (30 - 35 ft-lbs)
Weight	0.28 kg (0.62 lbs)
Cavity	CA-10A-4N (see data sheet 18325-70)
Lines bodies and standard assemblies	Please refer to section "Hydraulic integrated circuit" or consult factory
Seal kit[2]	Code: RG0308010520100
	material no: R30005801
Fluids	Mineral-based or synthetics with lubricating properties at viscosities of 10 to 500 mm²/s (cSt)
Recommended degree of fluid contamination	Nominal value max. 10μm (NAS 8) / ISO 4406 19/17/14
Installation position	No restrictions
Other Technical Data	See data sheet 18350-50

[1] Measured at 200 bar (2900 psi)
[2] Only external seals for 10 valves

Setting is performed pressurizing "X" port.

Description

Flow is blocked from 1 to 2 until pressure increases to meet the selected valve setting, lifting the small, pilot-stage poppet from its seat. This action exhausts oil above the main-stage piston (spool type), allowing it to shift fully and unload flow from 1 through 2 with minimal pressure drop. Similarly, when remote pilot pressure at 3 exceeds the pressure setting, a secondary piston lifts the pilot-stage poppet from its seat, again exhausting fluid from 1 through 2. The spring chamber is drained to tank at 4. Any pressure at 4 will be additive to the valve setting.
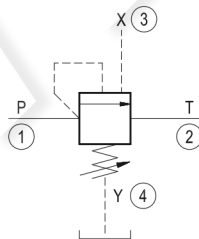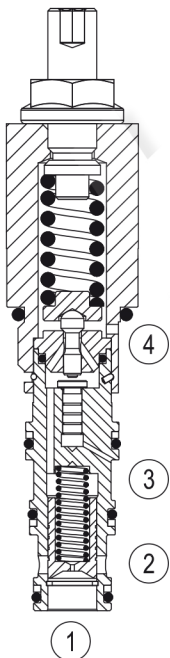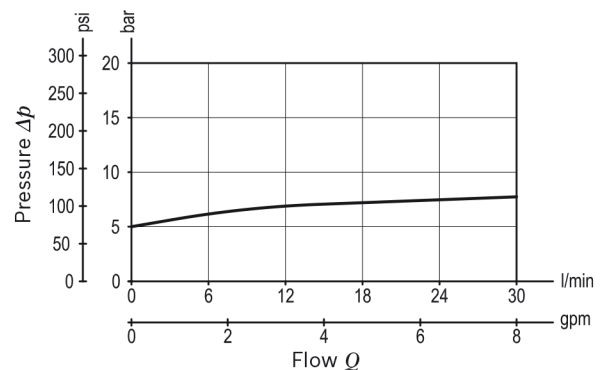
Characteristic curve

Ordering code

04.75.10	X	99	Z	00	*

Series 0/A to L
unchanged performances and dimensions

Priority unloading pilot operated

Version and options standard

Differential unloading / reload

03 Re-seat at (85±2.5)% of pressure setting

99 Common cavity, CA-10A-4N
(old code cartridge style)

	SPRINGS		
	Adj. press. range bar (psi)	Pressure increase bar/turn (psi/turn)	Std. setting bar (psi) Q=5 l/min
10	7-105 (100-1500)	26 (377)	70 (1000)
20	90-210 (1300-3000)	31 (450)	120 (1750)
35	150-350 (2200-5000)	105 (1523)	200 (2900)

Note: Special settings available. Contact factory authorized representative for ordering code.

Preferred types

Type	Material number	Type	Material number
04751003991000D	R930005772		
04751003992000D	R930005779		
04751003993500C	R930005780		

Dimensions

Hex 5 (0.2)

Hex 17 / Hex (0.67)   12-15 Nm (9-11) ft-lb

Hex 27 (1.06)

66.3 (2.6)

61 (2.4)

7/8-14 UNF-2A

12 (0.47)

62 (2.44)

Ø 19.05 (0.75)

Ø 17.47 (0.69)

Ø 15.87 (0.63)

OPTION
Tamper resistant cap
ordering code: 11.04.23.004
Mat. no.   R930001411