

Nominal sizes 08 to 10, special cavities

RE 18301-91

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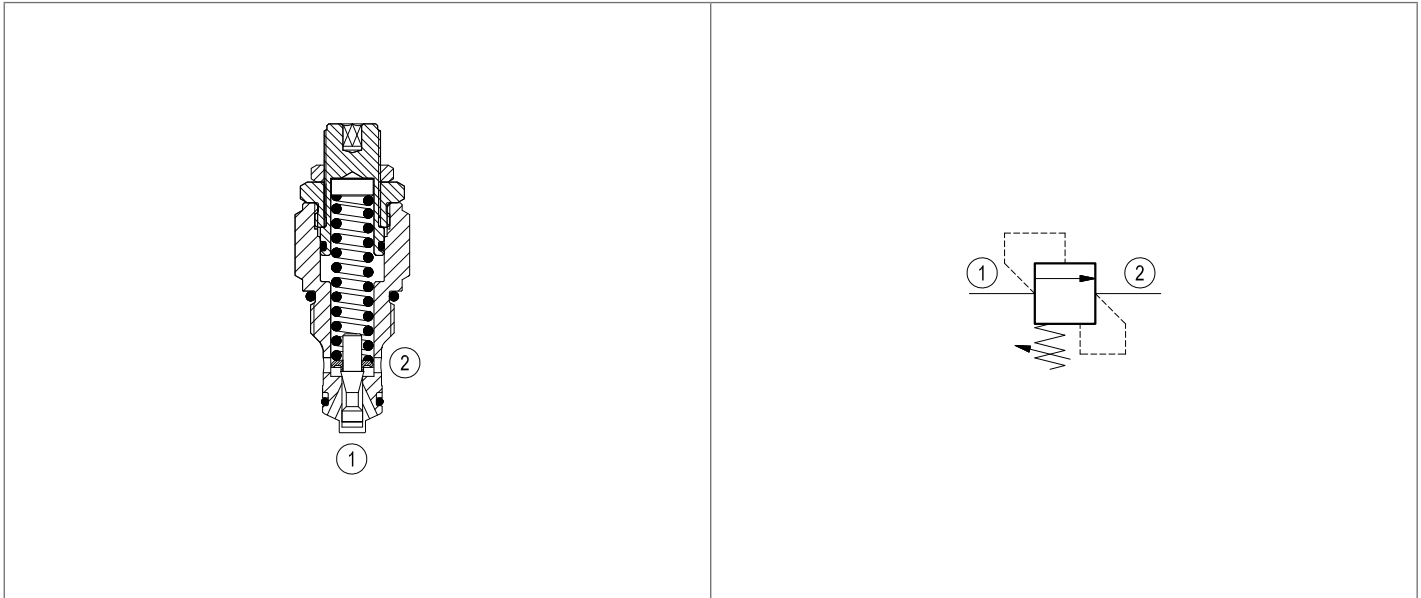


Contents

Relief, direct acting guided poppet type Common cavity, Size 10	2
Relief, direct acting guided poppet type Special cavity, Size 019-E	6
Proportional valves non compensated flow regulators Common cavity, Size 10	8
Coils - Connectors	12

Relief, direct acting guided poppet type Common cavity, Size 10

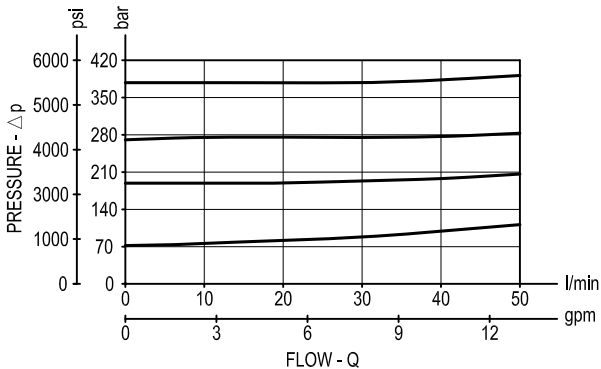
VMD1.040 OT.M1.03 - X - 99 - Z



Description

Flow is blocked from 1 to 2 until pressure increases to meet the selected valve setting, lifting the poppet from its seat and allowing relief flow through port 2 to tank. Pressure at port 2 is additive to the relief setting of the valve. The unique Bosch Rexroth Oil Control poppet design provides enhanced stability at all flows and pressures.

Performance



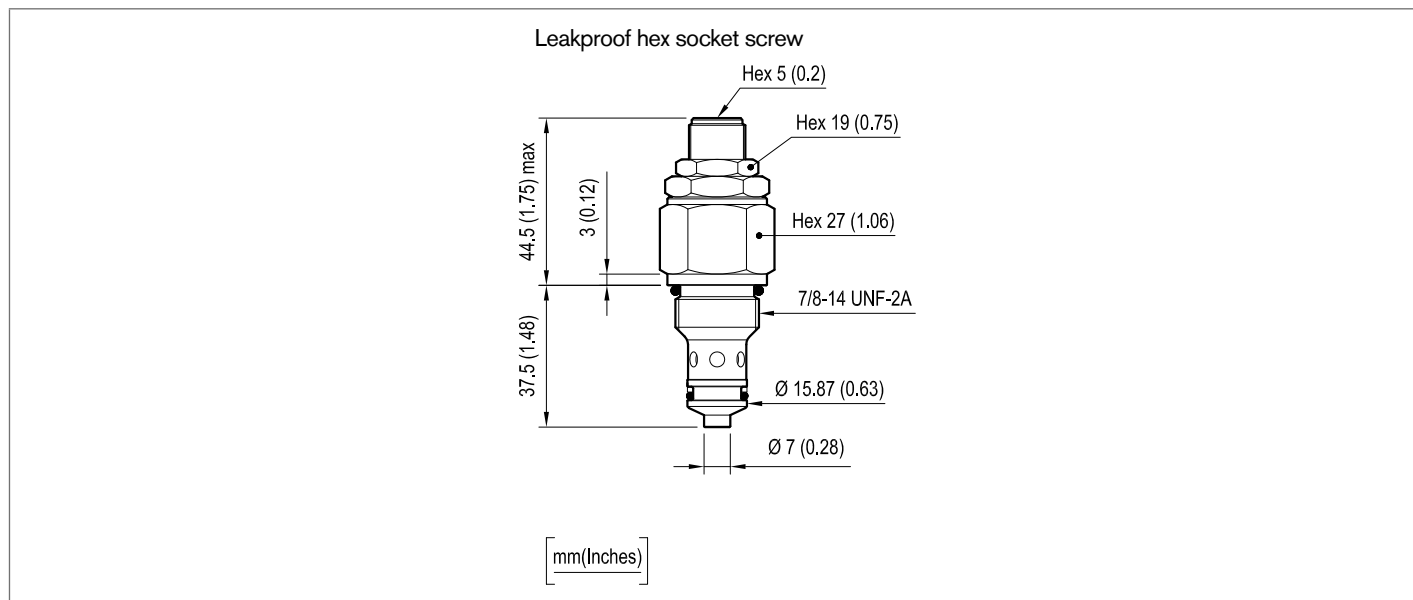
Technical Data

General		
Max pressure	bar (psi)	350 (5000)
Max flow	l/min (gpm)	50 (13)
Installation torque	Nm (ft-lb)	55-65 (41-48)
Cavity		CA-10A-2N
Weight	kg (lbs)	0.17 (0.38)
Fluid temperature range	°C (°F)	between -30 (-22) and +100 (+212)

Preferred types

Type	Material number
OTM103039910000	R901099401
OTM103039920000	R901099402
OTM103039935000	R901114696

Dimensions



Ordering code

0T.M1.03	X	99	Z
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Relief, direct acting
guided poppet type

Adjustments

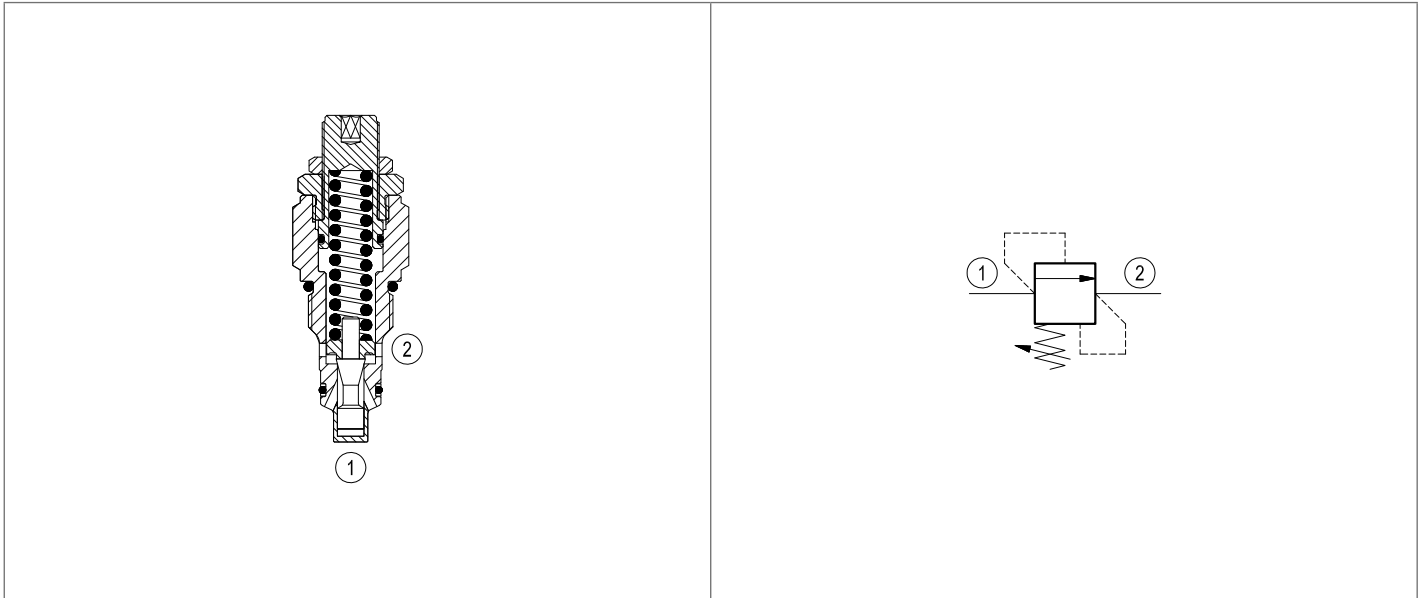
= **03** Leakproof hex. socket
screw

Common cavity Size 10

	SPRINGS		
	Adj. press. range bar (psi)	Press. increase bar/turn (psi/turn)	Std. setting press. bar (psi) (Q=5 l/min)
= 10	25-120 (350-1750)	16.5 (239)	100 (1450)
= 20	40-200 (580-2900)	26.5 (384)	180 (2600)
= 35	200-350 (2900-5000)	51 (740)	350 (5000)

Relief, direct acting guided poppet type Common cavity, Size 10

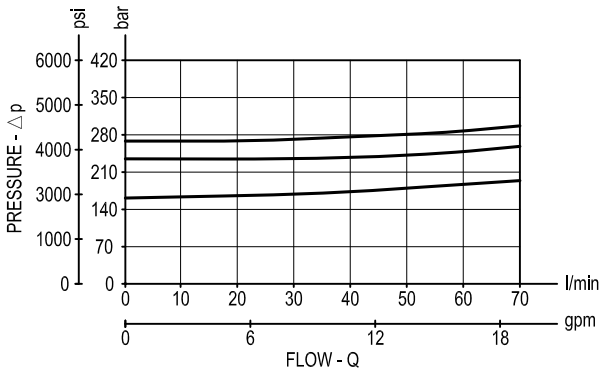
VMD1.070 OT.M1.04 - X - 99 - Z



Description

Flow is blocked from 1 to 2 until pressure increases to meet the selected valve setting, lifting the poppet from its seat and allowing relief flow through port 2 to tank. Pressure at port 2 is additive to the relief setting of the valve. The unique Bosch Rexroth Oil Control poppet design provides enhanced stability at all flows and pressures.

Performance



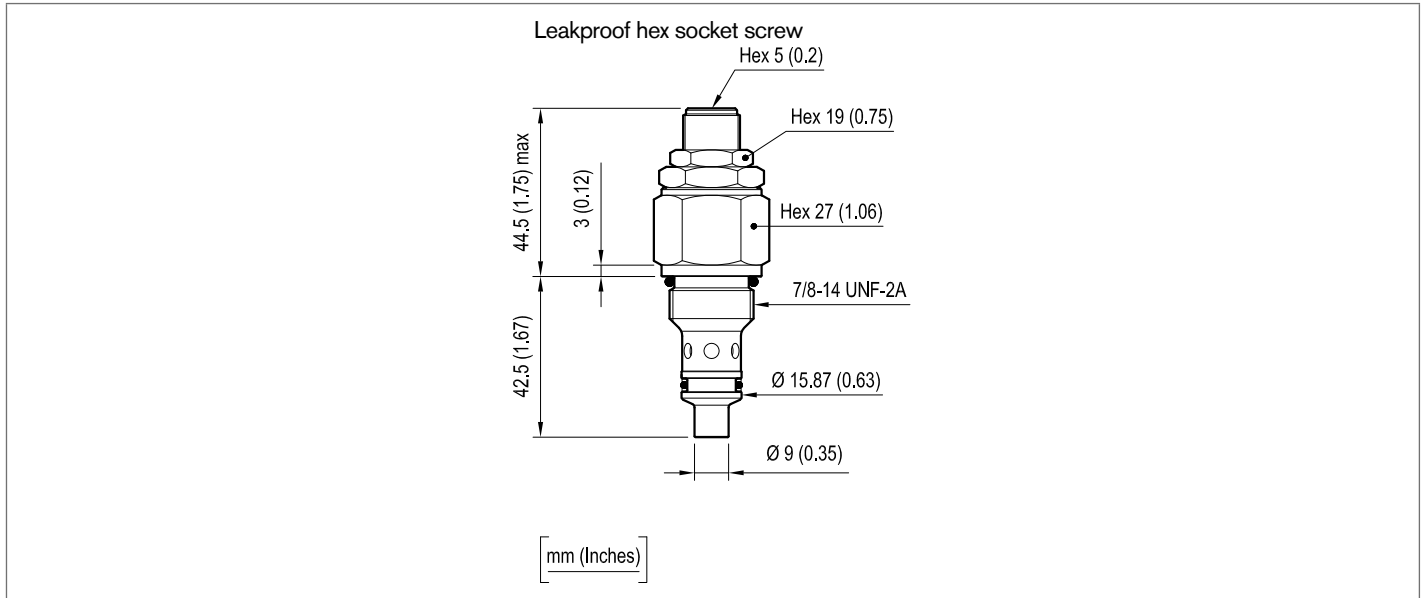
Technical Data

General		
Max pressure	bar (psi)	260 (3800)
Max flow	l/min (gpm)	70 (19)
Installation torque	Nm (ft-lb)	55-65 (41-48)
Cavity		CA-10A-2N
Weight	kg (lbs)	0.18 (0.4)
Fluid temperature range	°C (°F)	between -30 (-22) and +100 (+212)

Preferred types

Type	Material number
OTM104039905000	R901099575
OTM104039910000	R901099604
OTM104039920000	R901116269
OTM104039935000	R901099642

Dimensions



Ordering code

OT.M1.04	X	99	Z
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Relief, direct acting
 guided poppet type

Adjustments

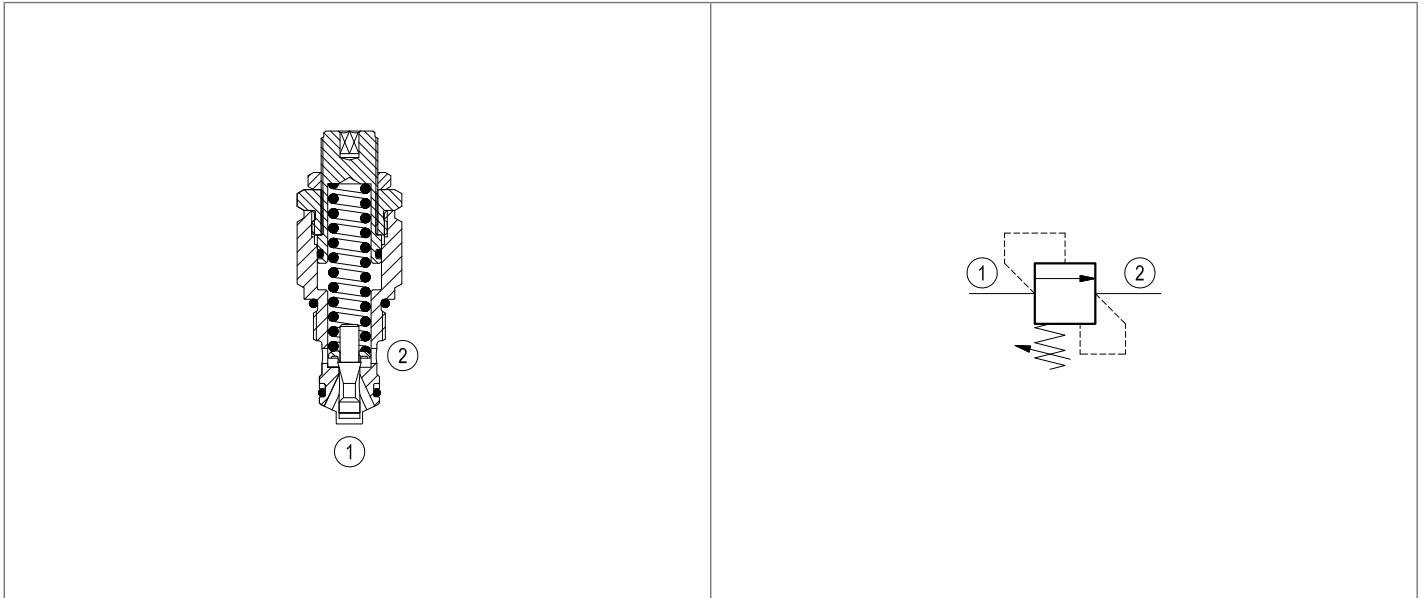
= **03** Leakproof hex. socket
 screw

Common cavity Size 10

	SPRINGS		
	Adj. press. range bar (psi)	Press. increase bar/turn (psi/turn)	Std. setting press. bar (psi) (Q=5 l/min)
= 05	10-60 (145-870)	10 (145)	50 (725)
= 10	40-110 (580-1600)	17 (247)	100 (1450)
= 20	110-220 (1600-3200)	31.5 (457)	200 (2900)
= 35	220-260 (3200-3800)	37 (537)	250 (3600)

Relief, direct acting guided poppet type Special cavity, Size 019-E

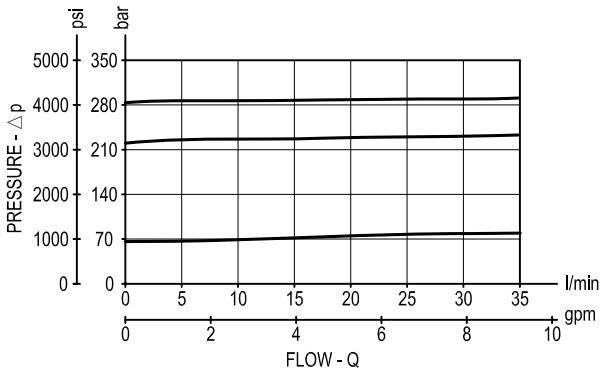
VMD1.025 OT.M1.02 - X - 99 - Z



Description

Flow is blocked from 1 to 2 until pressure increases to meet the selected valve setting, lifting the poppet from its seat and allowing relief flow through port 2 to tank. Pressure at port 2 is additive to the relief setting of the valve. The unique Bosch Rexroth Oil Control poppet design provides enhanced stability at all flows and pressures.

Performance



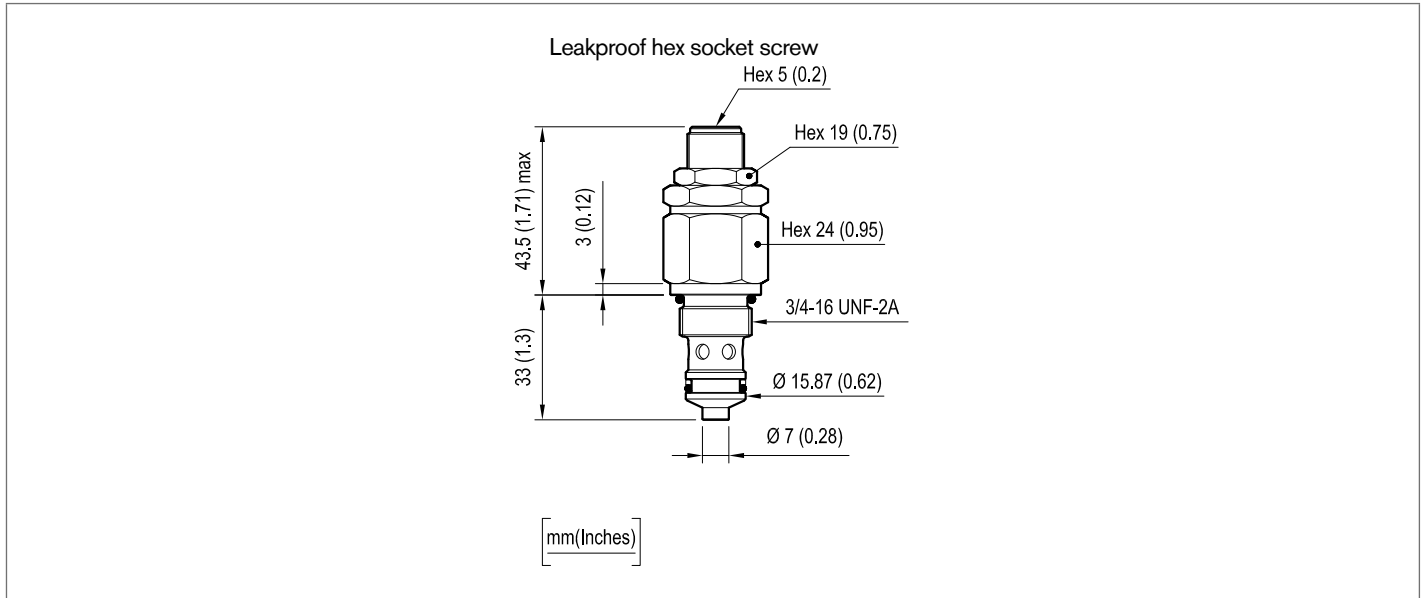
Technical Data

General		
Max pressure	bar (psi)	350 (5000)
Max flow	l/min (gpm)	35 (9)
Installation torque	Nm (ft-lb)	40-45 (30-33)
Special Cavity		019-E
Weight	kg (lbs)	0.13 (0.29)
Fluid temperature range	°C (°F)	between -30 (-22) and +100 (+212)

Preferred types

Type	Material number
OTM102039910000	
OTM102039920000	R901091925
OTM102039935000	R901091920

Dimensions



Ordering code

0T.M1.02	X	99	Z
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Relief, direct acting
guided poppet type

Adjustments

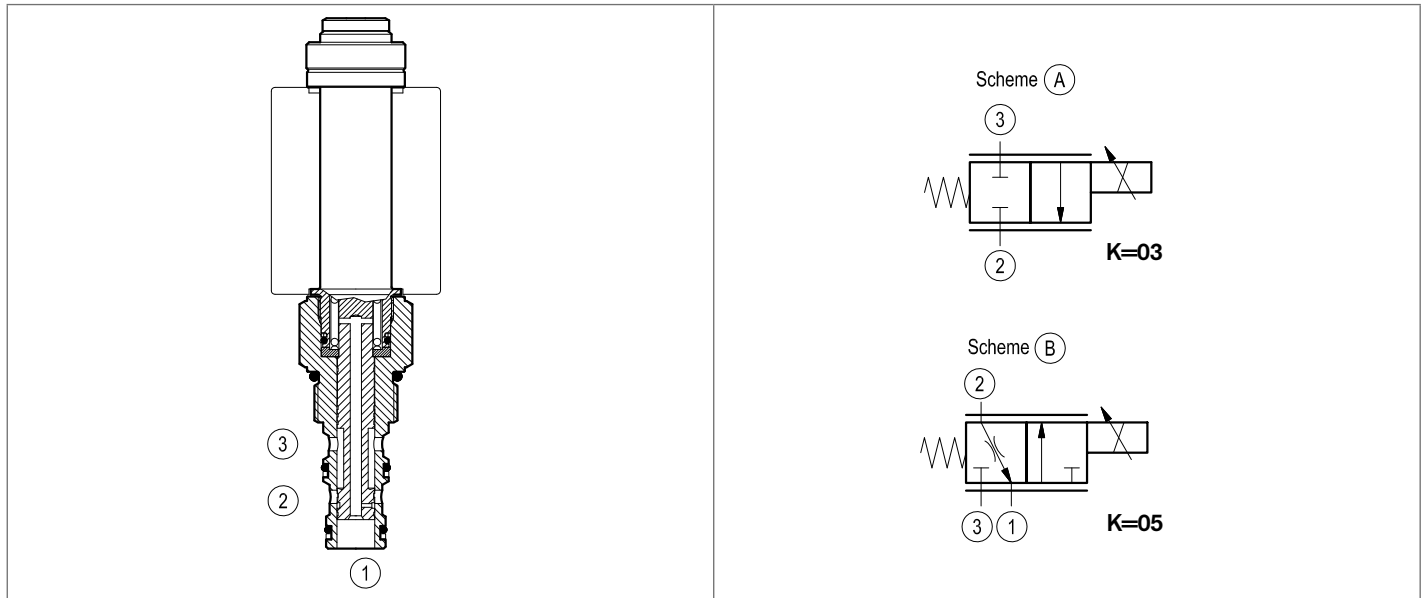
= **03** Leakproof hex. socket
screw

Special cavity Size 019-E

SPRINGS			
	Adj. press. range bar (psi)	Press. increase bar/turn (psi/turn)	Std. setting press. bar (psi) (Q=5 l/min)
= 10	25-120 (350-1750)	16.5 (239)	100 (1450)
= 20	40-200 (580-2900)	26.5 (384)	180 (2600)
= 35	200-350 (2900-5000)	51 (740)	350 (5000)

Proportional valves non compensated flow regulators Common cavity, Size 10

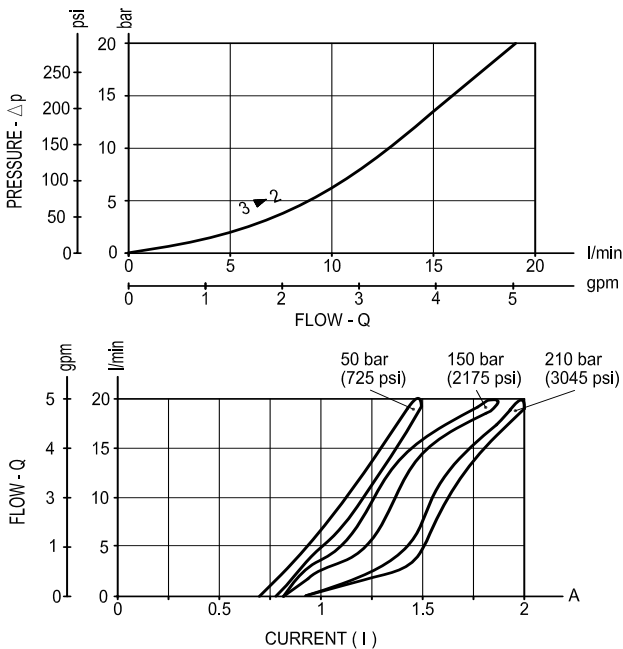
VEP-5A-2Q-09-NC-2F OD.92 - K - 77 - Y - 01



Description

Flow is blocked from 1 to 2 until pressure increases to meet the selected valve setting, lifting the poppet from its seat and allowing relief flow through port 2 to tank. Pressure at port 2 is additive to the relief setting of the valve. The unique Bosch Rexroth Oil Control poppet design provides enhanced stability at all flows and pressures.

Performance



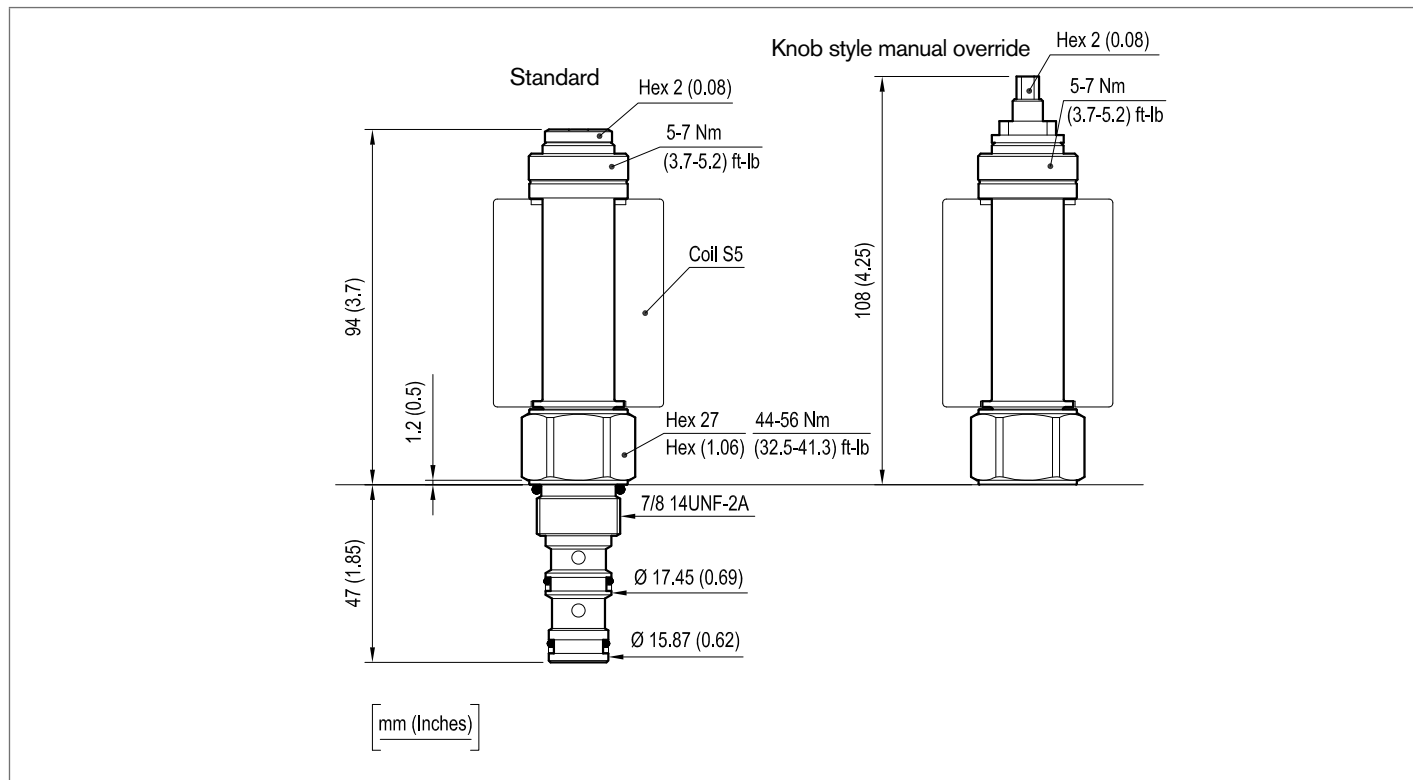
Technical Data

General		
I max(±15%) for 12 V DC coil	A	2
I min(±15%) for 12 V DC coil	A	0.9
Recommended PWM frequency	Hz	150-180
Internal leakage at 210 bar (3000 psi) with 46 cSt oil	cm ³ /min (in ³ /min)	max 180 (11)
Cavity	CA-10A-3N	
Coil	S5 (must be ordered separately)	
Minimum voltage required	90% of nominal value	
Testing conditions - Seals	Internal and external seals are designed for applications that operate within the fluid temperature range	
Weight	kg (lbs)	0.31 (0.68)
Fluid temperature range	°C (°F)	between -30 (-22) and +100 (+212)
Ambient temperature	°C (°F)	-30 (86) and +60 (+140)
Mounting position	unrestricted	
N.B. It is recommended to bleed air carefully before operation.		

Preferred types

Type	Material number
OD920377030100	R934001518
OD920377040100	R934001521
OD920577030100	R934001524
OD920577040100	R934001526

Dimensions



Ordering code

OD.92	K	77	Y	01
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Proportional valves
 non compensated flow
 regulators

Hydraulic scheme
 = **03** see scheme A
 = **05** see scheme B

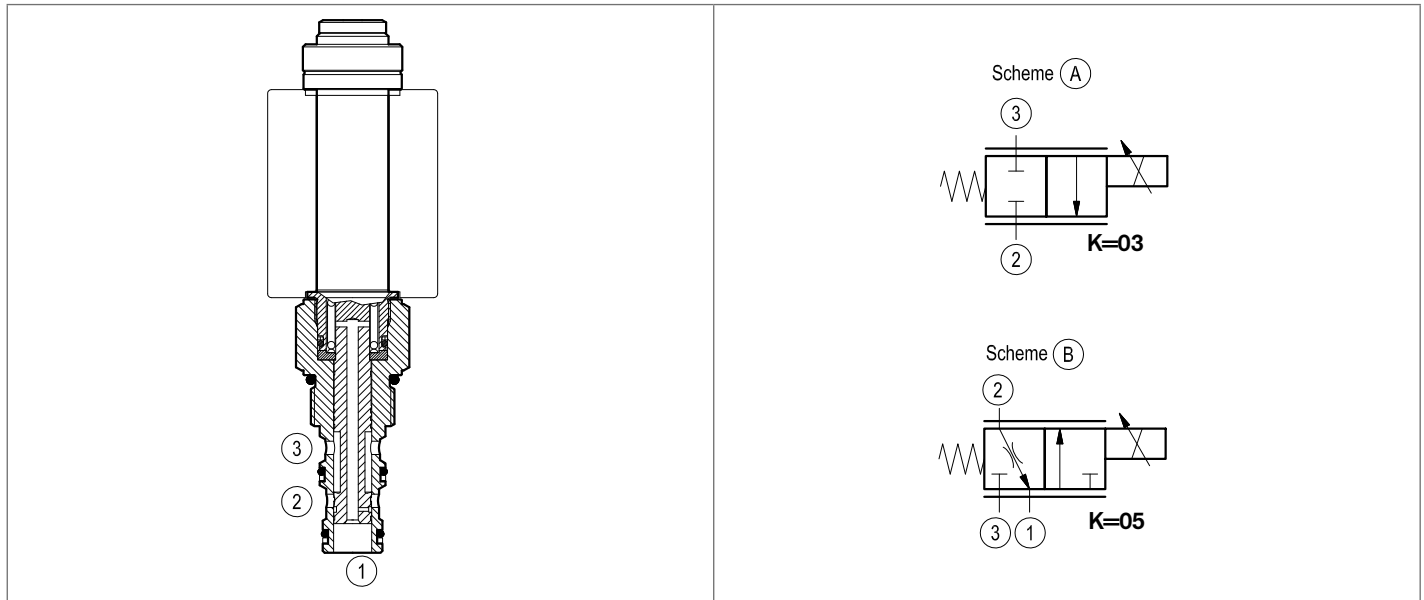
Common cavity Size 10

Ordering options

= **03** Standard
 = **04** knob style manual
 override

Proportional valves non compensated flow regulators Common cavity, Size 10

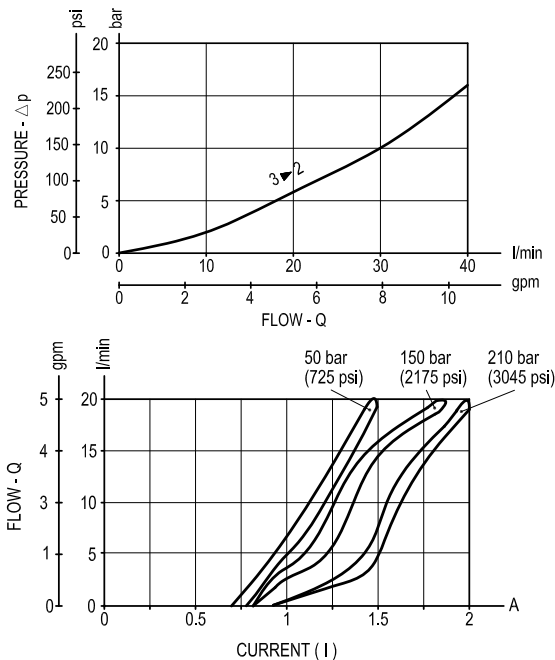
VEP-5A-2Q-09-NC-6F OD.92 - K - 77 - Y - 03



Description

Flow is blocked from 1 to 2 until pressure increases to meet the selected valve setting, lifting the poppet from its seat and allowing relief flow through port 2 to tank. Pressure at port 2 is additive to the relief setting of the valve. The unique Bosch Rexroth Oil Control poppet design provides enhanced stability at all flows and pressures.

Performance



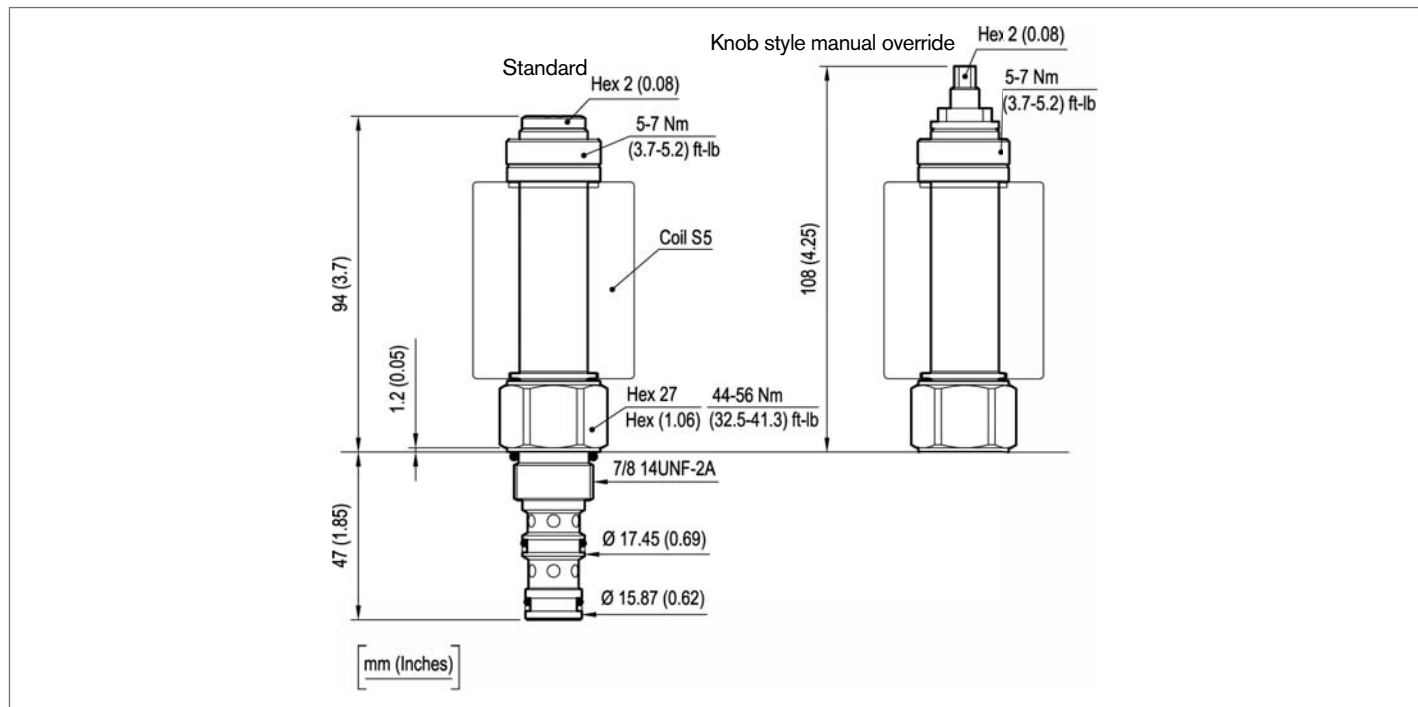
Technical Data

General		
Operating pressure	bar (psi)	210 (3000)
Rated flow	l/min (gpm)	40 (11)
I max(±15%) for 12 V DC coil	A	2
I min(±15%) for 12 V DC coil	A	0.8
Recommended PWM frequency	Hz	150-180
Internal leakage at 210 bar (3000 psi) with 46 cSt oil	cm ³ /min (in ³ /min)	max 180 (11)
Cavity	CA-10A-3N	
Coil	S5 (must be ordered separately)	
Minimum voltage required	90% of nominal value	
Testing conditions - Seals	Internal and external seals are designed for applications that operate within the fluid temperature range	
Weight	kg (lbs)	0.31 (0.68)
Fluid temperature range	°C (°F)	between -30 (-22) and +100 (+212)
Ambient temperature	°C (°F)	-30 (86) and +60 (+140)
Mounting position	unrestricted	
N.B. It is recommended to bleed air carefully before operation.		

Preferred types

Type	Material number
OD920377030300	R934001520
OD920377040300	R934001522
OD920577030300	R934001525
OD920577040300	R934001528

Dimensions



Ordering code

OD.92	K	77	Y	03
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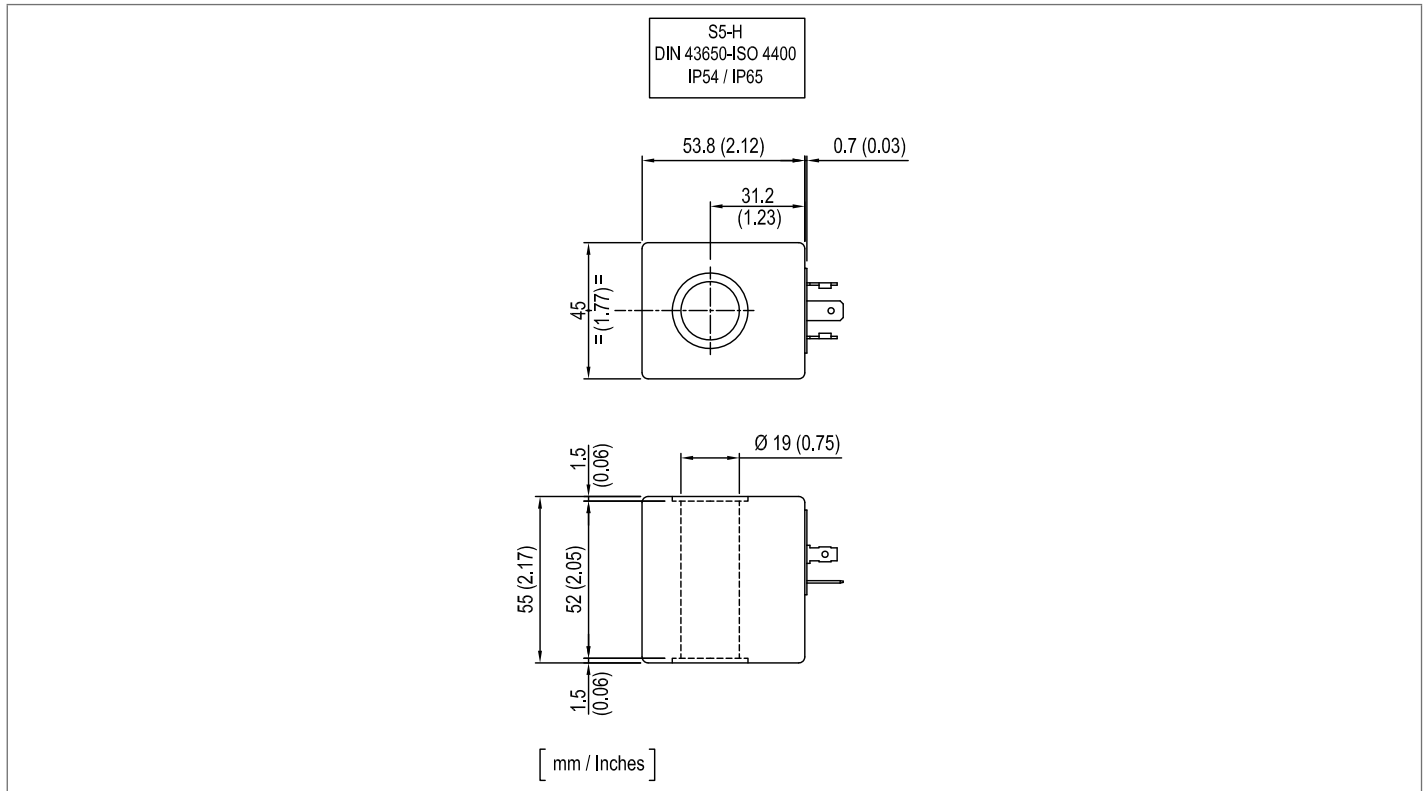
Proportional valves
non compensated flow
regulators

Hydraulic scheme
= **03** see scheme A
= **05** see scheme B

Common cavity Size 10

Ordering options

= **03** Standard
= **04** knob style manual
override

Coils - Connectors**COIL S5 - CLASS H OD.02.09.01.30 - Z - 01****Technical Data**

General		
Weight	kg (lbs)	0.47 kg (1.04 lbs)
Heat insulation Class F	°C (°F)	+180 (356°)
Ambient temperature	°C (°F)	-30 (86) and +60 (+140)

Inlet voltage fluctuations must not exceed $\pm 10\%$ of nominal voltage to obtain correct operation and long life coils.

Ordering Code

Z	Voltage V	Resistance Ohm ($\pm 7\%$)	Power W	Current A	ΔT °C (°F)
	Nominal	Ta = 20-25°C (68-77°F)	Cold coil	Cold coil	Hot coil
OB	12 DC	6.2	23	1.92	1.41
OC	24 DC	24.9	23	0.96	0.71

1 hour energized at Ta=20-25°C (68-77°F) Nominal voltage

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