



## 4/2, 4/3 WAY BANKABLE DIRECTIONAL VALVES KVM

- NG 6
- Up to 350 bar [5 076 PSI]
- Up to 40 L/min [10.6 GPM]
- Parallel or series connection.
- Plug-in connection for solenoids to ISO 4400.
- 5-chamber model with good spool guidance.
- Wet pin solenoid with interchangeable coil.
- Manual emergency control.
- Protection of solenoid IP 65 to EN 60529 / IEC 60529.
- Fulfil EMC (89/336/EEC).
- Threaded connections to ISO 9974 (Metric), ISO 1179 (BSPP/Gas), ISO 11926 (UNF).



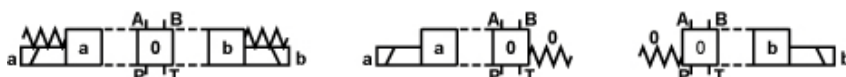
KVM-P-4/3-6-1-1-12DC-3/8

### Hydraulic symbol

#### Spool types - Parallel connection (KVM-P)



#### Spool types - Series connection (KVM-S)



### Features

Hydraulic		KVM-P	KVM-S
Size		6	6
Flow rate	L/min [GPM]	40 [10.6]	30 [7.9]
Operating pressure	A, B, P	350 [4 568]	250 [3 626]
	T	250 [3 626]	
Oil temperature range	°C [°F]	-20 to +70 [-4 to +158]	
Viscosity range	mm <sup>2</sup> /s [SUS]	15 to 380 [3.24 to 82]	
	Mass	1,85 [4.08]	
Mass	4/2	kg [lb]	
	4/3	2,4 [5.29]	
Filtration	NAS 1638	8	
Electrical			
Supply voltage	V	12, 24 DC	
Power	W	29	
	(12 V DC supply voltage)	36	
Switching frequency	1/h	15 000	
Ambient temperature	°C [°F]	to +50 [to +122]	
Coil temperature	°C [°F]	to +180 [to +356]	
Duty cycle		Continuous	

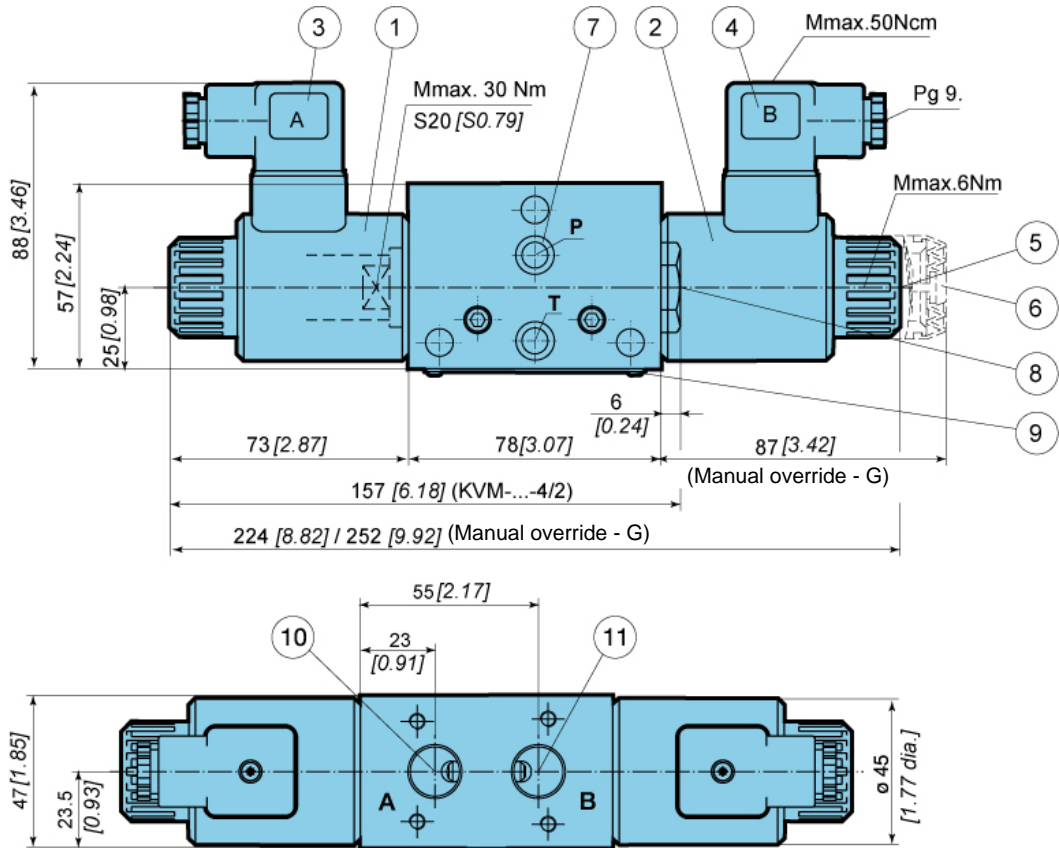
Mechanically operated

Hydraulically operated

Electrically operated

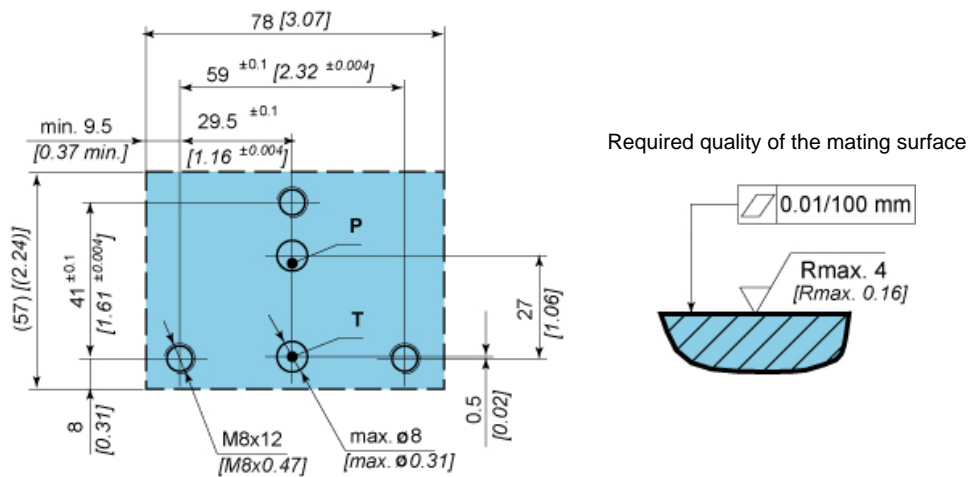


Dimensions



- 1. Solenoid "a" / MR-045-O
- 2. Solenoid "b" / MR-045-O
- 3. Plug-in connector «a» -grey
- 4. Plug-in connector «b» -black
- 5. Emergency manual override
- 6. Manual override with rubber (G)
- 7. O-ring 9,25 x 1,78
- 8. Valve cap (KVM-...-4/2)
- 9. Nameplate
- 10. Threaded connection A-M torque = max. 100 Nm
- 11. Threaded connection B-M torque = max. 100 Nm

Connection dimensions for KVM-6

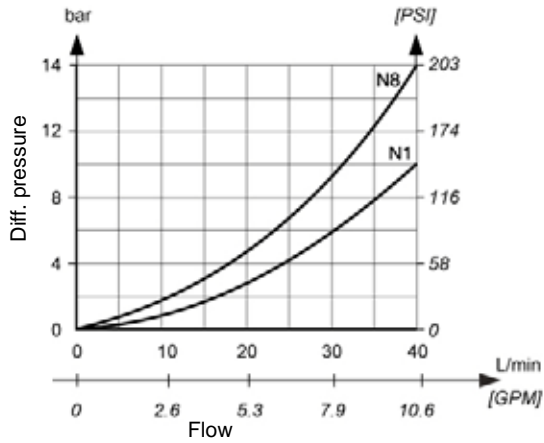




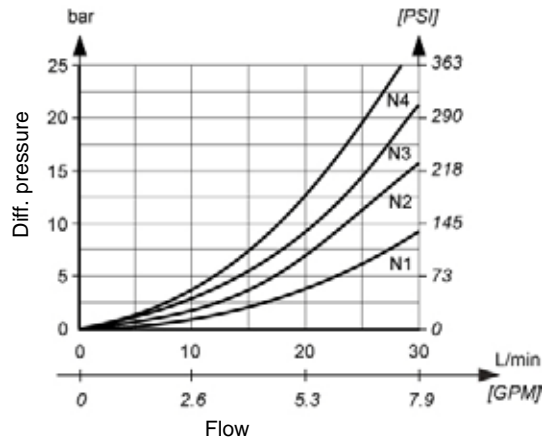
**ΔP-Q Performance curves**

Measured at 50°C [122°F] and viscosity of 32 mm<sup>2</sup>/s [148 SUS].

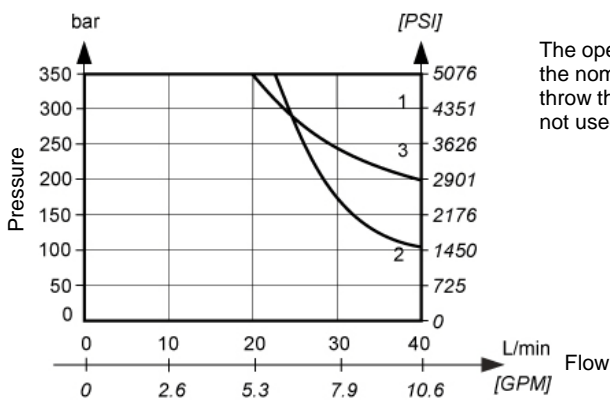
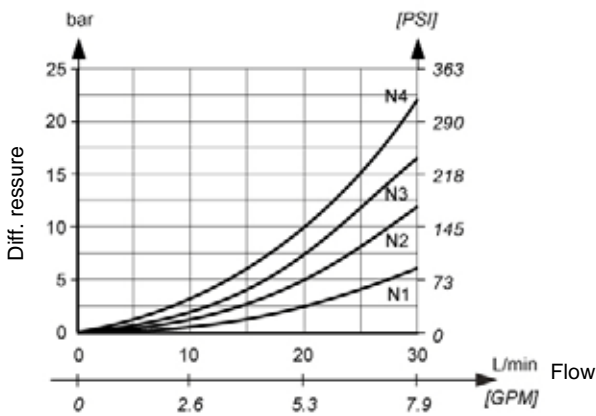
Parallel connection -KVM-P (N1 to N8)



.Series connection -KVM-S (P to T).



Series connection -KVM-S (P to A(B)).



The operating limits of the valve shall be determined at a voltage 10% below the nominal rating. The curves refer to application with symmetrical flow through the valve (P-A and B-T). In the case of asymmetrical flow (e.g. one part not used) reduced values may result.

Spool type	Curve
1	1
2	2
3,6	3

Mechanically operated

Hydraulically operated

Electrically operated



Model code



Type of connection

Series connection	S
Parallel connection	P

Number of control spool positions

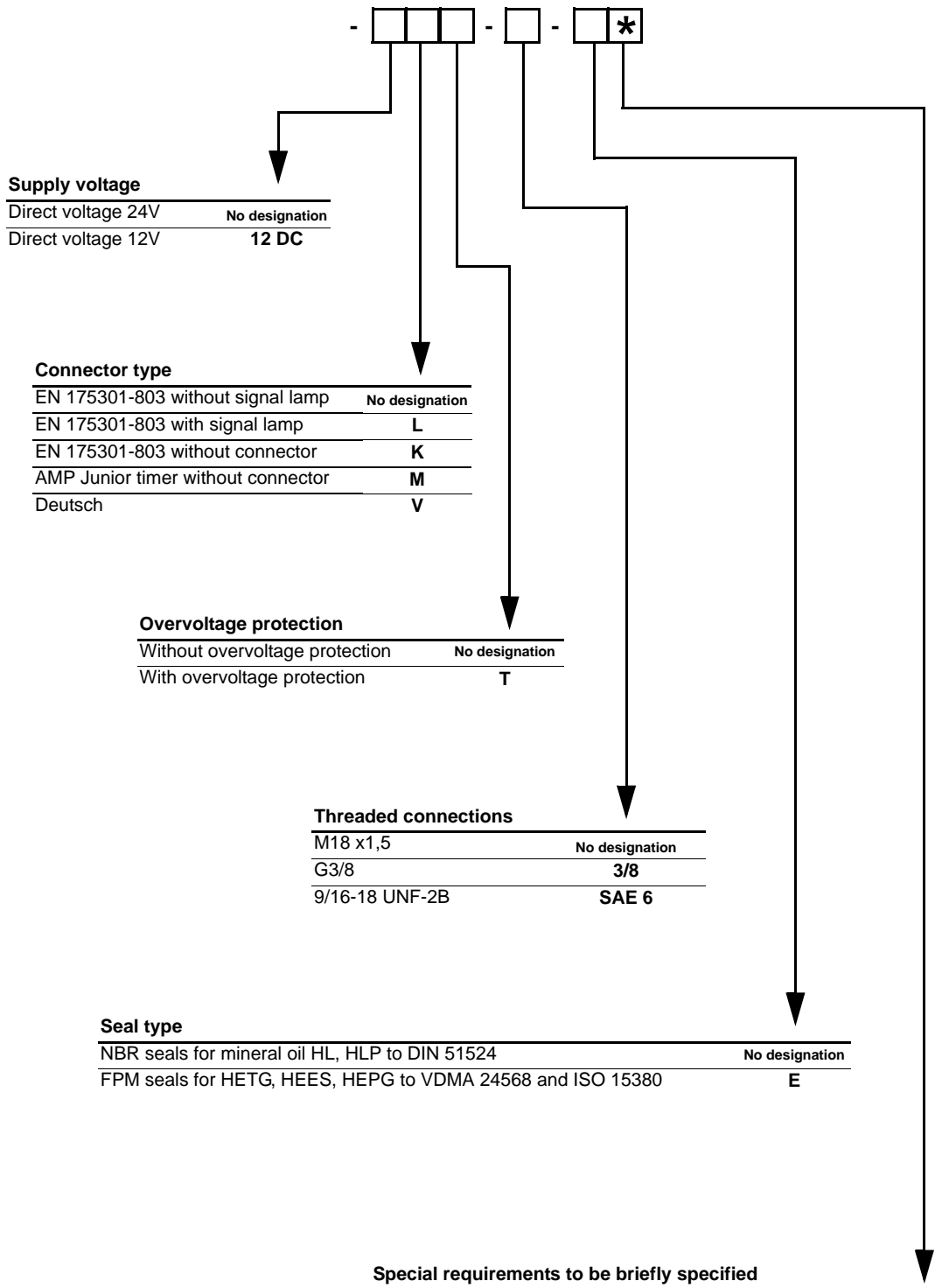
Two positions	2
Three positions	3

Manual override option

Emergency manual override	No designation
Manual override with rubber	G
Lockable manual override	C

Spool type

		1
		3
		6
		1A
		3A
		6A
		51A
		1B
		3B
		6B
		51B
		81
		2
Parallel connection (KVM-P)		2A
		2B



Mechanically operated

Hydraulically operated

Electrically operated