



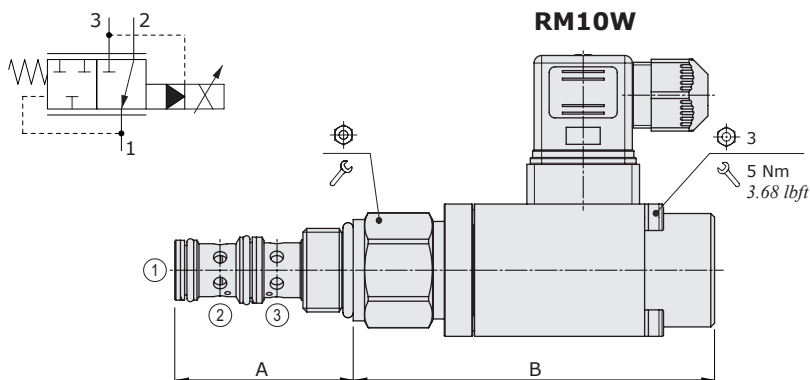
## RM..W type pressure reducing valves - 3 way

- Solenoid proportional type, pilot operated
- Without relieving
- Spool type
- From SAE10 to SAE16 cavities

Technical specifications and diagrams are measured with mineral oil of 46 cSt viscosity at 40°C (104°F) temperature.

	RM10W	RM12W	RM16W
Nominal flow	50 l/min (13 US gpm)	100 l/min (26 US gpm)	150 l/min (40 US gpm)
Max. pressure	350 bar (5100 psi)		
Oil leakage	-		
Fluid	mineral based oil		
Viscosity	10-200 cSt		
Max level of contamination	18/16/13 ISO4406		
Fluid temperature	with NBR seals with FPM seals	from -20°C (-4°F) to 80°C (176°F) from -20°C (-4°F) to 100°C (212°F)	
Environmental temp. for working conditions	from -20°C (-4°F) to 50°C (122°F)		
Cavity	SAE 10/3	SAE 12/3	SAE 16/3
Coil type*	MP35		
Nominal voltages	12 VDC - 24 VDC		
Power rating	11.2 W (12 VDC) - 11.4 W (24 VDC)		
Max control current	12 V -> 1.25 A - 24 V -> 0.68 A		
Dither frequency	150 Hz		
Hysteresis	≤4%		
Weight	0.680 kg (1.50 lb)	0.820 kg (1.81 lb)	0.930 kg (2.05 lb)

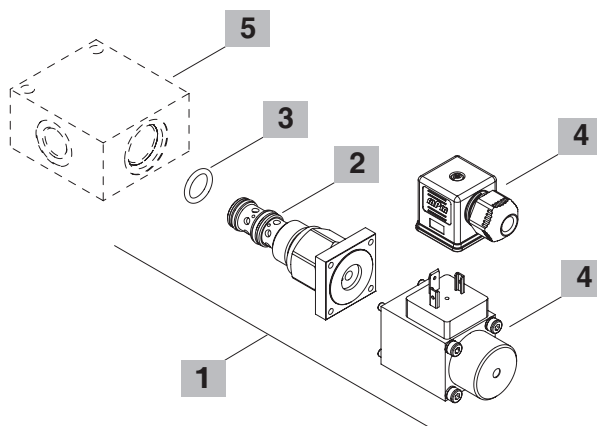
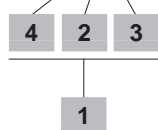
NOTE - For different conditions, please contact Walvoil Sales Dpt. - For coils further features see from page 206



Valve type	A		B		⊕	⌘
	mm	in	mm	in		
RM10W	47.2	1.86	95.6	3.76	27	50 37
RM12W	73.5	2.89	93.5	3.68	32	70 52
RM16W	75	2.95	92	3.62	41	100 74

### Ordering codes and description composition

#### RM10W/121B



#### 1 Cartridges

TYPE	CODE	DESCRIPTION
<b>SAE cavity 10/3</b>		
RM10W/121B	ORM10002015	Pressure range <b>1</b> , 12VDC
RM10W/122B	ORM10002016	Pressure range <b>2</b> , 12VDC
RM10W/123B	ORM10002017	Pressure range <b>3</b> , 12VDC
RM10W/124B	ORM10002018	Pressure range <b>4</b> , 12VDC
<b>SAE cavity 12/3</b>		
RM12W/021B	ORM12002003	Pressure range <b>1</b> , 12VDC
RM12W/022B	ORM12002005	Pressure range <b>2</b> , 12VDC
RM12W/024B	ORM12002001	Pressure range <b>4</b> , 12VDC
<b>SAE cavity 16/3</b>		
RM16W/021B	ORM16002004	Pressure range <b>1</b> , 12VDC
RM16W/022B	ORM16002005	Pressure range <b>2</b> , 12VDC
RM16W/023B	ORM16002006	Pressure range <b>3</b> , 12VDC
RM16W/024B	ORM16002001	Pressure range <b>4</b> , 12VDC

#### 2 Pressure range

TYPE	DESCRIPTION
<b>1</b>	Pressure range 5÷50 bar (72.5÷725 psi)
<b>2</b>	Pressure range 50÷200 bar (725÷2900 psi)
<b>3</b>	Pressure range 80÷350 bar (1160÷5100 psi)
<b>4</b>	Pressure range 20÷100 bar (290÷1450 psi) Pressure range 10÷80 bar (145÷1160 psi) only for RM12W/024B

#### 3 Seals

TYPE	DESCRIPTION
<b>B</b>	<b>NBR (Buna)</b> o-ring seals, std configuration
<b>V</b>	<b>FPM (Viton)</b> o-ring seals, contact Sales Dept.

#### 4 Coils and connectors

TYPE	CODE	DESCRIPTION
<b>2) MP35 12VDC</b>	5SL4000120	12VDC-ISO4400 coil
<b>ISO4400</b>	4CN1009995	Connector
<b>4) MP35 24VDC</b>	4SL4000240	24VDC-ISO4400 coil
<b>ISO4400</b>	4CN1009995	Connector

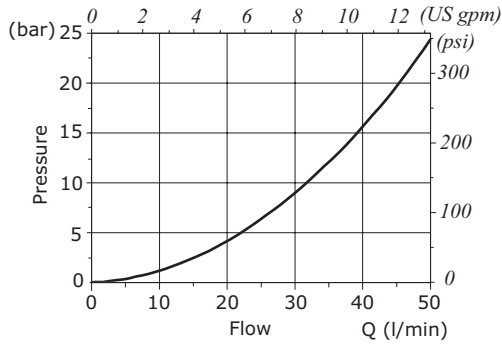
For complete coils and connectors list see from page 206

#### 5 Valve body

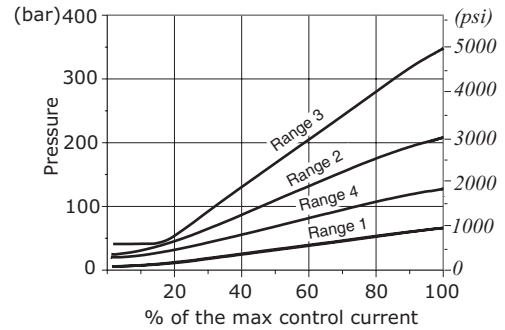
TYPE	CODE	DESCRIPTION
<b>SAE 10/3-G 3/8</b>	3CC1030C11	Aluminium body for cavity 10 valve, G 3/8 std thread
<b>SAE 12/3-G 1/2</b>	3CC1230D11	Aluminium body for cavity 12 valve, G 1/2 std thread
<b>SAE 16/3-G 3/4</b>	3CC1630E11	Aluminium body for cavity 16 valve, G 3/4 std thread

Note: aluminium body can stand up to 210 bar (3050 psi)  
For steel bodies or different threading see from page 217

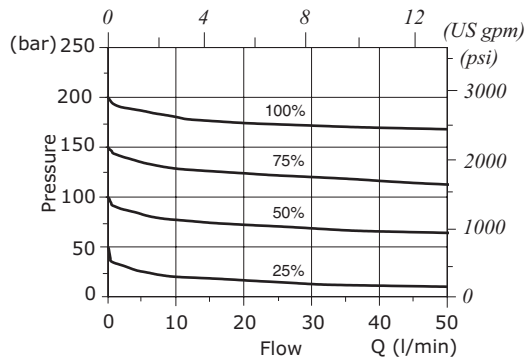
**RM10W pressure drop vs. flow 2->1**



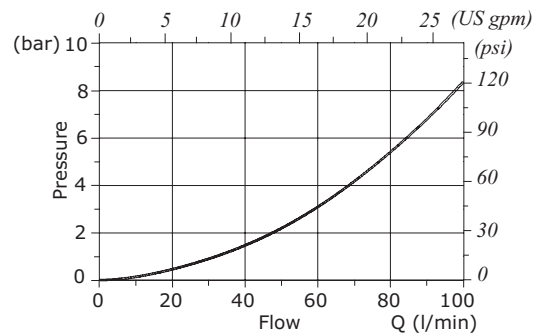
**RM10W pressure reducing vs. control current**



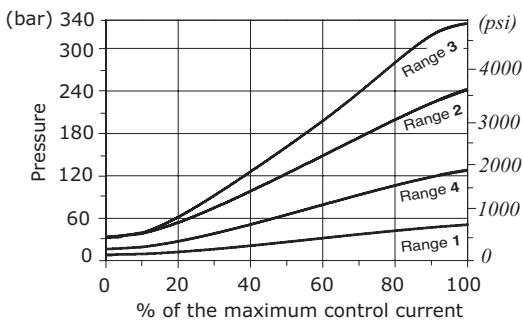
**RM10W pressure reducing vs. flow**  
for % of control current - Pressure range 2 -



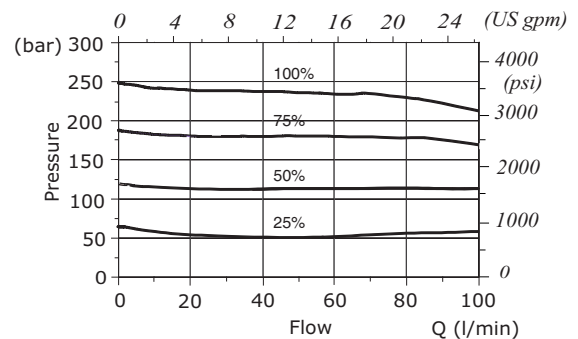
**RM12W pressure drop vs. flow 2->1**



**RM12W pressure reducing vs. control current**

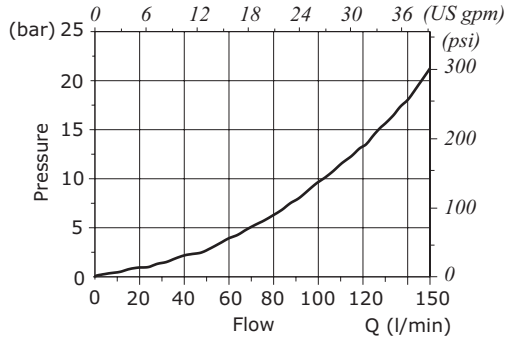


**RM12W pressure reducing vs. flow**  
for % of control current - Pressure range 2 -

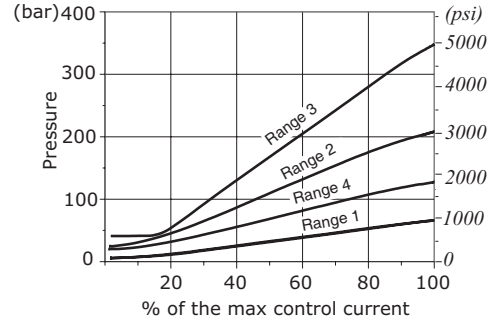


Rating diagrams

RM16W pressure vs. flow 2->1



RM16W pressure setting vs. % max. control current



RM16W pressure reducing vs. flow  
for % of control current - Pressure range 2 -

