

Type VE/B/VMP/VUI/SR
directional solenoid valves

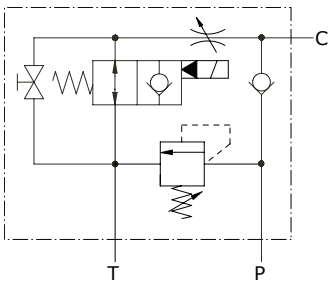
• Single acting cylinder

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

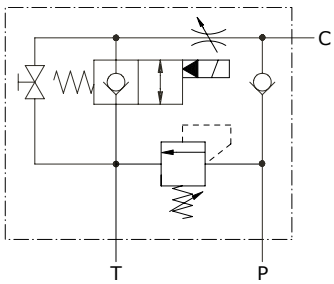
		VE/B/VMP/ VUI/SR 14	VE/B/VMP/ VUI/SR 38	VE/B/VMP/ VUI/SR 12	VE/B/VMP/ VUI/SR 34	VE/B/VMP/ VUI/SR 100
Nominal flow		20 l/min *(5.3 US gpm)*	35 l/min *(9.2 US gpm)*	65 l/min *(17.2 US gpm)*	70 l/min *(18.5 US gpm)*	150 l/min *(39.6 US gpm)*
Max. pressure		Aluminium body = 210 bar *(3050 psi)* Steel body = 350 bar *(5100 psi)*				
Oil leakage		0.25 cm³/min. - *0.015 in³/min.* (5 drops) at 210 bar - *3050 psi*				
Fluid		mineral based oil				
Viscosity		from 10 to 200 cSt				
Max. level of contamination		18/16/13 ISO4406				
Fluid temperature		*with NBR seals* from -20°C *(-4°F)* to 80°C *(176°F)*				
Environmental temp. for working conditions		from -40°C *(-40°F)* to 100°C *(212°F)*				
Weight	*aluminium*	1.32 kg *(2.91 lb)*	1.32 kg *(2.91 lb)*	3.01 kg *(6.64 lb)*	3.01 kg *(6.64 lb)*	5.00 kg *(11.02 lb)*
	steel	2.65 kg *(5.84 lb)*	2.65 kg *(5.84 lb)*	3.19 kg *(7.03 lb)*	3.19 kg *(7.03 lb)*	10.03 kg *(22.11 lb)*

NOTE - For different conditions, please contact Walvoil Sales Dpt.

Normally open configuration (NA)

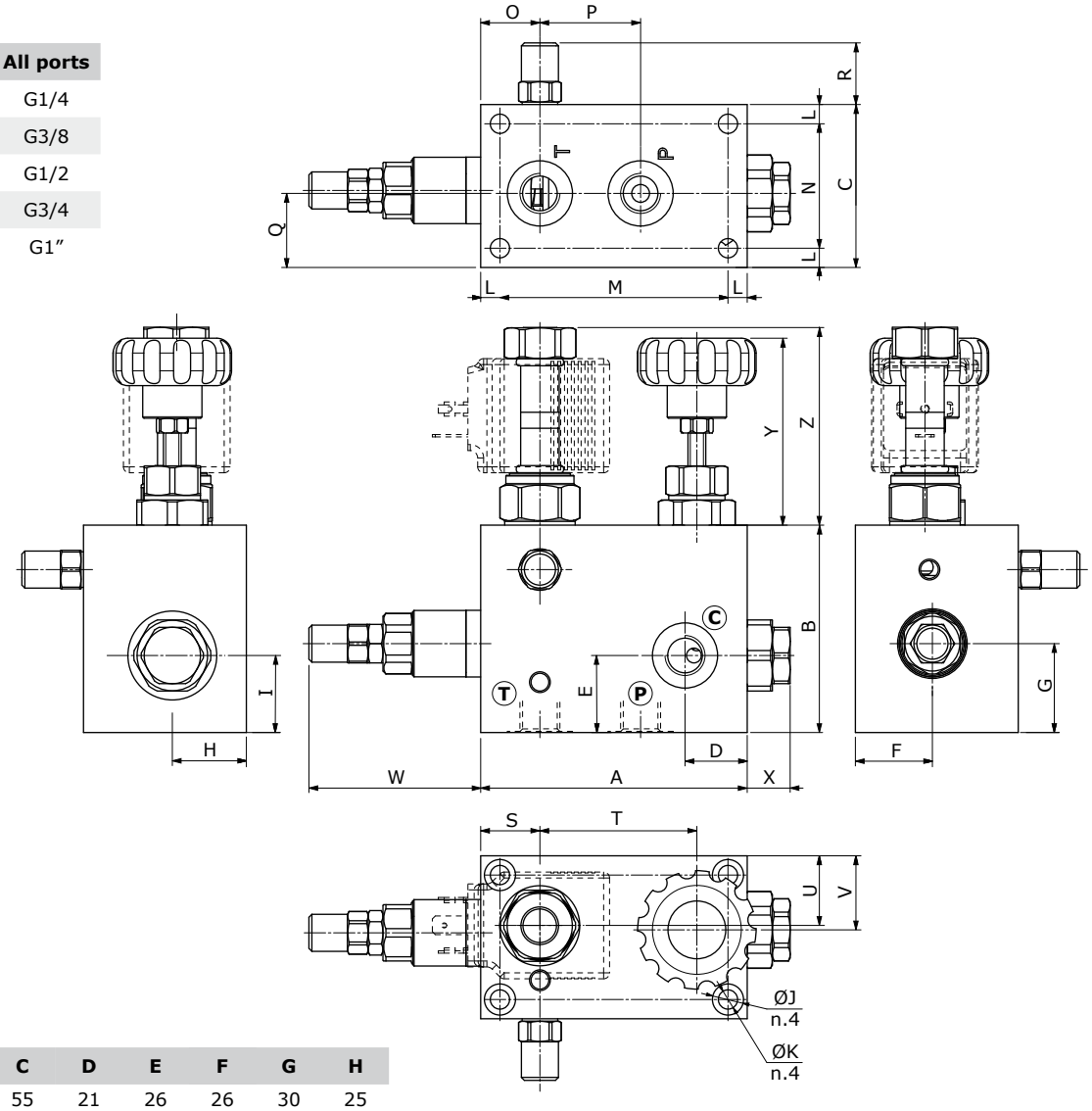


Normally closed configuration (NC)



Dimensions

Valve type	All ports
VE/B/VMP/VUI/SR 14	G1/4
VE/B/VMP/VUI/SR 38	G3/8
VE/B/VMP/VUI/SR 12	G1/2
VE/B/VMP/VUI/SR 34	G3/4
VE/B/VMP/VUI/SR 100	G1"

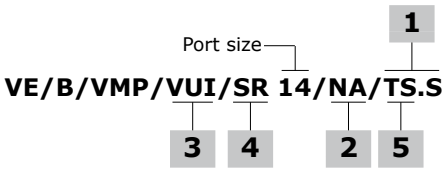


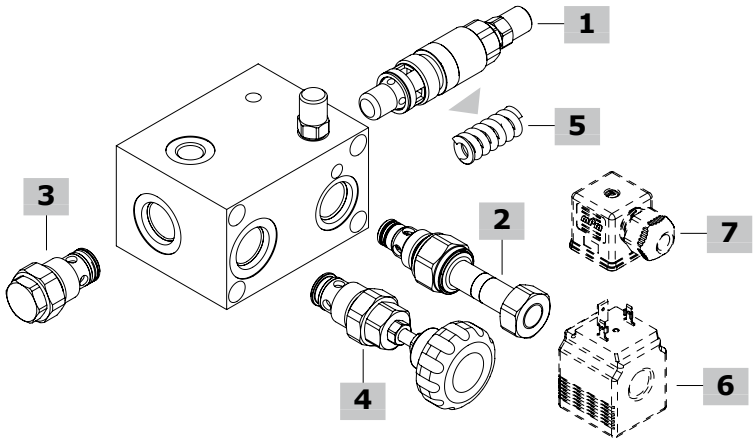
Dimensions are in mm-*in*

Valve type	A	B	C	D	E	F	G	H
VE/B/VMP/ VUI/SR 14	90 *3.54*	70 *2.76*	55 *2.17*	21 *0.83*	26 *1.02*	26 *1.02*	30 *1.18*	25 *0.98*
VE/B/VMP/ VUI/SR 38	90 *3.54*	70 *2.76*	55 *2.17*	22 *0.87*	26 *1.02*	26 *1.02*	30 *1.18*	25 *0.98*
VE/B/VMP/ VUI/SR 12	115 *4.53*	100 *3.94*	70 *2.76*	28 *1.10*	38.5 *1.53*	32 *1.26*	38.5 *1.53*	32 *1.26*
VE/B/VMP/ VUI/SR 34	115 *4.53*	100 *3.94*	70 *2.76*	30 *1.18*	38.5 *1.53*	32 *1.26*	38.5 *1.53*	32 *1.26*
VE/B/VMP/ VUI/SR 100	150 *5.91*	120 *4.72*	80 *3.15*	37 *1.46*	45 *1.77*	36 *1.42*	45 *1.77*	36 *1.42*

Valve type	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z (NA)	Z (NC)
VE/B/VMP/ VUI/SR 14	26 *1.02*	10.5 *0.413*	6.5 *0.256*	6.5 *0.256*	77 *3.03*	42 *1.65*	20 *0.79*	34 *1.34*	25 *0.98*	20.8 *0.82*	20 *0.79*	53 *2.09*	23.5 *0.93*	25 *0.98*	58 *2.28*	14.5 *0.571*	63 *2.48*	66.7 *2.63*	62.8 *2.47*
VE/B/VMP/ VUI/SR 38	26 *1.02*	10.5 *0.413*	6.5 *0.256*	6.5 *0.256*	77 *3.03*	42 *1.65*	20 *0.79*	34 *1.34*	25 *0.98*	20.8 *0.82*	20 *0.79*	53 *2.09*	23.5 *0.93*	25 *0.98*	58 *2.28*	14.5 *0.571*	63 *2.48*	66.7 *2.63*	62.8 *2.47*
VE/B/VMP/ VUI/SR 12	38.5 *1.53*	13.5 *0.531*	8.5 *0.335*	8.5 *0.335*	98 *3.86*	53 *2.09*	29 *1.14*	37 *1.46*	29 *1.14*	23.8 *0.94*	29 *1.14*	61 *2.40*	29 *1.14*	29 *1.14*	56.5 *2.22*	11 *0.433*	72.5 *2.85*	86.4 *3.40*	81 *3.19*
VE/B/VMP/ VUI/SR 34	38.5 *1.53*	13.5 *0.531*	8.5 *0.335*	8.5 *0.335*	98 *3.86*	53 *2.09*	29 *1.14*	41 *1.61*	29 *1.14*	23.5 *0.93*	29 *1.14*	61 *2.40*	29 *1.14*	29 *1.14*	56.5 *2.22*	11 *0.433*	72.5 *2.85*	86.4 *3.40*	81 *3.19*
VE/B/VMP/ VUI/SR 100	45 *1.77*	16.5 *0.65*	10.5 *0.413*	10 *0.394*	130 *5.12*	60 *2.36*	27 *1.06*	60 *2.36*	36 *1.42*	23.5 *0.93*	27 *1.06*	91 *3.58*	36 *1.42*	36 *1.42*	71 *2.80*	16.5 *0.65*	83 *3.27*	79.4 *3.13*	74.2 *2.92*

Ordering codes and description composition





VE/B/VMP/VUI/SR complete valves

Aluminium body and VMP direct type valve configuration
Standard setting 160 bar at 5 l/min (2320 psi at 1.32 US gpm)
Setting range: 50-220 bar (725-3200 psi)

TYPE	CODE	DESCRIPTION
(NA) normally open solenoid valve configuration		
VE/B/VMP/VUI/SR 14/NA/TS.S	1900511101	G1/4 ports
VE/B/VMP/VUI/SR 38/NA/TS.S	1900521103	G3/8 ports
VE/B/VMP/VUI/SR 12/NA/TS.S	1900531110	G1/2 ports
VE/B/VMP/VUI/SR 34/NA/TS.S	1900541106	G3/4 ports
VE/B/VMP/VUI/SR 100/NA/TS.S	1900551110	G1" ports
(NC) normally closed solenoid valve configuration		
VE/B/VMP/VUI/SR 14/NC/TS.S	1900511100	G1/4 ports
VE/B/VMP/VUI/SR 38/NC/TS.S	1900521102	G3/8 ports
VE/B/VMP/VUI/SR 12/NC/TS.S	1900531109	G1/2 ports
VE/B/VMP/VUI/SR 34/NC/TS.S	1900541105	G3/4 ports
VE/B/VMP/VUI/SR 100/NC/TS.S	1900551109	G1" ports
VE/B/VMP/VUI/SR 38/NC/TS.S/SAE	1900521200	SAE8 ports
VE/B/VMP/VUI/SR 12/NC/TS.S/SAE	1900531200	SAE10 ports

For other steel body configurations, SAE thread, other port sizes and configurations with FPM (Viton) seals, please contact our Sales Dpt.

1 Pressure relief valve

TYPE	CODE	DESCRIPTION
For VE/B/VMP/VUI/SR 14 and 38 valves		
VMP 5/TS.S	1100520400	Setting range 50-220 bar *(725-3200 psi)*
For VE/B/VMP/VUI/SR 12 and 34 valves		
VMP 10/TS.S	1100530400	Setting range 50-220 bar *(725-3200 psi)*
For VE/B/VMP/VUI/SR 100 valve		
VMP 20/TS.S	1100540400	Setting range 50-220 bar *(725-3200 psi)*

2 Solenoid valve

TYPE	CODE	DESCRIPTION
For VE/B/VMP/VUI/SR 14 and 38 valves: BER coils required		
EC08M/10NB	0EC08002031	(NA) normally open configuration
EC08M/20NB	0EC08002032	(NC) normally closed configuration
For VE/B/VMP/VUI/SR 12 and 34 valves: BER coils required		
EC10M/10NB	0EC10002012	(NA) normally open configuration
EC10M/20NB	0EC10002013	(NC) normally closed configuration
For VE/B/VMP/VUI/SR 100 valve: BER coils required		
EC16M/10NB	0EC16002020	(NA) normally open configuration
EC16M/20NB	0EC16002021	(NC) normally closed configuration

3 Check valve

TYPE	CODE	DESCRIPTION
For VE/B/VMP/VUI/SR 14 and 38 valves		
VUI 38/Pa0,5	1300020400	Opening pressure 0.5 bar *(7.25 psi)*
For VE/B/VMP/VUI/SR 12 and 34 valves		
VUI 12/Pa0,5	1300030400	Opening pressure 0.5 bar *(7.25 psi)*
For VE/B/VMP/VUI/SR 100 valve		
VUI 34/Pa0,5 pasmag	1300020400	Opening pressure 0.5 bar *(7.25 psi)*

4 Needle valve

TYPE	CODE	DESCRIPTION
For VE/B/VMP/VUI/SR 14 and 38 valves		
VUI/SR 38/V	1305020400	Handknob actuation
For VE/B/VMP/VUI/SR 12 and 34 valves		
VUI/SR 12/V	1305030400	Handknob actuation
For VE/B/VMP/VUI/SR 100 valve		
VUI/SR 34/V	1305040400	Handknob actuation

5 Pressure setting springs

TYPE	CODE	DESCRIPTION
For VE/B/VMP/VUI/SR 14 and 38 valves		
TB	3MOL314311	Setting range 5-40 bar *(72.5-580 psi)*
TV	3MOL314330	Setting range 20-80 bar *(290-1150 psi)*
TS	3MOL315330	Setting range 50-220 bar *(725-3200 psi)*
TR	3ML1143600	Setting range 180-350 bar *(2600-5075 psi)*
For VE/B/VMP/VUI/SR 12 and 34 valves		
TB	3MOL316410	Setting range 5-40 bar *(72.5-580 psi)*
TV	3ML1154300	Setting range 20-80 bar *(290-1150 psi)*
TS	3MOL317420	Setting range 50-220 bar *(725-3200 psi)*
TR	3MOL317440	Setting range 180-350 bar *(2600-5075 psi)*
For VE/B/VMP/VUI/SR 100 valve		
TB	3ML1184300	Setting range 5-40 bar *(72.5-580 psi)*
TV	3ML1174500	Setting range 20-80 bar *(290-1150 psi)*
TS	3ML1204200	Setting range 50-220 bar *(725-3200 psi)*
TR	3ML1214500	Setting range 180-350 bar *(2600-5075 psi)*

6 Coils (not included)

TYPE	CODE	DESCRIPTION
BER 12VDC	4SLE001200A	12VDC-ISO4400 for EC08M
BT 12VDC	4SL3000120	12VDC-ISO4400 for VSE/P/2 and VSE/P/2-150

For complete coils list see from page 433

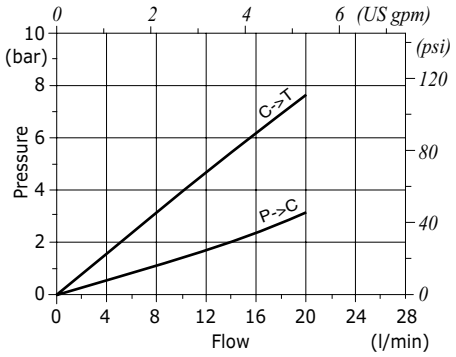
7 Connector (not included)

TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995	Connector

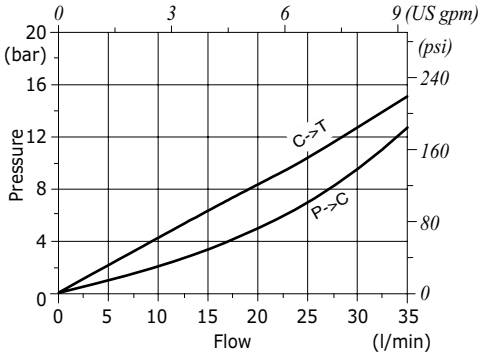
For complete connectors list see from page 433

Rating diagrams

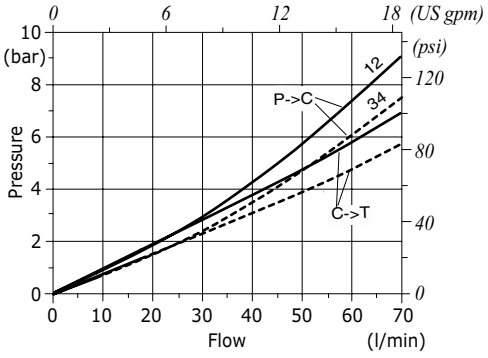
VE/B/VMP/VUI/SR 14 pressure drop vs. flow from P→C - C→T



VE/B/VMP/VUI/SR 38 pressure drop vs. flow from P→C - C→T



VE/B/VMP/VUI/SR (12-34) pressure drop vs. flow from P→C - C→T



VE/B/VMP/VUI/SR 100 pressure drop vs. flow from P→C - C→T

