

Part number:

Directional solenoid valves



**Type VE/B
directional solenoid valves**

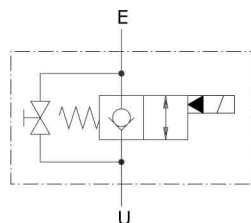
- Two way
- With emergency
- Pilot operated

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

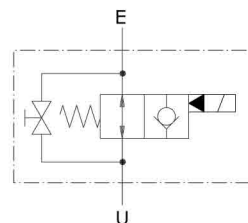
	VE/B 14	VE/B 38	VE/B 12	VE/B 34	VE/B 100	
Nominal flow	20 l/min (5.3 US gpm)	40 l/min (10.6 US gpm)	60 l/min (15.8 US gpm)	75 l/min (19.8 US gpm)	160 l/min (42.3 US gpm)	
Max. pressure	Aluminium body = 210 bar (3050 psi) Steel body = 350 bar (5100 psi)					
Oil leakage	0.25 cm ³ /min - 0.015 in ³ /min. (2 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	<i>aluminium</i>	0.39 kg (0.86 lb)	0.39 kg (0.86 lb)	1.10 kg (2.43 lb)	1.08 kg (2.38 lb)	1.58 kg (3.48 lb)
	<i>steel</i>	0.77 kg (1.70 lb)	0.74 kg (1.63 lb)	1.93 kg (4.25 lb)	1.85 kg (4.08 lb)	2.90 kg (6.39 lb)

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

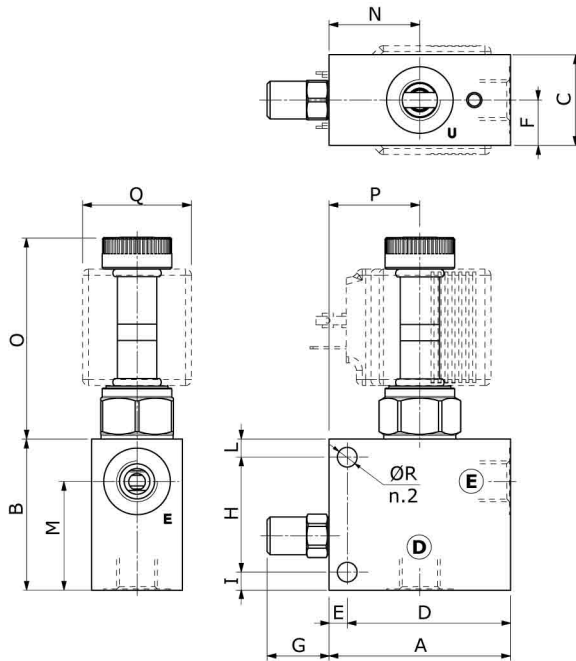
Normally closed configuration (NC)



Normally open configuration (NA)



Dimensions



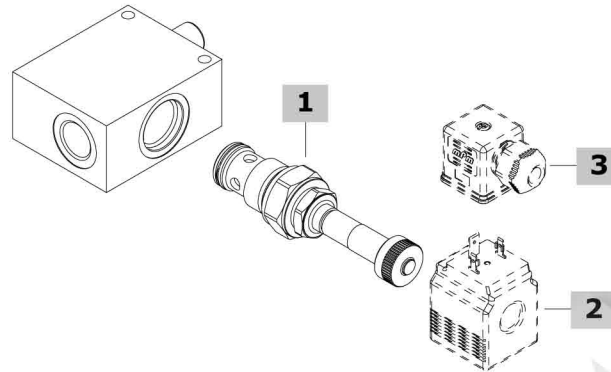
Valve type	U	E
VE/B 14	G1/4	G1/4
VE/B 38	G3/8	G3/8
VE/B 12	G1/2	G1/2
VE/B 34	G3/4	G3/4
VE/B 100	G1"	G1"

Dimensions are in mm-in

Valve type	A	B	C	D	E	F	G	H	I	L	M	N	O		P	Q	ØR
													(NA)	(NC)			
VE/B 14	60 2.36	50 1.97	30 1.18	54 2.13	6 0.236	15 0.59	20 0.79	38 1.50	6 0.236	6 0.236	36 1.42	30 1.18	66.7 2.63	62.8 2.47	30 1.18	36 1.42	6.5 0.256
VE/B 38	60 2.36	50 1.97	30 1.18	54 2.13	6 0.236	15 0.59	20 0.79	38 1.50	6 0.236	6 0.236	36 1.42	30 1.18	66.7 2.63	62.8 2.47	30 1.18	36 1.42	6.5 0.256
VE/B 12	80 3.15	65 2.56	40 1.57	74 2.91	6 0.236	20 0.79	23 0.91	53 2.09	6 0.236	6 0.236	43 1.69	40 1.57	86.4 3.40	81 3.19	40 1.57	36.5 1.44	6.5 0.256
VE/B 34	80 3.15	65 2.56	40 1.57	74 2.91	6 0.236	20 0.79	23 0.91	53 2.09	6 0.236	6 0.236	43 1.69	40 1.57	86.4 3.40	81 3.19	40 1.57	36.5 1.44	6.5 0.256
VE/B 100	90 3.54	80 3.15	50 1.97	82.5 3.25	7.5 0.295	25 0.98	23 0.91	65 2.56	7.5 0.295	7.5 0.295	49 1.93	43 1.69	79.4 3.13	74.2 2.92	43 1.69	36.5 1.44	8.5 0.335

Ordering codes and description composition

Port size
VE/B 14/NA
1



VE/B complete valves

TYPE	CODE	DESCRIPTION
(NA) normally open solenoid valve configuration		
VE/B 14/NA/EC08M	1720011101	Aluminium body, G1/4 ports
VE/B 38/NA/EC08M	1720021106	Aluminium body, G3/8 ports
VE/B 12/NA	1720031112	Aluminium body, G1/2 ports
VE/B 34/NA	1720041114	Aluminium body, G3/4 ports
VE/B 100/NA	1720051108	Aluminium body, G1" ports
VE/B 14/NA/ac	1720012101	Steel body, G1/4 ports
VE/B 38/NA/ac	1720022101	Steel body, G3/8 ports
VE/B 12/NA/ac	1720032104	Steel body, G1/2 ports
VE/B 34/NA/ac	1720042105	Steel body, G3/4 ports
VE/B 100/NA/ac	1720052109	Steel body, G1" ports
(NC) normally closed solenoid valve configuration		
VE/B 14/NC/EC08M	1720011100	Aluminium body, G1/4 ports
VE/B 38/NC/EC08M	1720021105	Aluminium body, G3/8 ports
VE/B 12/NC	1720031111	Aluminium body, G1/2 ports
VE/B 34/NC	1720041113	Aluminium body, G3/4 ports
VE/B 100/NC	1720051107	Aluminium body, G1" ports
VE/B 14/NC/ac	1720012100	Steel body, G1/4 ports
VE/B 38/NC/ac	1720022102	Steel body, G3/8 ports
VE/B 12/NC/ac	1720032103	Steel body, G1/2 ports
VE/B 34/NC/ac	1720042104	Steel body, G3/4 ports
VE/B 100/NC/ac	1720052108	Steel body, G1" ports

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

1 Solenoid valve

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

2 Coils

TYPE	CODE	DESCRIPTION
BER 12VDC	4SLE001200A	12VDC-ISO4400 coil

For complete coils list see from page 433

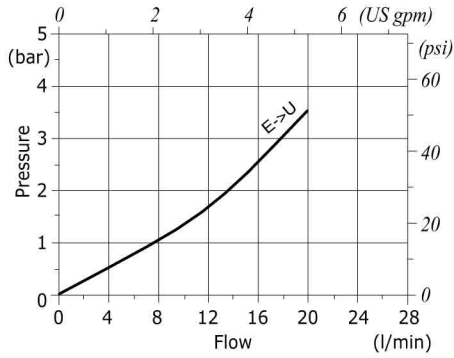
3 Connector

TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995	Connector

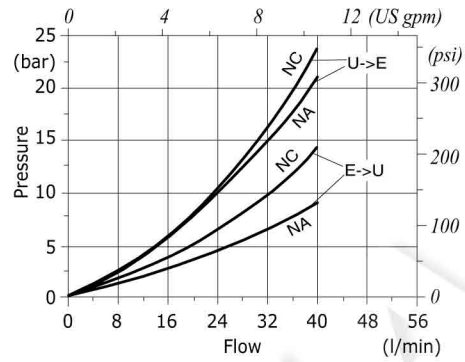
For complete connectors list see from page 433

Rating diagrams

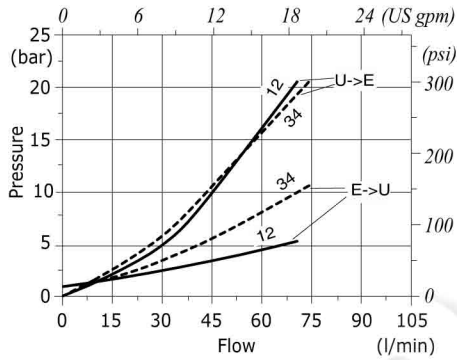
VE/B 14 pressure drop vs. flow from E→U



VE/B 38 pressure drop vs. flow from E→U and U→E



VE/B 12-34 pressure drop vs. flow from E→U and U→E



VE/B 100 pressure drop vs. flow from E→U and U→E

