



EW... type directional solenoid valves - 2 ways / 2 positions

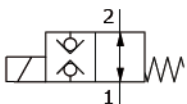
- Direct acting
- Poppet type
- Normally open and closed configurations
- With check in both directions
- From SAE08 to SAE12 cavities

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

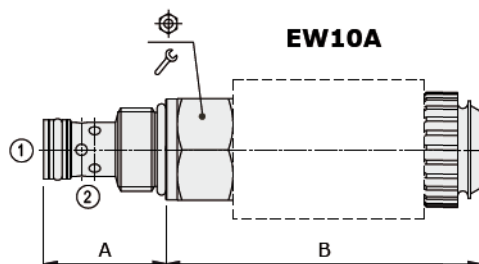
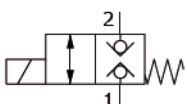
	EW08A	EW10A-EW10B	EW12B-EW12C
Nominal flow	10 l/min (2.64 US gpm)	25-30 l/min (6.6 - 7.9 US gpm)	50 l/min (13.2 US gpm)
Max. pressure	210 bar (3050 psi)		
Oil leakage	at 210 bar (3050 psi) 0.25 cm ³ /min (0.015 in ³ /min)	0.25 cm ³ /min (0.015 in ³ /min)	0.25 cm ³ /min (0.015 in ³ /min)
Fluid	mineral based oil		
Viscosity	10-200 cSt		
Max level of contamin.	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 8/2	SAE 10/2	SAE 12/2
Coil type*	BT	BIN 19	BIN 22
Nominal voltages	12 VDC - 24 VDC ± 10%		
Power rating	21 W	29 W (12 VDC) - 31 W (24 VDC)	32.6 W (12 VDC) - 31 W (24 VDC)
Weight	0.16 kg (0.35 lb)	0.25 kg (0.55 lb)	0.44 kg (0.97 lb)

NOTE - For different conditions, please contact Walvoil Sales Dpt. - *For coils further features see from page 190.

Normally open configuration



Normally closed configuration

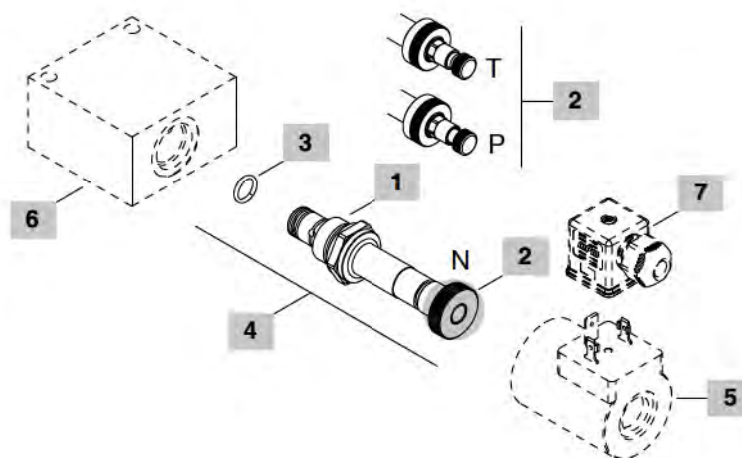
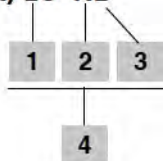


Valve type	A		B		⊕	⌘	Nm	lbft
	mm	in	mm	in				
EW08A/10NB	28.5	1.12	65.7	2.59	24	30	22	
EW08A/20NB	28.5	1.12	70.9	2.79	24	30	22	
EW10A/20PB	32.3	1.27	83.3	3.28	27	50	37	
EW10B/10NB	32.3	1.27	99.8	3.93	27	50	37	
EW12C/20PB	46	1.81	98.7	3.89	32	80	59	
EW12B/10NB	46	1.81	102.8	4.05	32	80	59	

For dimensions with different type of emergency see page 197

Ordering codes and description composition

EW08A/10 NB



1 Spool

TYPE	DESCRIPTION
1	Normally open configuration
2	Normally closed configuration

2 Emergency

TYPE	DESCRIPTION
N	Without emergency
T	Screw type
P	Push button type (N.C.)

Note: emergency type depends on cavity type. See chapter 4 for availability.

3 Seals

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

4 Cartridges

TYPE	CODE	DESCRIPTION
SAE cavity 8/2		
EW08A/10NB	0EW08002001	Normally open configuration (N.O.) without emergency
EW08A/10TB	0EW08002003	Normally open configuration (N.O.) with screw type emergency
EW08A/20NB	0EW08002006	Normally closed configuration (N.C.) Without emergency
EW08A/20PB	0EW08002004	Normally closed configuration (N.C.) with push button emergency
EW08A/20TB	0EW08002002	Normally open configuration (N.C.) with screw type emergency
SAE cavity 10/2		
EW10B/10NB	0EW10002004	Normally open configuration (N.O.) without emergency
EW10A/20PB	0EW10002002	Normally closed configuration (N.C.) with push button emergency
SAE cavity 12/2		
EW12B/10NB	0EW12002005	Normally open configuration (N.O.) without emergency
EW12C/20PB	0EW12002003	Normally closed configuration (N.C.) with push button emergency

5 Coils

TYPE	CODE	DESCRIPTION
BT 12VDC	4SL3000120	12VDC-ISO4400 coil for EW08A
BIN 19 VDC	4SL6000121	12VDC-ISO4400 coil for EW10A-EW10B
BIN 22 VDC	4SL6000128	12VDC-ISO4400 coil for EW12A-EW12C

For complete coils list see from page 190

6 Valve body

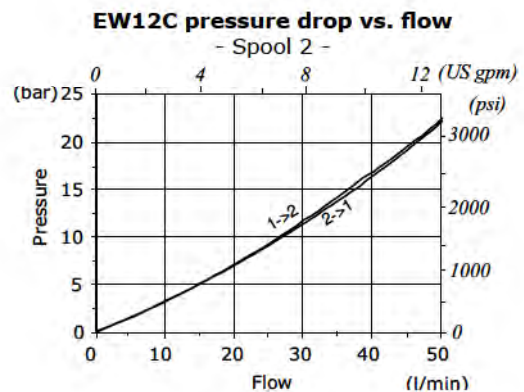
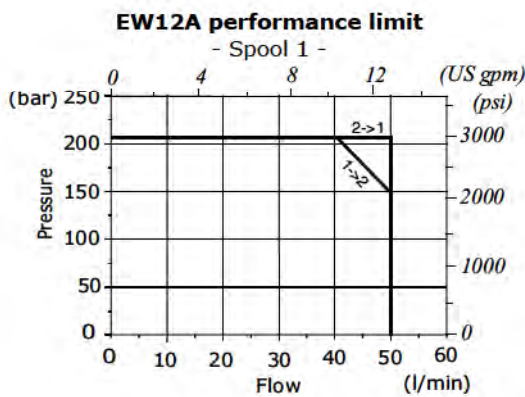
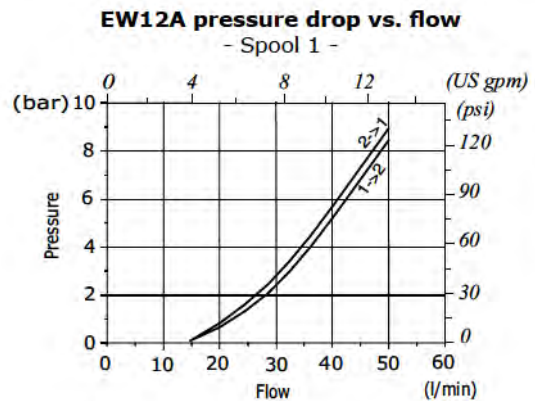
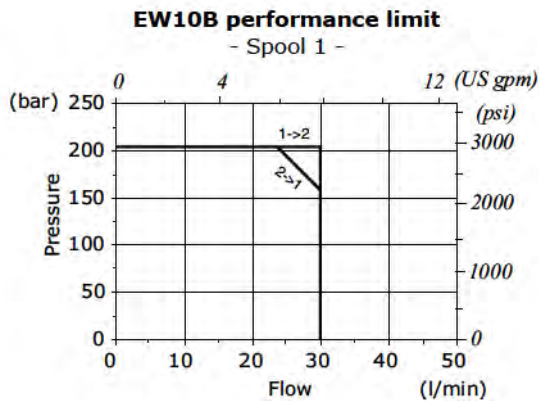
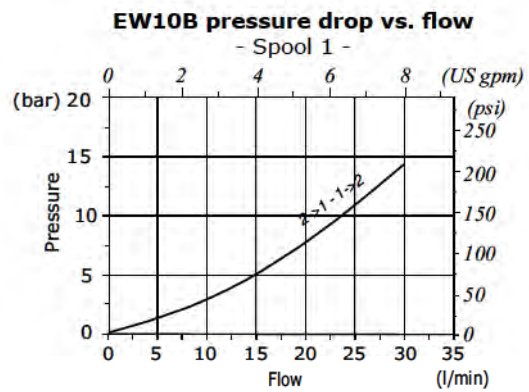
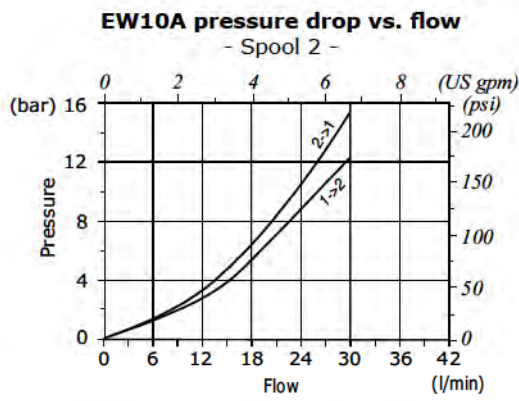
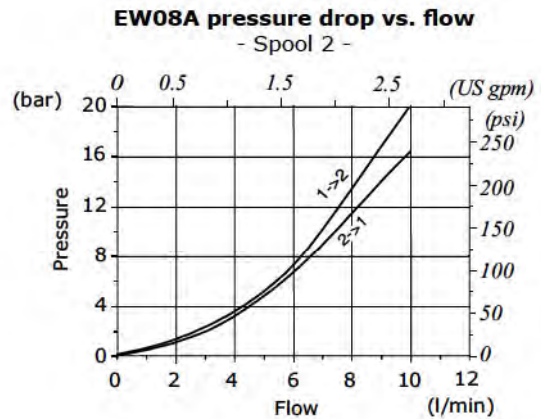
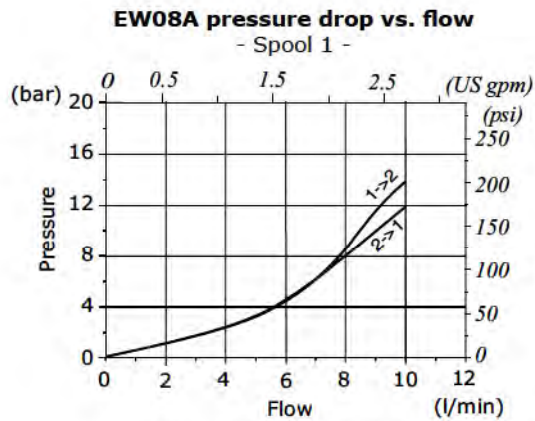
TYPE	CODE	DESCRIPTION
SAE 08/2-G 3/8	3CC0820C11	Aluminium body for cavity 08 valve, G3/8 std thread
SAE 10/2-G 3/8	3CC1020C11	Aluminium body for cavity 08 valve, G3/8 std thread
SAE 12/2-G 1/2	3CC1220D11	Aluminium body for cavity 12 valve, G1/2 std thread

For steel bodies or different threading see from page 199

7 Connector

TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995	Connector

For complete connectors list see from page 190





EW..M type directional solenoid valves - 2 ways / 2 positions

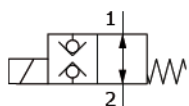
- Direct acting
- Poppet type
- Normally open and closed configurations
- With check in both directions
- From SAE08 to SAE10 cavities

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

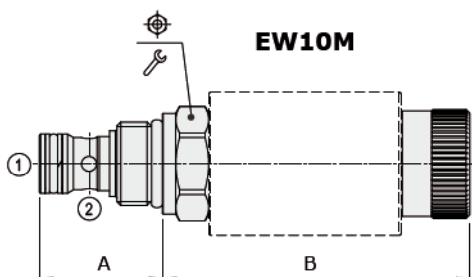
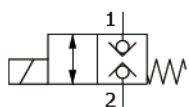
	EW08M	EW10M
Nominal flow	20 l/min (5.28 US gpm)	40 l/min (10.6 US gpm)
Max. pressure	250 bar (3600 psi)	350 bar (5075 psi)
Oil leakage	at 210 bar (3050 psi) 0.25 cm ³ /min (0.015 in ³ /min)	0.25 cm ³ /min (0.015 in ³ /min)
Fluid	mineral based oil	
Viscosity	10-200 cSt	
Max level of contamination	18/16/13 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 8/2	SAE 10/2
Coil type*	BER	BH
Nominal voltages	12 VDC - 24 VDC ± 10%	
Power rating	22.8 W (12 VDC) - 22.5 W (24 VDC)	33 W
Weight	0.15 kg (0.33 lb)	0.30 kg (0.66 lb)

NOTE - For different conditions, please contact Walvoil Sales Dpt. - *For coils further features see from page 190.

Normally open configuration



Normally closed configuration

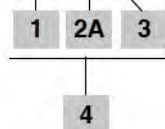


Valve type	A		B				
	mm	in	mm	in		Nm	lbft
EW08M/10NB	28	1.10	60.2	2.37	24	30	22
EW08M/20NB	28	1.10	62.5	2.46	24	30	22
EW10M/20NB	32.5	1.28	81.3	3.20	27	50	37

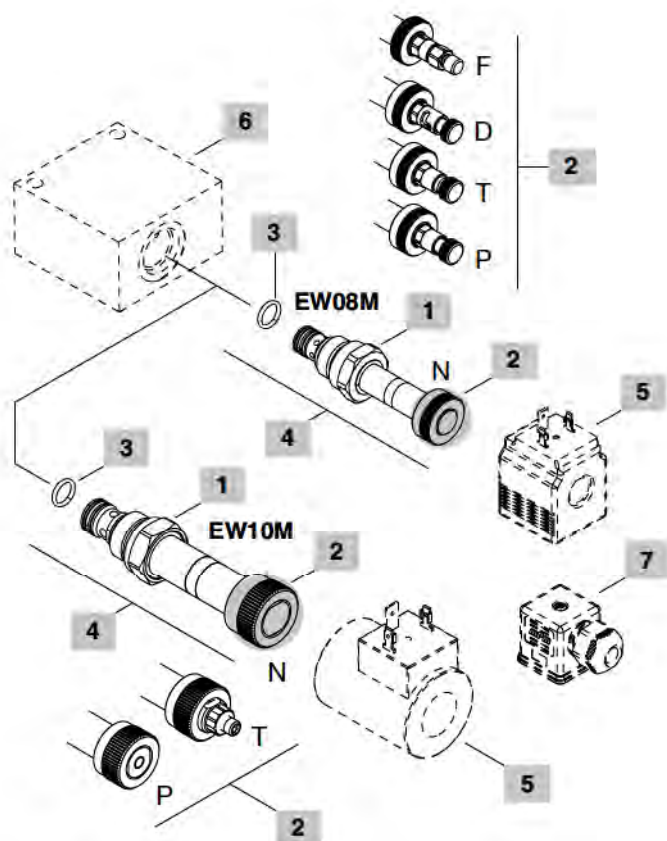
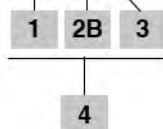
For dimensions with different type of emergency see page 197

Ordering codes and description composition

EW08M/10 NB



EW10M/20 NB



1 Spool

TYPE	DESCRIPTION
1	Normally open configuration
2	Normally closed configuration

2 Emergency

TYPE	DESCRIPTION
N	Without emergency
P	Push button type (N.C.)
T	Screw type (N.C. - N.O. for EW08M / N.C. for EW10M)
D	Push type with detent (N.C.)
F	Pull button type (N.O.)

3 Seals

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

4 Cartridges

TYPE	CODE	DESCRIPTION
SAE cavity 8/2		
EW08M/10NB	0EW08002014	Normally open configuration (N.O.) without emergency
EW08M/10FB	0EW08002015	(N.O.) pull button emergency
EW08M/10TB	0EW08002016	(N.O.) screw type emergency
EW08M/20NB	0EW08002018	Normally closed configuration (N.C.) without emergency
EW08M/20PB	0EW08002019	(N.C.) push button emergency
EW08M/20TB	0EW08002020	(N.C.) screw type emergency
EW08M/20DB	0EW08002021	(N.C.) push type with detent emergency

SAE cavity 10/2

EW10M/20NB	0EW10002008	Normally closed configuration (N.C.) without emergency
EW10M/20TB	0EW10002009	(N.C.) screw type emergency
EW10M/20PB	0EW10002010	(N.C.) push button emergency

5 Coils

TYPE	CODE	DESCRIPTION
BER 12VDC	4SLE001200	12VDC-ISO4400 coil for EW08M
BH 12VDC	4SLD001200	12VDC-ISO4400 coil for EW10M

For complete coils list see from page 190

6 Valve body

TYPE	CODE	DESCRIPTION
SAE 08/2-G 3/8	3CC0820C11	Aluminium body for cavity 08 valve, G3/8 std thread
SAE 10/2-G 3/8	3CC1020C11	Aluminium body for cavity 10 valve, G3/8 std thread

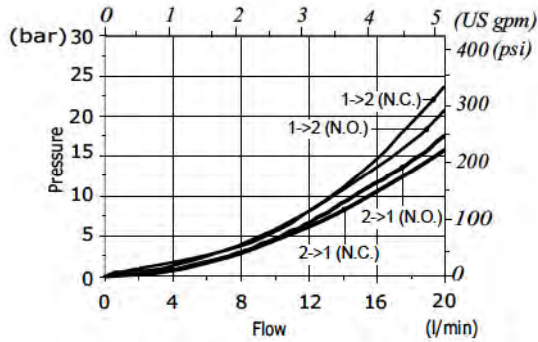
For steel bodies or different threading see from page 199

7 Connector

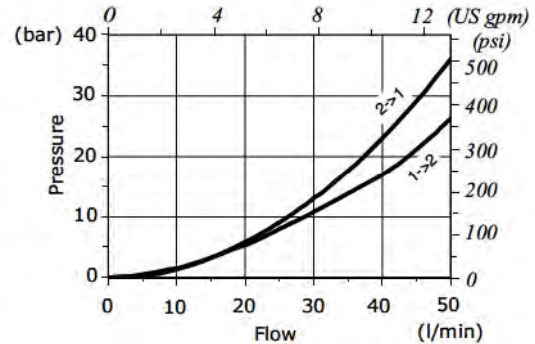
TYPE	CODE	DESCRIPTION
ISO4400	4CN1009995	Connector

For complete connectors list see from page 190

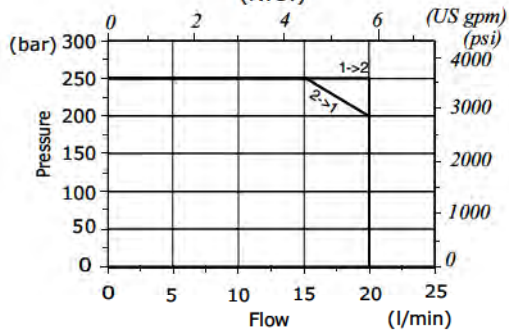
EW08M pressure drop vs. flow



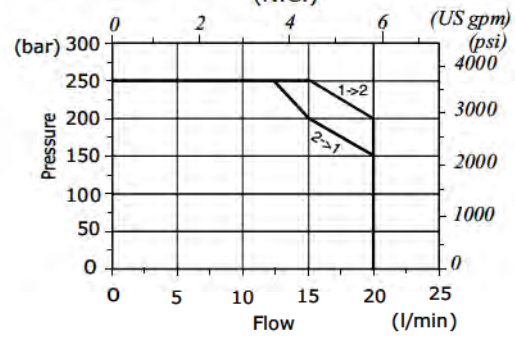
EW10M pressure drop vs. flow (N.C.)



EW08M performance limit (N.O.)



EW08M performance limit (N.C.)



EW10M performance limit (N.C.)

