



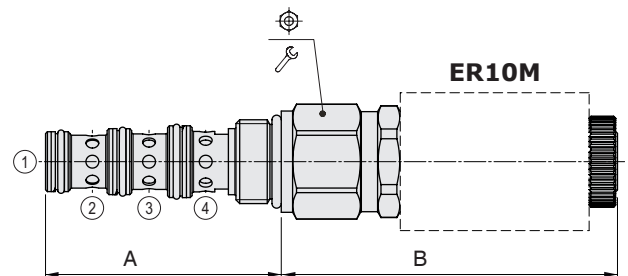
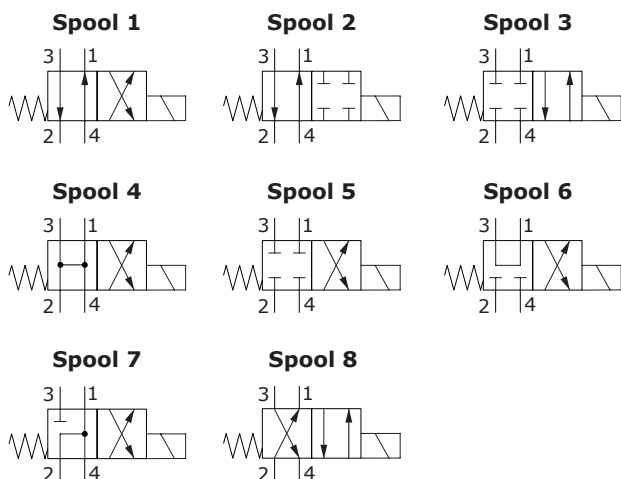
ER..M type directional solenoid valve - 4 way / 2 positions

- Direct acting
- Spool type
- From SAE08 to SAE12 cavities

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

| | ER08M | ER10M | ER12M |
|--|---|---|---|
| Nominal flow | 20 l/min (5.3 US gpm) | 40 l/min (10.5 US gpm) | 60 l/min (15.8 US gpm) |
| Max. pressure | port 1 | 210 bar (3050 psi) | 250 bar (3600 psi) |
| | port 2,3,4 | 210 bar (3050 psi) | 320 bar (4600 psi) |
| Oil leakage | at 210 bar (3050 psi) 40 cm ³ /min (2.44 in ³ /min) | 80 cm ³ /min (4.88 in ³ /min) | 200 cm ³ /min (12.20 in ³ /min) |
| Fluid | mineral based oil | | |
| Viscosity | 10-200 cSt | | |
| Max level of contamination | 18/16/13 ISO4406 | | |
| Fluid temperature | with NBR seals | from -20°C (-4°F) to 80°C (176°F) | |
| | with FPM seals | 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 08/4 | SAE 10/4 | SAE 12/4 |
| Coils type* | BER | BC | BH |
| Nominal voltages | 12 VDC - 24 VDC ± 10% | 12 VDC - 24 VDC ± 10% | 12 VDC - 24 VDC ± 10% |
| Power rating | 22.8 W (12 VDC) | 26.1 W (12 VDC) | 33 W (12/24 VDC) |
| | 22.5 W (24 VDC) | 25.9 W (24 VDC) | |
| Weight | 0.20 kg (0.44 lb) | 0.50 kg (1.10 lb) | 0.73 kg (1.61 lb) |

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

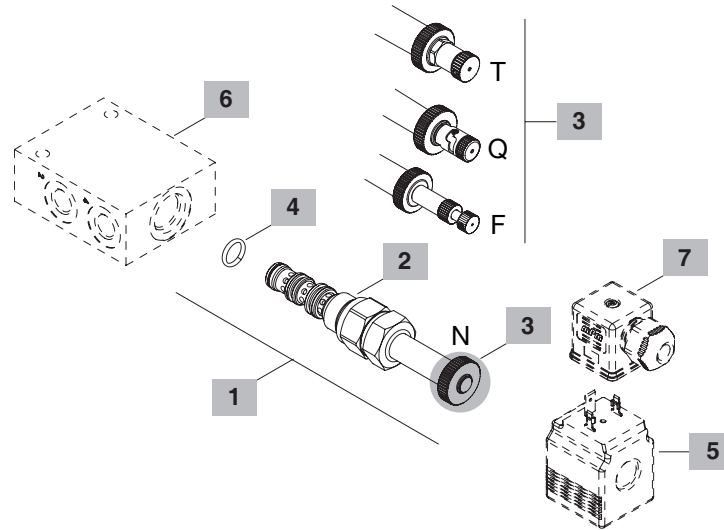
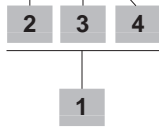


| Valve type | A | | B | | ⊕ | ⌘ | Nm | lbft |
|------------|------|------|------|------|----|----|----|------|
| | mm | in | mm | in | | | | |
| ER08M/..NB | 53.6 | 2.11 | 75 | 2.95 | 24 | 30 | 22 | |
| ER10M/..NB | 62.4 | 2.46 | 89 | 3.50 | 27 | 50 | 37 | |
| ER12M/..NB | 81.4 | 3.20 | 85.5 | 3.37 | 32 | 85 | 63 | |

For dimensions with different type of emergency see page 213

Ordering codes and description composition

ER08M/10 NB



1 Cartridges

| TYPE | CODE | DESCRIPTION |
|------------------------|-------------|----------------------------|
| SAE cavity 08/4 | | |
| ER08M/10NB | 0ER08002016 | Without emergency, spool 1 |
| ER08M/20NB | 0ER08002017 | Without emergency, spool 2 |
| ER08M/30NB | 0ER08002018 | Without emergency, spool 3 |
| ER08M/40NB | 0ER08002019 | Without emergency, spool 4 |
| ER08M/50NB | 0ER08002020 | Without emergency, spool 5 |
| ER08M/60NB | 0ER08002021 | Without emergency, spool 6 |
| ER08M/70NB | 0ER08002022 | Without emergency, spool 7 |
| ER08M/80NB | 0ER08002023 | Without emergency, spool 8 |
| SAE cavity 10/4 | | |
| ER10M/10NB | 0ER10002023 | Without emergency, spool 1 |
| ER10M/20NB | 0ER10002024 | Without emergency, spool 2 |
| ER10M/30NB | 0ER10002025 | Without emergency, spool 3 |
| ER10M/40NB | 0ER10002026 | Without emergency, spool 4 |
| ER10M/50NB | 0ER10002027 | Without emergency, spool 5 |
| ER10M/60NB | 0ER10002028 | Without emergency, spool 6 |
| ER10M/70NB | 0ER10002029 | Without emergency, spool 7 |
| ER10M/80NB | 0ER10002030 | Without emergency, spool 8 |
| SAE cavity 12/4 | | |
| ER12M/10NB | 0ER12002021 | Without emergency, spool 1 |
| ER12M/20NB | 0ER12002023 | Without emergency, spool 2 |
| ER12M/50NB | 0ER12002024 | Without emergency, spool 5 |
| ER12M/80NB | 0ER12002022 | Without emergency, spool 8 |

2 Spool

| TYPE | DESCRIPTION |
|------|-------------|
| 1 | Spool 1 |
| 2 | Spool 2 |
| 3 | Spool 3 |
| 4 | Spool 4 |
| 5 | Spool 5 |
| 6 | Spool 6 |
| 7 | Spool 7 |
| 8 | Spool 8 |

3 Emergency

| TYPE | DESCRIPTION |
|------|-----------------------|
| N | Without emergency |
| F | Pull button type |
| Q | Pull type with detent |
| T | Screw type |

4 Seals

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

Note (*): for ER12M, NBR and polyurethane D-ring

5 Coils

| TYPE | CODE | DESCRIPTION |
|--------------------------|------------|------------------------------|
| BER 12VDC-ISO4400 | 4SLE001200 | 12VDC-ISO4400 coil for ER08M |
| BC 12VDC-ISO4400 | 4SL8000120 | 12VDC-ISO4400 coil for ER10M |
| BH 12VDC-ISO4400 | 4SLD001200 | 12VDC-ISO4400 coil for ER12M |

For complete coils list see from page 206

6 Valve body

| TYPE | CODE | DESCRIPTION |
|-----------------------|------------|---|
| SAE 08/4-G 3/8 | 3CC0840C11 | Aluminium body for cavity 08 valve, G3/8 std thread |
| SAE 10/4-G 3/8 | 3CC1020C11 | Aluminium body for cavity 10 valve, G3/8 std thread |
| SAE 12/4-G 1/2 | 3CC1240D11 | Aluminium body for cavity 12 valve, G1/2 thread |

Note: aluminium body can stand up to 210 bar (3050 psi)
For steel bodies or different threading see from page 219

7 Connector

| TYPE | CODE | DESCRIPTION |
|----------------|------------|-------------|
| ISO4400 | 4CN1009995 | Connector |

For complete connectors list see from page 206

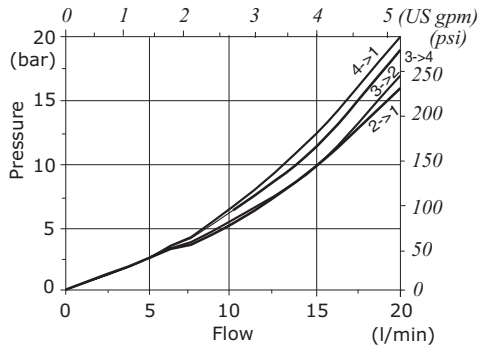
Directional control valves

Directional solenoid valves - 4 way / 2 positions

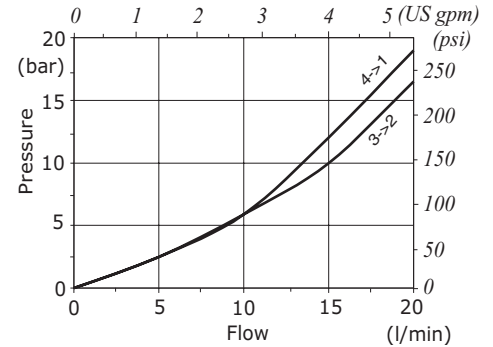
ER..M type

Rating diagrams

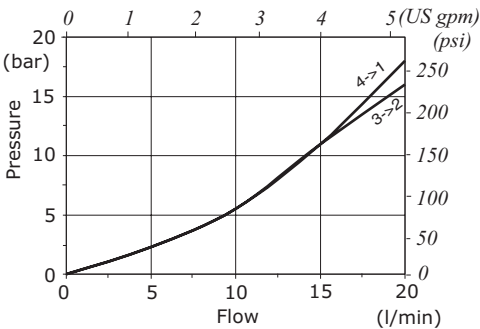
ER08M pressure drop vs. flow
- Spool 1 -



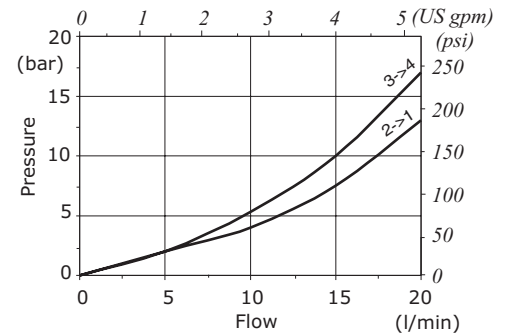
ER08M pressure drop vs. flow
- Spool 2 -



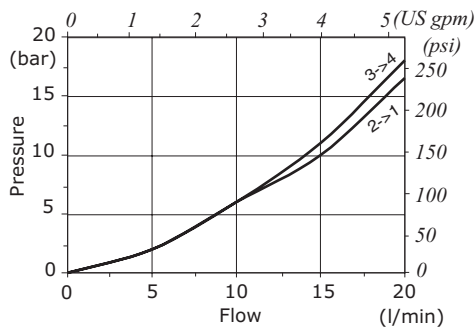
ER08M pressure drop vs. flow
- Spool 3 -



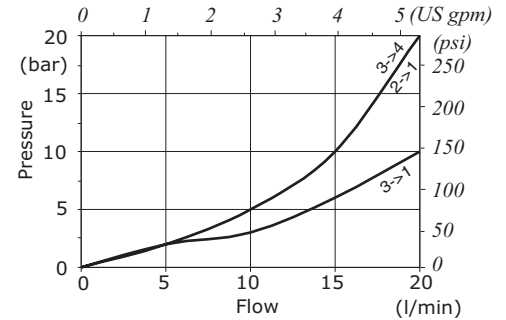
ER08M pressure drop vs. flow
- Spool 4 -



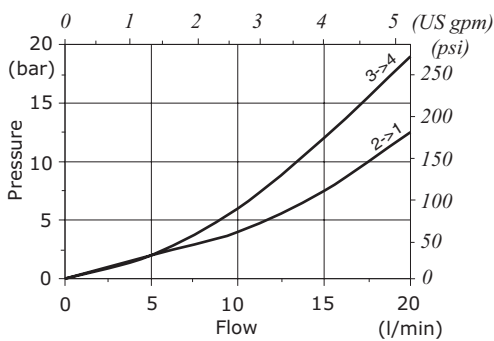
ER08M pressure drop vs. flow
- Spool 5 -



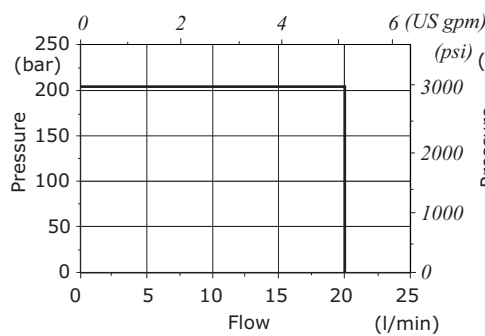
ER08M pressure drop vs. flow
- Spool 6 -



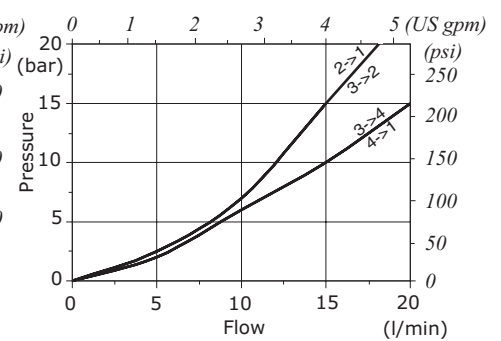
ER08M pressure drop vs. flow
- Spool 7 -



ER08M performance limit

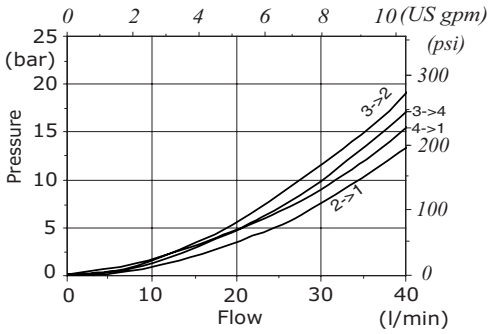


ER08M pressure drop vs. flow
- Spool 8 -

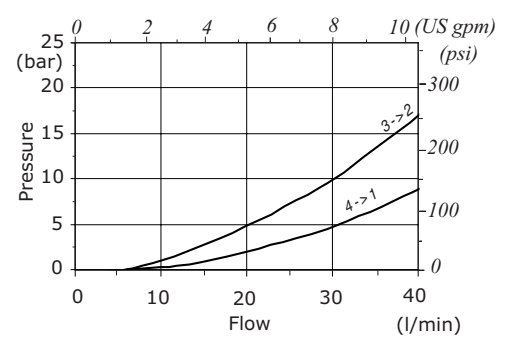


Rating diagrams

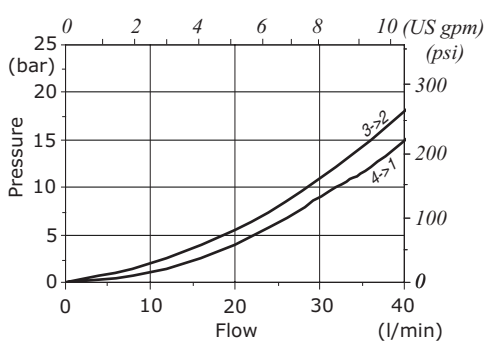
ER10M pressure drop vs. flow
- Spool 1 -



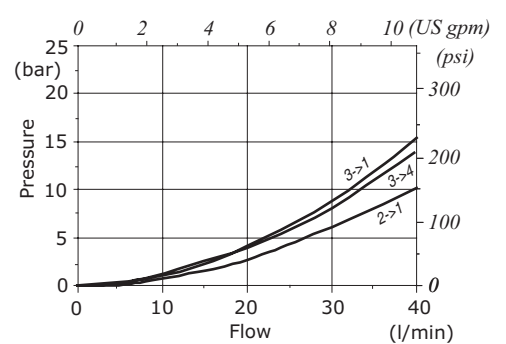
ER10M pressure drop vs. flow
- Spool 2 -



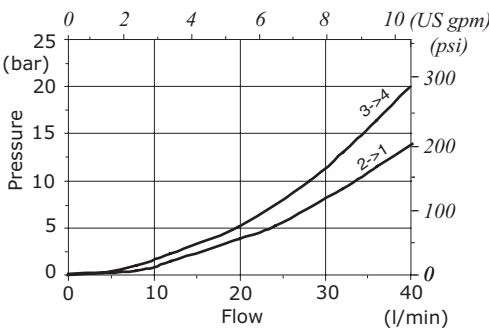
ER10M pressure drop vs. flow
- Spool 3 -



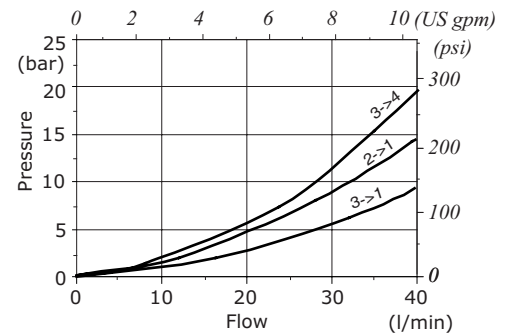
ER10M pressure drop vs. flow
- Spool 4 -



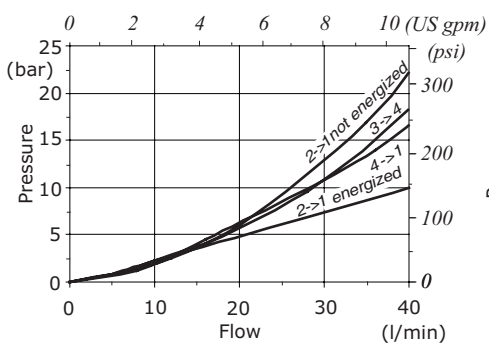
ER10M pressure drop vs. flow
- Spool 5 -



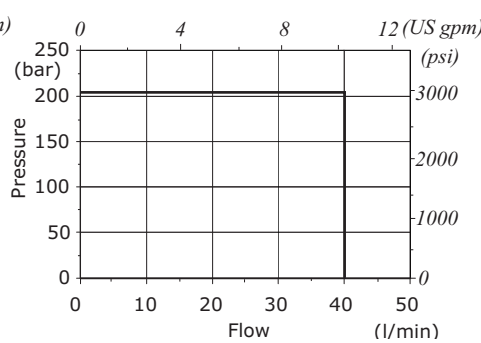
ER10M pressure drop vs. flow
- Spool 6 -



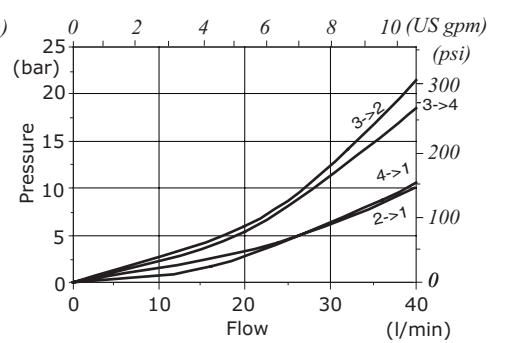
ER10M pressure drop vs. flow
- Spool 7 -



ER10M performance limit



ER10M pressure drop vs. flow
- Spool 8 -



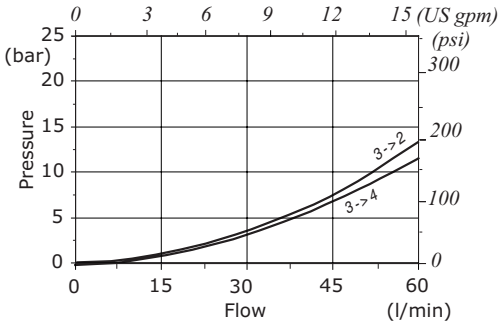
Directional control valves

Directional solenoid valves - 4 way / 2 positions

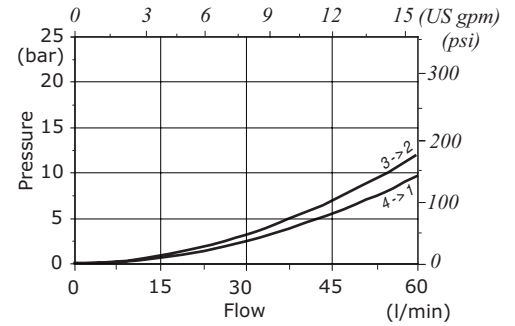
ER..M type

Rating diagrams

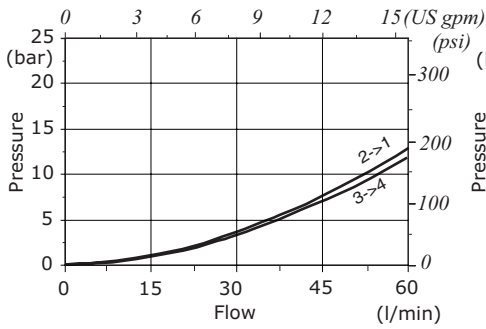
ER12M pressure drop vs. flow
- Spool 1 -



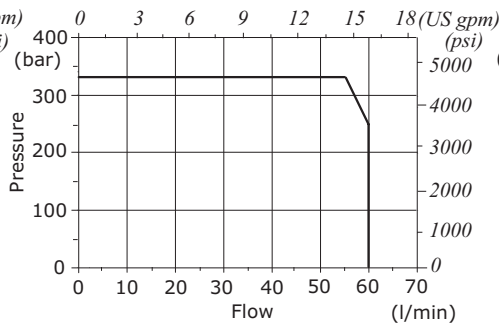
ER12M pressure drop vs. flow
- Spool 2 -



ER12M pressure drop vs. flow
- Spool 5 -



ER12M performance limit



ER12M pressure drop vs. flow
- Spool 8 -

