

SOLENOID VALVE

Poppet Type - Series EF

Cat No EF - 01 - 01 - A

POPPET TYPE - G1/4

Features

- 3/2 NO & NC, 5/2 Spring return and 5/2 Double solenoid
- No lubrication required
- Suitable for dirty / dusty environment
- Mounting provision for individual unit
- Manual override - (Push, Turn and Lock)
- Wide range of coil voltages - 12, 24, 48, 110, 220
- Suitable for manifold mounting (M006, M007, M008 Series)
- Solenoid coil can be rotated by 360°



Technical Specifications

| Model | NO - EF13615 NC - EF14615 | EF115615 | EF125615 |
|---------------------------------|---|---|---------------------|
| Type | 3/2 Spring return | 5/2 Spring return | 5/2 Double solenoid |
| Design | Poppet | | |
| Port size | Inlet (1), Outlet (2), Exhaust (3) - G1/4 | Inlet (1), Outlet (2, 4), Exhaust (3, 5) - G1/4 | |
| Medium | Compressed air - Filtered - Lubricated / Unlubricated | | |
| Working pressure range | 1.5 to 10 bar | 2.2 to 10 bar | 1.5 to 10 bar |
| Recommended oil for lubrication | ISO VG32 (Servo system 32) | | |
| Ambient temperature | -10° to +60° C | | |
| Medium temperature | +5° to +50° C | | |
| Flow @ | 1000 lpm | 1000 lpm | 1100 lpm |
| Materials of construction | Aluminium, Nitrile, PU, Brass, Acetal, PBT, Zinc, Steel | | |
| Product weight | 0.390 Kg | 0.340 Kg | 0.450 Kg |
| Electrical | | | |
| Coil width | 22 mm | | |
| Voltage (V) ± 10% | AC (50 Hz) - 24, 48, 110, 220 | | |
| | DC - 12, 24, 48, 110 | | |
| Power consumption | AC - 6 VA, DC - 5 W | | |
| Duty cycle | Continuous | | |
| Class of insulation | Class F | | |
| Type of coil protection | IP65 | | |
| Cable entry | PG9 (Suitable for Ø6 - Ø8 OD cable (2wire/3wire)) | | |
| Response time ON | 14 ms | 10 ms | 10 ms |
| Response time OFF | 40 ms | 47 ms | NA |

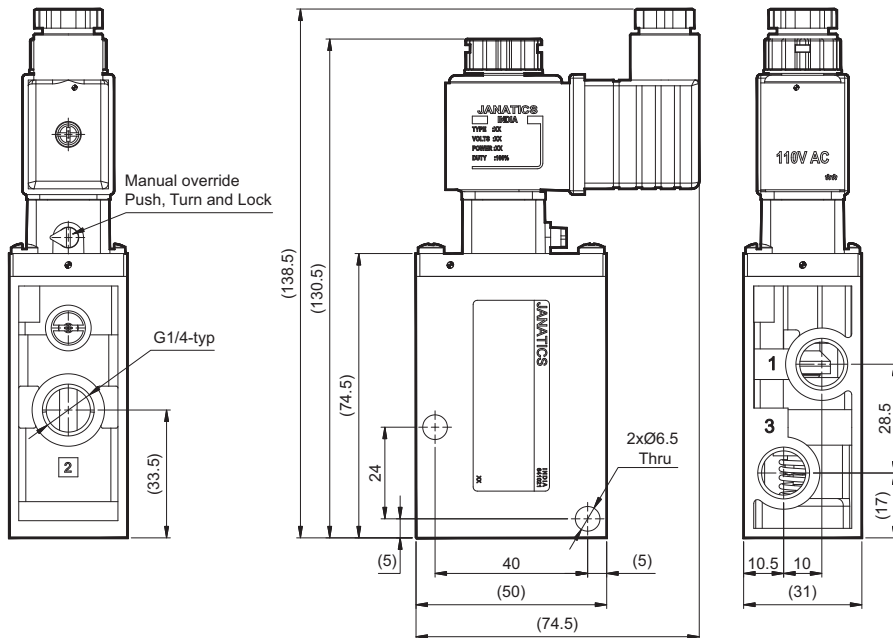
@ - Inlet pressure at 6 bar, and pressure drop at 1 bar

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3/2 Single solenoid spring return valve - Normally Opened

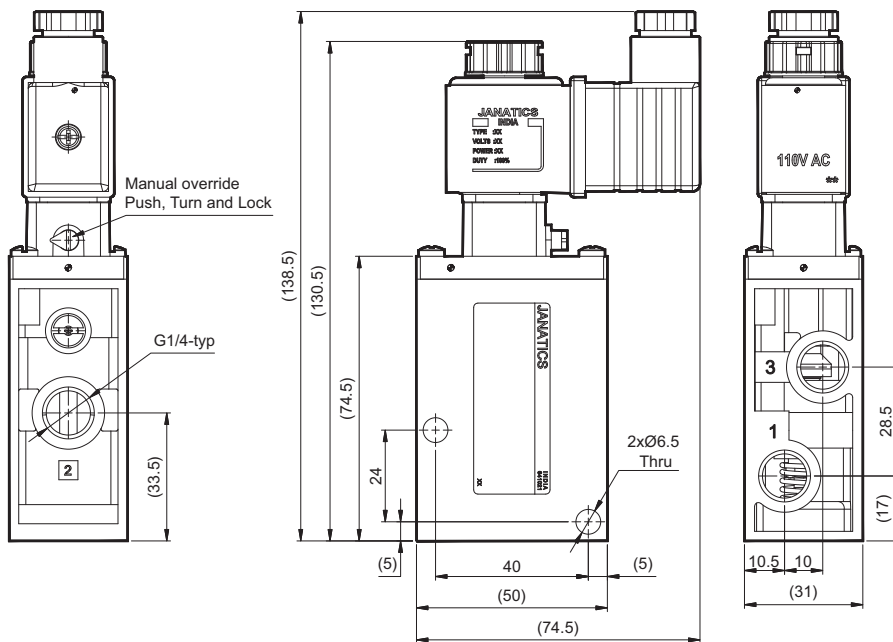


1 - Inlet, 2 - Outlet, 3 - Exhaust

| | |
|--------------|---------------|
| Ordering No* | EF13615 |
| Type | Normally open |
| Symbol | |

* For ordering No, voltage to be added

3/2 Single solenoid spring return valve - Normally Closed



1 - Inlet, 2 - Outlet, 3 - Exhaust

| | |
|--------------|-----------------|
| Ordering No* | EF14615 |
| Type | Normally closed |
| Symbol | |

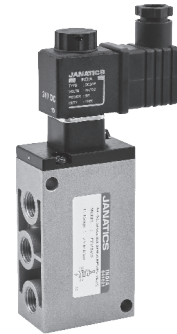
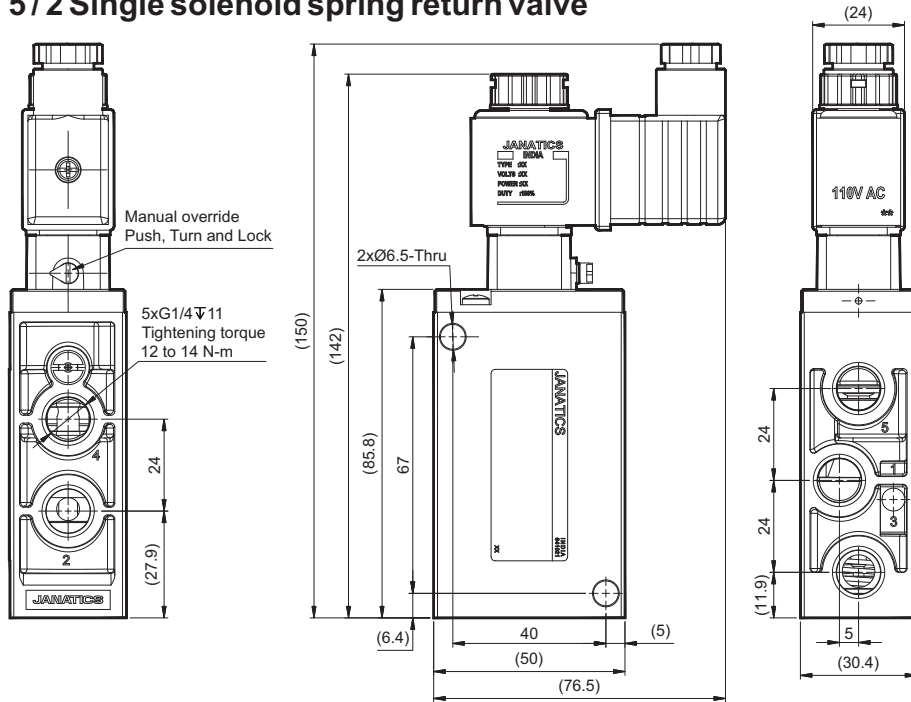
* For ordering No, voltage to be added

SOLENOID VALVE


Poppet Type - Series EF

Cat No EF - 01 - 01 - A

5/2 Single solenoid spring return valve

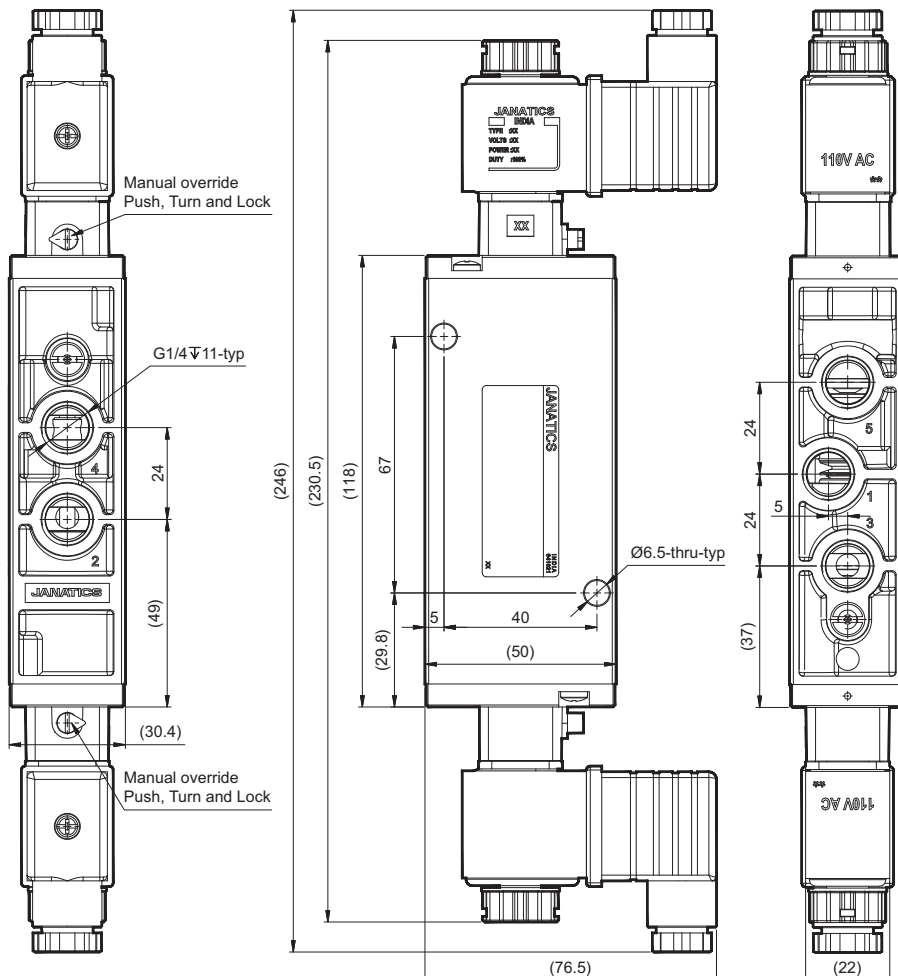


1 - Inlet, 2, 4 - Outlet, 3, 5 - Exhaust

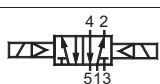
| | |
|--------------|--|
| Ordering No* | EF115615 |
| Symbol |  |

* For ordering No, voltage to be added

5/2 Double solenoid valve



1 - Inlet, 2, 4 - Outlet, 3, 5 - Exhaust

| | |
|--------------|---|
| Ordering No* | EF125615 |
| Symbol |  |

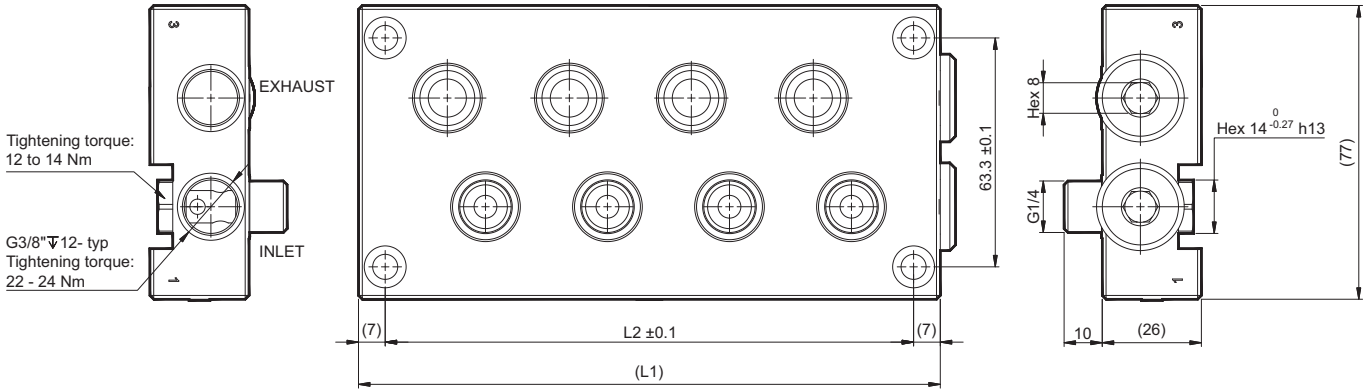
* For ordering No, voltage to be added

SOLENOID VALVE

Poppet Type - Series EF

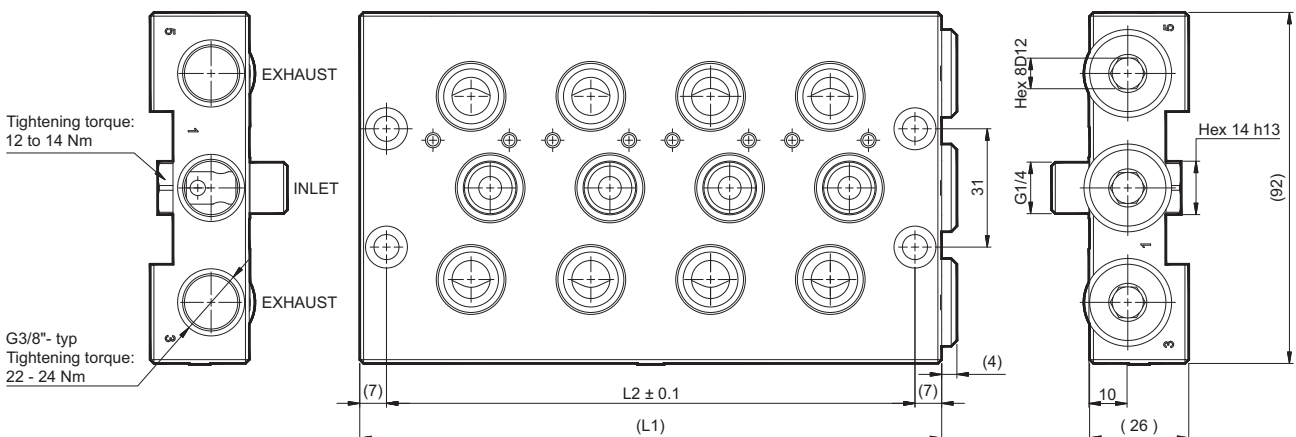
Cat No EF - 01 - 01 - A

Manifold - Type M008 (For 3/2)



| Number of valves | L | L1 | Ordering no. |
|------------------|-------|-------|--------------|
| 2 | 89.8 | 75.8 | M0080202 |
| 4 | 152.6 | 138.6 | M0080204 |
| 6 | 215.4 | 201.4 | M0080206 |
| 8 | 278.2 | 264.2 | M0080208 |

Manifold - Type M006 (For 5/2)



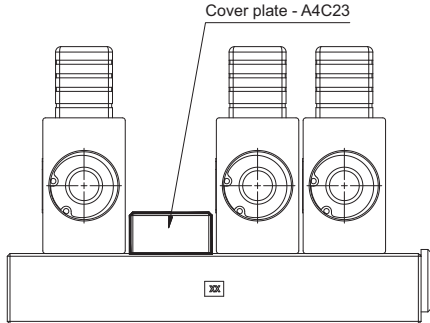
| Number of valves | L | L1 | Ordering no. |
|------------------|-------|-------|--------------|
| 2 | 89.8 | 75.8 | M0060202 |
| 4 | 152.6 | 138.6 | M0060204 |
| 6 | 215.4 | 201.4 | M0060206 |
| 8 | 278.2 | 264.2 | M0060208 |

SOLENOID VALVE

Poppet Type - Series EF

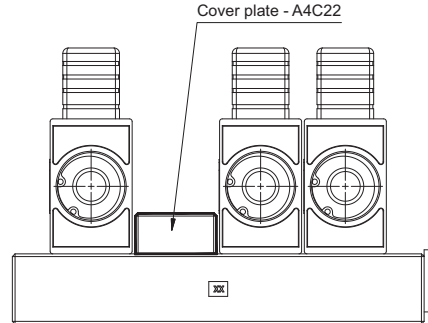
Cat No EF - 01 - 01 - A

Cover Plate - Type M008 (For 3/2)



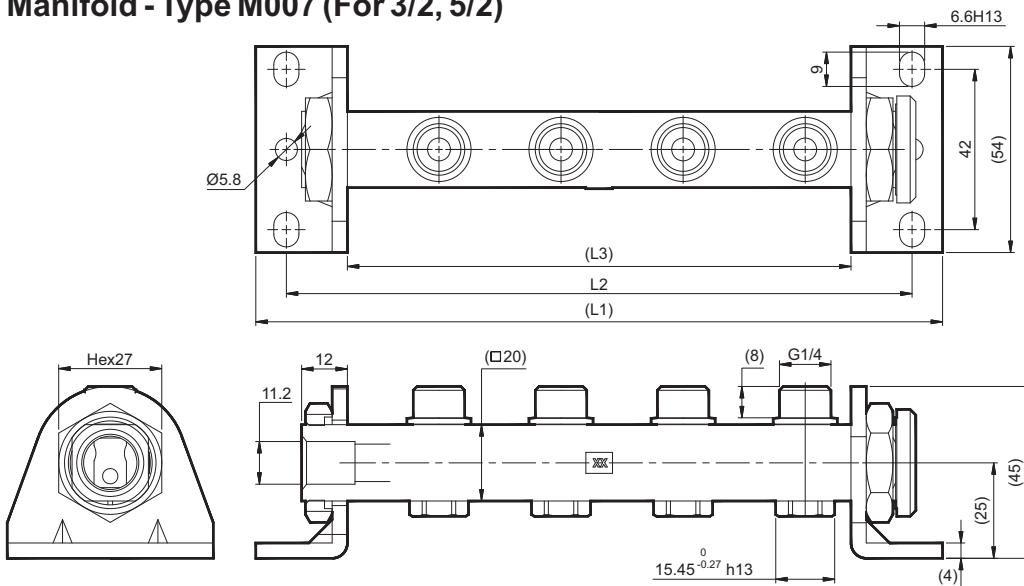
| Part name | Ordering No |
|-------------|-------------|
| Cover plate | A4C23 |

Cover Plate - Type M006 (For 5/2)



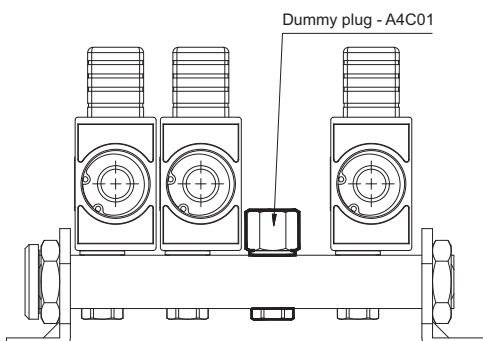
| Part name | Ordering No |
|-------------|-------------|
| Cover plate | A4C22 |

Manifold - Type M007 (For 3/2, 5/2)



| Number of valves | L | L1 | L3 | Ordering no. |
|------------------|-----|-----|-----|--------------|
| 2 | 116 | 100 | 68 | M0070202 |
| 4 | 180 | 164 | 132 | M0070204 |
| 6 | 244 | 228 | 196 | M0070206 |
| 8 | 308 | 292 | 260 | M0070208 |

Dummy Plug - Type M007 (For 3/2 & 5/2)



| Part name | Ordering No |
|------------|-------------|
| Dummy plug | A4C01 |

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How to order

1. Solenoid valve + “Connectors without LED”

While ordering Solenoid operated valves, please mention the suffix given below along with the model number to indicate the required voltage

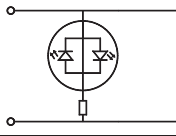
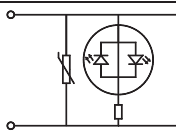
| | | | |
|---|---------|---|---------|
| A | 220V AC | Q | 110V DC |
| B | 110V AC | S | 48V DC |
| D | 48V AC | W | 24V DC |
| G | 24V AC | R | 12V DC |

Ordering Example:

- The ordering no. for 3/2 Normally Opened Single solenoid valve, 24V D.C coil with PG cable is **EF13615W**
- The ordering no. for 3/2 Normally Opened Single solenoid valve, 24V D.C coil with Moulded cable is **EF13615W1**

2. Solenoid valve + “Connectors with LED”

While ordering Solenoid operated valves with LED connectors, given below in the corresponding tables.

| Voltage | | Housing Colour & Indication | | LED colour | | Connection type | |
|---------|---------|-----------------------------|---|------------|-----|-----------------|------------------------------------|
| A | 220V AC | T0 |  | R | Red | 0 | PG Cable entry |
| G | 24V AC | | | | | 1 | Moulded cable (with 2metre length) |
| W | 24V DC | | | | | | |
| | | T1 |  | | | | |
| | | | | | | | |

Transparent housing with Bipolar LED indicator confirming supply voltage

Transparent housing with Bipolar LED indicator confirming supply voltage plus varistor to give over voltage protection to the source and load

Ordering Example:

The ordering no. for 3/2 Normally Opened Single solenoid valve, 24V DC, connectors with LED of Transparent colour housing with Bipolar LED and varistor, Red colour LED with moulded cable: **EF13615WT1R1**

Coil spare ordering no.

| Coil (without connector) | Ordering no. | |
|----------------------------|--------------|--------|
| | AC | DC |
| 220 | AC23A | - NA - |
| 110 | AC23B | DC24Q |
| 48 | AC23D | DC24S |
| 24 | AC23G | DC24W |
| 12 | - NA - | DC24R |