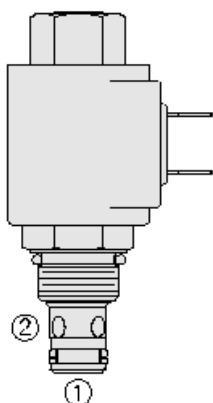




## Overview



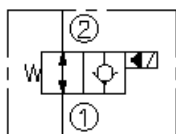
### Description

Solenoid-operated, 2 way, normally open, poppet-type, screw in hydraulic cartridge valve, designed to function as a load holding or blocking valve in applications requiring low internal leakage at high pressure. When de-energized, the SF08-23 poppet lifts to open from port 2 to port 1. In this mode, flow is also allowed from port 1 to port 2. When energized, the cartridge acts as a check valve, blocking flow from port 2 to port 1 after overcoming the solenoid force (requires 50 to 150 psi [3,4 to 10,3 bar])

### Features

- Continuous-duty rated coil.
- Hardened seat for long life and low leakage.
- Optional coil voltages and terminations.
- Cartridges are voltage interchangeable.
- Unitized, molded coil design.
- Manual override option.
- Optional waterproof E-Coils rated up to IP69K.
- Corrosion-resistant plating.
- Industry common, compact size.

### Symbol



## Ratings

### Pressure Ratings

Pressure rating 350 bar (5000 psi)

### Flow Ratings

Flow rating See performance chart

Maximum internal leakage 3 drops/min - **Note:** Max at 350 bar (5000 psi)

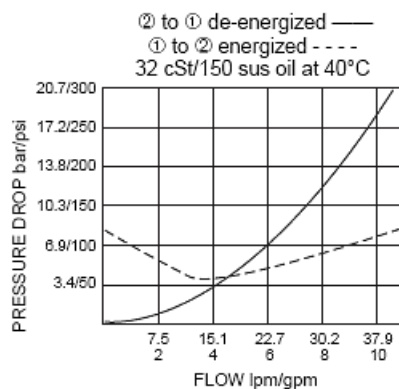
### Temperature Ratings

Operating fluid temperature -40 to 100 °C (-40 to 212 °F) - **Note:** Buna N  
-26 to 204 °C (-15 to 400 °F) - **Note:** Viton  
-54 to 107 °C (-65 to 225 °F) - **Note:** Polyurethane

## Properties

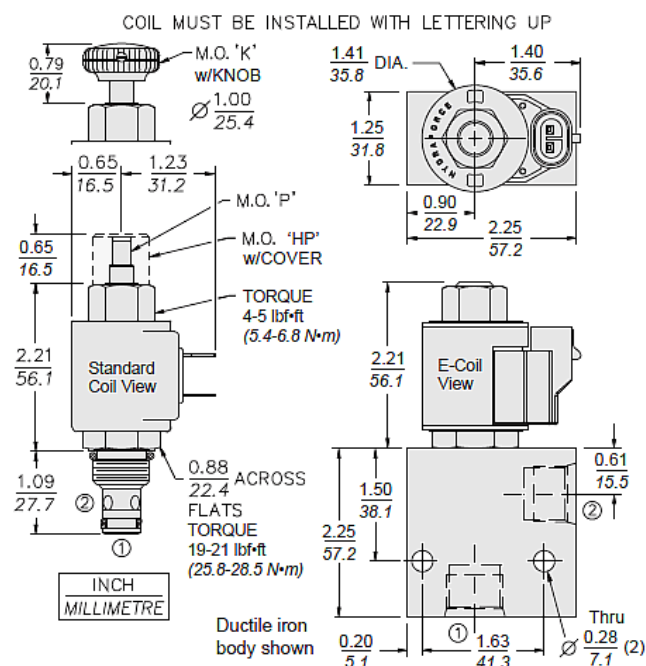
Materials Steel with hardened work surfaces exposed surfaces plated per hf spec plt033 for 960 hours of salt spray per ASTM b117-09 before corrosion (red rust)

## Performance





## Dimensions



## Materials

### Materials

**Cartridge:** Weight: 0.09 kg (0.20 lb); Steel with hardened work surfaces. Zinc-plated exposed surfaces; Polyurethane cast O-rings and fluorocarbon back-up standard.

**Standard Ported Body:** Weight: 0.54 kg (1.2 lb); Ductile iron standard, rated to 345 bar (5000 psi).

**Standard D-Coil:** Weight each: 0.11 kg (0.25 lb); Unitized thermoplastic encapsulated, Class H high temperature magnet wire.

**E-Coil:** Weight: 0.14 kg (0.3 lb); Perfect wound, fully encapsulated with rugged external metal shell; Rated up to IP69K with integral connectors.

## Order Code

| POSITION | CODE  | DESCRIPTION   |
|----------|-------|---|
|          |       | SF08-23EG-H-J-L                                     |
| E        |       | Manual Override                                     |
| E        | BLANK | NONE  |
| E        | HP    | Momentary Push Override, Button with Protective Nut |
| E        | K     | Momentary Push Override, Knob                       |
| E        | P     | Momentary Push Override, Button                     |
| G        |       | Screen  |
| G        | BLANK | NONE  |
| G        | S     | 100 Mesh Screen                                     |
| H        |       | Line Body   |
| H        | 0     | No Body   |
| H        | 4T    | Aluminum SAE 4                                      |
| H        | 6T    | Aluminum SAE 6                                      |
| H        | 8T    | Aluminum SAE 8                                      |
| H        | 6TD   | Ductile Iron SAE 6                                  |
| H        | 8TD   | Ductile Iron SAE 8                                  |
| H        | 2B    | Aluminum BSPP 1/4" (2)                              |
| H        | 3B    | Aluminum BSPP 3/8" (3)                              |



| POSITION | CODE     | DESCRIPTION  |
|----------|----------|--|
| H        | 3BD      | Ductile Iron BSPP 3/8" (3)                                 |
| J        |          | Seal   |
| J        | N        | Buna-N   |
| J        | V        | Fluorocarbon   |
| J        | P        | Polyurethane   |
| L        |          | Coil   |
| L        | 0        | No Coil  |
| L        | 10DL     | 10 VDC, D-Coil, Dual Lead Wires                            |
| L        | 10DR/D   | 10 VDC, D-Coil, Deutsch with Diode                         |
| L        | 10DS     | 10 VDC, D-Coil, Dual Spade                                 |
| L        | 10EL     | 10 VDC, E-Coil, Dual Lead Wires, 18 inches long            |
| L        | 10EL/36  | 10 VDC, E-Coil, Dual Lead Wires, 36 inches long            |
| L        | 10ER     | 10 VDC, E-Coil, Deutsch                                    |
| L        | 10ER/Z   | 10 VDC, E-Coil, Deutsch with Zener Diode                   |
| L        | 12DG     | 12 VDC, D-Coil, DIN 43650                                  |
| L        | 12DL     | 12 VDC, D-Coil, Dual Lead Wires, 18 inches long            |
| L        | 12DL/36  | 12 VDC, D-Coil, Dual Lead Wires, 36 inches long            |
| L        | 12DL/W   | 12 VDC, D-Coil, Dual Lead Wires with Weatherpak            |
| L        | 12DL/W/D | 12 VDC, D-Coil, Dual Lead Wires with Weatherpak with Diode |
| L        | 12DR     | 12 VDC, D-Coil, Deutsch                                    |
| L        | 12DR/D   | 12 VDC, D-Coil, Deutsch with Diode                         |
| L        | 12DR/Z   | 12 VDC, D-Coil, Deutsch with Zener Diode                   |
| L        | 12DS     | 12 VDC, D-Coil, Dual Spade                                 |
| L        | 12EG     | 12 VDC, E-Coil, DIN 43650                                  |
| L        | 12EG/Z   | 12 VDC, E-Coil, DIN 43650 with Zener Diode                 |
| L        | 12EJ     | 12 VDC, E-Coil, AMP Jr.                                    |
| L        | 12EJ/Z   | 12 VDC, E-Coil, AMP Jr. with Zener Diode                   |
| L        | 12EL     | 12 VDC, E-Coil, Dual Lead Wires, 18 inches long            |
| L        | 12EL/36  | 12 VDC, E-Coil, Dual Lead Wires, 36 inches long            |
| L        | 12EL/Z   | 12 VDC, E-Coil, Dual Lead Wires with Zener Diode           |
| L        | 12ER     | 12 VDC, E-Coil, Deutsch                                    |
| L        | 12ER/Z   | 12 VDC, E-Coil, Deutsch with Zener Diode                   |
| L        | 12EY     | 12 VDC, E-Coil, Metri-Pack 150                             |
| L        | 12EY/Z   | 12 VDC, E-Coil, Metri-Pack 150 with Zener Diode            |
| L        | 20DG     | 20 VDC, D-Coil, DIN 43650                                  |
| L        | 20DS     | 20 VDC, D-Coil, Dual Spade                                 |
| L        | 20ER     | 20 VDC, E-Coil, Deutsch                                    |
| L        | 20ER/Z   | 20 VDC, E-Coil, Deutsch with Zener Diode                   |
| L        | 24AG     | 24 VDC, D-Coil, DIN 43650                                  |
| L        | 24AP     | 24 VDC, D-Coil, 1/2" Conduit and Dual Lead Wires           |
| L        | 24DG     | 24 VDC, D-Coil, DIN 43650                                  |
| L        | 24DL     | 24 VDC, D-Coil, Dual Lead Wires, 18 inches long            |
| L        | 24DL/36  | 24 VDC, D-Coil, Dual Lead Wires, 36 inches long            |



| POSITION | CODE   | DESCRIPTION                                       |
|----------|--------|---|
| L        | 24DL/W | 24 VDC, D-Coil, Dual Lead Wires with Weatherpak   |
| L        | 24DR   | 24 VDC, D-Coil, Deutsch                           |
| L        | 24DR/D | 24 VDC, D-Coil, Deutsch with Diode                |
| L        | 24DR/Z | 24 VDC, D-Coil, Deutsch with Zener Diode          |
| L        | 24DS   | 24 VDC, D-Coil, Dual Spade                        |
| L        | 24EG   | 24 VDC, E-Coil, DIN 43650                         |
| L        | 24EG/Z | 24 VDC, E-Coil, DIN 43650 with Zener Diode        |
| L        | 24EJ   | 24 VDC, E-Coil, AMP Jr.                           |
| L        | 24EL/D | 24 VDC, E-Coil, Dual Lead Wires with Diode        |
| L        | 24ER   | 24 VDC, E-Coil, Deutsch                           |
| L        | 24ER/Z | 24 VDC, E-Coil, Deutsch with Zener Diode          |
| L        | 24EY   | 24 VDC, E-Coil, Metri-Pack 150                    |
| L        | 24EY/Z | 24 VDC, E-Coil, Metri-Pack 150 with Zener Diode   |
| L        | 36DG   | 36 VDC, D-Coil, DIN 43650                         |
| L        | 36DS   | 36 VDC, D-Coil, Dual Spade                        |
| L        | 115AG  | 115 VAC, D-Coil, DIN 43650                        |
| L        | 115AP  | 115 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires |
| L        | 230AG  | 230 VAC, D-Coil, DIN 43650                        |
| L        | 230AP  | 230 VAC, D-Coil, 1/2" Conduit and Dual Lead Wires |

