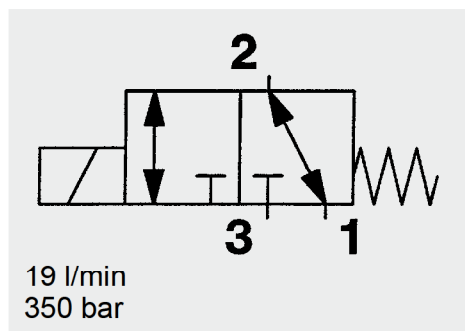
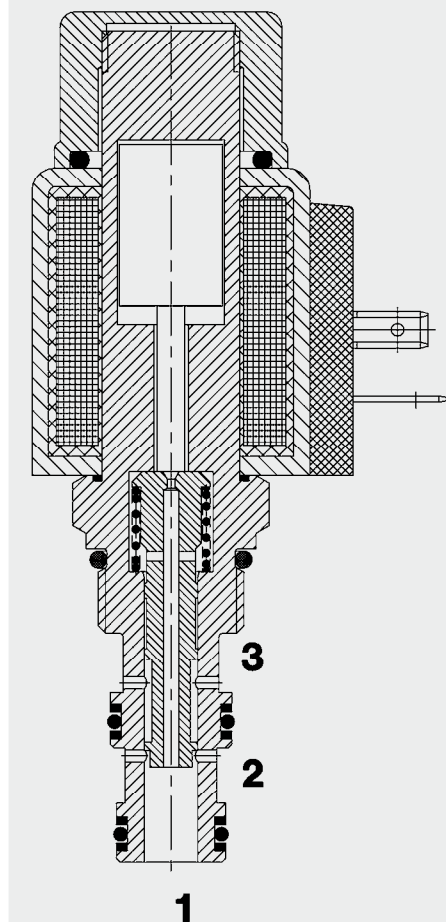




## FUNCTION



When de-energized, the valve allows flow from port 1 to 2 or from port 2 to 1, while blocking flow at port 3. When energized, the valve allows flow from port 3 to 2 or from port 2 to 3, while blocking flow at port 1.

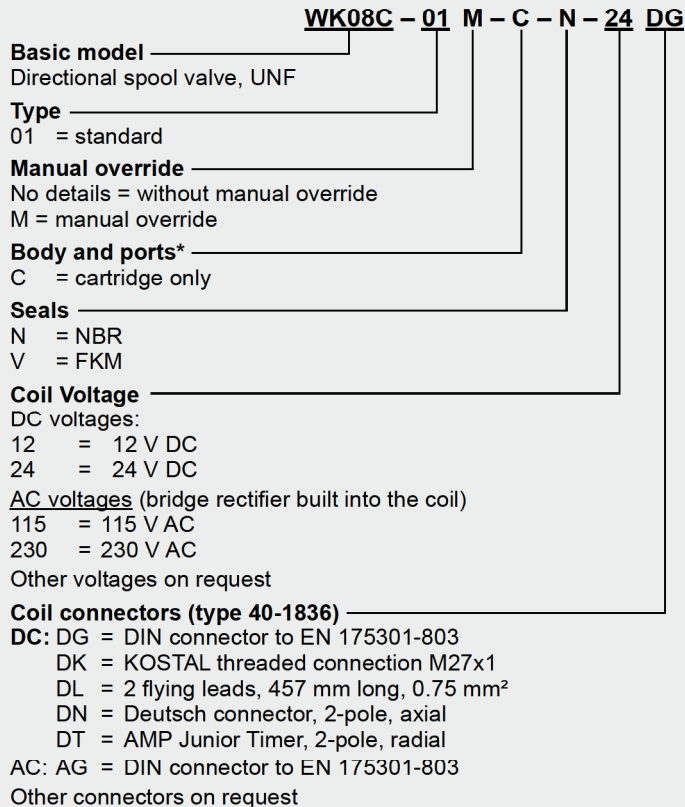
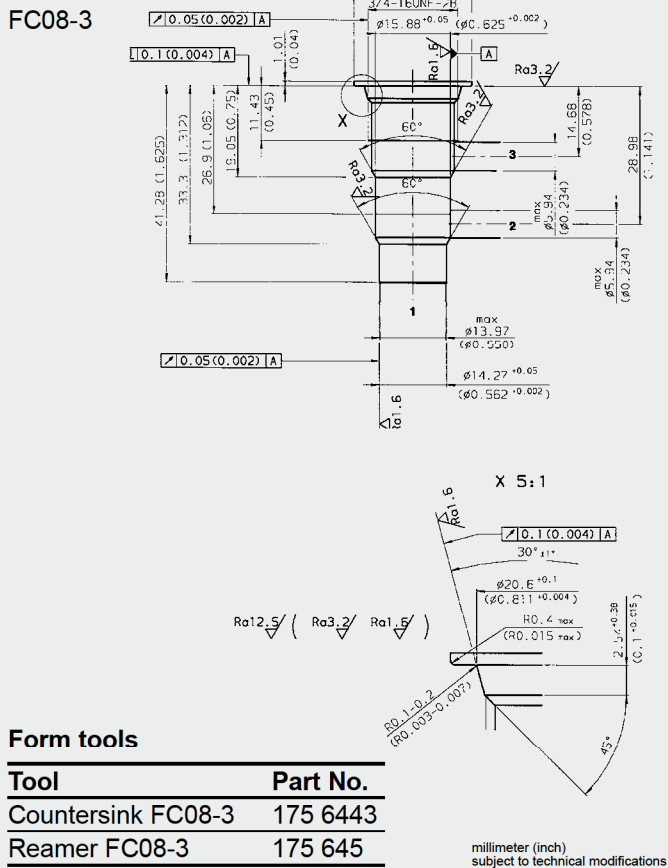
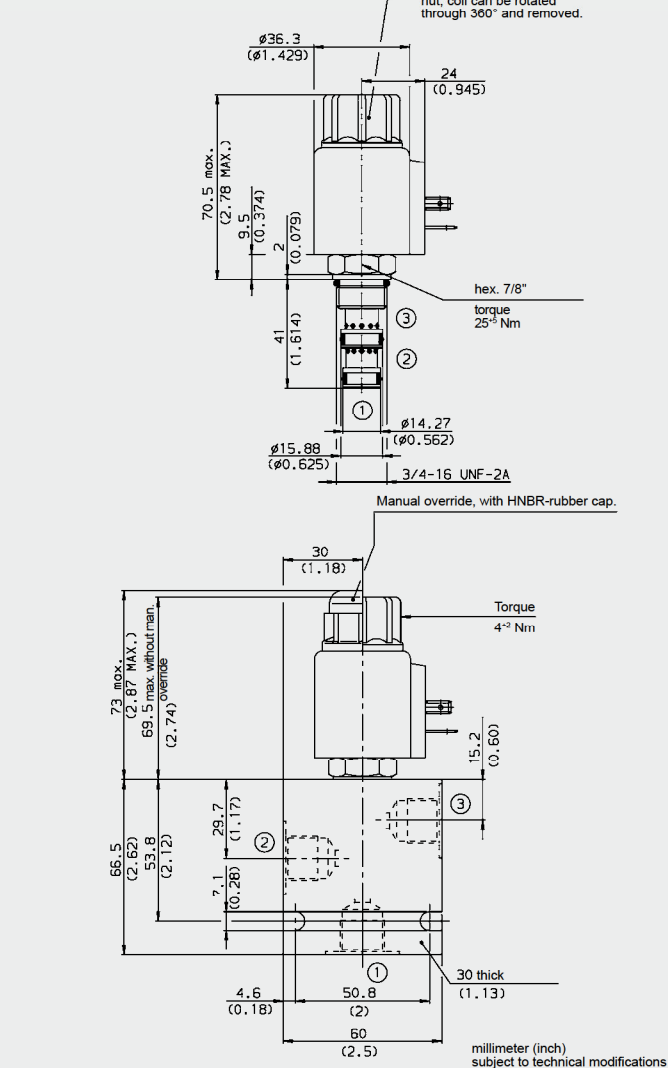
## 3/2 Solenoid Directional Valve **UNF** Spool Type - Direct-Acting SAE08 Cartridge – 350 bar WK08C-01

### FEATURES

- External surfaces zinc-plated and corrosion-proof
- Hardened and ground internal valve components to ensure minimal wear and extended service life
- Coil seals protect the solenoid system
- Wide variety of connectors available
- Excellent switching performance by high power HYDAC solenoid
- Low pressure drop due to CFD optimized flow path

### SPECIFICATIONS

|                                    |                                                                                   |                                                                             |
|------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Operating pressure:                | max. 350 bar                                                                      |                                                                             |
| Nominal flow:                      | max. 19 l/min                                                                     |                                                                             |
| Internal leakage:                  | max. 90 cm <sup>3</sup> /min at 250 bar and 34 mm <sup>2</sup> /s                 |                                                                             |
| Media operating temperature range: | min. -20 °C to max. +120 °C                                                       |                                                                             |
| Ambient temperature range:         | min. -20 °C to max. +60 °C                                                        |                                                                             |
| Operating fluid:                   | Hydraulic oil to DIN 51524 Part 1 and 2                                           |                                                                             |
| Viscosity range:                   | min. 7.4 mm <sup>2</sup> /s to max. 420 mm <sup>2</sup> /s                        |                                                                             |
| Filtration:                        | Class 21/19/16 according to ISO 4406 or cleaner                                   |                                                                             |
| MTTF <sub>d</sub> :                | 150 years (see "Conditions and instructions for valves" in brochure 5.300)        |                                                                             |
| Material                           | Valve body:                                                                       | free-cutting steel                                                          |
|                                    | Piston:                                                                           | hardened and ground steel                                                   |
|                                    | Seals:                                                                            | NBR (standard)<br>FKM (optional, media temperature range -20 °C to +120 °C) |
|                                    | Back-up rings:                                                                    | PTFE                                                                        |
|                                    | Coil:                                                                             | steel/polyamide                                                             |
|                                    | Cavity:                                                                           | FC08-3                                                                      |
| Weight:                            | Valve complete                                                                    | 0.37 kg                                                                     |
|                                    | Coil only                                                                         | 0.19 kg                                                                     |
| <b>Electrical data:</b>            |                                                                                   |                                                                             |
| Switching time:                    | Energized:                                                                        | approx. 20 - 85 ms                                                          |
|                                    | De-energized:                                                                     | approx. 40 - 80 ms                                                          |
| Type of voltage:                   | DC solenoid, AC voltage is rectified using a bridge rectifier built into the coil |                                                                             |
| Current draw at 20 °C:             | 1.5 A at 12 V DC                                                                  |                                                                             |
|                                    | 0.8 A at 24 V DC                                                                  |                                                                             |
| Voltage tolerance:                 | ± 15% of the nominal voltage                                                      |                                                                             |
| Coil duty rating:                  | Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature    |                                                                             |
| Coil type:                         | Coil...-40-1836                                                                   |                                                                             |

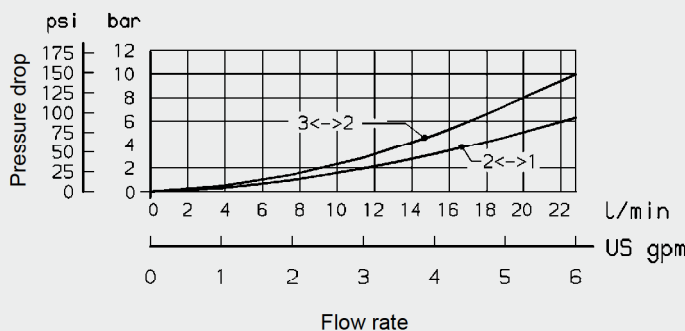


| Code                    | Part No. |
|-------------------------|----------|
| WK08C-01-C-N-12DG       | 3020375  |
| WK08C-01-C-N-24DG       | 3020388  |
| WK08C-01-C-N-230AG      | 3043889  |
| Other models on request |          |

| Code                    | Part No. | Material                  | Connections | Pressure |
|-------------------------|----------|---------------------------|-------------|----------|
| FH083-SB3               | 560922   | Steel, zinc-plated        | G3/8        | 420 bar  |
| FH083-AB3               | 3011427  | Aluminium, clear anodized | G3/8        | 210 bar  |
| Other bodies on request |          |                           |             |          |

| Code             | Material | Part No. |
|------------------|----------|----------|
| FH083-N Seal kit | NBR      | 3054795  |
| FH083-V Seal kit | FKM      | 2591059  |

Measured at  $\nu = 34 \text{ mm}^2/\text{s}$ ,  $T_{\text{oil}} = 46 \text{ }^\circ\text{C}$



The information in this brochure relates to the operating conditions and applications described. For applications or operating conditions not described, please contact the relevant technical department.  
Subject to technical modifications.