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EN ISO 13849 Data Sheet

Slip-In Cartridge Valves to ISO 7368

Directional Valves with Electrical Indication

Sizes NG16, NG25, NG32 & NG40

Slip-In Cartridge Directional Valves with Electrical Indication is an integral assembly of a Cover and an Insert, with a main spool that is fully seated in its closed position. A coaxially mounted switch on the top cover provides a signal when the main spool is in position to close the mainstream flow. This 'valve closed' indication as a safety feature and high-power density offered by these products makes it preferred choice to control machine motions demanding high performance. For these valves, mounting interface is per ISO-7368 while pilot interface is ISO-4401, Size 03-02-0-94 / ANSI / B93.7M-D03.

Features

- Accurate and repeatable switching points
- Integrated and pre-set switch assembly
- High Power Density, Smaller package size
- Better performance and control
- Enhanced operational efficiency
- Improved reliability

Applications

- Industrial

Comprehensive technical literature is online at *www.danfoss.com*

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Technical data

Parameter	Value
Maximum operating pressure	420 bar [6090 psi]
Max oil flow, Size 16 - Insert D10 (at ΔP = 10 bar across the valve)	325 l/min [88 US gal/min]
Max oil flow, Size 25 - Insert D10 (at ΔP = 10 bar across the valve)	615 l/min [193 US gal/min]
Max oil flow, Size 32 - Insert D10 (at ΔP = 10 bar across the valve)	1250 l/min [407 US gal/min]
Max oil flow, Size 40 - Insert D10 (at ΔP = 10 bar across the valve)	1925 l/min [590 US gal/min]
Oil temperature	-20°C to 80°C [-4°F to 176°F]
Viscosity	500 to 5 cSt
Cleanliness according to ISO 4406	18/16/13

Note

The products must be used in accordance with the installation instructions and operating conditions published in the relevant product user guide.
This data sheet contains supplementary performance data that is not contained in the valve product data sheet. It has been produced specifically to support the requirement of the harmonized standard EN ISO 13849.

Additionally, for products intended to be sold in the European Economic Area:
"Safety Devices" or other safety functions mentioned in any product literature are not necessarily "Safety Components" as defined by the Machinery Directive 2006/42/EC, unless otherwise stated together with the CE mark and specific reference to said directive.

Silting may occur when left in the actuated position for long time duration. It is highly recommended that the valves are periodically cycled to limit these effects.

Determination of MTTFd

Evaluation of Mean Time to Dangerous Failure (MTTFd) for Slip-In Cartridge valve with Electrical Indication is based on part count method and for each component based on "Good Engineering Practice Method" using annexure for assessments as per ISO 13849-2:2015. MTTFd value for the Position Switch is referred from supplier's certificate.

Reliability data

Model code	MTTFd according to ISO 13849:2015
(F3)-CVU-**-SWD(3)-*-20	86 years