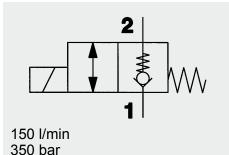


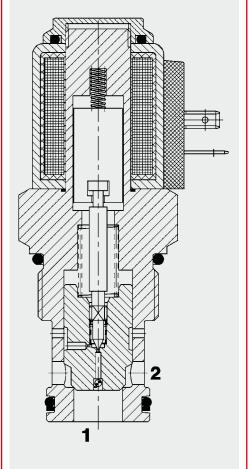
YDAC INTERNATIONAL



2/2 Solenoid Directional Valve UNE Poppet Type, Pilot-Operated Normally Closed (Reverse Flow) SAE-16 Cartridge – 350 bar

WS16ZR-01

FUNCTION



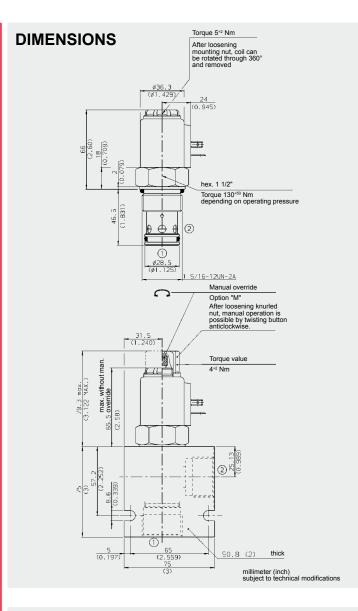
FEATURES

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

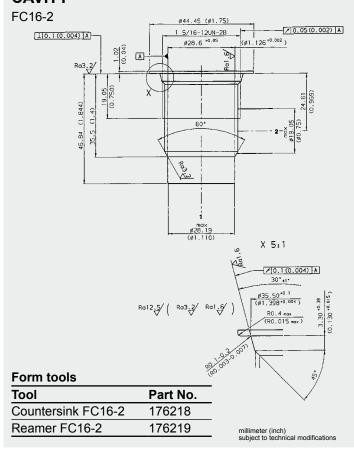
SPECIFICATIONS

max. 100 l/min, from 280 to 350 bar Leakage: Leakage-free (max. 5 drops ≜ 0,25 cm³/min at 350 bar) Media operating temperature range: min20 °C to max. +100 °C Ambient temperature range: min20 °C to max. +60 °C Coil duty rating: Continuous up to max. 115% of the nominal voltage at 60 °C ambient temperature Operating fluid: Hydraulic oil to DIN 51524 Part 1 and 2 Viscosity range: min. 7.4 mm²/s to max. 420 mm²/s Filtration: Class 21/19/16 according to ISO 4406 or cleaner MTTF _d : 150 years (see "Conditions and instructions for valves" in brochure 5.300) Installation: No orientation restrictions Materials: Valve body: Free-cutting steel Poppet: hardened and ground steel Seals: NBR (standard) FKM (optional, media temperature range -20 °C to +120 °C) Back-up rings: PTFE Coil: steel / polyamide Cavity: FC16-2 Weight: Valve complete 0.62 kg Coil only 0.19 kg Electrical data: 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 Response time: Energized: approx. 70 ms	Operating pressure:	max. 350 bar		
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FKM (optional, media temperature range -20 °C to +120 °C) Back-up rings: PTFE Coil: steel / polyamide Cavity: FC16-2 Weight: Valve complete 0.62 kg Coil only 0.19 kg Electrical data: 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 Response time: Energized: approx. 35 ms De-energized: approx. 70 ms		Poppet:		
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Cavity: FC16-2 Weight: Valve complete 0.62 kg Coil only 0.19 kg Electrical data: 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 Response time: Energized: approx. 35 ms De-energized: approx. 70 ms		Back-up rings:	PTFE	
Weight: Valve complete 0.62 kg Coil only 0.19 kg Electrical data: Current draw at 20 °C: 1.5 A at 12 V DC 0.8 A at 24 V DC Voltage tolerance: Energized: De-energized: approx. 35 ms De-energized: approx. 70 ms		Coil:	steel / polyamide	
Coil only 0.19 kg Electrical data: 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 Response time: Energized: approx. 35 ms De-energized: approx. 70 ms	Cavity:	FC16-2		
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Voltage tolerance: ± 15% of the nominal voltage Response time: Energized: approx. 35 ms De-energized: approx. 70 ms	Electrical data:			
Response time: Energized: approx. 35 ms De-energized: approx. 70 ms	Current draw at 20 °C:			
Response time: Energized: approx. 35 ms De-energized: approx. 70 ms	Voltage tolerance:	± 15% of the nominal voltage		
- · · · · · · · · · · · · · · · · · · ·		De-energized:	approx. 70 ms	
Coil type: Coil40-1836	Coil type:	Coil40-1836		

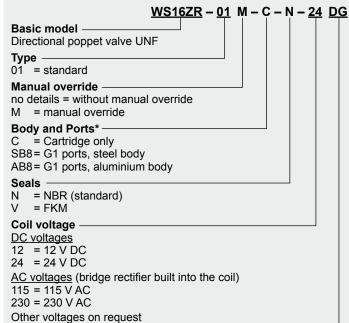
When the solenoid coil is not energized, the valve is closed from port 2 to port 1. Flow is permitted from port 1 to port 2. When energized the valve allows flow in both directions.



CAVITY







Coil connectors (type 40-1836)

DC: DG = DIN connector to EN 175301-803
DK = KOSTAL threaded connection M27x1 DL = 2 flying leads, 457 mm long, 0.75 mm² DN = Deutsch connector, 2-pole, axial DT = AMP Junior Timer, 2-pole, radial AC: AG = DIN connector to EN 175301-803 Other connectors on request

Standard models

Model code	Part No.
WS16ZR-01-C-N-24DG	3049536
WS16ZR-01-C-N-230AG	3049568

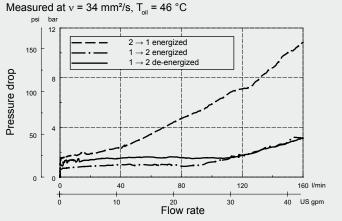
*Standard in-line bodies

Code	Part No.	Material	Ports	Pressure
FH162-SB8	3032496	Steel, zinc-plated	G1	420 bar
FH162-AB8	3037193	Aluminium, anodized	G1	250 bar
Other housings	on request			

Seal kits

Code	Material	Part No.
FS162-N SEAL KIT	NBR	3052427
FS162-V SEAL KIT	FKM	3051758

PERFORMANCE



Note
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.

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