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NG5

Electro-hydraulic CANbus Control Module



NG5 ELECTRO-HYDRAULIC CANbus CONTROL MODULE

- · Accurate spool position control
- · Analog or CANbus control
- · IP67/IPx9K protection grade
- EPD certification according to ISO 14025 and EN 50693













Low Hysteresis

Thanks to integrated electronics and contactless position sensor, the module NG5 can ensure the precise positioning of the valve Spool, with low hysteresis, high dynamic and reactivity.

Functional Safety

Functional Safety has been integrated since the beginning in the design and validation process. The electronic board is designed with Hardware Category 2 and is capable to reach safety level PLd / SIL 2.

CANbus or Analog

The module can be controlled using SAE J1939 or CANopen protocol directly from Joystick or throug a Control Unit. A redundant analog input command option is available.

Reliability

The electrohydraulic module has been qualified according to OEMs' most rigorous reliability standards.

The Deutsch connector and the potted electronic board allows the IP67/IPx9K protection grade and a strong resistance to all adverse conditions (vibrations, shocks, EMC).

Flexibility

The NG5 module has a high degree of customization thanks to the dedicated WST interface.

It allows you to manage the dynamics of the system, working with custom motion profiles.

EPD certification

The NG5 ensures improved environmental performance with low energy consumption and product life cycle safety according to ISO 14025 and EN 50693 certification.

WORKING CONDITIONS

Electrical data	
Voltage supply	from 8 to 32 V
Max. current absorption (power)	1500 mA
no load current absorption (logic)	100 mA
CANbus Output	SAE J1939, CANopen
CANbus Input	SAE J1939, CANopen
Analog redundant Input	0.5 V - 4.5 V
Working temperature	from -40°C to 85°C from -40°F to 185°F
Storage temperature	from -40°C to 105°C from -40°F to 221°F
Weather protection	IP 67/IPx9K
EMC compatibility	according to ISO 14982 / 13766
Connector	DT04-08P A
Optional power Output(*)	6A max

Hydraulic data		
Max inlet pressure	50 bar <i>725 psi</i>	
Max back pressure	5 bar 72.5 psi	
Contamination level	-/18/15-ISO 4406	
Fluid	Mineral oil based	
Max mechanical stroke	+/- 10 mm +/- 0.39 in	
Sensor type	Hall effect	
Redundant	Analog redundant Input Hall effect redundant sensor	
Absolut accuracy	< 3.5% (+/- 10 mm) < 3.5% (+/- 0.39 in)	

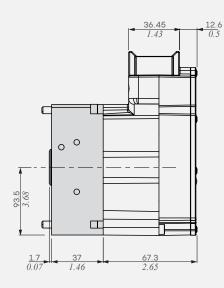
Note: Technical specifications measured with mineral oil of 46 mm²/s (46~cSt) viscosity at 40°C - (104°F) temperature. (*): For more information, please contact the Sales Department

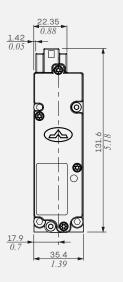
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DIMENSIONAL DATA



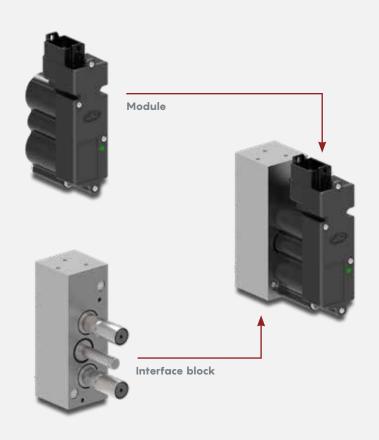


	Pinout function
1	CAN_L
2	GND
3	Analog Input Command
4	Auxiliary Output
5	Analog Input command redundant
6	External enable
7	VBB
8	CAN_H

Valve Interface Block

The dimensions of the part are referred only to DPX100. For other sectional directional control valves dimensions are different. Please, contact our Sales Dpt.

Directional valves compatibility		
DPK	DPK120	
DPX	DPX100	
	DPX100HF	
	DPX160	
series	EX38	
	EX54	
	EX72	
DPC	DPC130	
	DPC200	

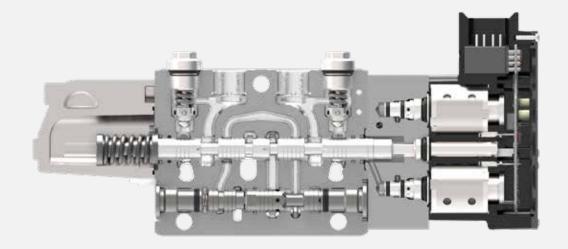


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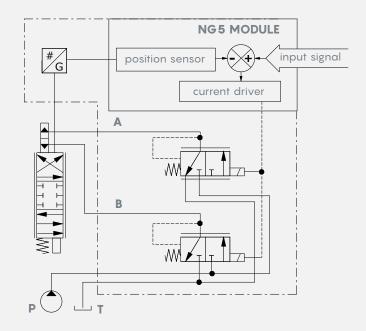


SECTION

DPX100 working section with NG5 module



FUNCTIONALITY PRINCIPLE



WALVOIL S.P.A.

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