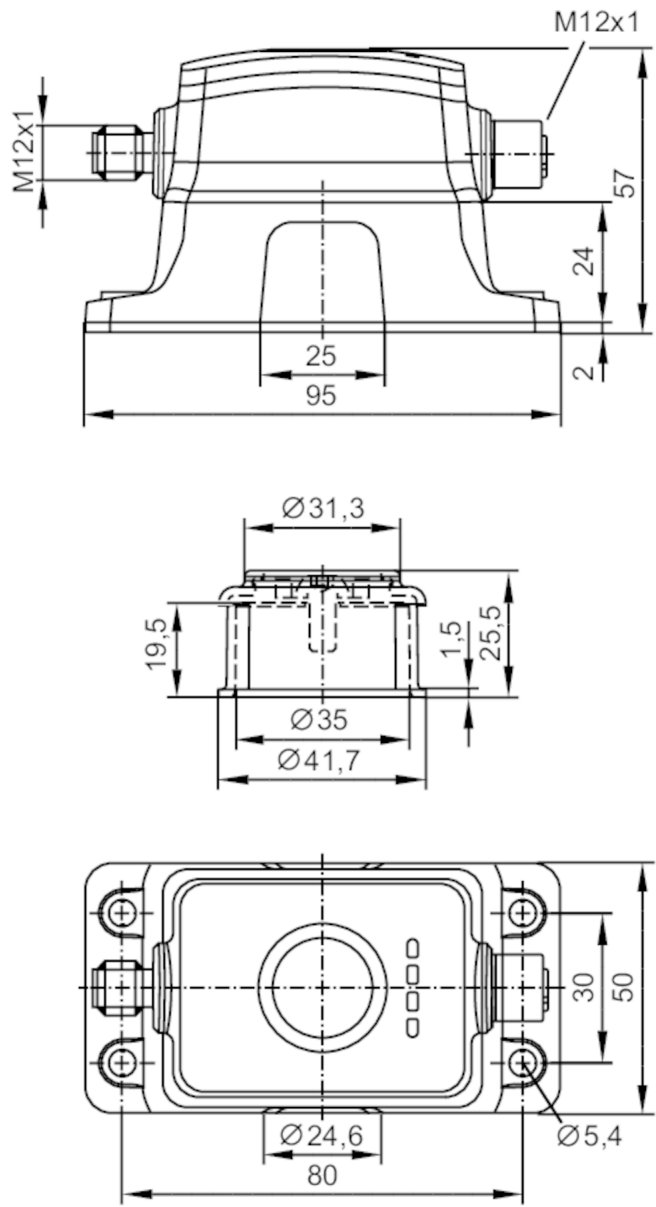


MVQ201



Position sensor for valve actuators

SVS SOLENOID OUT



Product characteristics

Communication interface	IO-Link
Housing	rectangular
Dimensions [mm]	95 x 50 x 57
Switching outputs	
Electrical design	PNP
Output function	2 x normally open / normally closed; (selectable)
Solenoid valve connection (SV1 / SV2)	
Output function	2 x normally open



Position sensor for valve actuators

SVS SOLENOID OUT

Application		
Principle of operation		magnetic
Application		angle of rotation detection absolute; actuator control
Electrical data		
Operating voltage	[V]	10...30 DC
Current consumption	[mA]	< 40
Protection class		III
Reverse polarity protection		yes
Max. power-on delay time	[ms]	300
Inputs / outputs		
Number of inputs and outputs		Number of digital inputs: 1; Number of digital outputs: 2
Inputs		
Number of digital inputs		1
Outputs		
Number of digital outputs		2
Switching outputs		
Electrical design		PNP
Output function		2 x normally open / normally closed; (selectable)
Max. voltage drop switching output DC	[V]	2.5
Max. current load per output	[mA]	100
Short-circuit protection		yes
Overload protection		yes
Solenoid valve connection (SV1 / SV2)		
Output function		2 x normally open
Max. current load per output	[mA]	200
Short-circuit protection		yes
Overload protection		yes
Monitoring range		
Monitoring range	[°]	360
Accuracy / deviations		
Rotational angle detection		
Accuracy	[°]	± 1
Resolution	[°]	0.1
Temperature drift	[°/K]	0,02
Repeatability	[°]	0,1
Switch point indication		
Tolerance	[°]	0.1...15; (Factory setting 10)
Hysteresis	[°]	0.1...5; (Factory setting 3)
Interfaces		
Communication interface		IO-Link
Transmission type		COM2 (38,4 kBaud)



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IO-Link revision	1.1	
SDCI standard	IEC 61131-9 CDV	
Profiles	BLOB	Binary Large Object transfer
	Common - I&D	Identification and Diagnosis
	Function	Multiple switching signal
	Function	Teach channel
	Function	Measurement data, standard resolution
SIO mode	yes	
Required master port class	A	
Min. process cycle time [ms]	4	
Supported DeviceIDs	Type of operation	DeviceID
	default	1190

Operating conditions

Ambient temperature [°C]	-25...70	
Protection	IP 65; IP 67; (Target puck area dust-protected)	

Tests / approvals

EMC	EN 61000-4-2	4 kV CD / 8 kV AD
	EN 61000-4-3	10 V/m
	EN 61000-4-4	2 kV
	EN 61000-4-6	10 V
	EN 55011	class B
Vibration resistance	EN 60068-2-6 Fc	1 mm (10...55 Hz) / 1 octave per minute in 3 axes
Shock resistance	EN 60068-2-27 Ea	30 g 11 ms half-sine; 6 shocks each in every direction along the three coordinate axes
MTTF [years]	363	
Embedded software included	yes	
UL approval	UL approval number	S002

Mechanical data

Weight [g]	192	
Housing	rectangular	
Dimensions [mm]	95 x 50 x 57	
Material	housing, target puck: PA; plug: stainless steel (316L / 1.4404); Socket: stainless steel (316L / 1.4404)	
Tightening torque [Nm]	target puck: 1,2; housing: 3,0; housing on plastic mounting plate: 1,5	

Displays / operating elements

Display	Power	1 x LED, green
	Switching status	2 x LED, white
	Switching status	1 x LED, RGB

Accessories

Items supplied	socket head screws: 4 x (M5 x 16 mm), stainless steel	
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Remarks

Pack quantity	1 pcs.	
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MVQ201

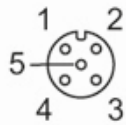


Position sensor for valve actuators

SVS SOLENOID OUT

Electrical connection - Single solenoid valve

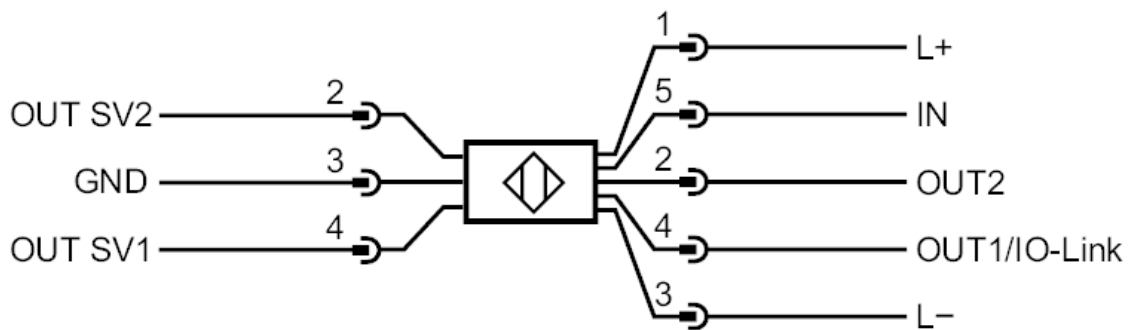
Connector: 1 x M12; coding: A; Moulded body: stainless steel



2	Out SV2
3	GND
4	Out SV1

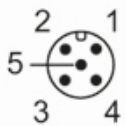
Electrical connection

Connection



Electrical connection - Process connection

Connector: 1 x M12; coding: A; Moulded body: stainless steel



1	Ub
2	Out2
3	GND
4	Out1 IO-Link
5	In1

Other data

Inputs

Operating mode	12 V	24 V
Switching level high	6...30 V	15...30 V
Switching level low	0...2 V	0...5 V