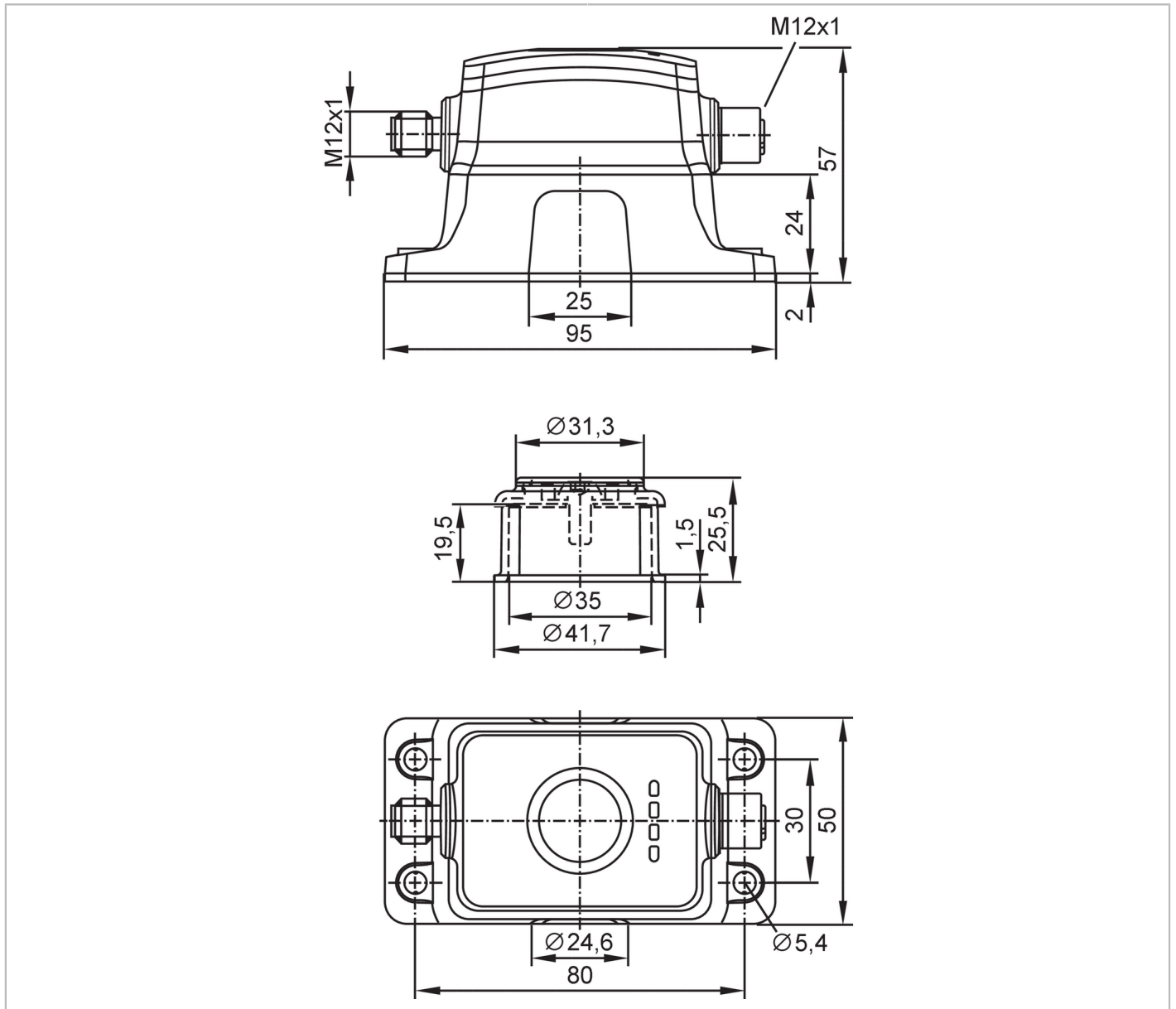


# MVQ201



## 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
Application	
Operating principle	magnetic
Application	angle of rotation detection absolute; actuator control

# MVQ201



## Position sensor for valve actuators

SVS SOLENOID OUT

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
Detection zone	
Detection zone [°]	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)
IO-Link revision	1.1
SDCI standard	IEC 61131-9 CDV

# MVQ201



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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 type		A
Min. process cycle time [ms]		4
Supported DeviceIDs	<b>Type of operation</b>	<b>DeviceID</b>
	default	1190

Operating conditions		
Ambient temperature [°C]		-25...70
Storage temperature [°C]		-40...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 no.	S002

Mechanical data		
Weight [g]		192
Housing		rectangular
Dimensions [mm]		95 x 50 x 57
Materials		housing: PA; 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	operation	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

Remarks		
Pack quantity		1 pcs.

# MVQ201

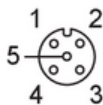


## Position sensor for valve actuators

SVS SOLENOID OUT

### Electrical connection - solenoid valve

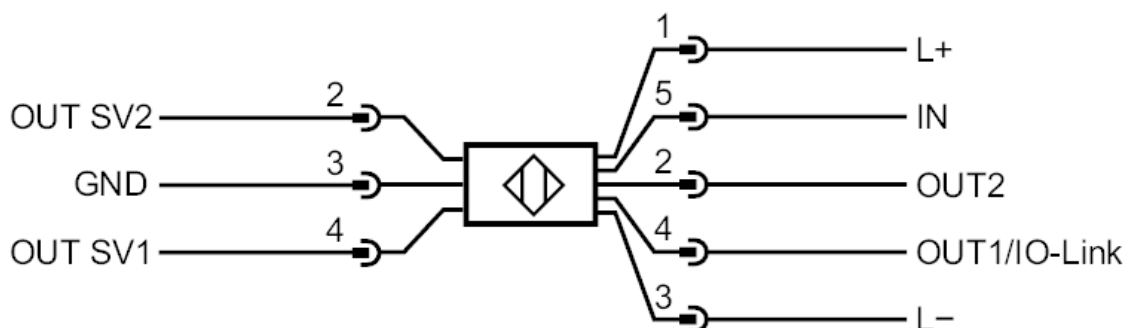
Connector: 1 x M12; coding: A; Contacts: 3; Moulded body: stainless steel



2	Out SV2
3	GND
4	Out SV1

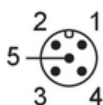
### Electrical connection

#### Connection



### Electrical connection - Process connection

Connector: 1 x M12; coding: A; Contacts: 5; 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