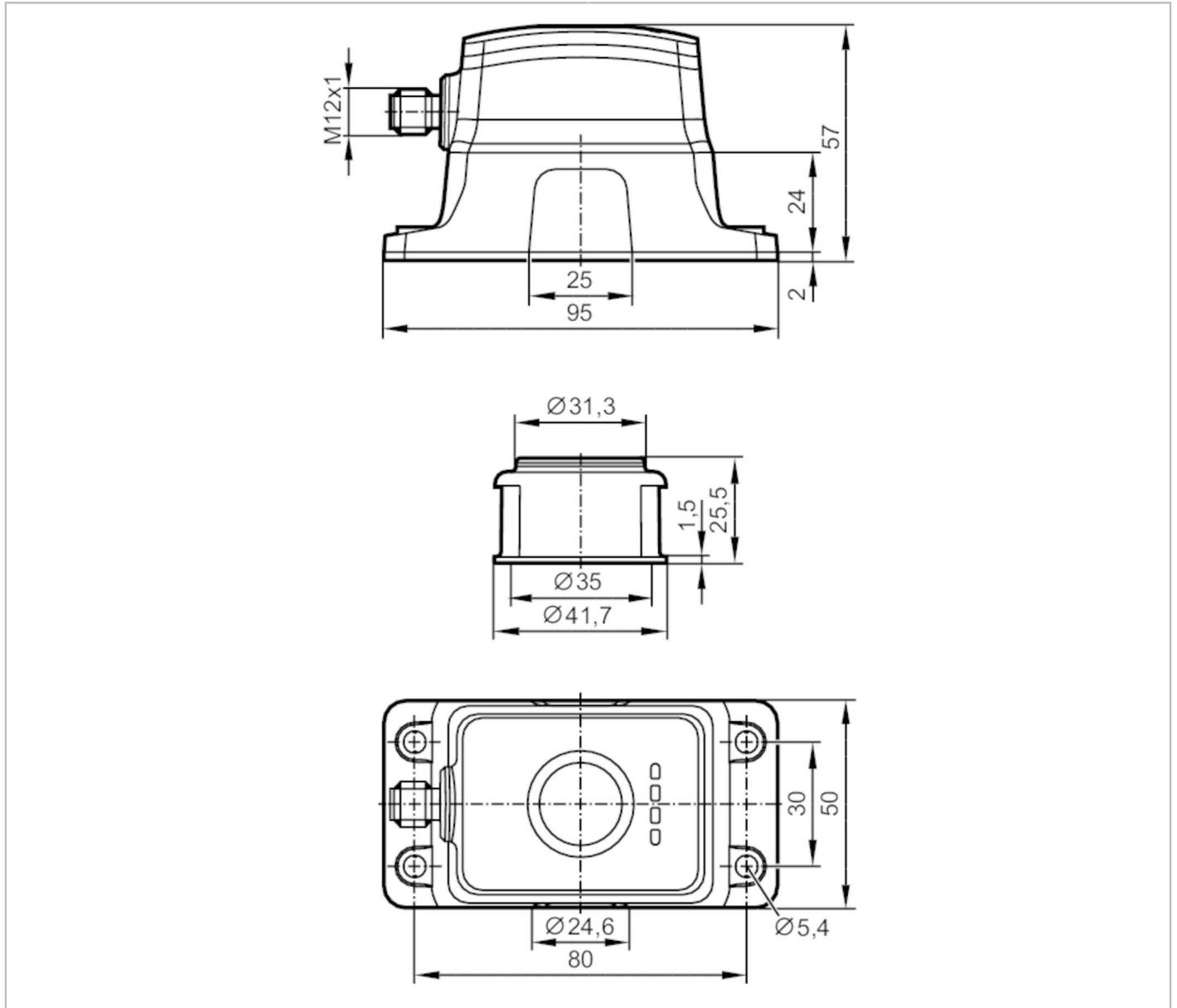


# MVQ101



## Position sensor for valve actuators

SVS BASIC IO-LINK



### Product characteristics

Electrical design	PNP
Output function	3 normally open / normally closed; (selectable)
Communication interface	IO-Link
Housing	rectangular
Dimensions [mm]	95 x 50 x 57

### Application

Principle of operation	magnetic
Application	angle of rotation detection absolute

### Electrical data

Operating voltage [V]	10...30 DC
Current consumption [mA]	< 40

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Protection class	III
Reverse polarity protection	yes
Max. power-on delay time [ms]	300

### Outputs

Electrical design	PNP
Output function	3 normally open / normally closed; (selectable)
Max. voltage drop switching output DC [V]	2.5
Permanent current rating of switching output DC [mA]	100
Short-circuit protection	yes
Overload protection	yes

### Monitoring range

Monitoring range [°]	360
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### Accuracy / deviations

Accuracy [°]	± 1
Resolution [°]	0.1
Tolerance [°]	0.1...15; (default 10)
Hysteresis [°]	0.1...5; (default 3)
Temperature drift [°/K]	0,02
Repeatability [°]	0,1

### Interfaces

Communication interface	IO-Link				
Transmission type	COM2 (38,4 kBaud)				
IO-Link revision	1.1				
SDCI standard	IEC 61131-9 CDV				
Profiles	Smart Sensor: Device Identification; Device Diagnosis; Device Teach Channel; Binary Data Channel; Process Data Variable; Blob; Measurement Data Channel				
SIO mode	yes				
Required master port class	A				
Min. process cycle time [ms]	4				
Supported DeviceIDs	<table><thead><tr><th>Type of operation</th><th>DeviceID</th></tr></thead><tbody><tr><td>default</td><td>595</td></tr></tbody></table>	Type of operation	DeviceID	default	595
Type of operation	DeviceID				
default	595				

### 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

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MTTF	[years]	410
Embedded software included		yes
UL approval	UL approval number	S001

Mechanical data		
Weight	[g]	175
Housing		rectangular
Dimensions	[mm]	95 x 50 x 57
Material		PA
Tightening torque	[Nm]	1.5

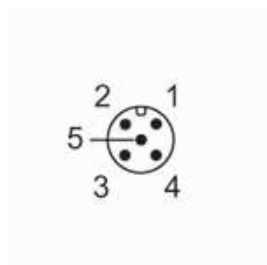
Displays / operating elements		
Display	Power	1 x LED, green
	Switching status	2 x LED, white RGB

Accessories	
Items supplied	socket head screws: 4 x M5 x 16, stainless steel

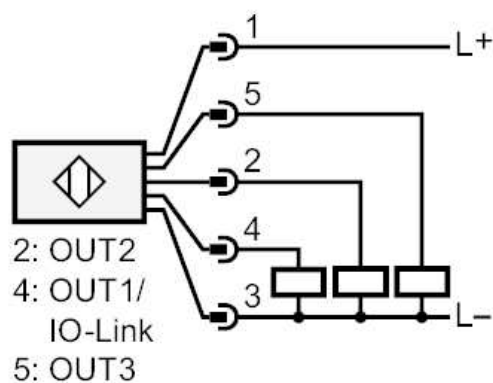
Remarks	
Pack quantity	1 pcs.

### Electrical connection - plug

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



### Connection



1	Ub
2	Out2
3	GND
4	Out1 IO-Link
5	Out3