

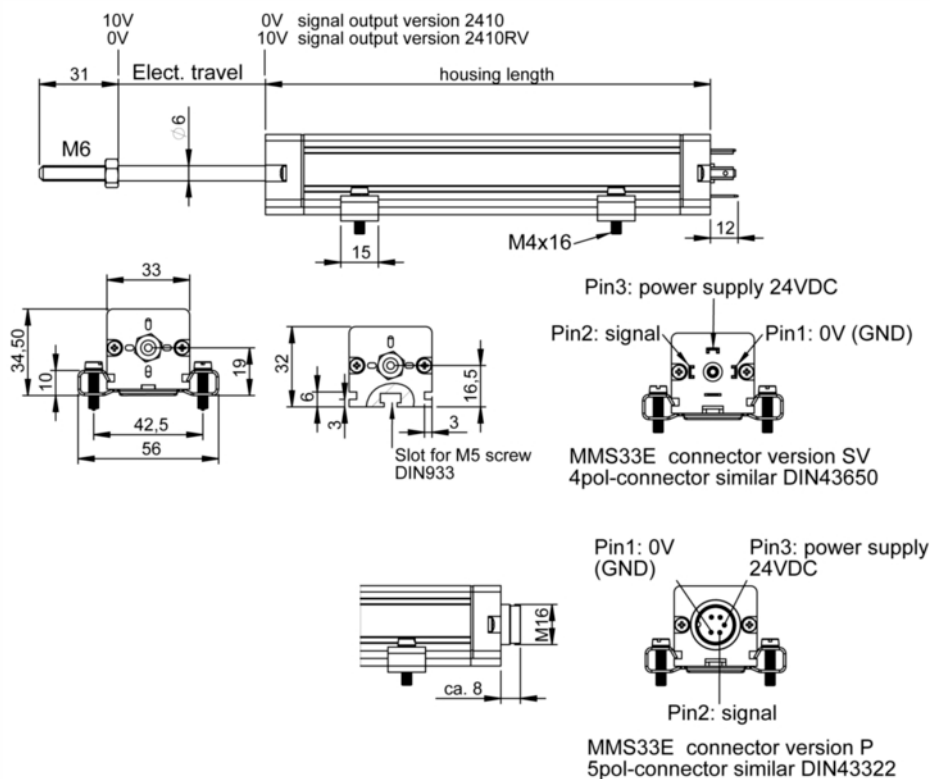
Series MMS33 E / Potentiometric Transducer with integrated Amplifier

- Electronics:
Supply voltage $24V \pm 20\%$
Analog output $0...5/10V$; $0/4...20mA$
- Measuring range up to 900 mm
- Linearity tolerance $\pm 0,1\%$
- Resolution quasi infinite
- Operating temperature $-30...+80^{\circ}C$
- Protection class IP60 and IP65

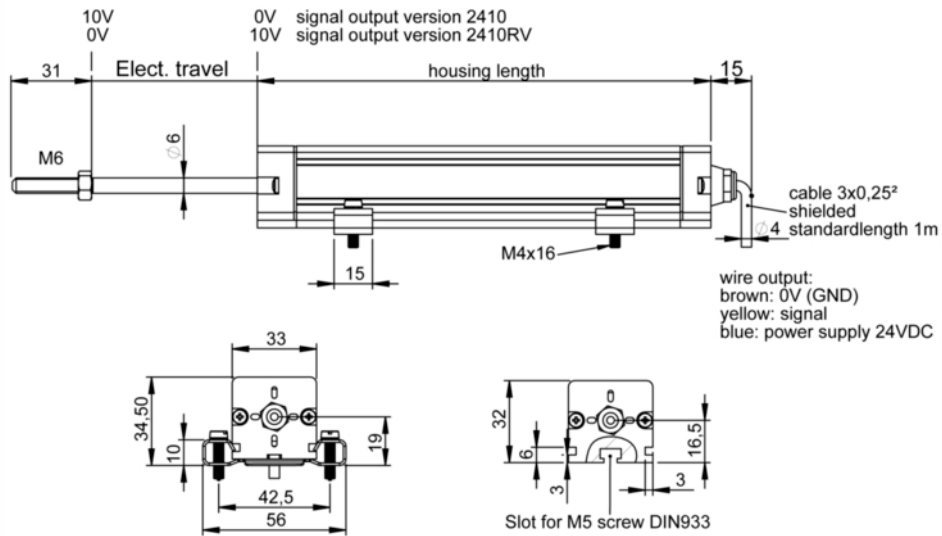


The MMS33E linear transducer is a potentiometric sensor with conductive plastic technology. In his housing a signal converter is integrated to provide the typical output signals $0..5/10V$ and $0/4...20mA$ with $24V \pm 20\%$ power supply. A stabilised power supply is not necessary as for the potentiometric series MMS33. The installation dimensions has not be changed to the potentiometric version. The compact and robust design allows applications in heavy duty conditions. The smoothed push rod and the high quality guidance guarantees long life time up to 100 Mio movements.

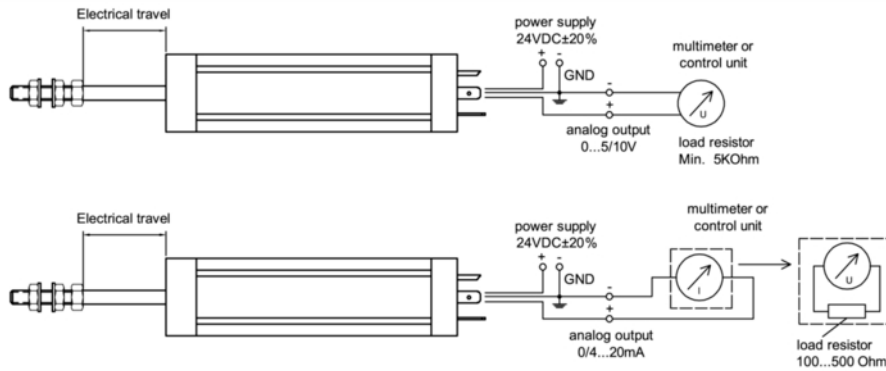
Drawing



Series MMS33 E / Potentiometric Transducer with integrated Amplifier



Wiring Diagram



Dimensions in mm

Electr. Stroke + 1 *	50	75	100	130	150	175	200	225	275	300	350	375	400	450	500	600	650	750	900
Mech. Stroke ± 1	59	84	109	139	159	184	210	235	285	310	361	386	412	518	518	619	670	772	924
Housing Length	113	138	163	193	218	238	264	289	339	364	415	440	466	517	572	673	725	826	978

* At the start of the measured displacement (0...2%FS) and at the end (98...100%FS) the linearity can deviate from the data sheet specifications.

Electrical Data

Independent Linearity Tolerance	± 0,1 %
Sampling Rate	< 1 ms
Operating Voltage	24 VDC ± 20 %
Resolution	quasi infinite
Signal Coefficient	150 ppm/K typical voltage version 0-10V: 50 typical current version 0/4...20mA: 100
Insulation Resistance	> 100 MOhm at 500V DC
Load Resistance Voltage Output	5 kOhm

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Electrical Data

Load Resistance Current Output	100 - 500 Ohm
Load Capability	0 - 500 nF

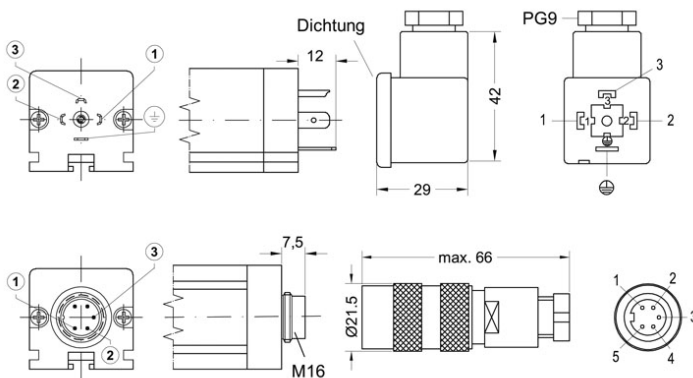
Mechanical Data

Max. Displacement Speed	IP60-Version = 10 m/s IP65-Version = 5 m/s
Max. Acceleration	$\leq 200 \text{ m/s}^2$ (20g)
Middle Life	$> 25 \times 10^6$ Meter or $> 100 \times 10^6$ Movements (the smaller value is currently in force)
Friction	IP60-Version $< 3 \text{ N}$ IP65-Version $< 25 \text{ N}$
Housing Material	anodized Aluminium
Rod Material	stainless Steel AISI 303

Ambient Conditions

Operating Temperature	$-30 \dots +80^\circ \text{ C}$
Storage Temperature	$-30 \dots +100^\circ \text{ C}$
Shock	50 g / 11 m/s
Vibration	5 ... 2000 Hz, $A_{\text{max}} = 0,75 \text{ mm}$, $a_{\text{max}} = 20 \text{ g}$

Mating Connector

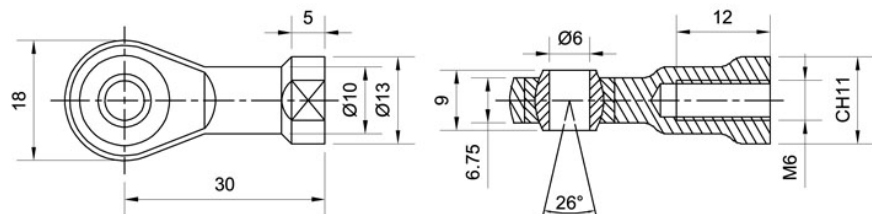


4-pol. Mating Plug Type SW25 DIN 43650

5-pol. Mating Plug Type SW61 DIN 43322

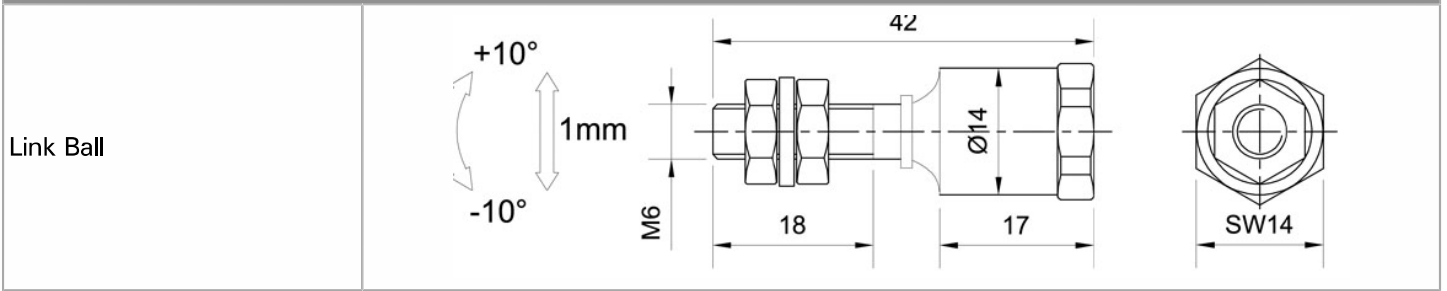
Accessories: Push Rod Mounting

Ball Joint



Series MMS33 E / Potentiometric Transducer with integrated Amplifier

Accessories: Push Rod Mounting



Options / Accessories

- Plug 4-pole (angled) Typ SW25
Part No. 110 767
- Mounting brackets (2 pcs. included in delivery)
Part No. 111 679
- Other cable length for IP60/65 versions
- Plug 5-pole (straight) Typ SW61
Part No. 110 906
- Plug 5-pole (angled) Typ SKW61
Part No. 114 462
- Ball joint PE01 (M6x1 thread) Part No. 110 434
- Link ball M6

Order Description

Series	Electrical Connection	Stroke	Protection Class	Output
MMS33E	K = Cable, Standard 1m SV = 4-pole Connector DIN43650 P = 5-pole Connector DIN43322	200	IP65 IP60	2410 = 0 - 0V 2405 = 0 - 5V 2420 = 0 - 20mA 2442 = 4 - 20mA 2410RV = 10V - 0 2405RV = 5V - 0 2420RV = 20mA - 0 2442RV = 20mA - 4

The specifications and information in this datasheet cannot consider all special demands that are caused by the application. Because of this, they are no general description of the properties of the product.

02. September 2010. All specifications are subject to change without notice.