

Linear-Transducer LA42 - ISI

Ref.: K-LA42-ISI-1

18.11.2013

0102010040

Advantages

- _ Customer-specific solutions
- _ Flexible programming
- _ Further interfaces available
- _ Measures linear movements
- _ Perfect fit for cylinders
- _ Pressure proof tube housing
- _ Wear-free detection



General Data

Supply	
- Supply voltage	24 VDC, -20...+10 %
Current consumption no load	<= 250 mA
Measuring principle	magnetostrictive
Measuring length, standard	150...3000 mm, in steps
Resolution	0.01 mm
Linearity deviation	< 0.05 %
Reproducibility	0.01 mm
Hysteresis	0.1 mm
Temperature coefficient	< 8 $\mu\text{m}/^\circ\text{C}$ <= 500 mm < 15 ppm/ $^\circ\text{C}$ > 500 mm
Straight line velocity	1 m/s, Resolution = 0.01 mm
Mounting position	no restrictions
Material - Measuring body	Cr/Ni - alloy
Rod end mounting	Option
Magnet	T4-M33 other on request
Incremental - Interface	
- Load frequency	4...120 kHz
- Incremental signals	K1 \pm K2 \pm
- Output driver, TTL	RS-422, 5 VDC

Subject to change.

TR-Electronic GmbH
 Eglshalde 6
 78647 Trossingen
 Tel. +49 (0) 7425 228-0
 info@tr-electronic.de
www.tr-electronic.de

Linear-Transducer LA42 - ISI

Ref.: K-LA42-ISI-1

18.11.2013

0102010040

General Data continuation

- Output driver, HTL	Push-Pull, 11...27 VDC
Parameter/Function, changeable	Resolution
	Load frequency
	Preset parameter
Type of parametrization	programmable
Prgramming - Tool	TR-Soft: TRWinProg
	TR-Tool: PT-100-N
Cycle time, internal	see dimensional drawing
External inputs	
- Preset	electronic adjustment
- Load input	Load absolute position
- Logic level	"0" < +2V, "1" = Supply
External outputs	
- Load output	ISI Load process finished

Environmental conditions

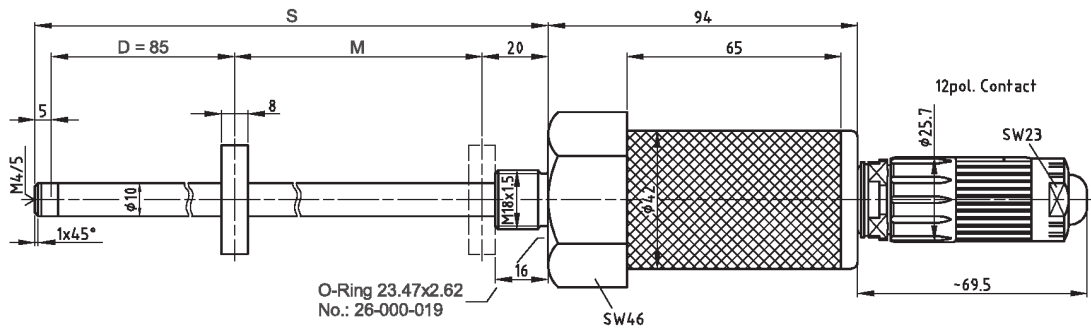
Vibration	
- Specific value	$\leq 100 \text{ m/s}^2$
- Sine	50...2000 Hz
Shock	
- Specific value	$\leq 1000 \text{ m/s}^2$
- Half sine	11 ms
Immunity to disturbance	DIN EN 61000-6-2
Transient emissions	DIN EN 61000-6-3
Working temperature	
- Standard	0...+70 °C
- Optional	-20...+70 °C;
Storage temperature, dry	-30...+85 °C
Relative humidity	98 %, non condensing
Protection class	
- Standard	IP65
Stray magnetic field	< 3 mT
Measuring reference	Measuring plane
Pressure resistance	
- Optional	600 bar, static

Subject to change.

Linear-Transducer LA42 - ISI

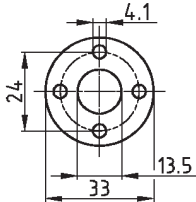
Ref.: K-LA42-ISI-1
 18.11.2013
 0102010040

Dimensional drawing



- S = Stablänge
 - D = Dämpfungszone: keine Herstellergarantie für die Messdaten
 - M = Messlänge: typenbezogener Messweg
 - L = 5mm Zusatzlänge mit M4x5 bei Option Stabspitzenlagerung
- S = TOTAL LENGTH
 D = DAMPING ZONE: IN THIS AREA NO MEASURING SIGNAL IS PRODUCED
 M = EFFECTIVE LENGTH
 L = 5mm ADDITIONAL LENGTH WITH M4X5 FOR OPTION ROD MOUNTING

Positionssensor T4-M33
 POSITION SENSOR T4-M33



Messlänge M (mm) EFFECTIVE LENGTH M (mm)	Stablänge S (mm) TOTAL LENGTH S (MM)	Zykluszeit (ms) CYCLE (ms)
150	256	1,0
300	406	1,0
500	606	1,5
750	856	2,0
1000	1106	2,0
1500	1606	2,7
2000	2106	3,5
2500	2606	4,5
3000	3106	5,2

Subject to change.

TR-Electronic GmbH
 Eglisshalde 6
 78647 Trossingen
 Tel. +49 (0) 7425 228-0
 info@tr-electronic.de
www.tr-electronic.de