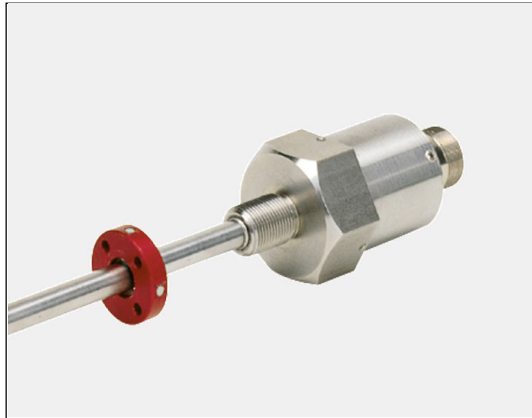


Linear-Encoder LA-41-K A



- **High Pressure Type, Makes it Possible for Installation into Hydraulic Cylinders**
- **For Linear Measurement**
- **Non Contact and Wear Free**
- **Adjustment via set-inputs**
- **Analog Interface**
- **Housing length: 66 mm**

7

Electrical Data

Measurement Principle	Magnetostrictive
Measuring Length (Stroke) Standard (mm).....	150, 300, 500, 700, 750, 1000, 1500, 2000, 2500, 3000 > 3000 by request
Resolution	max. 0.1 mm
Operating Voltage	24 V DC \pm 10 %
Power Dissipation (No Load)	< 4 Watt
Analog Voltage Interface.....	0 - 10 V, 10 - 0 V, \pm 5 V, \pm 10 V
Impedance	min. 680 Ω
Analog Current Interface.....	0 - 20 mA, 4 - 20 mA
Impedance	max. 500 Ω
Cycle Time	See Dimensional Drawing
Data Transmission Length	
Dependent on Shield Design	max. 10 m for Analog Voltage Interface, max. 1000 m for Analog Current Interface
Inputs	
Zero Set	For setting the start point of the analog signal
Span Set	For setting the end point of the analog signal
Logic Levels	"0" < + 2 V DC, "1" > + 8 V DC, max. 30 V DC
Pin Configuration.....	Upon request

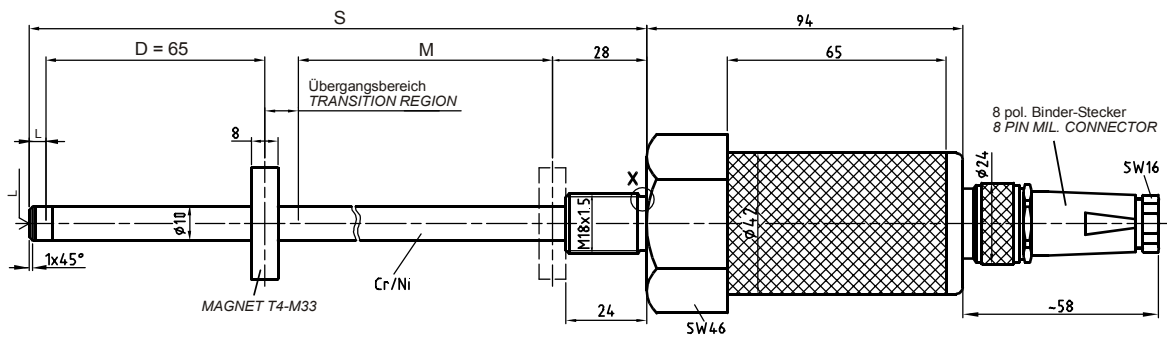
Environmental Data

Electromagnetic compatibility (EMC).....	EN 61000-4-2 (IEC-801-2) / EN 61000-4-4 (IEC-801-4)
Operating Temperature.....	0°-70°C (32° to 158° F) (Optional -20° to +70°C) (-4° to 158° F)
Storage Temperature.....	-30° to +80°C (-22° to 178° F)
Relative Humidity	98 % (non condensing)
*Protection Class	IP 65 (DIN 40 050)
* The protection class of the sensor can be effected by the type of connector used.	

Mechanical Data

Linearity	< 0.05 % of Stroke Length
Reproducibility	≤ 0,01 mm
Hysteresis	< 0.1 mm
Temperature Coefficient	< 5 μm / °C
Vibration (Sinus 50-2000 Hz) according to DIN IEC 68-2-6	≤ 100 m/s ² (10g)
Shock (11ms) according to DIN IEC 68-2-27	≤ 1000 m/s ² (100g)
Pressure Resistance (Option)	600 bar static
Rod Material	Cr/Ni-alloy
Magnetic Interference (at rod circumference)	< 3 mT (milli Tesla)
Operating Speed and Mounting Orientation	No restrictions
Magnet Type (Standard)	T4-M33
Magnet Type (Option)	T3-U64
Rod Mounting	Option
Mechanical Special Types	Upon Request
Connector	8 pin MIL-Connector

Dimensional Drawing



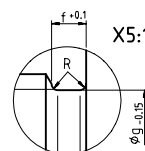
S = Stablänge
 D = Dämpfungszone: Keine Herstellergarantie für die Meßdaten
 M = Meßlänge: Typenbezogener Meßweg
 L = 5 mm Zusatzlänge mit M4x5 bei Option Stabspitzenlagerung

S = TOTAL LENGTH
 D = DAMPENING ZONE: IN THIS AREA NO MEASURING SIGNAL IS PRODUCED
 M = STROKE LENGTH
 L = 5 MM ADDITIONAL LENGTH WITH M4x5 FOR OPTION ROD MOUNTING

Einzelheit "X"
 DETAIL "X"

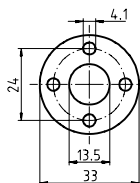
Maße entsprechen Einschraubzapfen DIN 3852-F

DIMENSIONED TO DIN 3852-F



G	f	g	R	O-RING
M18x1.5	2.3	15.9	0.4	15.4x2.1

MAGNET T4-M33



Meßlänge M (mm) STROKE LENGTH M (mm)	Stablänge S (mm) TOTAL LENGTH S (MM)	Zykluszeit (ms) CYCLE (ms)	Auflösung (mm) RESOLUTION (MM)
150	250	0,5	0,1
300	400	0,5	0,1
500	600	0,5	0,12
700	800	1	0,17
750	850	1	0,18
1000	1100	1	0,25
1500	1600	2	0,37
2000	2100	2	0,5
2500	2600	2	0,6
3000	3100	2	0,75