

Very compact and simple low-cost type
 Housing of extruded aluminium sheath
 Flexible stainless steel cable Ø 1 or 1,2 mm
 Strong spring mechanics
 Precision cable drum



Absolut Weggeber PLA 85 / PLA 115

Linear Motion Transducer up to 15.000 mm range, with STANDARD ABSOLUTE ENCODER

Used encoder

Used encoder

Absolut Encoder EAM 57 / EAMS 57 SSI
 Absolut Encoder EAM 58 Interbus
 Absolut Encoder EAM 58 Profibus
 Absolut Encoder EAM 58 CANopen® / Device Net
 Absolut Encoder EAM 58 / EAMS 58 Ethernet Powerlink

Type explanation

PLA 85-25-12/EAM57-25G-30-D-SC12

| | |
|------------------------|--|
| Measuring range | 25 = 2.500 mm 50 = 5.000 mm 75 = 7.500 mm 100 = 10.000 mm 150 = 15.0000 mm |
| Encoder type | Absolute |
| Number of bits | 24 = 12 bits x 4096 turn 25 = 13 bits x 4096 turn 28 = 16 bits x 4096 turn |
| Supply voltage | 30 = 10 .. 30 VDC |
| Interface | IBS = Interbus PB = Profibus CO = CANopen® DN = Device Net PL = ETHERNET Powerlink |
| Output driver | D-SSI DI |
| Position of connection | R S |
| Connector | C12 = 12 pins M23 |

Technical data

Mechanical data

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|------------------------|--|
| Acceleration of cable | $\leq 30 \text{ ms}^{-2}$ (PLA115-100, PLA115-150) $\leq 50 \text{ ms}^{-2}$ (PLA85-25, PLA115-50) $\leq 60 \text{ ms}^{-2}$ (PLA115-75) |
| Side movement of cable | $\leq 3^\circ$ |
| Weight | $\approx 1,7 \text{ kg}$ (PLA 85) $\approx 2.1 \dots 3,4 \text{ kg}$ |

Environmental conditions

| | |
|-----------------------|---|
| Vibration | 100 ms^{-2} (20 ... 2000 Hz) |
| Shock | 200 ms^{-2} |
| Operating temperature | 0 ... +70°C |
| Storage temperature | -40 ... +85°C |
| Atmospheric humidity | $\leq 98\%$ r.h. |
| Protection class | IP 65 (Encoder) IP 40 (Mechanic of Linear Motion Transducer) |

Electrical data

| | |
|------------------------|---|
| Scanning type | Optical, without contact |
| Transmitter, infrared | LED |
| Receiver | Photo-Array |
| Scanning frequency LSB | 800 kHz |
| Supply voltage | $V_{cc} = 10 \dots 30 \text{ VDC}$ |
| Power consumption | $\leq 180 \text{ mA}$ ($V_{cc} = 24 \text{ V}$) |

Electrical connections

SSI

| | |
|-----------|------------------------|
| Interface | RS485 with optocoupler |
| Clock | max. 2 MHz |

Profibus

| | |
|-----------|------------------------|
| Interface | RS485 with optocoupler |
| Clock | max. 12 MBaud |

CANopenR

| | |
|-----------|-------------------------------|
| Interface | CAN Transceiver ISO/DIS 11898 |
| Clock | 20 kBaud ... 1 MBaud |

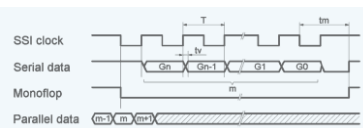
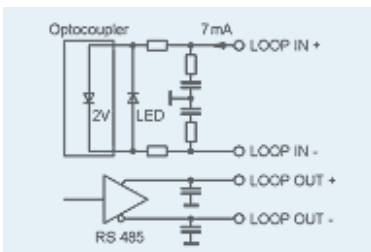
Device Net

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|-----------|-------------------------------|
| Interface | CAN Transceiver ISO/DIS 11898 |
| Clock | 125, 250, 500 kBaud |

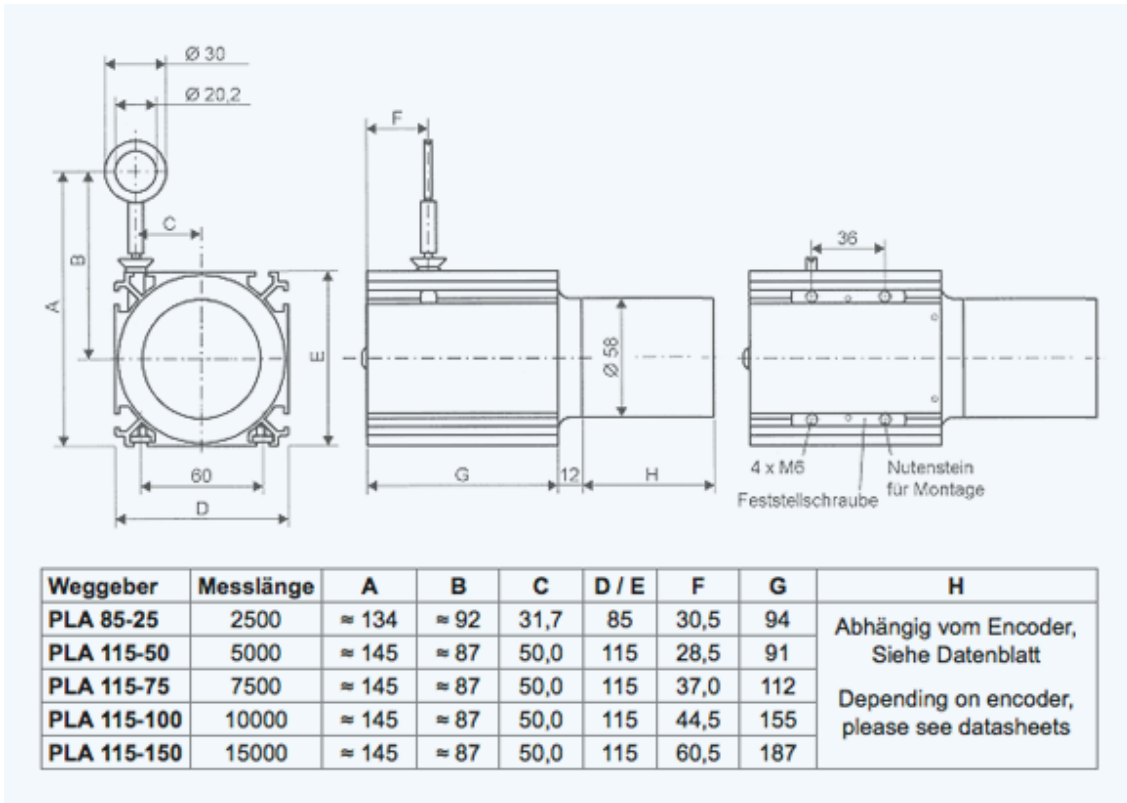
Interbus

| | |
|-----------|---------------------------|
| Interface | RS485 with optocoupler |
| Clock | max. 500 kBaud or 2 MBaud |

Channel schematic



Outline drawing



Version ZE 611-411 · Subject to change

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