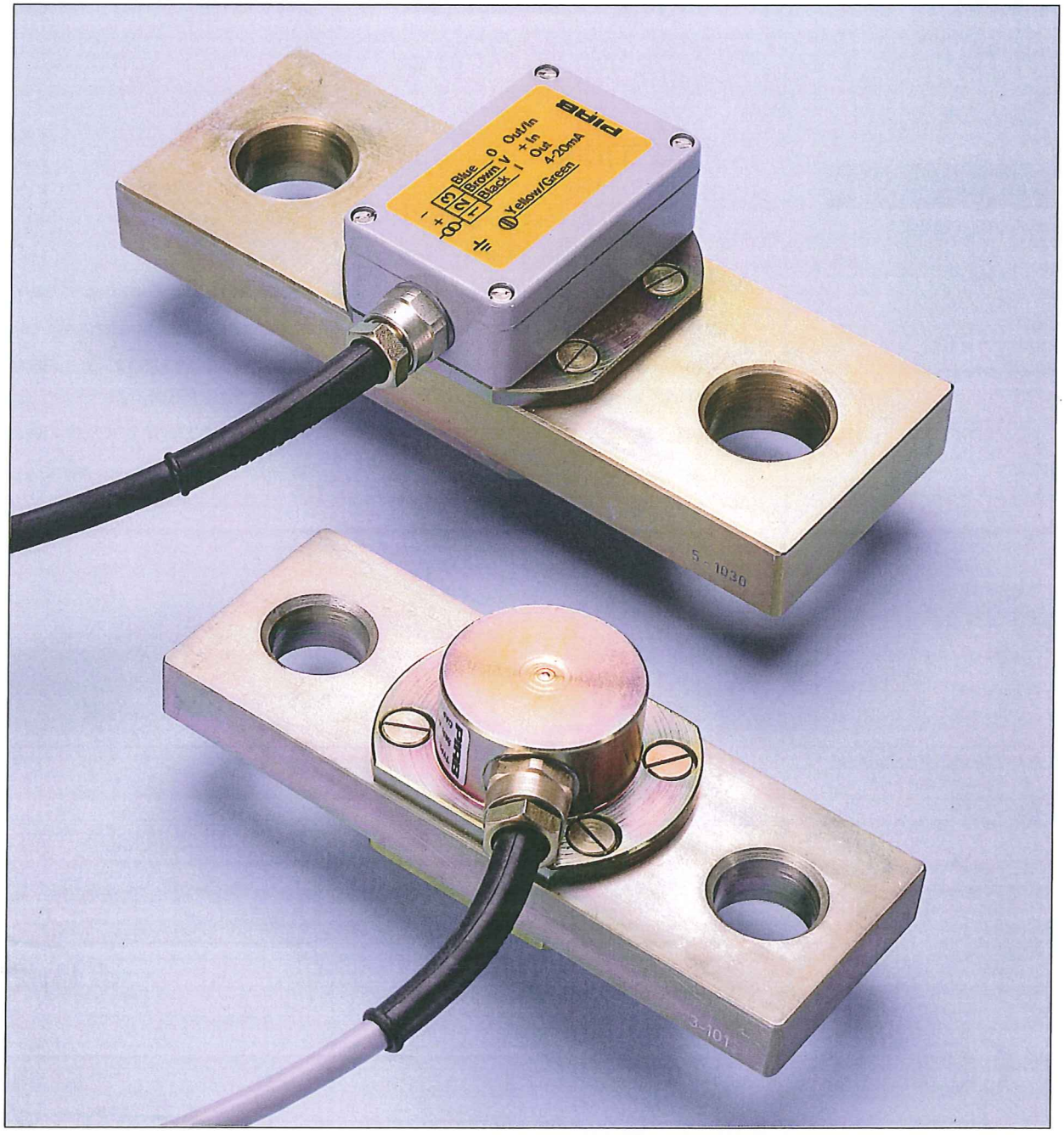
# LL/LLA LINK




For accurate force measurement and load indication.
The PIAB LL and LLA are made for use in aggressive industrial environments and fully conform to IP 67.

PIAB

## TECHNICAL DATA LL/LLA

ACCURACY
*± 0.15 % of the max. capacity.*

MATERIAL
*Toughened steel, zink coated and white chromated.*
*Extra: polyester lacquering.*

INTERNATIONAL PROTECTION SPECIFICATION CLASS
*IP 67.*

TEMPERATURE RANGE
*-20°C – +70 °C.*

OVERLOAD
*50 % without affecting the accuracy.*

## TECHNICAL DATA LL

RECOMMENDED INPUT VOLTAGE
*10 VDC.*

MAX INPUT VOLTAGE
*15 VDC.*

SENSITIVITY
*0-approx. 1.7mV/V.*

TRANSDUCER IMPEDANCE IN
*380 ohm.*

TRANSDUCER IMPEDANCE OUT
*350 ohm.*

REPEATABILITY
*±0.1% of the max. capacity.*

CABLE
*4 m 6 x 0.5 mm² shielded cable.*

## TECHNICAL DATA LLA

SUPPLY VOLTAGE
*15-30 VDC.*

POWER CONSUMPTION
*Approx. 60 mA.*

OUTPUT SIGNAL
*4-20 mA. The signal is resistant to interference and can withstand, without affecting the accuracy, serial resistances up to 250 ohm.*

CABLE
*4 m 4 x 1.5 mm² unshielded cable. The cable transmits supply voltage to the transducer amplifier as well as an output signal from the transducer amplifier to the electronic unit. The cable can be placed close to other live cables without affecting the output signal.*

CE

CERTIFICATED ISO 9001 COMPANY

# RANGE OF APPLICATION

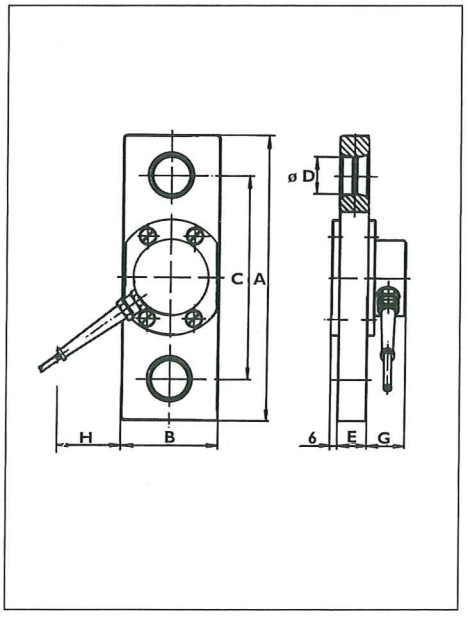
The PIAB LL/LLA can be used as a transmitter for weighing and measuring of tension forces.
The LL and LLA are suitable as transmitters and overload guards, for protection and load indication.
LL-Link without transducer amplifier (0-approx. 1.7mV/V).
LLA-Link with built-in transducer amplifier (4-20mA).

# FUNCTION

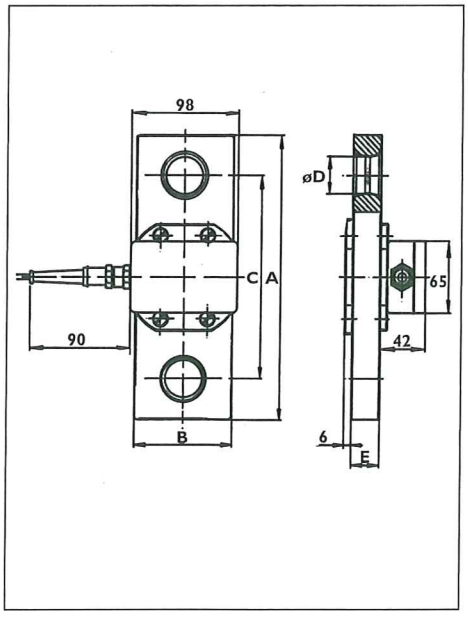
The tension force affecting the Link is measured by means of strain gauges. Four gauges in a Wheatstone bridge are fed with a constant voltage.
The output signal from the bridge (mV/V) is proportional to the force on the Link.
The transducer amplifier of the LLA amplifies and converts the signal to a current signal of 4-20 mA which is resistant to interference. This signal corresponds to the capacity of the transducer. The amplified signal can be transmitted a distance of at least 500 m.
*Important! The LL/LLA must not be exposed to bending and turning moments.*

| TYPE LL/LLA | CAPACITY ton | WEIGHT kg | | MEASUREMENTS mm | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | LL | LLA | A | B | C | D | E | G | H |
| 2 | 2 | 2.6 | 3.1 | 205 | 69.3 | 150 | 26 | 20 | 31 | 68 |
| 3 | 3 | 2.7 | 3.2 | 205 | 72.4 | 150 | 26 | 20 | 31 | 67 |
| 5 | 5 | 5.0 | 5.3 | 258 | 89.6 | 184 | 34 | 27 | 34 | 58 |
| 10 | 10 | 7.1 | 7.4 | 300 | 96.0 | 204 | 46 | 35 | 34 | 56 |
| 20 | 20 | 19.4 | 19.7 | 440 | 147 | 290 | 60 | 47 | 36 | 50 |
| 50 | 50 | 30.0 | 30.2 | 570 | 187 | 350 | 95 | 47 | 36 | 30 |
| 75 | 75 | 49.0 | 49.2 | 570 | 187 | 350 | 95 | 77 | 36 | 30 |

LL 2-75/LLA 20-75




LLA 2-10

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