

5 Specifications

5.1 Characteristic data

Manufacturer	Leuze electronic GmbH + Co.
Transmission medium	IR modulated light
Modulation	Pulse Pause Modulation (PPM)
Range	0 - 1.8 m
Time per data exchange	< 400 μ s
Resistance to outside light	30 klux
Optical beam angle	+/- 20°
EMC (IEC 801.4)	Supply: severity 4 I/O conductor: severity 3

Transmit / receive characteristics

(all specifications in cm)

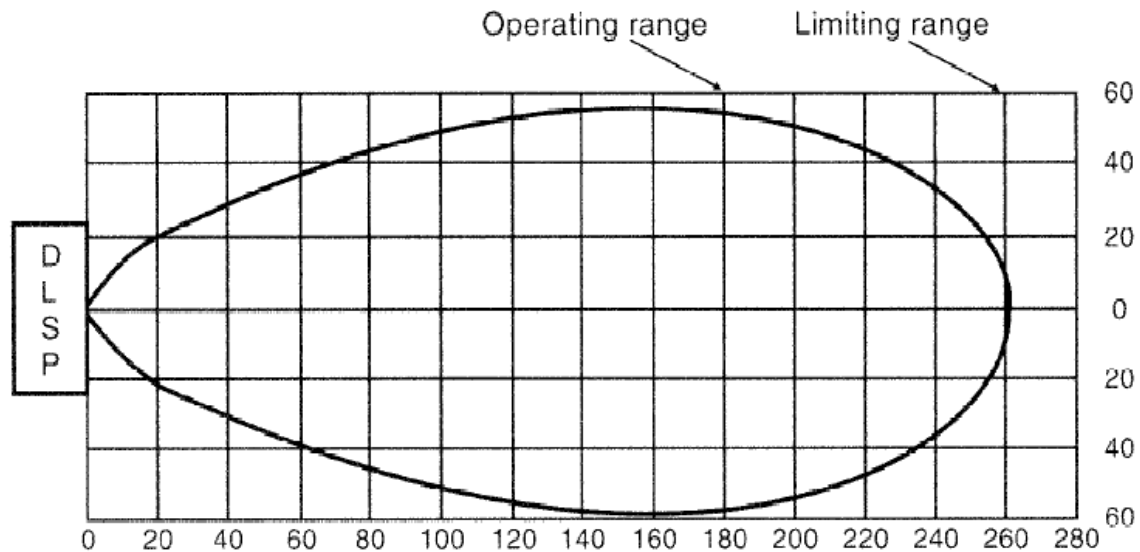


Fig. 10 Transmit / receive characteristics

5.2 Mechanical data

Housing	Aluminium
Surface finish	Anodized
Colour	Red/black
Dimensions	75 x 55 x 45 mm (W x H x D)
Terminals	Soldered, flat ribbon cable or spring-type
Fixture	2 M4 screws
Protection class	IP 65 (splash water protection)

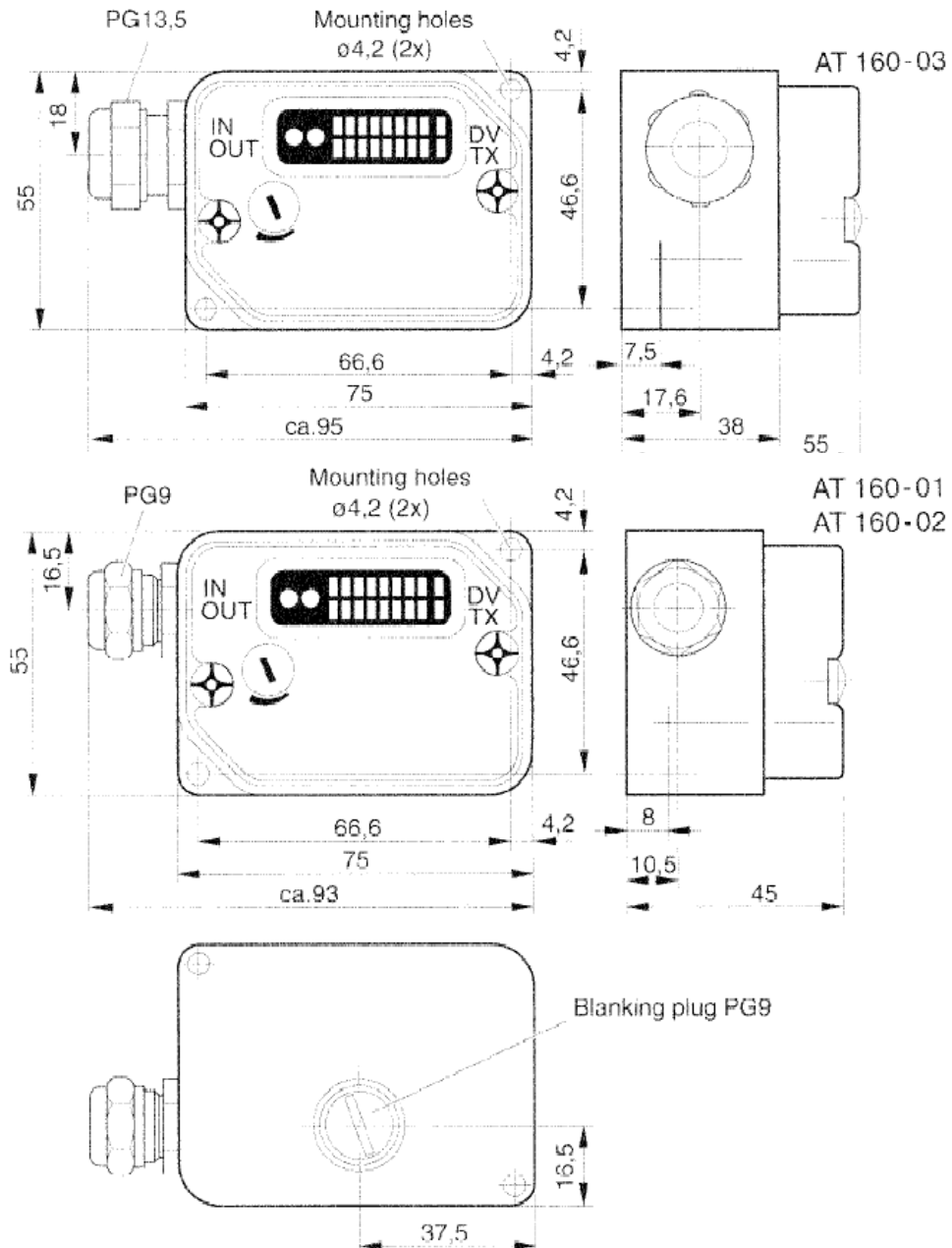


Fig. 11 Dimensions (mm)

5.3 Ambient conditions

Ambient temperature	-20°C to +60°C
Storage temperature	-30°C to +70°C

5.4 Electrical data

Supply	
Operating voltage	16-35V DC
Residual ripple	15%
Current consumption	appr. 130 mA (all LEDs on)

Inputs

Data inputs (Data IN)	max. 35 V DC, 4.5 mA
Transmit (TX)	$H \geq 8 \text{ V}$, $L \leq 5 \text{ V}$
Output enable (OE)	$H \geq 8 \text{ V}$, $L \leq 5 \text{ V}$

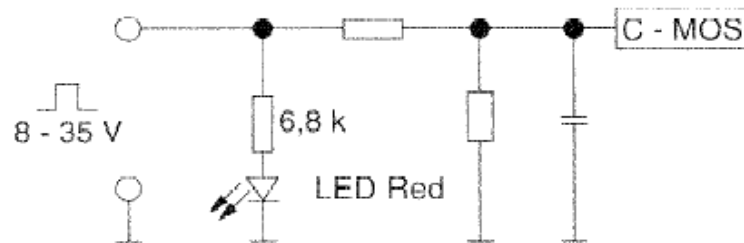


Fig. 12 Input circuit

Outputs

Data outputs (DO)	High-side driver, short-circuit proof
	$H \geq U_B - 2\text{V}$, $L \leq 1.5 \text{ V}$
max. load	2 outputs each 250 mA
	3 outputs each 160 mA
	4 outputs each 120 mA
	5 outputs each 100 mA
	6 outputs each 80 mA
	7 outputs each 70 mA
	8 outputs each 60 mA

With a total data output load greater than 0.6 A, the back-up fuse triggers. The supply voltage must be switched off and back on again one time in order to activate the back-up fuse.

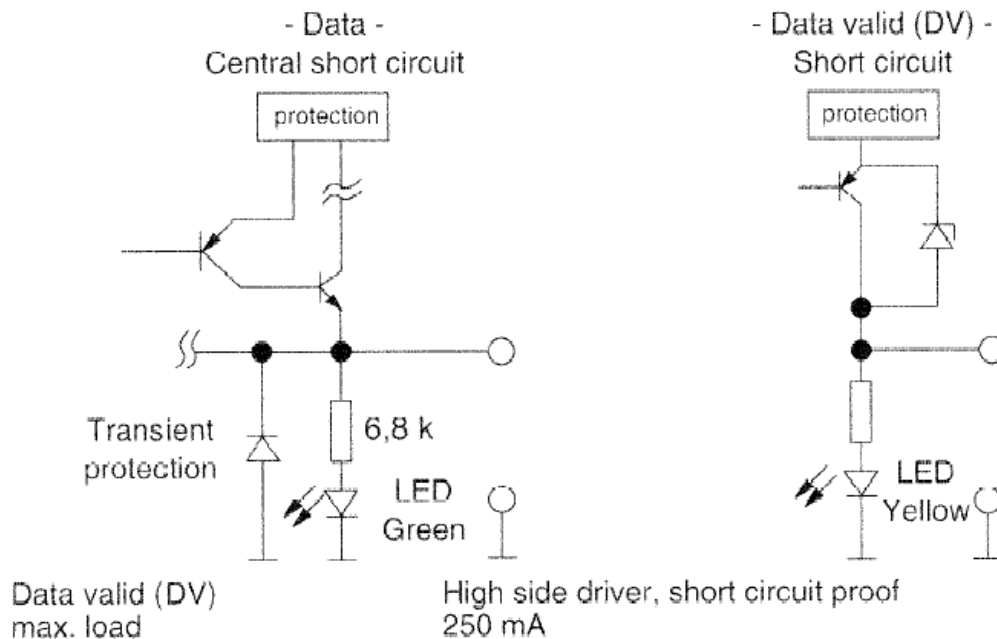


Fig. 13 Output circuit