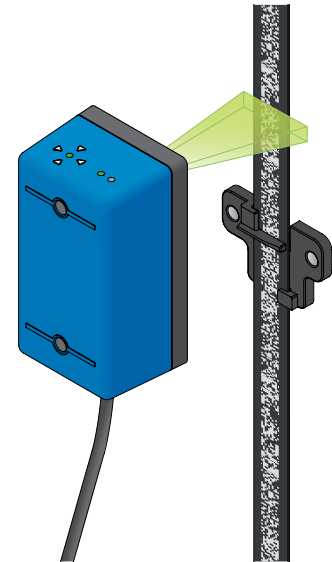


APS C-Series one – Absolute Positioning System

Technical data

FEATURES

- ▶ Wear-free, contactless principle
- ▶ Absolute position up to 1,500 m with a resolution of 0.5 mm
- ▶ Velocity up to 20 m/s with a resolution of 0.001 m/s
- ▶ Integrated building compression detection, no additional sensors needed
- ▶ Floor level detection using mounting clips
- ▶ Very robust system due to high light reserve
- ▶ Insensitive to dust and smoke
- ▶ CAN, CANopen DS417, RS485 or customer-specific interfaces available
- ▶ Simple and flexible mounting



OPTICAL

Position resolution	0.5 mm
Velocity resolution	1 mm/s
Range of velocity measurement	±0 ... 20 m/s
Distance between APS sensor and APS code tape	105 mm
Readout tolerance:	
Distance	±15 mm
Left-right	±15 mm

MECHANICAL

Housing (h × w × d)	103.6 × 56.6 × 45.6 mm
Enclosure rating	IP65
Temperature range	-20°C ... +65°C

ELECTRICAL

Supply voltage U_{Sp}	10.8 VDC ... 28.8 VDC
Max. current consumption	100 mA
Max. power-up inrush current	200 mA
Termination	
- CAN	100 Ω (internally)
- RS485	120 Ω (internally)
Scanning rate	200 Hz

CODE TAPE

Max. length	1,500 m
Material	Stainless steel body (1.4310)
Width	19 mm
Thickness	0.6 mm (steel body 0.2 mm)

CONNECTION CABLE AND ELECTRICAL CONNECTION

Length	0.5 ... 5 m (customer specific lengths on request)	
Connector	RJ45	
	CAN	RS485
1 – blue	CAN Channel 1 LOW	RS485 Channel 1 A
2 – grey	CAN Channel 1 HIGH	RS485 Channel 1 B
3 – green	GND (0 V)	GND (0 V)
4 – white	U_{Sp}	U_{Sp}
5 – N/A	Not connected	Not connected
6 – N/A	Not connected	Not connected
7 – brown	No function	No function
8 – yellow	No function	GND_SEC

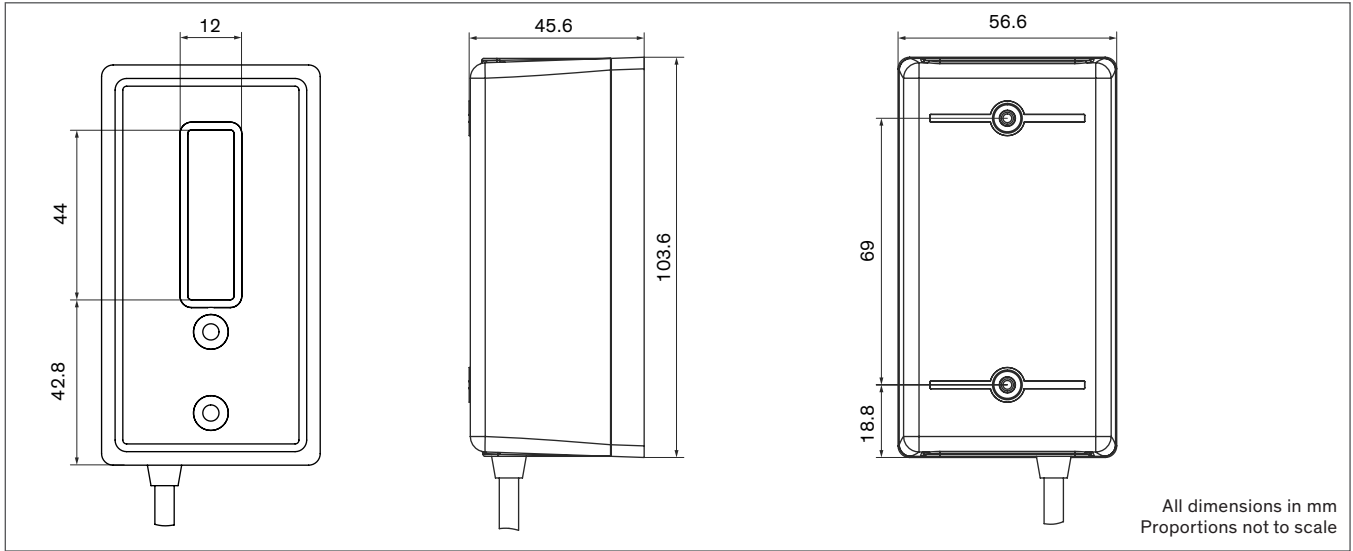
GENERAL

EMC emission	EN 12015:2014
EMC immunity	EN 12016:2013
Vibration	IEC 60068-2-6:2007
Shock	IEC 60068-2-27:2008
RoHS	2011/65/EU
Certificates	CE, UKCA

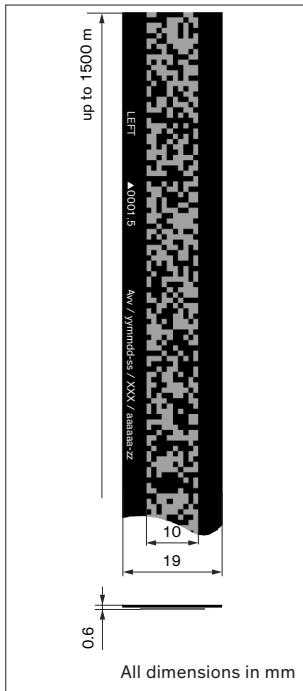


CEDES AG is certified according to ISO 9001: 2015.

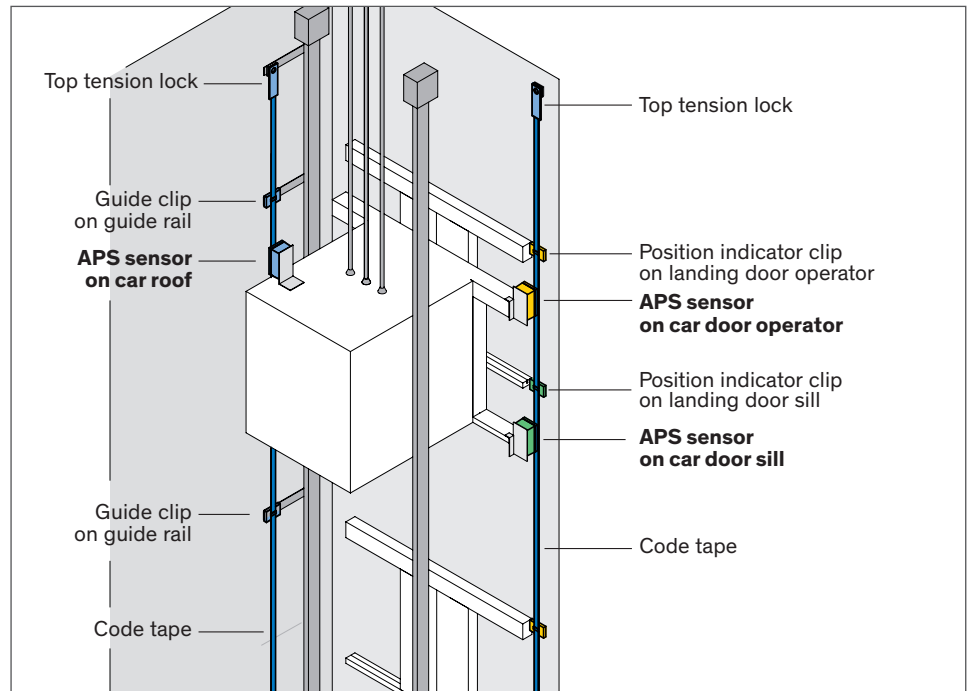
APS Sensor dimensions



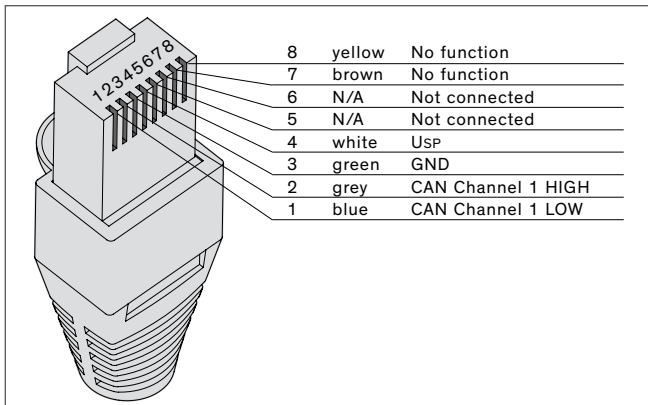
APS code tape dimensions



Mounting position examples



RJ45 plug connections (CAN interface)



RJ45 plug connections (RS485 interface)

