

Sensor heads

- Extremely dirt-resistant
- High penetration
- Large detection range
- Small design
- High switching accuracy
- Easy adjustment

Description

The transmitter and receiver have a special small design, which allows them to be used in micro constructions. The sensor heads are fully sealed, giving them a high protection class of IP 67. It is possible to use the sensor heads in areas with extremely high humidity and dust. A wide opening angle allows easy adjustment at detection ranges up to approximately 35 m and enables the sensors to be insensitive to vibration, shock, and misalignment.

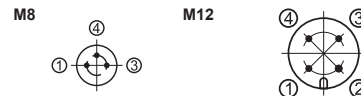
Connection diagram

Cable version

Transmitter		Receiver	
core-color	connection	core-color	connection
Red	+	Yellow	+
Black	-	Shield	-

Plug version (core colours)

Transmitter		Receiver	
core-color	connection	core-color	connection
① (brown)	+	④ (black)	+
③ (blue)	-	③ (blue)	-








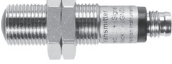














Note:

The sensor heads are only for use with amplifier and multiplexer type ISM..., ISG... or IMX...

Technical Data (at. +20 °C)

Ambient temperature	-25 °C to +65 °C (-13°F to 149°F)		
Storage temperature	-40 °C to +80 °C (-40°F to 176°F)		
Vibration	10 ... 55 Hz, 1,5 mm		
Shock	30 g		
Protection class	IP 67		
Transmitter			
Type	ITL...	ITH...	ITA...
Transmit light	Infrared 880 nm, modulated	Infrared 870 nm, modulated	Infrared 870 nm, modulated
Transmit power (IF = 100 mA)	40 mW / sr	70 mW / sr	350 mW / sr
Opening angle	12 °	20 °	6 °
Cable sheathing	PVC, Ø4,8 mm ±0,2 mm, black		
Cable core	2 x 0,25 mm, red / black		
Receiver			
Type	IRL...	IR... or IRH...	
Opening angle	25 °	25 °	
Light immunity	40000 LUX	60000 LUX	
Cable sheathing	PVC, Ø4,8 mm ±0,2 mm, black		
Cable core	1 x 0,34 mm, yellow shielded		

Transmitter ITL...	Transmitter ITH...	Transmitter ITA...	Receiver	Connection	Material	Outline-drawing	Picture
IT-P10-5m	IT-P10HP-5m	ITA-TLP-5	IR-P10-5m	cable 5m	plastic	picture 1	
IT-P10-15m	IT-P10HP-15m	ITA-TLP-15	IR-P10-15m	cable 15 m			
IT-P10-3QD	IT-P10HP-3QD	ITA-TLP-B3	IR-P10-3QD	plug M8	plastic	picture 2	
ITL-SLP-5	ITH-SLP-5	ITA-SLP-5	IRH-SLP-5	cable 5m	plastic	picture 3	
ITL-SLP-15	ITH-SLP-15	ITA-SLP-15	IRH-SLP-15	cable 15 m			
ITL-SLP-B3	ITH-SLP-B3	ITA-SLP-B3	IRH-SLP-B3	plug M8	plastic	picture 4	

Transmitter ITL...	Transmitter ITH...	Transmitter ITA...	Receiver	Connection	Material	Outline- drawing	Picture
IT-M12-5m	IT-M12HP-5m	ITA-CLN-5	IR-M12-5m	cable 5m	nickel plated brass	picture 5	
IT-M12-15m	IT-M12HP-15m	ITA-CLN-15	IR-M12-15m	cable 15 m	stainless steel		
IT-M12VA-5m	IT-M12VAHP-5m	ITA-CLV-5	IR-M12VA-5m	cable 5m			
IT-M12VA-15m	IT-M12VAHP-15m	ITA-CLV-15	IR-M12VA-15m	cable 15 m			
IT-M12-3QD	IT-M12HP-3QD	ITA-CLN-B3	IR-M12-3QD	plug M8	nickel plated brass	picture 6	
IT-M12VA-3QD	IT-M12VAHP-3QD	ITA-CLV-B3	IR-M12VA-3QD	plug M8	stainless steel		
IT-M12-4QD	IT-M12HP-4QD	ITA-CLN-C4	IR-M12-4QD	plug M12	nickel plated brass	picture 7	
IT-M12VA-4QD	IT-M12VAHP-4QD	ITA-CLV-C4	IR-M12VA-4QD	plug M12	stainless steel		
IT-AE-5m			IR-AE-5m	cable 5m	plastic	picture 8	
IT-AE-15m			IR-AE-15m	cable 15 m			
IT-AE-3QD			IR-AE-3QD	plug M8	plastic	picture 9	
IT-AS-5m			IR-AS-5m	cable 5m	plastic	picture 10	
IT-AS-15m			IR-AS-15m	cable 15 m			
IT-AS-3QD			IR-AS-3QD	plug M8	plastic	picture 11	
IT-SLA-5m	IT-SLAHP-5m	ITA-LLA-5	IR-SLA-5m	cable 5m	aluminium	picture 12	
IT-SLA-15m	IT-SLAHP-15m	ITA-LLA-15	IR-SLA-15m	cable 15 m			
IT-SLA-3QD	IT-SLAHP-3QD	ITA-LLA-B3	IR-SLA-3QD	plug M8	aluminium	picture 13	
ITL-TSP-5	ITH-TSP-5	ITA-TSP-5	IRL-TSP-5	cable 5m	plastic	picture 14	
ITL-TSP-15	ITH-TSP-15	ITA-TSP-15	IRL-TSP-15	cable 15m			
ITL-TSP-B3	ITH-TSP-B3	ITA-TSP-B3	IRL-TSP-B3	plug M8	plastic	picture 15	
ITL-SSP-5	ITH-SSP-5	ITA-SSP-5	IRL-SSP-5	cable 5m	plastic	picture 16	
ITL-SSP-15	ITH-SSP-15	ITA-SSP-15	IRL-SSP-15	cable 15m			
ITL-SSP-B3	ITH-SSP-B3	ITA-SSP-B3	IRL-SSP-B3	plug M8	plastic	picture 17	
ITL-CSN-5	ITH-CSN-5	ITA-CSN-5	IRL-CSN-5	cable 5m	nickel plated brass	picture 18	
ITL-CSN-15	ITH-CSN-15	ITA-CSN-15	IRL-CSN-15	cable 15 m			
ITL-CSV-5	ITH-CSV-5	ITA-CSV-5	IRL-CSV-5	cable 5m	stainless steel		
ITL-CSV-15	ITH-CSV-15	ITA-CSV-15	IRL-CSV-15	cable 15 m			
ITL-CSN-B3	ITH-CSN-B3	ITA-CSN-B3	IRL-CSN-B3	plug M8	nickel plated brass	picture 19	
ITL-CSV-B3	ITH-CSV-B3	ITA-CSV-B3	IRL-CSV-B3	plug M8	stainless steel		
ITL-CSN-C4	ITH-CSN-C4	ITA-CSN-C4	IRL-CSN-C4	plug M12	nickel plated brass	picture 20	
ITL-CSV-C4	ITH-CSV-C4	ITA-CSV-C4	IRL-CSV-C4	plug M12	stainless steel		

Dimension drawings (in mm)

