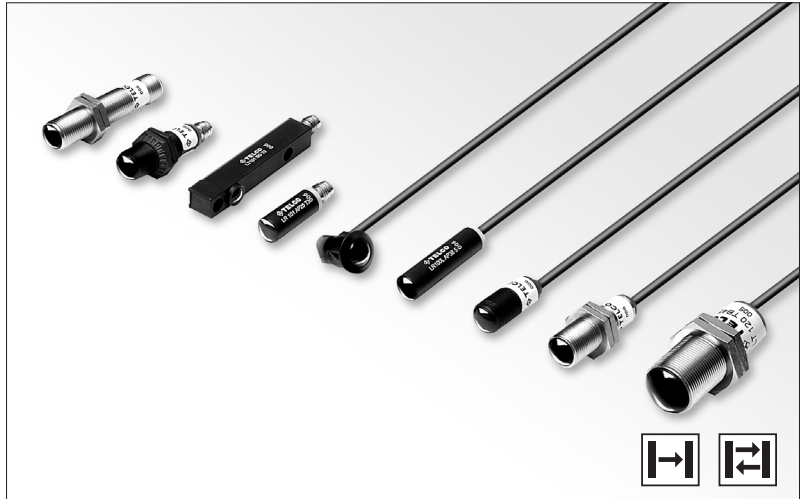


REMOTE SENSOR – U SERIES

Description

- Operation mode and max sensing range:
Thru-beam: Dependent on amplifier (up to 46m)
Diffuse proximity: Dependent on amplifier (up to 4,0m)
- Optional sensor monitor LED
- Wide variety of housings
- High tolerance to hostile environments
- Cable or plug connections
- UL 325 approved



The remote sensor U series, which consists of a transmitter LT and receiver LR, is made to operate in conjunction with a Telco photoelectric amplifier from the PA 11 U series.


The series is available with optional power-(LR) and output-(LT) monitor LEDs for use with any Telco photoelectric amplifier which has the sensor LED drive feature incorporated.

The remote sensors are available in a wide range of housings, with either cable or plug connection, and may be used in thru-beam or diffuse proximity mode.

Technical Data

		LT	LR
Transmitter diode		Ga Al As, (880 nm)	-
Photo transistor		-	Silicon NPN
Housing material	Sensor housing	Refer to Available Types	
	Front lens	Polycarbonate	
Cable, PVC Ø 4,0 mm		2 x 0,25 mm ²	1 x 0,25 mm ² + shield
Min. cable bending radius		45 mm	

Environmental Data

Vibration		10 – 55 Hz, 0,5 mm
Shock		30 g
Light immunity, @ 20° incidence	100 Series	> 80 000 lux
	110/120 Series	> 100 000 lux
Temperature, operation		- 25 to +65 °C
Temperature, storage		- 40 to +80 °C
Sealing class		IP 67
Approvals		CE 

REMOTE SENSOR – U SERIES

Available Types

	Series	Optical Angle	Connection		5 m cable	15 m cable	3 pin, M8 plug	4 pin, M12 plug
			Housing Material	Housing Type				
Transmitter	100	+/- 12° (High Power)	Polycarbonate	Ø10	LT 100H AP38 5 U	LT 100H AP38 15 U	LT 100H AP38 T3 U	-
				M12 x 1	LT 100H TP38 5 U	LT 100H TP38 15 U	LT 100H TP38 T3 U	-
			Nickel Plated Brass	M12 x 1	LT 100H TB38 5 U	LT 100H TB38 15 U	LT 100H TB38 T3 U	LT 100H TB58 J U
				Stainless Steel (V4A)	LT 100H TS38 5 U	LT 100H TS38 15 U	LT 100H TS38 T3 U	LT 100H TS58 J U
			Polyester	□ 9,5 x 11,5	LT 100H SG 5 U²	LT 100H SG 15 U²	LT 100H SG T3 U	-
		Polycarbonate	Ø12,7 Snap	LT 100H S30 5 U²	LT 100H S30 15 U²	-	-	
		+/- 6°	Polycarbonate	Ø10	LT 100 AP38 5 U	LT 100 AP38 15 U	LT 100 AP38 T3 U	-
				M12 x 1	LT 100 TP38 5 U	LT 100 TP38 15 U	LT 100 TP38 T3 U	-
			Nickel Plated Brass	M12 x 1	LT 100 TB38 5 U	LT 100 TB38 15 U	LT 100 TB38 T3 U	LT 100 TB58 J U
				Stainless Steel (V4A)	LT 100 TS38 5 U	LT 100 TS38 15 U	LT 100 TS38 T3 U	LT 100 TS58 J U
Polyester	□ 9,5 x 11,5		LT 100 SG 5 U²	LT 100 SG 15 U²	LT 100 SG T3 U	-		
Polycarbonate	Ø12,7 Snap	LT 100 S30 5 U²	LT 100 S30 15 U²	-	-			
Receiver		+/- 7°	Polycarbonate	Ø10	LR 100 AP38 5 U	LR 100 AP38 15 U	LR 100 AP38 T3 U	-
				M12 x 1	LR 100 TP38 5 U	LR 100 TP38 15 U	LR 100 TP38 T3 U	-
			Nickel Plated Brass	M12 x 1	LR 100 TB38 5 U	LR 100 TB38 15 U	LR 100 TB38 T3 U	LR 100 TB58 J U
				Stainless Steel (V4A)	LR 100 TS38 5 U	LR 100 TS38 15 U	LR 100 TS38 T3 U	LR 100 TS58 J U
			Polyester	□ 9,5 x 11,5	LR 100 SG 5 U²	LR 100 SG 15 U²	LR 100 SG T3 U	-
Polycarbonate	Ø12,7 Snap	LR 100 S30 5 U²	LR 100 S30 15 U²	-	-			

Transmitter	110	+/- 5°	Polycarbonate	Ø10	LT 110 AP38 5 U	LT 110 AP38 15 U	LT 110 AP38 T3 U	-
				M12 x 1	LT 110 TP38 5 U	LT 110 TP38 15 U	LT 110 TP38 T3 U	-
			Nickel Plated Brass	M12 x 1	LT 110 TB38 5 U	LT 110 TB38 15 U	LT 110 TB38 T3 U	LT 110 TB58 J U
Stainless Steel (V4A)	LT 110 TS38 5 U	LT 110 TS38 15 U		LT 110 TS38 T3 U	LT 110 TS58 J U			
Receiver		+/- 3°	Polycarbonate	Ø10	LR 110 AP38 5 U	LR 110 AP38 15 U	LR 110 AP38 T3 U	-
				M12 x 1	LR 110 TP38 5 U	LR 110 TP38 15 U	LR 110 TP38 T3 U	-
			Nickel Plated Brass	M12 x 1	LR 110 TB38 5 U	LR 110 TB38 15 U	LR 110 TB38 T3 U	LR 110 TB58 J U
Stainless Steel (V4A)	LR 110 TS38 5 U	LR 110 TS38 15 U		LR 110 TS38 T3 U	LR 110 TS58 J U			

Transmitter	120	+/- 4°	Nickel Plated Brass	M18 x 1	LT 120 TB45 5 U	LT 120 TB45 15 U	-	-
Receiver		+/- 2,5°			LR 120 TB45 5 U	LR 120 TB45 15 U	-	-

Note: 1. Photo amplifiers to be ordered separately.

2. Remote sensors are available with optional power (LR) and output (LT) monitor LEDs for use with the applicable Telco photoelectric amplifier, which has the sensor LED drive. Add 'L' after the series number for sensor monitor LED e.g. LT/LR 100 AP 38 5 U.

Applicable Photoelectric Amplifiers and Maximum Ranges

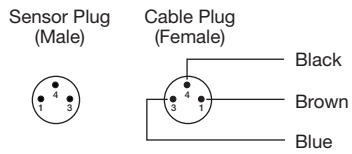
Remote Sensor Series	100		110		120	
	Thru-beam	Diffuse Proximity	Thru-beam	Diffuse Proximity	Thru-beam	Diffuse Proximity
Photoelectric Amplifier Series						
PA 11 U	12 m	0,9 m	26 m	1,6 m	46 m	4,0 m

REMOTE SENSOR – U SERIES

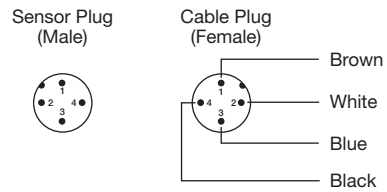
Connections

	Cable	M8 Plug / Cable	M12 Plug / Cable
Transmitter Signal	Red	Pin 1 / Brown	Pin 1 / Brown
Transmitter Ground	Black	Pin 3 / Blue	Pin 3 / Blue
Receiver Signal	Yellow	Pin 4 / Black	Pin 4 / Black
Receiver Ground	Shield	Pin 3 / Blue	Pin 3 / Blue

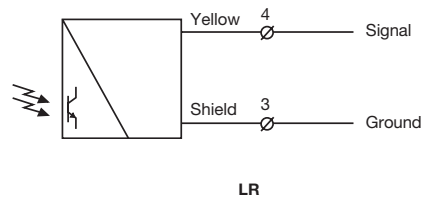
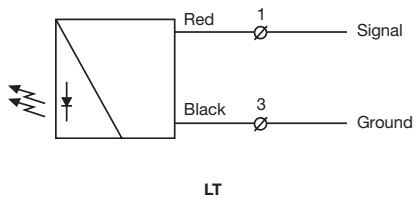
3 pin, M8



4 pin, M12

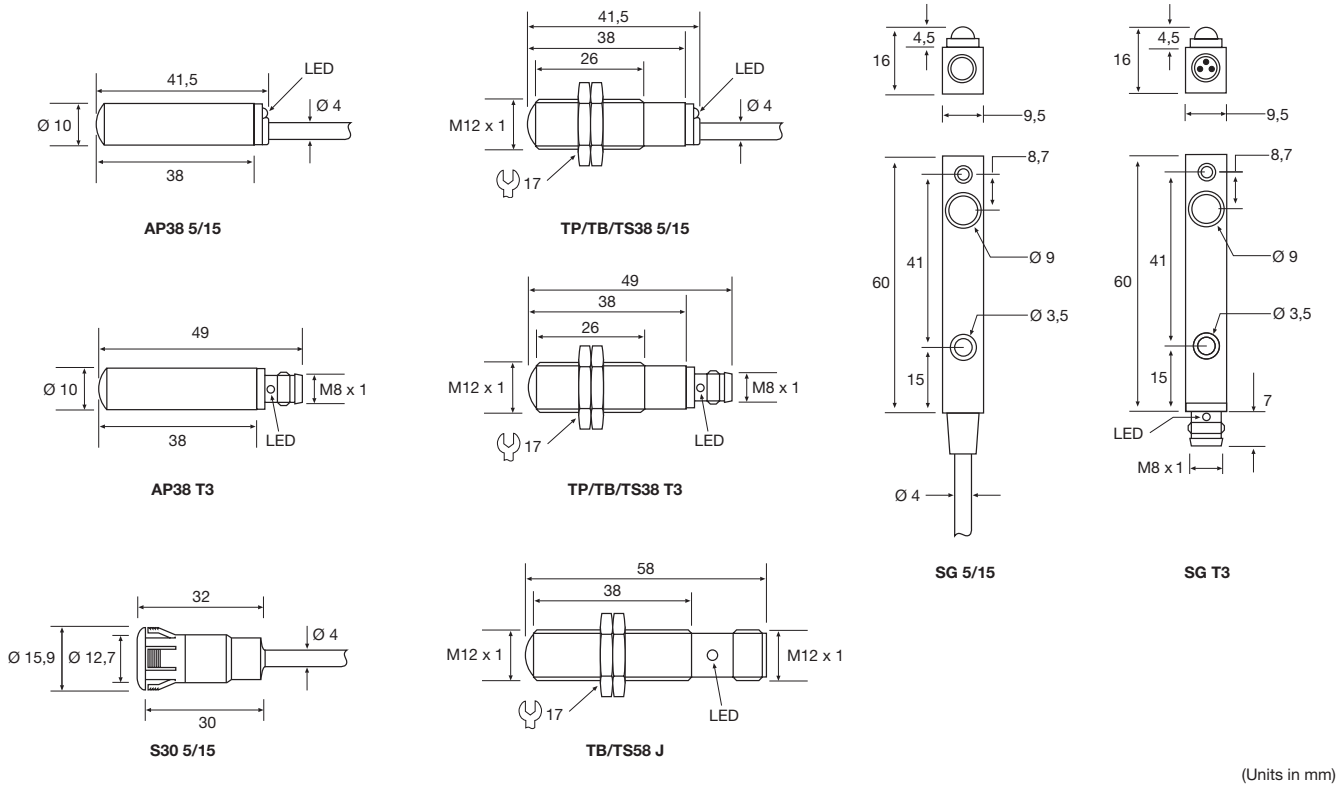


Wiring Diagrams

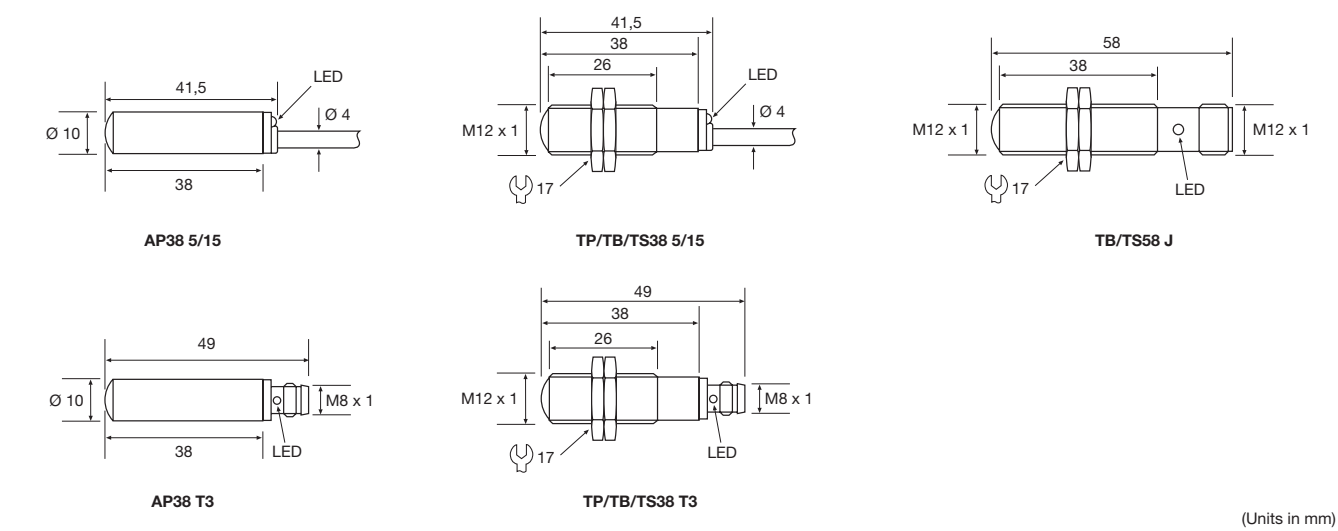


Dimensions and Descriptions

Series 100



Series 110



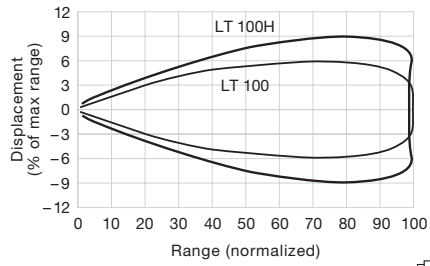
Series 120



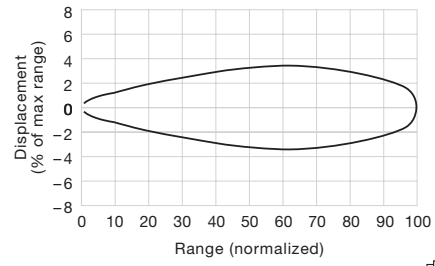
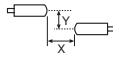
REMOTE SENSOR – U SERIES

Sensing Characteristics

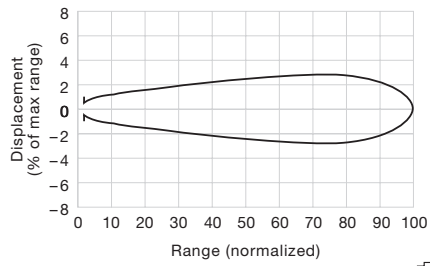
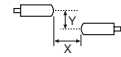
Parallel Displacement (Thru-beam)



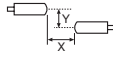
Series 100



Series 110

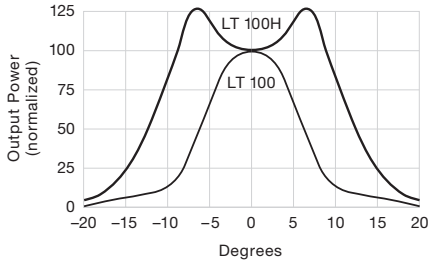


Series 120

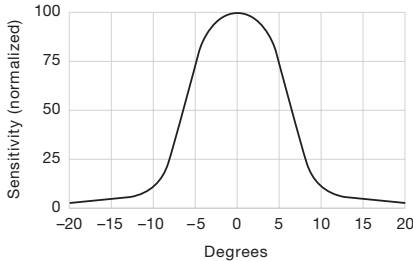


Sensing Characteristics

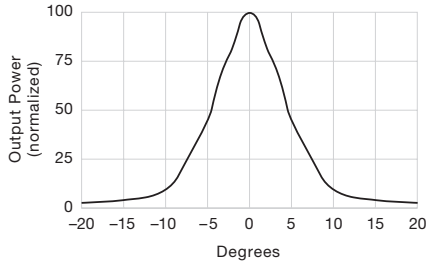
Angular Displacement (Thru-beam)



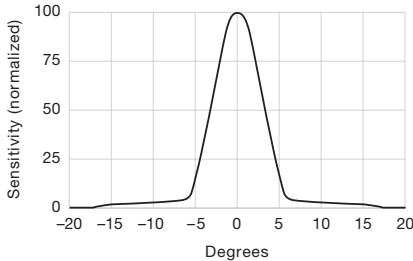
LT 100



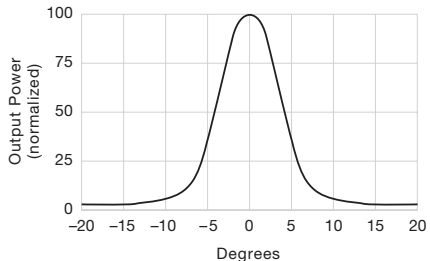
LR 100



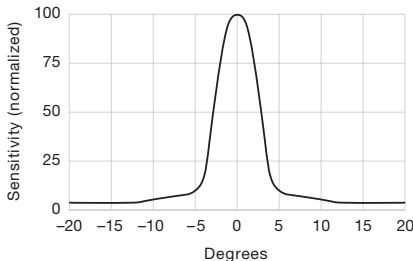
LT 110



LR 110



LT 120



LR 120

Telco reserves the right to change specifications without notice.