



## S62

*The most complete universal sensor  
in a compact 50x50 mm housing*

- Sensors with red, infrared LED or LASER emission
- Background suppression from 3 cm to 2 m
- Polarized retroreflective up to 20 m
- Multivoltage 24-240Vac/24-60Vdc with Relay output
- NPN/PNP output NO-NC configuration



SENSORS

### APPLICATIONS

- Processing and Packaging machinery
- Conveyor lines, material handling



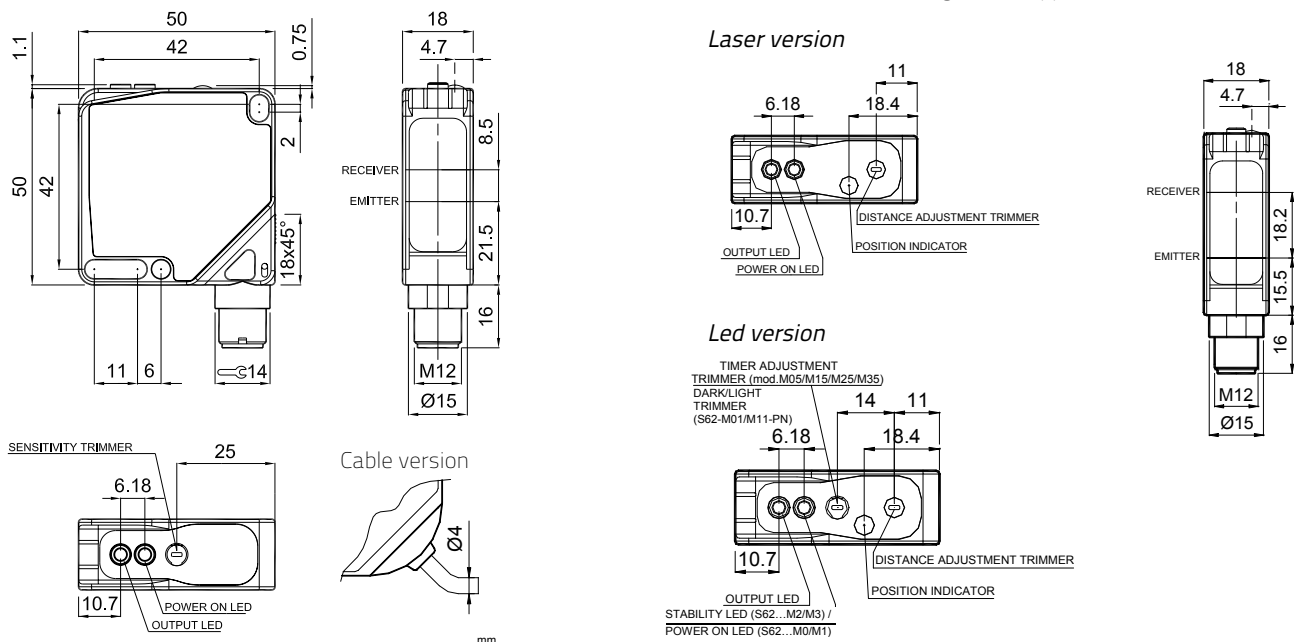
S62		
Through beam		0...25 m
Retroreflective (on R2 reflector)		0,1...13 m
Polarized retroreflective		0,1...8 m 0,3...20 m (class 2 LASER)
Diffuse proximity		short 0...900 mm, long 0...2000 mm 0...900 mm (class 2 LASER)
Background suppression		short 30...300 mm medium 60...600 mm long 60...1200 mm very long 200...2000 mm short LASER 30...150 mm (class 2 LASER) long LASER 50...350 mm (class 2 LASER)
Power supply	Vdc	10...30 V
	Vac	
	Vac/dc	24/240 Vac/24...60 Vdc
	PNP	▪
Output	NPN	▪
	NPN/PNP	▪
	relay	▪
	other	
Connection	cable	▪
	connector	▪
	pig-tail	
Approximate dimensions (mm)		18x50x50
Housing material		ABS
Mechanical protection		IP67

# Compact Sensors - S62

TECHNICAL DATA	
Power supply	10 ... 30 Vdc (mod. S62...2/5) 24...240 Vac / 24...60 Vdc (mod. S62...1)
Ripple	2 Vpp max. (mod. S62...2/5), 10% max. (mod. S62...1)
Consumption (output current excluded)	30 mA max. (mod. S62...2/5) 3 VA max. (mod. S62...1)
Light emission	red LED 640 nm (mod. S62-PA...A/B/C/G/M01/M05/M11/M15) IR LED 880 nm (mod. S62-PA...M21/M25/M31/M35) red Laser 645...665 nm (mod. S62-PL)
Setting	sensitivity adjustment trimmer
Operating mode	mono-turn LIGHT/DARK trimmer (mod. S62...RX/PN) yellow OUTPUT LED
Indicators	green STABILITY LED, POWER LED (S62...G)
Output	PNP or NPN N.O./N.C. (mod. S62...PP/NN); NPN/PNP (mod. S62...PN); electromechanical SPDT 250 Vac/30 Vdc (mod. S62...RX)
Output current	100 mA max. (mod. S62...2/5), 2 A max. (mod. S62...1)
Saturation voltage	2 V max. (mod. S62...2/5)
Response time	25 ms (mod. S62...1) 1,5 ms (mod. S62...M3x) 1 ms (mod. S62...2/5-F/G/M2x) 500 µs (mod. S62-PA...2/5-A/B/C/M0x/M1x) 200 µs (mod. S62-PL...B/C/M11) 140 µs (mod. S62-PL...M01)
Switching frequency	20 Hz (mod. S62...1) 330 Hz (mod. S62...M3x) 500 Hz (mod. S62...2/5-F/G/M2x) 1 kHz (mod. S62-PA...2/5-A/B/C/M0x/M1x) 2,5 kHz (mod. S62-PL...B/C/M11) 3,5 kHz (mod. S62-PL...M01)
Connection	M12 4-pole connector, 2 m Ø 4 mm cable vers., 2 m Ø 5 mm cable vers.
Dielectric strength	500 Vac 1 min., between electronics and housing
Insulation resistance	>20 MΩ 500 Vdc, between electronics and housing
Mechanical protection	IP67
Ambient light rejection	According to EN 60947-5-2
Vibrations	0.5 mm amplitude, 10 ... 55 Hz frequency, for each axis (EN60068-2-6)
Shock resistance	11ms (30G) 6 shock for every axis (EN60068-2-27)
Housing material	ABS
Lens material	PMMA window, polycarbonate lens
Operating temperature	-10 ... 55 °C
Storage temperature	-20 ... 70 °C
Weight	40 g max. conn. vers., 90 max. cable vers.

## DIMENSIONS

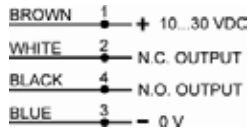
Background suppression



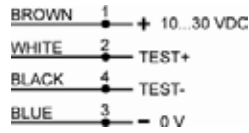
# Compact Sensors - S62

## CONNECTIONS

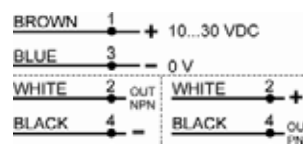
### VDC MODELS



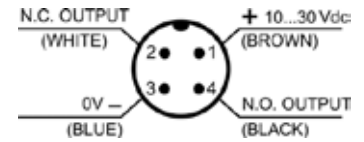
Through beam emitter



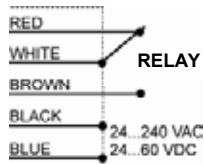
NPN/PNP version



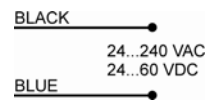
### M12 CONNECTOR



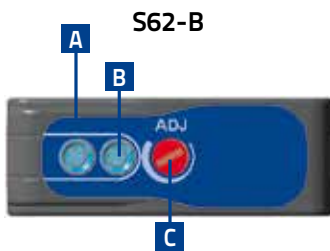
### VAC MODELS



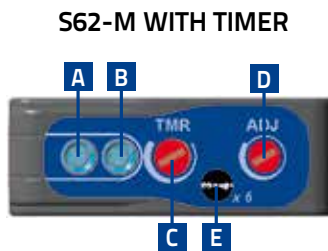
Through beam emitter



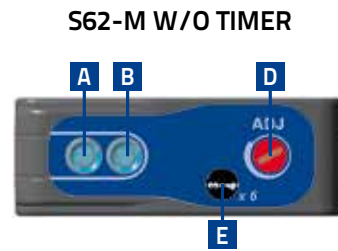
## INDICATORS AND SETTINGS



**S62-B**



**S62-M WITH TIMER**



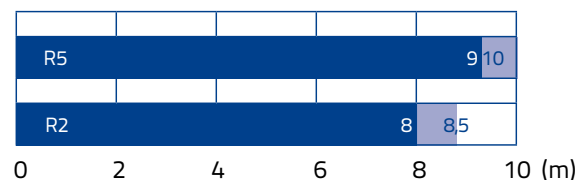
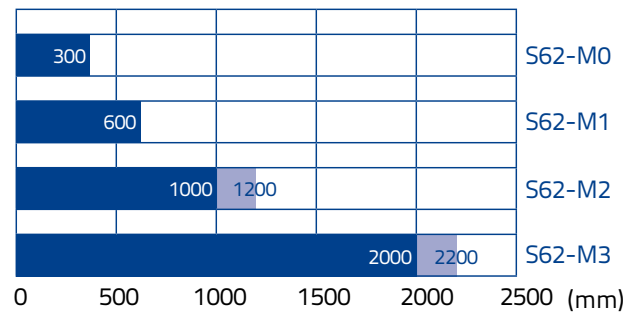
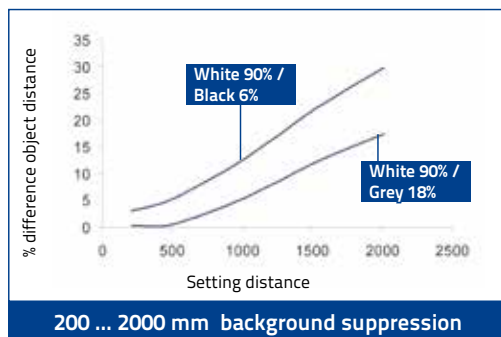
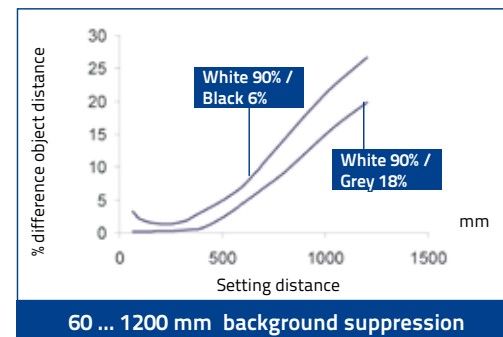
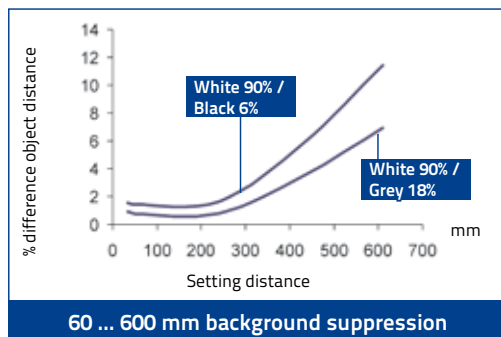
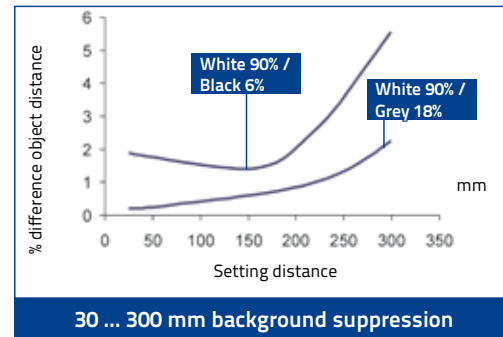
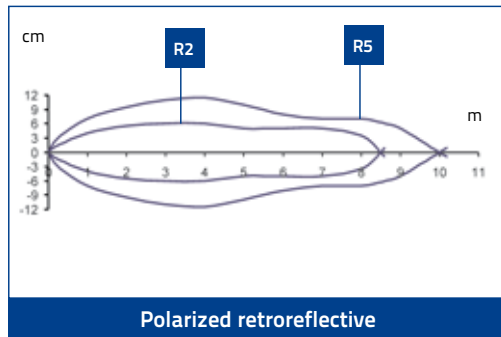
**S62-M W/O TIMER**

- A** Output status LED
- B** Stability LED or Power ON LED (laser vers.)
- C** Timer adjustment trimmer

- D** Distance adjustment trimmer
- E** Geared numeric scale
- F** M12 connector output
- G** Cable output

# Compact Sensors - S62

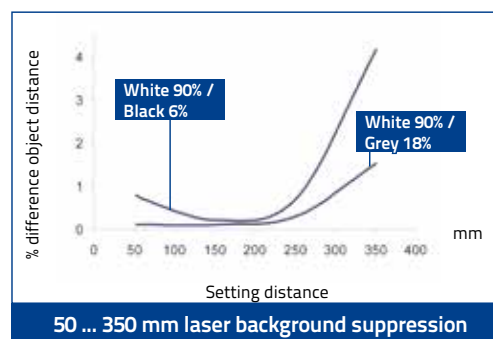
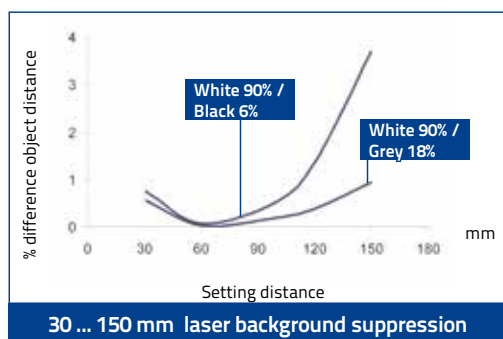
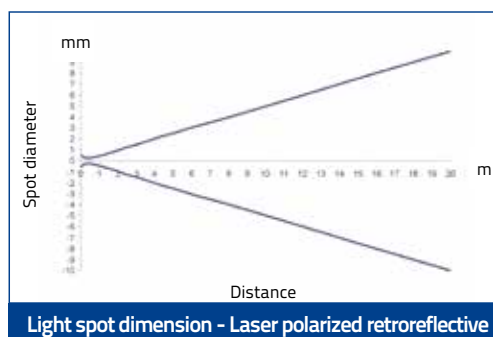
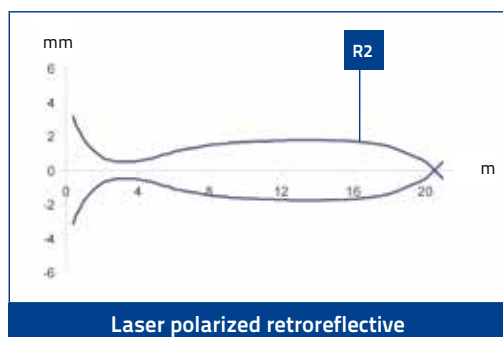
## DETECTION DIAGRAMS OF MODELS WITH LED EMISSION



Recommended operating distance

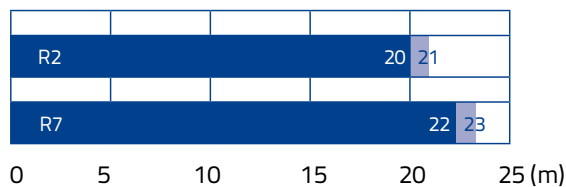
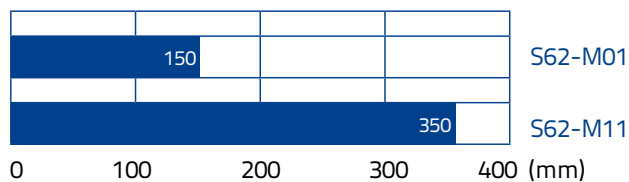
Maximum operating distance

## DETECTION DIAGRAMS OF MODELS WITH LASER EMISSION



Reflector operating distances (m)				
R1	R2	R6	R7 / R20	R8
0.3 ... 16	0.3 ... 20	0.4 ... 22	0.3 ... 22	0.2 ... 2

The use of the RT3970 reflecting tape is suggested.



- Recommended operating distance
- Maximum operating distance

# Compact Sensors - S62

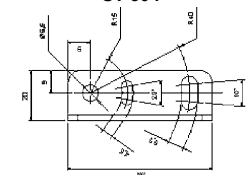


## MODEL SELECTION AND ORDER INFORMATION

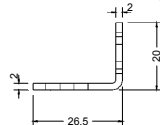
OPTIC FUNCTION	EMISSION	CONNECTION	OUTPUT	MODEL	ORDER No.
Retroreflective	LED (red 640nm)	2m Cable	PNP/NPN	S62-PA-2-A01-PN	956211240
		M12 Connector	PNP/NPN	S62-PA-5-A01-PN	956211310
		Vac relay	Relay	S62-PA-1-A01-RX	956211180
Polarized retroreflective	LED (red 640nm)	2m Cable	PNP/NPN	S62-PA-2-B01-PN	956211250
		M12 Connector	PNP	S62-PA-2-B01-PP	956211010
			NPN	S62-PA-5-B01-NN	956211020
			PNP/NPN	S62-PA-5-B01-PN	956211320
		PNP	S62-PA-5-B01-PP	956211000	
		Vac relay	Relay	S62-PA-1-B01-RX	956211190
	LASER	M12 Connector	NPN	S62-PL-5-B01-NN	956211100
			PNP	S62-PL-5-B01-PP	956211110
			NPN	S62-PA-2-C01-NN	956211420
Short diffused proximity	LED (red 640nm)	2m Cable	PNP/NPN	S62-PA-2-C01-PN	956211260
			PNP	S62-PA-2-C01-PP	956211380
			NPN	S62-PA-5-C01-NN	956211500
		M12 Connector	PNP/NPN	S62-PA-5-C01-PN	956211330
			PNP	S62-PA-5-C01-PP	956211460
			Vac relay	Relay	S62-PA-1-C01-RX
	LASER	2m Cable	NPN	S62-PL-2-C01-NN	956211440
		M12 Connector	PNP	S62-PL-2-C01-PP	956211400
			NPN	S62-PL-5-C01-NN	956211520
			PNP	S62-PL-5-C01-PP	956211480
		Long diffused proximity	LED (red 640nm)	2m Cable	NPN
PNP/NPN	S62-PA-2-C11-PN				956211270
PNP	S62-PA-2-C11-PP				956211390
M12 Connector	NPN			S62-PA-5-C11-NN	956211510
	PNP/NPN			S62-PA-5-C11-PN	956211340
	PNP			S62-PA-5-C11-PP	956211470
Vac relay	Relay		S62-PA-1-C11-RX	956211210	
Through beam receiver	-	2m Cable	NPN	S62-PA-2-F01-NN	956211450
			PNP/NPN	S62-PA-2-F01-PN	956211290
			PNP	S62-PA-2-F01-PP	956211410
		M12 Connector	NPN	S62-PA-5-F01-NN	956211530
			PNP/NPN	S62-PA-5-F01-PN	956211360
			PNP	S62-PA-5-F01-PP	956211490
		Vac relay	Relay	S62-PA-1-F01-RX	956211220
Through beam emitter	LED (red 640nm)	2m Cable	-	S62-PA-2-G00-XG	956211300
		M12 Connector		S62-PA-5-G00-XG	956211370
		Vac relay		S62-PA-1-G00-XX	956211230
		Background suppression (short distance)		LED (red 640nm)	2m Cable
M12 Connector	PNP		S62-PA-2-M01-PP		956201841
	NPN		S62-PA-5-M01-NN		956201811
	PNP/NPN		S62-PA-5-M01-PN		956211350
	PNP		S62-PA-5-M01-PP		956201831
	NPN		S62-PA-5-M05-NN		956201801
	LASER		M12 Connector	PNP	S62-PA-5-M05-PP
NPN				S62-PL-5-M01-NN	956211120
PNP				S62-PL-5-M01-PP	956211130
Background suppression (medium distance)	LED (red 640nm)	2m Cable	PNP	S62-PA-2-M11-PP	956201891
		M12 Connector	NPN	S62-PA-5-M11-NN	956201861
			PNP	S62-PA-5-M11-PP	956201881
			NPN	S62-PA-5-M15-NN	956201851
			PNP	S62-PA-5-M15-PP	956201871
	LASER	M12 Connector	NPN	S62-PL-5-M11-NN	956211140
Background suppression (long distance)	LED (infrared 880nm)	2m Cable	PNP	S62-PL-5-M11-PP	956211150
		M12 Connector	NPN	S62-PA-2-M21-PP	956201940
			NPN	S62-PA-5-M21-NN	956201910
			PNP	S62-PA-5-M21-PP	956201900
			NPN	S62-PA-5-M25-NN	956201930
			PNP	S62-PA-5-M25-PP	956201920
		2m Cable	PNP	S62-PA-2-M31-PP	956211050
		M12 Connector	NPN	S62-PA-5-M31-NN	956211060
	PNP		S62-PA-5-M31-PP	956211070	
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## ACCESSORIES

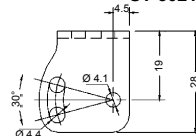
**ST-504**



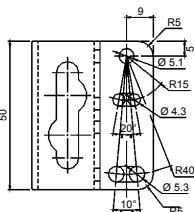
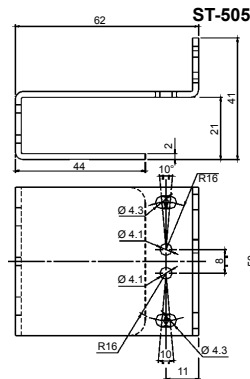
**ST-5020**



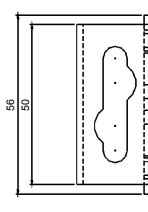
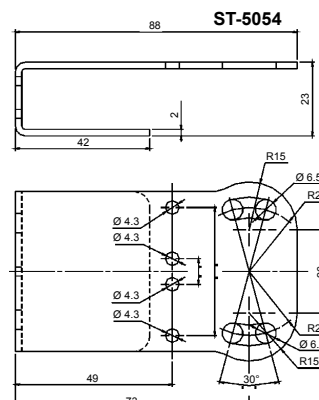
**ST-5021**



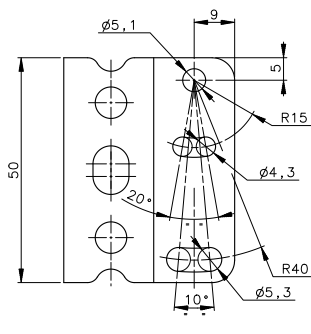
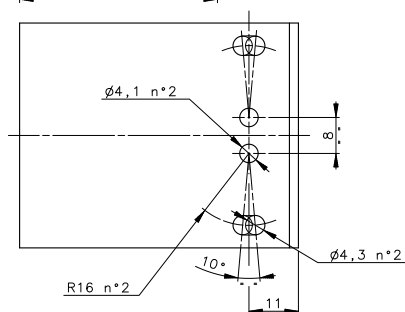
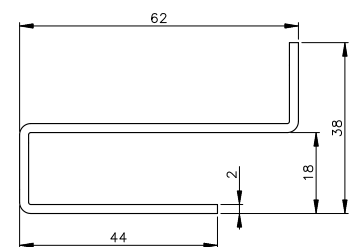
**ST-5053**



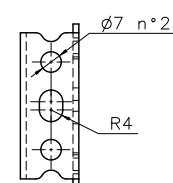
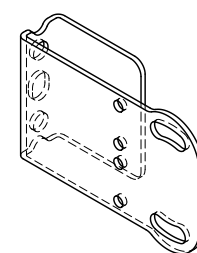
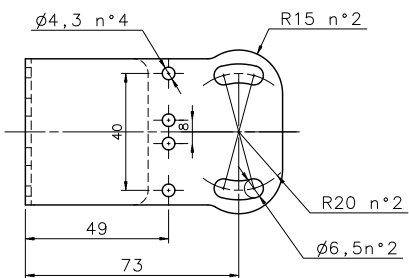
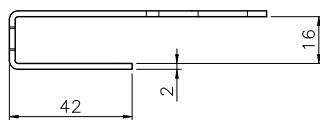
**ST-5054**



**ST-5018**



**ST-5019**



MODEL	DESCRIPTION	ORDER No.
ST-5018	protective bracket	95ACC5310
ST-5019	protective bracket	95ACC5320
ST-5020	mounting bracket	95ACC5330
ST-5021	mounting bracket	95ACC5340
ST-504	mounting bracket	95ACC2820
ST-5053	protective bracket	95ACC2410
ST-5054	protective bracket	95ACC2420
JOINT-S62	protective bracket with jointed support	95ACC2430

## CABLES

TYPE	DESCRIPTION	LENGTH	MODEL	ORDER No.
Axial M12 Connector	4-pole, grey, P.V.C.	3 m	CS-A1-02-G-03	95A251380
		5 m	CS-A1-02-G-05	95A251270
		7 m	CS-A1-02-G-07	95A251280
		10 m	CS-A1-02-G-10	95A251390
	4-pole, P.U.R.	2 m	CS-A1-02-R-02	95A251540
		5 m	CS-A1-02-R-05	95A251560
Radial M12 Connector	4-pole, grey, P.V.C.	3 m	CS-A2-02-G-03	95A251360
		5 m	CS-A2-02-G-05	95A251240
		7 m	CS-A2-02-G-07	95A251245
		10 m	CS-A2-02-G-10	95A251260
	4-pole, P.U.R.	2 m	CS-A2-02-R-02	95A251550
		5 m	CS-A2-02-R-05	95A251570
Radial M12 Connector with LED (for PNP N.O. sensors)	4-pole, grey, P.V.C.	3 m	CS-A2-12-G-03	95A251400
		5 m	CS-A2-12-G-05	95A251350
		10 m	CS-A2-12-G-10	95A251370
Axial M12 Connector	4-pole, shielded, black, P.V.C.	3 m	CV-A1-22-B-03	95ACC1480
		5 m	CV-A1-22-B-05	95ACC1490
		10 m	CV-A1-22-B-10	95ACC1500
		15 m	CV-A1-22-B-15	95ACC2070
		25 m	CV-A1-22-B-25	95ACC2090
Radial M12 Connector		3 m	CV-A2-22-B-03	95ACC1540
		5 m	CV-A2-22-B-05	95ACC1550
		10 m	CV-A2-22-B-10	95ACC1560
Axial M12 Connector	4-pole, U.L., black, P.V.C.	3 m	CS-A1-02-U-03	95ASE1120
		5 m	CS-A1-02-U-05	95ASE1130
		10 m	CS-A1-02-U-10	95ASE1140
		15 m	CS-A1-02-U-15	95ASE1150
		25 m	CS-A1-02-U-25	95ASE1160
Radial M12 Connector	4-pole, black	Connector- not cabled	CS-A1-02-B-NC	G5085002
		Connector- not cabled	CS-A2-02-B-NC	G5085003