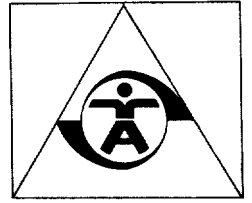
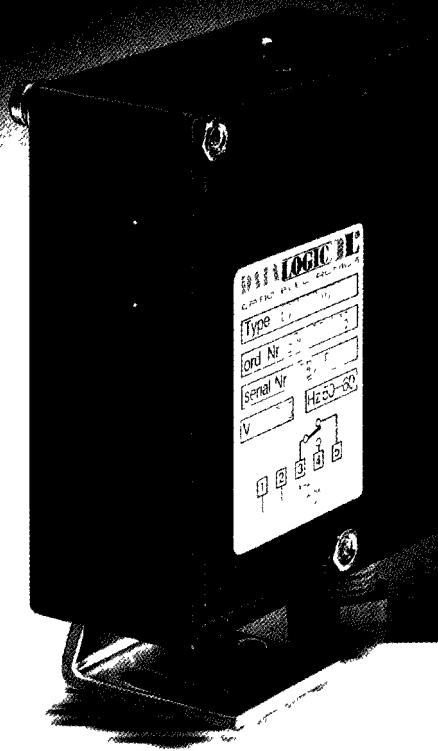


NEW

DATALOGIC DL[®]
SENSOR CONTROL



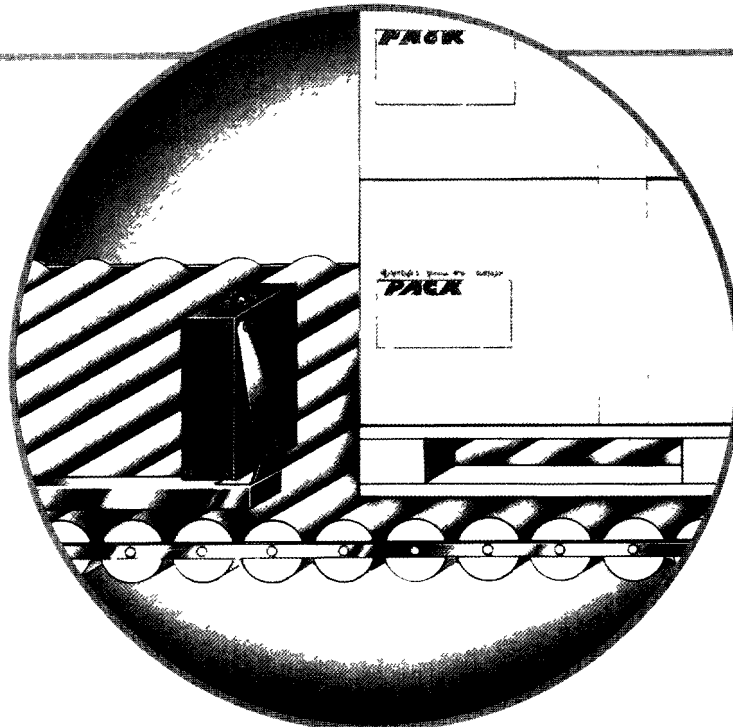
RT7 SERIES
PHOTOELECTRIC
SENSOR



MULTI VOLTAGE
15 ÷ 275 Vac/Vdc

SMD
TECNOLOGY

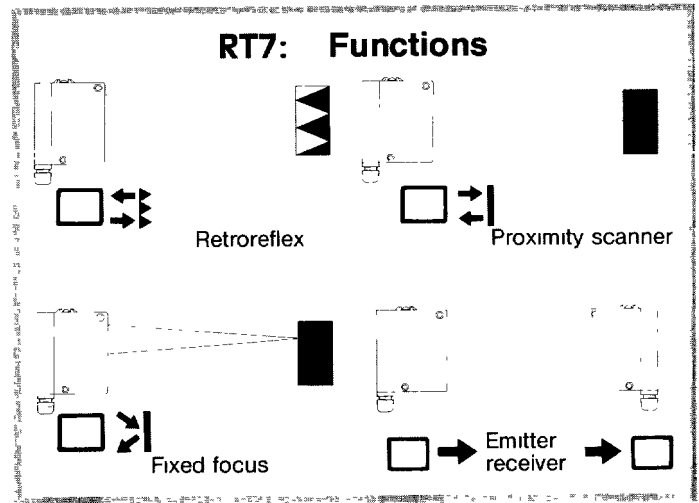
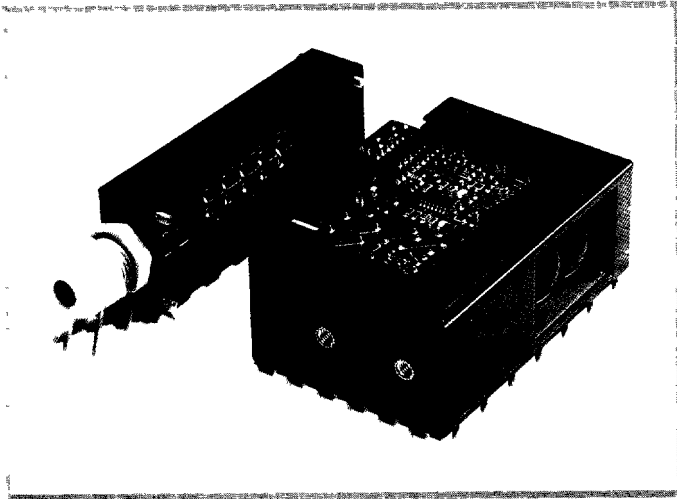
177-068
To
177-071



RT7: Applications

The new RT7 series of photoelectric sensors can be used in all industrial applications requiring a reliable and compact unit combining good optical/electronic design with easy installation

The RT7 series is mainly installed on handling equipment, conveyors, palletisers/depalletisers, automatic stock management equipment and most industrial automation machinery



RT7: Main features

The new RT7, built using SMD Technology, is extremely versatile thanks to its variety of optical versions and electronic features

- Free voltage power supply 15-275 VAC/VDC
- SPDT relay (3A - 275VAC/30VDC) or NPN/PNP output
- D.C versions protected against short-circuit and reverse polarity
- Sensitivity adjustment on proximity and emitter versions
- Light/Dark selector switch

- Two timing scales on timer version (60ms-3s/0.4-18s)
- One-shot, on-delay, off-delay, on/off delay functions in timer versions
- High immunity to electrical noise.
- High immunity to ambient light due to modulated emission
- ABS housing with mounting bracket protected to IP 66
- Detachable terminal block fitted with conduit entry/PG cable gland

RT7: Specifications

Type of emission	IR LED 900 nm
Average life of emitter	100,000 hours
Lenses	PMMA Methacrylate
Output indicator	Red L.E.D
Housing material	Cyclocac ABS UL 94V-0
Protection class	IP66
Connections	Terminal strip with conduit fitting PG9
Operating temperature	– 5 to 131°F (– 15°C to + 55°C)
Storage temperature	4° to 158°F (– 20°C to + 70°C)
Weight	ca 13 oz max (370 g)
Ambient light rejection	More than 1000 lux incandescent lamp source

Vibration	(IEC 68-2-6 Test FC) 10 – 500 Hz at 5G, sweep-rate 1 oct/min, 6 cycles each direction x, y, z
Humidity	Operating at 104°F (40°C) 5 to 95% not condensing
Shock resistance	(IEC 68-2-27 Test EA) 3 shocks on the 6 planes-Halfsine 15G, 11ms
Sensitivity control	Proximity scanner and emitter
Time-delay version	
Timing ranges	0.06 to 3 sec - 0.4 to 18 sec
Timing functions	ON-delay, OFF-delay, ONE-SHOT and ON/OFF delay

RT7: Technical data

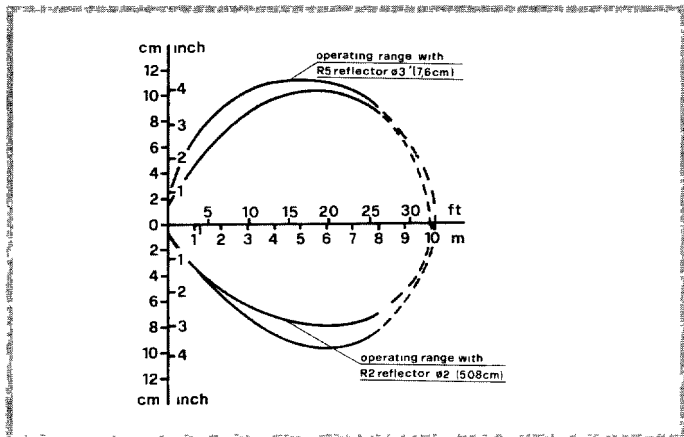
AC type

Operating range for retroreflex on R2 2" diam reflector 0-26.24 ft (0-8 m)
 Operating range for proximity scanner w/white paper Kodak 8" x 9 8" (204 x 250 mm) 90% reflectance 0-6.56 ft (0-2 m)
 Operating range for proximity scanner with target 3" (7.6 cm) 0-5.9 ft (0-180 cm)
 Operating range for fixed-focus proximity scanner w/white paper Kodak 8" x 9 8" (204 x 250 mm) 90% reflectance 1"-11.8" (2.5-30 cm) no reflections are picked up over 1.968 ft (0.6 m)
 Operating range for fixed-focus proximity scanner with target 3" (7.6 cm) 1"-11.8" (2.5-30 cm) Max operating range for thru/beam emitter/receiver 98.4 ft (30 m)
 Supply voltage. 15-275 Vac-Vdc
 Max switching rate 5 Hz
 Response time 30 ms
 SPDT relay output 275 Vac 30 Vdc 3 A with resistive load, or at 275 Vac 0.4 A with inductive load power factor 0.4

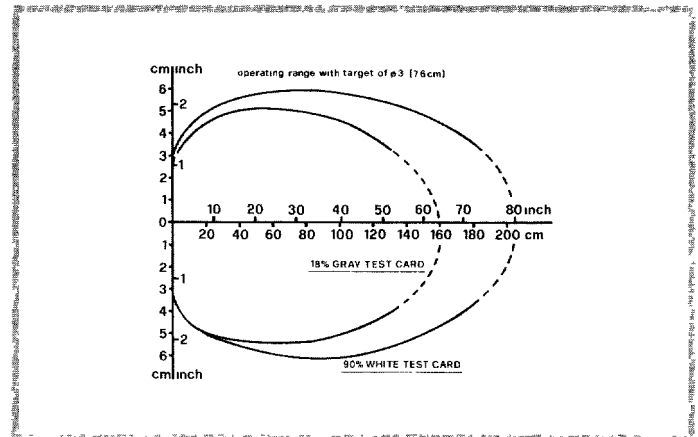
DC type

Operating range for retroreflex on R2 2" diam reflector 0-26.24 ft (0-8 m)
 Operating range for proximity scanner w/white paper Kodak 8" x 9 8" (204 x 250 mm) 90% reflectance 0-6.56 ft (0-2 m)
 Operating range for proximity scanner with target 3" (7.6 cm) 0-5.9 ft (0-180 cm)
 Operating range for fixed-focus proximity scanner w/white paper Kodak 8" x 9 8" (204 x 250 mm) 90% reflectance 1"-11.8" (2.5-30 cm) no reflections are picked up over 1.968 ft (0.6 m)
 Operating range for fixed-focus proximity scanner with target 3" (7.6 cm) 1"-11.8" (2.5-30 cm)
 Max operating range for thru/beam emitter/receiver 98.4 ft (30 m)
 Supply voltage 10-30 Vdc
 Max. current consumption ≤ 50 mA at 30 Vdc
 Response time 5 ms
 Max output current 100 mA max short circuit protected
 Saturation voltage ≤ 1.2 V

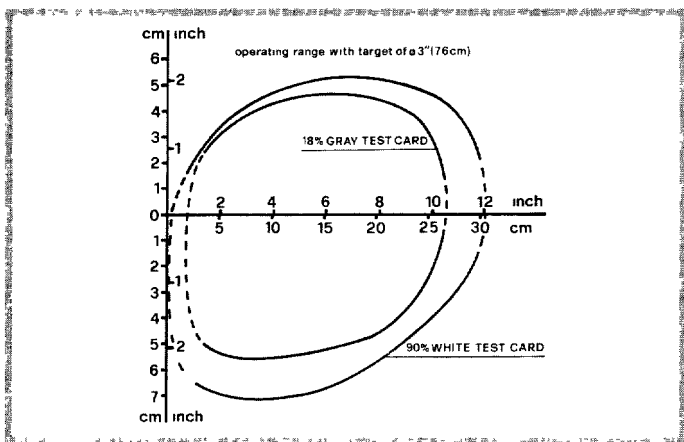
RT7: Characteristic diagrams Effective beam diameter



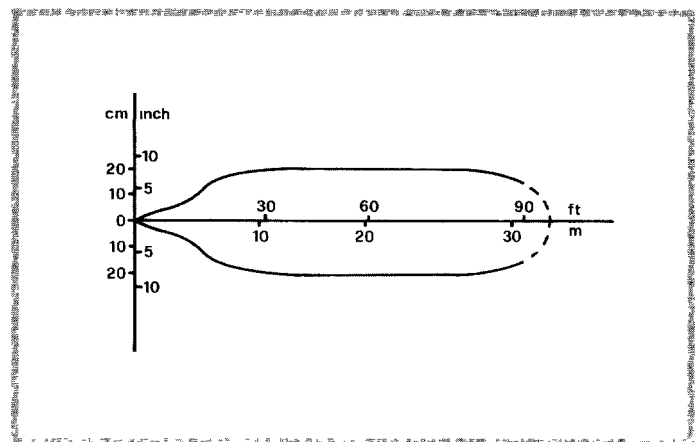
Retroreflex



Proximity scanner



Fixed focus Proximity scanner



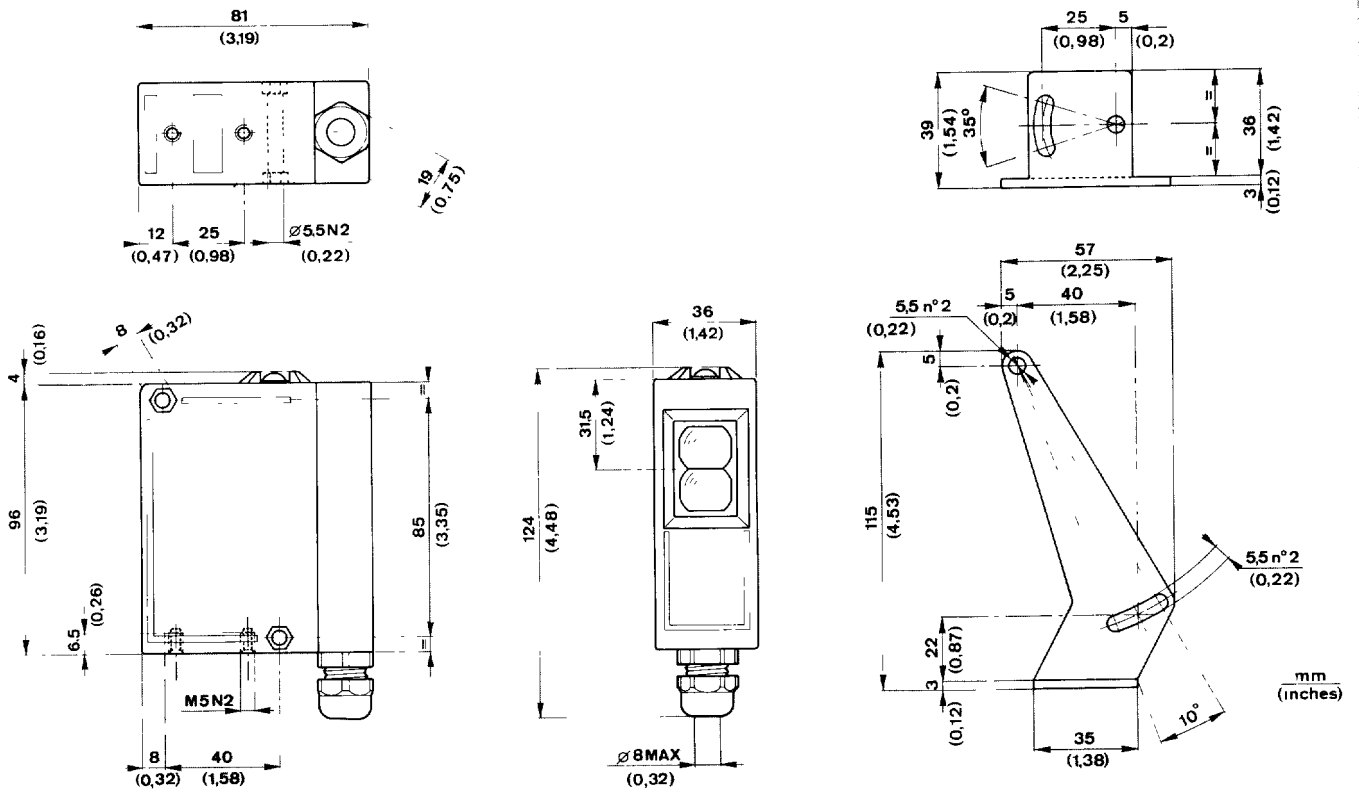
Emitter/receiver

The standard values given for the operating ranges are referred to ideal conditions, i.e. clean air, clean lenses, etc. Dust, air pollution and other kinds of ambient contamination reduce the operating ranges.

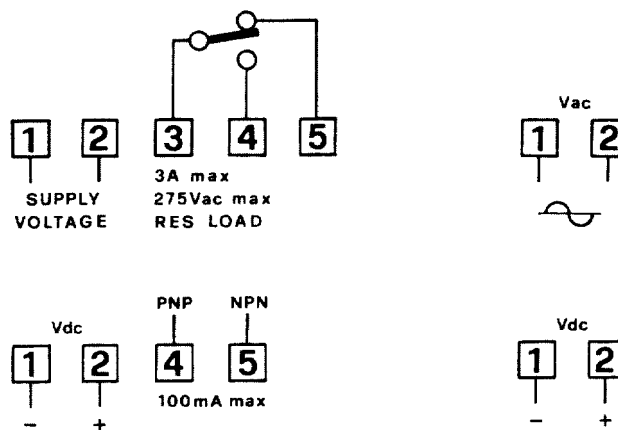
RT7: Model selection table

TYPE	FUNCTION MAX OPERATING RANGE	OUTPUT	SUPPLY VOLTAGE		TIME-DELAY VERSION	ORDER NO
			DC	AC		
RT7-0112	<input type="checkbox"/> retroreflex	NPN/PNP	10-30V			S907330000
RT7-0112T	26 ft (8 m) with 2" (ø 5 cm) reflector	NPN/PNP	10-30V		●	S907335000
RT7-0134	<input type="checkbox"/> proximity scanner	NPN/PNP	10-30V			S907530000
RT7-0134T	6.6 ft (2 m) with white paper	NPN/PNP	10-30V		●	S907535000
RT7-0178	<input type="checkbox"/> fixed focus	NPN/PNP	10-30V			S907630000
RT7-0178T	12" (300 mm) with white paper	NPN/PNP	10-30V		●	S907635000
RT7-00	<input type="checkbox"/> emitter		10-30V			S907139900
RT7-0156	<input type="checkbox"/> receiver	NPN/PNP	10-30V			S907200000
RT7-0156T	emitter/receiver 100 ft (30 m)	NPN/PNP	10-30V		●	S907205000
RT7-20				24V		S907139910
RT7-30				48V		S907139920
RT7-40	<input type="checkbox"/> emitter			110V		S907139930
RT7-50				220/240V		S907139940
RT7-256		relay		24V		S907200310
RT7-256T		relay		24V	●	S907205310
RT7-356		relay		48V		S907200320
RT7-356T		relay		48V	●	S907205320
RT7-456		relay		110V		S907200330
RT7-456T		relay		110V	●	S907205330
RT7-556		relay		220/240V		S907200340
RT7-556T		relay		220/240V	●	S907205340
				FREE-VOLTAGE		
RT7-12	<input type="checkbox"/> retroreflex	relay	15-275 Vac-Vdc			S907330390
RT7-12T	2.6 ft (8 m) with 2" (ø 5 cm) reflector	relay	15-275 Vac-Vdc		●	S907335390
RT7-34	<input type="checkbox"/> proximity scanner	relay	15-275 Vac-Vdc			S907530390
RT7-34T	6.6 ft (2 m) with white paper	relay	15-275 Vac-Vdc		●	S907535390
RT7-78	<input type="checkbox"/> fixed focus	relay	15-275 Vac-Vdc			S907630390
RT7-78T	12" (300 mm) with white paper	relay	15-275 Vac-Vdc		●	S907635390

RT7: Overall dimensions



RT7: Connections



DATALOGIC DL
SENSOR CONTROL



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Via Lavino, 265 - Bologna - Italia
Tel. 051/936302 - Tlx. 214601 SENSOR I - Fax 051/936454

Datalogic manufacturers of Photoelectric Controls, Temperature Controls  Bar Code Systems 

We reserve the right to make modifications and improvements