



RL28-8-H-400-../105/...

Reflection light scanner with background suppression

RL28-8-H-400-../105/...

with 5-pin, M12 x 1 plastic connector



- ◆ Sensor range 20 mm ... 400 mm, adjustable
- ◆ PNP and NPN transistor outputs
- ◆ Clearly visible LEDs for Power ON, switching state and stability control
- ◆ Not sensitive to ambient light, even with energy saving lamps
- ◆ Design RT: Good alignability by red transmission LED
- ◆ Design IR: Minimal black-white difference through the infrared transmission LED
- ◆ Dove-tail mounts and pass-through mounting holes
- ◆ Large temperature range from -40 °C ... +60 °C
- ◆ Waterproof, protection class IP67

For suitable cable sockets, reflectors and mounting aids refer to chapter "accessories".

Date of issue: 10/4/01

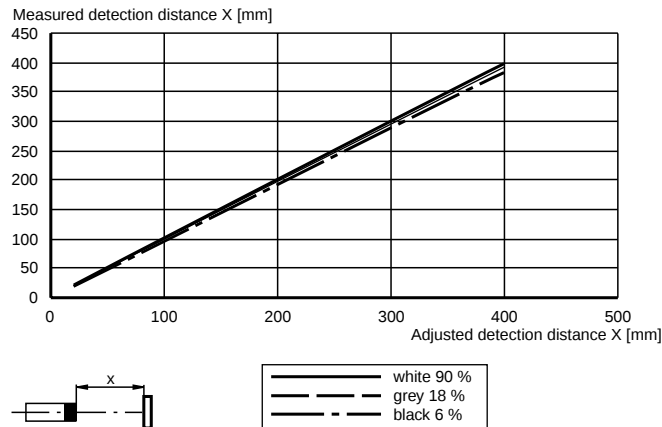
Ordering code		RL28-8-H-400-RT/47/105	RL28-8-H-400-RT/49/105	RL28-8-H-400-RT/105/110	RL28-8-H-400-IR/47/105	RL28-8-H-400-IR/49/105	RL28-8-H-400-IR/105/110
Detection range	20 ... 400 mm	◆	◆	◆	◆	◆	◆
Detection range min.	20 ... 150 mm	◆	◆	◆	◆	◆	◆
Sensor range max.	20 ... 400 mm	◆	◆	◆	◆	◆	◆
Black/white difference (6 %/90 %)	< 10 %	◆	◆	◆	◆		
	< 5 %					◆	◆
Light type	Red, alternating light	◆	◆	◆			
	Infrared, alternating light				◆	◆	◆
Light source	LED	◆	◆	◆			
	IRE				◆	◆	◆
Angle of divergence	transmitter 1.2° receiver 2°	◆	◆	◆			
	transmitter 2° receiver 2°				◆	◆	◆
Diameter of the light spot	approx. 12 mm at a distance of 400 mm	◆	◆	◆			
	approx. 14 mm at a distance of 400 mm				◆	◆	◆
Ambient light limit	50000 Lux	◆	◆	◆	◆	◆	◆
Standard conformity	EN 60947-5-2	◆	◆	◆	◆	◆	◆
Approvals	CE	◆	◆	◆	◆	◆	◆
USA	UL	◆	◆	◆	◆	◆	◆
Kanada	CSA	◆	◆	◆	◆	◆	◆
Operating display	LED green	◆	◆	◆	◆	◆	◆
Function display	2 LEDs yellow on: object inside the scanning range off: object outside the scanning range	◆	◆	◆	◆	◆	◆
Controls	rotary switch for light/dark	◆	◆	◆	◆	◆	◆
Controls	sensitivity adjuster	◆	◆	◆	◆	◆	◆
Operating voltage	10 ... 30 V DC	◆	◆	◆	◆	◆	◆
Ripple	10 %	◆	◆	◆	◆	◆	◆
No-load supply current	≤ 40 mA	◆	◆	◆	◆	◆	◆
Signal output	2 pnp antivalent, short-circuit proof, protected against reverse polarity	◆			◆		
	1 npn, 1 pnp synchronised-switching, short-circuit proof, protected against reverse polarity		◆			◆	
	1 push-pull output, short-circuit proof, protected against reverse polarity			◆			◆
Switching type	Light/dark ON, switchable	◆	◆	◆	◆	◆	◆
Switching voltage	max. 30 V DC	◆	◆	◆	◆	◆	◆
Switching current	max. 200 mA	◆	◆	◆	◆	◆	◆
Switching frequency	250 Hz	◆	◆	◆	◆	◆	◆
Response time	2 ms	◆	◆	◆	◆	◆	◆
Ambient temperature	-40 ... +60 °C	◆	◆	◆	◆	◆	◆
Storage temperature	-40 ... +75 °C	◆	◆	◆	◆	◆	◆
Protection degree	IP67	◆	◆	◆	◆	◆	◆
Connection type	5-pin, M12 connector	◆	◆	◆	◆	◆	◆
Housing	Plastic ABS	◆	◆	◆	◆	◆	◆
Light exit	Plastic	◆	◆	◆	◆	◆	◆
Mass	70 g	◆	◆	◆	◆	◆	◆



Diagrams

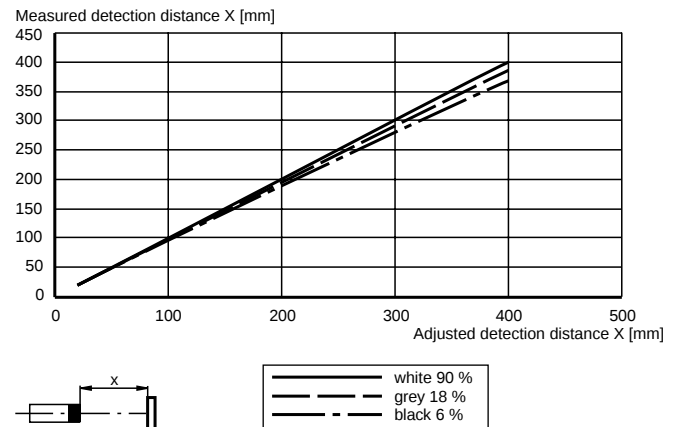
Difference in detection distance

RL28-8-H-400-IR



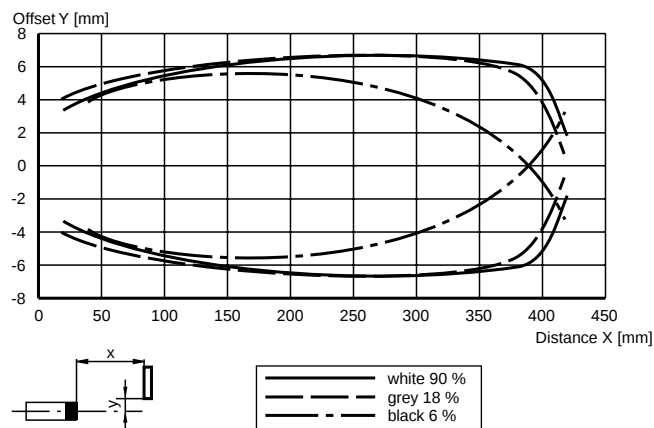
Difference in detection distance

RL28-8-H-400-RT



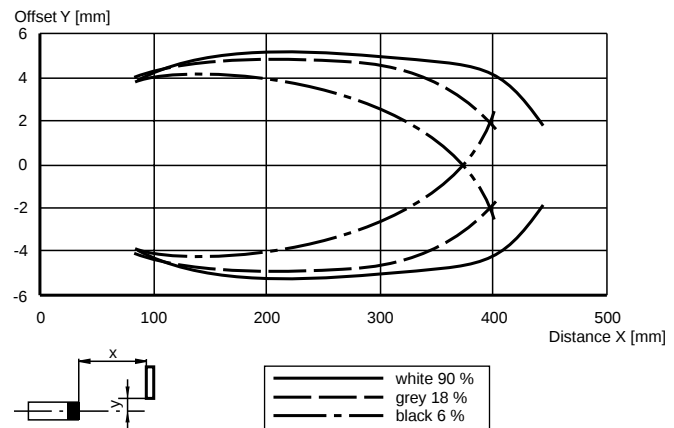
Characteristic response curve

RL28-8-H-400-IR

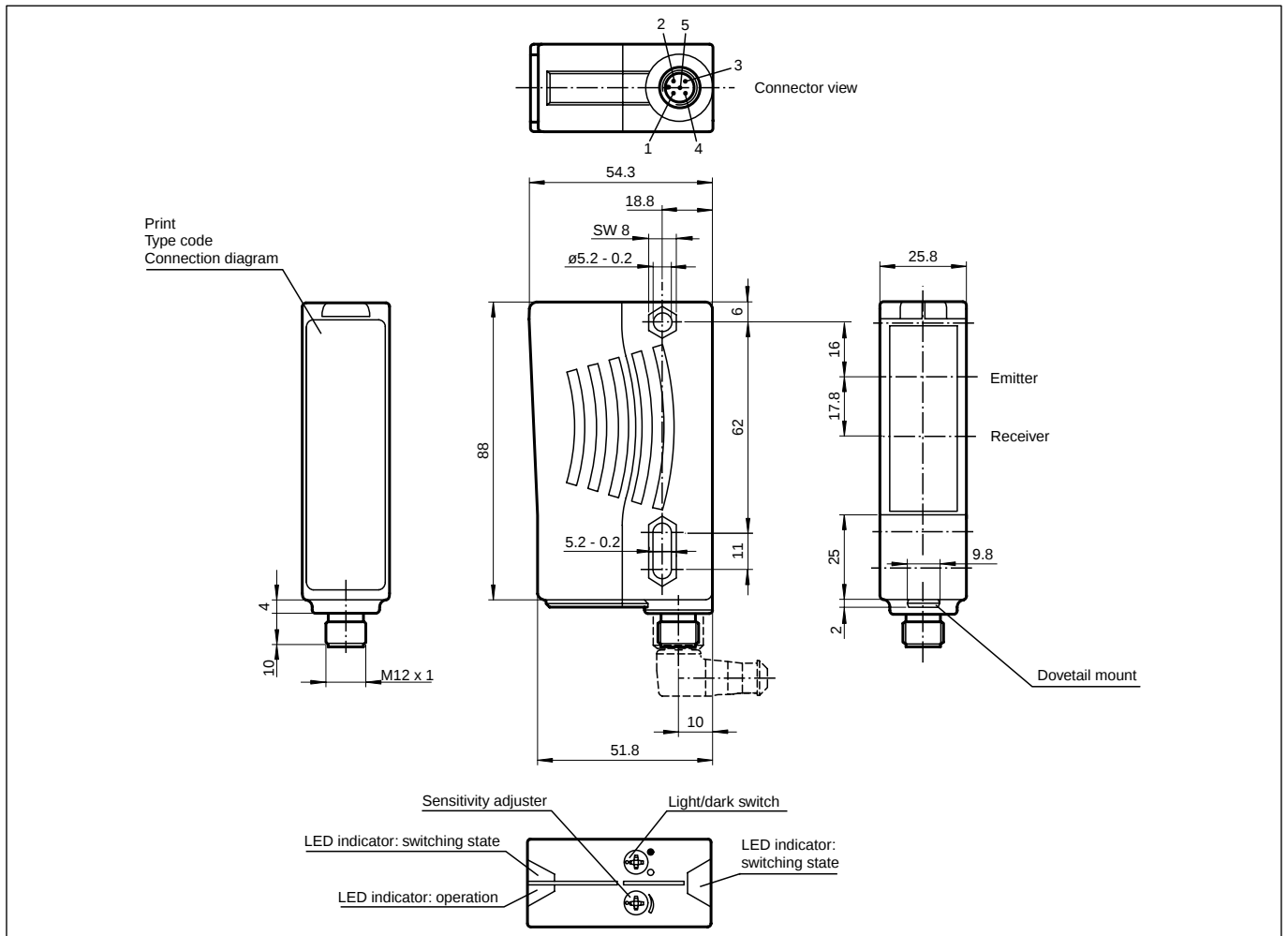


Characteristic response curve

RL28-8-H-400-RT



Dimensions



Electrical Connection

