

RL.25-55/...

Reflection light beam switch with polarisation filter

RL.25-55/...

with terminal compartment

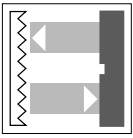


- ◆ Detection range up to 8 m, optional 14 m
- ◆ Compact construction
- ◆ Light/dark switch
- ◆ Sensitivity adjuster and light-/dark switch
- ◆ Pre-fault indication and output
- ◆ AS-Interface
- ◆ Test input

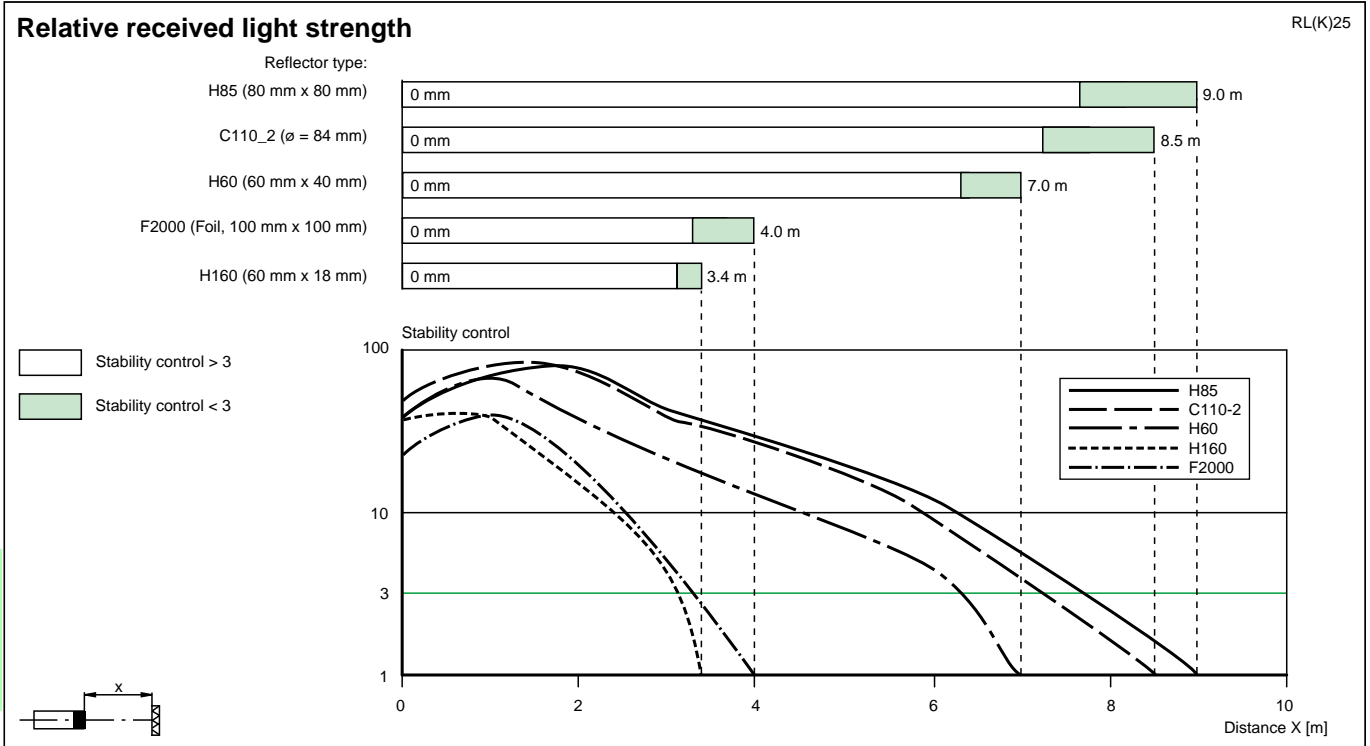
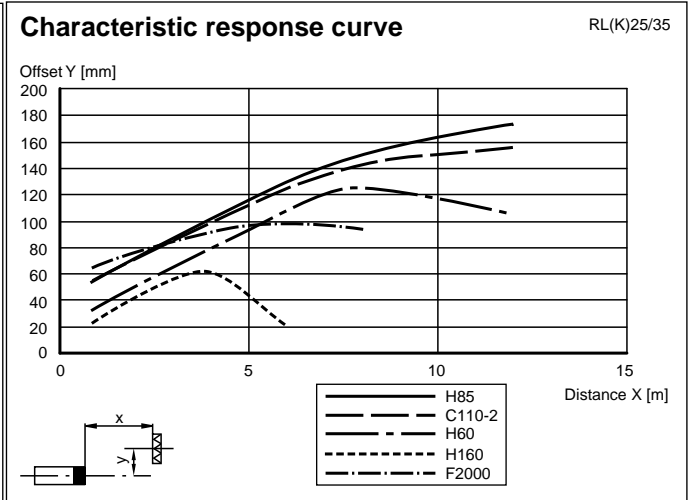
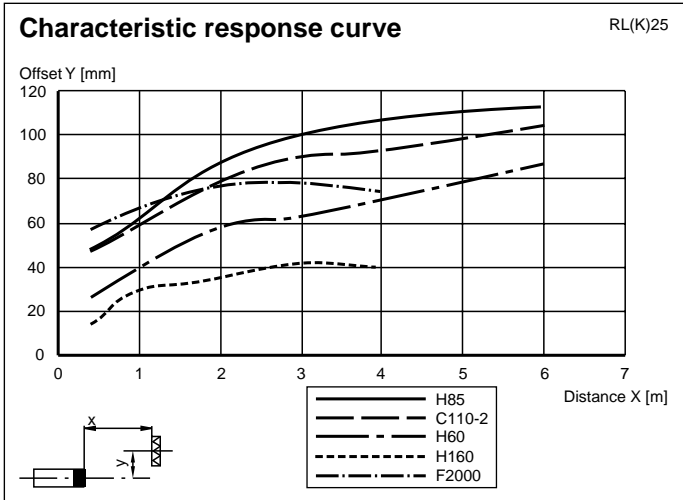
Series
25

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

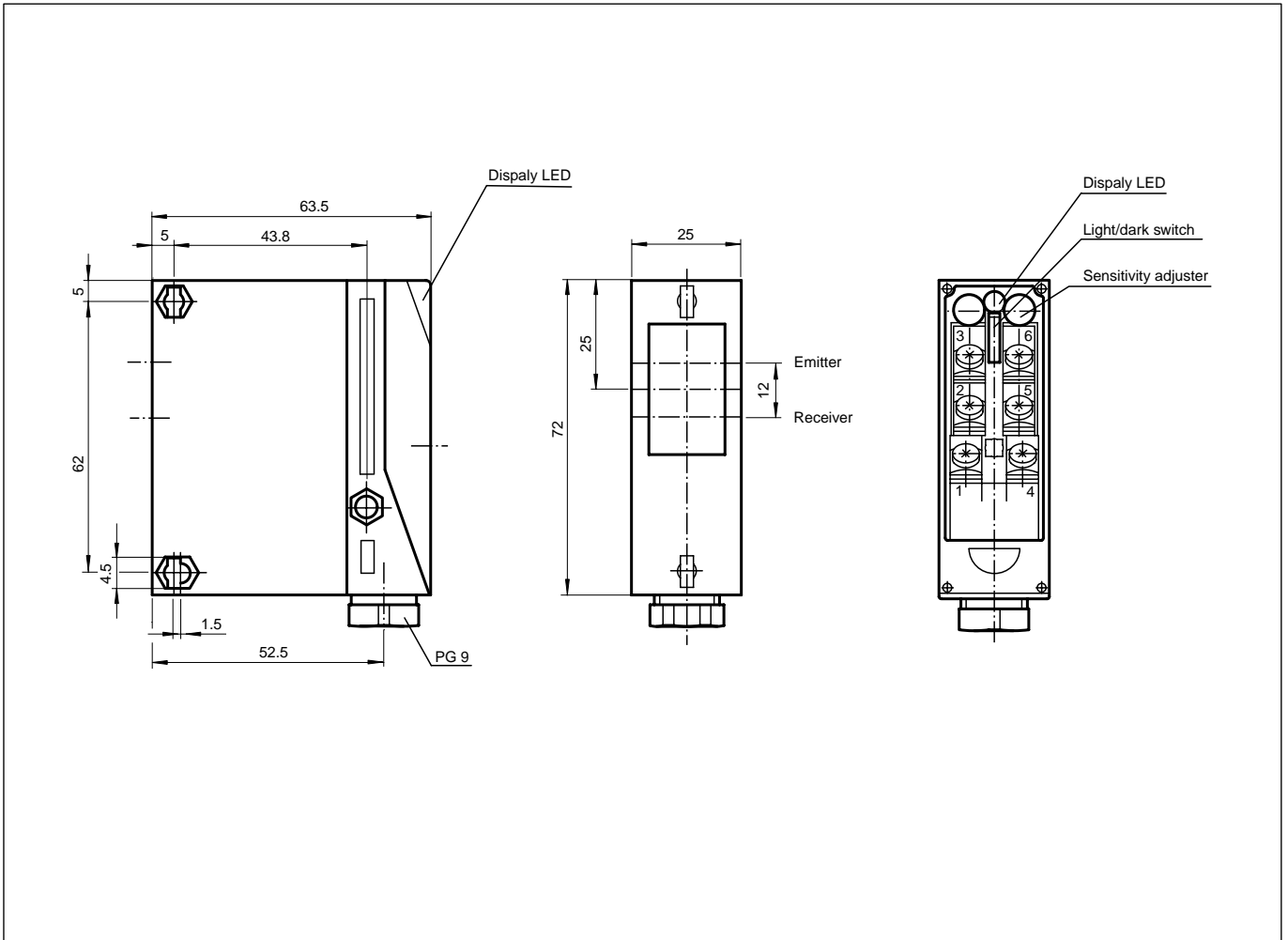
Ordering code		RL25-55/47/116	RL25-55/49/116	RLK25-55/116	RLK25-55/35/116	RL25-55/35/47/116	RL25-55/35/49/116	RL25-55-AS-I	RL25-55-AS-I/35
Effective detection range	0 ... 4000 mm	◆	◆	◆				◆	
	0 ... 8000 mm				◆	◆	◆		◆
Threshold detection range	14 m (with C110-2 reflector)				◆	◆	◆		◆
	8 m (with C110-2 reflector)	◆	◆	◆				◆	
Reflector distance	0 ... 4000 mm	◆	◆	◆				◆	
	400 ... 8000 mm				◆	◆	◆		◆
Light type	Red, alternating light	◆	◆	◆	◆	◆	◆	◆	◆
Light source	LED	◆	◆	◆	◆	◆	◆	◆	◆
Angle of divergence	approx. 2°	◆	◆	◆	◆	◆	◆	◆	◆
Diameter of the light spot	approx. 100 mm at a distance of 4000 mm	◆	◆	◆				◆	
	approx. 250 mm at a distance of 10 m				◆	◆	◆		◆
Ambient light limit	80000 Lux	◆	◆	◆	◆	◆	◆	◆	◆
Standard conformity	EN 60947-5-2	◆	◆	◆	◆	◆	◆	◆	◆
Approvals	CE	◆	◆	◆	◆	◆	◆	◆	◆
USA	UL	◆	◆	◆	◆	◆	◆	◆	◆
Kanada	CSA	◆	◆	◆	◆	◆	◆	◆	◆
Function display	LED green, lights up when light beam is free/flashes when falling short of the stability control	◆	◆	◆	◆	◆	◆	◆	◆
Controls	sensitivity adjuster	◆	◆	◆	◆	◆	◆		
Controls	Light/dark switch	◆	◆	◆	◆	◆	◆		
Operating voltage	via AS-i network							◆	◆
	10 ... 30 V DC	◆	◆			◆	◆		
	12 ... 240 V AC/DC			◆	◆				
Ripple	10 %	◆	◆			◆	◆		
No-load supply current	40 mA	◆	◆			◆	◆	◆	◆
Power consumption	3 VA			◆	◆				
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 relay, 1 alternator			◆	◆				
	AS-Interface							◆	◆
Switching type	Light/dark ON, switchable	◆	◆	◆	◆	◆	◆		
	light/dark switching							◆	◆
Switching voltage	max. 250 V AC			◆	◆				
	30 V DC	◆	◆			◆	◆		
Switching current	max. 2 A			◆	◆				
	max. 200 mA	◆	◆			◆	◆		
Switching frequency	25 Hz	◆	◆	◆	◆				
	250 Hz	◆	◆			◆	◆		
	250 Hz (max. 100 Hz with 31 slaves)							◆	◆
Response time	2 ms	◆	◆	◆	◆	◆	◆	◆	◆
Output of the pre-fault indication	1 pnp	◆	◆			◆	◆		
	Data bit D1							◆	◆
Test input	Emitter deactivation	◆	◆			◆	◆		
	Data bit D3							◆	◆
Ambient temperature	-20 ... +60 °C	◆	◆	◆	◆	◆	◆	◆	◆
Storage temperature	-20 ... +75 °C	◆	◆	◆	◆	◆	◆	◆	◆
Protection degree	IP65	◆	◆	◆	◆	◆	◆	◆	◆
Connection type	terminal compartment	◆	◆	◆	◆	◆	◆	◆	◆
Housing	Terluran GV15	◆	◆	◆	◆	◆	◆	◆	◆
Light exit	Glass	◆	◆	◆	◆	◆	◆	◆	◆
Mass	100 g			◆	◆				
	90 g	◆	◆			◆	◆	◆	◆



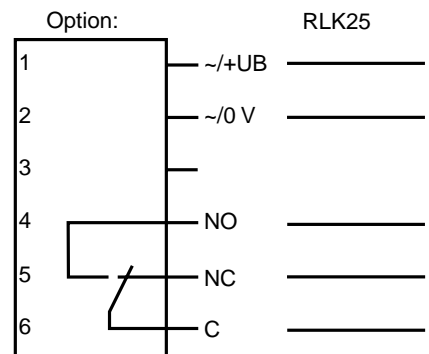
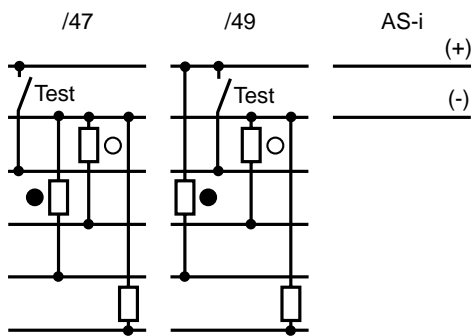
Diagrams



Dimensions



Electrical Connection



○ = Light ON, ● = Dark ON

Date of issue: 10/15/01

AS-Interface Parameters

Slave profile: IO code = 1, ID code = F

• Parameter bit

Bit	Type	device function	Meaning at Host level
P0	parameter	none	none
P1	parameter	inversion of D0	1 = light on (D0 = 1 with receiver lit)(light-dark switching) 0 = dark on (D0 = 0 with receiver lit)
P2	parameter	none	none
P3	parameter	none	none

• Data bit

Bit	Type	device function	Meaning at Host level
D0	input	sensor function	1 = receiver lit (at P1 = 1) 0 = receiver not lit (at P1 = 1) 0 = receiver lit (at P1 = 0) 1 = receiver not lit (at P1 = 0)
D1	input	warning	1 = sufficient stability control (> 3-fold) or receiver not lit (delay time until setting to 1: < 5 s); 0 = insufficient stability control (delay time until setting to 0: < 2 s)
D2	input	functional readiness	1 = device ready for operation 0 = device not ready for operation
D3	output	test function	none

