

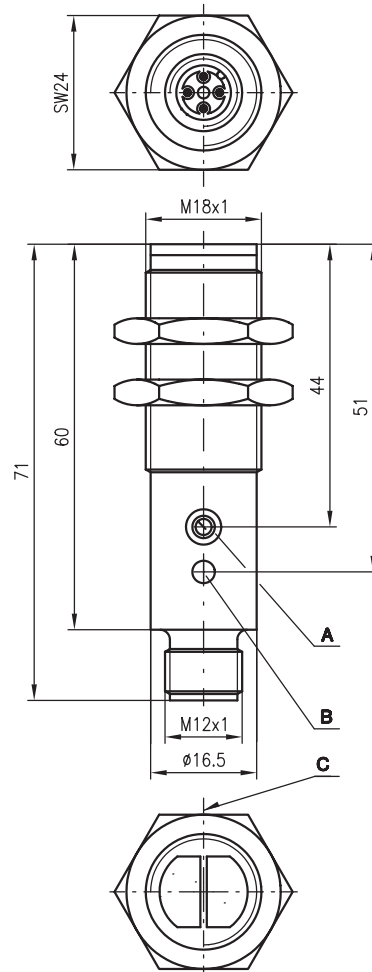


## RT 618

## Energetic diffuse reflection light scanner



### Dimensioned drawing



- A Sensitivity adjustment
- B Indicator diode
- C Optical axis

### Electrical connection

RT 618/4-200-S12

10-30V DC+	10-30V DC+	1	br/BN
GND	10-30V DC+	2	ws/WH
GND	GND	3	bl/BU
●	○	4	sw/BK



0 ... 300 mm



- Energetic diffuse reflection light scanner with light/dark switching
- Robust cylindrical metal housing M18x1
- Sensitivity adjustment for optimal adaptation to the application
- Dual LED display for easy commissioning
- M12 connector for fast installation



### Accessories:

(available separately)

- M12 connectors (KD ...)
- Ready-made cables (KB ...)
- 90° deflection head

We reserve the right to make changes • 618\_c01e.fm

## Specifications

### Optical data

Typ. scanning range limit (white 90%) <sup>1)</sup>	0 ... 300mm
Scanning range <sup>2)</sup>	see table
Adjustment range	30 ... 300mm
Light source	LED (modulated light)
Wavelength	880nm

### Timing

Switching frequency	500Hz
Response time	1 ms
Delay before start-up	≤ 100ms

### Electrical data

Operating voltage $U_B$	10 ... 30VDC (incl. residual ripple)
Residual ripple	≤ 10% of $U_B$
Bias current	≤ 30mA
Switching output	PNP transistor output
Function characteristics <sup>3)</sup>	light/dark switching via control line
Signal voltage high/low	≥ ( $U_B - 2.5V$ ) / ≤ 2.5V
Output current	max. 100mA
Sensitivity	adjustable

### Indicators

Dual LED green	ready
Dual LED yellow	reflection
Dual LED yellow flashing	reflection, no performance reserve

### Mechanical data

Housing	nickel-faced brass
Optics cover	plastic
Weight	40g
Connection type	M12 connector, 4-pin

### Environmental data

Ambient temp. (operation/storage)	-25°C ... +55°C / -30°C ... +70°C
Protective circuit	Short circuit and overload protection
Protection class	IP 67
Standards applied	IEC 60947-5-2

1) Typ. scanning range limit: max. attainable range without performance reserve

2) Scanning range: recommended range with performance reserve

3) light switching for control line (ws/WH): not connected or connected to  $U_B$   
dark switching for control line (ws/WH): connected to GND

## Tables

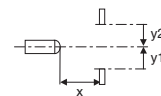
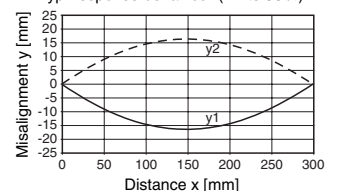
1	0	200	300
2	1	97	146
3	3	65	100

1	white 90%
2	grey 18%
3	black 6%

<input type="checkbox"/>	Scanning range [mm]
<input type="checkbox"/>	Typ. scanning range limit [mm]

## Diagrams

Typ. response behaviour (white 90%)



## Order guide

Designation	Part No.
RT 618/4-200-S12	500 38449

## Remarks

- With the set scanning range, a tolerance of the upper scanning range limit is possible depending on the reflection properties of the material surface.