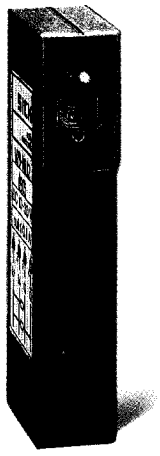
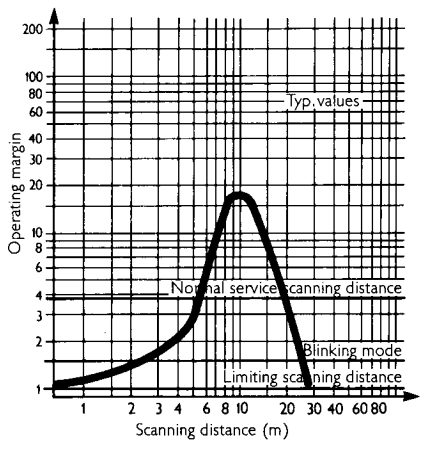


Scanning Range

10 to 20 mm

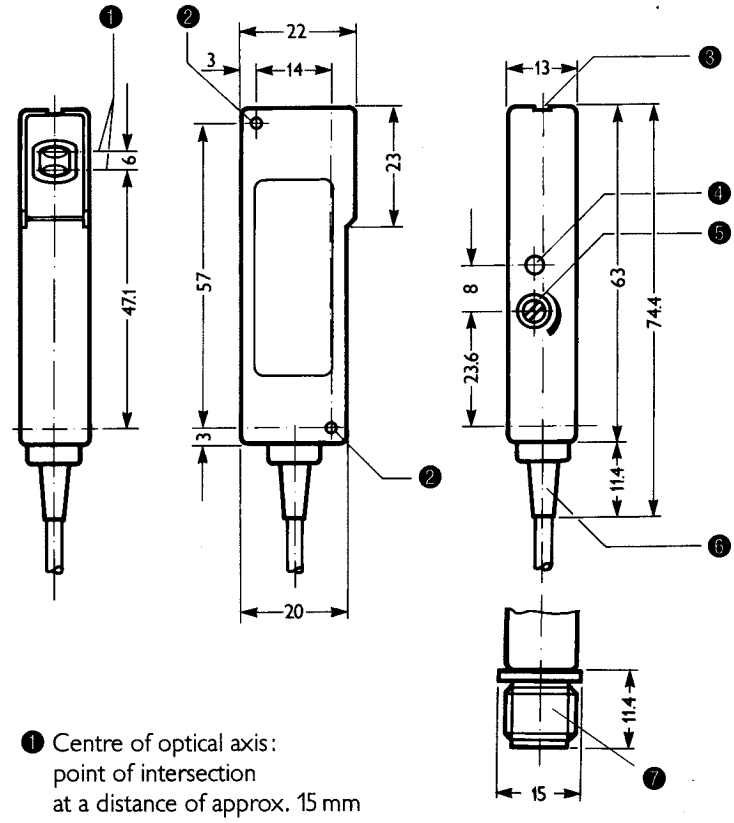
Features:

- Blinking LED signal strength indicator to show misalignment and dirt build-up on optics
- Supply connections reverse-polarity protected
- Complementary switching outputs Q and $\overline{Q}$ (light- and dark-switching)
- Switching outputs short circuit protected, PNP or NPN
- Insensitive to ambient light
- No false triggering on power-up
- Glassfiber-reinforced plastic housing
- CE



WT 9

Dimensions in mm



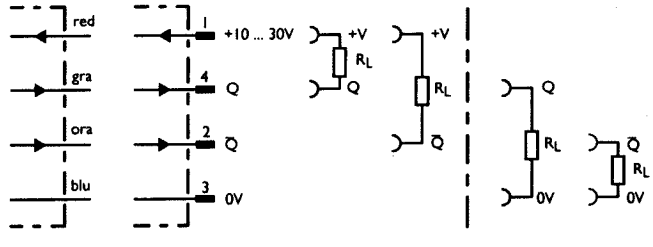
1. Centre of optical axis: point of intersection at a distance of approx. 15 mm
2. Mounting holes, I.D. 3.2 mm
3. Alignment sight
4. Signal strength indicator
5. Sensitivity control
6. Connecting cable, 2 m long
7. M 12 plut, 4-pin

For mounting bracket (accessories), Part No. 2 009 120, see page 282

Connection Diagram

WT 9

-N/-P 112 **-F 410**



red	gra	ora	blu
red	gray	orange	blue

WT 9
Photoelectric Proximity Switch

WT 9	-N112	-P112	-F410
Part No.	1005705	1005704	1011371
Type of connection	cable		4-pin plug
Mounting bracket, Part No.	2009120		
Scanning range[1]	10 to 20 mm		
Supply voltage V_S	10 to 30 VDC (limit values)		
Current consumption (no load)	< 50 mA		
Ripple[2]	≦ 5 V_{PP}		
Light source	LED, modulated infrared, average service life 100,000 h[3]		
Light spot diameter	3 mm at distance of 15 mm		
Light receiver switching mode	LIGHT- and DARK-switching		
Sensitivity	adjustable (270°-potentiometer)		
Signal strength indicator	LED		
Switching outputs Q und $\overline{Q}$	NPN	PNP	
Signal voltage HIGH	approx. V_S	V_S – (≦ 1.5 V)	
Signal voltage LOW[4]	≦ 1.5 V	approx. 0 V	
Output current max.	100 mA		
Response time[5]; switching frequency[6]	≦ 700 µs; 700/s		
VDE protection class[7]	⧈		
Enclosure rating	IP 67		
Circuit protection[8]	A, B, C		
Ambient operating temperature[9]	–25 to + 55 °C		
Storage temperature[9]	–40 to + 75 °C		
Connecting cable	2 m, 4 x 0.25 mm², PVC, O.D. 5 mm		
Weight (incl. cable)	approx. 100 g		

1) Material with 6% reflectance (based on white standard, to DIN 5033)
2) Must be within V_S tolerances
3) At room temperature = + 25 °C
4) At room temperature = + 25 °C and output current of 100 mA
5) With resistive load
6) With light/dark time ratio of 1 : 1
7) Withstand voltage 50 V
8) A = supply connections reverse-polarity protected
   B = outputs Q and $\overline{Q}$ short circuit protected
   C = interference suppression
9) Do not distort cable below 0 °C