


Photoelectric proximity switches

Infrared light

WT24-2Exi

	Scanning distance
	100...2000 mm
Photoelectric proximity switch	

■ **Marking:**



II 2G EEx ia IIC T4
according to Directive 94/9/EC
(ATEX)

■ According to category 2G

■ **Switching output:**
EN60947-5-6 (NAMUR)

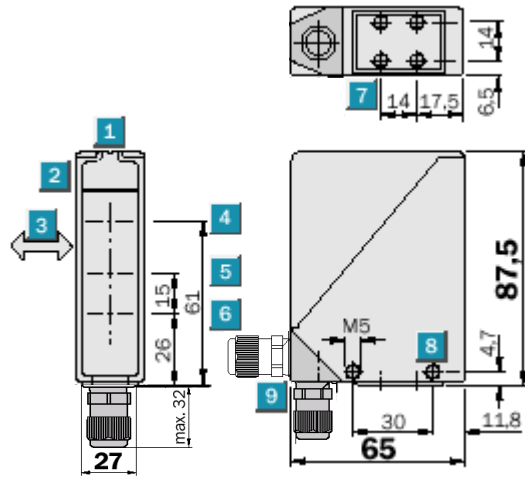
■ **Background suppression can be set very precisely**

■ **Infrared light**

■ **Plug rotatable by 90°**

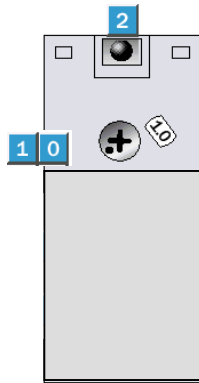


Dimensional drawing



Adjustment possible

WT24-2X260
WT24-2X460



- 1 Alignment sight
- 2 LED signal strength indicator
- 3 Standard direction of the material being scanned
- 4 Middle of optic axis, sender
- 5 Middle of optic axis, receiver at close range
- 6 Middle of optic axis, receiver at long range
- 7 M5 threaded mounting hole
- 8 Sensitivity adjustment
- 9 M16 screw fixing or M12 plug, rotatable by 90°
- 10 Scanning distance adjuster

Connection types

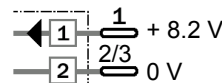
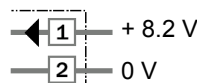
WT24-2X260

WT24-2X460



M16, terminals

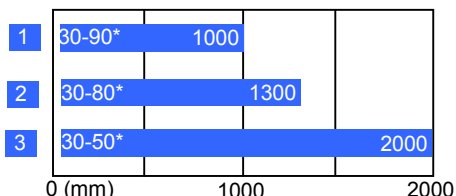
4-pin, M12



Technical Data		WT24-2	X260	X460
Scanning distance	100...2000 mm, adjustable			
Light source ¹⁾, light type	LED; infrared light			
Light spot diameter	Approx. 50 mm at 2000 mm			
Supply voltage U_s ²⁾	DC 8.2 V (R _i approx. 1 kOhm) (5V...13.5 V) ³⁾			
Ripple ⁴⁾	0.4 V _{SS}			
EC-type examination certificate	PTB 03 ATEX 2105			
Explosion protection	Type of protection „Intrinsic safety“			
Input voltage U _i , max.	15.5 V			
Input current I _i , max.	53 mA			
Input power P _i , max.	100 mW			
Internal capacity C _i , max.	80 nF			
Internal inductivity L _i , max.	negligible small (≈ 0 μH)			
Ambient temperature T _A	Operation: - 20 °C < T _A < + 60 °C			
Output / current consumption	Control current dependent on switching state to EN 60947-5-6 (NAMUR)			
Object is detected	≥ 2.2 mA			
Object is not detected	≤ 1 mA			
Switching mode	Light-switching			
Response time ⁵⁾	≤ 10 ms			
Max. switching frequency ⁶⁾	50/s			
Connection types	Plug			
	Terminal connection			
VDE protection class ⁷⁾	<input type="checkbox"/>			
Circuit protection ⁸⁾	A, C			
Enclosure rating	IP 67			
Ambient temperature T _A	Storage: - 25 °C ... + 70 °C			
Weight	Approx. 330 g			
Housing material	Zinc die-cast housing			

- 1) Average service life 100,000 h at T_A = + 25 °C
 2) Supply with isolating switching unit EN 2 Ex
 3) Limit values
 4) May not exceed or fall short of V_S tolerances
 5) Signal transit time with resistive load
 6) With light/dark ratio 1:1
 7) Reference voltage DC 50 V
 8) A = V_S connections reverse-polarity protected
 C = Interference pulse suppression

Scanning distance	Order information	
	Type	Part No.
	WT24-X260	1 025 684
	WT24-X460	1 025 683



* lower bound of detection area depending on the adjusted scanning distance

- 1 Scanning distance on black, 6 %
- 2 Scanning distance on grey, 18 %
- 3 Scanning distance on white, 90 %

