



WTH

CYLINDRICAL PROTECTIVE HEATED HOUSING FOR USE IN SEVERE ENVIRONMENTAL CONDITIONS

- *Ideal for external use*
- *Resistant to pressurised water jets*
- *Resistant to highly humid environments*
- *Resistant to cold temperatures*
- *Resistant to saline environments*

INTRODUCTION

- WTH is a ***cylindrical protective housing for safety light curtain*** designed to secure operators working on dangerous machines in an industrial environment including the protection of access to the stations in severe environmental conditions.
- Thanks to its features, WTH is also the ideal solution for all uses in external environments (rain, sun, environments that generate condensation or cold temperatures).
- The cylindrical housing WTH can fit the following safety light curtain REER families: ADMIRAL, VISION, ADMIRAL AX, VX VISION, VISION VXL.

PRODUCT STRUCTURE

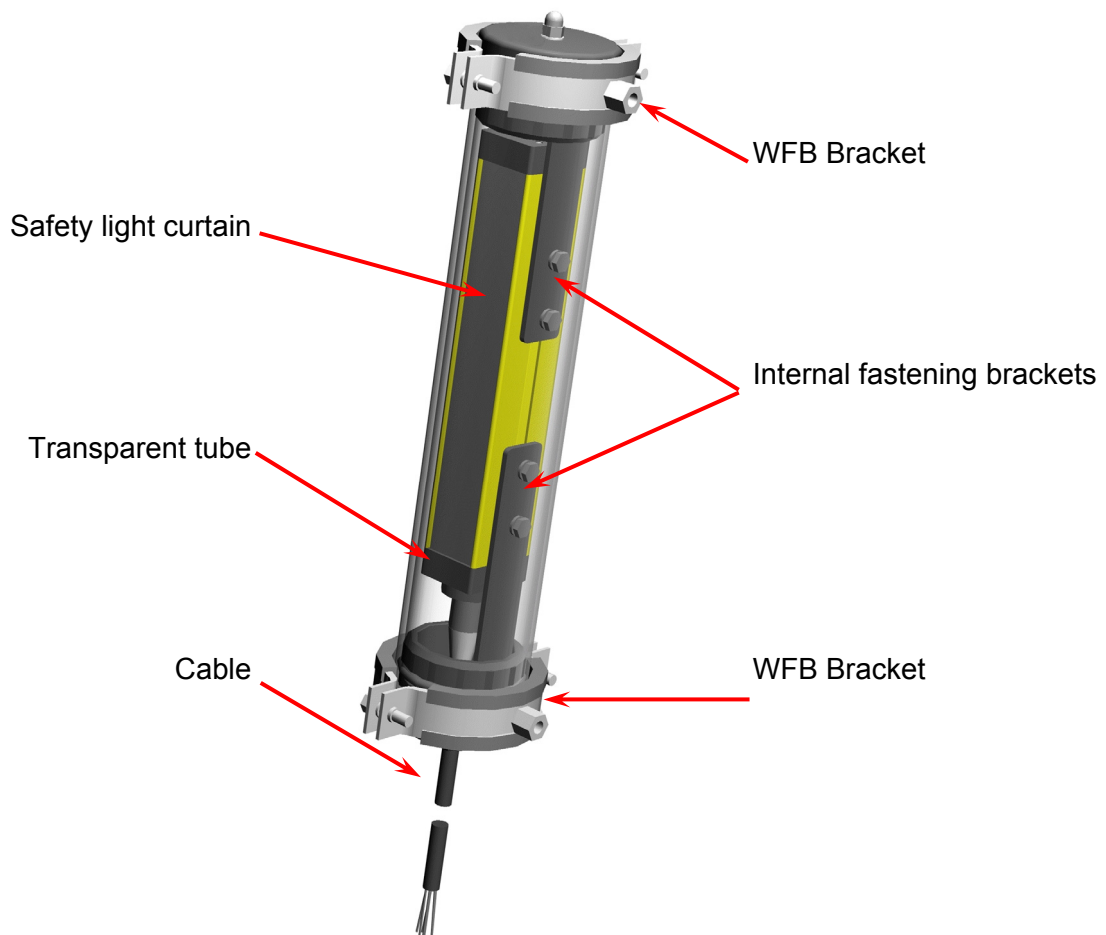


Figure 1

GENERAL CHARACTERISTICS

- Resistant to pressurised water streams of up to 40 bars.
- Integrated anti-condensation system through the GORE™ vent.
- Thermostatic heating control system (power supplied with 24V AC/DC).
(Power consumption = 13,5W for each heating system).
- Operating temperature from -25° to +55°C.
- Degree of protection IP67.
- CE certified.

PROTECTIVE HOUSING TECHNICAL CHARACTERISTICS

Fastenings		Via 2 WFB circular brackets
Operating temperature	°C	-25 ÷ +55
Operating temperature with pressurised water	°C	10 ÷ 40 (max. water pressure = 40 bars)
Material	Transparent tube	PC (Polycarbonate) Ø 70mm
	Sealing caps	PVC
	WFB brackets	Zinc plated steel / SBR/EPDM rubber (without chlorine or silicone)
Degree of protection		IP 67

LIGHT CURTAIN ELECTRICAL CONNECTIONS

EMITTER			
PIN	COLOR	NAME	DESCRIPTION
1	Brown	24VDC	+24VDC power supply
3	Blue	0VDC	0VDC power supply
5	Grey	PE	Ground connection
2	White	RANGE0 *	Barrier configuration
4	Green	RANGE1 *	
-	Yellow	0VDC	HEATING SYSTEM
-	Red	24V AC/DC	
-	Pink		
NOT CONNECTED			

RECEIVER			
PIN	COLOR	NAME	DESCRIPTION
2	Brown	24VDC	+24VDC power supply
7	Blue	0VDC	0VDC power supply
8	Red	PE	Ground connection
1	White	OSSD1	Safety static outputs
3	Green	OSSD2	
5	Grey	SEL_A	Barrier configuration
6	Pink	SEL_B	
4	Yellow	K1 K2	External contactors Feedback
-	Black	0VDC	HEATING SYSTEM
-	Violet	24V AC/DC	

DIMENSIONS (mm)

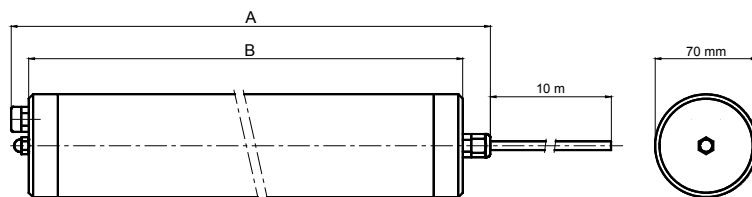


Figure 2

MODEL	150	300	450	600	750	900	1000	1050	1200	1350	1500	1650	1800	2B	3B	2B LR DB	3B LR DB
Dimension "A"	390	540	690	840	990	1140	1240	1290	1440	1590	1740	1890	2040	840	1140	900	1200
Dimension "B"	360	510	660	810	960	1110	1210	1260	1410	1560	1710	1860	2010	810	1110	870	1170

WFB FASTENING BRACKET DIMENSIONS (mm)

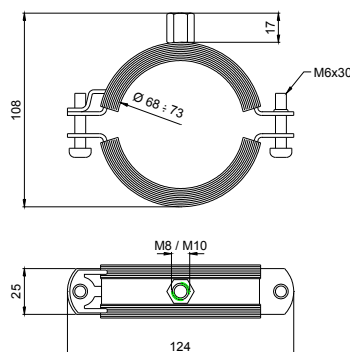


Figure 3

DISTANCE FROM REFLECTIVE SURFACES

✱ The presence of reflective surfaces close to the light curtain may cause occasional reflections that prevent sensing. Referring to Figure 4, object **A** is not detected due to surface **S** that, reflecting the beam, closes the optical path between the Emitter and Receiver. Therefore, a minimum distance d must be maintained between any reflecting surfaces and the guarded area. The minimum distance d must be calculated according to the distance l between the Emitter and Receiver and taking into account that the angle of projection and reception is 6° (due to the Polycarbonate cylinder optical interference).

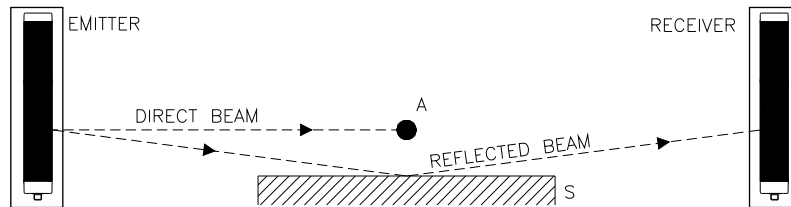


Figure 4 - Reflective surfaces

The distance d to be kept as the distance l between Emitter and Receiver varies is shown in Figure 5.

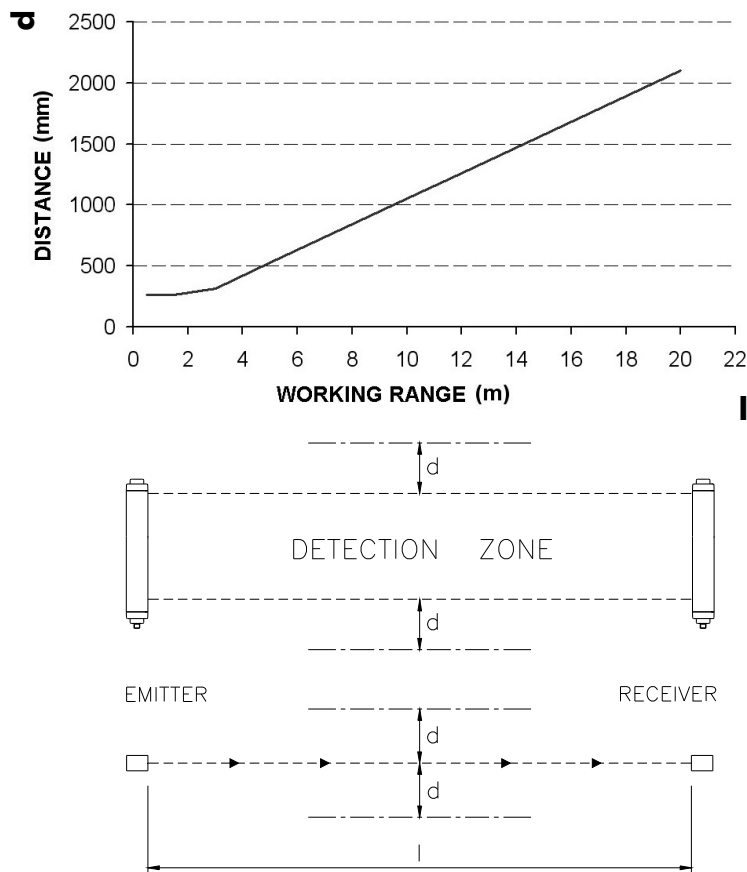


Figure 5 - Minimum distance d

After installing the system, check for any reflective surface that intercept the beams, first of all at the centre and then close to the Emitter and Receiver. During this procedure, the red led on the Receiver must never switch off.