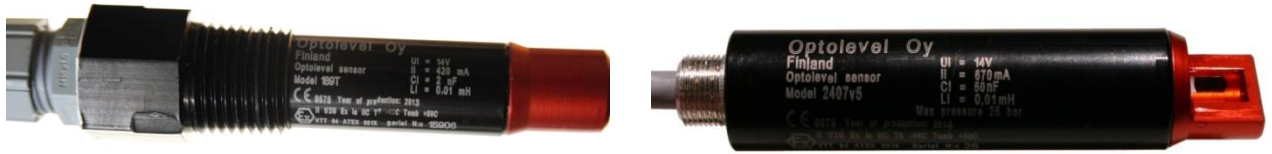


Optolevel® Two-Wire Optic Sensors



Optolevel® Two-wire Optic Sensor is a sensor for *Liquid Level Detection*. The sensors can be used for overflow and retain prevention for example on road tankers, storage tanks and rail cars. This sensor was the first product manufactured under the Optolevel trademark. The two-wire optic sensor has transformed significantly since the first prototype was introduced in the year 2000. Today's sensor represents the result of a long development history where every aspect of the sensor has been polished to its peak. Our goal was to find a reliable and lasting solution for liquid petroleum level detection and today's matured design achieves that successfully.

Technical Specifications

Description		Detection	
Designed and produced in Finland in accordance with standard EN13922 (interface and functionality). The approval is not tied to any specific mounting solution.		Level	adjustable with a mounting pipe (285 mm)
Structure - Enclosure		Accuracy	± 1 mm
Dimensions ø	18 mm or 24 mm	Mounting Information	
Weight	73 g or 105 g (90 g 189T)	The Optolevel® bottom sensors (1807 AA and 2407 AA) are designed to be mounted with a compression fitting. The bottom sensor (189T) is supplied with a cable ending connections. The top sensors (1807 YA and 2407 YA) are designed to be mounted with a mounting pipe (JP18 or JP24) and a mounting and connection box. Third party mounting parts may be used if they are Ex-certified for this type of use.	
Exposed Material	Aluminium EN6063, Glass BK7, Viton® seals	Others	
Electrical Specifications		The sensor's protection is based on an intrinsically safe structure and is permitted for mounting in Zone 0 according to ATEX Directive 2014/34/EC. EEx ia IIC T6	
Electrical Connection Max.	$U_i = 14 \text{ V DC}$ $C_i = 2 \text{ nF}$ $I_i = 420 \text{ mA}$ $L_i = 0,01 \text{ mH}$	Certificate	
Electrical Leads	450 mm long, 2 x 0,75 mm ²	ATEX	VTT 04 ATEX 051X II 1/2G Ex ia IIC T6
Ambient Conditions			
Operating Temperature	$-40^\circ\text{C} < T_a < 50^\circ\text{C}$		
Relative Humidity	20 - 80 % (non-condensing)		
Pressure Max.	25 bar		



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Ordering Information and Related Products

Product Code	Description
1807 YA	Two-wire optic top sensor Ø 18 mm (without holder) with 450 mm lead
2407 YA	Two-wire optic top sensor Ø 24 mm (without holder) with 450 mm lead
1807 AA	Two-wire optic bottom sensor Ø 18 mm with 450 mm lead and AMP SUPERSEAL connection plug (socket body included)
2407 AA	Two-wire optic bottom sensor Ø 24 mm with 450 mm lead and AMP SUPERSEAL connection plug (socket body included)
189T	Two-wire optic bottom sensor Ø 18 mm with ½" NPT tapered-thread, 450 mm lead and AMP SUPERSEAL connection plug (socket body included), cable ending connections
JP18	Mounting pipe 285 mm, Ø 18 mm for 1807 YA
JP24	Mounting pipe 285 mm, Ø 24 mm for 2407 YA
15-3387	Mounting and connection box for two (2) 2407 YA sensors
15-3390	Mounting and connection box for one (1) 2407 YA sensor

Optolevel® is a registered trademark of Optolevel Oy.
 Viton® is a registered trademark of DuPont.
 Specifications are subject to change without notice.



189T



2407 YA
1807 YA



2407 AA
1807 AA



NATO



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