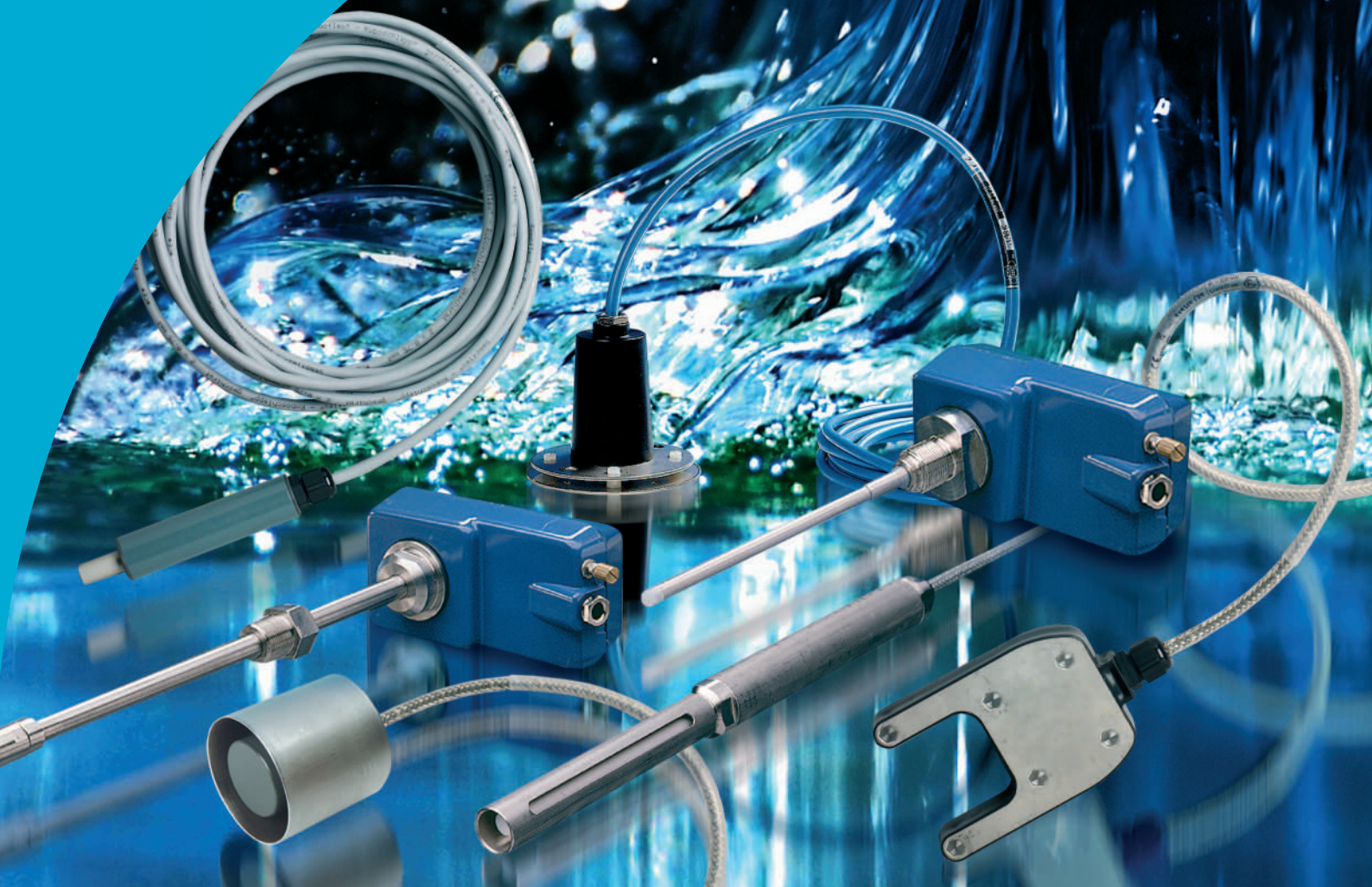


Labkotec SET sensors

Level detectors for monitoring and control of liquids



- Sensors for various applications
- Warns of excessive levels of oil, sludge & liquids
- No moving parts
- Easy installation
- Remote monitoring
- ATEX approved

Measure your success

 **Labkotec**
INDUTRADE GROUP

Labkotec SET level detectors for monitoring and control of liquids

Labkotec SET level detectors are suitable for a wide variety of applications. When connected to SET-100, SET-1000 and SET-2000 control units, they can be used for the level monitoring and control of water, oil products, acids, alkalis, detergents, solvents and other liquids. All measurements can be connected to LabkoNet remote monitoring systems, www.labkonet.com



SET level detector models

SET/TSH2 sensor for non-viscous liquids

SET/TSH2 is a universal sensor for non-viscous liquids. The most common applications are e.g. water/oil interface detection and high/low level alarm in fuel and chemical tanks. Easy installation by suspension cable or mounting thread.

When ordering, please specify SET/TSH2-V for conductive and SET/TSH2-O for non-conductive medium.



SET/TSHS2 sensor for viscous liquids

SET/TSHS2 is a special sensor for viscous liquids. The most common applications are e.g. high level or water interface alarm in grease or heavy oil storage tanks. Equipped with a fork type counter electrode instead of a tube. Other specifications as SET/TSH2.



SET/TSSH2 sensor for non-viscous liquids

SET/TSSH2 is a special sensor with adjustable mounting thread for non-viscous liquids having high temperatures - up to 120 °C. It is very versatile, some of the most typical applications being high/low level alarm or high level alarm in a hot water vessel. Standard lengths 500 mm and 800 mm.



SET/OS2 sensor for oil alarm

SET/OS2 is a low-cost capacitive sensor for e.g. oil/water interface detection. The transmitter is cast in the sensor.



Floating SET/OSK2

SET/OSK2 is a special version of SET/OS2 equipped with polypropylene floats to detect an oil layer in an inspection shaft, pump shaft or on a water basin.



SET/SA2 sensor for difficult circumstances

SET/SA2 is a special sensor for process mediums causing material build-up on the sensing element. Due to its rod-type construction with FEP-coating, SET/SA2 can be utilized in various applications in difficult circumstances, especially in the process and chemical industries. Standard length 300 mm.



SET/OELO2 sensor for leakage alarm



SET/OELO2 is a special sensor for leakage alarm in oil burner rooms, in basins under oil tanks, cellars or other dry rooms, where leakage of oil, water or chemicals has to be detected.

The transmitter is cast in the sensor, protection class IP68. The sensing element consists of two parallel metallic plates and the transmitter detects the presence of liquid between them.

SET/S2 sludge alarm sensor

SET/S2 sludge alarm sensor is installed in the lower section of the separator. The sensor alarms when the sludge layer reaches the sensor. The probe is normally immersed in water.



SET/V high level sensor

SET/V high level sensor is installed above the outlet's upper level. The sensor alarms when in contact with liquid, oil or water. The sensor is normally in air.



Technical Data



Fault diagnostics and easy choice of operation.



Fault diagnostics and easy choice of operation. Resettable audible alarm. Push buttons on front panel.



Fault diagnostics and easy choice of operation. Resettable audible alarms. Push buttons on front panel.

Control units

	SET-100	SET-1000	SET-2000
Dimensions	55 x 70 x 112 mm (L x H x D)	175 x 125 x 75 mm (L x H x D)	
Enclosure	Plastic housing IP 20, mounting on a 35 mm DIN rail	IP 65, material polycarbonate, wall-mounted	
Ambient temperature	-20 °C...+50 °C	-25 °C...+50 °C	-25 °C...+50 °C
Supply voltage	230 V AC ± 10 %, 50/60 Hz	230 V AC ± 10 %, 50/60 Hz, 110 V AC ± 10 %, 50/60 Hz, 12 VDC	
Power consumption	2 VA		4 VA
Sensors	SET/...2 sensors	One Labkotec SET sensor	Max. two SET sensor
Relay outputs	One potential-free relay output, 250 V, 5 A, 100 VA	Two potential-free relay outputs, 250 V, 5 A, 100 VA	Two potential-free relay outputs, 250 V, 5 A, 100 VA
Electrical safety	EN 61010-1, CAT II, Class II		EN 61010-1, CAT II, Class II/III
Certificates:			
ATEX	VTT 02 ATEX 018X	VTT 04 ATEX 031X	VTT 04 ATEX 031X
IECEX	N/A	IECEX VTT 10.0003X	IECEX VTT 10.0003X
Ex-classification	Ex II (1) G [Ex ia] IIC	Ex II (1) G [Ex ia] IIC	Ex II (1) G [Ex ia] IIC

Accessories



Junction box



Installation accessories



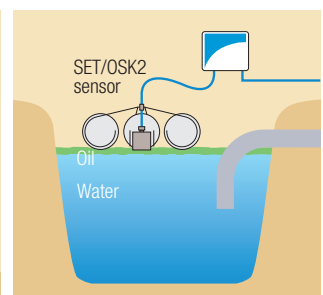
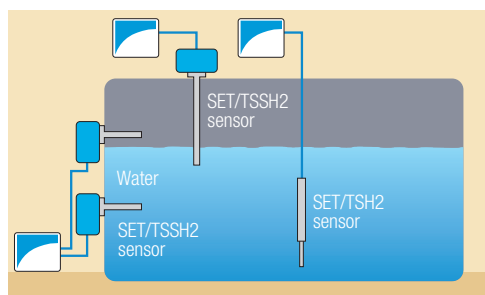
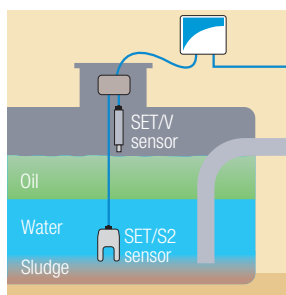
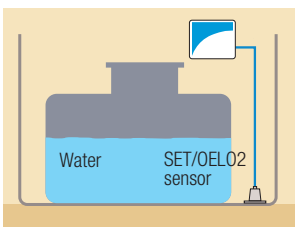
Cable joint

Sensors



	SET/TSH2 SET/TSHS2	SET/TSSH2	SET/OS2 SET/OSK2	SET/SA2	SET/OELO2	SET/S2	SET/V
Interface to	SET-100, SET-1000, SET-2000					SET-1000, SET-2000	SET-1000, SET-2000
Principle of operation	Capacitive	Capacitive	Capacitive	Capacitive	Capacitive	Ultrasonic	Vibration
IP classification	IP 68						
Enclosure	AISI 316, PTFE	AISI 316, PTFE	AISI 316, PVC	AISI 316, FEP	AISI 316, Nylon 12	PA, PVC, aluminium, NBR	PA, PVC, aluminium, NBR
Ambient temperature	-25 °C...+60 °C	-25 °C...+120 °C	-25 °C...+60 °C	-25 °C...+60 °C	-25 °C...+60 °C	-30 °C...+60 °C	-30 °C...+60 °C
Supply voltage	Approx. 12 VDC from SET control unit						
Cable	3 x 0,75 mm ²	2 x (2+1) x 0,5 mm ²	3 x 0,5 mm ²	2 x (2+1) x 0,5 mm ²	3 x 0,5 mm ²		2 x 0,75 mm ²
Certificates:							
ATEX	VTT 03 ATEX 024X	VTT 02 ATEX 022X	VTT 03 ATEX 009X	VTT 02 ATEX 022X	VTT 03 ATEX 015X	VTT 09 ATEX 051X	VTT 09 ATEX 025X
IECEX	N/A	N/A	N/A	N/A	N/A	IECEX VTT 10.0002X	IECEX VTT 10.0006X
Ex-classification	Ex II 1 G Ex ia IIB T5 Ga	Ex II 1 G Ex ia IIC T5 Ga	Ex II 1 G Ex ia IIA T5 Ga	Ex II 2 G Ex ia IIC T5 Ga	Ex II 2 G Ex ia IIB T5 Ga	Ex II 1 G Ex ia IIB T5 Ga	Ex II 1 G Ex ia IIB T5 Ga

Applications





Measure your success with Labkotec

Labkotec Oy is a leading Finnish manufacturer and supplier of electronic level gauges, flow detection devices and alarms, automation and detector technology, and web-based data transmission solutions.

We have more than 40 years of experience of the industry, and have pioneered several new solutions. Our diverse and comprehensive expertise enables us to supply solutions tailored to each customer's needs.

Our ISO 9001:2008 and ISO 14001:2004 compliant quality and environmental systems are certified by Lloyd's Register Quality Assurance. As regards to safety, we comply with the ATEX and ISPS standards.

Labkotec Oy is a member of the international Indutrade Group.

Our electronic level gauges and leak detection and flow measurement technologies cover a comprehensive range of applications. Our communication units and data transmission systems relay readings in real time, independently of permanent electrical or cable networks.

Our automation and detector technology is widely used in access control systems in industrial installations, in storage silos and ports, as well as at snow dumping and landfill sites. Our TransControl system is based on RFID identification technology and fulfils the requirements of the International Ship and Port Security Facility (ISPS) code.

Measure your success



www.labkotec.com
www.labkonet.com



Labkotec Oy
Myllyhaantie 6
FI-33960 Pirkkala
FINLAND
Tel. int. +358 (0)29 006 260
Fax int. +358 (0)29 006 1260
E-mail info@labkotec.fi

Labkotec UK Ltd.
Adminicle House, 1 Lumb Lane
Audenshaw, Manchester M34 5WH
ENGLAND
Tel. int. +44 (0)844 3350 477
Fax int. +44 (0)161 428 1179
E-mail info@labkotec.co.uk

Labkotec AB
Ekbacksvägen 28
SE-168 69 Bromma
SWEDEN
Tel. int. +46 (0)8 130 060
Fax int. +46 (0)8 555 36108
E-mail info@labkotec.se

Labkotec Oy reserves the rights to alterations without prior notice. Due to policy of continuous improvement in R&D, technical specifications may change. Installation shall always be made as documented in manufacturer's instructions.