



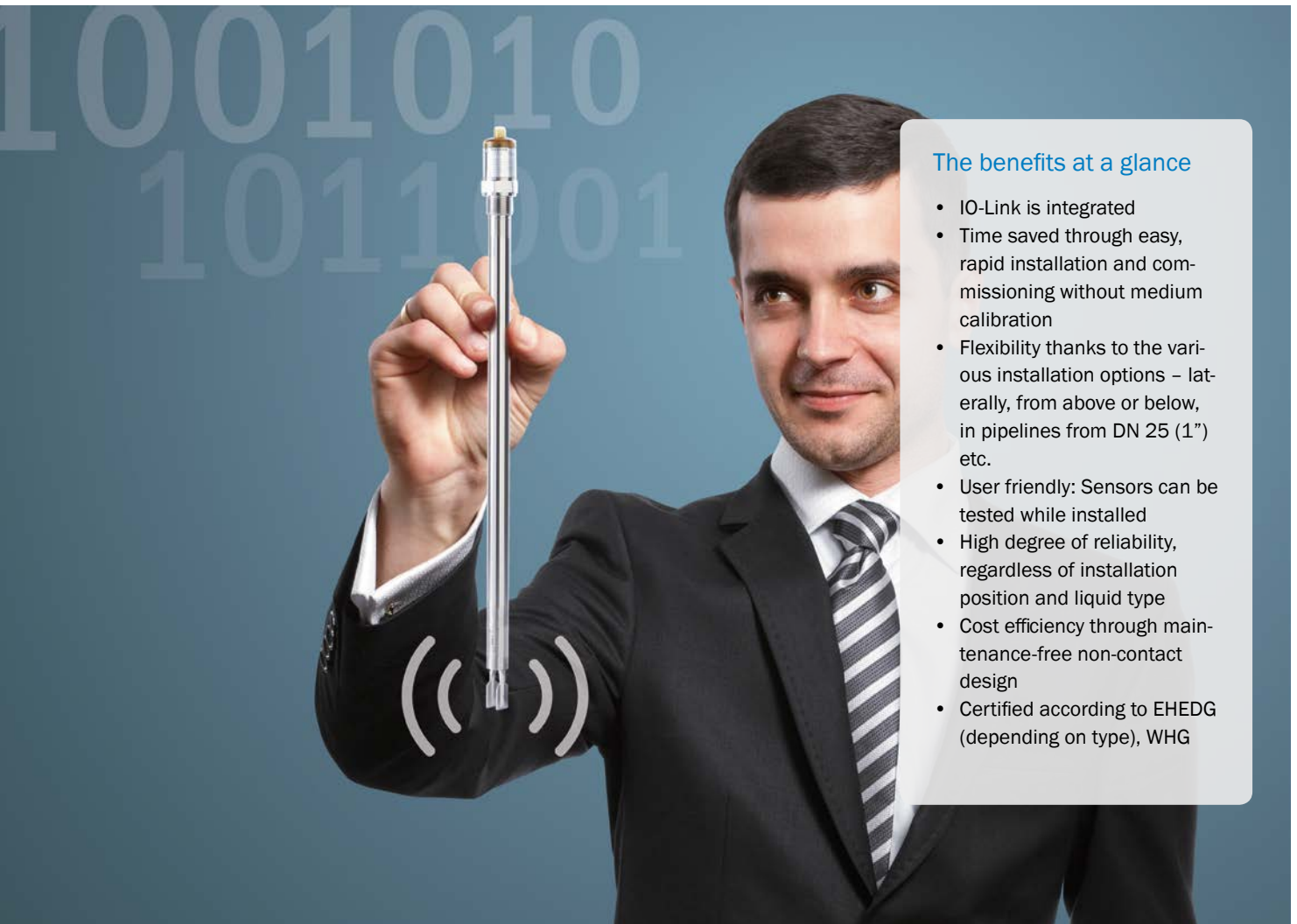
LFBV200

THE POINT LEVEL SENSOR FOR ALL KIND OF LIQUIDS

Level sensors

SICK
Sensor Intelligence.

GOOD VIBRATIONS



The benefits at a glance

- IO-Link is integrated
- Time saved through easy, rapid installation and commissioning without medium calibration
- Flexibility thanks to the various installation options – laterally, from above or below, in pipelines from DN 25 (1") etc.
- User friendly: Sensors can be tested while installed
- High degree of reliability, regardless of installation position and liquid type
- Cost efficiency through maintenance-free non-contact design
- Certified according to EHEDG (depending on type), WHG

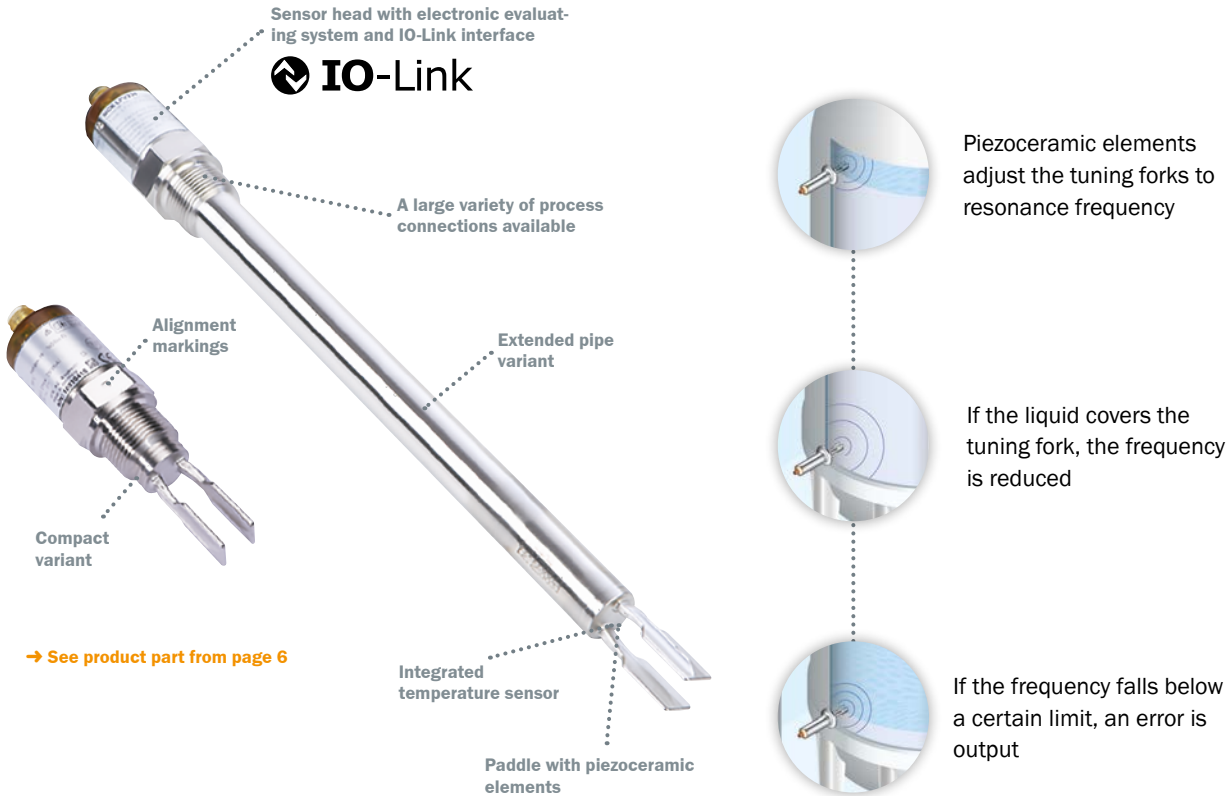


THE Lfv200 WITH IO-LINK IS GIVING FRESH IMPETUS TO POINT LEVEL MEASUREMENT

Reliable point level measurement – This is what defines the vibrating level switches from the Lfv200 product family. The level sensors, which can be used in almost any application, are available in compact or extended pipe variants and expand the data usage possibilities with their integrated IO-Link.

Operating principle

LFV200 detects the presence of liquids through vibrational changes to the tuning fork. These changes are dependent upon how much liquid is covering the tuning fork. The switching point of the limit to be measured is determined by the installation location and position and the sensor length. Teaching-in of the liquid to be measured is not required.



Fields of application

Point level measurements take many different forms and take place in high numbers. The LFV200 vibrating level switches can contribute to overflow protection, supply monitoring or process control, as well as to low-level monitoring (e.g. for pump dry-run protection). Predefined levels are recorded down to the milli-

meter in the supply tank. On top of this, the LFV200 functions independently of the liquid and is wear- and maintenance-free. Furthermore, the hygienic design of the sensor can be easily cleaned.



Point level measurement



Point level measurement



Overflow protection



Low-level monitoring

IO-Link KEEPS COMMUNICATION FLOWING

IO-Link offers new options for communication between the system control and field level. This is a crucial aspect, as networked production and control processes in complex machine environments are key to the industrial future and are what is making Industry 4.0 possible in the first place.



The world's first standardized IO technology (according to IEC 61131-9) means sensors can play an active role in end-to-end automation networks. They record real operational statuses, turn these into digital data, and independently share

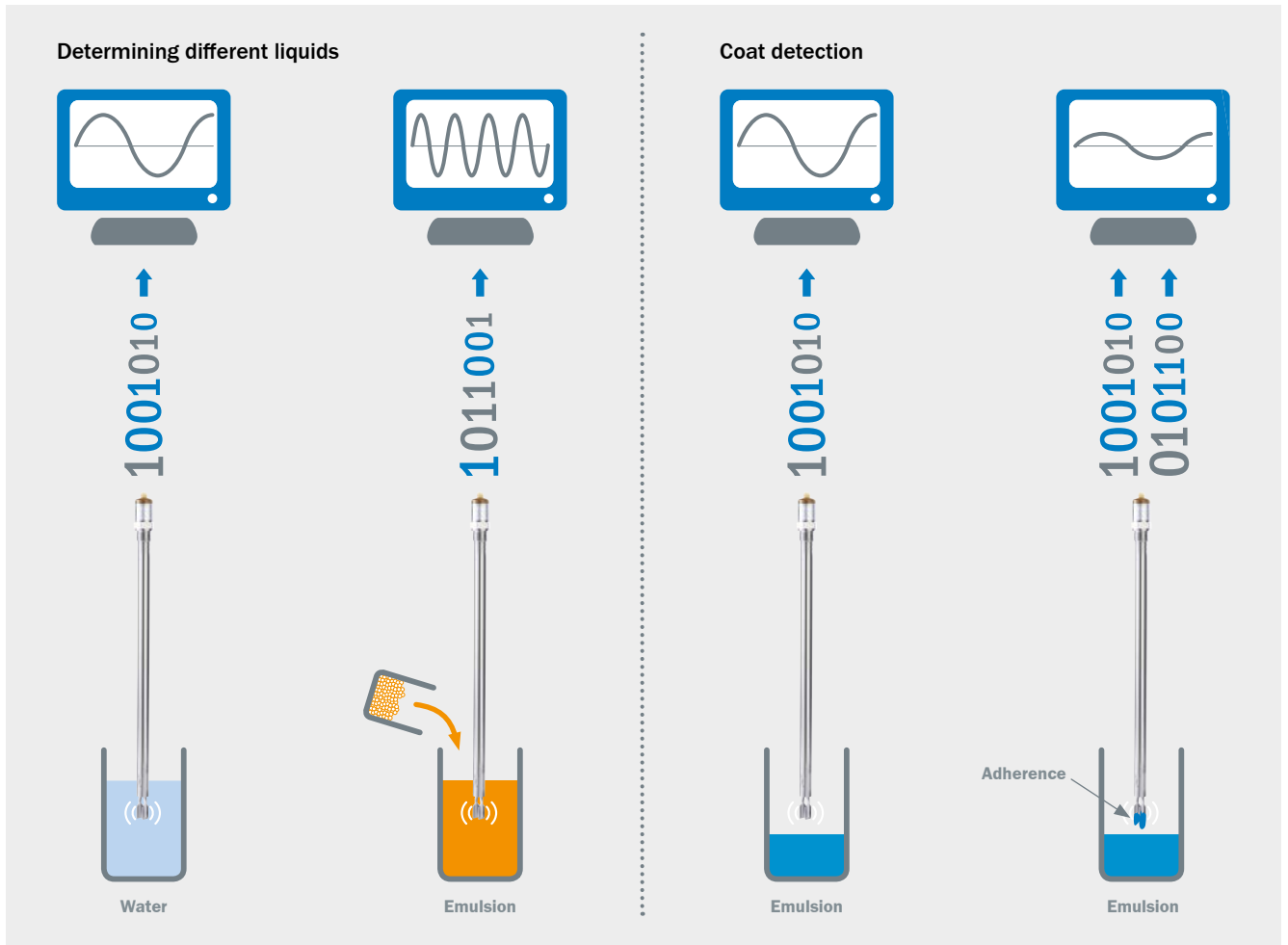
them with the process controller. The result: Clear cost and process optimization throughout the entire supply chain – and a decisive step toward an Industry 4.0 approach.

IO-Link

More application possibilities

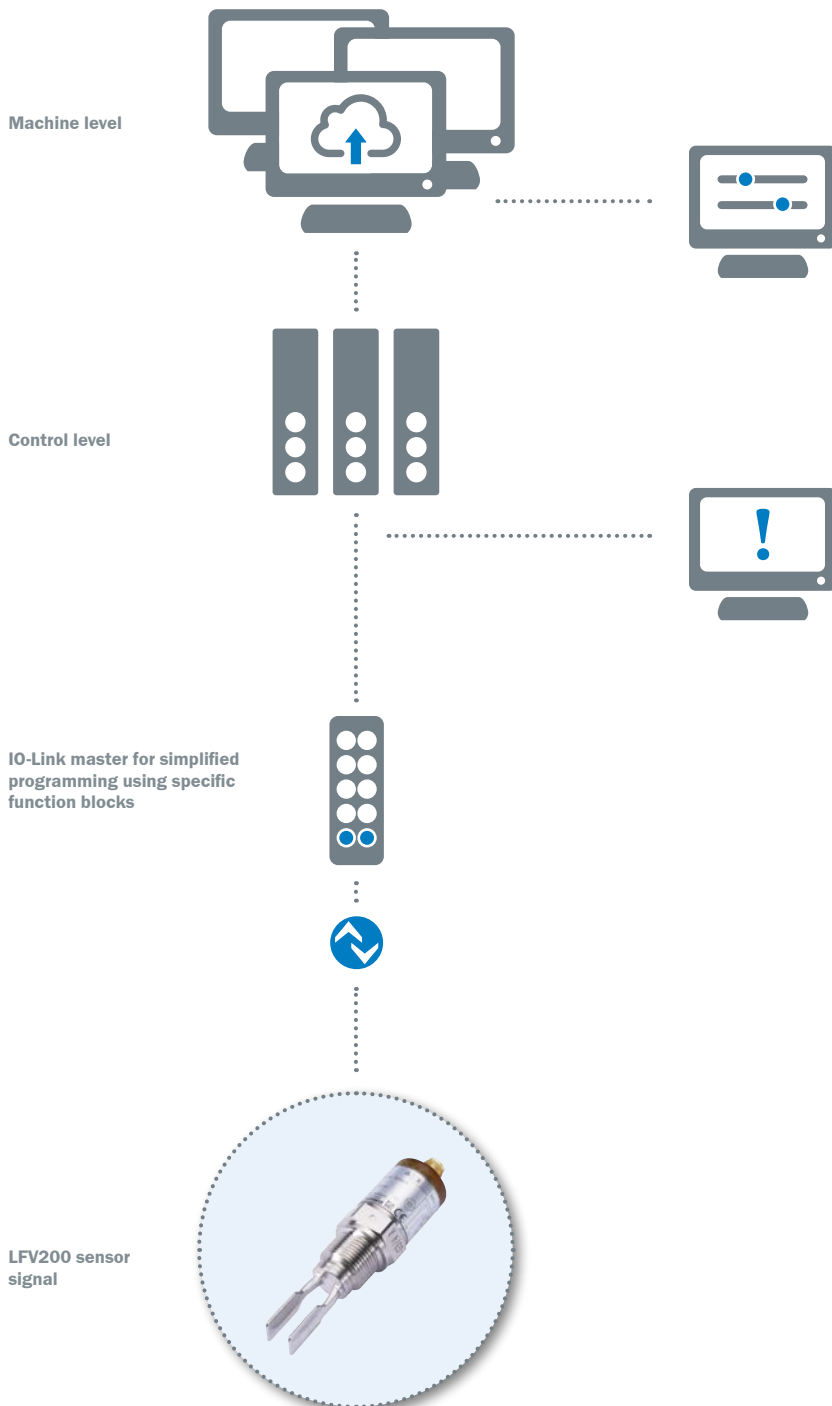
The influence of users on the switching behavior of vibrating level switches is usually limited. With its IO-Link interface, the LFV200 breaks through these limits and makes possible a significantly larger, more individual application spectrum through its adjustable switching frequency.

Continuous condition monitoring provides information on temperature as well as density- and viscosity-proportional signals. This means that liquids can be differentiated from one another and expands diagnosis options.



MORE INFORMATION DEPTH

Via its integrated IO-Link interface, the LFB200 vibrating level switch shares the collected data in the automation network. In addition to the standard functions and pure level measurement, other valuable information is also available for evaluation and further processing.



In the event of a fault, the IO-Link interface of the LFB200 provides important information about extreme measurements in real time. This makes it possible to take countermeasures quickly in order to prevent damage being caused to the equipment (predictive maintenance).

The advantages of the LFB200

- + Medium detection
- + Medium determination
- + Temperature information
- + More diagnostic options



→ www.sick.com

🔍 IO-Link ▶ IO-Link – The new form of communication on the sensor level

Direct link

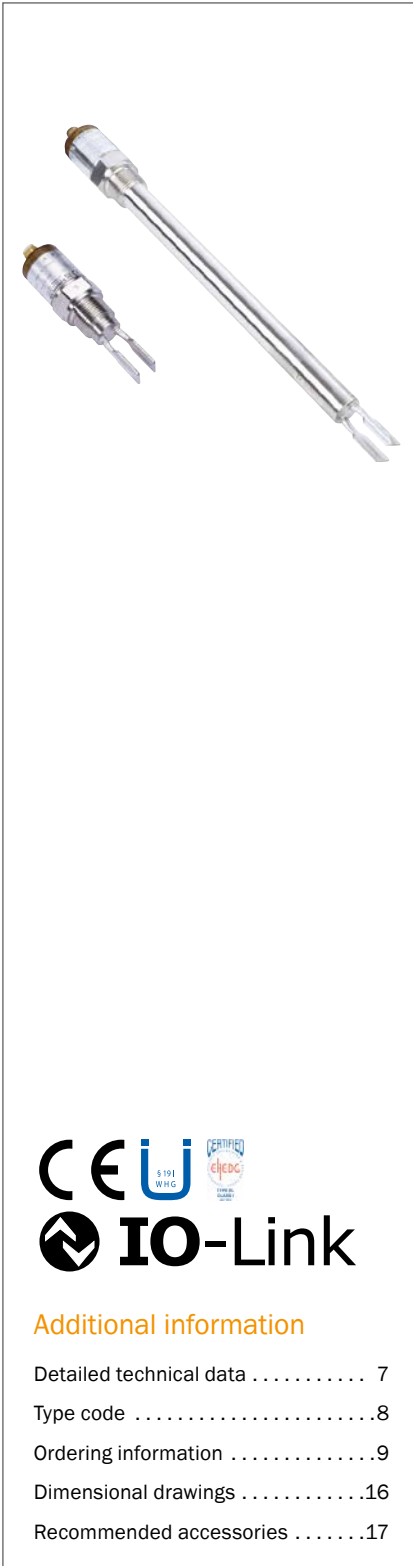


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▶ SMART SENSORS SUPPLIERS OF INFORMATION FOR INDUSTRY 4.0

Direct link



THE POINT LEVEL SENSOR FOR ALL KINDS OF LIQUIDS



Product description

The vibrating level switch of the LFV200 product family detects the pre-defined levels in liquid systems with maximum precision. Whether indicating that a container has reached its maximum fill level (overflow protection) or that it is empty or used in pipes to prevent the pumps from running dry, the LFV200 works with all liquids and is wear- and maintenance-free. A high surface quality and the rugged tuning fork made of stainless

steel make the LFV200, in combination with aseptic process connections, the first choice for applications even with the strictest hygiene requirements. With the LFV230, extended pipe variants up to 1,200 mm are available. With IO-Link, the oscillation frequency, amplitude and temperature of the sensor can be read out in addition to the switching signal, which enables extended diagnostics and predictive maintenance.

At a glance

- Commissioning without container filling or medium calibration
- Immune to deposit formation
- Process temperature up to 150 °C
- Two electrical output versions and IO-Link available
- Pipe extension up to 1,200 mm
- Hygienic designs with polished surface, CIP- and SIP-capable
- Housing made of 316L stainless steel
- Very high repeatability

Your benefits

- Universal and reliable technology for nearly all liquids and applications
- Can be used in containers and pipes regardless of the mounting situation
- Easy installation and commissioning, no medium calibration necessary
- Easy operation and system integration
- Maintenance-free system
- Sensors can be tested while installed
- Frequency, amplitude and temperature of the sensor can be read out via IO-Link
- Extended pipe variants for more flexibility



Additional information

Detailed technical data	7
Type code	8
Ordering information	9
Dimensional drawings	16
Recommended accessories	17

→ www.sick.com/LFV200

For more information, simply enter the link or scan the QR code and get direct access to technical data, CAD design models, operating instructions, software, application examples, and much more.



Detailed technical data

Features

	LFB200	LFB230
Medium	Fluids	
Measurement	Switch	
Probe length	67 mm 115 mm	80 mm ... 1,200 mm
Process pressure	-1 bar ... +64 bar	
Process temperature	-40 °C ... +100 °C -40 °C ... +150 °C (depending on type)	
Fill material density	0.7 g/cm ³ ... 2.5 g/cm ³	
WHG approval	✓ (depending on type)	
IO-Link	✓ (depending on type)	
EHEDG approval	✓ (depending on type)	

Performance

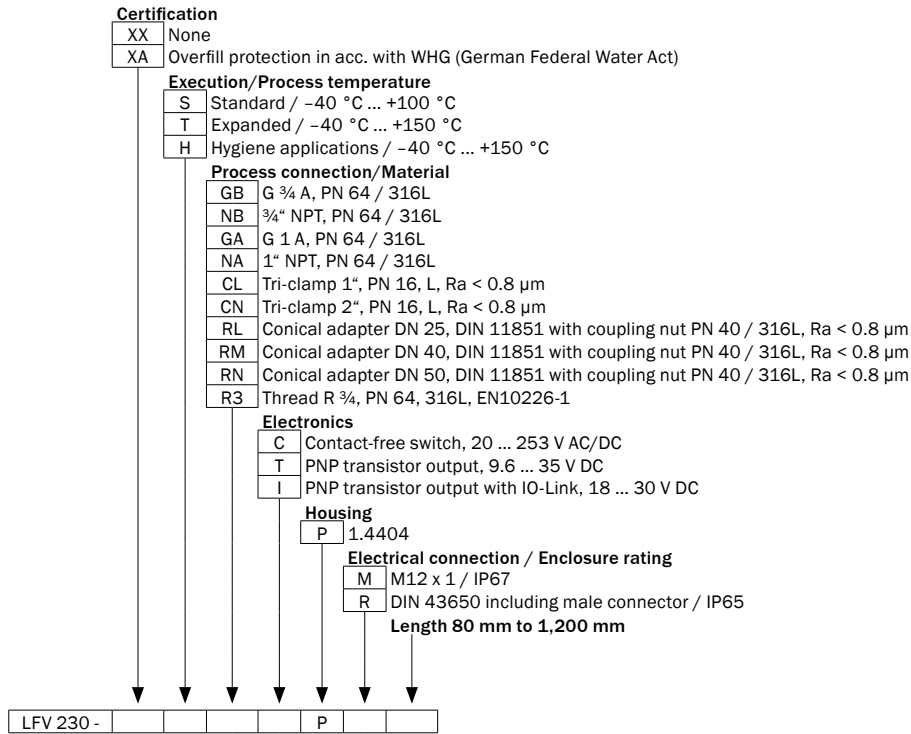
Accuracy of sensor element	± 2 mm
Reproducibility	≤ 1 mm
Viscosity	0.1 mPas ... 10,000 mPas
Resolution	≤ 1 mm
Response time	500 ms

Mechanics

	LFB200	LFB230
Wetted parts	Stainless steel 1.4404 (Ra ≤ 0,8 µm optional)	
Process connection	See type code	
Housing material	Stainless steel 1.4404, PEI	

Electronics

	Non-contact switch	Tranistor output PNP (with IO-Link)
Supply voltage	20 V AC/DC ... 253 V AC/DC	9.6 V DC ... 35 V DC 18 V DC ... 30 V DC (IO-Link)
Residual ripple	-	≤ 5 V _{pp}
Power consumption	≤ 4.2 mA	< 10 mA
Initialization time	< 3 s	< 2 s
VDE protection class 1	✓	-
VDE protection class 2	-	✓
Electrical connection	Valve plug DIN 43650 / M12 round connector x 1, 4-pin (depending on type)	
Hysteresis	2 mm	
Signal voltage HIGH	-	V _s -3 V
Signal voltage LOW	-	0 V +- 1 V
Output current	-	< 250 mA
Inductive load	≤ 1 H	
Capacitive load	100 nF	
Enclosure rating	IP65 / IP67 (depending on type)	
Temperature drift	0.03 mm/K	



Not all variants of the type code can be combined!

Ordering information

LFV200

- **Enclosure rating:** IP65
- **Process pressure:** -1 bar ... +64 bar
- **Housing material:** Stainless steel 1.4404, PEI
- **Electrical connection:** Valve plug DIN 43650

Process connection	Output signal	Process temperature	Probe length	WHG approval	Type	Part no.
Triclamp 1" (PN 16, 316L, Ra<0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	✓	LFV200-XAHCLCPV	6036548
Triclamp 2" (PN 16, 316L, Ra < 0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	✓	LFV200-XAHCNCPV	6036549
Conical coupling DN 25 acc. to DIN 11851 with Union nut (PN 40, 316L, Ra < 0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	✓	LFV200-XAHRMCPV	6036550
Conical coupling DN 40 acc. To DIN 11851 with union nut (PN 40, 316L, Ra < 0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	✓	LFV200-XAHRNCPV	6036551
Conical coupling DN 50 acc. to DIN 11851 with Union nut (PN 40, 316L, Ra < 0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	✓	LFV200-XASGACP	6036552
G 1 A PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	✓	LFV200-XASGACP	6036377
			115 mm	✓	LFV200-XASGACP	6037301
G ¾ A PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	✓	LFV200-XASGBCPV	6036375
G ½ A PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	✓	LFV200-XASGHCPV	6054121

Process connection	Output signal	Process temperature	Probe length	WHG approval	Type	Part no.
1" NPT PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	✓	LFV200-XASNACPV	6036378
			115 mm	✓	LFV200-XASNACPVL	6037302
¾" NPT PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	✓	LFV200-XASNBCPV	6036376
G 1 A PN 64	Non-contact switch	-40 °C ... +150 °C	67 mm	✓	LFV200-XATGACPV	6036381
			115 mm	✓	LFV200-XATGACPVL	6037303
G ¾ A PN 64	Non-contact switch	-40 °C ... +150 °C	67 mm	✓	LFV200-XATGBCPV	6036379
			115 mm	✓	LFV200-XATGBCPVL	6058134
1" NPT PN 64	Non-contact switch	-40 °C ... +150 °C	67 mm	✓	LFV200-XATNACPV	6036382
			115 mm	✓	LFV200-XATNACPVL	6037304
¾" NPT PN 64	Non-contact switch	-40 °C ... +150 °C	67 mm	✓	LFV200-XATNBCPV	6036380
Triclamp 1" (PN 16, 316L, Ra<0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	-	LFV200-XXHCLCPV	6036543
Triclamp 2" (PN 16, 316L, Ra < 0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	-	LFV200-XXHCNCPV	6036544
Conical coupling DN 25 acc. to DIN 11851 with Union nut (PN 40, 316L, Ra < 0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	-	LFV200-XXHRLCPV	6036545
Conical coupling DN 40 acc. To DIN 11851 with union nut (PN 40, 316L, Ra < 0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	-	LFV200-XXHRMCPV	6036546
Conical coupling DN 50 acc. to DIN 11851 with Union nut (PN 40, 316L, Ra < 0.8µm)	Non-contact switch	-40 °C ... +150 °C	67 mm	-	LFV200-XXHRNCPV	6036547
G 1 A PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	-	LFV200-XXSGACPV	6036369
			115 mm	-	LFV200-XXSGACPVL	6037305
G ¾ A PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	-	LFV200-XXSGBCPV	6036367
			115 mm	-	LFV200-XXSGBCPVL	6051048
G ½ A PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	-	LFV200-XXSGHCPV	6048866
			67 mm	-	LFV200-XXSGHCPV	6049356
1" NPT PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	-	LFV200-XXSNACPV	6036370
			115 mm	-	LFV200-XXSNACPVL	6037306
¾" NPT PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	-	LFV200-XXSNBCPV	6036368
			67 mm	-	LFV200-XXSNBTPV	6048611
½" NPT PN 64	Non-contact switch	-40 °C ... +100 °C	67 mm	-	LFV200-XXSNHCPV	6048865
			67 mm	-	LFV200-XXSNHTPV	6049697

Process connection	Output signal	Process temperature	Probe length	WHG approval	Type	Part no.
G 1 A PN 64	Non-contact switch	-40 °C ... +150 °C	67 mm	-	LFV200-XXTGACPV	6036373
			115 mm	-	LFV200-XXTGACPVL	6037307
G ¾ A PN 64	Non-contact switch	-40 °C ... +150 °C	67 mm	-	LFV200-XXTGBCPV	6036371
			115 mm	-	LFV200-XXTGBCPVL	6042248
1" NPT PN 64	Non-contact switch	-40 °C ... +150 °C	67 mm	-	LFV200-XXTNACPV	6036374
			115 mm	-	LFV200-XXTNACPVL	6037308
¾" NPT PN 64	Non-contact switch	-40 °C ... +150 °C	67 mm	-	LFV200-XXTNBCPV	6036372

- **Enclosure rating:** IP67
- **Process pressure:** -1 bar ... +64 bar
- **Housing material:** Stainless steel 1.4404, PEI
- **Electrical connection:** M12 round connector x 1, 4-pin

Process connection	Output signal	Process temperature	Probe length	WHG approval	Type	Part no.
Triclamp 1" (PN 16, 316L, Ra<0.8µm)	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XAHCLTPM	6036538
Triclamp 2" (PN 16, 316L, Ra < 0.8µm)	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XAHCNTPM	6036539
Conical coupling DN 25 acc. to DIN 11851 with Union nut (PN 40, 316L, Ra < 0.8µm)	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XAHRTPM	6036540
Conical coupling DN 40 acc. To DIN 11851 with union nut (PN 40, 316L, Ra < 0.8µm)	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XAHRMTPM	6036541
Conical coupling DN 50 acc. to DIN 11851 with Union nut (PN 40, 316L, Ra < 0.8µm)	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XAHRNTPM	6036542
G 1 A PN 64	Transistor output PNP	-40 °C ... +100 °C	67 mm	✓	LFV200-XASGATPM	6036361
			115 mm	✓	LFV200-XASGATPML	6037297
G ¾ A PN 64	Transistor output PNP	-40 °C ... +100 °C	67 mm	✓	LFV200-XASGBTM	6036359
			115 mm	✓	LFV200-XASGBTMPL	6037458
G ½ A PN 64	Transistor output PNP	-40 °C ... +100 °C	67 mm	✓	LFV200-XASGHTM	6050754
G 1½ A PN 64	Transistor output PNP	-40 °C ... +100 °C	115 mm	✓	LFV200-XASGHTMPL	6039226
1" NPT PN 64	Transistor output PNP	-40 °C ... +100 °C	67 mm	✓	LFV200-XASNATPM	6036362
			115 mm	✓	LFV200-XASNATPML	6037298
¾" NPT PN 64	Transistor output PNP	-40 °C ... +100 °C	67 mm	✓	LFV200-XASNBTPM	6036360
½" NPT PN 64	Transistor output PNP	-40 °C ... +100 °C	67 mm	✓	LFV200-XASNHTPM	6053354
G 1 A PN 64	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XATGATPM	6036365
			115 mm	✓	LFV200-XATGATPML	6037299
G ¾ A PN 64	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XATGBTM	6036363
			115 mm	✓	LFV200-XATGBTMPL	6037460
G ½ A PN 64	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XATGHTM	6054808
1" NPT PN 64	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XATNATPM	6036366
			115 mm	✓	LFV200-XATNATPML	6037300
¾" NPT PN 64	Transistor output PNP	-40 °C ... +150 °C	67 mm	✓	LFV200-XATNBTPM	6036364

Process connection	Output signal	Process temperature	Probe length	WHG approval	Type	Part no.
Triclamp 1" (PN 16, 316L, Ra<0.8µm)	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXHCLIPM	6066388
	Transistor output PNP	-40 °C ... +150 °C	67 mm	-	LFV200-XXHCLTPM	6036533
				-	LFV200-XXHCLTPMG	6049762
Tri-Clamp 2" (316L, R _a < 0.8 µm)	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXHCNIPM	6066395
Triclamp 2" (PN 16, 316L, Ra < 0.8µm)	Transistor output PNP	-40 °C ... +150 °C	67 mm	-	LFV200-XXHCNTPM	6036534
G ¾, DIN 3852-A PN 64 / 316L, R _a < 0,8 µm	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXHGPIPM	6066384
¾" NPT PN 64	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXHNPIPM	6066394
Conical coupling DN 25 acc. to DIN 11851 with Union nut (PN 40, 316L, Ra < 0.8µm)	Transistor output PNP	-40 °C ... +150 °C	67 mm	-	LFV200-XXHRLTPM	6036535
Conical coupling DN 40 acc. To DIN 11851 with union nut (PN 40, 316L, Ra < 0.8µm)	Transistor output PNP	-40 °C ... +150 °C	67 mm	-	LFV200-XXHRMTPM	6036536
Conical coupling DN 50 acc. to DIN 11851 with Union nut (PN 40, 316L, Ra < 0.8µm)	Transistor output PNP	-40 °C ... +150 °C	67 mm	-	LFV200-XXHRNTPM	6036537
G 1 A PN 64	Transistor output PNP with IO-Link	-40 °C ... +100 °C	67 mm	-	LFV200-XXSGAIPM	6066386
				-	LFV200-XXSGATPM	6036353
	Transistor output PNP	-40 °C ... +100 °C	67 mm 115 mm	- -	LFV200-XXSGATPML	6037293
G ¾ A PN 64	Transistor output PNP with IO-Link	-40 °C ... +100 °C	67 mm	-	LFV200-XXSGBIPM	6066347
				-	LFV200-XXSGBTPM	6036351
	Transistor output PNP	-40 °C ... +100 °C	67 mm 115 mm	- -	LFV200-XXSGBTPML	6037457
G ½ A PN 64	Transistor output PNP with IO-Link	-40 °C ... +100 °C	67 mm	-	LFV200-XXSGHIPM	6048862
	Transistor output PNP	-40 °C ... +100 °C	67 mm	-	LFV200-XXSGHTPM	6048704
1" NPT PN 64	Transistor output PNP with IO-Link	-40 °C ... +100 °C	67 mm	-	LFV200-XXSNAIPM	6066382
				-	LFV200-XXSNATPM	6036354
	Transistor output PNP	-40 °C ... +100 °C	67 mm 115 mm	- -	LFV200-XXSNATPML	6037294
¾" NPT PN 64	Transistor output PNP with IO-Link	-40 °C ... +100 °C	67 mm	-	LFV200-XXSNBIPM	6066393
	Transistor output PNP	-40 °C ... +100 °C	67 mm	-	LFV200-XXSNBTPM	6036352
½" NPT PN 64	Transistor output PNP with IO-Link	-40 °C ... +100 °C	67 mm	-	LFV200-XXSNHIPM	6048863
	Transistor output PNP	-40 °C ... +100 °C	67 mm	-	LFV200-XXSNHTPM	6048864
G 1 A PN 64	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXTGAIPM	6066390
				-	LFV200-XXTGATPM	6036357
	Transistor output PNP	-40 °C ... +150 °C	67 mm 115 mm	- -	LFV200-XXTGATPML	6037295
G ¾ A PN 64	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXTGBIPM	6066385
				-	LFV200-XXTGBTPM	6036355
	Transistor output PNP	-40 °C ... +150 °C	67 mm 115 mm	- -	LFV200-XXTGBTPML	6037459

Process connection	Output signal	Process temperature	Probe length	WHG approval	Type	Part no.
G ½ A PN 64	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXTGHIPM	6066392
	Transistor output PNP	-40 °C ... +150 °C	67 mm	-	LFV200-XXTGHTPM	6052475
1" NPT PN 64	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXTNAIPM	6066387
	Transistor output PNP	-40 °C ... +150 °C	67 mm	-	LFV200-XXTNATPM	6036358
			115 mm	-	LFV200-XXTNATPML	6037296
¾" NPT PN 64	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXTNBIPM	6066391
	Transistor output PNP	-40 °C ... +150 °C	67 mm	-	LFV200-XXTNBTPM	6036356
½" NPT PN 64	Transistor output PNP with IO-Link	-40 °C ... +150 °C	67 mm	-	LFV200-XXTNHIPM	6066389

LFB230

- **Enclosure rating:** IP65
- **Output signal:** Non-contact switch
- **Process temperature:** -40 °C ... +100 °C
- **Process pressure:** -1 bar ... +64 bar
- **Housing material:** Stainless steel 1.4404, PEI
- **Electrical connection:** Valve plug DIN 43650

Process connection	Probe length	Type	Part no.
G ¾ A PN 64	80 mm	LFV230-XXSGBCPV0080	6043182
	100 mm	LFV230-XXSGBCPV0100	6044782
	120 mm	LFV230-XXSGBCPV0120	6043602
	190 mm	LFV230-XXSGBCPV0190	6044688
	200 mm	LFV230-XXSGBCPV0200	6048454
	270 mm	LFV230-XXSGBCPV0270	6049420
	300 mm	LFV230-XXSGBCPV0300	6044007
	400 mm	LFV230-XXSGBCPV0400	6042265
	500 mm	LFV230-XXSGBCPV0500	6044008
	600 mm	LFV230-XXSGBCPV0600	6057016
1" NPT PN 64	128 mm	LFV230-XXSNACPV0128	6042997

- **Enclosure rating:** IP67
- **Process pressure:** -1 bar ... +64 bar
- **Housing material:** Stainless steel 1.4404, PEI
- **Electrical connection:** M12 round connector x 1, 4-pin

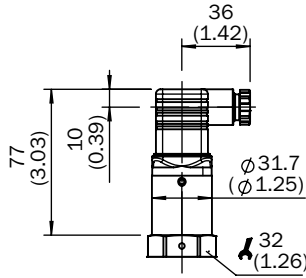
Process connection	Output signal	Process temperature	Probe length	Type	Part no.
Triclamp 1" (PN 16, 316L, Ra<0.8µm)	Transistor output PNP with IO-Link	-40 °C ... +150 °C	100 mm	LFV230-XXHCLIPM0100	6066416
			150 mm	LFV230-XXHCLIPM0150	6066417
			200 mm	LFV230-XXHCLIPM0200	6066418
			500 mm	LFV230-XXHCLIPM0500	6066419
			750 mm	LFV230-XXHCLIPM0750	6066420

Process connection	Output signal	Process temperature	Probe length	Type	Part no.			
Triclamp 2" (PN 16, 316L, Ra < 0.8µm)	Transistor output PNP with IO-Link	-40 °C ... +150 °C	100 mm	LFV230-XXHCNIPM0100	6066421			
			150 mm	LFV230-XXHCNIPM0150	6066422			
			200 mm	LFV230-XXHCNIPM0200	6066423			
			500 mm	LFV230-XXHCNIPM0500	6066424			
			750 mm	LFV230-XXHCNIPM0750	6066425			
G 1 A PN 64	Transistor output PNP with IO-Link	-40 °C ... +100 °C	100 mm	LFV230-XXSGAIPM0100	6066406			
			150 mm	LFV230-XXSGAIPM0150	6066407			
			200 mm	LFV230-XXSGAIPM0200	6066408			
			500 mm	LFV230-XXSGAIPM0500	6066409			
			750 mm	LFV230-XXSGAIPM0750	6066410			
G ¾ A PN 64	Transistor output PNP with IO-Link	-40 °C ... +100 °C	100 mm	LFV230-XXSGBIPM0100	6066411			
			150 mm	LFV230-XXSGBIPM0150	6066412			
			200 mm	LFV230-XXSGBIPM0200	6066413			
			500 mm	LFV230-XXSGBIPM0500	6066414			
			750 mm	LFV230-XXSGBIPM0750	6066415			
	Transistor output PNP	-40 °C ... +100 °C	80 mm	LFV230-XXSGBTPM0080	6042999			
			85 mm	LFV230-XXSGBTPM0085	6053321			
			90 mm	LFV230-XXSGBTPM0090	6049513			
			G ¾ A PN 64	Transistor output PNP	-40 °C ... +100 °C	100 mm	LFV230-XXSGBTPM0100	6048000
						110 mm	LFV230-XXSGBTPM0110	6052799
120 mm	LFV230-XXSGBTPM0120	6049427						
130 mm	LFV230-XXSGBTPM0130	6049514						
150 mm	LFV230-XXSGBTPM0150	6043000						
Transistor output PNP	-40 °C ... +100 °C	160 mm		LFV230-XXSGBTPM0160	6051726			
		175 mm		LFV230-XXSGBTPM0175	6055023			
		200 mm		LFV230-XXSGBTPM0200	6041848			
		230 mm		LFV230-XXSGBTPM0230	6065706			
		250 mm		LFV230-XXSGBTPM0250	6043515			
		300 mm		LFV230-XXSGBTPM0300	6041850			
		310 mm		LFV230-XXSGBTPM0310	6052516			
		325 mm		LFV230-XXSGBTPM0325	6053782			
		350 mm		LFV230-XXSGBTPM0350	6049151			
		400 mm		LFV230-XXSGBTPM0400	6041852			
450 mm	LFV230-XXSGBTPM0450	6057102						
500 mm	LFV230-XXSGBTPM0500	6041682						
600 mm	LFV230-XXSGBTPM0600	6041855						
650 mm	LFV230-XXSGBTPM0650	6052934						
700 mm	LFV230-XXSGBTPM0700	6041857						
800 mm	LFV230-XXSGBTPM0800	6041860						
900 mm	LFV230-XXSGBTPM0900	6041862						
1,000 mm	LFV230-XXSGBTPM1000	6041669						
1,100 mm	LFV230-XXSGBTPM1100	6041864						
1,200 mm	LFV230-XXSGBTPM1200	6041865						

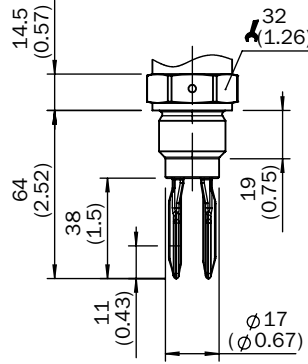
Process connection	Output signal	Process temperature	Probe length	Type	Part no.
¾" NPT PN 64	Transistor output PNP	-40 °C ... +100 °C	200 mm	LFV230-XXSNBTPM0200	6041847
			300 mm	LFV230-XXSNBTPM0300	6041849
			340 mm	LFV230-XXSNBTPM0340	6052264
			400 mm	LFV230-XXSNBTPM0400	6041851
	Transistor output PNP	-40 °C ... +100 °C	500 mm	LFV230-XXSNBTPM0500	6041853
			600 mm	LFV230-XXSNBTPM0600	6041854
			700 mm	LFV230-XXSNBTPM0700	6041856
			800 mm	LFV230-XXSNBTPM0800	6041858
			900 mm	LFV230-XXSNBTPM0900	6041859
			1,000 mm	LFV230-XXSNBTPM1000	6041861
			1,100 mm	LFV230-XXSNBTPM1100	6041863
			1,200 mm	LFV230-XXSNBTPM1200	6041866
G ¾ A PN 64	Transistor output PNP	-40 °C ... +150 °C	100 mm	LFV230-XXTGBTPM0100	6041902
			130 mm	LFV230-XXTGBTPM0130	6053662
			150 mm	LFV230-XXTGBTPM0150	6052476
			200 mm	LFV230-XXTGBTPM0200	6041903
			250 mm	LFV230-XXTGBTPM0250	6054040
			300 mm	LFV230-XXTGBTPM0300	6041905
			350 mm	LFV230-XXTGBTPM0350	6052875
			400 mm	LFV230-XXTGBTPM0400	6041907
			450 mm	LFV230-XXTGBTPM0450	6059425
			500 mm	LFV230-XXTGBTPM0500	6041909
			600 mm	LFV230-XXTGBTPM0600	6041911
			700 mm	LFV230-XXTGBTPM0700	6041913
			800 mm	LFV230-XXTGBTPM0800	6041915
			900 mm	LFV230-XXTGBTPM0900	6041916
			1,000 mm	LFV230-XXTGBTPM1000	6041673
			1,100 mm	LFV230-XXTGBTPM1100	6041919
1,200 mm	LFV230-XXTGBTPM1200	6041921			

Dimensional drawings (Dimensions in mm (inch))

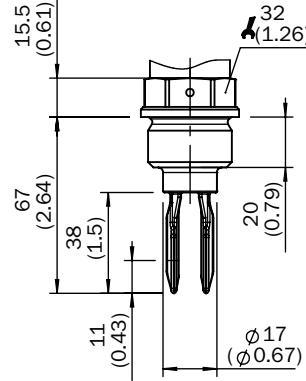
Housing (standard temperature range -40 °C ... +100 °C), DIN 43650 incl. plug angled, IP65



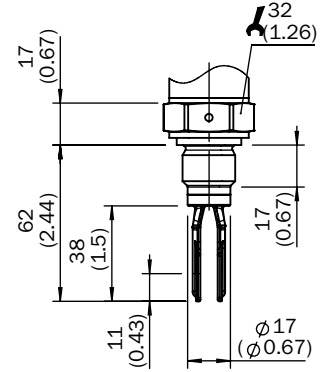
G 3/4 A, 3/4" NPT



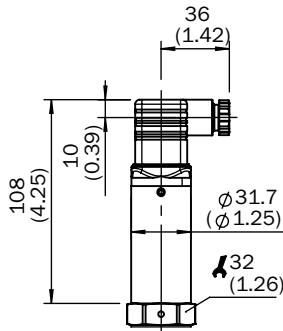
G 1 A, 1" NPT



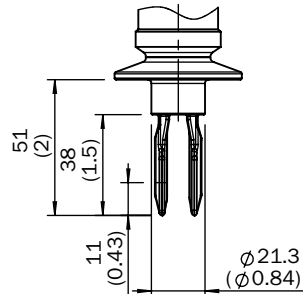
G 1/2 A, 1/2" NPT



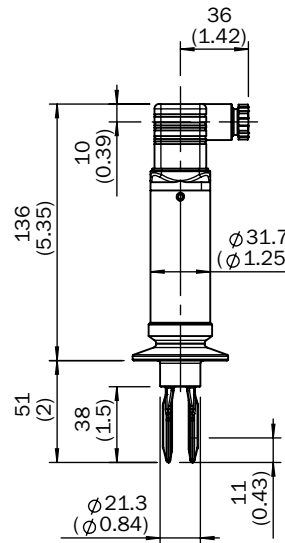
Housing (enhanced temperature range -40 °C ... +150 °C), DIN 43650 incl. plug angled, IP65



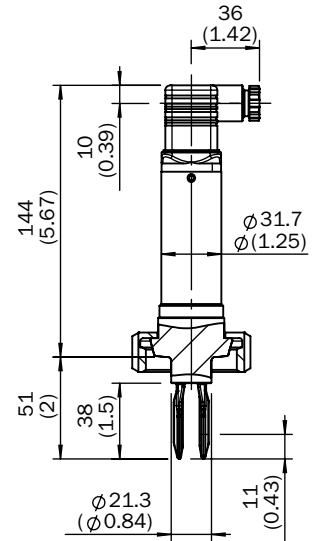
Tri-Clamp 1", 2"



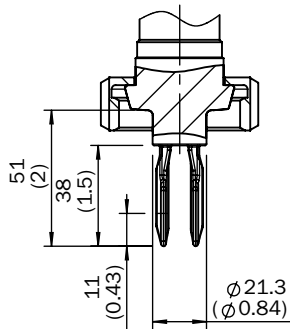
Tri-Clamp 1", 2"



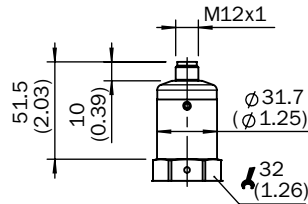
DIN 11851 DN 25, DN 40, DN 50; DIN 43650 incl. plug angled, IP65



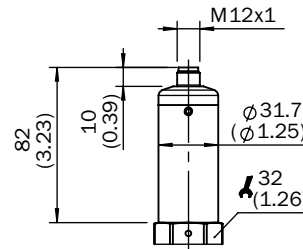
DIN 11851 DN 25, DN 40, DN 50



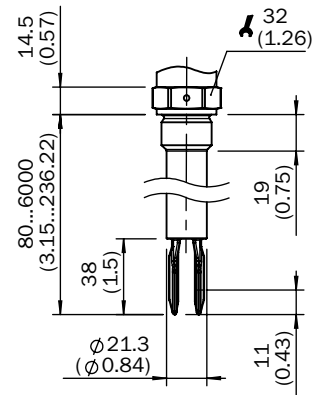
Housing (standard temperature range -40 °C ... +100 °C), M12 x 1, IP67



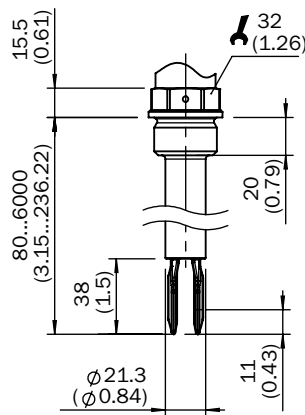
Housing (enhanced temperature range -40 °C ... 150 °C)



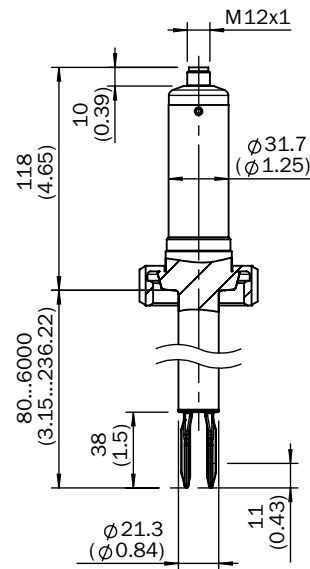
G 3/4 A, 3/4" NPT



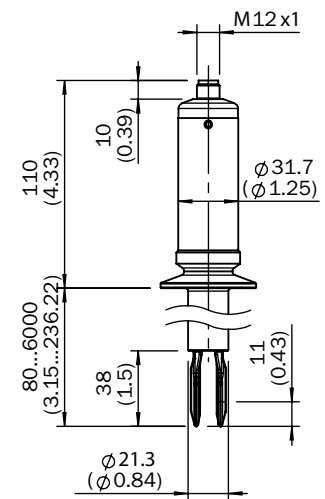
G 1 A, 1" NPT



DIN 11851 DN 25, DN 40,
DN 50, M12 x 1, IP67



Tri-Clamp 1", 2"



Recommended accessories

Mounting systems

Flanges

Weld-in flange

	Brief description	Type	Part no.
	Welded flange/welded connector, DIN11851-1, DN25 / PN40, Stainless steel 1.4404	BEF-FL-851D25-LFV2	5321527
	Welded flange/welded connector DIN11851-1, DN40 / PN40, Stainless steel 1.4404	BEF-FL-851D40-LFV2	5321459
	Welded flange/welded connector DIN11851-1, DN50 / PN25, Stainless steel 1.4404	BEF-FL-851D50-LFV2	5321528
	Welded flange/welded connector, process connection G 1, Stainless steel 1.4404	BEF-FL-GEWG10-LFV2	4054605
	Welded flange/welded connector, G 3/4 process connection, Stainless steel 1.4404	BEF-FL-GEWG34-LFV2	4054604
	Welded flange/welded connector, process connection Tri-Clamp 1", Stainless steel 1.4404	BEF-FL-TCLI10-LFV2	5321678
	Welded flange/welded connector, process connection Tri-Clamp 2", Stainless steel 1.4404	BEF-FL-TCLI20-LFV2	5321679

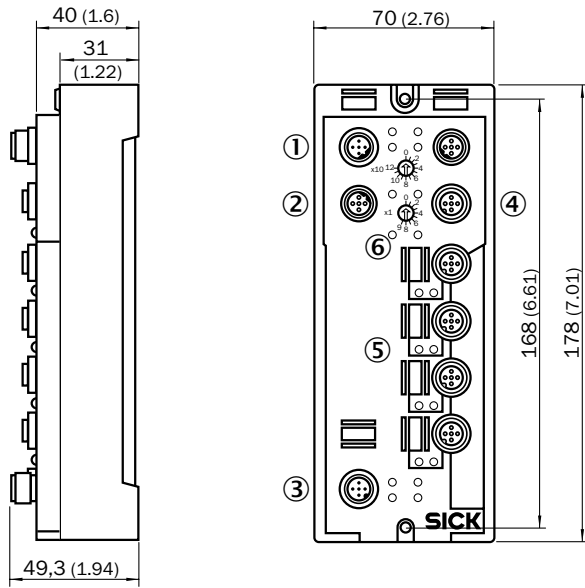
Connection systems

Modules and gateways

Fieldbus modules

	Brief description	Type	Part no.
	Number of IO-Link ports: 4; Communication mode: COM1/COM2; IO-Link version: IO-Link V1.0; Switching input: PNP; Supply voltage Vs, IO-Link ports: DC 24 V; Current loading: 800 mA; Data transmission rate: Max. 12 MBaud, Autobaud; Address space occupation: 1 bis 126; Connection type: Connector M12; Connection type, IO-Link ports: Connector M12, 5-pin; Suppl voltage Vs, module: DC 18 ... 30 V; Power consumption: Typ. 75 mA / max. 100 mA (at UL with DC 24 V), Typ. 25 mA + sensor current / max. 80	IOLSHPB-P3104R01	6039728

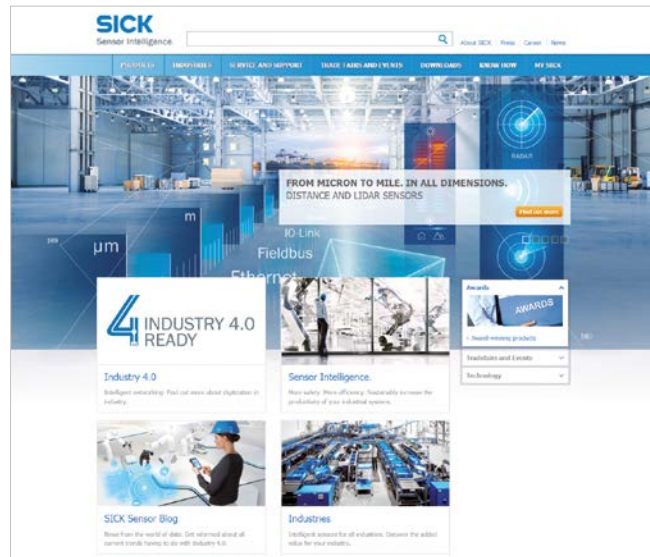
IOLSHPB-P3104R01



- ① Bus IN
- ② Bus OUT
- ③ Power supply IN
- ④ Power supply OUT
- ⑤ Port 1...4
- ⑥ Bus adress rotary switch

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