



## LFV200

Rugged, reliable point level switch for almost all liquids – even in hygienic applications.

**SICK**  
Sensor Intelligence.



## Technical data overview

<b>Measurement principle</b>	Vibrating level switch
<b>Detection principle</b>	Contact
<b>Medium</b>	Fluids
<b>Measurement</b>	Switch
<b>Process temperature</b>	-40 °C ... +150 °C (depending on type)
<b>Process pressure</b>	-1 bar ... 64 bar
<b>Output signal</b>	Non-contact switch Transistor output PNP Transistor output PNP with IO-Link (depending on type)
<b>Accuracy of sensor element</b>	± 2 mm

## 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

## Fields of application

- Point level measurement in storage tanks
- Point level measurement in release agent tanks
- Monitoring of pouring machine supply lines
- Point level measurement in CIP reservoirs
- Monitoring of hydraulic and coolant systems

Type code

Other models and accessories → [www.sick.com/LFV200](http://www.sick.com/LFV200)

LFV200 type code

<b>Certification</b>	
XX	without
XA	Overfill protection in acc. with WHG (German Federal Water Act)
<b>Execution / Process temperature</b>	
S	Standard / -40 °C ... +100 °C
T	Expanded / -40 °C ... +150 °C
H	Hygiene applications / -40 °C ... +150 °C
<b>Process connection / Material</b>	
GH	G ½, DIN3852-A, PN 64 / 316L
NH	½" NPT, ASME B1.20.1, PN 64 / 316L
GB	G ¾ A, PN 64 / 316L
NB	¾" NPT, ASME B1.20.1, PN 64 / 316L
GA	G 1 A, PN 64 / 316L
NA	1" NPT, ASME B1.20.1, PN 64 / 316L
CL	Tri-clamp 1", PN 16, L, Ra < 0.8 µm
CN	Tri-Clamp 2", PN 16, L, Ra < 0.8 µm
RL	Conical adapter DN 25, DIN 11851 with coupling nut PN 40 / 316L, Ra < 0.8 µm
RM	Conical adapter DN 40, DIN 11851 with coupling nut PN 40 / 316L, Ra < 0.8 µm
RN	Conical adapter DN 50, DIN 11851 with coupling nut PN 40 / 316L, Ra < 0.8 µm
GP	G ¾ A, PN 64 / 316L, Ra < 0.8 µm
NP	¾" NPT, ASME B1.20.1, PN 64 / 316L, Ra < 0.8 µm
Mgmt	G 1 A, PN 64 / 316L, Ra < 0.8 µm
NL	1" NPT, ASME B1.20.1, PN 64 / 316L, Ra < 0.8 µm
CM	Tri-clamp 1 ½", PN 16, L, Ra < 0.8 µm
RR	SMS DN 38, PN 6, 316L, Ra < 0.8 µm
LA	Aseptic connection with grooved cap nut, F 40, DN 25, 316L, Ra < 0.8 µm
R3	Thread R ¾, PN 64, 316L, EN10226-1
<b>Electronics</b>	
C	Contact-free switch, 20 ... 253 V AC/DC
T	PNP transistor output, 9.6 ... 35 V DC
I	PNP transistor output with IO-Link, 18 ... 30 V DC
<b>Housing</b>	
P	1.4404
<b>Electrical connection / Enclosure rating</b>	
M	M12 x 1 / IP 67
V	DIN 43650 including male connector / IP 65
<b>Measuring point identification plate</b>	
	without
L	Fork length 115 mm

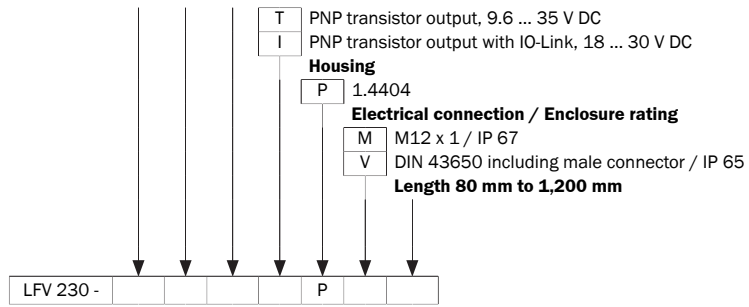
  

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Not all variants of the type code can be combined!

LFV230 type code

<b>Certification</b>	
XX	without
XA	Overfill protection in acc. with WHG (German Federal Water Act)
<b>Execution / Process temperature</b>	
S	Standard / -40 °C ... +100 °C
T	Expanded / -40 °C ... +150 °C
H	Hygiene applications / -40 °C ... +150 °C
<b>Process connection / Material</b>	
GB	G ¾ A, PN 64 / 316L
NB	¾" NPT, PN 64 / 316L
GA	G 1 A, PN 64 / 316L
NA	1" NPT, PN 64 / 316L
CL	Tri-clamp 1", PN 16, L, Ra < 0.8 µm
CN	Tri-clamp 2", PN 16, L, Ra < 0.8 µm
RL	Conical adapter DN 25, DIN 11851 with coupling nut PN 40 / 316L, Ra < 0.8 µm
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<b>Electronics</b>	
C	Contact-free switch, 20 ... 253 V AC/DC



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## SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

## WORLDWIDE PRESENCE:

Contacts and other locations –[www.sick.com](http://www.sick.com)