



## LFV300

Flexible and robust – Tuning Forks for all kinds of liquids

LEVEL SENSORS

**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>	-50 °C ... +250 °C, See safety notes for ATEX devices (depending on type) (depending on type)
<b>Process pressure</b>	-1 bar ... 64 bar
<b>Output signal</b>	Non-contact switch Double relay (DPDT) 1 x PNP/NPN NAMUR signal (depending on type) (depending on type)
<b>Accuracy of sensor element</b>	± 2 mm

### Product description

The LFV300 product family of universal vibrating level switches precisely detects predefined liquid levels in systems to the millimeter – even under difficult operating conditions. The switches can emit a signal to prevent overfilling, a switching signal for refilling, or a dry-run signal for pump protection. The LFV300 works independently of the liquid and is wear-free and maintenance-free. A wide selection of flange, threads, and hygienic connections together with a modular device concept enable customer-specific solutions. The device is suitable for hygienic applications and can be cleaned using SIP/CIP. There are also variants for use in explosive atmospheres, to prevent overfilling in compliance with WHG, and with marine certification (GL). Besides the rugged LFV310 standard device, there are LFV330 tube-extended variants for reliable vertical mounting to bridge sensing ranges up to 6 m.

### At a glance

- Choice of various housing materials and electrical output signals
- Commissioning without filling
- Process temperature up to 250 °C
- Immune to deposit formation
- Very high repeatability
- Hygienic designs according to EHEDG and FDA, compatible for CIP and SIP
- ATEX approval available
- Tube extension up to 6 m in length

### Your benefits

- Easy installation and commissioning, no calibration necessary
- Easy operation and integration, saves time
- Maintenance-free sensor, reduces downtime
- Testing in place possible – no mounting required, which reduces installation time
- Flexible and tough system for a multitude of applications
- Universal technology works in all kinds of liquids
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GCP	Thread G 1 ½ A, PN 64 / 316L, Ra < 0.8 µm	RIP	Ingold connection PN16 / 316L Ra < 0.8 µm
NCP	Thread G 1 ½" NPT PN 64 / 316L, Ra < 0.8 µm	LGP	DB50L / 316L, Ra < 0.8 µm
GEV	Thread G 2 A PN64 / 316L	SGD	Bundle clamp DN33, 7PN40, DIN11864-3-A / 316L, BN2, Ra < 0.8 µm
GDV	Thread M27x1.5 PN64 / 316L	SHP	Aseptic lapped flange DN50PN16, DIN11864-3-A / 316 L, Ra < 0.8 µm
GFV	Thread M27x2 PN64 / 316L	SJP	Aseptic lapped flange DN100PN16, DIN11864-3-A / 316 L, Ra < 0.8 µm
KAP	Cone DN25 PN40 / 316L, Ra < 0.8 µm	FTV	Flange, DN 25, PN 6, form C, DIN 2501 / 316L
KBP	Cone M52 PN40 / 316 L, Ra < 0.8 µm	FPV	Flange, DN 25, PN 40, form C, DIN 2501 / 316L
LAP	Aseptic with union nut F40P- N25 / 316L, Ra < 0.8 µm, ZB3052	FRV	Flange, DN 25, PN 40, form D, DIN 2501 / 316L
DAV	DRD flange PN40 / 316L, ZB3007	OPV	Flange, DN 25, PN 40, form F, DIN 2501 / 316L
RRP	SMS DN38PN6 / 316L, Ra < 0.8 µm	PPV	Flange, DN 25, PN 40, form N, DIN 2501 / 316L
RTP	SMS DN51PN6 / 316L, Ra < 0.8 µm	UPV	Flange, DN 25, PN 40, V13, DIN 2501 / 316L
SBA	Neumo biocontrol size 25PN16 / 316L, Ra < 0.8 µm	FBV	Flange, DN 32, PN 40, form C, DIN 2501 / 316L
SAP	Neumo biocontrol size 50PN16 / 316L, Ra < 0.8 µm	OBV	Flange, DN 32, PN 40, form F, DIN 2501 / 316L
SCP	Neumo biocontrol Gr.65PN16 / 316L, Ra < 0.8 µm	FOV	Flange, DN 40, PN 6, form C, DIN 2501 / 316L
SDP	Neumo biocontrol Gr.80PN16 / 316L, Ra < 0.8 µm	FCV	Flange, DN 40, PN 40, form C, DIN 2501 / 316L
RUP	SÜDMO W500 DN50PN10 / 316L, Ra < 0.8 µm	OCV	Flange, DN 40, PN 40, form F, DIN 2501 / 316L
PCV	Flange, DN 40, PN 40, form N, DIN 2501 / 316L	ICV	Flange, DN 40, PN 40, form E, DIN 2501 / 316L
MEV	Flange, DN 50, PN 40, form D, DIN 2501 / 316L	U6V	Flange, DN 80, PN 64, V13, DIN 2501 / 316L
OEV	Flange, DN 50, PN 40, form F, DIN 2501 / 316L	FJV	Flange, DN 100, PN 16, form C, DIN 2501 / 316L
PEV	Flange, DN 50, PN 40, form N, DIN 2501 / 316L	MJV	Flange, DN 100, PN 16, form D, DIN 2501 / 316L
IEV	Flange, DN 50, PN 40, form E, DIN 2501 / 316L	OJV	Flange, DN 100, PN 16, form F, DIN 2501 / 316L
UEV	Flange, DN 50, PN 40, V13, DIN 2501 / 316L	PJV	Flange, DN 100, PN 16, form N, DIN 2501 / 316L
EEV	Flange, DN 50, PN 40, R13, DIN 2501 / 316L	FKV	Flange, DN 100, PN 40, form C, DIN 2501 / 316L
ONV	Flange, DN 50, PN 64, form F, DIN 2501 / 316L	OKV	Flange, DN 100, PN 40, form F, DIN 2501 / 316L
INV	Flange, DN 50, PN 64, form E, DIN 2501 / 316L	PKV	Flange, DN 100, PN 40, form N, DIN 2501 / 316L
HNV	Flange, DN 50, PN 64, form L, DIN 2501 / 316L	UKV	Flange, DN 100, PN 40, V13, DIN 2501 / 316L
IYV	Flange, DN 50, PN 100, form E, DIN 2501 / 316L	PSV	Flange, DN 100, PN 64, form N, DIN 2501 / 316L
HYV	Flange, DN 50, PN 100, form L, DIN 2501 / 316L	ISV	Flange, DN 100, PN 64, form E, DIN 2501 / 316L
FGV	Flange, DN 65, PN 40, form C, DIN 2501 / 316L	IUV	Flange, DN 100, PN 100, form E, DIN 2501 / 316L
OGV	Flange, DN 65, PN 40, form F, DIN 2501 / 316L	HUV	Flange, DN 100, PN 100, form L, DIN 2501 / 316L
I1V	Flange, DN 65, PN 40, form E, DIN 2501 / 316L	OZV	Flange, DN 125, PN 16, form F, DIN 2501 / 316L
F1V	Flange, DN 80, PN 40, form C, DIN 2501 / 316L	FLV	Flange, DN 125, PN 40, form C, DIN 2501 / 316L
O1V	Flange, DN 80, PN 40, form F, DIN 2501 / 316L	F4V	Flange, DN 150, PN 6, form C, DIN 2501 / 316L
P1V	Flange, DN 80, PN 40, form N, DIN 2501 / 316L	FPC	Flange, DN 25, PN 40, form B1, EN1092-1 / 316L
FJC	Flange, DN 100, PN 16, form B1, EN1092-1 / 316L	IPC	Flange, DN 25, PN 40, form B2, EN1092-1 / 316L
FKC	Flange, DN 100, PN 40, form B1, EN1092-1 / 316L	EPC	Flange, DN 25, PN 40, form F, EN1092-1 / 316L
OKC	Flange, DN 100, PN 40, form C, EN1092-1 / 316L	F3C	Flange, DN 25, PN 63, form B1, EN1092-1 / 316L
PKC	Flange, DN 100, PN 40, form D, EN1092-1 / 316L	IWC	Flange, DN 25, PN 100, form B2, EN1092-1 / 316L
PSC	Flange, DN 100, PN 63, form D, EN1092-1 / 316L	FCC	Flange, DN 40, PN 40, form B1, EN1092-1 / 316L
ISC	Flange, DN 100, PN 63, form B2, EN1092-1 / 316L	ICC	Flange, DN 40, PN 40, form B2, EN1092-1 / 316L
FMC	Flange, DN 150, PN 16, form B1, EN1092-1 / 316L	FEC	Flange, DN 50, PN 40, form B1, EN1092-1 / 316L
FVC	Flange, DN 150, PN 40, form B1, EN1092-1 / 316L	OEC	Flange, DN 50, PN 40, form C, EN1092-1 / 316L
IVC	Flange, DN 150, PN 40, form B2, EN1092-1 / 316L	PEC	Flange, DN 50, PN 40, form D, EN1092-1 / 316L
WPM	Flange 1" 150 lb RF, ANSI B16.5 / 316L	IEC	Flange, DN 50, PN 40, form B2, EN1092-1 / 316L
ANV	Flange 1" 300 lb RF, ANSI B16.5 / 316L	UEC	Flange, DN 50, PN 40, form E, EN1092-1 / 316L
AQV	Flange 1" 600 lb RF, ANSI B16.5 / 316L	EEC	Flange, DN 50, PN 40, form F, EN1092-1 / 316L
YQV	Flange 1" 600 lb LG, ANSI B16.5 / 316L	ONC	Flange, DN 50, PN 63, form C, EN1092-1 / 316L
AAV	Flange 1 ½" 150 lb RF, ANSI B16.5 / 316L	FIC	Flange, DN 80, PN 40, form B1, EN1092-1 / 316L
ABV	Flange 1 ½" 300 lb RF, ANSI B16.5 / 316L	IIC	Flange, DN 80, PN 40, form B2, EN1092-1 / 316L
3BV	Flange 1 ½" 300 lb SM, ANSI B16.5 / 316L	ARV	Flange 1 ½" 600 lb RF, ANSI B16.5 / 316L
ACV	Flange 2" 150 lb RF, ANSI B16.5 / 316L	AYV	Flange 3 ½" 150 lb RF, ANSI B16.5 / 316L
QCV	Flange 2" 150 lb FF, ANSI B16.5 / 316L	AIV	Flange 4" 150 lb RF, ANSI B16.5 / 316L
1CV	Flange 2" 150 lb ST, ANSI B16.5 / 316L	WIV	Flange 4" 150 lb LT, ANSI B16.5 / 316L



TNP	Varivent N25-100 / 316L Ra<0,8µm ZB3052
CCP	Tri-Clamp 1" PN 16 / 316L Ra<0,8µm
CBP	Tri-Clamp 1 1/2" PN 16 / 316L Ra<0,8µm
CAP	Tri-Clamp 2" PN 16 / 316L Ra<0,8µm
CDP	Tri-Clamp 2 1/2" PN 10 / 316L Ra<0,8µm
CEP	Tri-Clamp 3" PN 10 / 316L Ra<0,8µm

REP	Fitting DN 25, PN 40, DIN 11851 / 316L Ra<0,8µm
RAP	Fitting DN 40, PN 40, DIN 11851 / 316L Ra<0,8µm
RFP	Fitting DN 40, PN 40, DIN 11864-1A / 316L Ra<0,8µm ZB3052
RBP	Fitting DN 50, PN 25, DIN 11851 / 316L Ra<0,8µm
RDP	Fitting DN 50, PN 25, DIN 11864-1A / 316L Ra<0,8µm ZB3052

## 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.”

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