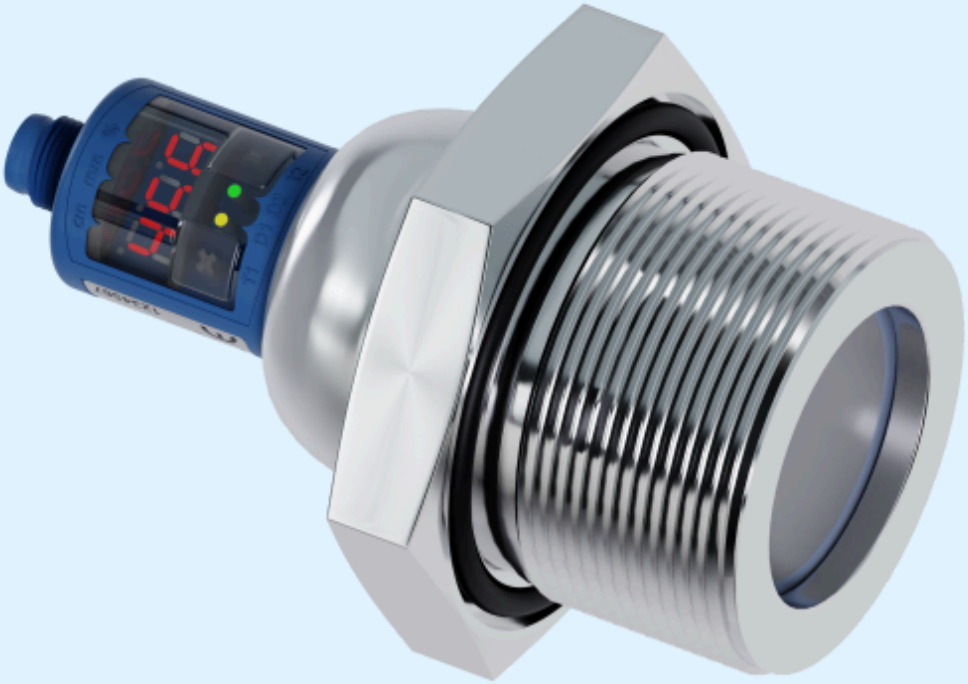
microsonic



extract from our online catalogue:

# *hps+340/DD/TC/E/G2*

current to: 2026-11-26

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# hps+

hps+ in safety gear - When you need chemically resistant, pressure-resistant sensors.

## Highlights

- Optionally used in normal pressure or overpressure
- PTFE membrane › for protection against aggressive media
- Stainless-steel or optional PVDF housing for hps+340 › for use in the food industry
- Sealed against the housing with an O-ring made from FFKM › for the highest possible chemical resistance
- Digital display with direct measured value output in mm/cm or %
- Numeric configuration of the sensor using digital display
- UL Listed › to Canadian and US safety standards

## Basics

- 2 switching outputs in pnp variant
- Analogue output plus 1 pnp switching output
- 4 detection ranges with a measurement range of 30 mm to 8 m
- microsonic Teach-in using T1 or T2 buttons
- 0.025 mm to 2.4 mm resolution
- Temperature compensation
- 9–30 V operating voltage
- LinkControl › for configuration of sensors from a PC

# For fill level measurements of aggressive media and in overpressure

the ultrasonic transducers of the new hps+ sensors are now fitted out - as standard - with a PTFE film. It is sealed with a FFKM O-ring against the housing made of 1.4571 stainless steel or PVDF. This ensures a high degree of resistance to aggressive media.



*Fill level measurement in tanks*




*hps+340 in highly resistant PVDF housing - PTFE protective film sealed with an O-ring made from FFKM against the housing*

The hps+ sensors can be used for fill level measurement under normal pressure or in tanks and containers with an overpressure of up to 6 bar. Its special software filters also allow its use in containers filled from above or that have a stirring system. Pressure-tight installation in a tank is undertaken by means of a 1“ threaded flange or a 2“ one in the case of hps+340.

## Chemical resistance

and seal tightness were tested through being stored over cellulose thinner and 1,000,000 alternating pressure stresses. Cellulose thinner is extremely corrosive and has a high rate of penetration.

### *Two different output stages*

are available for four detection ranges:



2 switching outputs in pnp switching technology



1 analogue output with an additional pnp switching output

### *Sensors with switching output have three operating modes:*

- Single switching point
- Two-way reflective barrier
- Window mode

### *Two three-colour LEDs*

always show the current state of the switching outputs or the analogue output.

### *With TouchControl*

all configuration can be done right at the sensor. The easily legible three-digit LED display continually shows the current distance value and automatically switches between millimetre and centimetre displays.

### *Setting a switching or analogue output*

can optionally be carried out by numeric input of the desired distance values, or using a Teach-in procedure. This permits the user to select the configuration method preferred. The hps+ sensors support synchronisation and multiplex operation and have extensive parameterisation options via LinkControl. (Further information on how to set up hps+ sensors can be found at mic+ sensors.)

### *LinkControl*

consists of the LinkControl-Adapter LCA-2 and the LinkControl-Software and facilitates the configuration of the hps+ sensors via a PC or laptop with any conventional conventional Windows® operating system.




*Sensor connected to the PC via LCA-2 for programming*

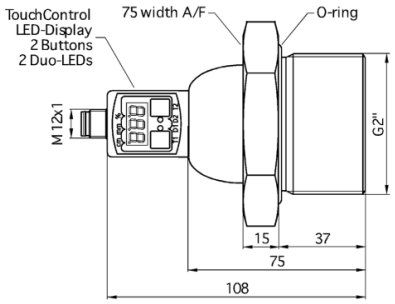
## You have special requirements?

Nothing as simple as that.

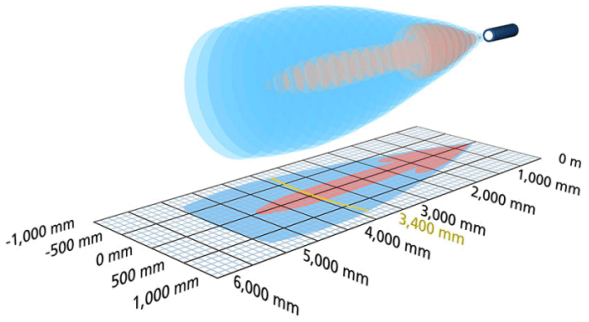
With us, you can easily find an individual solution. Let us talk about your application: +49 231 97 51 51-82.

# hps+340/DD/TC/E/G2

## scale drawing




## detection zone




2 x pnp

| | |
|---|---|
| design | process connection G2 |
| operating mode | proximity switch/reflective mode<br>reflective barrier<br>window mode |
| particularities | pressure-resistant up to 6 bar overpressure<br>high chemical resistance<br>stainless steel version<br>display<br>process connection G2<br>UL Listed |

## Ultrasonic-Specific

| | |
|---|---|
| means of measurement | echo propagation time measurement |
| transducer frequency | 120 kHz |
| blind zone | 350 mm |
| operating range | 3,400 mm |
| resolution | 0.18 mm |
| reproducibility | ± 0.15 % |
| accuracy | ± 1 % (temperature drift internally compensated) |

## Electrical Data

| | |
|---|---|
| operating voltage $U_B$ | 9 - 30 V d.c., reverse polarity protection |
| voltage ripple | ± 10 % |
| no-load current consumption | ≤ 80 mA |
| type of connection | 5-pin M12 initiator plug |

## Outputs

| | |
|---|---|
| output 1 | switching output<br>pnp: $I_{max}$ = 200 mA ($U_B$-2V)<br>NOC/NCC adjustable, short-circuit-proof |
| Ausgang 2 | switching output<br>pnp: $I_{max}$ = 200 mA ($U_B$-2V)<br>NOC/NCC adjustable, short-circuit-proof |
| switching hysteresis | 50 mm |
| switching frequency | 3 Hz |
| response delay | 240 ms |
| delay prior to availability | < 380 ms |

## Inputs

| | |
|---|---|
| input 1 | com input<br>synchronisation input |

## Housing

| | |
|---|---|
| material | stainless steel, plastic parts: PBT, TPU |
| ultrasonic transducer | coated with PTFE film, FFKM O-ring |
| class of protection to EN 60529 | IP 67 |
| operating temperature | -25°C to +70°C |
| storage temperature | -40°C to +85°C |
| weight | 1,200 g |

## Technical Features/Characteristics

| | |
|---|---|
| temperature compensation | yes |
| controls | 2 push-buttons + LED display (TouchControl) |
| scope for settings | Teach-in and numeric configuration via TouchControl<br>LCA-2 with LinkControl |
| synchronization | yes |
| multiplex | yes |
| indicators | 3-digit LED display, 2 x three-colour LED |

## Accessories

| | |
|---|---|
| deployable accessory | LCA-2<br>LCA-2 Koffer<br>KST5G-2/M12<br>KST5G-5/M12<br>KST5A-2/M12<br>KST5A-5/M12 |

## *pin assignment*

