

# FCP-320/FCH-320 Conventional Automatic Fire Detectors

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Advantage Line

The FCP-320/FCH-320 Series conventional automatic fire detectors set new standards in fire detection with a combination of optical, thermal, and chemical (gas) sensors and intelligent evaluation electronics. They excel with their ability to prevent false alarms, in addition to fast, accurate detection. An extended operating voltage range from 8.5 to 30 V DC and 820-ohm alarm resistors let these products be used with nearly all conventional fire panels.

## Features

- ▶ Evaluation electronics for highly reliable detection
- ▶ Automatic threshold adjustment (drift compensation) for pollution soiling of the optical sensor
- ▶ Mechanical lock to prevent removal/theft (can be activated and deactivated)
- ▶ Dust-proof labyrinth and cap design
- ▶ All detectors have a “chamber-maid plug” at the bottom for cleaning the optical chamber with compressed air (not required for the FCH-T320 heat detector)

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### Technical specifications

Electrical	
Operating voltage	8.5 V DC to 30 V DC
Current consumption	< 0.12 mA
Alarm output	Increase in current (alarm resistance 820 Ω or 470 Ω)
Indicator output	Open collector connects 0 V in the event of an alarm over 3.92 kΩ
Mechanics	
Individual display	LED red
Dimensions	
• Without base	Ø 99.5 x 52 mm
• With base	Ø 120 x 63.5 mm
Housing material	Plastic, ABS
Housing color	White, similar to RAL 9010, matt finish
Weight	Without / with packaging
• FCP-OC320	Approx. 85 g / approx 130 g
• FCP-OT320 / FCP-O320 / FCH-T320 / FCH-T320-FSA	Approx. 80 g / approx. 120 g
Environmental conditions	
Protection class as per EN 60529	IP 40, IP 43 with detector base with damp room seal
Permissible relative humidity	95% (non-condensing)
Permissible air speed	20 m/s
Permissible operating temperature	
• FCP-OC320	-10 °C to +50 °C
• FCP-OT320	-20 °C to +50 °C
• FCP-O320	-20 °C to +65 °C
• FCH-T320 / T320-FSA	-20 °C to +50 °C
Planning	
Monitoring area	
• FCP-OC320, FCP-OT320, FCP-O320	Max. 120 m <sup>2</sup> (Heed local guidelines!)
• FCH-T320	Max. 40 m <sup>2</sup> (Heed local guidelines!)
Maximum installation height	16 m (Heed local guidelines!)
• FCP-OC320, FCP-OT320, FCP-O320	16 m (Heed local guidelines!)
• FCH-T320	6 m (Heed local guidelines!)
Special features	
Response sensitivity	
• Optical part	< 0.2 dB/m, in line with EN 54 T7
• Thermal maximum part	>54 °C

• Thermal rate-of-rise part (in line with prEN 54-5)	FCH-T320: A2R FCH-T320-FSA: A1R
• Chemical part	In ppm range
Color code	
• FCP-OC320	Blue ring
• FCP-OT320	Black ring
• FCP-O320	No marking
• FCH-T320 / T320-FSA	Red ring

### Certifications and approvals

Region	Certification	
	000018/01 FCP-O320	
Germany	VdS	G 208003 FCH-T320_-R470
	VdS	G 208001 FCP-O320_-R470
	VdS	G 208002 FCP-OT320_-R470
Europe	VdS	G 208005 FCP-OC320_-R470
	CE	FCP-/FCH-320
	CPD	0786-CPD-20353 FCH-T320_FCH-T320-R470
	CPD	0786-CPD-20351 FCP-O320_FCP-O320-R470
	CPD	0786-CPD-20355 FCP-OC320_FCP-OC320-R470
	CPD	0786-CPD-20352 FCP-OT320_FCP-OT320-R470

The detectors comply with:

Detector type	EN54-5:2000/A1:2002	EN54-7:2000/A1:2002
FCP-OC320		•
FCP-OT320	•	•
FCP-O320		•
FCH-T320	•	

### Ordering information

FCP-OC320 Multisensor Detector Optical/Chemical	FCP-OC320
FCP-OT320 Multisensor Detector Optical/Thermal	FCP-OT320
FCP-O320 Optical Smoke Detector	FCP-O320
FCH-T320 Heat Detector	FCH-T320
MS 400 Detector Base	MS 400
MSS 300 Detector Base Sounder White	MSS 300
MSS 300-WH-EC Detector Base Sounder White	MSS300-WH-EC
FAA-420-RI Remote Indicator	FAA-420-RI

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