

Technical Data F300K



Fig. 1-1 F300K ...

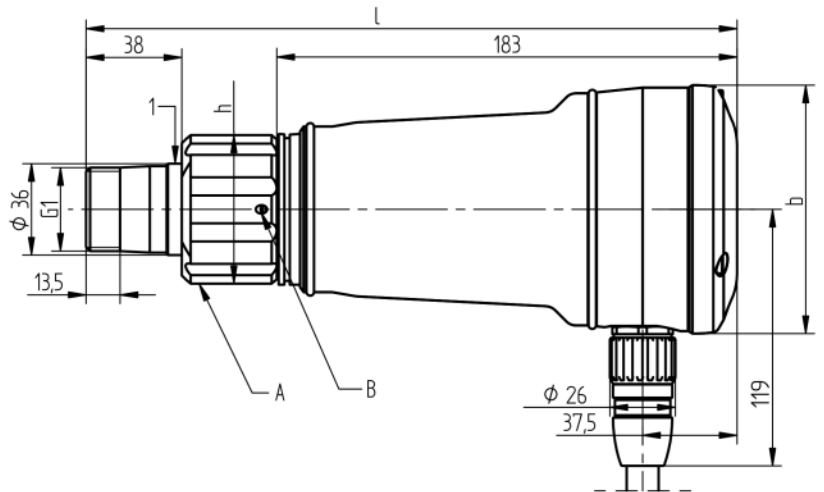


Fig. 1-2 F300K ... with mounted bracket FH30-00

Dimensions

Dimensions (HxT)	99x195,5 mm/3.9"x7.7" in
Weight	1,05 kg/2.3" in (aluminium) 3,6 kg/7.9" in (stainless steel)
Material	Corrosion-resistant aluminium EN AW 6082 (seawater 2*; atmospheric condition 1*), anodised or stainless steel

* Comparative evaluation from 1 (very good) to 6 (unsuitable)

Input data

Auxiliary power

Power supply*	24 VDC \pm 20 %
Power consumption	\leq 3,7 W

Digital inputs - Switching operating mode

Control voltage*	24 VDC \pm 20 %
Control current	ca. 6 mA

Signal Input

Response sensitivity	\geq 18 mVAC
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Output value

Output contact "flame signal"	switch NO (floating)
Valid switching voltage*	42 VAC/DC max. 13 VAC/DC min.
Valid switching current	0,5 A max. $\cos\phi$ 0,4 bei \leq 60 °C 0,4 A max. $\cos\phi$ 0,4 bei \leq 80 °C 10 mA min.
Fuse protection	Internal self-resetting fuse + safety fuse
Safety time (FFDT) response time at flame failure	t_{VOff} adjustable with factory password to 1, 2, 3, 4, 5 s (standard 1 s)
Start-up delay	t_{VOn} adjustable to 5 s

Technical Data F300K

Output value

Output contact operation	Switch NC, floating
Valid switching voltage	42 VAC/DC max. 13 VAC/DC min.
Valid switching current	max. 0,5 A min. 10 mA
Fuse protection	External fuse protection required

* The product must not be transported outside the specified data. Otherwise all commitments concerning safety-related functions will be lost.

Output value

Measuring output intensity	no potential separation
Output current	4 ... 20 mA, 0 ... 20 mA min. – adjustable
Max. load	240 Ω
Idle voltage	ca. 6,5 V
Basic error	$\pm 2 \%$

Communication

FSB Bus (FLAME SCANNER SYSTEM BUS)	no potential separation
Driver	High-speed
Speed	500 kbit/s
Cable length	TP (twisted pair) 80 m/262.47 ft, otherwise 50 m/164.04 ft

Connecting cable / Extension cable

Type	14-wire, shielded, e. g. LiYCY
Cable length	Max. additional extension incl. 3 m (9.84 ft.) connecting cable, at power supply 20,4 V: Cross-section 0,5 mm ² /20 AWG → length 100 m/328.08 ft Cross-section 1,0 mm ² /17 AWG → length 200 m/656.17 ft

Technical capacity

Mode of operation	Continuous operation, 72 h operation after TRD 604
Safety integrity level	DIN EN 61508:2011, SIL 3 Part 1-7
Overvoltage category	IEC 607030-1:2010, OCIII
Effects of interference	IEC 60730-1:2010
Interference emission	DIN EN 55022:2006, class B

Environmental conditions

Degree of protection	DIN EN 60529:2000 IP67 NEMA 4X
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Operating temperature range

Operation temperature*	-40 °C ... +85 °C/-40 °F ... 185 °F – display inside the device
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
Storage condition/transport condition

Storage location	Closed premises
Air temperature*	-40 °C ... +85 °C/-40 °F ... 185 °F

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Application in hazardous areas of zone 2:

Certificate	IECEX IBE 15.0011X
Marking	 II 3G Ex nA nC ic IIC T5 (T6) Gc X

Order Information

659A50-	A 10 SPECTRUM	A 20 HOUSING	A 30 UL CERTIFICATION	A 40 CUSTOMER PARAMETER
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A 10 – SPECTRUM

			Selection
TYPE UV-1	UV-SPECTRAL RANGE	260 ... 400 nm	01*
TYPE UV-4	UV-SPECTRAL RANGE	215 ... 360 nm	04
TYPE IR-2	IR-SPECTRAL RANGE	850 ... 1.200 nm	10
TYPE IR-3	IR-SPECTRAL RANGE	1.000 ... 1.700 nm	11
TYPE IR-4	IR-SPECTRAL RANGE	1.000 ... 2.200 nm	12
TYPE UVIR-1	UV-SPECTRAL RANGE	215 ... 360 nm, IR-SPECTRAL RANGE 1.000 ... 1.700 nm	17

* (Default setting)

A 20 – HOUSING

		Selection
WITH INTEGRATED USER-INTERFACE		UI*
WITH LED-DISPLAY		0
STAINLESS STEEL 1.4404 WITH LED-DISPLAY		V4A

* (Default setting)

A 30 – UL CERTIFICATION

		Selection
WITHOUT		00*
WITH UL CERTIFICATION		UL

* (Default setting)

A 40 – CUSTOMER PARAMETER

		Selection
STANDARD PARAMETERISATION		0*

* (Default setting)

Approvals



The information in this publication is subject to technical changes.

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