

for Flame Detector Devices F 250, F 150,  
Burner Control ETAMATIC

**FFS 05 Ex**



**FFS 05 ...**



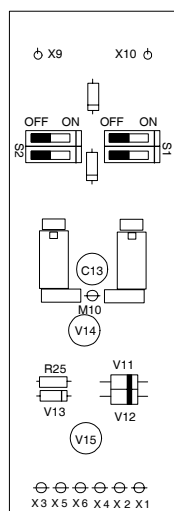
## Criterion for selection of Flame Sensors

Sensor type	for radiated spectrum of	Application - Fuel
FFS 05 UV-1 (Ex)	260 ... 400 nm	Oil, Gas (for highly required selectivity, also against back ground fire, like incineration – and coal fire)
FFS 05 UV-2 (Ex) FFS 05 UV-3 (Ex)	210 ... 380 nm	Gas (monitoring of special gases ie. refinery – and blast furnace gases and/or against intensive back ground fire like hard coal fire produces)
FFS 05-1 (Ex)	850 ... 1200 nm	Dust coal firing (firing chamber flame monitoring)
FFS 05 (Ex)	1200 ... 2800 nm	Oil, gas, wood, coal firing with very much of flue gas recirculation, yellow coloured waste gases without UV-radiation respectively shielded UV-radiation by steam, dust, etc.

## Instructions for installation and operating the Flame Sensors

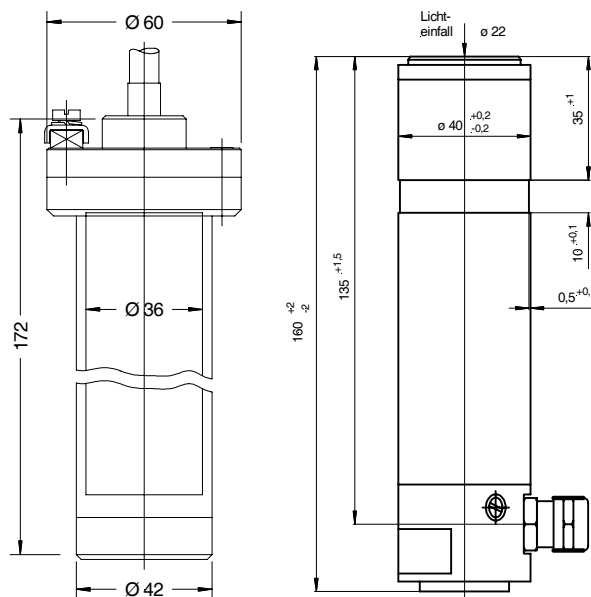
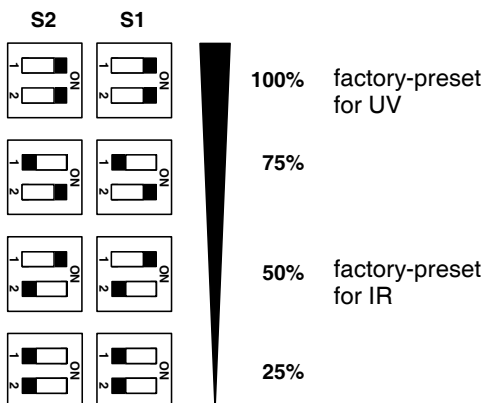
Adjust the flame sensor with its designated bracket to the view opening of the burner, so that the burner-flame is good visible and can be excellent monitored for the „full firing rate of the furnace“. The flame sensor should be adjusted to the first third part of the flame for selective monitoring tasks. Sensitivity adjustments according to the flame can be made by threshold-switches of the flame sensor. Therefore open, -screw off the flame sensor casing and adjust the switches according the following illustration.

### FFS 05... (Ex)



The adjustments are made by the switches S1 and S2, accessible after opened flame sensor casing.

#### Sensitivity



## Order text information

The Flame Sensor FFS 05... is delivered incl. 3 m connecting cable respectively with 0,3 m and Coninvers plug. Is the order of FFS 05 with the Coninvers plug, than an additional connector plug incl. 3 m connecting cable (659 R 0112) is required and has to be ordered too.

The Flame Sensor FFS 05... Ex (installed in the BARTEC casing, PTB 03 ATEX 1026, II 2G EEx d IIC T6) are always delivered without a plug.

Therefore the Junction box FG 24 Ex (ABTECH casing, SIRA99ATEX3173, II 2GD EExe II T6) is available.

FFS 05	without plug, 3 m cable	<b>659 R 1001</b>	FFS 05	with plug, 0,30 m cable	<b>659 R 1011/OE</b>
FFS 05-1	without plug, 3 m cable	<b>659 R 1002</b>	FFS 05-1	with plug, 0,30 m cable	<b>659 R 1012/OE</b>
FFS 05 UV-1	without plug, 3 m cable	<b>659 R 2001</b>	FFS 05 UV-1	with plug, 0,30 m cable	<b>659 R 2011/OE</b>
FFS 05 UV-2	without plug, 3 m cable	<b>659 R 2002</b>	FFS 05 UV-2	with plug, 0,30 m cable	<b>659 R 2012/OE</b>
FFS 05 UV-3	without plug, 3 m cable	<b>659 R 2003</b>	FFS 05 UV-3	with plug, 0,30 m cable	<b>659 R 2013/OE</b>
			Coninvers connector plug with 3 m Kabel		<b>659 R 0112</b>

FFS 05 Ex	<b>659 R 1101</b>
FFS 05-1 Ex	<b>659 R 1102</b>
FFS 05 UV-1 Ex	<b>659 R 1103</b>
FFS 05 UV-2 Ex	<b>659 R 1104</b>
FFS 05 UV-3 Ex	<b>659 R 1105</b>
FG 24 Ex Junction Box	<b>659 R 0111</b>

Weight:	0,4 kg (FFS 05...) 1,6 kg (FFS 05... Ex)
Protection class:	IP 65
Ambient temperature:	-10°C ... +60 °C



**LAMTEC Meß- und Regeltechnik  
für Feuerungen GmbH & Co KG**  
Wiesenstraße 6  
D-69190 Walldorf  
Telefon +49 (0) 62 27 / 60 52-0  
Telefax +49 (0) 62 27 / 60 52-57  
Internet <http://www.lamtec.de>  
E- Mail: [info@lamtec.de](mailto:info@lamtec.de)

### LAMTEC Leipzig GmbH & Co KG

Portitzer Straße 69  
D-04425 Taucha  
Telefon +49 (0) 34298 / 4875-0  
Telefax +49 (0) 34298 / 4875-99

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