

Holding Devices for Flame Monitoring Systems



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Classification of holding Devices to the Flame Monitors.

Holding Devices for F300K

- FV30-00 Screw Joint and FV30-01 (stainless steel)
- FV30-10 Screw Joint with Purge Air Connection and FV30-11 (stainless steel)
- FV40-10 Screw Joint with Purge Air Connection and Ball-and-Socket Joint and FV41-11 (stainless steel)
- FK30 Cooling Air Housing
- FK41 Cooling Air Housing with Purge Air Connection and Ball-and-Socket Joint
- FK46 Cooling Air Housing with Purge Air Connection and FS35 (detachable holding device)

Holding Devices for F200K

- FV30-00 Screw Joint
- FV30-10 Screw Joint with Purge Air Connection
- FH20-10 Holding Bracket with Benching Mirror 90°
- FH30-00 Holding Bracket
- FH30-10 Holding Bracket and Purge Air Connection
- FV40-10 Screw Joint with Purge Air Connection and Ball-and-Socket Joint
- FH40-10 Holding Bracket with Purge Air Connection and Ball-and-Socket Joint
- FS50 Cooling Air Housing
- FS51 Cooling Air Housing and Ball-and-Socket Joint
- FFS56 Cooling Air Housing with Holding Device (detachable and adjustable)

Holding Devices for FFS05 and FFS07

- FV30-00 Screw Joint
- FV30-10 Screw Joint with Purge Air Connection
- FH20-10 Holding Bracket with Benching Mirror 90°
- FH30-00 Holding Bracket
- FH30-10 Holding Bracket and Purge Air Connection
- FH30-15 Holding Bracket with the Ex version
- FH30-25 Holding Bracket and Purge Air Connection for sensors with the Ex version
- FV40-10 Screw Joint with Purge Air Connection and Ball-and-Socket Joint
- FH40-10 Holding Bracket with Purge Air Connection and Ball-and-Socket Joint
- FH40-25 Holding Bracket with Purge Air Connection and Ball-and-Socket Joint for sensors with the Ex version
- FS30 Cooling Air Housing
- FS36 Cooling Air Housing with Holding Device (detachable and adjustable)
- FS41 Cooling Air Housing and Ball-and-Socket Joint

Holding Devices for FFS06 and FFS08

- FS60-00 Holding Device
- FS60-10 Holding Device
- FS65 Cooling Air Housing
- FH80-00 Holding Device
- FH80-10 Holding Device

General.

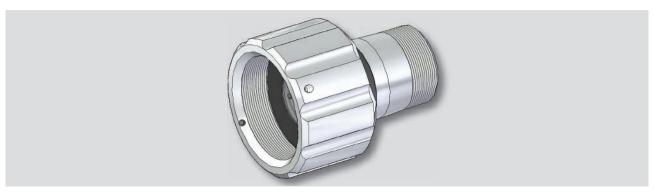
Valid for all holding devices in this document

- Purge air connection must be free from oil and dirt.
- Recommended operating pressure: > 50 mbar above the internal pressure in the combustion chamber
- Recommended cooling air housing temperature: min. 20 K under the allowed device temperature
- Recommended air consumption: 5 m3/h
- All indication of weight corresponds with holding devices without probe mass
- Length tolerance (total length) in technical data: ± 5
- Connecting threads differing from the above described are available on request

Especially for FV30-00, FV30-10, FV40-10, FK41, FK46 and for the corresponding stainless steel variants: Purge air / boiler pressure at dismantled flame scanner: p max. = 0.5 bar

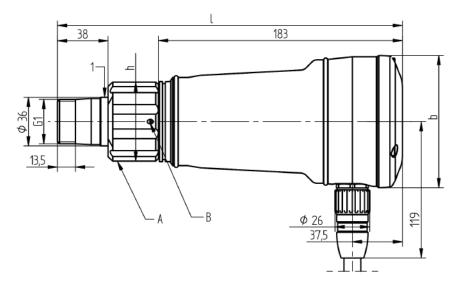
Screw Joint FV30-00 and FV30-01 (Stainless steel).

Technical Data



Screw Joint FV30-00 and FV30-01

Possible application	FFS05, FFS07, F200K/V, F200K Ex, F300K	Dimensions [mm]	l	b	h
Item no.	659S1201 alu	Holding device	76		60
item no.	659S1202 stainless steel	with FFS05/FFS07	234	40	60
Material	Aluminium anodized, plastic Stain-	with F200K/V	253	80	60
Matchat	less steel (V4A)/plastic	with F200K Ex	276	90	60
Air connection		with F300K	258	99	60
Weight [kg]	0,30 alu 0,55 stainless steel	Spare parts for alu Spare parts for stainless steel and alu Spare parts for stainless steel	659ES121 R	ocking disc a ubber rings (ocking disc a	5 pcs)

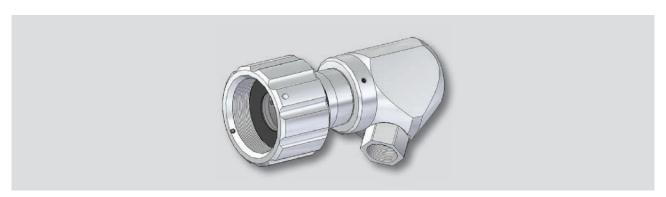


Dimensional drawing FV30-00 with flame scanner F300K

- 1 Insulating part
- **A** Coupling nut tightened either by hand or by using SW46
- **B** Securing device tightened by allen key for M3

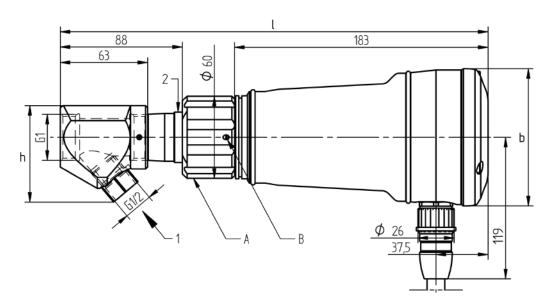
Screw Joint with Purge Air Connection FV30-10 and FV30-11 (Stainless steel).

Technical Data



Screw Joint with Purge Air Connection FV30-10 and FV30-11 (Stainless steel)

Possible application	FFS05, FFS07, F200K/V, F200K Ex, F300K	Dimensions [mm]	l	b	h
Item no.	659S1200 alu	Holding device	126		70
item no.	659S1211 stainless steel	with FFS05/FFS07	284	40	70
Material	Aluminium anodized, plastic,	with F200K/V	303	80	70
Material	Stainless steel (V4A)/plastic	with F200K Ex	326	90	70
Air connection	Hexagonal fitting G 1/2"i	with F300K	308	99	70
Weight [kg]	0,50 alu 1,23 stainless steel	Spare parts for alu Spare parts for stainless steel and alu Spare parts for stainless steel	659ES121 Ru	cking disc applibber rings (5 cking disc app	pcs)

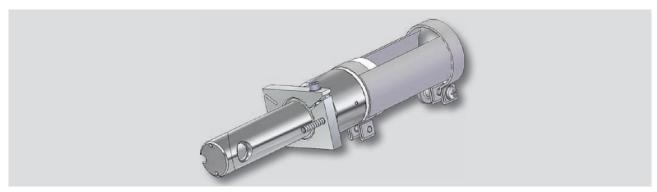


Dimensional drawing FV30-10 with flame scanner F300K

- **1** Purge air
- A Coupling nut tightened either by hand or by using SW46
- **B** Securing device tightened by allen key for M3

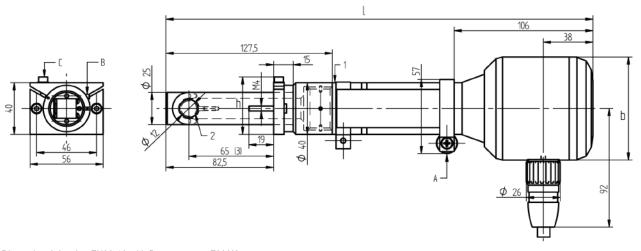
Holding Bracket with Benching Mirror 90° FH20-10.

Technical Data



Holding Bracket with Benching Mirror 90° FH20-10

Weight [kg]	0,58	Spare parts	659ES123 Lo	cking disc appacket, welded	olication
Material	Brass nickelplated, plastic Aluminium anodized	FFS07 with F200K	308 327	40 80	44 44
Item no.	659V3100	Holding device with FFS05/	221		44
Possible application	FFS05, FFS07, F200K	Dimensions [mm]	l	b	h



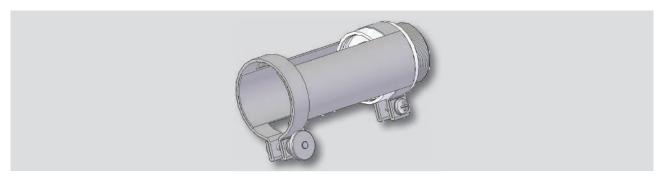
Dimensional drawing FH20-10 with flame scanner F200K

Benching Mirror applicable exclusively for IR - flame scanner!

- 1 Insulating part
- 2 Radial light entry
- 3 Max. immersion depth with dimensional drawing
- A Clamping screw tightened by hand
- B Clamping screw 2 tightened with allen for M3
- Clamping screw 3 tightened with allen for M4

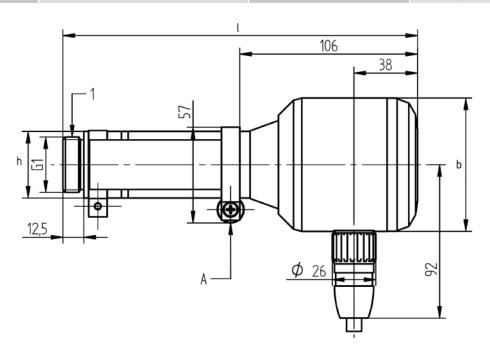
Holding Bracket FH30-00.

Technical Data



Holding Bracket FH30-00

Possible application	FFS05, FFS07, F200K	Dimensions [mm]	l	b	h
Item no.	659S1501	Holding device	106		40
Material	Zinc coated stool plastic	with FFS05/FFS07	194	40	40
Material	Zinc coated steel, plastic	with F200K	212	80	40
Weight [kg]	0,15	Spare parts		cking disc ap	

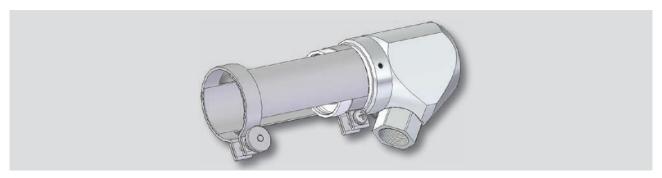


Dimensional drawing FH30-00 with flame scanner F200K

- 1 Insulating part
- A Clamping screw tightened by hand

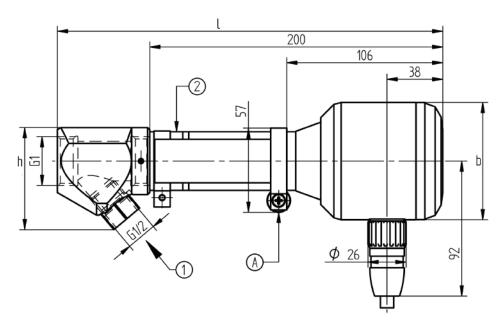
Holding Bracket and Purge Air Connection FH30-10.

Technical Data



Holding Bracket and Purge Air Connection FH30-10

Possible application	FFS05, FFS07, F200K	Dimensions [mm]	l	b	h
Item no.	659S1500	Holding device	156		70
NA - t * - I	Aluminium anodized, plastic,	with FFS05/FFS07	244	40	70
Material	Zinc coated steel	with F200K	263	80	70
Air connection	Hexagonal fitting, G 1/2"i	Spare parts		cking disc app acket, welded	
Weight [kg]	0,35				

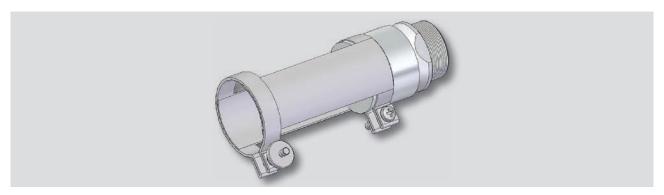


Dimensional drawing FH30-10 with flame scanner F200K

- 1 Purge air
- 2 Insulating part
- A Clamping screw tightened by hand

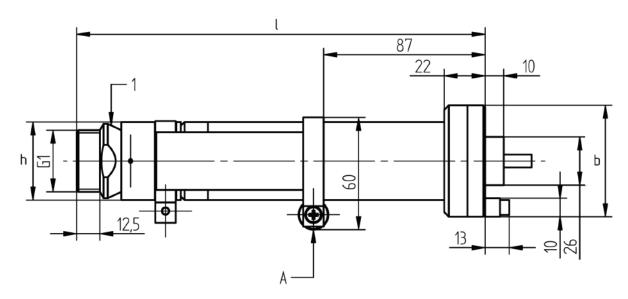
Holding Bracket (Ex) FH30-15.

Technical Data



Holding Bracket (Ex) FH30-15

Possible application	FFS05 EX, FFS07 EX	Dimensions [mm]	l	b	h
Item no.	659S1510	Holding device with FFS05 Ex, FFS07 Ex	133 220	 60	42 42
Material	Aluminium anodized, Zinc coated steel, plastic	Spare parts	659ES151	Bracket, w	elded
Weight [kg]	0,20				

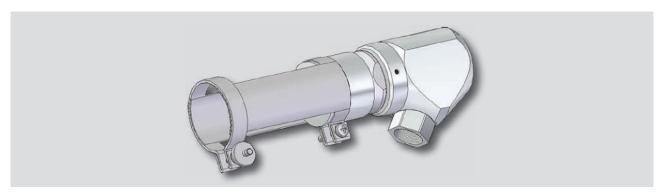


Dimensional drawing FH30-15 with flame sensor FFS05 Ex, FFS07 Ex

- **1** Purge air
- 2 Insulating part
- A Clamping screw tightened by hand

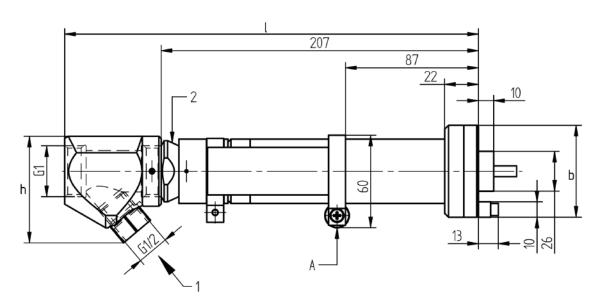
Holding Bracket and Purge Air Connection (Ex) FH30-25.

Technical Data



Holding Bracket and Purge Air Connection (Ex) FH30-25

Possible application	FFS05 EX, FFS07 EX	Dimensions [mm]	l	b	h
	55054544	Holding device	183		70
Item no.	659S1511	with FFS05 Ex, FFS07 Ex	270	60	70
Material	Aluminium anodized, Zinc coated steel, plastic	Weight [kg]	0,40		
Air connection	Hexagonal fitting, G 1/2"i	Spare parts	659ES151	Bracket, w	elded



Dimensional drawing FH30-25 with flame sensor FFS05 Ex

- l Purge air
- 2 Insulating part
- A Clamping screw tightened by hand

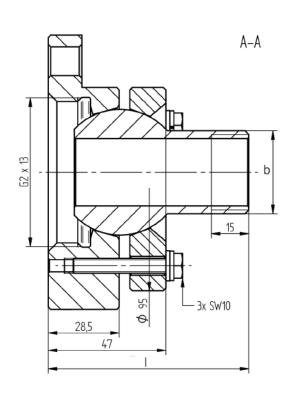
Globe joint FS10 and FS11 (Stainless steel).

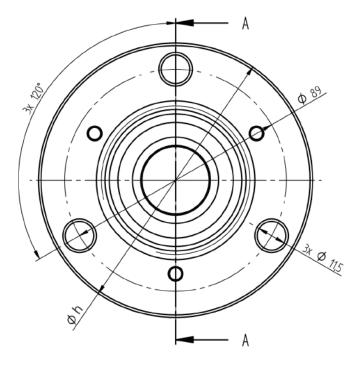
Technical Data



Globe joint FS10 and FS11 (Stainless steel)

Possible application	FV30 and FH30		l	b	h
Item no.	659E0106 Alu 659S0411 Stainless steel	Dimensions [mm]	80,5	=G1	110
Material	Aluminium anodized, Stainless steel V4A	Weight [kg]	0,85 Alu 1,93 Stair	nless steel	





Dimensional drawing globe joint FS10/FS11

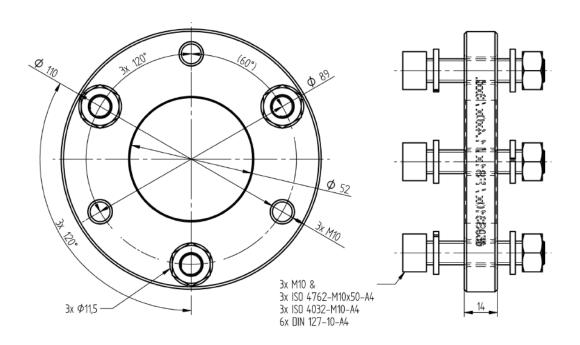
Welding neck flange FS1x in V4A and V2A.

Technical Data



Welding neck flange FS1x in V4A and V2A

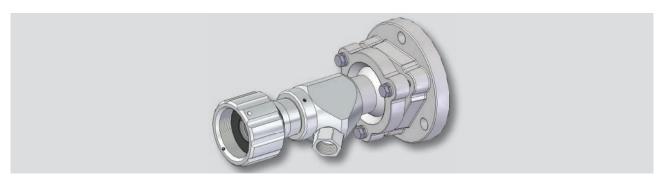
Possible application	V2A bei FS10 V4A bei FS11	Discouries Issuel	Soo dimensional drawing		
Item no.	659S3101 V4A 659S3102 V2A	Dimensions [mm]	See dimensional drawing		
Material	Stainless steel V4A/V2A	Weight [kg]	0,96		



Welding neck flange FS1x in V4A and V2A

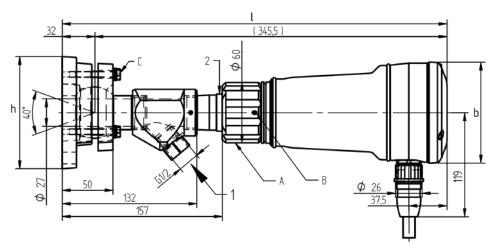
Screw Joint, Purge Air Connection, Ball-Socket Joint FV40-10 a. FV41-11.

Technical Data



Screw Joint, Purge Air Connection, Ball-Socket Joint FV40-10/11 (Stainless steel)

Possible application	FFS05, FFS07, F200K/V, F200K Ex, F300K	Dimensions [mm]	l	b	h
Item no.	659S1300 Alu	Holding device	195		110
item no.	659S1311 Stainless steel	with FFS05, FFS07	353	40	110
Material	Aluminium anodized, plastic,	with F200K,	372	80	110
······································	Stainless steel (V4A)/plastic	with F200K Ex	395	90	110
Air connection	Hexagonal fitting, G 1/2" i	with F300K	378	99	110
Weight [kg]	1,35 Alu 3,16 Stainless steel	Spare parts for Alu Spare parts for Stainless steel and Alu Spare parts for Stainless steel	659ES120 Locking disc applica 659ES121 Rubber rings (5 pcs.) 659ES123 Locking disc applica		pcs.)

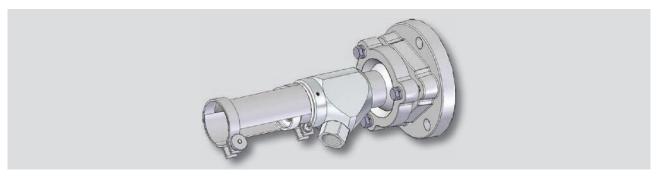


Dimensional drawing FV40-10 with flame scanner F300K

- 1 Purge air
- 2 Insulating part
- **A** Coupling nut tightened either by hand or by using SW 46
- **B** Securing device tightened by allen key for M3
- C Clamping of the ball-and-socket joint by using SW 10

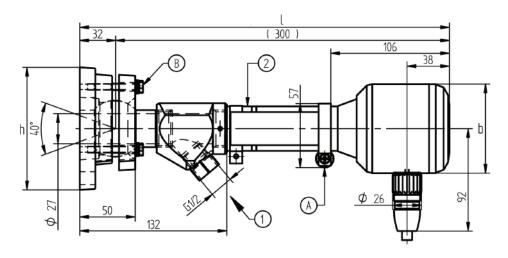
Holding Bracket with Purge Air Connection and Ball-and-Socket Joint FH40-10.

Technical Data



Holding Bracket with Purge Air Connection and Ball-and-Socket Joint FH40-10

Possible application	FFS05, FFS07, F200K	Dimensions [mm]	l	b	h	
Artikelnummer	659S1600	Holding device	225		110	
		with FFS05, FFS07	313	40	110	
Material	Aluminium anodized Zinc coated steel, plastic	with F200K	332	80	110	
Air connection	Hexagonal fitting, G 1/2" i	Weight [kg]	1,20			
		Spare parts	659ES120 Locking disc application 659ES151 Bracket, welded			

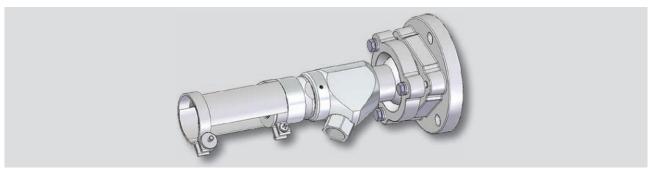


Dimensional drawing FH40-10 with flame scanner F200K

- 1 Purge air
- 2 Insulating part
- A Clamping screw tightened by hand
- **B** Clamping of the ball-and-socket joint by using SW 10

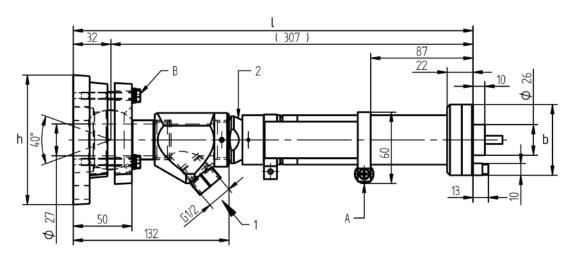
Holding Bracket with Purge Air Connection and Ball-and-Socket Joint (Ex) FH40-25.

Technical Data



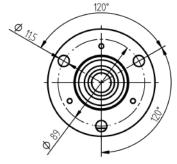
Holding Bracket with Purge Air Connection and Ball-and-Socket Joint (Ex) FH40-25

Possible application	FFS05 EX, FFS07 EX	Dimensions [mm]	l	b	h
		Holding device	250		110
Item no.	659S1601	with FFS05 Ex, FFS07 Ex	339	60	110
Material	Aluminium anodized, Zinc coated steel, plastic	Weight [kg]	1,25		
Air connection	Hexagonal fitting, G 1/2" i	Spare parts	659ES152 Bracket, welded		



Dimensional drawing FH40-25 with flame sensor FFS05 Ex, FFS07 Ex

- 1 Purge air
- 2 Insulating part
- A Clamping screw tightened by hand
- **B** Clamping of the ball-and-socket joint by using SW 10



View from front

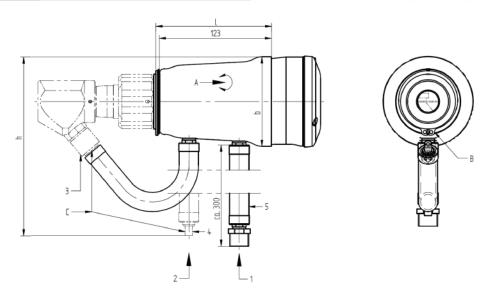
Cooling Air Housing FK30.

Technical Data



Cooling Air Housing FK30

Possible application	F300K	Dimensions [mm]	l	b	h	
		Holding device	126	99	250	
Item no.	659S1100	with F300K	180	99	250	
Material	Aluminium anodized, plastic	Weight [kg]	0,30			
Connection Inlet air Exhaust air	Adaptor G 1/2" o Locking coupling AG Type 26 G1/2"	Spare parts	659ES110 Washers (5 pcs.) 659ES111 Retaining rings (5 pcs.)			



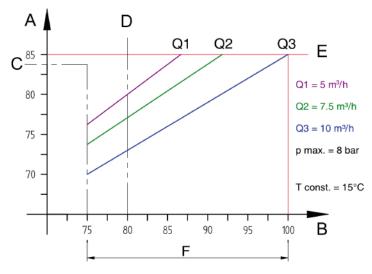
Dimensional drawing FK30 with flame scanner F300K

- 1 Inlet air with dismounted flame scanner p max. = 0,5 bar
- Exhaust / Serves as purge air for adjustment bracket FV30-10 / Holder with lock coupling type AG 26 - G 1/2 equip (will be supplied)!
- 3 Locking coupling
- 4 Socket
- 5 Connecting hose/Temperature range -40 °C ... +150 °C

- A Slide the cooling air housing slightly rotating on the outer 0-ring on F300K-housing
- B Lock the cooling air housing with washer and locking ring DIN 471 60 x 2, use to the groove in the device optics holder using a Circlip pliers.
- **C** Connect the locking coupling and socket

Subject to technical changes!

Performance of Cooling Air Housing FK30

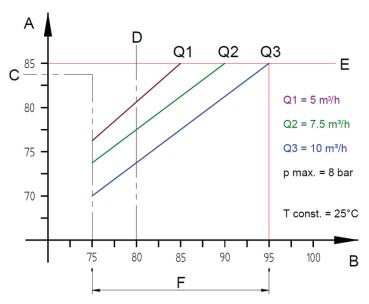


Performance of cooling air housing FK30 with cooling air temperature of 15 °C

Reading examples:

- Ambient temperature up to 75 °C don't require a cooling air housing.
- We recommend to use cooling air for temperatures higher than 75 °C. For temperatures higher than 80 °C.
- With cooling air temperature of 15 $^{\circ}$ C and ambient temperature up to 85 $^{\circ}$ C a volume flow of 5 m³/h is sufficient because the operating temperature of 85 $^{\circ}$ C is not exceeded.
- Up to 90 $^{\circ}$ C of ambient air you need compressed air of 7,5 m³/h. Up to 100 $^{\circ}$ C of ambient air you need compressed air of 10 m³/h.

- A = Operating temperature/Inner device temperature [°C]
- B = Ambient temperature [°C]
- C = Area without cooling duty
- D = Limit of cooling duty
- E = Highest permissible operating temperature
- F = Operating temperature range FK30



Performance of cooling air housing FK30 with cooling air temperature of 25 °C

A = Operating temperature/Inner device temperature [°C]

B = Ambient temperature [°C]

C = Area without cooling duty

D = Limit of cooling duty

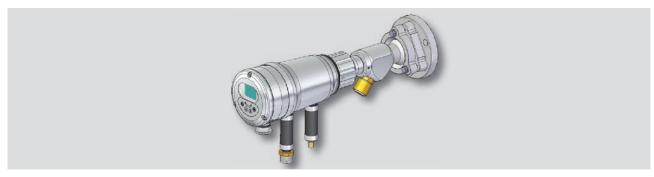
E = Highest permissible operating temperature

F = Operating temperature range FK30

Reading examples: see above

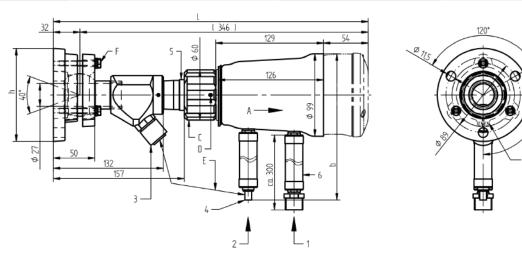
Cooling Air Housing with Purge Air Connection and Ball-and-Socket Joint FK41

Technical Data



Cooling Air Housing with Purge Air Connection and Ball-and-Socket Joint FK41

Possible application	F300K	Dimensions [mm] Holding device with F300K	l	b	h	
Item no.	659S1401		324 378	250 250	110 110	
Material	Aluminium anodized, plastic	Weight [kg]	1,65			
Connection Inlet air Exhaust air	Adaptor G 1/2" o Locking coupling AG Type 26 G1/2"	Spare parts	659ES110 Wa	659ES120 Locking disc applicatio 659ES110 Washers (5 pcs.) 659ES111 Retaining rings (5 pcs.) 659ES121 Rubber rings (5 pcs.)		



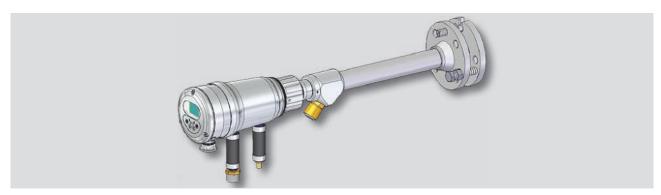
Dimensional drawing FK41 with flame scanner F300K

- 1 Inlet air
- 2 Exhaust air
- 3 Locking coupling
- 4 Socket
- 5 Insulating part
- **6** Connecting hose/Temperature range -40 °C ... +150 °C

- A Slide the cooling air housing slightly rotating on the outer O-ring on F300K-housing
- **B** Lock the cooling air housing with washer and locking ring DIN $471 60 \times 2$
- C Tighten coupling nut either by hand or by using SW 46
- D Tighten securing device by allen key for M3
- E Connect the locking coupling and socket
- F Lock the ball-and-socket joint by using SW 10

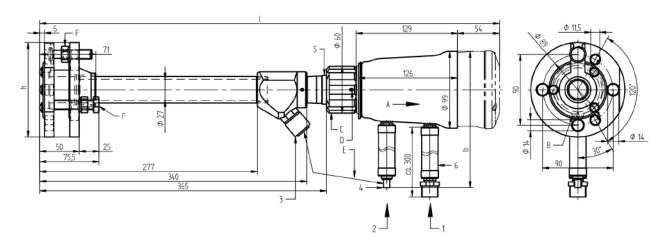
Cooling Air Housing with Purge Air Connection and FS35-FK46.

Technical Data



Cooling Air Housing with Purge Air Connection and FS35-FK46

Possible application	F300K	Dimensions [mm]	l	b	h		
Item no.	659S1400	Holding device with F300K	534 586	250 250	120 120		
Material	Aluminium anodized, plastic Aluminium coated zinc,	Weight [kg]	2,80	2,80			
Connection Inlet air Exhaust air	Adaptor G 1/2" o Locking coupling AG Type 26 G1/2"	Spare parts	659ES120 Lo 659ES110 Wa 659ES111 Re 659ES121 Ru	(5 pcs.)			



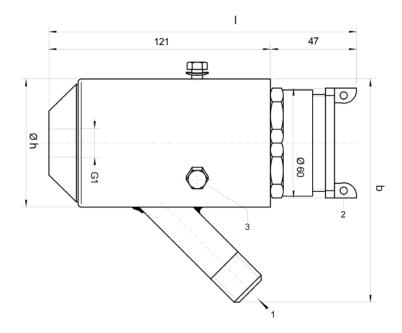
Dimensional drawing FK46 with flame scanner F300K

- 1 Inlet air
- 2 Exhaust air
- 3 Locking coupling
- 4 Socket
- 5 Insulating part
- **6** Connecting hose/Temperature range -40 °C ... +150 °C
- A Slide the cooling air housing slightly rotating on the outer O-ring on F300K-housing
- $\bf B$ Lock the cooling air housing with shim and locking ring DIN 471 60 x 2
- C Tighten coupling nut either by hand or by using SW 46
- **D** Tighten securing device by allen key for M3
- **E** Connect the locking coupling and socket
- **F** Lock the detachable bracket by using SW19

Cooling Air Housing FS30.

Technical Data

Danible andication	FFCOF FFCOF F., FFCO7 FFCO7 F.	Dimensions [mm]	l	b	h	
Possible application FFS05, FFS05 Ex FFS07 Item no. 659R0109	FFS05, FFS05 Ex FFS07, FFS07 Ex	Holding device	168	122	70	
	550D0400	with FFS05, FFS07	205	122	70	
	659R0109	with FFS05 Ex, FFS07 Ex	215	122	70	
Material	Zink coated steel	Weight [kg]	1,24			
Air connection	Tube stub G 1/2" a	Spare parts	659E0107 Sealing washer 659E0109 Screwing PG42 with sealing washer			



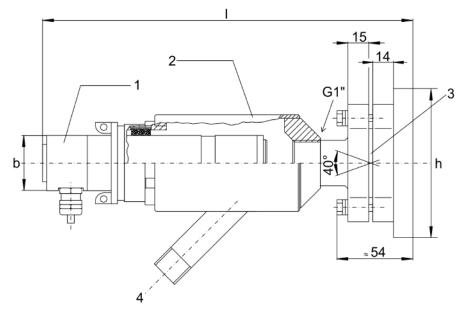
Dimensional drawing of Holding Device FS30

- 1 Inlet air
- 2 PG42 gland with sealing ring
- 3 Hexagon clamping screw polyamide M6 X 16

Adjustable Holding Device FS41.

Technical Data

Possible application	FFS05, FFS05 EX FFS07, FFS07 EX	Dimensions [mm]	l	b	h
Item no.	659R0107	Holding device	220		110
		with FFS05, FFS07	265	40	110
Material	Aluminium anodized, Zink coated steel	with FFS05 Ex, FFS07 Ex	275	60	110
Air connection	Tube stub G 1/2" a	659E0107 Sealing washer			
Weight [kg]	2,08	Spare parts 659E0109 Screwing PG with sealing			



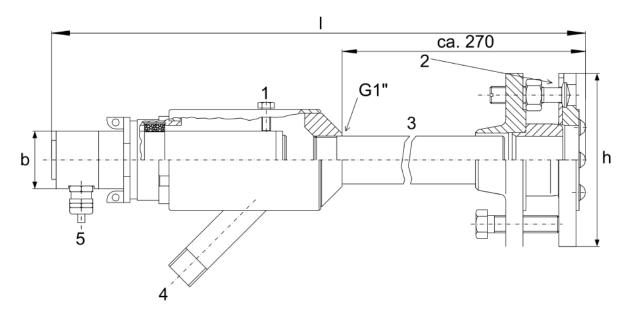
Dimensional drawing FS41 with flame sensor FFS05, FFS07

- 1 Flame sensor FFS05, FFS07
- 2 Cooling air housing with holding fixture
- 3 Ball-and-socket joint
- 4 Purge air connection

Cooling Air Housing with Holding Device, Adjustable and Detachable FS36.

Technical Data

Possible application	FFS05, FFS05 EX FFS07, FFS07 EX	Dimensions [mm]	l	b	h
Item no.	659R6099	Holding device	420		120
		with FFS05, FFS07	465	40	120
Material	Zink coated steel	with FFS05 Ex, FFS07 Ex	475	60	120
Air connection	Tube stub G 1/2" a	Cooks nexts		ealing washer crewing PG42	
Weight [kg]	3,24	Spare parts	with sealing washer 659R6098 Bracket, detachable		



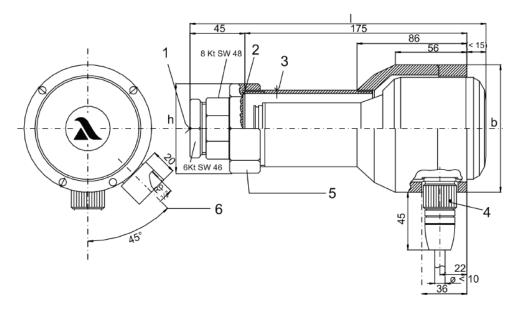
Dimensional drawing FS36 with flame sensor FFS05, FFS07

- Retaining screw
- 2 Flange mounting device adjustable and detachable
- 3 Spacer tube
- 4 Purge air connection
- 5 Cable connection flame sensor

Cooling Air Housing FS50.

Technical Data

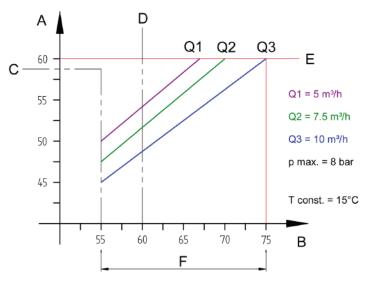
Possible application	F200K	Dimensions [mm]	l	b	h
Item no.	659S6109	Holding device	225	100	62
Material	Aluminium anodized,	with F200K	247	100	62
	Zink coated steel	Weight [kg]	2.08		
Air connection	Adaptor G 1/2" i	116.6.11.161	_,00		



Dimensional drawing FS50 with flame scanner F200K

- 1 Tube connection (boiler) Rp1"
- 2 Sealing washer 56 x 42 x 2 mm
- 3 3x Back-up screw M6, plastic insulated fitting
- 4 Cable connection with screw cap
- 5 Detachable connection 8 Kt SW 66 (lens cleaning)
- **6** Cooling air connection

Performance of cooling air housing FK50



Performance of cooling air housing FK50

- A = Operating temperature/Inner device temperature [°C]
- B = Ambient temperature [°C]
- C = Area without cooling duty
- D = Limit of cooling duty
- E = Highest permissible operating temperature
- F = Operating temperature range FK50

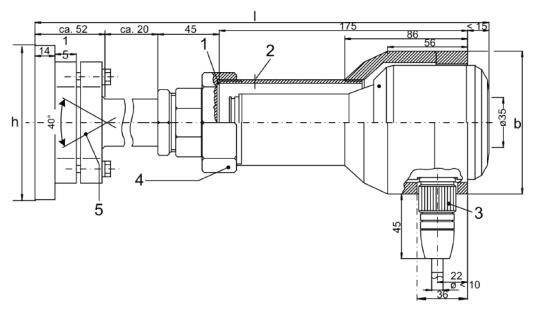
Reading examples:

- Ambient temperature up to 55 °C don't require a cooling air housing.
- We recommend to use cooling air for temperatures higher than 55 °C. For temperatures higher than 60 °C.
- With cooling air temperature of 15 $^{\circ}$ C and ambient temperature up to 65 $^{\circ}$ C a volume flow of 5 $^{\circ}$ C is not exceeded.
- Up to 70 $^{\circ}$ C of ambient air you need compressed air of 7,5 $^{\circ}$ /h. Up to 75 $^{\circ}$ C of ambient air you need compressed air of 10 m3/h.

Cooling Air Housing with Ball-and-Socket Joint FS51.

Technical Data

Possible application	F200K	Dimensions [mm]	l	b	h
Item no.	659S6107	Holding device	290	100	110
Material	Aluminium anodized, Zink coated steel	with F200K	302	100	110
Air connection	Adaptor G 1/2" i	Weight [kg]	2,13		



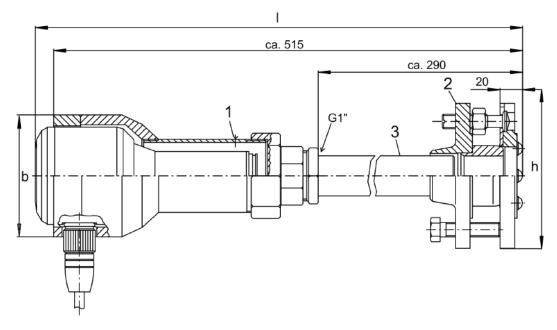
Dimensional drawing FS51 with flame scanner F200K

- 1 Sealing washer 56 x 42 x 2 mm
- 2 3 x Back-up screws M6, plastic insulated fitting
- 3 Cable connection with screw cap
- 4 Detachable connection 8 Kt SW 66 (lens cleaning)
- 5 Ball-and-socket joint

Cooling Air Housing with Holding Device, Adjustable and Detachable FS56.

Technical Data

Possible application	F200K	Dimensions [mm]	l	b	h
Item no.	659S6099	Holding device	495	100	120
Material	Aluminium anodized,	with F200K	507	100	120
Material	Zink coated steel	Weight [kg]	1,29		
Air connection	Adaptor G 1/2" i	Spare parts	659R6098 Bracket, detachable		nable



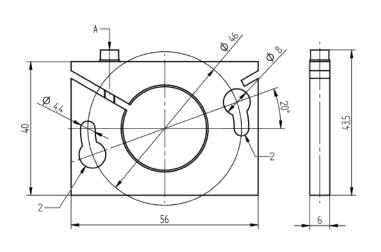
Dimensional drawing FS56 with flame scanner F200K

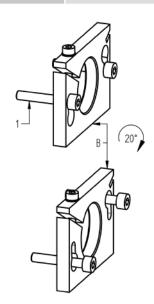
- 1 3 x Back-up screws M6, plastic insulated fitting
- 2 Flange holding device adjustable and detachable
- 3 Distance sleeve

Holding Device FS60-00.

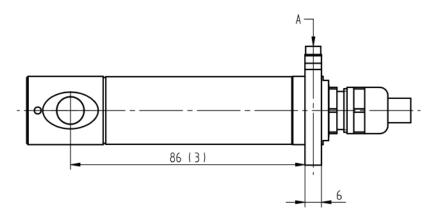
Technical Data

Possible application	FFS06, FFS08	Dimensions [mm]	l	b	h
Item no.	659S0500	Holding device		56	40
Material	Aluminium anodized	with FFS06, FFS08	133	56	40
		Weight [kg]	0,05		





Dimensional drawing FS60-00 for flame sensor FFS06, FFS08



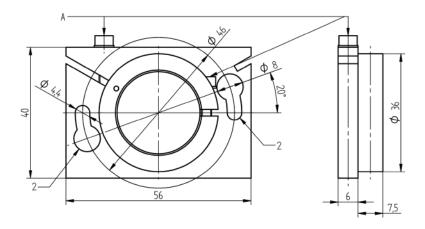
Dimensional drawing FS60-00 with flame sensor FFS06, FFS08

- A Clamping screw tightened by allen key for M3
- \boldsymbol{B} $\,$ Disassembly by removing the screws M4 and 20 $^{\circ}$ rotation of the rotary plate
- 1 M4 fixing screws (not supplied) Nominal length depends on assembly,
- 2 Holes for mounting screws ISO4762 M4 ... (not supplied), nominal length depends on assembly
- 3 max. Depth of the flame sensor FFS08, with extension L max. = 166mm

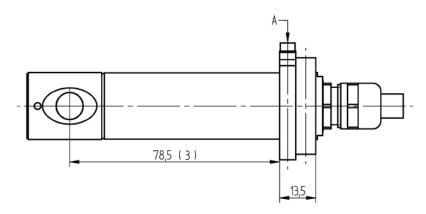
Holding Device FS60-10.

Technical Data

Possible application	FFS06, FFS08	Dimensions [mm]	l	b	h
Item no.	659S0510	Holding device		56	40
Material	Aluminium anodized	with FFS06, FFS08	133	56	40
		Weight [kg]	0,05		



Dimensional drawing FS60-10 for flame sensor FFS06, FFS08



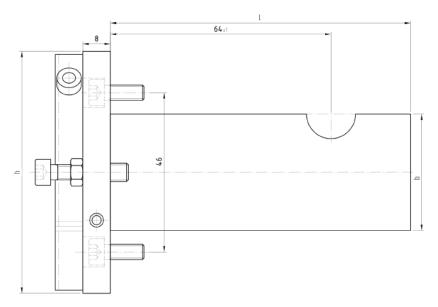
Dimensional drawing FS60-10 with flame sensor FFS06, FFS08

- A Clamping screw tightened by allen key for M3
- 2 Holes for mounting screws ISO4762 M4 ... (not supplied), nominal length depends on assembly
- 3 max. Depth of the flame sensor FFS08, with extension L max. = 158,5mm

Cooling Air Housing FS65.

Technical Data

Possible application	FFS06, FFS08	Dimensions [mm]	l	b	h
Item no.	659R3109	Holding device		34	70
Material	Aluminium anodized, plastic, Zink coated steel	with FFS06, FFS08	87	34	70
Air connection	GLRZ-1/8-PK6B (±90° pivotable)	Weight [kg]	0,33		



Dimensional drawing FS65 for flame sensor FFS06, FFS08

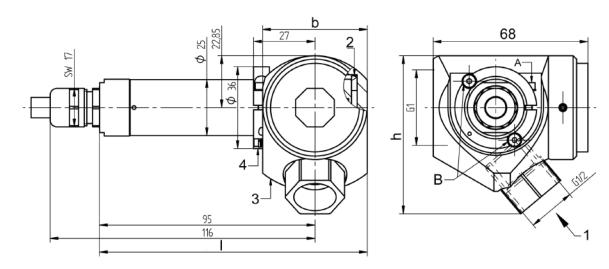
Holding Device FH80-00.

Technical Data



Holding Device FH80-00

Possible application	FFS06, FFS08	Dimensions [mm]	l	b	h
Item no.	659S2100	Holding device		46	70
Material	Aluminium anodized, plastic	with FFS06, FFS08	118	46	70
Air connection	Hexagonal fitting G 1/2" i	Weight [kg]	0,5		



Dimensional drawing FH80-00 with flame sensor FFS06, FFS08

- 1 Purge air
- 2 Insulating part / Flame sensor housing is also isolated
- 3 Purge Air Connection
- 4 Setting ring
- A Flame sensor in Setting ring tightened by allen key for M3
- **B** Setting ring with allen key for M3

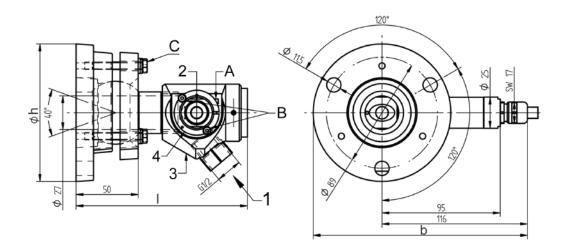
Holding Device FH80-10.

Technical Data



Holding Device FH80-10

Possible application	FFS06, FFS08	Dimensions [mm]	l	b	h
Item no.	659S2110	Holding device	137		110
Material	Aluminium anodized, plastic	with FFS06, FFS08	137	171	110
Air connection	Hexagonal fitting G 1/2" i	Weight [kg]	1,35		



Dimensional drawing FH80-10 with flame sensor FFS06, FFS08

- 1 Purge air
- 2 Insulating part / Flame sensor housing is also isolated
- **3** Purge Air Connection
- 4 Setting ring
- A Flame sensor in Setting ring tightened by allen key for M3
- **B** Setting ring with allen key for M3
- C Clamping of the ball-and-socket joint by using SW 10.

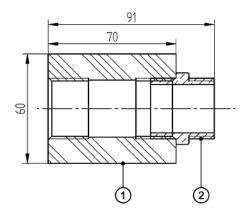
Insulation part for Flame Scanner Holding Device.

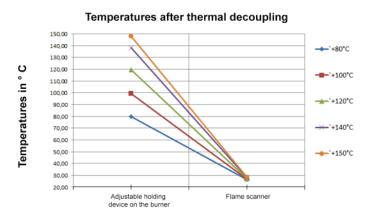
Technical Data



Insulation part for Flame Scanner Holding Device

Possible application	For thermal insulation of the flame scanner F300K, F200K and FFS07		l 70	b 	d 60
Item no.	659S3900	Dimensions [mm]			
Material	Brass, plastic (PPS)				
Connection	G1"IG / G1"AG	Weight [kg]	0,3		





Dimensional drawing Insulation part

- I Insulation part G1"IG / G1"IG
- 2 Double nipple DN25, 1"G-AG / 1"G-AG, brass

Temperatures after thermal decoupling

Connector Cable Protective Tube.

Technical Data



Connector cable protective tube

Possible application	For protection of the LAMTEC Standard- and	Dimensions	d	l
	Silikoncabel F300K, F200K		18/21 mm	3/5/10 m
Item no.	659N9900 length 3 m 659N9901 length 5 m 659N9902 length 10 m	Features	UV-resistant, Ozon-resistant, weatherproof, temperature-resistant	
Material	inner tube: light rubberized cord-web hose cover: SBR-rubber, black		-35°C bis +100°C	
		Connector	Stainless st	eel hose clip



Details connector cable protective tube

- 1 LAMTEC standard cable additional with shrinking hose at the cable ends
- 2 Cable protective tube / outer diameter 21mm
- 3 Wrench size 7
- 4 Overlap of metal sheet press on outer diameter!

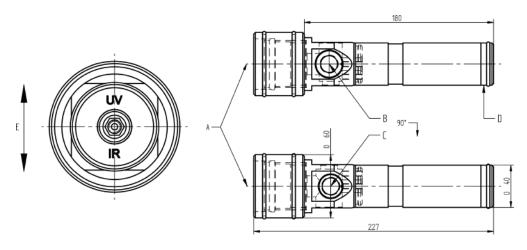
Flame Scanner Testing Device FFP30.

Technical Data



Flame Scanner Testing Device FFP30

Possible application	Flame simulation for IR- und UV Flame scanner	Dimensions	See dimensional drawing
Voltage supply	Alkaline battery 9 V, 500 mAh, Automatic switch-off after approx. 5 min	Material	Aluminium
Frequency range	Flame simulation in 4 frequency ranges	Weight [kg]	0,52
Manakara	Threaded receptacle for F200K, F300K, Plug-in receptacle for FFS07, FFS08, F200K	Battery life	approx. 3 years
Montage		Ambient temperature	-10 +60 °C



Dimensional drawing Flame Scanner Testing Device FFP30.

A, B, C Threaded receptacle for F200K, F300K Plug-in receptacle for FFS07, FFS08, F200K

D Changing battery (9 V, 500 mA - turn left to open housing)

E Toggle switch

Notes.			

Notes.			

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