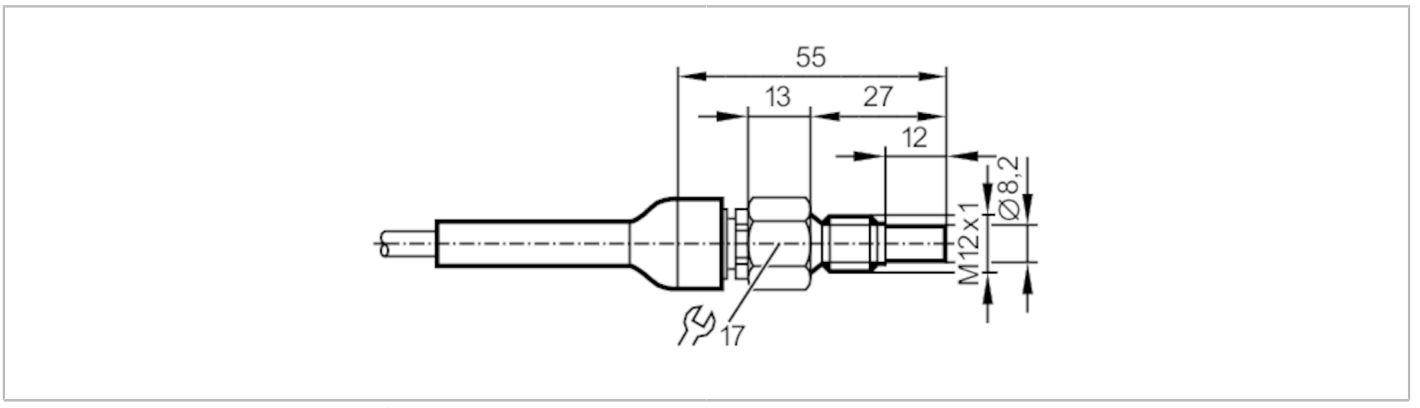
SF111A

Flow sensor for connection to an evaluation unit

SFM12ADB/1/2G /6M



Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection M12 x 1 external thread	
Application			
Media		Liquids; Gases	
Medium temperature	[°C]	-20...60	
Pressure rating		300 bar	30 MPa
Liquids			
Medium temperature	[°C]	-20...60	
Gases			
Medium temperature	[°C]	-20...60	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	

SF111A

Flow sensor for connection to an evaluation unit

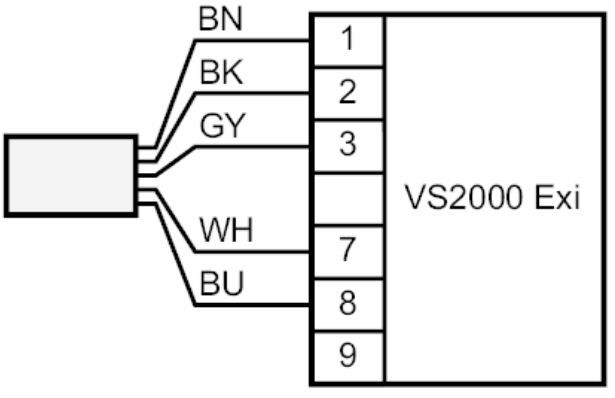
SFM12ADB/1/2G /6M

Operating conditions			
Ambient temperature	[°C]		-20...60
Protection			IP 67
Tests / approvals			
Approval			DMT 03 ATEX E 090 X; TIIS TC17434; IECEx BVS 11.0017 X
ATEX marking			II 1/2G Ex ia IIC T4 Ga/Gb
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]		8648
Mechanical data			
Weight	[g]		354.5
Housing			tubular
Dimensions	[mm]		Ø 19.6 / L = 105
Material			stainless steel (1.4404 / 316L)
Materials (wetted parts)			stainless steel (1.4404 / 316L)
Process connection			threaded connection M12 x 1 external thread
Probe diameter	[mm]		8.2
Installation length EL	[mm]		27
Remarks			
Remarks			In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar). For pressures outside this range use must be assessed and approved by the user. Adhere to the operating instructions and the type test certificate.
Pack quantity			1 pcs.

Electrical connection

Cable: 6 m, TPE-S; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

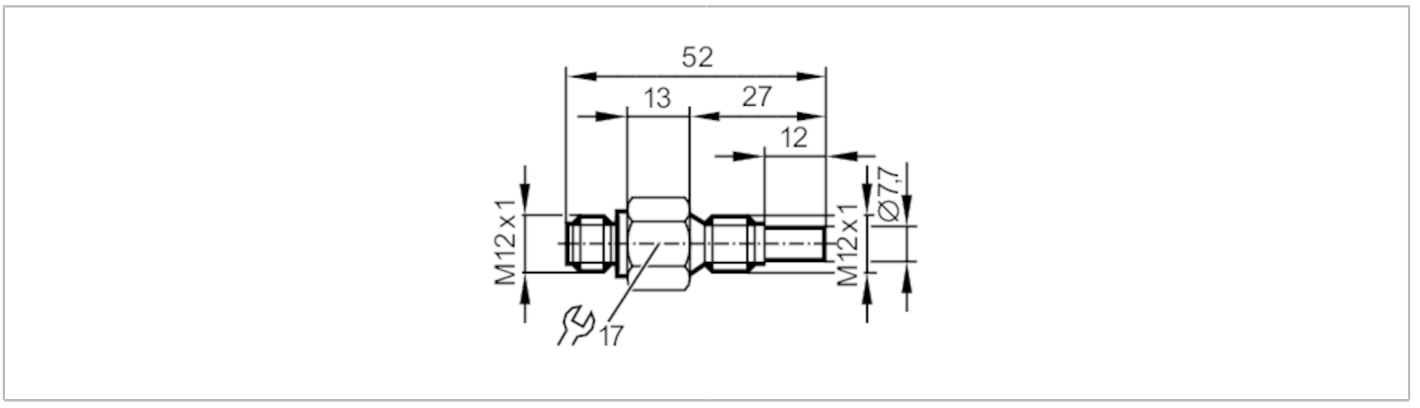


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF120A

Flow sensor for connection to an evaluation unit

SFM12ABB/US/2G



Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection M12 x 1 external thread	
Application			
Media		Liquids; Gases	
Medium temperature	[°C]	-20...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	-20...70	
Gases			
Medium temperature	[°C]	-20...70	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	

SF120A

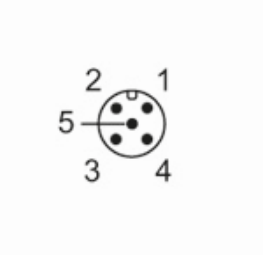
Flow sensor for connection to an evaluation unit

SFM12ABB/US/2G

Operating conditions			
Ambient temperature	[°C]	-20...70	
Protection		IP 67	
Tests / approvals			
Approval		DMT 03 ATEX E091; IECEX BVS 06.0007	
ATEX marking		II 2G Ex ia IIC T4 Gb	
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	
Safety classification			
Max. internal capacitance	[nF]	0.4	
Max. internal inductance	[µH]	2	
Temperature class		T4	
Mechanical data			
Weight	[g]	111.5	
Housing		tubular	
Material		stainless steel (1.4404 / 316L)	
Materials (wetted parts)		stainless steel (1.4404 / 316L)	
Process connection		threaded connection M12 x 1 external thread	
Probe diameter	[mm]	7.7	
Installation length EL	[mm]	27	
Remarks			
Remarks		In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar). For pressures outside this range use must be assessed and approved by the user. Adhere to the operating instructions and the type test certificate.	
Pack quantity		1 pcs.	

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m

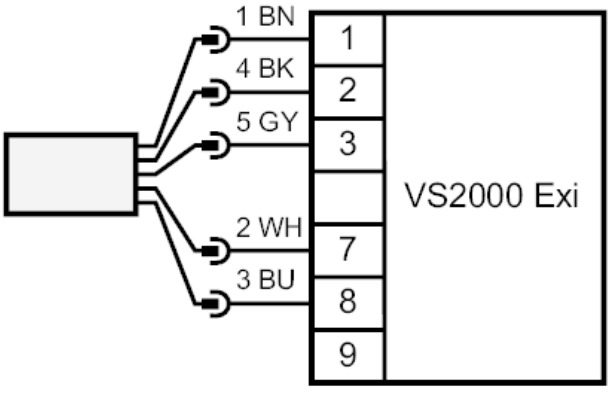


SF120A

Flow sensor for connection to an evaluation unit

SFM12ABB/US/2G

Connection

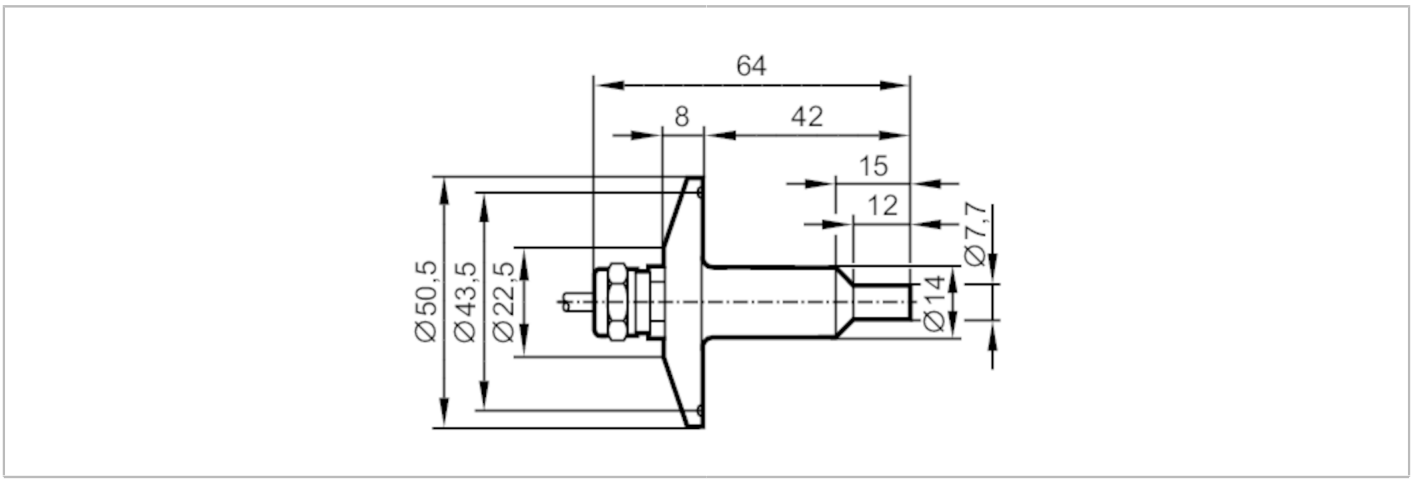


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF0516

Flow sensor for connection to an evaluation unit

SFG14ZBB/6M



Product characteristics			
Probe length L	[mm]	42	
Process connection		Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852)	
Application			
Application		high temperature; hygienic applications	
Pressure rating		30 bar	3 MPa
Liquids			
Application		high temperature; hygienic applications	
Medium temperature	[°C]	0...120	
Gases			
Medium temperature	[°C]	0...100	
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	42	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	

SF0516

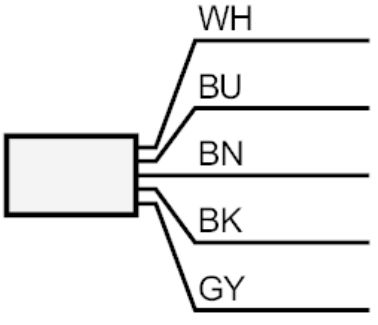
Flow sensor for connection to an evaluation unit

SFG14ZBB/6M

Gases			
Response time	[s]	1...10	
Operating conditions			
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	
Mechanical data			
Weight	[g]	485	
Housing		tubular	
Dimensions	[mm]	Ø 14 / L = 64	
Material		stainless steel (1.4571/316Ti)	
Materials (wetted parts)		stainless steel (1.4571/316Ti)	
Process connection		Clamp DN25...DN40 (1...1,5") DIN 32676 (ISO 2852)	
Probe diameter	[mm]	7.7	
Installation length EL	[mm]	42	
Remarks			
Remarks		The 3-A qualification is only valid if adapters with 3-A qualification are used for installation.	
Pack quantity		1 pcs.	
Electrical connection			

Cable: 6 m, silicone; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

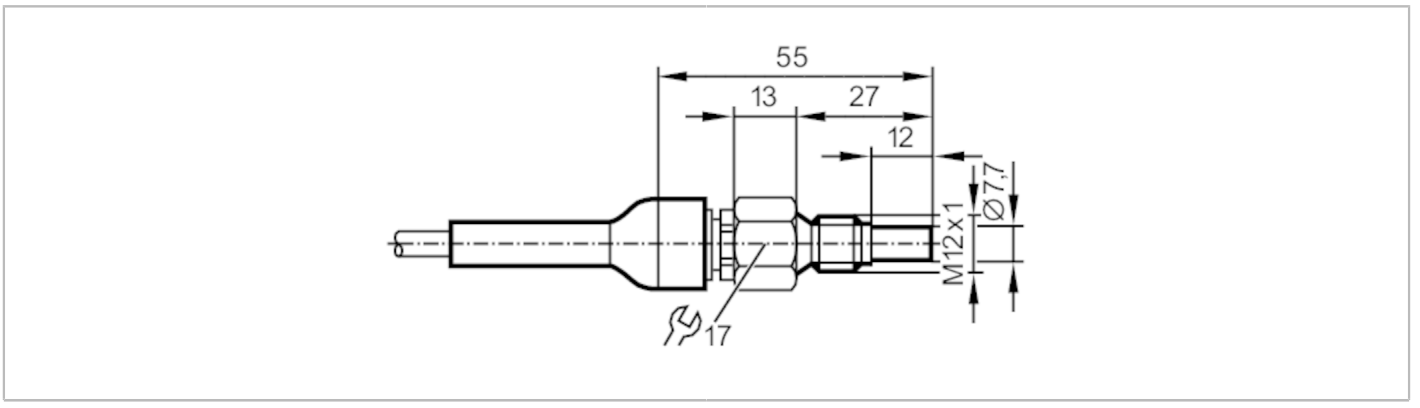


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF121A

Flow sensor for connection to an evaluation unit

SFM12ABB/2G /6M



Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection M12 x 1 external thread	
Application			
Media		Liquids; Gases	
Medium temperature	[°C]	-20...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	-20...70	
Gases			
Medium temperature	[°C]	-20...70	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	

SF121A

Flow sensor for connection to an evaluation unit

SFM12ABB/2G /6M

Operating conditions			
Ambient temperature	[°C]	-20...70	
Protection		IP 67	
Tests / approvals			
Approval		DMT 03 ATEX E091; IECEX BVS 06.0007	
ATEX marking		II 2G Ex ia IIC T4 Gb	
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	
Safety classification			
Max. internal capacitance	[nF]	1.2	
Max. internal inductance	[µH]	6	
Temperature class		T4	
Mechanical data			
Weight	[g]	346	
Housing		tubular	
Material		stainless steel (1.4404 / 316L)	
Materials (wetted parts)		stainless steel (1.4404 / 316L)	
Process connection		threaded connection M12 x 1 external thread	
Probe diameter	[mm]	7.7	
Installation length EL	[mm]	27	
Remarks			
Remarks		In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar). For pressures outside this range use must be assessed and approved by the user. Adhere to the operating instructions and the type test certificate.	
Pack quantity		1 pcs.	

SF121A

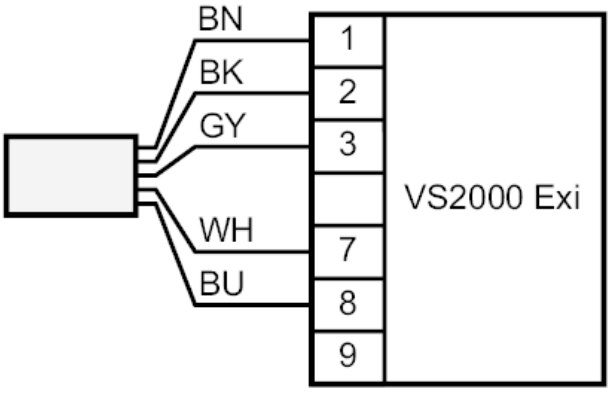
Flow sensor for connection to an evaluation unit

SFM12ABB/2G /6M

Electrical connection

Cable: 6 m, TPE-S; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

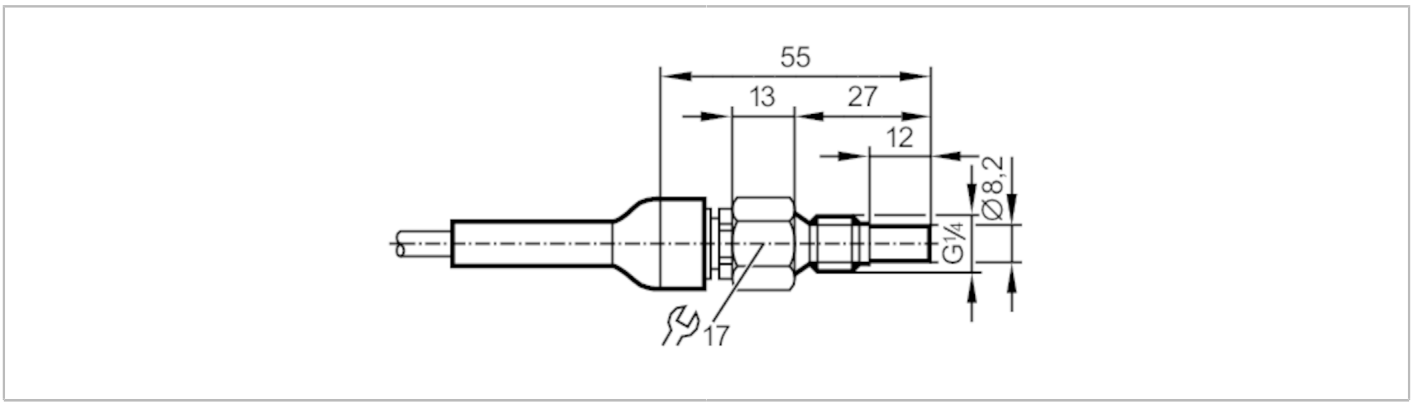


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF211A

Flow sensor for connection to an evaluation unit

SFR14ADB/1/2G /6M



Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection G 1/4 external thread	
Application			
Media		Liquids; Gases	
Medium temperature	[°C]	-20...60	
Pressure rating		300 bar	30 MPa
Liquids			
Medium temperature	[°C]	-20...60	
Gases			
Medium temperature	[°C]	-20...60	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	

SF211A

Flow sensor for connection to an evaluation unit

SFR14ADB/1/2G /6M

Operating conditions			
Ambient temperature	[°C]	-20...60	
Storage temperature	[°C]	-20...85	
Protection		IP 67	
Tests / approvals			
Approval		DMT 03 ATEX E 090 X; TIIS TC17434; IECEx BVS 11.0017 X	
ATEX marking		II 1/2G Ex ia IIC T4 Ga/Gb	
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	
Safety classification			
Max. internal capacitance	[nF]	1.2	
Max. internal inductance	[µH]	6	
Temperature class		T4	
Mechanical data			
Weight	[g]	356.5	
Housing		tubular	
Material		stainless steel (1.4404 / 316L)	
Materials (wetted parts)		stainless steel (1.4404 / 316L)	
Process connection		threaded connection G 1/4 external thread	
Probe diameter	[mm]	8.2	
Installation length EL	[mm]	27	
Remarks			
Remarks		In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar). For pressures outside this range use must be assessed and approved by the user. Adhere to the operating instructions and the type test certificate.	
Pack quantity		1 pcs.	

SF211A

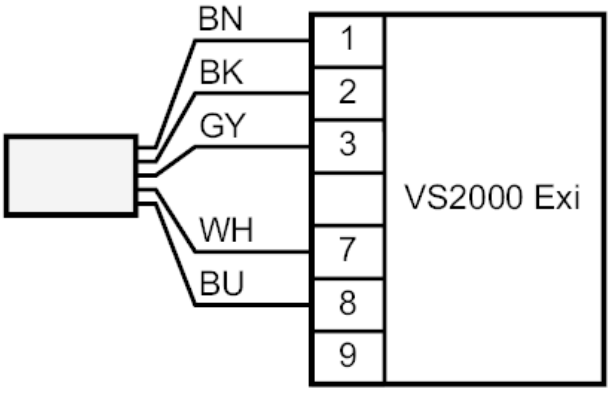
Flow sensor for connection to an evaluation unit

SFR14ADB/1/2G /6M

Electrical connection

Cable: 6 m, TPE-S; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

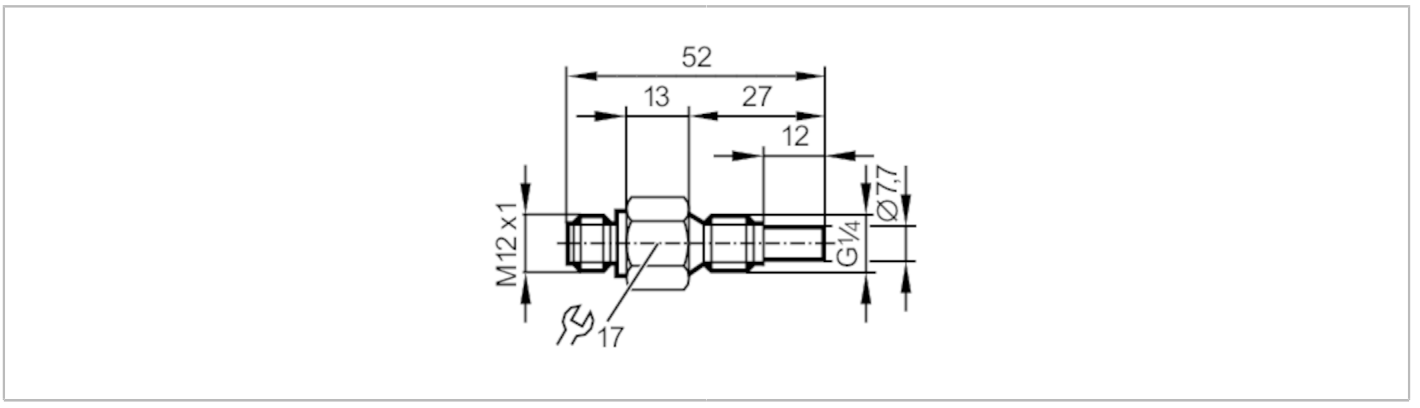


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF220A

Flow sensor for connection to an evaluation unit

SFR14ABB/US/2G



Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection G 1/4 external thread	
Application			
Media		Liquids; Gases	
Medium temperature	[°C]	-20...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	-20...70	
Gases			
Medium temperature	[°C]	-20...70	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	

SF220A

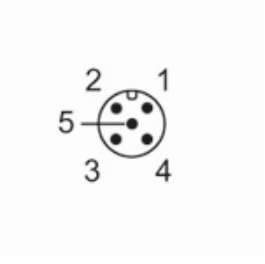
Flow sensor for connection to an evaluation unit

SFR14ABB/US/2G

Operating conditions			
Ambient temperature	[°C]		-20...70
Protection			IP 67
Tests / approvals			
Approval			DMT 03 ATEX E091; IECEX BVS 06.0007
ATEX marking			II 2G Ex ia IIC T4 Gb
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]		8648
Safety classification			
Max. internal capacitance	[nF]		0.4
Max. internal inductance	[µH]		2
Temperature class			T4
Mechanical data			
Weight	[g]		113
Housing			tubular
Material			stainless steel (1.4404 / 316L)
Materials (wetted parts)			stainless steel (1.4404 / 316L)
Process connection			threaded connection G 1/4 external thread
Probe diameter	[mm]		7.7
Installation length EL	[mm]		27
Remarks			
Remarks			In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar). For pressures outside this range use must be assessed and approved by the user. Adhere to the operating instructions and the type test certificate.
Pack quantity			1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m

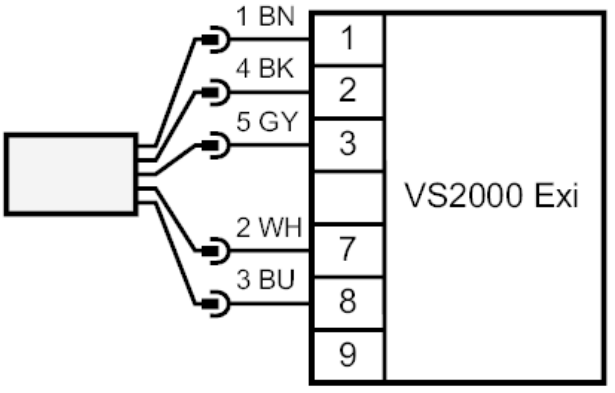


SF220A

Flow sensor for connection to an evaluation unit

SFR14ABB/US/2G

Connection

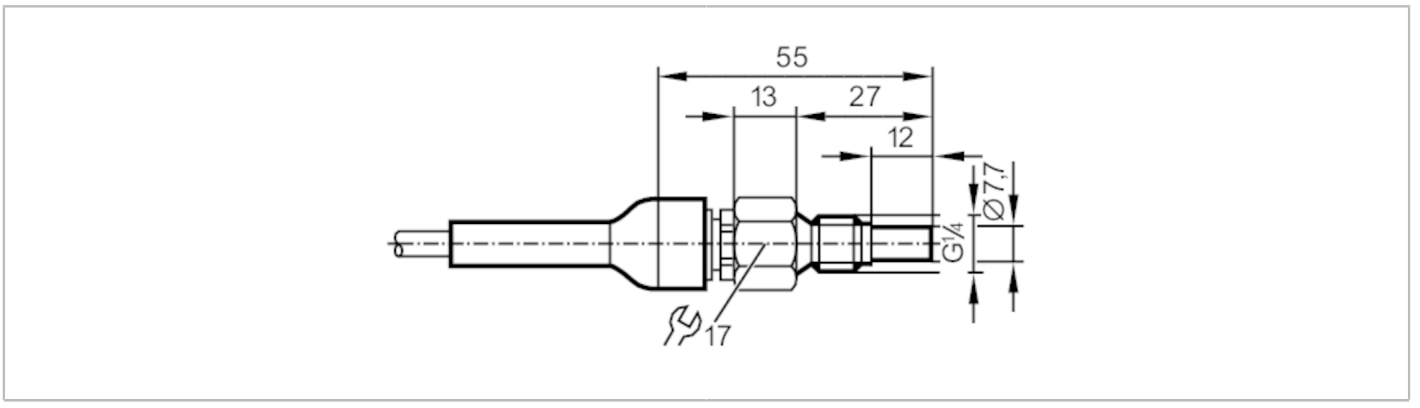


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF221A

Flow sensor for connection to an evaluation unit

SFR14ABB/2G /6M



Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection G 1/4 external thread	
Application			
Media		Liquids; Gases	
Medium temperature	[°C]	-20...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	-20...70	
Gases			
Medium temperature	[°C]	-20...70	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	

SF221A

Flow sensor for connection to an evaluation unit

SFR14ABB/2G /6M

Operating conditions			
Ambient temperature	[°C]	-20...70	
Protection		IP 67	
Tests / approvals			
Approval		DMT 03 ATEX E091; IECEX BVS 06.0007	
ATEX marking		II 2G Ex ia IIC T4 Gb	
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	
Safety classification			
Max. internal capacitance	[nF]	1.2	
Max. internal inductance	[µH]	6	
Temperature class		T4	
Mechanical data			
Weight	[g]	350	
Housing		tubular	
Material		stainless steel (1.4404 / 316L)	
Materials (wetted parts)		stainless steel (1.4404 / 316L)	
Process connection		threaded connection G 1/4 external thread	
Probe diameter	[mm]	7.7	
Installation length EL	[mm]	27	
Remarks			
Remarks		In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar).	
		For pressures outside this range use must be assessed and approved by the user.	
		Adhere to the operating instructions and the type test certificate.	
Pack quantity		1 pcs.	

SF221A

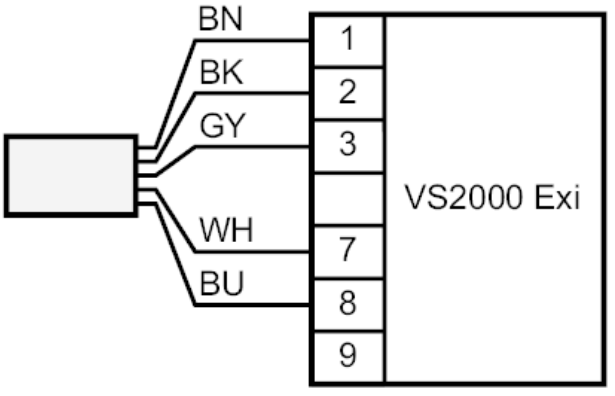
Flow sensor for connection to an evaluation unit

SFR14ABB/2G /6M

Electrical connection

Cable: 6 m, TPE-S; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

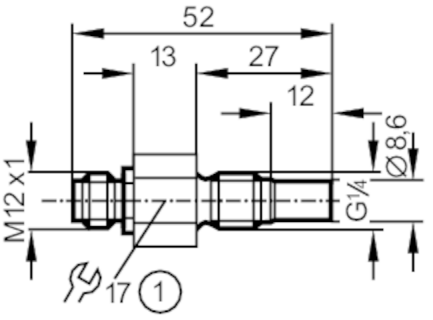


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF2405

Flow sensor for connection to an evaluation unit

SFR14XBK/US-100



1 tightening torque max. 8 Nm

Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection G 1/4 external thread	
Application			
Media		Liquids; aggressive media	
Medium temperature	[°C]	5...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	5...70	
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...60	
Greatest sensitivity	[cm/s]	3...40	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	7	
Reaction times			
Response time	[s]	2...20	
Liquids			
Response time	[s]	2...20	
Operating conditions			
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	

SF2405

Flow sensor for connection to an evaluation unit

SFR14XBK/US-100

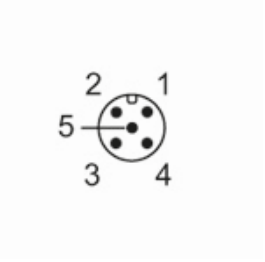
Mechanical data		
Weight	[g]	41.5
Housing		tubular
Material		ceramics (99.7 % Al2O3)
Materials (wetted parts)		ceramics (99.7 % Al2O3)
Process connection		threaded connection G 1/4 external thread
Probe diameter	[mm]	8.6
Installation length EL	[mm]	27

Accessories	
Items supplied	sealings: 1, PTFE

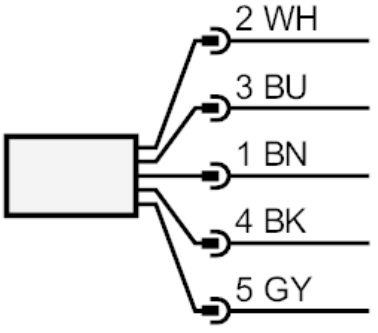
Remarks	
Remarks	For sealing use the supplied PTFE packing washer.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m



Connection

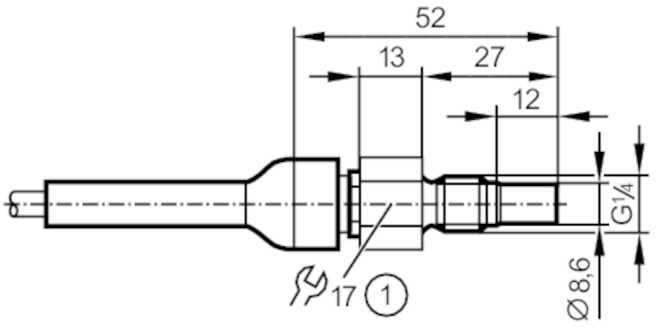


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF2410

Flow sensor for connection to an evaluation unit

SFR14XBK/6M



1 tightening torque max. 8 Nm

Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection G 1/4 external thread	
Application			
Media		Liquids; aggressive media	
Medium temperature	[°C]	5...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	5...70	
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...60	
Greatest sensitivity	[cm/s]	3...40	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	7	
Reaction times			
Response time	[s]	2...20	
Liquids			
Response time	[s]	2...20	
Operating conditions			
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	

SF2410

Flow sensor for connection to an evaluation unit

SFR14XBK/6M

Mechanical data		
Weight	[g]	379
Housing		tubular
Material		ceramics (99.7 % Al2O3)
Materials (wetted parts)		ceramics (99.7 % Al2O3)
Process connection		threaded connection G 1/4 external thread
Probe diameter	[mm]	8.6
Installation length EL	[mm]	27

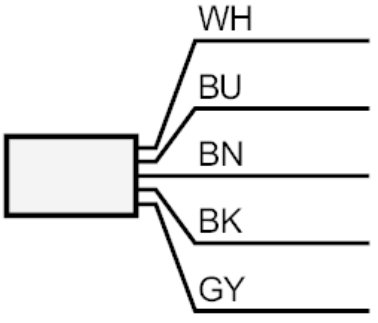
Accessories	
Items supplied	sealings: 1, PTFE

Remarks	
Remarks	For sealing use the supplied PTFE packing washer.
Pack quantity	1 pcs.

Electrical connection

Cable: 6 m, PUR; Maximum cable length: 100 m; 5 x 0.34 mm², PVC

Connection

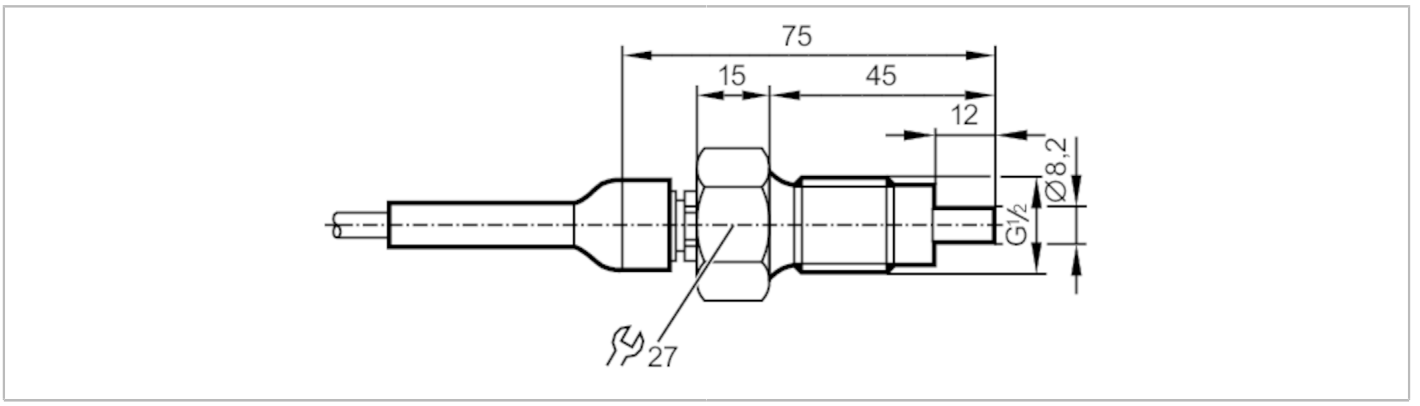


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF311A

Flow sensor for connection to an evaluation unit

SFR12ADB/1/2G /6M



Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection G 1/2 external thread	
Application			
Media		Liquids; Gases	
Medium temperature	[°C]	-20...60	
Pressure rating		300 bar	30 MPa
Liquids			
Medium temperature	[°C]	-20...60	
Gases			
Medium temperature	[°C]	-20...60	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	

SF311A

Flow sensor for connection to an evaluation unit

SFR12ADB/1/2G /6M

Operating conditions			
Ambient temperature	[°C]	-20...60	
Storage temperature	[°C]	-20...85	
Protection		IP 67	
Tests / approvals			
Approval		DMT 03 ATEX E 090 X; TIIS TC17434; IECEx BVS 11.0017 X	
ATEX marking		II 1/2G Ex ia IIC T4 Ga/Gb	
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	
Safety classification			
Max. internal capacitance	[nF]	1.2	
Max. internal inductance	[µH]	6	
Temperature class		T4	
Mechanical data			
Weight	[g]	467	
Housing		tubular	
Material		stainless steel (1.4404 / 316L)	
Materials (wetted parts)		stainless steel (1.4404 / 316L)	
Process connection		threaded connection G 1/2 external thread	
Probe diameter	[mm]	8.2	
Installation length EL	[mm]	45	
Remarks			
Remarks		In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar). For pressures outside this range use must be assessed and approved by the user. Adhere to the operating instructions and the type test certificate.	
Pack quantity		1 pcs.	

SF311A

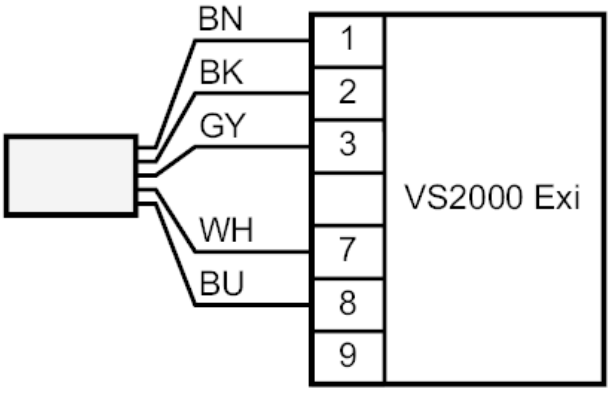
Flow sensor for connection to an evaluation unit

SFR12ADB/1/2G /6M

Electrical connection

Cable: 6 m, TPE-S; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

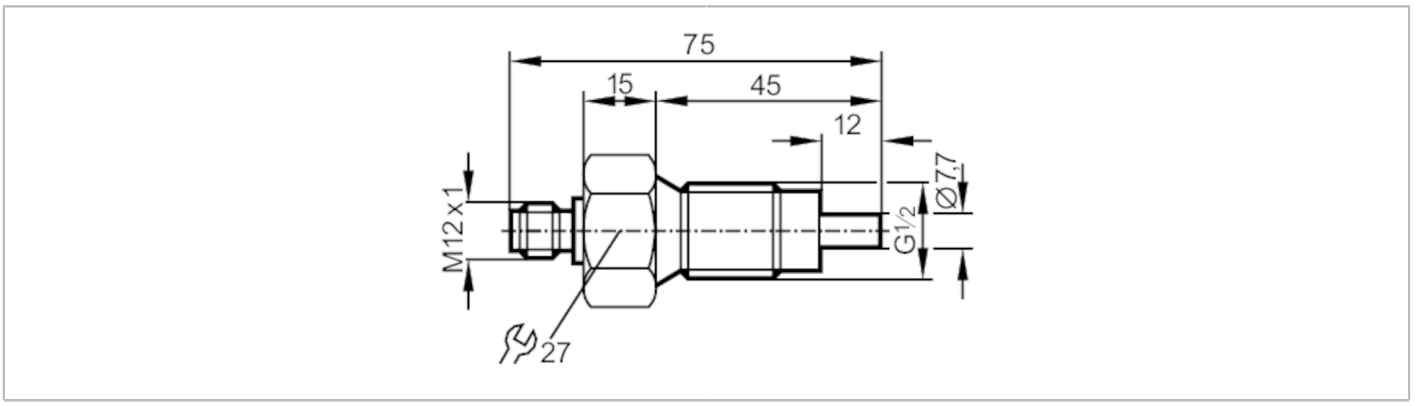


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF320A

Flow sensor for connection to an evaluation unit

SFR12ABB/US/2G



Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection G 1/2 external thread	
Application			
Media		Liquids; Gases	
Medium temperature	[°C]	-20...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	-20...70	
Gases			
Medium temperature	[°C]	-20...70	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	

SF320A

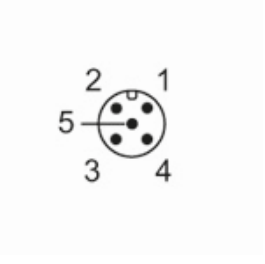
Flow sensor for connection to an evaluation unit

SFR12ABB/US/2G

Operating conditions			
Ambient temperature	[°C]	-20...70	
Protection		IP 67	
Tests / approvals			
Approval		DMT 03 ATEX E091; IECEX BVS 06.0007	
ATEX marking		II 2G Ex ia IIC T4 Gb	
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	
Safety classification			
Max. internal capacitance	[nF]	0.4	
Max. internal inductance	[µH]	2	
Temperature class		T4	
Mechanical data			
Weight	[g]	218.5	
Housing		tubular	
Material		stainless steel (1.4404 / 316L)	
Materials (wetted parts)		stainless steel (1.4404 / 316L)	
Process connection		threaded connection G 1/2 external thread	
Probe diameter	[mm]	7.7	
Installation length EL	[mm]	45	
Remarks			
Remarks		In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar). For pressures outside this range use must be assessed and approved by the user. Adhere to the operating instructions and the type test certificate.	
Pack quantity		1 pcs.	

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m

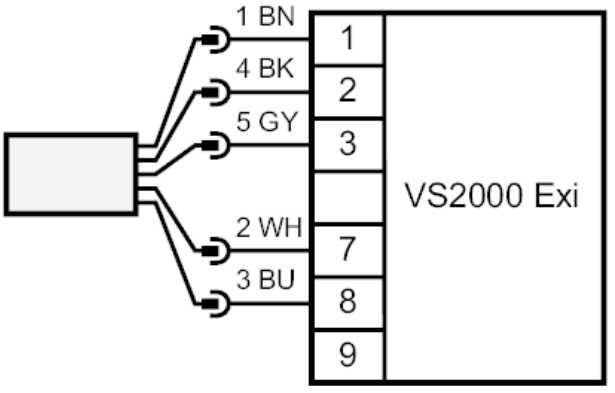


SF320A

Flow sensor for connection to an evaluation unit

SFR12ABB/US/2G

Connection

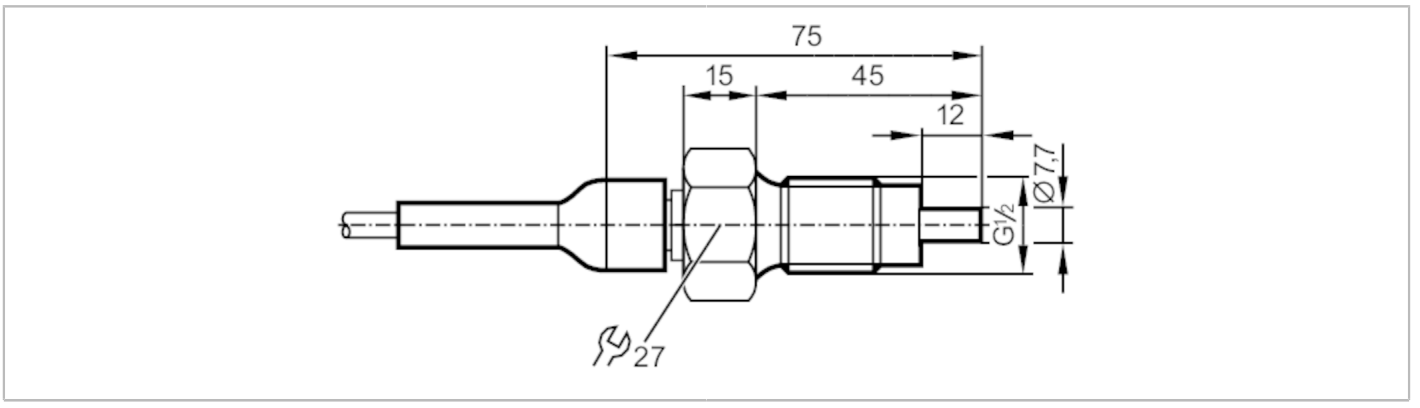


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF321A

Flow sensor for connection to an evaluation unit

SFR12ABB/2G



Product characteristics			
Probe length L	[mm]	12	
Process connection		threaded connection G 1/2 external thread	
Application			
Media		Liquids; Gases	
Medium temperature	[°C]	-20...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	-20...70	
Gases			
Medium temperature	[°C]	-20...70	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	12	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...2000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	

SF321A

Flow sensor for connection to an evaluation unit

SFR12ABB/2G

Operating conditions			
Ambient temperature	[°C]	-20...70	
Protection		IP 67	
Tests / approvals			
Approval		DMT 03 ATEX E091; IECEX BVS 06.0007	
ATEX marking		II 2G Ex ia IIC T4 Gb	
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8648	
Safety classification			
Max. internal capacitance	[nF]	1.2	
Max. internal inductance	[µH]	6	
Temperature class		T4	
Mechanical data			
Weight	[g]	456	
Housing		tubular	
Material		stainless steel (1.4404 / 316L)	
Materials (wetted parts)		stainless steel (1.4404 / 316L)	
Process connection		threaded connection G 1/2 external thread	
Probe diameter	[mm]	7.7	
Installation length EL	[mm]	45	
Remarks			
Remarks		In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar).	
		For pressures outside this range use must be assessed and approved by the user.	
		Adhere to the operating instructions and the type test certificate.	
Pack quantity		1 pcs.	

SF321A

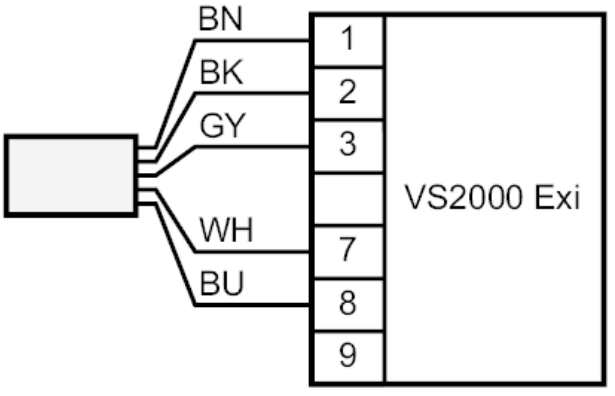
Flow sensor for connection to an evaluation unit

SFR12ABB/2G

Electrical connection

Cable: 6 m, TPE-S; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

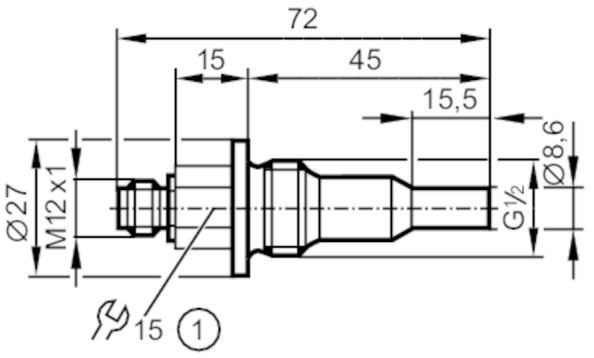


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF3405

Flow sensor for connection to an evaluation unit

SFR12XBK/US-100



1 tightening torque max. 30 Nm

Product characteristics			
Probe length L	[mm]	30	
Process connection		threaded connection G 1/2 external thread	
Application			
Media		Liquids; aggressive media	
Medium temperature	[°C]	5...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	5...70	
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	30	
Liquids			
Setting range	[cm/s]	3...60	
Greatest sensitivity	[cm/s]	3...40	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	7	
Reaction times			
Response time	[s]	2...20	
Liquids			
Response time	[s]	2...20	
Operating conditions			
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8213	

SF3405

Flow sensor for connection to an evaluation unit

SFR12XBK/US-100

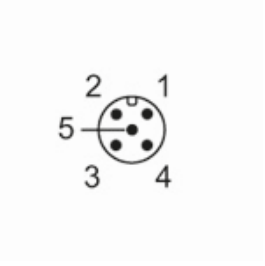
Mechanical data		
Weight	[g]	55
Housing		tubular
Material		ceramics (99.7 % Al2O3)
Materials (wetted parts)		ceramics (99.7 % Al2O3)
Process connection		threaded connection G 1/2 external thread
Probe diameter	[mm]	8.6
Installation length EL	[mm]	45

Accessories	
Items supplied	sealings: 1, PTFE

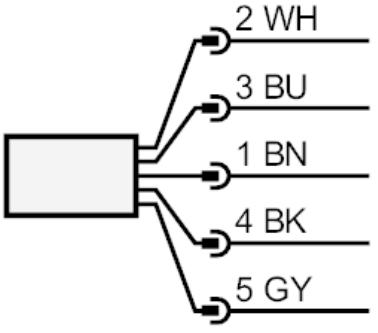
Remarks	
Remarks	For sealing use the supplied PTFE packing washer.
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m



Connection

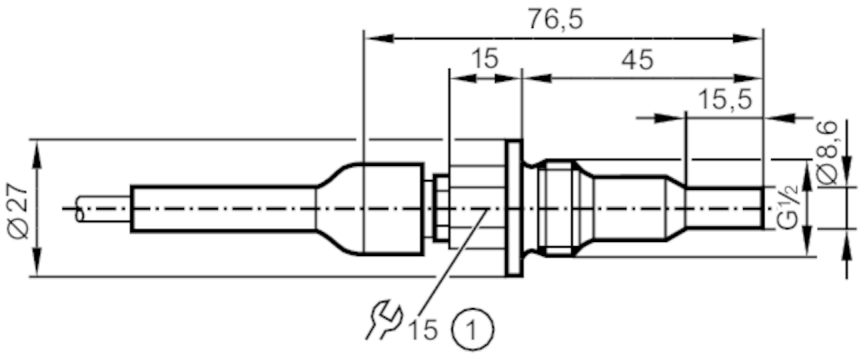


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF3410

Flow sensor for connection to an evaluation unit

SFR12XBK/6M



1 tightening torque max. 30 Nm

Product characteristics			
Probe length L	[mm]	30	
Process connection		threaded connection G 1/2 external thread	
Application			
Media		Liquids; aggressive media	
Medium temperature	[°C]	5...70	
Pressure rating		30 bar	3 MPa
Liquids			
Medium temperature	[°C]	5...70	
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	30	
Liquids			
Setting range	[cm/s]	3...60	
Greatest sensitivity	[cm/s]	3...40	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	7	
Reaction times			
Response time	[s]	2...20	
Liquids			
Response time	[s]	2...20	
Operating conditions			
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8213	

SF3410

Flow sensor for connection to an evaluation unit

SFR12XBK/6M

Mechanical data		
Weight	[g]	389.5
Housing		tubular
Material		ceramics (99.7 % Al2O3)
Materials (wetted parts)		ceramics (99.7 % Al2O3)
Process connection		threaded connection G 1/2 external thread
Probe diameter	[mm]	8.6
Installation length EL	[mm]	45

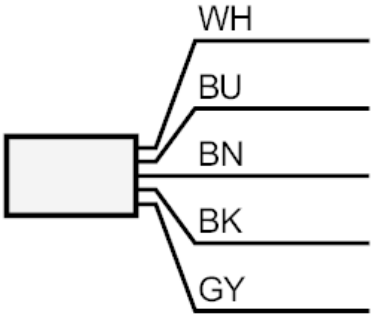
Accessories	
Items supplied	sealings: 1, PTFE

Remarks	
Remarks	For sealing use the supplied PTFE packing washer.
Pack quantity	1 pcs.

Electrical connection

Cable: 6 m, PUR; Maximum cable length: 100 m; 5 x 0.34 mm², PVC

Connection

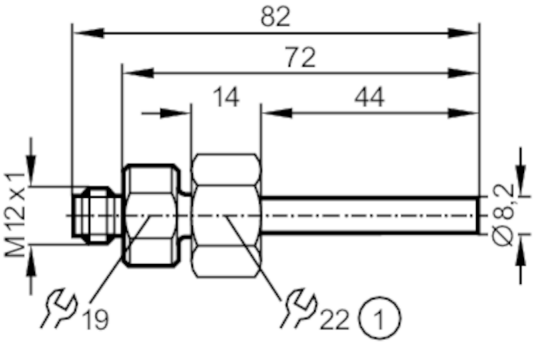


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5200

Flow sensor for connection to an evaluation unit

SFD10ADB /US-100



1 Internal thread M18 x 1;5

Product characteristics			
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Application		high temperature	
Media		Liquids; Gases	
Medium temperature	[°C]	-25...80	
Pressure rating		300 bar	30 MPa
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8213	
Mechanical data			
Weight	[g]	88.5	

SF5200

Flow sensor for connection to an evaluation unit

SFD10ADB /US-100

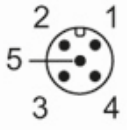
Housing		tubular
Dimensions	[mm]	M18 x 1.5 / L = 82
Thread designation		M18 x 1.5
Material		stainless steel (1.4404 / 316L)
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM 80 Shore A
Process connection		threaded connection M18 x 1,5 Internal thread
Probe diameter	[mm]	8.2
Installation length EL	[mm]	44

Remarks

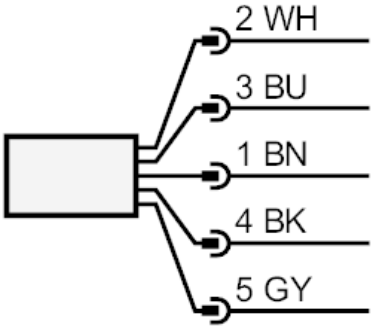
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m



Connection

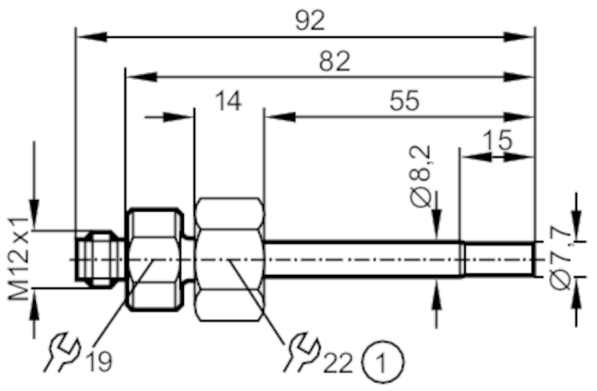


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5201

Flow sensor for connection to an evaluation unit

SFD10ABB /US-100



Internal thread M18 x 1;5

Product characteristics			
Probe length L	[mm]	55	
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Application		high temperature	
Media		Liquids; Gases	
Medium temperature	[°C]	-25...80	
Pressure rating		30 bar	3 MPa
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	55	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8213	

SF5201

Flow sensor for connection to an evaluation unit

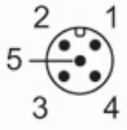
SFD10ABB /US-100

Mechanical data		
Weight	[g]	88
Housing		tubular
Dimensions	[mm]	Ø 8.2 / L = 92
Material		stainless steel (1.4404 / 316L)
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM 80 Shore A
Process connection		threaded connection M18 x 1,5 Internal thread
Probe diameter	[mm]	7.7
Installation length EL	[mm]	55

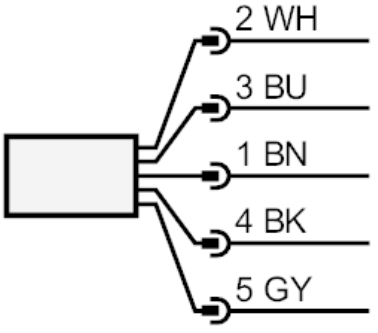
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m



Connection

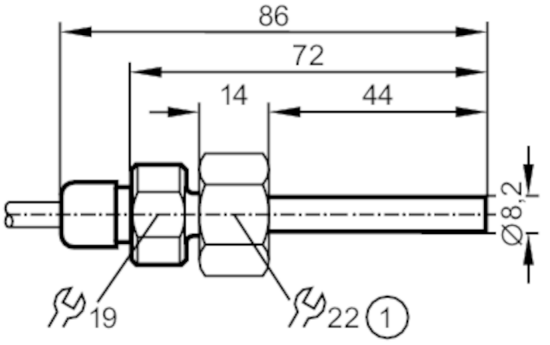


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5300

Flow sensor for connection to an evaluation unit

SFD10ZDB /6M



1 Internal thread M18 x 1.5

Product characteristics			
Probe length L	[mm]	45	
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Application		high temperature	
Media		Liquids; Gases	
Pressure rating		300 bar	30 MPa
Liquids			
Medium temperature	[°C]	0...120	
Gases			
Medium temperature	[°C]	0...100	
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	45	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Protection		IP 67	

SF5300

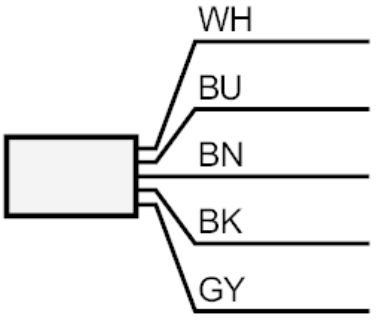
Flow sensor for connection to an evaluation unit

SFD10ZDB /6M

Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8096	
Mechanical data			
Weight	[g]	454.5	
Housing		tubular	
Material		knurled nut: stainless steel; Cable gland: FKM; nut for cable gland: brass nickel-plated; Sleeve: brass nickel-plated	
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM 80 Shore A	
Process connection		threaded connection M18 x 1,5 Internal thread	
Probe diameter	[mm]	8.2	
Installation length EL	[mm]	44	
Remarks			
Pack quantity		1 pcs.	
Electrical connection			

Cable: 6 m, silicone; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

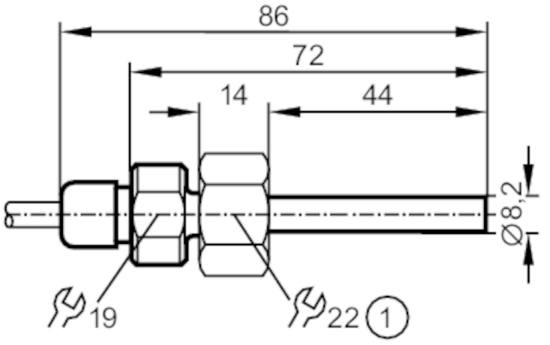


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5350

Flow sensor for connection to an evaluation unit

SFD10ADB /6M



1 Internal thread M18 x 1.5

Product characteristics			
Probe length L	[mm]	45	
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Application		high temperature	
Media		Liquids; Gases	
Medium temperature	[°C]	-25...80	
Pressure rating		300 bar	30 MPa
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	45	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8213	

SF5350

Flow sensor for connection to an evaluation unit

SFD10ADB /6M

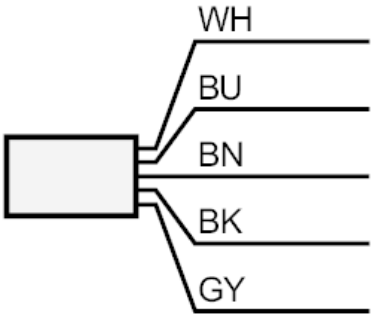
Mechanical data		
Weight	[g]	413.5
Housing		tubular
Material		stainless steel (1.4404 / 316L)
Materials (wetted parts)		stainless steel (1.4404 / 316L); O-ring: FKM 80 Shore A
Process connection		threaded connection M18 x 1,5 Internal thread
Probe diameter	[mm]	8.2
Installation length EL	[mm]	44

Remarks	
Pack quantity	1 pcs.

Electrical connection

Cable: 6 m, PUR; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

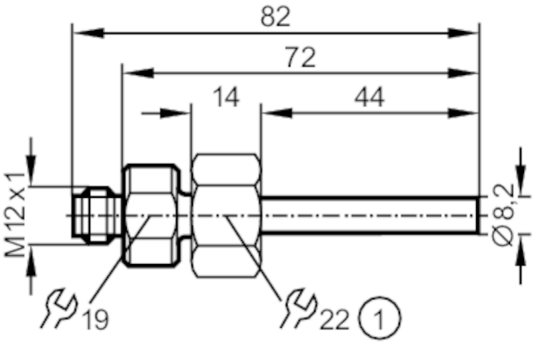


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5700

Flow sensor for connection to an evaluation unit

SFD10ADT /US-100



1 Internal thread M18 x 1;5

Product characteristics			
Probe length L	[mm]	45	
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Media		Liquids; Gases; aggressive media	
Medium temperature	[°C]	-25...80	
Pressure rating		100 bar	10 MPa
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	45	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Storage temperature	[°C]	-25...80	
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8213	

SF5700

Flow sensor for connection to an evaluation unit

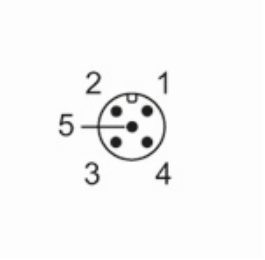
SFD10ADT /US-100

Mechanical data		
Weight	[g]	91
Housing		tubular
Dimensions	[mm]	M18 x 1.5 / L = 82
Thread designation		M18 x 1.5
Material		stainless steel (1.4404 / 316L); EPDM
Materials (wetted parts)		titanium (3.7035); O-ring: FKM 80 Shore A
Process connection		threaded connection M18 x 1,5 Internal thread
Probe diameter	[mm]	8.2
Installation length EL	[mm]	44

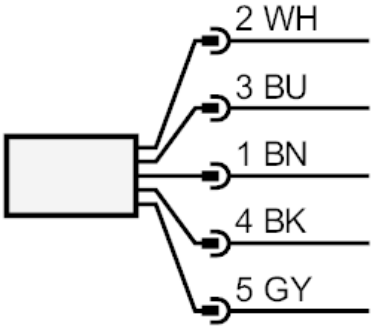
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m



Connection

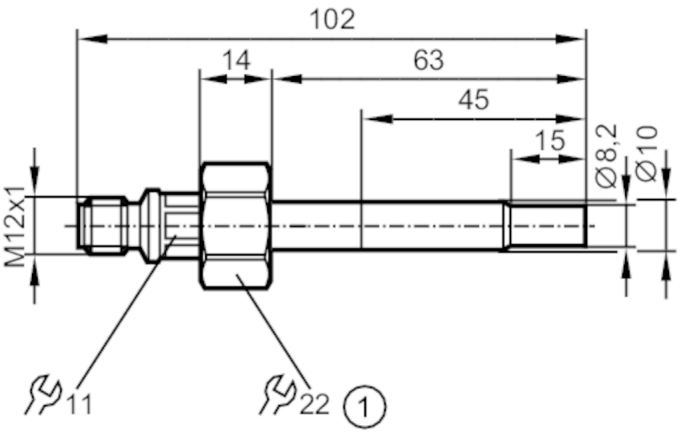


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5701

Flow sensor for connection to an evaluation unit

SFD10ADT /US-100



1 Internal thread M18 x 1;5

Product characteristics			
Probe length L	[mm]	63	
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Media		Liquids; Gases; aggressive media	
Medium temperature	[°C]	-25...80	
Pressure rating		100 bar	10 MPa
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	63	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Storage temperature	[°C]	-25...80	
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8393.77	

SF5701

Flow sensor for connection to an evaluation unit

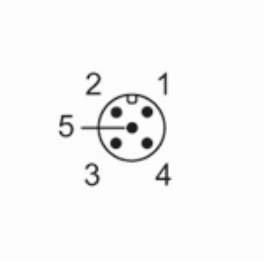
SFD10ADT /US-100

Mechanical data		
Weight	[g]	64
Housing		tubular
Dimensions	[mm]	Ø 8.2 / L = 102
Material		titanium (3.7035); EPDM; ULTEM
Materials (wetted parts)		titanium (3.7035); O-ring: FKM 80 Shore A
Process connection		threaded connection M18 x 1,5 Internal thread
Probe diameter	[mm]	8.2
Installation length EL	[mm]	63

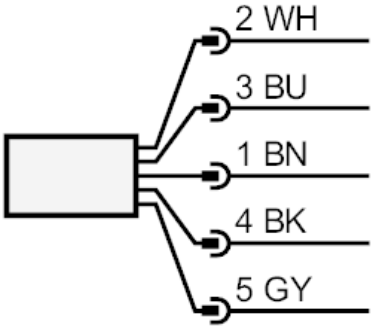
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m



Connection

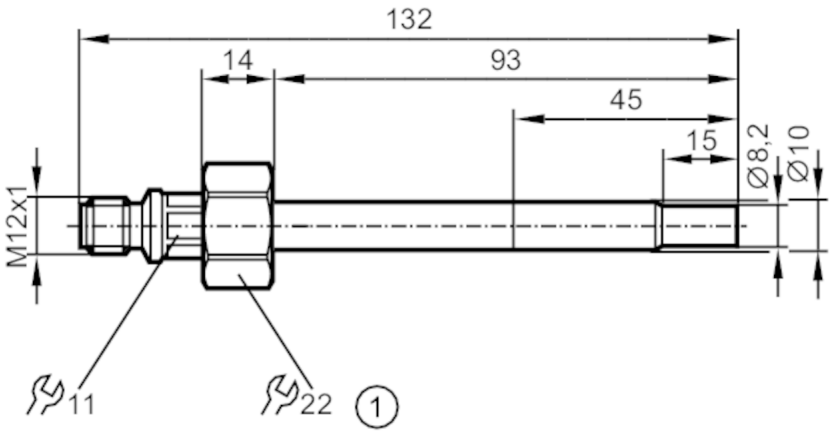


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5702

Flow sensor for connection to an evaluation unit

SFD10ADT /US-100



1 Internal thread M18 x 1;5

Product characteristics			
Probe length L	[mm]	93	
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Media		Liquids; Gases; aggressive media	
Medium temperature	[°C]	-25...80	
Pressure rating		100 bar	10 MPa
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	93	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Storage temperature	[°C]	-25...80	
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8393.77	

SF5702

Flow sensor for connection to an evaluation unit

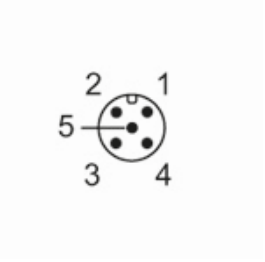
SFD10ADT /US-100

Mechanical data		
Weight	[g]	68
Housing		tubular
Dimensions	[mm]	Ø 8.2 / L = 132
Material		titanium (3.7035); EPDM; ULTEM
Materials (wetted parts)		titanium (3.7035); O-ring: FKM 80 Shore A
Process connection		threaded connection M18 x 1,5 Internal thread
Probe diameter	[mm]	8.2
Installation length EL	[mm]	93

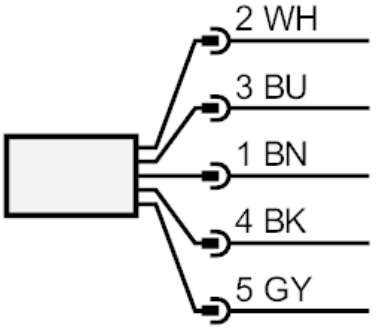
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m



Connection

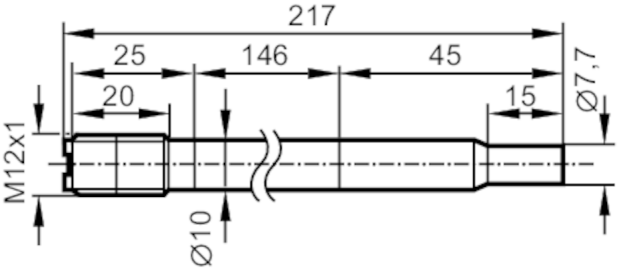


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF620A

Flow sensor for connection to an evaluation unit

SFG10ABB/2G /US-100



Product characteristics			
Probe length L	[mm]	15...156	
Process connection		Clamp fitting Ø 10 mm	
Application			
System		gold-plated contacts	
Installation		Sensor suitable for clamp fitting	
Media		Liquids; Gases	
Medium temperature	[°C]	-20...70	
Pressure rating		30 bar	3 MPa
Liquids			
Installation		Sensor suitable for clamp fitting	
Medium temperature	[°C]	-20...70	
Gases			
Medium temperature	[°C]	-20...70	
Electrical data			
Connection to control monitor		VS2000 Exi (PTB 01 ATEX 2075)	
Measuring/setting range			
Probe length L	[mm]	15...156	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	15	
Reaction times			
Response time	[s]	1...10	
Liquids			
Response time	[s]	1...10	

SF620A

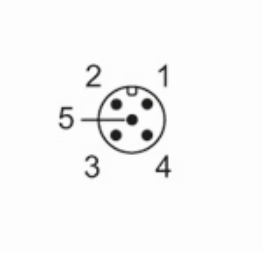
Flow sensor for connection to an evaluation unit

SFG10ABB/2G /US-100

Gases			
Response time	[s]	1...10	
Operating conditions			
Ambient temperature	[°C]	-20...70	
Protection		IP 67	
Tests / approvals			
Approval		DMT 03 ATEX E091; IECEX BVS 06.0007	
ATEX marking		II 2G Ex ia IIC T4 Gb	
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8272	
Safety classification			
Max. internal capacitance	[nF]	0.4	
Max. internal inductance	[µH]	2	
Temperature class		T4	
Mechanical data			
Weight	[g]	123	
Housing		tubular	
Dimensions	[mm]	Ø 10 / L = 217	
Material		stainless steel (1.4404 / 316L) several parts, welded	
Materials (wetted parts)		stainless steel (1.4404 / 316L) several parts, welded	
Process connection		Clamp fitting Ø 10 mm	
Probe diameter	[mm]	7.7	
Accessories			
Accessories (optional)		Clamp adapter: R 1/2, E40160	
		Clamp adapter: 1/2" NPT, E40174	
Remarks			
Remarks		In principle, the type test according to 94/9/EC (ATEX) only takes atmospheric conditions into account (0.8...1.1 bar).	
		For pressures outside this range use must be assessed and approved by the user.	
		Adhere to the operating instructions and the type test certificate.	
Pack quantity		1 pcs.	

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated; Maximum cable length: 100 m

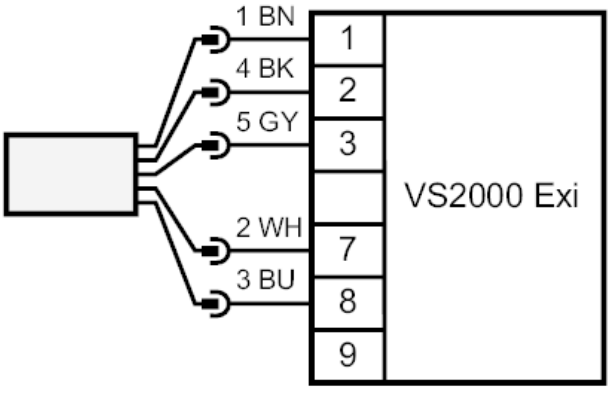


SF620A

Flow sensor for connection to an evaluation unit

SFG10ABB/2G /US-100

Connection

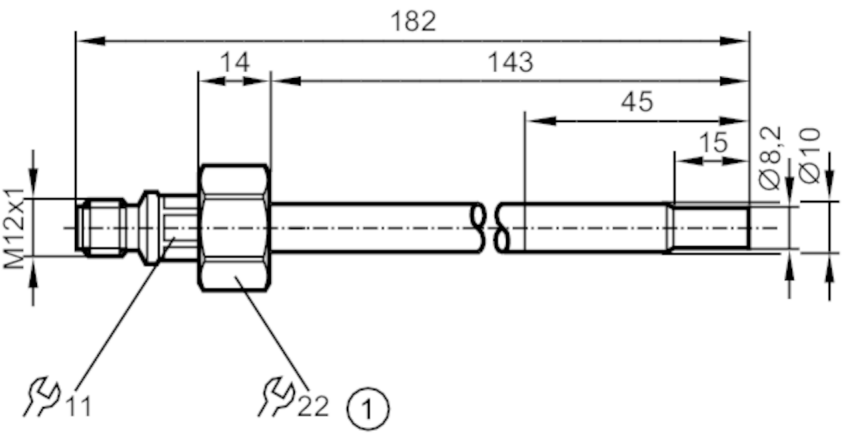


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5703

Flow sensor for connection to an evaluation unit

SFD10ADT /US-100



1 Internal thread M18 x 1;5

Product characteristics			
Probe length L	[mm]	143	
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Media		Liquids; Gases; aggressive media	
Medium temperature	[°C]	-25...80	
Pressure rating		100 bar	10 MPa
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	143	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Storage temperature	[°C]	-25...80	
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8393.77	

SF5703

Flow sensor for connection to an evaluation unit

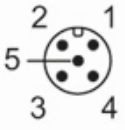
SFD10ADT /US-100

Mechanical data		
Weight	[g]	75
Housing		tubular
Dimensions	[mm]	Ø 8.2 / L = 182
Material		titanium (3.7035); EPDM; ULTEM
Materials (wetted parts)		titanium (3.7035); O-ring: FKM 80 Shore A
Process connection		threaded connection M18 x 1,5 Internal thread
Probe diameter	[mm]	8.2
Installation length EL	[mm]	143

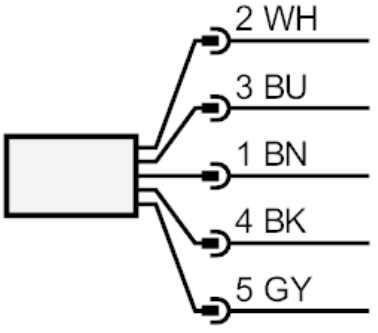
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m



Connection

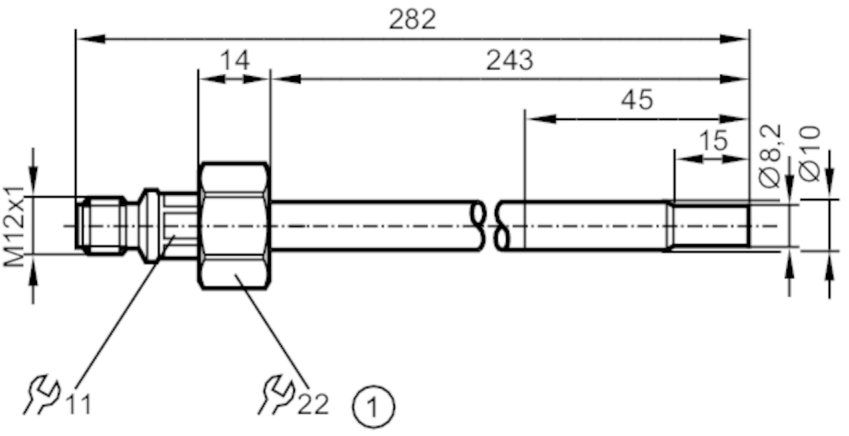


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5704

Flow sensor for connection to an evaluation unit

SFD10ADT /US-100



1 Internal thread M18 x 1;5

Product characteristics			
Probe length L	[mm]	243	
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Media		Liquids; Gases; aggressive media	
Medium temperature	[°C]	-25...80	
Pressure rating		100 bar	10 MPa
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	243	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Storage temperature	[°C]	-25...80	
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8393.77	

SF5704

Flow sensor for connection to an evaluation unit

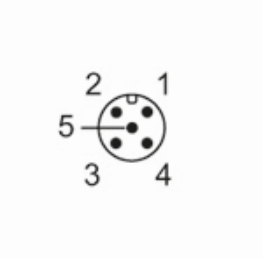
SFD10ADT /US-100

Mechanical data		
Weight	[g]	95
Housing		tubular
Dimensions	[mm]	Ø 8.2 / L = 282
Material		titanium (3.7035); EPDM; ULTEM
Materials (wetted parts)		titanium (3.7035); O-ring: FKM 80 Shore A
Process connection		threaded connection M18 x 1,5 Internal thread
Probe diameter	[mm]	8.2
Installation length EL	[mm]	243

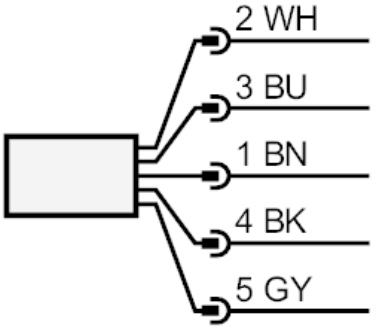
Remarks	
Pack quantity	1 pcs.

Electrical connection

Connector: 1 x M12; coding: A; Maximum cable length: 100 m



Connection

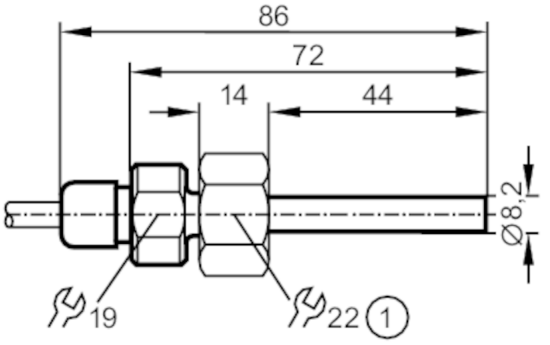


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF5800

Flow sensor for connection to an evaluation unit

SFD10ZDT /6M



1 Internal thread M18 x 1.5

Product characteristics			
Probe length L	[mm]	45	
Process connection		threaded connection M18 x 1,5 Internal thread	
Application			
Application		high temperature	
Media		Liquids; Gases; aggressive media	
Pressure rating		100 bar	10 MPa
Liquids			
Medium temperature	[°C]	0...120	
Gases			
Medium temperature	[°C]	0...100	
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	45	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	300	
Reaction times			
Response time	[s]	1...10	
Operating conditions			
Storage temperature	[°C]	-25...80	

SF5800

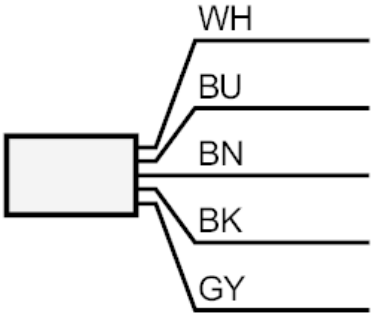
Flow sensor for connection to an evaluation unit

SFD10ZDT /6M

Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8096	
Mechanical data			
Weight	[g]	449.5	
Housing		tubular	
Material		titanium (3.7035)	
Materials (wetted parts)		titanium (3.7035); O-ring: FKM 80 Shore A	
Process connection		threaded connection M18 x 1,5 Internal thread	
Probe diameter	[mm]	8.2	
Installation length EL	[mm]	44	
Remarks			
Pack quantity		1 pcs.	
Electrical connection			

Cable: 6 m, silicone; Maximum cable length: 100 m; 5 x 0.34 mm²

Connection

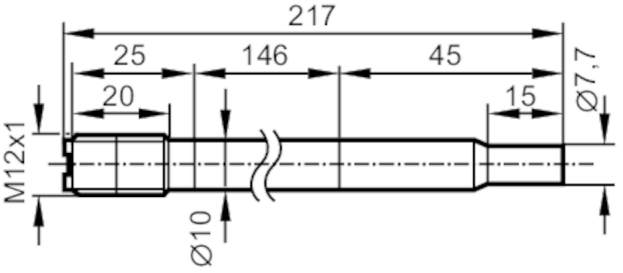


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF6200

Flow sensor for connection to an evaluation unit

SFG10ABB /US-100



Product characteristics			
Probe length L	[mm]	15...156	
Process connection		Clamp fitting Ø 10 mm	
Application			
System		gold-plated contacts	
Application		high temperature	
Installation		Sensor suitable for clamp fitting	
Media		Liquids; Gases	
Medium temperature	[°C]	-25...80	
Pressure rating		30 bar	3 MPa
Liquids			
Application		high temperature	
Installation		Sensor suitable for clamp fitting	
Medium temperature	[°C]	-25...80	
Gases			
Medium temperature	[°C]	-25...80	
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	15...156	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	30	
Reaction times			
Response time	[s]	1...10	

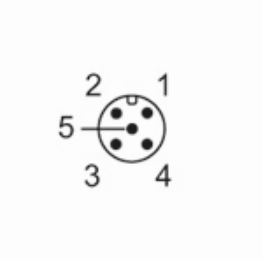
SF6200

Flow sensor for connection to an evaluation unit

SFG10ABB /US-100

Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	
Operating conditions			
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8583	
Mechanical data			
Weight	[g]	89	
Housing		tubular	
Dimensions	[mm]	Ø 10 / L = 217	
Material		stainless steel (1.4404 / 316L) several parts, welded	
Materials (wetted parts)		stainless steel (1.4404 / 316L) several parts, welded	
Process connection		Clamp fitting Ø 10 mm	
Probe diameter	[mm]	7.7	
Accessories			
Accessories (optional)		Clamp adapter: R 1/2, E40160	
		Clamp adapter: 1/2" NPT, E40174	
Remarks			
Pack quantity		1 pcs.	
Electrical connection			

Connector: 1 x M12; coding: A; Contacts: gold-plated; Maximum cable length: 100 m

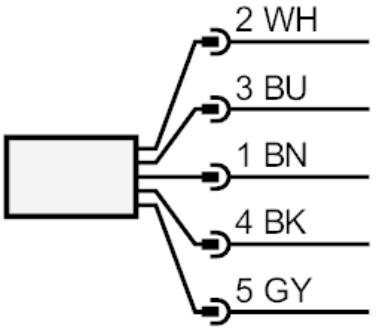


SF6200

Flow sensor for connection to an evaluation unit

SFG10ABB /US-100

Connection

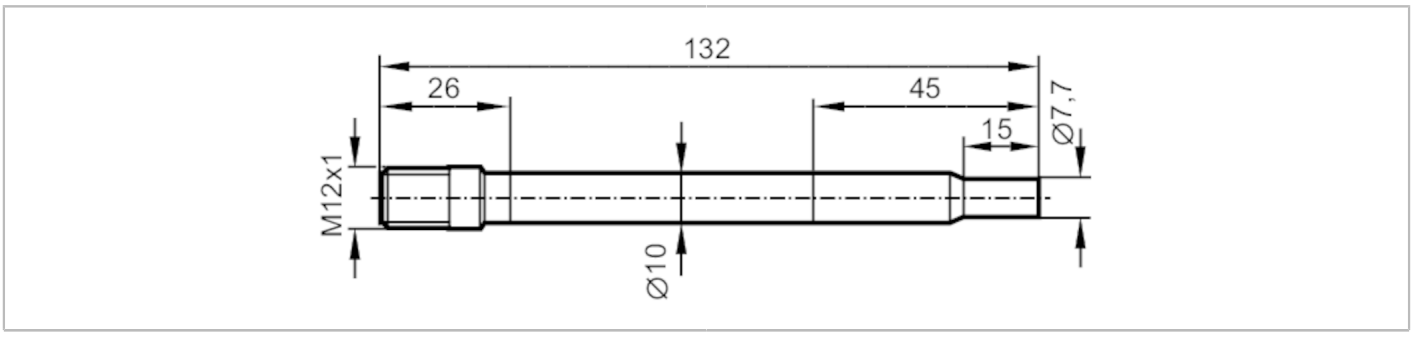


	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey

SF6201

Flow sensor for connection to an evaluation unit

SFG10ABB /US-100



Product characteristics			
Probe length L	[mm]	15...107	
Process connection		Clamp fitting Ø 10 mm	
Application			
System		gold-plated contacts	
Application		high temperature	
Installation		Sensor suitable for clamp fitting	
Media		Liquids; Gases	
Medium temperature	[°C]	-25...80	
Pressure rating		30 bar	3 MPa
Liquids			
Application		high temperature	
Installation		Sensor suitable for clamp fitting	
Medium temperature	[°C]	-25...80	
Gases			
Medium temperature	[°C]	-25...80	
Electrical data			
Connection to control monitor		VS3000	
Measuring/setting range			
Probe length L	[mm]	15...107	
Liquids			
Setting range	[cm/s]	3...300	
Greatest sensitivity	[cm/s]	3...60	
Gases			
Setting range	[cm/s]	200...3000	
Greatest sensitivity	[cm/s]	200...800	
Accuracy / deviations			
Max. temperature gradient of medium	[K/min]	30	
Reaction times			
Response time	[s]	1...10	

SF6201

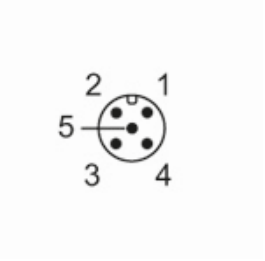
Flow sensor for connection to an evaluation unit

SFG10ABB /US-100

Liquids			
Response time	[s]	1...10	
Gases			
Response time	[s]	1...10	
Operating conditions			
Storage temperature	[°C]	-25...80	
Protection		IP 67	
Tests / approvals			
Shock resistance		DIN IEC 68-2-27	40 g (11 ms)
Vibration resistance		DIN IEC 68-2-6	10 g (55...2000 Hz)
MTTF	[years]	8393.77	
Mechanical data			
Weight	[g]	62.5	
Housing		tubular	
Dimensions	[mm]	Ø 10 / L = 132	
Material		stainless steel (1.4404 / 316L) several parts, welded	
Materials (wetted parts)		stainless steel (1.4404 / 316L) several parts, welded	
Process connection		Clamp fitting Ø 10 mm	
Probe diameter	[mm]	7.7	
Accessories			
Accessories (optional)		Clamp adapter: R 1/2, E40160	
		Clamp adapter: 1/2" NPT, E40174	
Remarks			
Pack quantity		1 pcs.	

Electrical connection

Connector: 1 x M12; coding: A; Contacts: gold-plated; Maximum cable length: 100 m

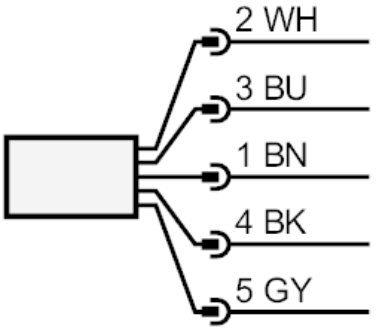


SF6201

Flow sensor for connection to an evaluation unit

SFG10ABB /US-100

Connection



	Core colors :
BN =	brown
BU =	blue
BK =	black
WH =	white
GY =	grey