

9.2 Model Series FTH to 1470 psi (PN 100)

Description

The FTH pitot tube sensor is designed to measure the volumetric flow of liquids and gases.

The installation is done via a flanged connection. The flanged packing gland above the shut off valve ensures proper sealing of the sensor as well as a shortening of the leverage arm.

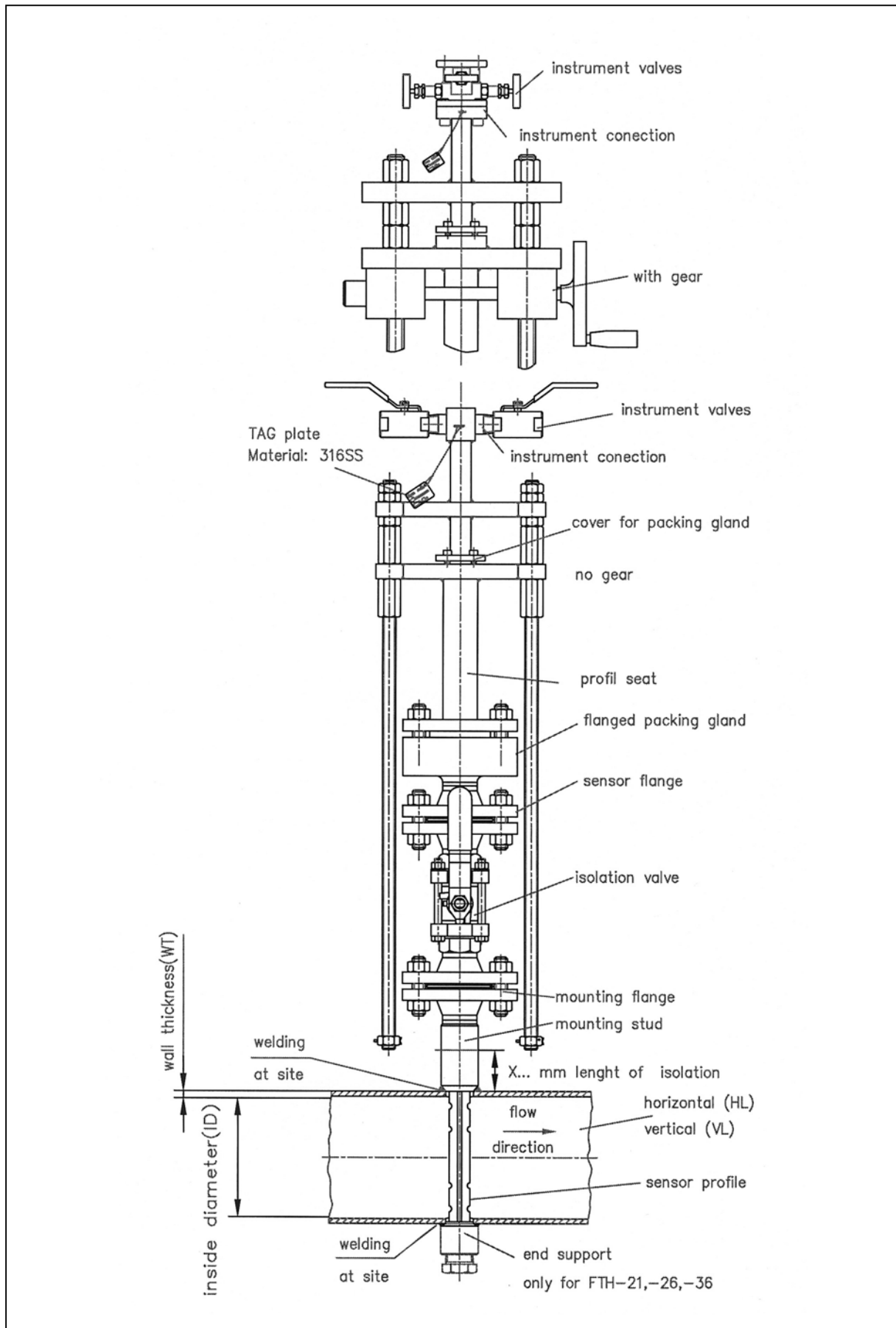
The installation / removal of the sensor is facilitated via a pair of guiding spindles or a gear box with hand wheel (optional).

The FTH sensor is designed for applications with a maximum operating pressure of 1470 psi and a maximum operating temperature of 400°C / 752 °F.



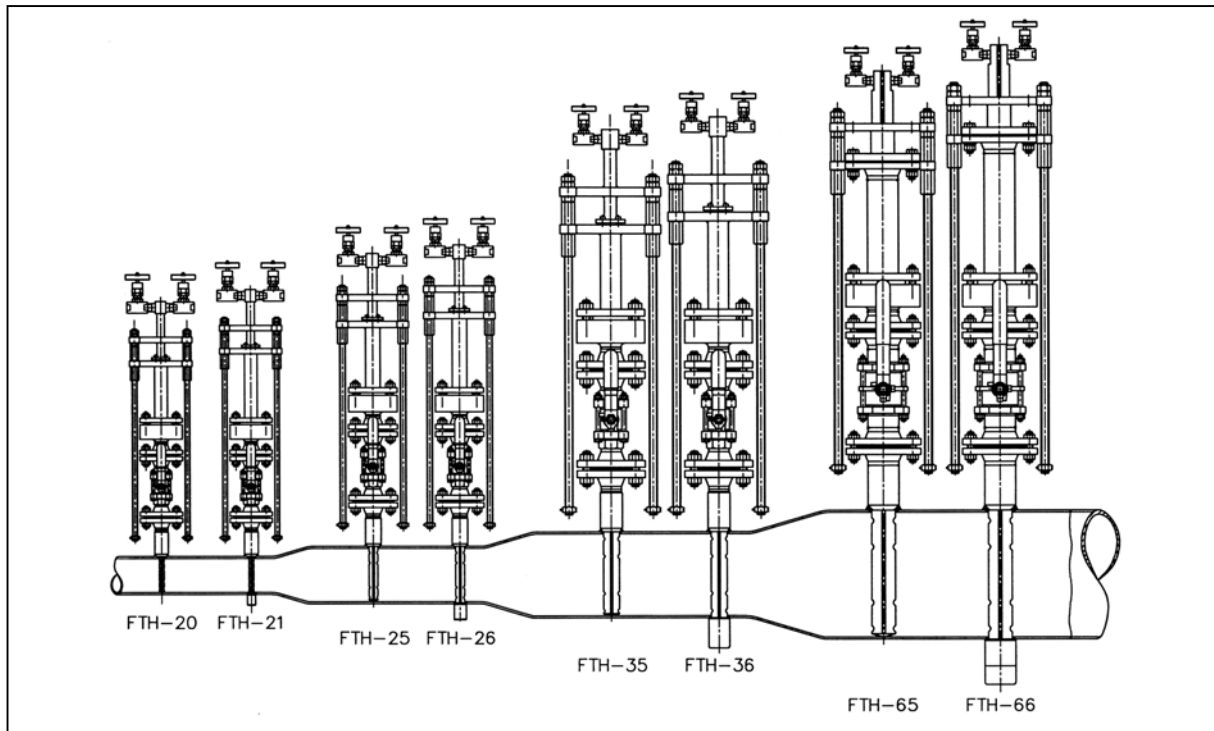
Fig. 9.3: Pitot tube sensor FTH-20 w/o gear box

Drawing for ITABAR Series FTH



Order Data for ITABAR Series FTH 20/21/25/26/35/36/65/66 PN 100

1. Sensor Type, with guide rod spindles



Pipe diameter inches mm		Maximum allowable volumetric flow in GPM							
		Sensor type							
		FTH -20	FTH -21	FTH -25	FTH -26	FTH -35	FTH -36	FTH -65	FTH -66
1 1/2	DN 40	175	502	---	---	---	---	---	---
2	DN 50	260	708	---	---	---	---	---	---
2 1/4	DN 65	409	1069	---	---	---	---	---	---
3	DN 80	572	1443	---	---	---	---	---	---
4	DN 100	787	1936	902	2398	---	---	---	---
5	DN 125	1047	2512	1240	3168	---	---	---	---
6	DN 150	---	---	1579	3938	---	---	---	---
8	DN 200	---	---	2270	5473	---	---	---	---
10	DN 250	---	---	3027	7150	---	---	---	---
12	DN 300	---	---	3841	8962	7739	18519	12416	24846
14	DN 350	---	---	4637	10718	9438	22321	15334	35728
16	DN 400	---	---	5403	12460	11154	26158	18229	42156
20	DN 500	---	---	7013	15976	14462	33528	23540	53891
24	DN 600	---	---	8588	19483	17850	41087	29928	68085
28	DN 700	---	---	10212	23069	21370	48923	36401	82482
32	DN 800	---	---	11910	26870	24965	56962	42358	95713
36	DN 900	---	---	---	30839	---	65155	---	107936
40	DN 1000	---	---	---	34896	---	73189	---	119746
48	DN 1200	---	---	---	43010	---	90090	---	144826
56	DN 1400	---	---	---	---	---	238695	---	172585
64	DN 1600	---	---	---	---	---	123292	---	202708
72	DN 1800	---	---	---	---	---	139264	---	229204
80	DN 2000	---	---	---	---	---	---	---	---

1. Order specification ITABAR-FLOW-Sensor, series FTH-20 / 21

1. type of sensor	
20	without end support
21	with end support
2. inside diameter and wall thickness.	
ID / W.-thickn	inside diameter and wall thickness in inches (or mm), please specify
3. sensor material	
S	316 SS (standrad)
X	1.4462 Duplex
K	1.4539
H	Hastelloy C4
M	Monel
4. sensor flange, always identically to sensor material.	
SM	flange according DIN
SA	flange according ANSI
5. gasket	
1	gasket strip according to DIN
2	ANSI RF
3	ANSI RF SF (smooth finish)
4	RTJ
6. PN, material and DN of Sensor flange	
	DIN
	ANSI
B01	PN16 / 150 lbs material: 316 SS 1.4571 DN25 1"
B02	PN40 / 300 lbs material: 316 SS 1.4571 DN25 1"
B03	PN63 / 300 lbs material: 316 SS 1.4571 DN25 1"
B04	PN100 / 600 lbs material: 316 SS 1.4571 DN25 1"
B10	PN16 / 150 lbs material: 1.4462 (Duplex) DN25 1"
B11	PN40 / 300 lbs material: 1.4462 (Duplex) DN25 1"
B12	PN63 / 300 lbs material: 1.4462 (Duplex) DN25 1"
B13	PN100 / 600 lbs material: 1.4462 (Duplex) DN25 1"
B20	PN16 / 150 lbs material: 1.4539 DN25 1"
B21	PN40 / 300 lbs material: 1.4539 DN25 1"
B22	PN63 / 300 lbs material: 1.4539 DN25 1"
B23	PN100 / 600 lbs material: 1.4539 DN25 1"
B30	PN16 / 150 lbs material: Hastelloy C4 DN25 1"
B31	PN40 / 300 lbs material: Hastelloy C4 DN25 1"
B32	PN63 / 300 lbs material: Hastelloy C4 DN25 1"
B33	PN100 / 600 lbs material: Hastelloy C4 DN25 1"
B60	PN16 / 150 lbs material: Monel DN25 1"
B61	PN40 / 300 lbs material: Monel DN25 1"
B62	PN63 / 300 lbs material: Monel DN25 1"
B63	PN100 / 600 lbs material: Monel DN25 1"
7. design assembly connecting pieces	
R	assembly connecting pieces with flange (standard)
W	Weldolet-assembly connecting pieces and flange
8. assembly connecting piece with flange, identically to sensor flange.	
0	without flange
M	flange according DIN, gasket strip form C
A	flange according ANSI, gasket strip RF
F	flange according ANSI, gasket strip SF (smooth finish)
T	flange according ANSI, gasket strip RTJ

1. Bestellaangaben ITABAR-DURCHFLUSS-Sonde, Baureihe FTH-20 / 21

9. material connecting piece, with flange (max. pressure rating)				
always identically to sensor flange.				
C1	C.S.	PN16 / 150 lbs	DN25	1"
S1	316 SS	PN16 / 150 lbs	DN25	1"
X1	Duplex	PN16 / 150 lbs	DN25	1"
K1	1.4539	PN16 / 150 lbs	DN25	1"
H1	Hastelloy C	PN16 / 150 lbs	DN25	1"
M1	Monel	PN16 / 150 lbs	DN25	1"
C2	C.S.	PN40 / 300 lbs	DN25	1"
S2	316 SS	PN40 / 300 lbs	DN25	1"
X2	Duplex	PN40 / 300 lbs	DN25	1"
K2	1.4539	PN40 / 300 lbs	DN25	1"
H2	Hastelloy C	PN40 / 300 lbs	DN25	1"
M2	Monel	PN40 / 300 lbs	DN25	1"
C3	C.S.	PN63 / 300 lbs	DN25	1"
S3	316 SS	PN63 / 300 lbs	DN25	1"
X3	Duplex	PN63 / 300 lbs	DN25	1"
K3	1.4539	PN63 / 300 lbs	DN25	1"
H3	Hastelloy C	PN63 / 300 lbs	DN25	1"
M3	Monel	PN63 / 300 lbs	DN25	1"
C4	C.S.	PN100 / 600 lbs	DN25	1"
S4	316 SS	PN100 / 600 lbs	DN25	1"
X4	Duplex	PN100 / 600 lbs	DN25	1"
K4	1.4539	PN100 / 600 lbs	DN25	1"
H4	Hastelloy C	PN100 / 600 lbs	DN25	1"
M4	Monel	PN100 / 600 lbs	DN25	1"
10. end support (only FTH-21)				
0	without support			
C	end support, material: C.S.			
S	end support, material: 316 SS			
X	end support, material: Duplex			
K	end support, material: 1.4539			
H	end support, material: Hastelloy C			
M	end support, material: Monel			
11. isolation valve for the sensor profile				
s. page 98				
12. flanged packing gland				
S	material: 316 SS (standard)			
X	1.4462 Duplex			
K	1.4539			
H	Hastelloy C			
M	Monel			
13. cage nipple				
PC	material: C.S. (standard)			
PS	material: 316 SS			
PX	1.4462 Duplex			
P3	1.4539			
PH	Hastelloy C			
PM	Monel			
14. packing material for the flanged and welded packing gland				
1	packing material: PTFE, max 200°C			
2	packing material: Graphit, max 400°C			
15. gears				
0	without gears			
1	with gears			
16. thermal isolation				
KI	without			
X..	thermal isolation in inches or mm, please specify			

2. Order specification ITABAR-Flow-Sensor, series Flo-Tap

Instrument connection and shutt-off device

type FTH- 20, 21

isolation valve for the sensor profile, DIN

MF01	ball valve, DN25 / PN16, material: C.S.
MF02	ball valve DN25 / PN16, material: 1.4401
MF03	ball valve DN25 / PN40, material: C.S.
MF04	ball valve DN25 / PN40, material: 1.4401
MF05	ball valve DN25 / PN40, material: Duplex
MF06	ball valve DN25 / PN40, material: Monel
MF07	ball valve DN25 / PN40, material: Hastelloy C
MS01	gate valve DN25 / PN100, material: C.S.
MS02	gate valve DN25 / PN100, material: 1.4401



isolation valve for the sensor profile, ANSI

AF01	ball valve, 1" ANSI 150 lbs, material: C.S.
AF02	ball valve, 1" ANSI 150 lbs, material: 1.4401
AF03	ball valve, 1" ANSI 300 lbs, material: C.S.
AF04	ball valve, 1" ANSI 300 lbs, material: 1.4401
AF05	ball valve, 1" ANSI 300 lbs, material: Duplex
AF06	ball valve, 1" ANSI 300 lbs, material: Monel
AF07	ball valve, 1" ANSI 300 lbs, material: Hastelloy C
AS01	gate valve, 1" ANSI / 600lbs, material: C.S.
AS02	gate valve, 1" ANSI / 600lbs, material: 1.4401



1. Order specification ITABAR-FLOW-Sensor, series FTH-25/26

1. type of sensor				
25	without end support			
26	with end support			
2. inside diameter and wall thickness.				
ID / W.-thickn.	inside diameter and wall thickness in inches (or mm), please specify			
3. sensor material				
S	316 SS (standrad)			
X	1.4462 Duplex			
K	1.4539			
H	Hastelloy C			
M	Monel			
4. sensor flange, always identically to sensor material.				
SM	flange according DIN			
SA	flange according ANSI			
5. gasket				
1	gasket strip according to DIN			
2	ANSI RF			
3	ANSI RF SF (smooth finish)			
4	RTJ			
6. PN, material and DN of Sensor flange				
			DIN	ANSI
B01	PN16 / 150 lbs	material: 316 SS 1.4571	DN32	1 1/2"
B02	PN40 / 300 lbs	material: 316 SS 1.4571	DN32	1 1/2"
B03	PN63 / 300 lbs	material: 316 SS 1.4571	DN40	1 1/2"
B04	PN100 / 600 lbs	material: 316 SS 1.4571	DN40	1 1/2"
B10	PN16 / 150 lbs	material: 1.4462 (Duplex)	DN32	1 1/2"
B11	PN40 / 300 lbs	material: 1.4462 (Duplex)	DN32	1 1/2"
B12	PN63 / 300 lbs	material: 1.4462 (Duplex)	DN40	1 1/2"
B13	PN100 / 600 lbs	material: 1.4462 (Duplex)	DN40	1 1/2"
B20	PN16 / 150 lbs	material: 1.4539	DN32	1 1/2"
B21	PN40 / 300 lbs	material: 1.4539	DN32	1 1/2"
B22	PN63 / 300 lbs	material: 1.4539	DN40	1 1/2"
B23	PN100 / 600 lbs	material: 1.4539	DN40	1 1/2"
B30	PN16 / 150 lbs	material: Hastelloy C4	DN32	1 1/2"
B31	PN40 / 300 lbs	material: Hastelloy C4	DN32	1 1/2"
B32	PN63 / 300 lbs	material: Hastelloy C4	DN40	1 1/2"
B33	PN100 / 600 lbs	material: Hastelloy C4	DN40	1 1/2"
B30	PN16 / 150 lbs	material: Monel	DN32	1 1/2"
B31	PN40 / 300 lbs	material: Monel	DN32	1 1/2"
B32	PN63 / 300 lbs	material: Monel	DN40	1 1/2"
B33	PN100 / 600 lbs	material: Monel	DN40	1 1/2"
7. design assembly connecting pieces				
R	assembly connecting pieces with flange (standard)			
W	Weldolet-assembly connecting pieces and flange			
8. assembly connecting piece with flange, identically to sensor flange.				
0	without flange			
M	flange according DIN, gasket strip form C			
A	flange according ANSI, gasket strip RF			
F	flange according ANSI, gasket strip SF (smooth finish)			
T	flange according ANSI, gasket strip RTJ			
9. material connecting piece, with flange (max. pressure rating) always identically to sensor flange.				
C1	C.S.	PN16 / 150 lbs	DN32	1 1/2"
S1	316 SS	PN16 / 150 lbs	DN32	1 1/2"
X1	Duplex	PN16 / 150 lbs	DN32	1 1/2"
K1	1.4539	PN16 / 150 lbs	DN32	1 1/2"
H1	Hastelloy C	PN16 / 150 lbs	DN32	1 1/2"
M1	Monel	PN16 / 150 lbs	DN32	1 1/2"

1. Order specification ITABAR-FLOW-Sensor, series FTH-25/26

C2	C.S.	PN40 / 300 lbs	DN32	1 1/2"
S2	316 SS	PN40 / 300 lbs	DN32	1 1/2"
X2	Duplex	PN40 / 300 lbs	DN32	1 1/2"
K2	1.4539	PN40 / 300 lbs	DN32	1 1/2"
H2	Hastelloy C	PN40 / 300 lbs	DN32	1 1/2"
M2	Monel	PN40 / 300 lbs	DN32	1 1/2"

C3	C.S.	PN63 / 300 lbs	DN40	1 1/2"
S3	316 SS	PN63 / 300 lbs	DN40	1 1/2"
X3	Duplex	PN63 / 300 lbs	DN40	1 1/2"
K3	1.4539	PN63 / 300 lbs	DN40	1 1/2"
H3	Hastelloy C	PN63 / 300 lbs	DN40	1 1/2"
M3	Monel	PN63 / 300 lbs	DN40	1 1/2"

C4	C.S.	PN100 / 600 lbs	DN40	1 1/2"
S4	316 SS	PN100 / 600 lbs	DN40	1 1/2"
X4	Duplex	PN100 / 600 lbs	DN40	1 1/2"
K4	1.4539	PN100 / 600 lbs	DN40	1 1/2"
H4	Hastelloy C	PN100 / 600 lbs	DN40	1 1/2"
M4	Monel	PN100 / 600 lbs	DN40	1 1/2"

10. end support (only FTH-26)

0	without support
C	end support, material: C.S.
S	end support, material: 316 SS
X	end support, material: Duplex
K	end support, material: 1.4539
H	end support, material: Hastelloy C
M	end support, material: Monel

11. isolation valve for the sensor profile

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12. flanged packing gland

S	material: 316 SS (standard)
X	1.4462 Duplex
K	1.4539
H	Hastelloy C
M	Monel

13. cage nipple

PC	material: C.S. (standard)
PS	material: 316 SS
PX	1.4462 Duplex
P3	1.4539
PH	Hastelloy C
PM	Monel

14. packing material for the flanged and welded packing gland

1	packing material: PTFE, max 200°C
2	packing material: Graphit, max 400°C

15. gears

0	without gears
1	with gears

16. thermal isolation

KI	without
X..	thermal isolation in inches or mm, please specify

17. piping run

HL	horizontal
VL	vertikal

18. integ. RTD resit. thermocouple

T0	without
TA	3-wire
TB	3-wire, with ex-proofness

2. Order specification ITABAR-Flow-Sensor, series Flo-Tap

Instrument connection and shutt-off device

isolation valve for the sensor profile, DIN

MF08	ball valve, DN32 / PN16, material: C.S.
MF09	ball valve, DN32 / PN16, material: 1.4401
MF10	ball valve, DN32 / PN16, material Duplex
MF11	ball valve, DN32 / PN16, material: Monel
MF12	ball valve, DN32 / PN16, material: Hastelloy C
MF13	ball valve, DN32 / PN40, material: C.S.-Stahl
MF14	ball valve, DN32 / PN40, material: 1.4401
MF15	ball valve, DN32 / PN40, material: Duplex
MF16	ball valve, DN32 / PN40, material: Monel
MF17	ball valve, DN32 / PN40, material: Hastelloy C
MF18	ball valve, DN40 / PN63, material C.S.
MF19	ball valve, DN40 / PN63, material: 1.4401
MF20	ball valve, DN40 / PN63, material: Duplex
MF21	ball valve, DN40 / PN63, material: Monel
MF22	ball valve, DN40 / PN63, material: Hastelloy C
MS10	gate valve DN40 / PN100, material: C.S.
MS11	gate valve DN40 / PN100, material: 1.4401



isolation valve for the sensor profile, ANSI

AF08	ball valve, 1 1/2" ANSI 150 lbs, material: C.S.
AF09	ball valve, 1 1/2" ANSI 150 lbs, material: 1.4401
AF10	ball valve, 1 1/2" ANSI 150 lbs, material: Duplex
AF11	ball valve, 1 1/2" ANSI 150 lbs, material: Monel
AF12	ball valve, 1 1/2" ANSI 150 lbs, material: Hastelloy C
AF13	ball valve, 1 1/2" ANSI 300 lbs, material: C.S.
AF14	ball valve, 1 1/2" ANSI 300 lbs, material: 1.4401
AF15	ball valve, 1 1/2" ANSI 300 lbs, material: Duplex
AF16	ball valve, 1 1/2" ANSI 300 lbs, material: Monel
AF17	ball valve, 1 1/2" ANSI 300 lbs, material: Hastelloy C
AS10	gate valve 1 1/2" ANSI 600 lbs, material: C.S.
AS11	gate valve, 1 1/2" ANSI 600 lbs, material: 1.4401



1. Order specification ITABAR-FLOW-Sensor, series FTH-35/36

1. type of sensor				
35	without end support			
36	with end support			
2. inside diameter and wall thickness.				
ID / W.-thickn.	inside diameter and wall thickness in inches (or mm), please specify			
3. sensor material				
S	316 SS (standrad)			
X	1.4462 Duplex			
K	1.4539			
H	Hastelloy C			
M	Monel			
4. sensor flange, always identically to sensor material.				
SM	flange according DIN			
SA	flange according ANSI			
5. gasket				
1	gasket strip according to DIN			
2	ANSI RF			
3	ANSI RF SF (smooth finish)			
4	RTJ			
6. PN, material and DN of Sensor flange				
			DIN	ANSI
C01	PN16 / 150 lbs	material: 316 SS	DN50	2"
C02	PN40 / 300 lbs	material: 316 SS	DN50	2"
C03	PN63 / 300 lbs	material: 316 SS	DN50	2"
C04	PN100 / 600 lbs	material: 316 SS	DN50	2"
C10	PN16 / 150 lbs	material: 1.4462 (Duplex)	DN50	2"
C11	PN40 / 300 lbs	material: 1.4462 (Duplex)	DN50	2"
C12	PN63 / 300 lbs	material: 1.4462 (Duplex)	DN50	2"
C13	PN100 / 600 lbs	material: 1.4462 (Duplex)	DN50	2"
C20	PN16 / 150 lbs	material: 1.4539	DN50	2"
C21	PN40 / 300 lbs	material: 1.4539	DN50	2"
C22	PN63 / 300 lbs	material: 1.4539	DN50	2"
C23	PN100 / 600 lbs	material: 1.4539	DN50	2"
C30	PN16 / 150 lbs	material: Hastelloy C4	DN50	2"
C31	PN40 / 300 lbs	material: Hastelloy C4	DN50	2"
C32	PN63 / 300 lbs	material: Hastelloy C4	DN50	2"
C33	PN100 / 600 lbs	material: Hastelloy C4	DN50	2"
C40	PN16 / 150 lbs	material: Monel	DN50	2"
C41	PN40 / 300 lbs	material: Monel	DN50	2"
C42	PN63 / 300 lbs	material: Monel	DN50	2"
C43	PN100 / 600 lbs	material: Monel	DN50	2"
7. design assembly connecting pieces				
R	assembly connecting pieces with flange (standard)			
W	Weldolet-assembly connecting pieces and flange			
8. assembly connecting piece with flange, identically to sensor flange.				
0	without flange			
M	flange according DIN, gasket strip form C			
A	flange according ANSI, gasket strip RF			
F	flange according ANSI, gasket strip SF (smooth finish)			
T	flange according ANSI, gasket strip RTJ			
9. material connecting piece, with flange (max. pressure rating)				
always identically to sensor flange.				
C1	C.S.	PN16 / 150 lbs	DN50	2"
S1	316 SS	PN16 / 150 lbs	DN50	2"
X1	Duplex	PN16 / 150 lbs	DN50	2"
K1	1.4539	PN16 / 150 lbs	DN50	2"
H1	Hastelloy C	PN16 / 150 lbs	DN50	2"
M1	Monel	PN16 / 150 lbs	DN50	2"

1. Order specification ITABAR-FLOW-Sensor, series FTH-35/36

C2	C.S.	PN40 / 300 lbs	DN50	2"
S2	316 SS	PN40 / 300 lbs	DN50	2"
X2	Duplex	PN40 / 300 lbs	DN50	2"
K2	1.4539	PN40 / 300 lbs	DN50	2"
H2	Hastelloy C	PN40 / 300 lbs	DN50	2"
M2	Monel	PN40 / 300 lbs	DN50	2"

C3	C.S.	PN63 / 300 lbs	DN50	2"
S3	316 SS	PN63 / 300 lbs	DN50	2"
X3	Duplex	PN63 / 300 lbs	DN50	2"
K3	1.4539	PN63 / 300 lbs	DN50	2"
H3	Hastelloy C	PN63 / 300 lbs	DN50	2"
M3	Monel	PN63 / 300 lbs	DN50	2"

C4	C.S.	PN100 / 600 lbs	DN50	2"
S4	316 SS	PN100 / 600 lbs	DN50	2"
X4	Duplex	PN100 / 600 lbs	DN50	2"
K4	1.4539	PN100 / 600 lbs	DN50	2"
H4	Hastelloy C	PN100 / 600 lbs	DN50	2"
M4	Monel	PN100 / 600 lbs	DN50	2"

10. end support (only FTH-36)

0	without support
C	end support, material: C.S.
S	end support, material: 316 SS
X	end support, material: Duplex
K	end support, material: 1.4539
H	end support, material: Hastelloy C
M	end support, material: Monel

11. isolation valve for the sensor profile

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7. flanged packing gland

S	material: 316 SS (standard)
X	1.4462 Duplex
K	1.4539
H	Hastelloy C
M	Monel

13. cage nipple

PC	material: C.S. (standard)
PS	material: 316 SS
PX	1.4462 Duplex
P3	1.4539
PH	Hastelloy C
PM	Monel

14. packing material for the flanged and welded packing gland

1	packing material: PTFE, max 200°C
2	packing material: Graphit, max 400°C

15. gears

0	without gears
1	with gears

16. thermal isolation

KI	without
X..	thermal isolation in inches or mm, please specify

17. piping run

HL	horizontal
VL	vertikal

18. integ. RTD resit. thermocouple

T0	without
TA	3-wire
TB	3-wire, with ex-proofness

2. Order specification ITABAR-Flow-Sensor, series Flo-Tap

Instrument connection and shutt-off device

isolation valve for the sensor profile, DIN

MF30 ball valve DN50 / PN16, material: C.S.

MF31 ball valve DN50 / PN16, material: 1.4401

MF32 ball valve DN50 / PN16, material: Duplex

MF33 ball valve DN50 / PN16, material: Monel

MF34 ball valve DN50 / PN16, material: Hastelloy C

MF35 ball valve DN50 / PN40, material: C.S.

MF36 ball valve DN50 / PN40, material: 1.4401

MF37 ball valve DN50 / PN40, material: Duplex

MF38 ball valve DN50 / PN40, material: Monel

MF39 ball valve DN50 / PN40, material: Hastelloy C

MF40 ball valve DN50 / PN63, material: C.S.

MF41 ball valve DN50 / PN63, material: 1.4401

MF42 ball valve DN50 / PN63, material: Duplex

MF43 ball valve DN50 / PN63, material: Monel

MF44 ball valve DN50 / PN63, material: Hastelloy C

MS20 gate valve, DN50 / PN100, material: C.S.

MS21 gate valve DN50 / PN100, material: 1.4401



isolation valve for the sensor profile, ANSI

AF30 ball valve 2" ANSI 150 lbs, material: C.S.

AF31 ball valve 2" ANSI 150 lbs, material: 1.4401

AF32 ball valve 2" ANSI 150 lbs, material: Duplex

AF33 ball valve 2" ANSI 150 lbs, material: Monel

AF34 ball valve 2" ANSI 150 lbs, material: Hastelloy C

AF35 ball valve 2" ANSI 300 lbs, material: C.S.

AF36 ball valve, 2" ANSI 300 lbs, Werkstoff: 1.4401

AF37 ball valve 2" ANSI 300 lbs, material: Duplex

AF38 ball valve 2" ANSI 300 lbs, material: Monel

AF39 ball valve 2" ANSI 300 lbs, material: Hastelloy C

AS20 gate valve 2" ANSI 600 lbs, material: C.S.

AS21 gate valve 2" ANSI 600 lbs, material: 1.4401



1. Order specification ITABAR-FLOW-Sensor, series FTH-65/66

1. type of sensor

- 65 without end support
- 66 with end support

2. inside diameter and wall thickness.

ID / W.-thickn. inside diameter and wall thickness in inches (or mm), please specify

3. sensor material

- S 316 SS (standrad)
- X 1.4462 Duplex
- K 1.4539
- H Hastelloy C
- M Monel

4. sensor flange, always identically to sensor material.

- SM flange according DIN
- SA flange according ANSI

5. gasket

- 1 gasket strip according to DIN
- 2 ANSI RF
- 3 ANSI RF SF (smooth finish)
- 4 RTJ

6. PN, material and DN of Sensor flange

			DIN	ANSI
D01	PN16 / 150 lbs	material: 316 SS	DN65	2 1/2"
D02	PN40 / 300 lbs	material: 316 SS	DN65	2 1/2"
D03	PN63 / 300 lbs	material: 316 SS	DN65	2 1/2"
D04	PN100 / 600 lbs	material: 316 SS	DN65	2 1/2"
D10	PN16 / 150 lbs	material: 1.4462 (Duplex)	DN65	2 1/2"
D11	PN40 / 300 lbs	material: 1.4462 (Duplex)	DN65	2 1/2"
D12	PN63 / 300 lbs	material: 1.4462 (Duplex)	DN65	2 1/2"
D13	PN100 / 600 lbs	material: 1.4462 (Duplex)	DN65	2 1/2"
D20	PN16 / 150 lbs	material: 1.4539	DN65	2 1/2"
D21	PN40 / 300 lbs	material: 1.4539	DN65	2 1/2"
D22	PN63 / 300 lbs	material: 1.4539	DN65	2 1/2"
D23	PN100 / 600 lbs	material: 1.4539	DN65	2 1/2"
D30	PN16 / 150 lbs	material: Hastelloy C4	DN65	2 1/2"
D31	PN40 / 300 lbs	material: Hastelloy C4	DN65	2 1/2"
D32	PN63 / 300 lbs	material: Hastelloy C4	DN65	2 1/2"
D33	PN100 / 600 lbs	material: Hastelloy C4	DN65	2 1/2"
D40	PN16 / 150 lbs	material: Monel	DN65	2 1/2"
D41	PN40 / 300 lbs	material: Monel	DN65	2 1/2"
D42	PN63 / 300 lbs	material: Monel	DN65	2 1/2"
D43	PN100 / 600 lbs	material: Monel	DN65	2 1/2"

7. design assembly connecting pieces

- R assembly connecting pieces with flange (standard)
- W Weldolet-assembly connecting pieces and flange

8. assembly connecting piece with flange, identically to sensor flange.

- O without flange
- M flange according DIN, gasket strip form C
- A flange according ANSI, gasket strip RF
- F flange according ANSI, gasket strip SF (smooth finish)
- T flange according ANSI, gasket strip RTJ

9. material connecting piece, with flange (max. pressure rating)

always identically to sensor flange.

C1	C.S.	PN16 / 150 lbs	DN65	2 1/2"
S1	316 SS	PN16 / 150 lbs	DN65	2 1/2"
X1	Duplex	PN16 / 150 lbs	DN65	2 1/2"
K1	1.4539	PN16 / 150 lbs	DN65	2 1/2"
H1	Hastelloy C	PN16 / 150 lbs	DN65	2 1/2"
M1	Monel	PN16 / 150 lbs	DN65	2 1/2"

1. Order specification ITABAR-FLOW-Sensor, series FTH-65/66

C2	C.S.	PN40 / 300 lbs	DN65	2 1/2"
S2	316 SS	PN40 / 300 lbs	DN65	2 1/2"
X2	Duplex	PN40 / 300 lbs	DN65	2 1/2"
K2	1.4539	PN40 / 300 lbs	DN65	2 1/2"
H2	Hastelloy C	PN40 / 300 lbs	DN65	2 1/2"
M2	Monel	PN40 / 300 lbs	DN65	2 1/2"

C3	C.S.	PN63 / 300 lbs	DN65	2 1/2"
S3	316 SS	PN63 / 300 lbs	DN65	2 1/2"
X3	Duplex	PN63 / 300 lbs	DN65	2 1/2"
K3	1.4539	PN63 / 300 lbs	DN65	2 1/2"
H3	Hastelloy C	PN63 / 300 lbs	DN65	2 1/2"
M3	Monel	PN63 / 300 lbs	DN65	2 1/2"

C4	C.S.	PN100 / 600 lbs	DN65	2 1/2"
S4	316 SS	PN100 / 600 lbs	DN65	2 1/2"
X4	Duplex	PN100 / 600 lbs	DN65	2 1/2"
K4	1.4539	PN100 / 600 lbs	DN65	2 1/2"
H4	Hastelloy C	PN100 / 600 lbs	DN65	2 1/2"
M4	Monel	PN100 / 600 lbs	DN65	2 1/2"

10. end support (only FTH-66)

0	without support
C	end support, material: C.S.
S	end support, material: 316 SS
X	end support, material: Duplex
K	end support, material: 1.4539
H	end support, material: Hastelloy C
M	end support, material: Monel

11. isolation valve for the sensor profile

s. page 110

7. flanged packing gland

S	material: 316 SS (standard)
X	1.4462 Duplex
K	1.4539
H	Hastelloy C
M	Monel

13. cage nipple

PC	material: C.S. (standard)
PS	material: 316 SS
PX	1.4462 Duplex
P3	1.4539
PH	Hastelloy C
PM	Monel

14. packing material for the flanged and welded packing gland

1	packing material: PTFE, max 200°C
2	packing material: Graphit, max 400°C

15. gears

0	without gears
1	with gears

16. thermal isolation

KI	without
X..	thermal isolation in inches or mm, please specify

17. piping run

HL	horizontal
VL	vertikal

18. integ. RTD resit. thermocouple

T0	without
TA	3-wire
TB	3-wire, with ex-proofness

2. Order specification ITABAR-Flow-Sensor, series Flo-Tap

shut-off device for type FTH-65/66

isolation valve for the sensor profile, DIN

MF50	ball valve, DN65 / PN16, material: C.S.
MF51	ball valve, DN65 / PN16, material: 1.4401
MF52	ball valve, DN65 / PN16, material: Duplex
MF53	ball valve, DN65 / PN16, material: Monel
MF54	ball valve, DN65 / PN16, material: Hastelloy C
MF55	ball valve, DN65 / PN40, material: C.S.
MF56	ball valve, DN65 / PN40, material: 1.4401
MF57	ball valve, DN65 / PN40, material: Duplex
MF57	ball valve, DN65 / PN40, material: Monel
MF58	ball valve, DN65 / PN40, material: Hastelloy C
MF59	ball valve, DN65 / PN63, material: C.S.
MF60	ball valve, DN65 / PN63, material: 1.4401
MF61	ball valve, DN65 / PN63, material: Duplex
MF62	ball valve, DN65 / PN63, material: Monel
MF63	ball valve, DN65 / PN63, material: Hastelloy C
MS30	gate valve, DN65 / PN100, material: C.S.
MS31	gate valve, DN65 / PN100, material: 1.4401

isolation valve for the sensor profile, ANSI

AF50	ball valve, 2 1/2" ANSI 150 lbs, material: C.S.
AF51	ball valve, 2 1/2" ANSI 150 lbs, material: 1.4401
AF52	ball valve, 2 1/2" ANSI 150 lbs, material: Duplex
AF53	ball valve, 2 1/2" ANSI 150 lbs, material: Monel
AF54	ball valve, 2 1/2" ANSI 150 lbs, material: Hastelloy C
AF55	ball valve, 2 1/2" ANSI 300 lbs, material: C.S.
AF56	ball valve, 2 1/2" ANSI 300 lbs, material: 1.4401
AF57	ball valve, 2 1/2" ANSI 300 lbs, material: Duplex
AF58	ball valve, 2 1/2" ANSI 300 lbs, Werkstoff: Monel
AF59	ball valve, 2 1/2" ANSI 300 lbs, material: Hastelloy C
AS30	gate valve, 2 1/2" ANSI 600 lbs, material: C.S.
AS31	gate valve, 2 1/2" ANSI 600 lbs, material: 1.4401

2. Order specification ITABAR-Flow-Sensor, series Flo-Tap

Instrument connection and shut-off device type FTH- 20, 21, 25, 26, 35, 36, 65, 66

instrument connection

A04	sensorhead with 1/4" NPT outside thread
A03	sensorhead with 1/2" NPT outside thread
A06	flange plate to direct mount a 3-valve manifold
A07	flange plate to direct mount a 5-valve manifold

shut-off device for effect pressure pipe.

A00	ohne Absperrorgan
A55	ball valve PN40, case C.S. / female thread 1/2" NPT , packing: Teflon
A56	ball valve PN40, case 1.4401. / female thread 1/2" NPT , packing: Teflon
A57	ball valve PN40, case C.S. / female thread 1/4" NPT , packing: Teflon
A58	ball valve PN40, case 1.4401. / female thread 1/4" NPT , packing: Teflon
A59	shut-off valve 1/4" NPT, PN400, case C.S. / female thread 1/4" NPT packing: graphite
A60	shut-off valve 1/4" NPT, PN400, case 1.4401 / female thread 1/4" NPT packing: graphite
A61	shut-off valve 1/2" NPT, PN400, case C.S. / female thread 1/2" NPT packing: graphite
A62	shut-off valve 1/2" NPT, PN400, case 1.4401 / female thread 1/2" NPT packing: graphite
A90	shut-off valve 1/2" NPT, 800 lbs, C.S. / female thread 1/2" NPT, packing: graphite
A91	shut-off valve 1/2" NPT, 800 lbs, 1.4401 / female thread 1/2" NPT, packing: graphite
A63	shut-off valve 1/2" NPT, PN10, PTFE
A64	shut-off valve G 1/2", PVDF
A66	direct mount, with 3-valve manifold, PN400, case 1.4401 / packing: PTFE (only with A06)
A67	direct mount, with 3-valve manifold, PN10, case PTFE / packing: PTFE (only with A06)
A71	direct mount, with 5-valve manifold, PN400, case 1.4401 / packing: PTFE (only with A07)