

## 8.0 Series IBR 20/21/25/26 to 588 PSI, IBR 35/36 to 235 PSI

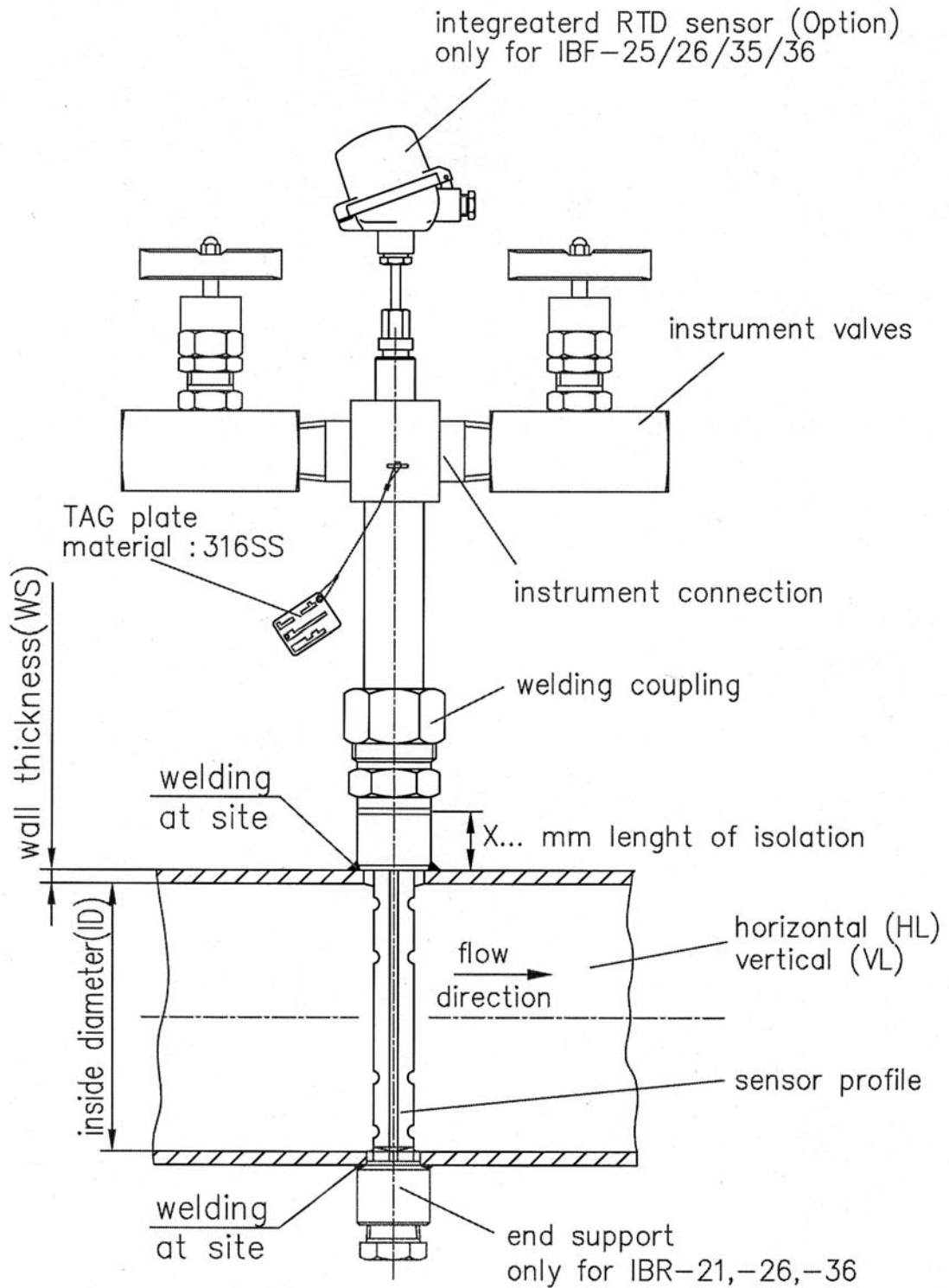
### Description

The ITABAR-sensor series IBR is used to measure volumetric flow of liquids and gases. It is designed to be installed through threaded weld-o-let pipe mounting parts. It offers a good price/performance ratio in applications with no high temperature or pressure requirements. Standard sensor material is 316 SS. The design is such that the DP transmitter can be integrally mounted onto the sensor via an optional 3-way-manifold. An optional RTD temperature sensor is available for mass flow measurement



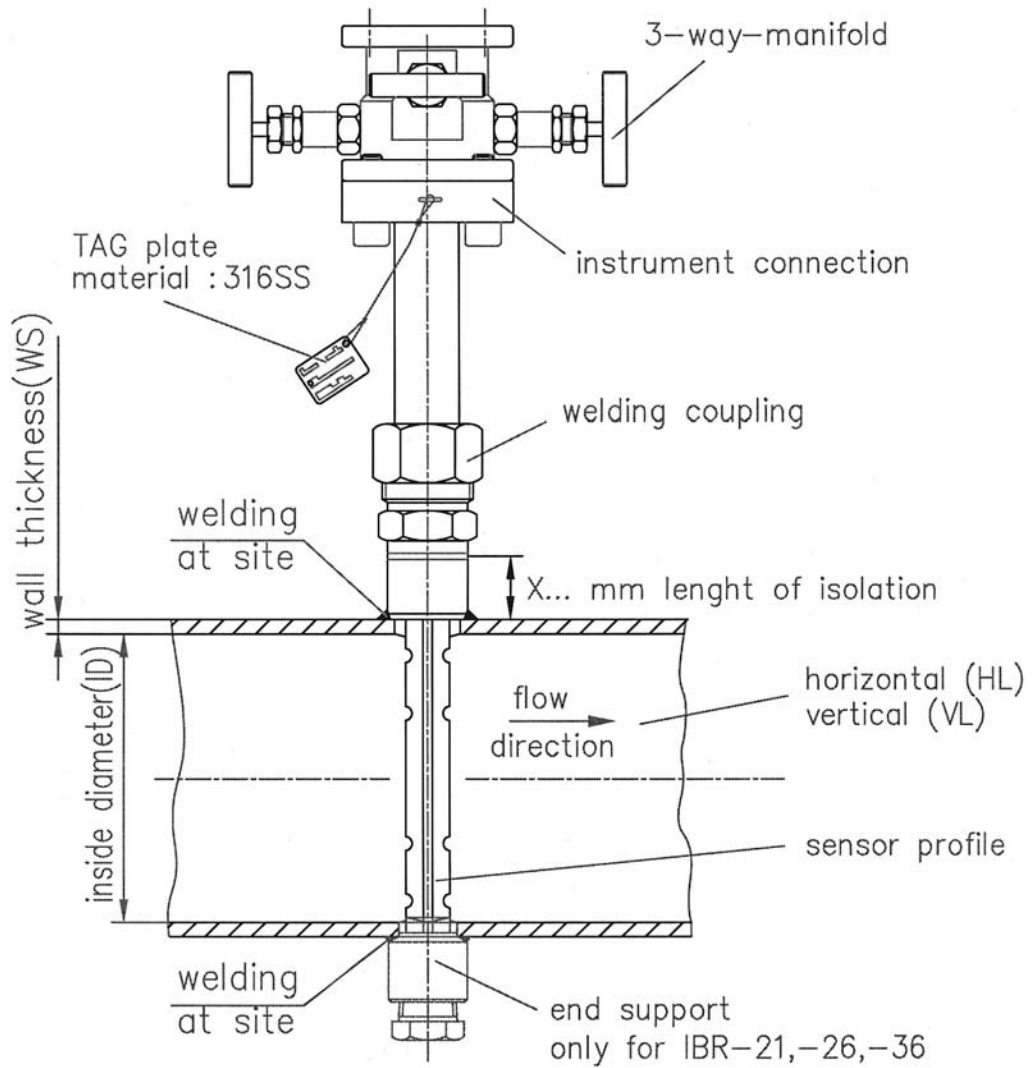
Fig.7.1: ITABAR IBR-25 for pipe size ID = 5.76 inches

seperate installation of sensor and transmitter



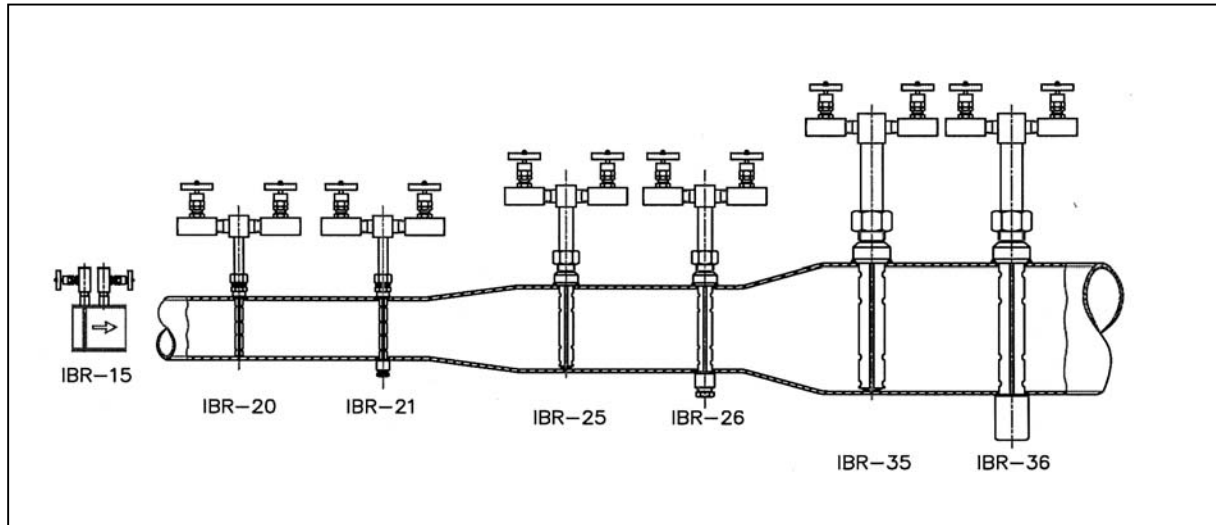
# Drawings for ITABAR series IBR

compact version electr. d.p.transmitter mounted on to the flow sensor ( only with A06 )



# Order Data for ITABAR Series IBR- 15/20/21/25/26/35/36

## 1. Sensor Type



Pipe Size inches	Max. volumetric flow GPM						
	IBR-15	IBR-20	IBR-21	IBR-25	IBR-26	IBR-35	IBR-36
1	159	---	---	---	---	---	---
1 ¼	225	---	---	---	---	---	---
1 ½	---	228	541	---	---	---	---
2	---	329	770	---	---	---	---
2 ¼	---	501	1161	---	---	---	---
2 ½	---	686	1566	---	---	---	---
4	---	924	2099	1126	2618	---	---
5	---	1201	2996	1504	3454	---	---
6	---	---	---	1878	4285	---	---
8	---	---	---	2622	5926	---	---
10	---	---	---	3418	7695	---	---
12	---	---	---	4272	9596	8830	19826
14	---	---	---	5090	11418	10608	23786
16	---	---	---	5882	13173	12390	27755
20	---	---	---	7519	16830	15787	35323
24	---	---	---	9116	20394	19245	43040
28	---	---	---	10753	24059	22818	51013
32	---	---	---	12491	27913	26470	59171
36	---	---	---	14185	31922	30179	67465
40	---	---	---	28028	36044	33932	75851
48	---	---	---	19795	44228	41412	92628
56	---	---	---	23328	52288	48936	109353
64	---	---	---	26844	59941	56416	126042
72	---	---	---	---	---	63602	142067
80	---	---	---	---	---	70778	158056

These values are for water of 0.999 SGU and at a temperature T = 67 °F. To calculate volumetric or mass flow of fluids with other densities see chapter 6 „Specifications of DP Sensors with WINFLOW“.

## 1. Order specification ITABAR-FLOW-Sensor, series IBR-15

<b>1. type of sensor</b>	
15	without end support
<b>2. inside diameter and wall thickness.</b>	
ID / W.-thickn.	inside diameter and wall thickness in inches (or mm), please specify
<b>3. sensor material</b>	
S	316 SS
<b>5. piping run</b>	
HL	horizontal
VL	vertikal
<b>6. process connection s. page 75</b>	
<b>7. instrument valves, s. page 75</b>	

IBR-	15	/	S						
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## 1. Order specification ITABAR-FLOW-Sensor, series IBR-20/21

<b>1. type of sensor</b>	
20	without end support
21	with end support
<b>2. inside diameter and wall thickness.</b>	
ID / W.-thickn.	inside diameter and wall thickness in inches (or mm), please specify
<b>3. sensor material</b>	
S	316 SS
<b>4. welding coupling</b>	
00	without
07	material C.S.
08	material 316 SS
<b>5. material end support (IBR-21)</b>	
Y	without end support
C	end support, material: C.S.
S	end support, material: 316 SS
<b>6. isolation</b>	
KI	without
X..	isolation in inches (or mm), please specify
<b>7. piping run</b>	
HL	horizontal
VL	vertikal
<b>8. process connection s. page 75</b>	
<b>9. instrument valves s. page 75</b>	

IBR-		/	S						
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# 1. Order specification ITABAR-FLOW-Sensor, series IBR-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

## 4. welding coupling

- 0 without
- 1 material: C.S.
- 2 material: 316 SS

## 5. material end support (IBR-26)

- Y without end support
- C end support C.S. material
- S end support 316 SS material

## 6. isolation

- KI without
- X.. isolation in inches (or mm), please specify

## 7. piping run

- HL horizontal
- VL vertikal

## 8. integrated RTD resistance thermocouple

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

## 9. process connection s. page 75

## 10. instrument valves, s. page 75

IBR- / S

# 1. Order specification ITABAR-FLOW-Sensor, series IBR-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

## 4. welding coupling

- 0 without
- 1 material: C.S.
- 2 material: 316 SS

## 5. material end support (IBR-36)

- Y without end support
- C end support C.S. material
- S end support 316 SS material

## 6. isolation

- KI without
- X.. isolation in inches (or mm), please specify

## 7. piping run

- HL horizontal
- VL vertikal

## 8. integrated RTD resistance thermocouple

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

## 9. process connection s. page 75

## 10. instrument valves, s. page 75

IBR- / S

## 2. Order specification ITABAR-Flow-Sensor

### Instrument connection and shut-off device

type IBR- 20, 21, 25, 26, 35, 36

type IBF- 20, 21, 35, 36, 65, 66, 100

#### 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	without shut-off-device
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
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)