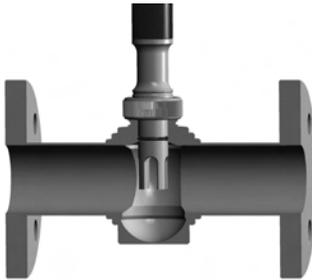


InFlow® Series

Modular, highly adaptable flow-through housings

Technical Data



InFlow 76X

Short description

InFlow 76X flow-through housings from METTLER TOLEDO are designed to enable safe and reliable mounting of the InTrac and InFit Series sensor housings directly into the process or in a bypass (pipe). These rugged flow-through housings are specially suited to the requirements of the process industry and can be easily and safely installed, allowing reliable measurement procedures.

InFlow 751 flow-through housings serve for the direct fitting of METTLER TOLEDO electrodes and sensors for the measurement of pH, ORP, dissolved oxygen, conductivity and turbidity, particularly in the field of industrial wastewater treatment. The housings protect electrodes/sensors against mechanical damage.

These flow-through housings feature the following highlights:

- optimally designed for use with METTLER TOLEDO housings and sensors
- available in different materials
- wide pressure and temperature ranges
- 180° or 90° versions available
- highly adaptable process connection



InFlow 751

Contents

InFlow 76X	2	InFlow 751	8
System structure InFlow 76X Series	2	System structure InFlow 751 Series	8
Complete measuring system and possible installation	2	Complete measuring system and possible installation	8
Dimensional drawings InFlow 76X Series	3	Dimensional drawings InFlow 751 Series	9
Technical specifications InFlow 76X	5	Technical specifications InFlow 751	10
Pressure/temperature diagram	6	Pressure/temperature diagram	10
Suitable InTrac and InFit housings	6	Product key InFlow 751	11
Product key InFlow 76X	7	Ordering information InFlow 751	11
Ordering information InFlow 762	7		

METTLER TOLEDO

A graphic element consisting of a series of parallel diagonal lines that form a stylized arrow pointing towards the right, positioned behind the company name.

System structure InFlow 76X Series

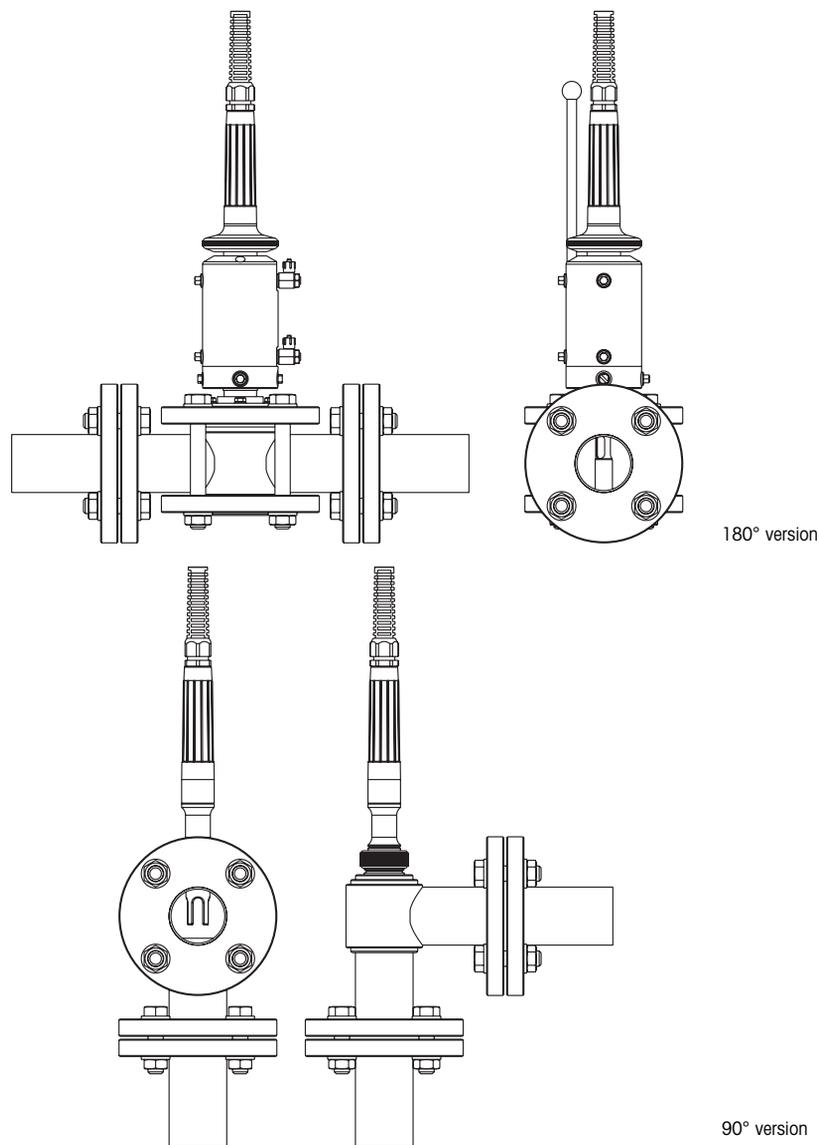
The InFlow 76X Series of modular flow-through housings work in conjunction with our InTrac and InFit housings, and available in stainless steel (1.4404/316L) or PVDF. For adaption of the InTrac or InFit housings, a DN50 flange or DN25 INGOLD socket are available.

The InFlow 76X can be directly integrated into a process or bypass pipe by using our available DIN or ANSI flange adaptors with dimensions DN25 (1") or DN50 (2"). Direct welding into a pipe is also possible.

For optimal adaption to the process, we can supply both 180° and 90° versions.

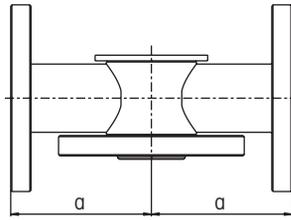
The InFlow 76X Series is a highly flexible connection system for the optimal integration of a measuring loop.

Complete measuring system and possible installation

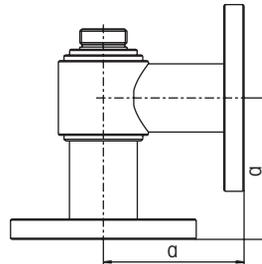


Examples of possible assembly of an InFlow flow-through housing on a pipe, either as a 180° or 90° version. There is the choice of combination with either an InTrac or an InFit housing.

Dimensional drawings InFlow 76X Series



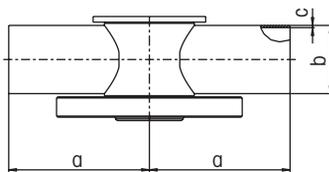
180° version



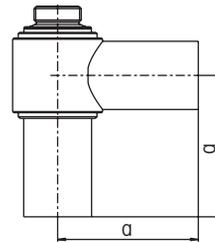
90° version

Flow-through housing with flange connection

	a
InFlow 761, 1.4404/316L	125 mm/4.92"
InFlow 762, PVDF	150 mm/5.91"



180° version

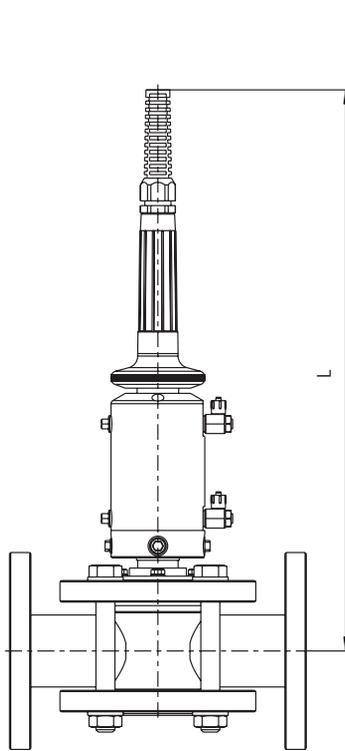


90° version

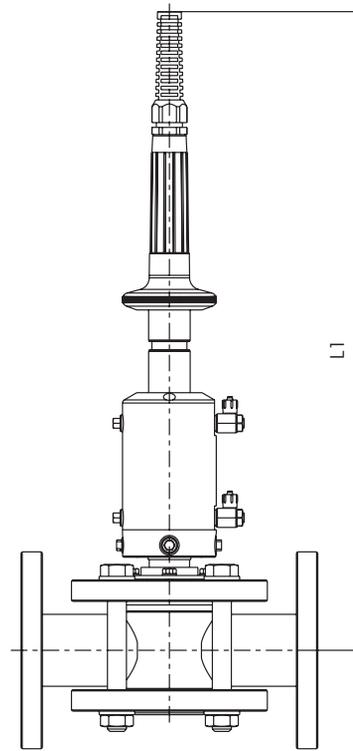
Flow-through housing with welded connection

	a	b	c
InFlow 761, 1.4404/316L			
DN25	125 mm/4.92"	33.7 mm/1.33"	2.0 mm/0.08"
DN50	125 mm/4.92"	60.3 mm/2.37"	2.0 mm/0.08"
InFlow 762, PVDF			
DN25	150 mm/5.91"	32 mm/1.26"	2.4 mm/0.09"
DN50	150 mm/5.91"	63 mm/2.48"	3.0 mm/0.12"

Dimensional drawings InFlow 76X Series (cont.)

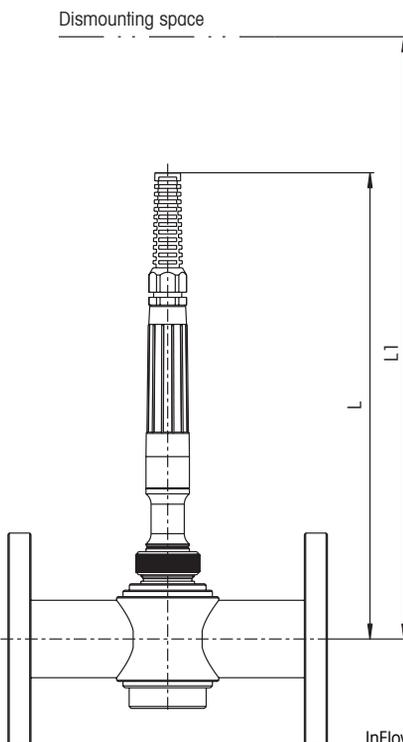


Measuring position



Maintenance position

InFlow 76X with InTrac 777 e



InFlow 76X with InFit 761 e

Flow-through housing in combination with InFit and InTrac housing

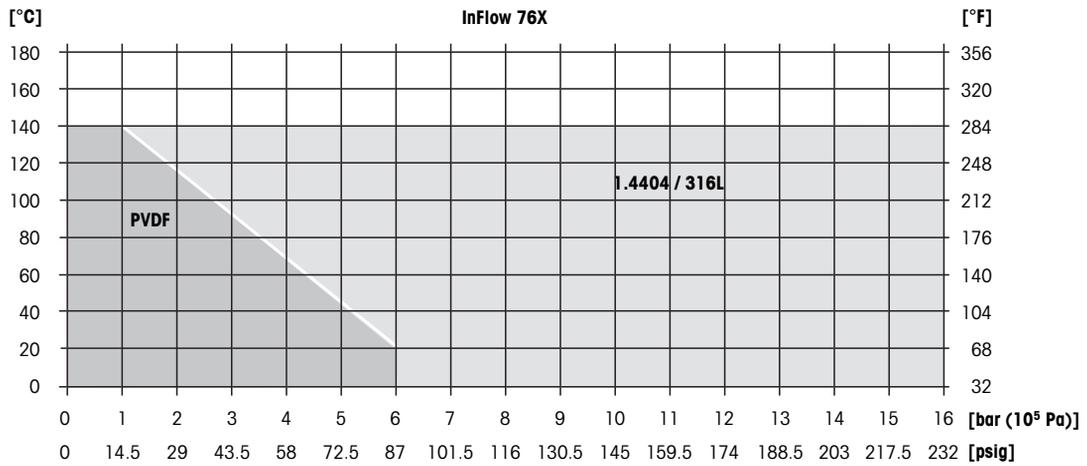
	L	L1
InTrac 776 e	650 mm/25.59"	715 mm/28.15"
InTrac 777 e	470 mm/18.5"	535 mm/21.06"
InFit 764 e	510 mm/20.08"	640 mm/25.2"
InFit 761 e	363 mm/14.29"	493 mm/19.41"

Technical specifications InFlow 76X

Ambient conditions							
Temperature	-40 ... +100 °C (-40 ... +212 °F)						
Max. admissible pressure [PS]/[TS]* (linear relation)	<table border="0"> <tr> <td>PVDF:</td> <td>6 bar/20 °C (87 psig/68 °F)</td> </tr> <tr> <td></td> <td>1 bar/140 °C (14.5 psig/284 °F)</td> </tr> <tr> <td>1.4404/316L:</td> <td>16 bar/140 °C (232 psig/284 °F)</td> </tr> </table> <p>Please refer to the pressure/temperature diagram on page 6!</p>	PVDF:	6 bar/20 °C (87 psig/68 °F)		1 bar/140 °C (14.5 psig/284 °F)	1.4404/316L:	16 bar/140 °C (232 psig/284 °F)
PVDF:	6 bar/20 °C (87 psig/68 °F)						
	1 bar/140 °C (14.5 psig/284 °F)						
1.4404/316L:	16 bar/140 °C (232 psig/284 °F)						
Medium-wetted materials	<table border="0"> <tr> <td>InFlow 761:</td> <td>1.4404/316L</td> </tr> <tr> <td>InFlow 762:</td> <td>PVDF (version INGOLD DN25 with Viton® O-ring)</td> </tr> </table>	InFlow 761:	1.4404/316L	InFlow 762:	PVDF (version INGOLD DN25 with Viton® O-ring)		
InFlow 761:	1.4404/316L						
InFlow 762:	PVDF (version INGOLD DN25 with Viton® O-ring)						
Weight	<table border="0"> <tr> <td>InFlow 761:</td> <td>approx. 10 kg (22 lbs)</td> </tr> <tr> <td>InFlow 762:</td> <td>approx. 6 kg (13 lbs)</td> </tr> </table>	InFlow 761:	approx. 10 kg (22 lbs)	InFlow 762:	approx. 6 kg (13 lbs)		
InFlow 761:	approx. 10 kg (22 lbs)						
InFlow 762:	approx. 6 kg (13 lbs)						
Pressure domain	<p>According to PED 97/23/EC, Article 1, Section 2.2: "Pressure" means pressure relative to atmospheric pressure, i.e. gauge pressure. As a consequence, vacuum is designated by a negative value.</p>						
Certificates/approvals	<ul style="list-style-type: none"> - Declaration of conformity CE for the "Pressure equipment directive" (PED) 97/23/EC - Certificate of compliance with directive EN10204-2.1 - Inspection certificate 3.1B 						

* Pressure rating according to PED 97/23/EC

Pressure/temperature diagram



Suitable InTrac and InFit housings

InFlow	InTrac	InFit
InFlow 761, 1.4404/316L		
InFlow 761 INGOLD DN25	InTrac 7XXx/100/4404/D00/xx/xxx	InFit 76X/xS/70/4435/D00/xxxx
	InTrac 7XXx/70/4404/D00/xx/xxx	InFit 76X/xS/70/4435/D11/xxxx
InFlow 761 flange DN50	InTrac 7XXx/100/4404/D04/xx/xxx	on request
	InTrac 7XXx/70/4404/D04/xx/xxx	
InFlow 762, PVDF		
InFlow 762 INGOLD DN25	InTrac 7XXx/100/PVDF/D00/xx/xxx	InFit 76X/xS/70/PVDF/D00/xxxx
	InTrac 7XXx/70/PVDF/D00/xx/xxx	
InFlow 762 flange DN50	InTrac 7XXx/100/PVDF/D04/xx/xxx	InFit 76X/xS/70/PVDF/D04/xxxx
	InTrac 7XXx/70/PVDF/D04/xx/xxx	

Product key InFlow 76X

Material*											
1	/	4	4	0	4						
2	/	P	V	D	F						
							1.4404/316L				
							PVDF (polyvinylidene fluoride)				
Flow-through direction											
							1	8	0		
							-	9	0		
								180°			
								90°			
Process connection*											
D	2	5								DIN flange DN25 PN16	
D	5	0								DIN flange DN50 PN16	
A	0	1								ANSI flange A150-1"	
A	0	2								ANSI flange A150-2"	
W	2	5								Welding connection DN25 (1")	
W	5	0								Welding connection DN50 (2")	
Housing connection*											
D	0	0								INGOLD DN25	
D	0	4								DIN flange DN50	
Special											
-										Standard	
S										Special	

InFlow 76 / / / / / / / /

9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

* others on request

Seals:

The PVDF version with INGOLD DN25 socket is fitted with a medium-wetted O-ring made of Viton®. O-ring sets made of EPDM and Kalrez® are available as accessories.

Ordering information InFlow 76X

Order No.

InFlow 761

InFlow761/4404/180/D25/D00/-	59800812
InFlow761/4404/180/D50/D00/-	59800815
InFlow761/4404/180/A01/D00/-	59800830
InFlow761/4404/180/W25/D00/-	59800832
InFlow761/4404/180/W50/D00/-	59800833
InFlow761/4404/-90/W25/D00	59800880
InFlow761/4404/-90/W50/D00/-	59800987
InFlow761/4404/-90/D25/D04/-	59801044
InFlow761/4404/-90/D25/D00/-	59801226

InFlow 762

InFlow762/PVDF/180/D25/D00/-	59800816
InFlow762/PVDF/180/A02/D00/-	59800842
InFlow762/PVDF/180/W25/D00/-	59800843

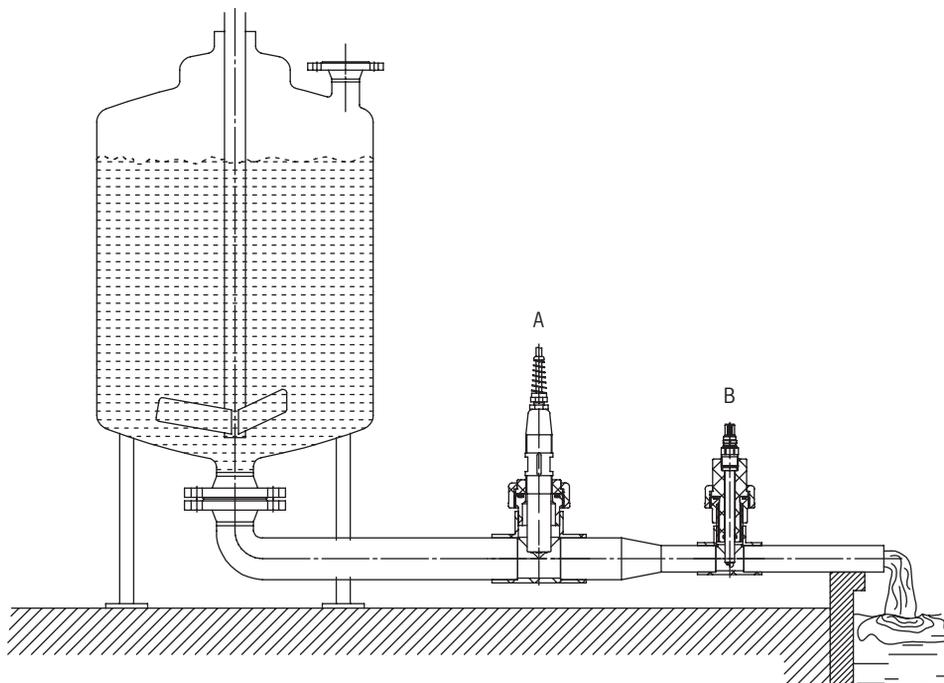
Accessories for InFlow 762

O-ring set for InFlow 762 with INGOLD DN25, EPDM	52 403 716
O-ring set for InFlow 762 with INGOLD DN25, Kalrez®	52 403 717
O-ring set for InFlow 762 with INGOLD DN 25, Viton®	52 403 715

System structure InFlow 751 Series

InFlow 751 flow-through housings serve for the direct fitting of METTLER TOLEDO electrodes and sensors for the measurement of pH, ORP, dissolved oxygen, conductivity and turbidity, particularly in the field of industrial wastewater treatment. The housings protect electrodes/sensors against mechanical damage. The plug-in connection allows easy, uncomplicated change of electrode/sensor. All parts of the housing which come into contact with the process medium are made of PVC or PVDF. Process-wetted O-rings are made of Viton®.

Complete measuring system and possible installation

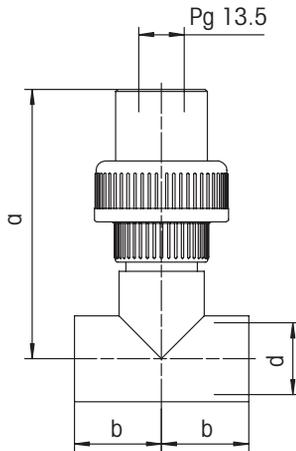


Pipe installation in PVC or PVDF lines

A InFlow 751 with 1" NPT electrode

B InFlow 751 with 12 mm sensor/electrode

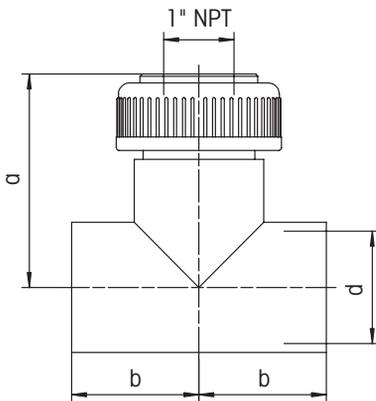
Dimensional drawings InFlow 751 Series



InFlow 751 – Pg 13.5

Pg 13.5	PVC			PVDF	
	d	a	b	a	b
DN25	32 (1.26")	120 (4.70")	39 (1.53")	120 (4.70")	38 (1.49")
DN40	50 (1.97")	113 (4.45")	57 (2.24")	113 (4.45")	51 (2.01")
DN50	63 (2.48")	107.5 (4.23")	71 (2.80")	106.5 (4.19")	

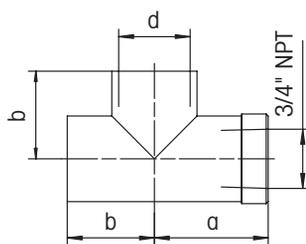
All dimensions in mm (inch)



InFlow 751 – NPT 1"

NPT 1"	PVC			PVDF	
	d	a	b	a	b
DN40	50 (1.97")	93 (3.66")	57 (2.24")	88 (3.46")	51 (2.01")
DN50	63 (2.48")	108 (4.25")	71 (2.80")	102 (4.19")	62 (2.44")

All dimensions in mm (inch)



InFlow 751 – NPT 3/4"

NPT 3/4"	PVC			PVDF	
	d	a	b	a	b
DN25	32 (1.26")	51 (2.01")	39 (1.53")	51 (2.01")	38 (1.49")
DN40	50 (1.97")	63 (2.48")	57 (2.24")	63 (2.48")	51 (2.01")
DN50	63 (2.48")	77 (3.03")	71 (2.80")	77 (3.03")	62 (2.44")

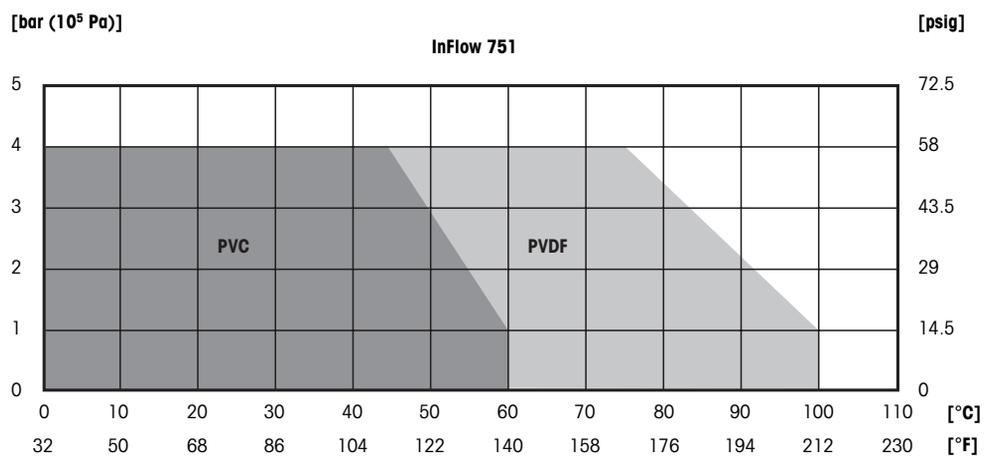
All dimensions in mm (inch)

Technical specifications InFlow 751

Ambient conditions									
Temperature	0 ... 70 °C (32 ... 158 °F)								
Max. admissible pressure [PS]/[TS]* (linear relation)	<table border="0"> <tr> <td>PVC:</td> <td>4 bar / 45 °C (58 psig / 113 °F)</td> </tr> <tr> <td></td> <td>1 bar / 60 °C (14.5 psig / 140 °F)</td> </tr> <tr> <td>PVDF:</td> <td>4 bar / 75 °C (58 psig / 167 °F)</td> </tr> <tr> <td></td> <td>1 bar / 100 °C (14.5 psig / 212 °F)</td> </tr> </table>	PVC:	4 bar / 45 °C (58 psig / 113 °F)		1 bar / 60 °C (14.5 psig / 140 °F)	PVDF:	4 bar / 75 °C (58 psig / 167 °F)		1 bar / 100 °C (14.5 psig / 212 °F)
PVC:	4 bar / 45 °C (58 psig / 113 °F)								
	1 bar / 60 °C (14.5 psig / 140 °F)								
PVDF:	4 bar / 75 °C (58 psig / 167 °F)								
	1 bar / 100 °C (14.5 psig / 212 °F)								
	Please refer to the pressure/temperature diagram below!								
Wetted material	PVC, PVDF								
Wetted seals	Viton®-FDA								
Adaption to process pipe	Ø 32 mm, 50 mm, 63 mm (DN25, DN40, DN50)								
Pressure domain	According to PED 97/23/EC, Article 1, Section 2.2: "Pressure" means pressure relative to atmospheric pressure, i.e. gauge pressure. As a consequence, vacuum is designated by a negative value.								
Certificates/Approvals	<ul style="list-style-type: none"> – Declaration of conformity CE for the "Pressure equipment directive" (PED) 97/23/EC (excluded DN25) – Certificate of compliance with directive EN10204-2.1 								

* Pressure rating according to PED 97/23/EC

Pressure/temperature diagram



Product key InFlow 751

InFlow 751:	Material		
	PVDF:	PVDF polymer (polyvinylidene fluoride)	
Examples: InFlow 751	PVC:	PVC polymer (polyvinylchloride)	
		Pipe diameter	
	d32DN25:	Pipe diameter outside 32 mm (1.26"), nominal size 25 mm (0.98")	
	d50DN40:	Pipe diameter outside 50 mm (1.97"), nominal size 40 mm (1.58")	
	d63DN50:	Pipe diameter outside 63 mm (2.48"), nominal size 50 mm (1.97")	
		Interface electrode/sensor	
	Pg 13.5:	pH electrodes, DO/O ₂ and conductivity sensors with 12 mm (0.47") diameter and a length [a] of 120 mm (4.72")	
	NPT 1"	pH electrode InPro 4500 VP or other sensors	
	NPT ¾"	Conductivity sensors	
InFlow 751	PVDF	d32DN25	Pg13.5
InFlow 751	PVC	d50DN40	NPT1"

Ordering information InFlow 751

Order No.

InFlow 751 – PVC version

InFlow 751 PVC d32DN25 Pg13.5	52 400 250
InFlow 751 PVC d32DN25 NPT ¾"	52 400 256
InFlow 751 PVC d50DN40 Pg13.5	52 400 251
InFlow 751 PVC d50DN40 NPT ¾"	52 400 257
InFlow 751 PVC d50DN40 NPT1"	52 400 644
InFlow 751 PVC d63DN50 Pg13.5	52 400 252
InFlow 751 PVC d63DN50 NPT ¾"	52 400 258
InFlow 751 PVC d63DN50 NPT1"	52 400 645

InFlow 751 – PVDF version

InFlow 751 PVDF d32DN25 Pg13.5	52 400 253
InFlow 751 PVDF d32DN25 NPT ¾"	52 400 259
InFlow 751 PVDF d50DN40 Pg13.5	52 400 254
InFlow 751 PVDF d50DN40 NPT ¾"	52 400 260
InFlow 751 PVDF d50DN40 NPT1"	52 400 646
InFlow 751 PVDF d63DN50 Pg13.5	52 400 255
InFlow 751 PVDF d63DN50 NPT ¾"	52 400 261
InFlow 751 PVDF d63DN50 NPT1"	52 400 647

Spare parts

InFlow 751, PVC

Spare parts set InFlow 751 PVC d=32	52 400 653
Spare parts set InFlow 751 PVC d=50	52 400 654
Spare parts set InFlow 751 PVC d=63	52 400 655

InFlow 751, PVDF

Spare parts set InFlow 751 PVDF d=32	52 400 656
Spare parts set InFlow 751 PVDF d=50	52 400 657
Spare parts set InFlow 751 PVDF d=63	52 400 658

Further accessories on request at your local METTLER TOLEDO representative.

Together with housings and electrodes/sensors METTLER TOLEDO offers a wide range of transmitters and EasyClean automated cleaning and calibration systems. Highly automated and application-specific measuring systems to meet your needs can be provided. For further information see www.mt.com.

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