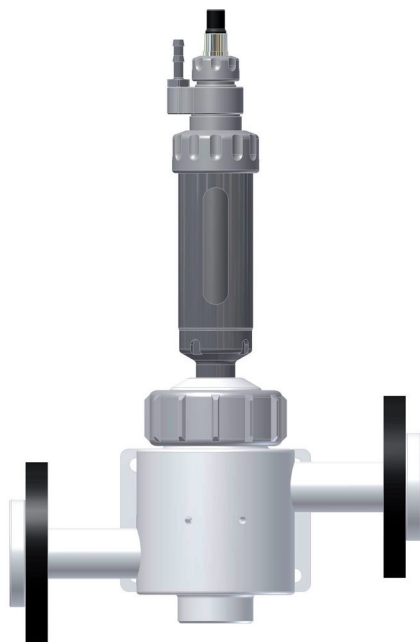


Flow-Through Fitting ARF 215

Standard Models
Model for Pressurized Sensors



Latest Product Information:
www.knick.de



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Warranty

Defects occurring within 1 year from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender).

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Return of Products Under Warranty

Please contact our Service Team before returning a defective device. Ship the cleaned device to the address you have been given. If the device has been in contact with process fluids, it must be decontaminated/disinfected before shipment. In that case, please attach a corresponding certificate, for the health and safety of our service personnel.

Disposal

Please observe the applicable local or national regulations.

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Safety Information

Process-Related Risks

Knick Elektronische Messgeräte GmbH & Co. KG assumes no liability for damages caused by process-related risks known to the operator, which would in fact not permit the use of the ARF 215 flow-through fitting.

The typical temperature dependence of the mechanical properties of the thermoplastics in use must be taken into account.

Be sure to observe:

Work on the ARF 215 flow-through fitting must only be performed by personnel authorized by the operating company and specially trained for handling and operating the flow-through fitting.

Intended Use

The ARF 215 flow-through fitting is used for holding liquid-analysis sensors. Two high-quality plastic materials are available for the process-wetted parts.

Typical applications:

- PP Drinking water, industrial water, and cooling water
- PVDF: Increased chemical resistance; for corrosive process media with up to 6 bars and 100°C

Different adapters for pH, temperature, oxygen, ORP, and conductivity sensors are available.

There are standard versions for the sealing materials and the process connection. Special versions can be provided. The fitting can be equipped with a spray cleaning function for the 3 x PG13.5 adapter.

The product is classified as Article 3 § 3 equipment according to the Pressure Equipment Directive 97/23/EC.

Operating Conditions



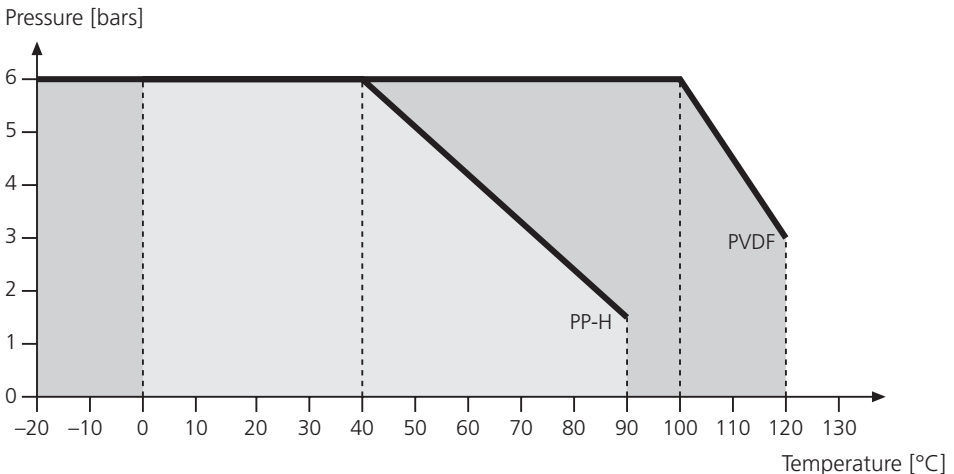
Caution

When spray cleaning is used, make sure that:

- process medium cannot flow into the inlet for the cleaning solution (can be prevented by using a check valve, for example).
- the operating pressure of the cleaning solution is lower than that of the process medium.

Pressure and Temperature

Material	Temperature	Pressure
PP-H	0 °C ... + 90 °C	Max. 6 bars up to +40 °C falling linearly to 1.5 bars at +90 °C
PVDF	- 20 °C ... + 120 °C	Max. 6 bars up to 100 °C falling linearly to 3 bars at 120 °C
Ambient temperature	- 5 °C ... + 50 °C	



ARF 215 Product Coding

Order Code:	ARF 215 / -						
Material							
PP-H	1						
PVDF	2						
Sensor adapter							
3 x PG 13.5	1						
SE 660	3						
SE 655/656	4						
SE 604 (G 1")	7						
SE 551/1 120mm pressurized liquid electrolyte	8						
Process connection							
DN 25 coupling		1					
G 1/4		2					
DN 25 flange		3					
DN 25 coupling (incl. joining pieces)		5					
Flange: ANSI 1", 150 lbs		A					
Installation							
90°				1			
180° staggered				2			
180° with cleaning equipment (only in conjunction with sensor adapter PG 13.5)				3			
Protective cap							
Without					0		
Normal					1		
Electrolyte reservoir					2		
Calibration beaker							
Without						0	
With						1	
Gasket material							
EPDM							1
FKM (Viton)							2
FFKM (Kalrez)							3

ARF 215 System Overview

Protective Cap



Normal



With electrolyte reservoir

Sensor Adapter



3 x Pg 13.5



SE 660



SE 655 / SE 656



SE 604 (G 1")



Adapter for pressurizable sensors

Arrangement of Process Connection



90°



180°



180° with cleaning equipment

Process Connection



DN 25 coupling
(separate or incl. joining piece)

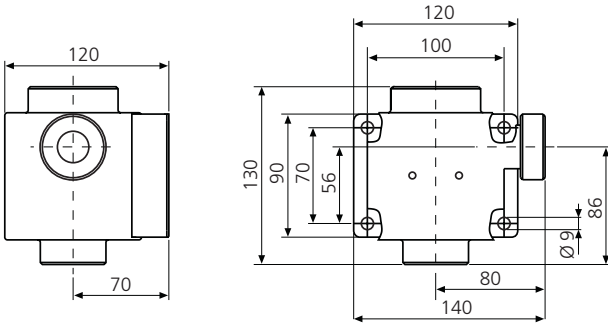


Internal G 1/4" thread

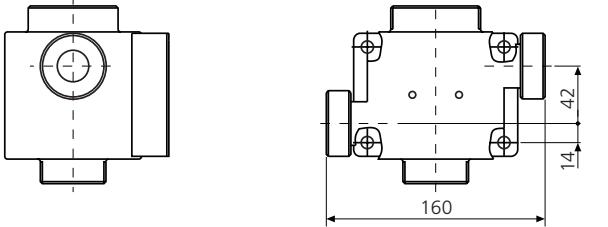


DN 25, ANSI 1" flange

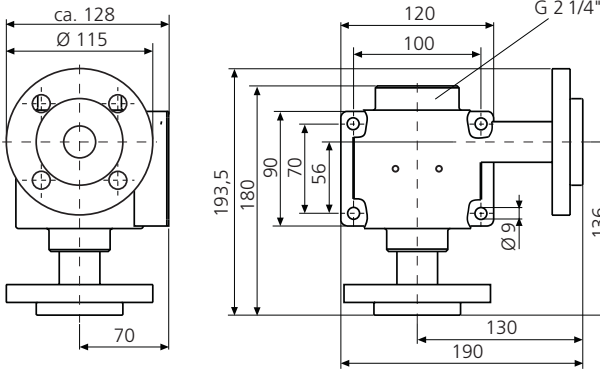
Dimension Drawings



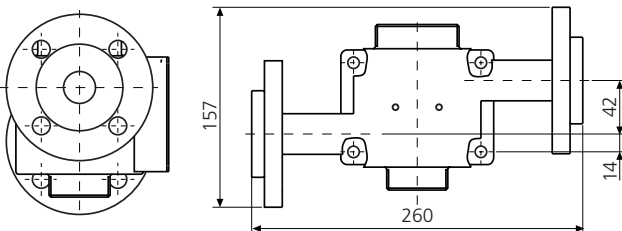
DN 25 coupling, 90°



DN 25 coupling, 180°
staggered, with connection
for cleaning equipment



DN 25 flange, 90°,
ANSI 1", 150 lbs

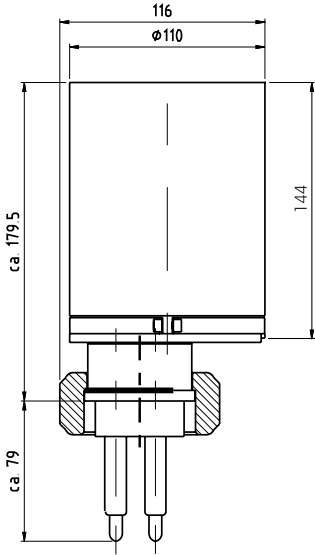


DN 25 flange, 180°
staggered, with connection
for cleaning equipment

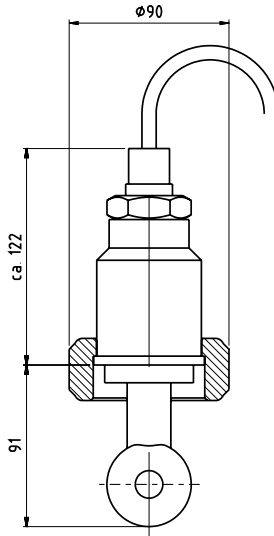
All dimensions in mm!

Dimension Drawings

3 x PG 13.5 Adapter



SE 655(X) / 656(X) Adapter



All dimensions in mm!

ARF 215 with Sensor Adapter for Pressurizable Sensors

Process-wetted materials:

- PVDM, FFKM

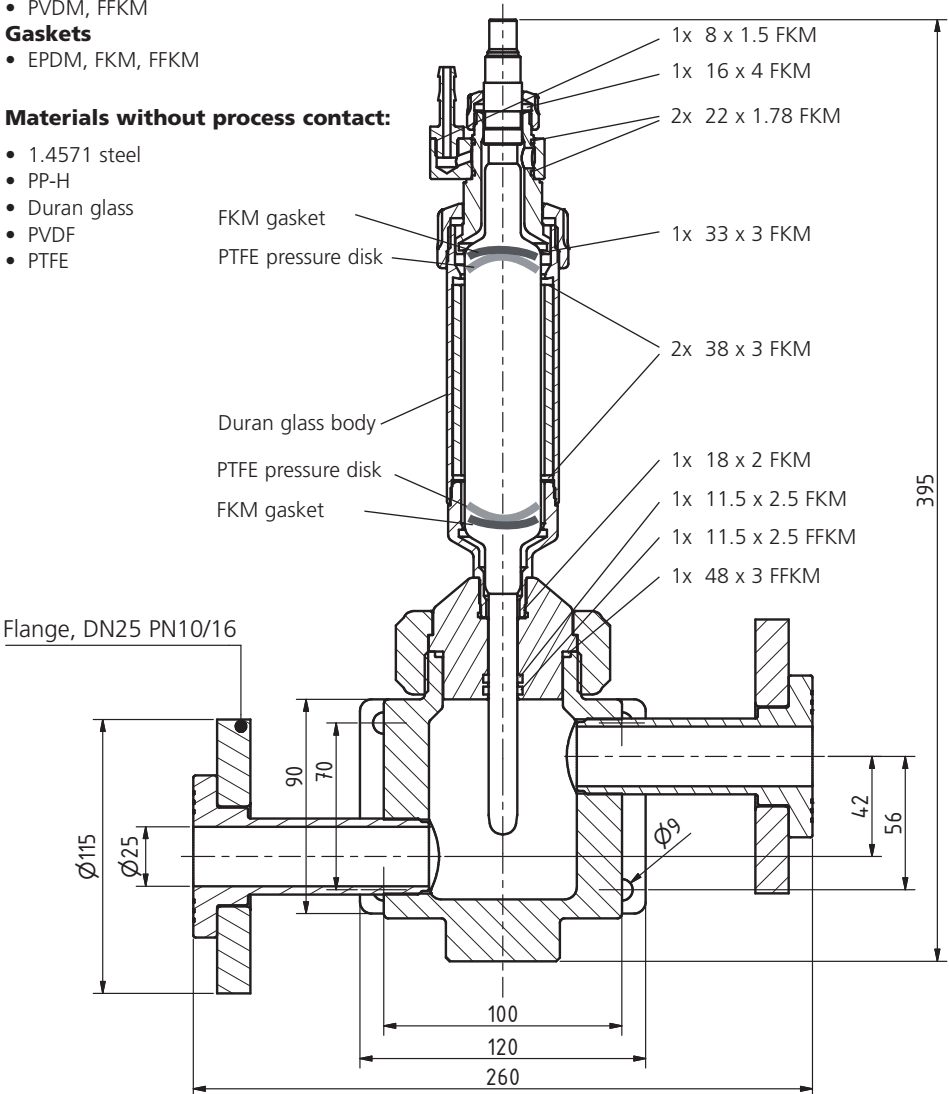
Gaskets

- EPDM, FKM, FFKM

Materials without process contact:

- 1.4571 steel
- PP-H
- Duran glass
- PVDF
- PTFE

O rings:



All dimensions in mm!

Specifications

ARF 215 Flow-Through Fitting

Materials

Process-wetted parts:

Flow cell	PP-H or PVDF
Adapter	PP-H or PVDF
Gaskets	EPDM or FKM Sensor adapter: See dimension drawing for O-ring specifications

Parts without process contact:

Protective cap	PVC Without electrolyte reservoir: H = 144 mm With electrolyte reservoir: H = 197 mm
Wall mounting assembly	1.4571
Cable clamp	1.4571 / EPDM
Installation position	Vertical
Process medium flow rate	10 L / h ... 200 L / h with clean media, G 1/4" 10 L / h ... 2000 L / h with polluted media, DN 25
Residual volume	Approx. 150 mL
Process medium connection	<ul style="list-style-type: none">• G 1/4" thread according to DIN 3852• Coupling with union nut and DN25 insert• DN50 PN16 flange
Spray cleaning connection	G 1/2" thread according to DIN 3852
Installation factor	Approx. 1.08 for electrodeless sensors (SE 655, SE 656)
Sensor equipment	<ul style="list-style-type: none">• 3 x PG 13.5 adapter: up to 3 sensors with PG13.5 screw cap, 120 mm insertion length, 12 mm shaft diameter• SE 604 (G 1") adapter: sensors with G 1" process coupling and a max. immersion depth of 100 mm• Adapter for pressurizable sensors: 120 mm length, automatic tolerance adjustment for sensors of different manufacturers• SE 655 / SE 656 adapter• SE 660 adapter

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