# Flow-Through Fitting ARF 210

Standard Models Model for Pressurized Sensors



# Latest Product Information: www.knick.de





#### Warranty

Defects occurring within 1 year from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender). ©2007 Subject to change without notice

#### **Return of Products Under Warranty**

Please contact our Service Team before returning a defective device. Ship the <u>cleaned</u> 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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### **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 210 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 210 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 210 flow-through fitting is used for holding liquid-analysis sensors. The process-wetted parts are made of 1.4571 stainless steel. 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
1.4571 steel	-35 °C +135 °C	Max. 10 bars
Ambient temperature	- 5 °C + 50 °C	



Temperature [°C]

### **ARF 210 Product Coding**

Order Code:	ARF 210 / -					+	+
Material 1.4571 stainless steel		3					
Sensor adapter 3 x PG 13.5 SE 660 SE 655/656 SE 604 (G 1") SE 551/1 120mm pressurized liq	uid electrolyte						
Process connection DN 25 coupling G 1/4 DN 25 flange DN 25 coupling (incl. joining pieces) Flange: ANSI 1", 150 lbs			1 2 3 5 A				
Installation 90° 180° staggered 180° with cleaning equipment (only in conjunction with sensor adapter PG	13.5)			1 2 3			
Protective cap Without Normal Electrolyte reservoir					0 1 2		
Calibration beaker Without With						0	
Gasket material EPDM FKM (Viton) FFKM (Kalrez)							1 2 3

### **ARF 210 System Overview**



### **Dimension Drawings**

DN 25 coupling







G 1/4", internal







All dimensions in mm!



# **Dimension Drawings**







## **Dimension Drawings**

3 x PG 13.5 Adapter

SE 655(X) / 656(X) Adapter





### ARF 210 with Sensor Adapter for Pressurizable Sensors



# **Specifications**

ARF 210 Flow-Through Fitting

### Materials

Process-wetted parts:			
Flow Cell	1.4571 steel		
Adapter	1.4571 steel		
Gaskets	EPDM, FKM, or FFKM 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> <li>G 1/4" thread according to DIN 3852</li> <li>Coupling with union nut and DN25 insert</li> <li>DN50 PN16 flange</li> </ul>		
Spray cleaning connection	G 1/2 " thread according to DIN 3852		
Sensor equipment	• 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		
	<ul> <li>Adapter for pressurizable sensors: 120 mm length, automatic tolerance adjustment for sensors of different manufacturers</li> </ul>		
	• SE 655 / SE 656 adapter:		
	• SE 660 adapter:		

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