

## **Fittings and Controllers**

### **ARD 50 Immersion Fitting**

### Modular Fitting with an Extraordinary Range of Functions for a Single Sensor

The fitting is used for measuring in tanks, basins and channels. For maximum flexibility, it offers numerous functions that can be freely combined. The special design facilitates sensor replacement. High-quality PP-H or PVDF makes it very sturdy.

#### Applications

- PP-H: Water, wastewater, industrial water
- PVDF: Chemical and petrochemical industry, power plants, electroplating, ore processing

Plastic tube with special sleeve geometry 25 ... 250 cm long

Catenary suspension

Ambient side with

cable gland

Sensor adapter

#### **Facts and Features**

- High variability adaptable to virtually every process
- Safe functioning, easy maintenance thanks to a special and unique design
- Easy removal/installation of the sensor adapter with just ½ turn of a coupling nut (manual)
- Removal of the sensor adapter through the top or from the bottom of the immersion pipe
- No cable twisting during sensor installation
- Sensor adapter: PG 13.5 / SE 655, SE 656 (G ¾") / ¾" NPT
- Rinse function for cleaning the sensor without opening or dismantling the fitting (PG 13.5, internal supply of rinse medium incl. check valve)
- Immersion depths: 25 250 cm
- Materials: PP-H, PVDF
- High pressure and temperature resistance
- Wetting cup
- Process connections: flange DN 50 – DN 100 or ANSI 2"– 4", optionally with sliding flange bushing wall holder catenary suspension (also as submersible version) pipe clamp
- Cable glands: EPDM cap with cable support sleeves and strain relief, submersible cable glands
- Stainless steel bracket for strain relief of the sensor cable

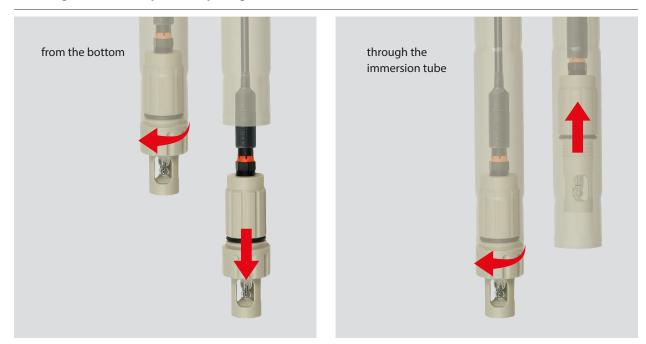
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# ARD 50 Immersion Fitting

### Specifications

Sensors	Ø12 mm, length 120 mm, thread PG 13.5 / SE 655, SE 656 / thread $3\!4''{ m NPT}$					
Diameter	50 mm					
Process pressure/temperature	See diagram					
Process connections	Loose flange EN 1092-1	DN50 / DN65 / DN80 / DN100				
	Loose flange ANSI B 16.5/150 lbs	2" / 2½" / 3" / 4"				
	Wall holder	Stainless steel 1.4571				
	Catenary suspension	Also as submersible version				
	Pipe clamp	Adjustable stop, stainless steel 1.4571				
Wetted materials	Fitting	PP-H/PVDF				
	Sealing material	EPDM / FKM / FFKM / FFKM Perlast G75B				
	Rinsing	PEEK, Hastelloy				
	Catenary suspension	Rope: polyamide				
Sensor protection in the process	Probe guard integrated in the sensor adapter for sensors with 12 mm dia., 120 mm length, PG 13.5 thread					
Immersion depth	250, 500, 1000, 1500, 2000, 2500 mm [special lengths (in cm) available on request]					
Rinsing	Hose	NW 6 mm				
	Material	EPDM				
	Check valve in the sensor adapter					
Transport and storage temperature	14 158 °F (–10 70 °C)	70 °C)				
Ambient temperature	Material: PP-H	23 131 °F (–5 55 °C)				
	Material: PVDF	5 131 °F (–15 55 °C)				
Protection according to EN 60529	Ambient side open	IP10				
	Ambient side with rubber cap	IP65				
	Ambient side cable gland	IP68 (immersion depth: 10 m permanently) and IP66				

### Removing the Sensor Adapter for Replacing the Sensor



## **Fittings and Controllers**

#### **Modular System**

This immersion fitting comes in 6 different nominal lengths (special lengths on request). The modular system is completed by various cable glands, process connections and sensor adapters.



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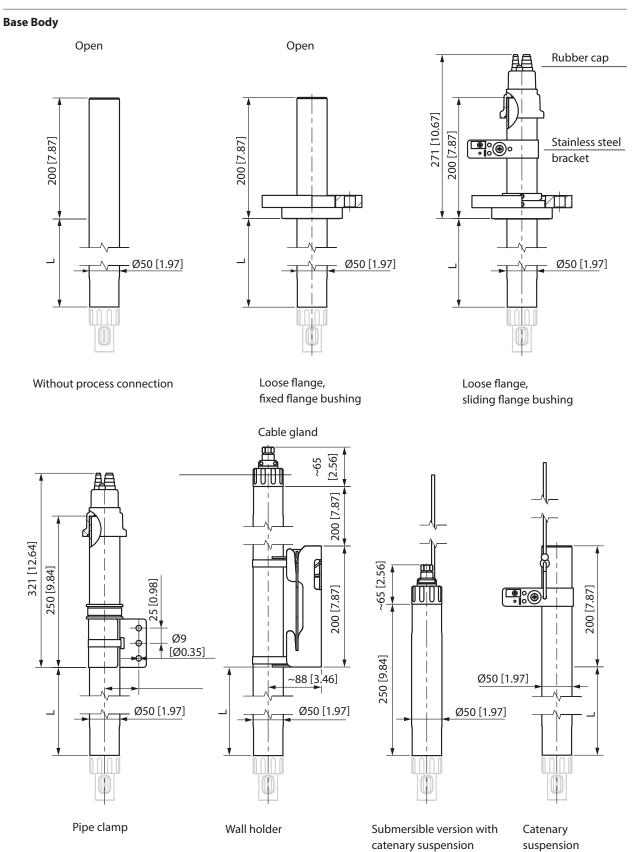
### **Product Range**

Immersion fitting	ARD 50-	N								-		
Material of fitting	PP-H	Р										
	PVDF	D										
Sensor adapter	1 x PG 13.5		1									
	1 x PG 13.5; with rinse function		2			A/B/C/D						
	SE 655 (X) / SE 656 (X)		5									
	3/4" NPT		6									
Sensor adapter with	1 x PG 13.5		A									
wetting cup	1 x PG 13.5; with rinse function		В									
Gasket material	FKM			А								
	EPDM			В								
	FFKM			К								
	FFKM Perlast G75B			L								
Process connection	Flange, loose, PN10/16, DN 50				0 B 1							
	Flange, loose, PN10/16, DN 65				0 B 2							
	Flange, loose, PN10/16, DN 80				0 B 3							
	Flange, loose, PN10/16, DN 100				0 B 4							
	Flange, loose, PN 10/16, DN 50, sliding flange	bushing			V B 1							
	Flange, loose, PN 10/16, DN 65, sliding flange	bushing			V B 2							
	Flange, loose, PN 10/16, DN 80, sliding flange	bushing			V B 3							
	Flange, loose, PN 10/16, DN 100, sliding flang	e bushing			V B 4							
	Flange, loose, ANSI, 150 lbs, 2"				0 D 1							
	Flange, loose, ANSI, 150 lbs, 2.5"				0 D 2							
	Flange, loose, ANSI, 150 lbs, 3"				0 D 3							
	Flange, loose, ANSI, 150 lbs, 4"				0 D 5							
	Flange, loose, ANSI, 150 lbs, 2", sliding flange	bushing			V D 1							
	Flange, loose, ANSI, 150 lbs, 2.5", sliding flang	e bushing			V D 2							
	Flange, loose, ANSI, 150 lbs, 3", sliding flange	bushing			V D 3							
	Flange, loose, ANSI, 150 lbs, 4", sliding flange	bushing			V D 5							
	Wall holder with locking function, stainless st	eel 1.4571			W 0 0							
	Catenary suspension				S 0 0	B/D/E/F						
	Catenary suspension, submersible version wi	th weight			S T 0	E	0	2	5			
	Pipe clamp with adjustable stop				R 0 0							
	Without process connection				0 0 0							
Ambient side	Open Open, stainless steel bracket for cable strain r	elief				A B						
	Rubber cap					С						
	Rubber cap, stainless steel bracket for cable s	train relief	:			D						
	Cable gland					E						
	Cable gland, stainless steel bracket for cable	strain relie	f			F						
Nominal	25						0	2	5			
body length [cm]	50						0	5	0			
	100						1	0	0			
	150						1	5	0			
	200						2	0	0			
	250						2	5	0			
	Special length (25 cm minimum)						*	*	*			
Special version	Without									0	0	0
	Customer-specific special data sheet									F		

ARD 50 Immersion Fitting

## **Fittings and Controllers**

**Dimension Drawings** 



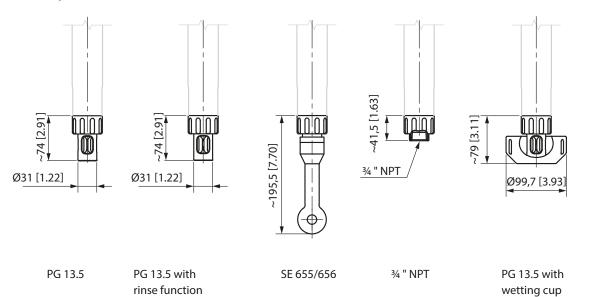
L = Nominal body length, see product range on Pg. 4



## ARD 50 Immersion Fitting

**Dimension Drawings** 

**Sensor Adapters** 

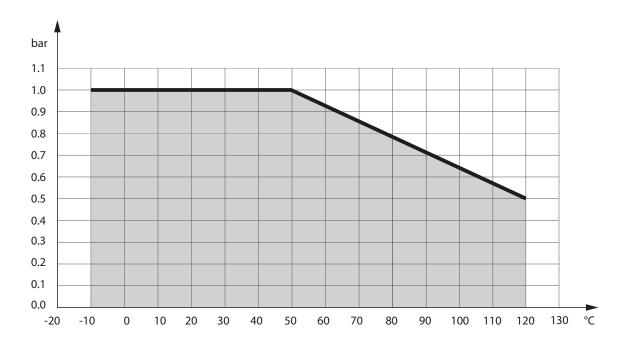


All dimensions in mm [inches]

# Fittings and Controllers

### Process Pressure/Temperature Diagram

Material: PVDF



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### **Process Pressure/Temperature Diagram**

Material: PP-H

