

ARD 75 Immersion Fitting

Modular Fitting with a Wide Range of Functionality.

The fitting for measuring in tanks, basins, and channels provides maximum flexibility with its wide range of combinable functions. The special design facilitates sensor replacement. The use of high-quality PP-H or PVDF guarantees the durability of the fitting. For measurements with up to 3 sensors (PG 13.5) or practically any commercial sensor.

Applications

- PP-H: water, wastewater, industrial water
- PVDF: chemical and petrochemical industries, power plants, electroplating, ore processing

Catenary suspension

Ambient side with cable gland

Plastic tube with special sleeve geometry
250 ... 2500 mm
(other lengths on request)

Sensor adapter

Facts and Features

- Flexibility – adaptable to almost any process
- Reliable operation, easy maintenance thanks to special, unique design
- Easy removal and installation of sensor adapter
- Sensor adapter can be removed either inward through the immersion tube or outward
- No cable twist when mounting the sensor
- Sensor adapter: 3 x PG 13.5, also for pressurized sensors, G1" and 3/4", NPT 1" and 3/4", and 1 x PG 13.5 with adapter and lock-gate function
- Rinse function for cleaning the sensors without opening or removing the fitting (PG 13.5, internal rinse medium feed incl. check valve)
- Immersion depths: 250 ... 2500 mm
- Materials: PP-H, PVDF
- High pressure and temperature resistance
- Wetting cup
- Process connections: DN 80 – DN 100 or ANSI 3" – 4" flange, optionally with sliding flange bushing
- Wall holder
- Catenary suspension (also as submersible version)
- Pipe clamp
- Cable gland: EPDM cap with cable support sleeves and strain relief, submersible cable glands
- Stainless steel bracket for sensor cable strain relief

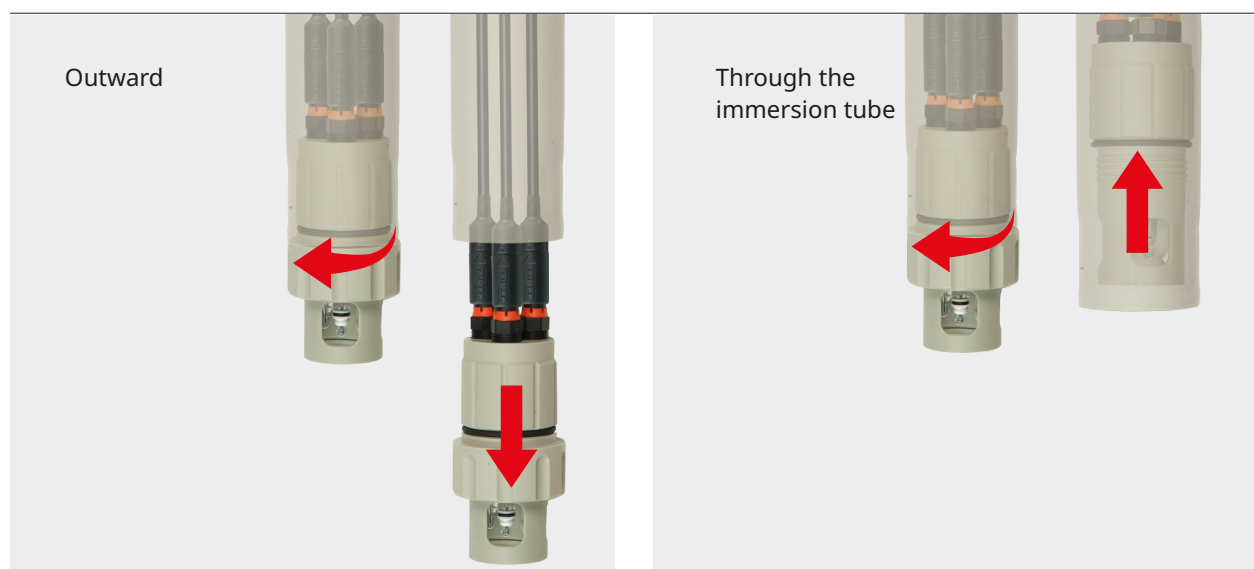


ARD 75 Immersion Fitting

Specifications

Sensors	3x Ø12 mm, length 120 mm, thread PG 13.5/SE670 G1/SE655, SE656/ thread ¾" NPT/1" NPT/SE680/G1 for SE604-MS, SE605-MS, SE630	
Diameter	75 mm	
Pressure-temperature	See diagram	
Process connections	Loose flange, DIN EN 1092-1	DN80/DN100
	Loose flange, ANSI B 16.5/150 lbs	3"/4"
	Wall holder	Stainless steel 1.4571
	Catenary suspension	Also as submersible version
	Pipe clamp	Adjustable stop, stainless steel 1.4571
Process-wetted materials	Fitting	PP-H/PVDF
	Seal material	EPDM/FKM/FFKM/FFKM Perlast G75B
	Rinsing	PEEK, Hastelloy
	Catenary suspension	Cable: Polyamide
In-process sensor protection	Probe guard integrated in sensor adapter for sensors Ø12 mm, length 120 mm, PG 13.5 thread	
Immersion depth	250, 500, 1000, 1500, 2000, 2500 mm [specific special lengths (state requirement in cm) on request]	
Rinsing	Tubing	NW 6
	Material	EPDM
	Check valve in sensor adapter	
Transport and storage temperature	-10 ... 70 °C	
Ambient temperature	Material: PP-H	-5 ... 55 °C
	Material: PVDF	-15 ... 55 °C
Degree of protection acc. to DIN EN 60529	Ambient side open	IP00
	Ambient side rubber cap	IP65
	Ambient side cable gland	IP68 (immersion depth: permanent 10 m) and IP66

Removing the sensor adapter to replace the sensor



Modular System

This immersion fitting is available in six different nominal lengths (other lengths on request). A range of cable glands, process connections, and sensor adapters complete the modular system.



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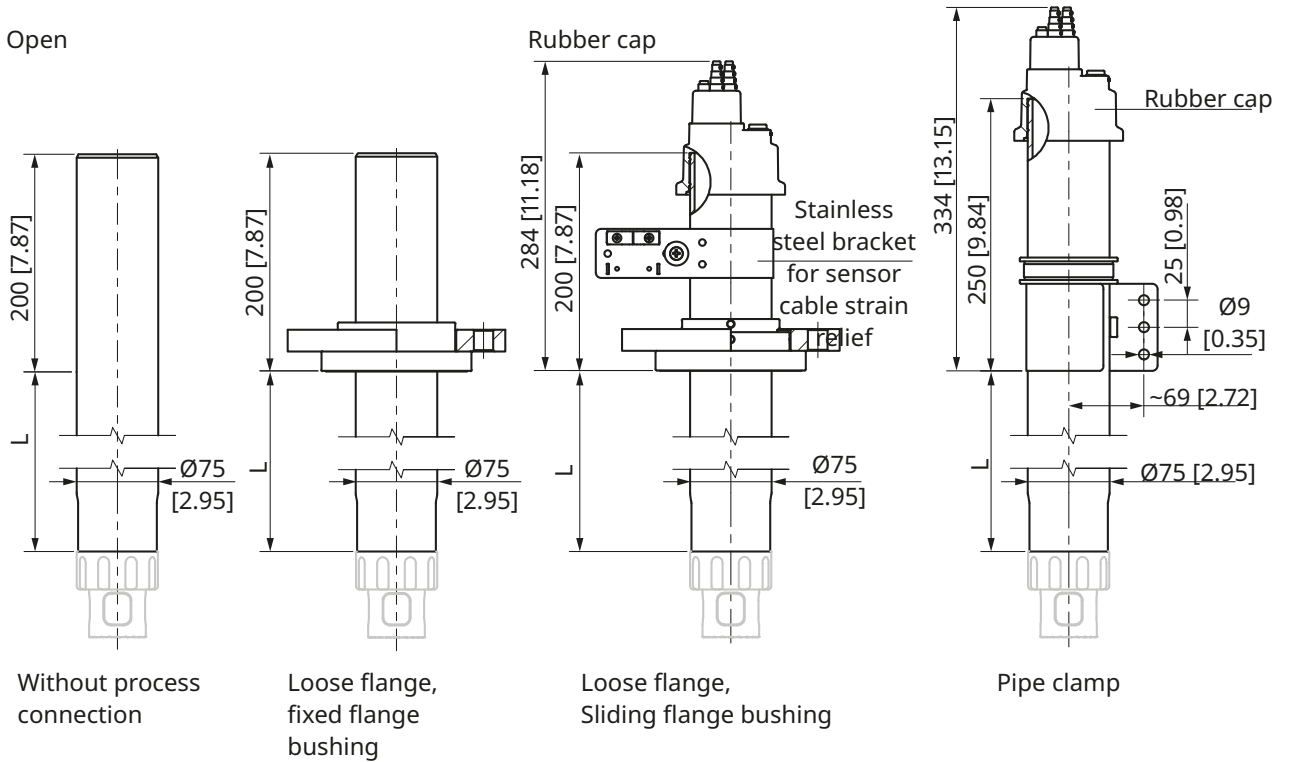
Product Line

Immersion fitting		ARD 75-	N																	
Fitting material	PP-H		P																	
	PVDF		D																	
Sensor adapter	3 x PG 13.5		1																	
	3 x PG 13.5; with rinse function		2																	
	pH sensor, Ø 12 mm, with pressurization		3																	
	SE670/G1		4																	
	SE655 (X) / SE656 (X)		5																	
	¾" NPT		6																	
	1" NPT		7																	
	SE680		8																	
	G1 for SE604-MS / SE605-MS		9																	
	G1 for SE630-MS		J																	
Sensor adapter with wetting cup	3 x PG 13.5		A																	
	3 x PG 13.5; with rinse function		B																	
Seal material	pH sensor, Ø 12 mm, with pressurization		C																	
	FKM		A																	
	EPDM		B																	
	FFKM		K																	
Process connection	FFKM Perlast G75B		L																	
	Loose flange, PN 10/16, DN80		0 B 3																	
	Loose flange, PN 10/16, DN100		0 B 4																	
	Loose flange, PN 10/16, DN80, sliding flange bushing		V B 3																	
	Loose flange, PN 10/16, DN100, sliding flange bushing		V B 4																	
	Loose flange, ANSI, 150 lbs, 3"		0 D 3																	
	Loose flange, ANSI, 150 lbs, 4"		0 D 5																	
	Loose flange, ANSI, 150 lbs, 3", sliding flange bushing		V D 3																	
	Loose flange, ANSI, 150 lbs, 4", sliding flange bushing		V D 5																	
	Wall holder with locking function, stainless steel 1.4571		W 0 0																	
Ambient side	Catenary suspension		S 0 0																	
	Catenary suspension, submersible version with immersion weight		S T 0																	
	Pipe clamp, adjustable stop		R 0 0																	
	Without process connection		0 0 0																	
Base body nominal length [cm]	Open		A																	
	Open, stainless steel bracket for sensor cable strain relief		B																	
	Rubber cap		C																	
	Rubber cap, stainless steel bracket for sensor cable strain relief		D																	
	Cable gland		E																	
	Cable gland, stainless steel bracket for sensor cable strain relief		F																	
	Cap for sensor adapter with lock-gate function; connections for drive and rinse medium; 3x cable gland M20x1.5"		G																	
Special version	25																			
	50																			
	100																			
	150																			
	200																			
	250																			
Other length (at least 25 cm)																				
Special version	None																			
	Customer-specific special datasheet																			

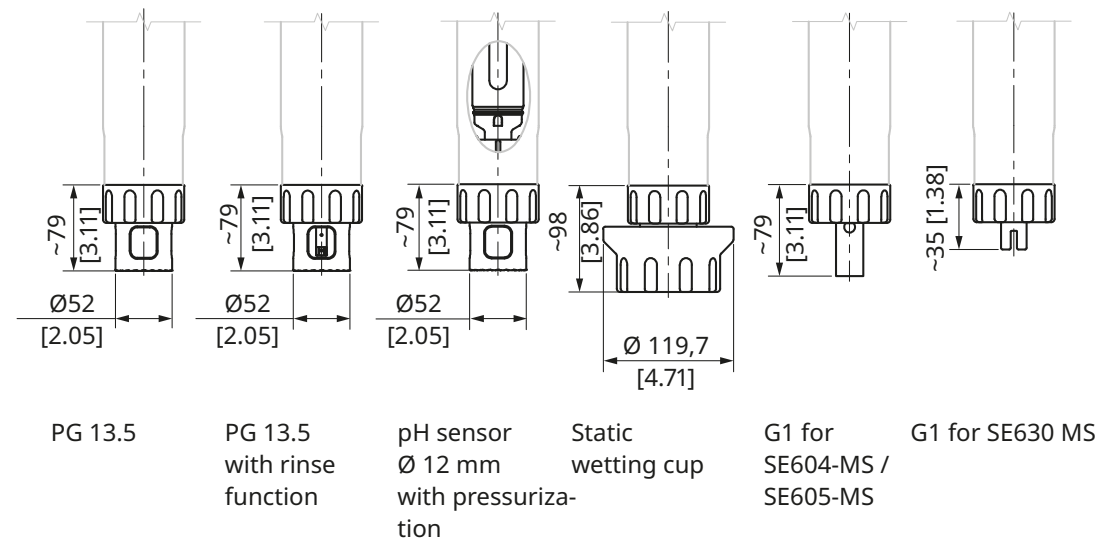
Dimension Drawings

Base Body

Open



Sensor Adapter



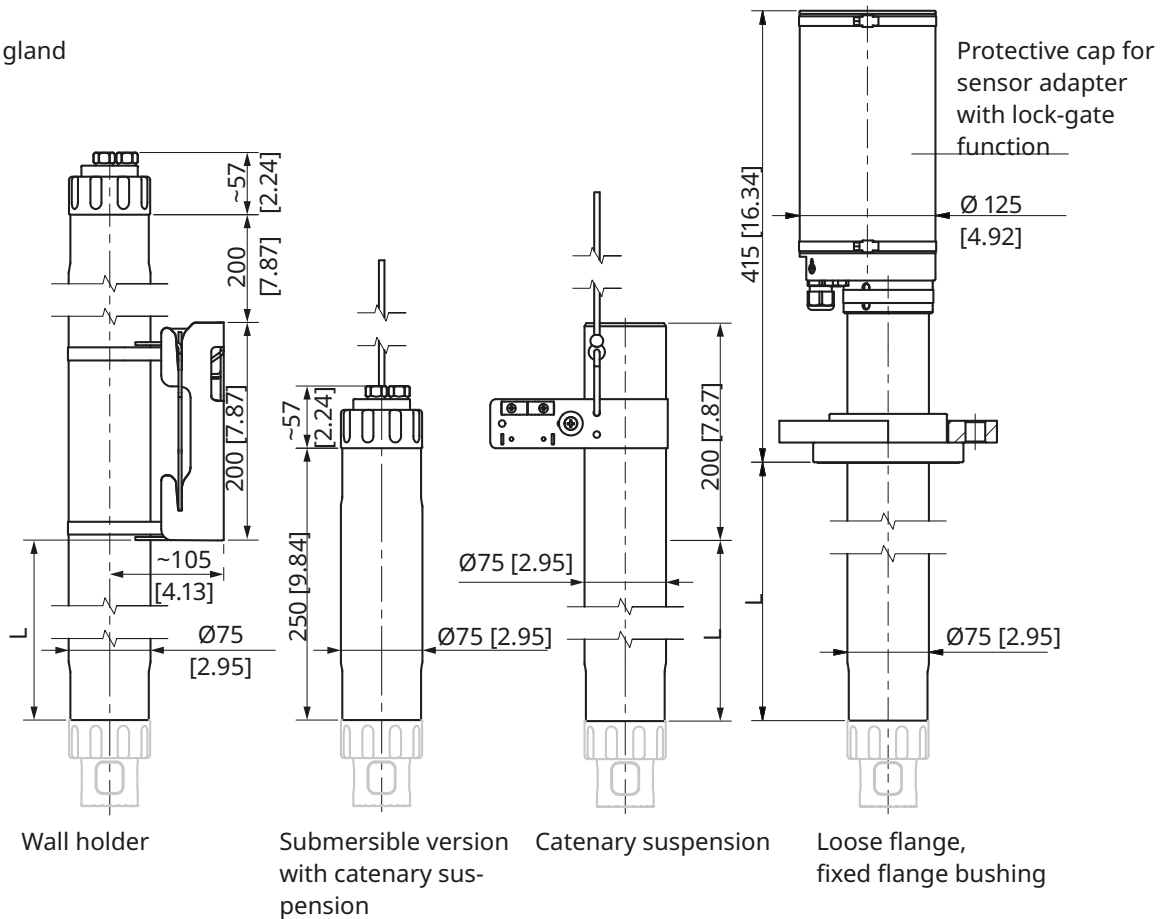
L = base body nominal length, see Product Line, p. 3

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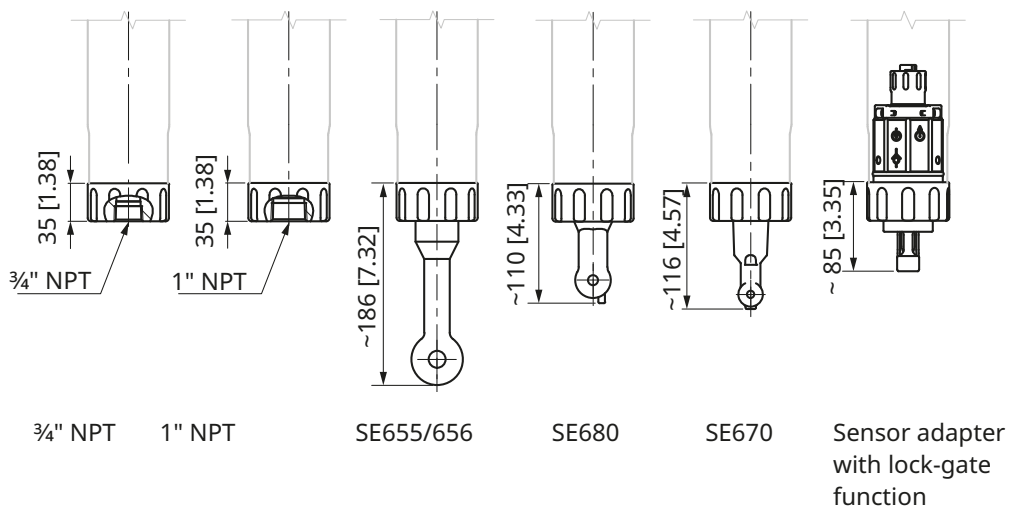
Dimension Drawings

Base Body

Cable gland



Sensor Adapter



All dimensions in mm [inches]

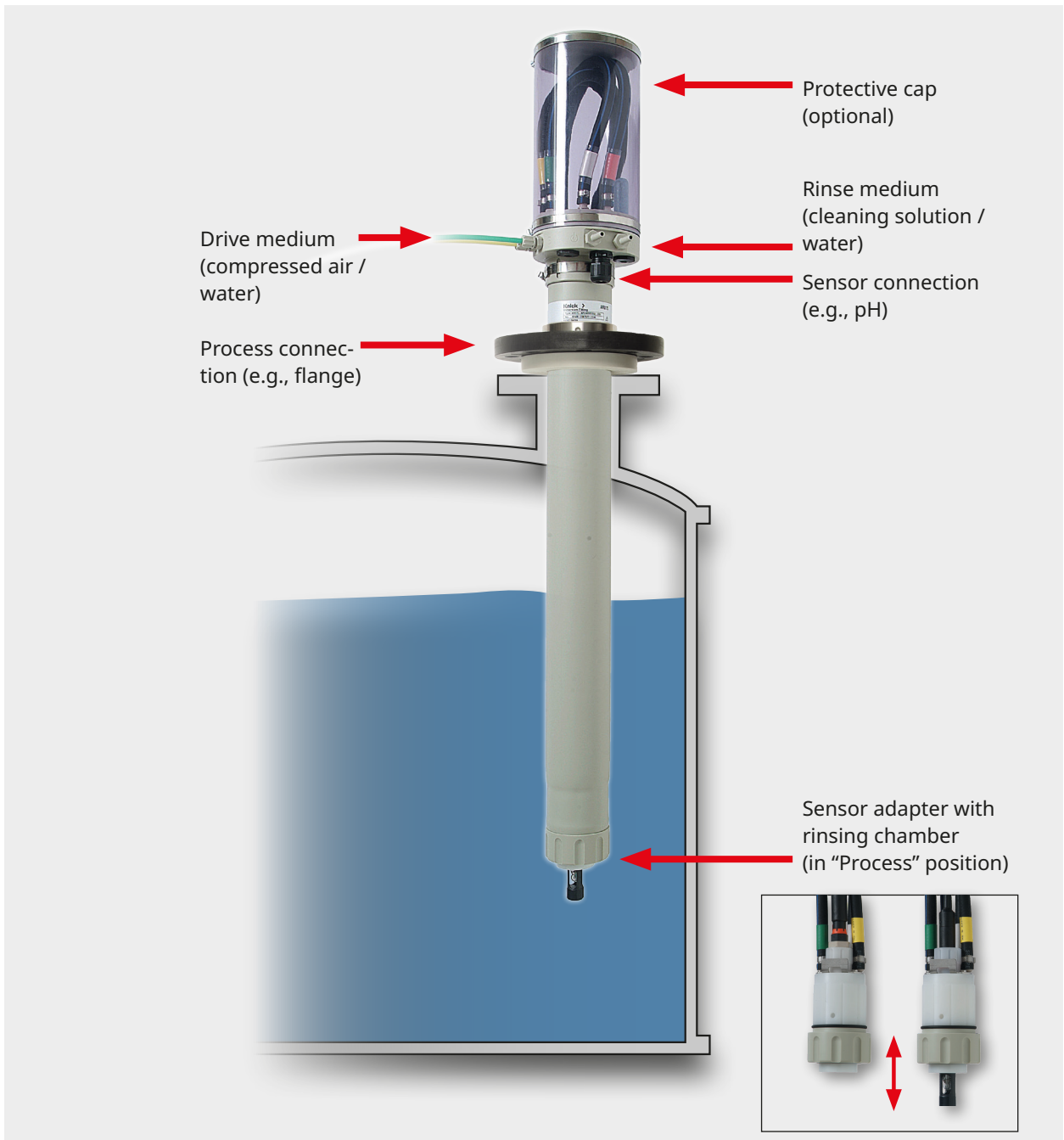
Lock-Gate Function

The ARD 75 immersion fittings also offer the option of automatic sensor cleaning and rinsing with water or a cleaning solution, but also with air purging.

The sensor is moved into and out of the process hydropneumatically, either by compressed air or water pressure. Compressed air does not necessarily need to be installed. The sensor can therefore be cleaned without interrupting the process.

Cleaning is carried out in the sensor adapter's cleaning chamber.

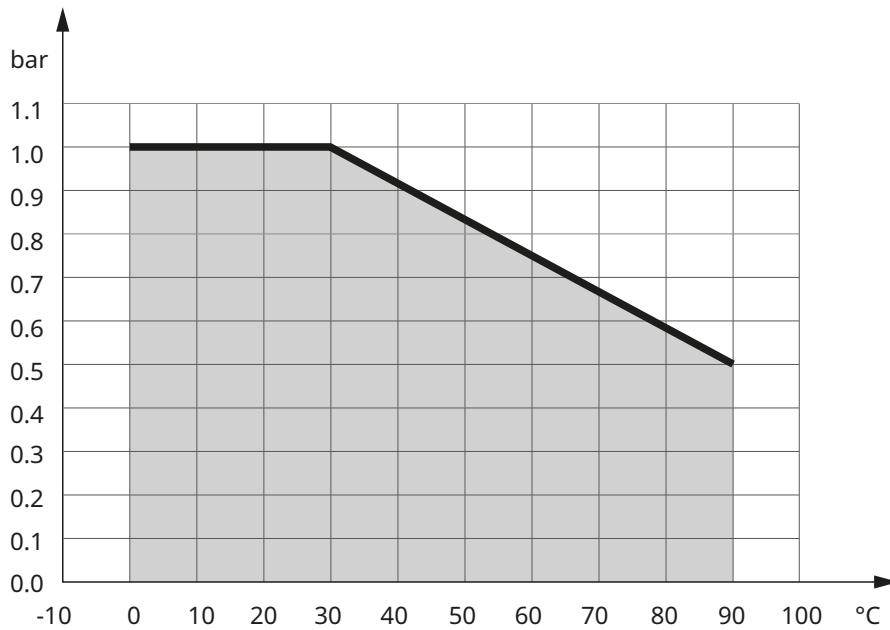
The image below shows an example of an installation in a tank with flange connection.



ARD 75 Immersion Fitting

Process Pressure/Temperature Diagram

Material: PP-H



Material: PVDF

