

## WA111 Retractable Fitting

### Pneumatic or Hydropneumatic Retractable Fitting

The WA111 retractable fitting is designed for installation in boilers, tanks, and pipes. It is used to mount sensors 120 mm long for measuring process parameters.

The sensor is immersed in the process medium pneumatically or hydropneumatically. Controlling the fitting by water removes the need for an expensive compressed air supply to be installed on site.

Cleaning and replacement of the sensor under process conditions is possible in the SERVICE position.

The use of PVDF for both the components in contact with the product and the fitting parts on the ambient side makes these fittings particularly suitable for use in highly corrosive atmospheres.

Thanks to its modular design, the fitting can be adapted to any process conditions.

### Applications

chemical and petrochemical industry, power plants, electroplating, ore processing

### Facts and Features

- Flexibility – adaptable to almost any process
- Reliable operation, easy maintenance thanks to special, unique design
- Easy removal and installation
- Measurement in main stream or bypass
- Removal of the sensor is also possible under process conditions
- Sensor lock-gate ensures safe separation of the process and the environment, even during movement of the fitting
- The fitting can only be immersed in the process if the sensor is installed

# WA111 Retractable Fitting

## Product Line

Retractable fitting	WA 111 - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>															
Explosion protection	Without approval	N	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Sensor	Sensor, Ø12 mm, with PG 13.5	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Seal material	FKM	A	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	EPDM	B	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	FFKM	K	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Wetted materials <sup>1)</sup>	PP-H/PP-H	P	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	PVDF/PVDF	D	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Immersion tube material	PEEK HD	E	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Process connection	Flange, loose, PN10/16, DN 50	B	1	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Flange, loose, PN10/16, DN 65	B	2	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Flange, loose, PN10/16, DN 80	B	3	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Flange, loose, PN10/16, DN 100	B	4	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Flange, loose, ANSI, 150 lbs, 2"	D	1	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Flange, loose, ANSI, 150 lbs, 2,5"	D	2	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Flange, loose, ANSI, 150 lbs, 3"	D	3	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Flange, loose, ANSI, 150 lbs, 4"	D	5	0	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Immersion tube immersion depth	Short	A	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Drive unit	Pneumatic	P	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Water-hydraulic	W	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Drive/rinse media connection	Free hose connection	1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Free hose connection, stainless steel bracket for strain relief	2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Special options	None		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Customer-specific special datasheet		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

<sup>1)</sup> Material combinations: process-wetted part of drive/process- and rinse-wetted part of rinsing chamber

Product Line

Accessories

Sensor Spanning Wrench

A/F19

Order No.

ZU0647

Tool Set

For maintenance work

ZU1155

Check Valve

RV01-



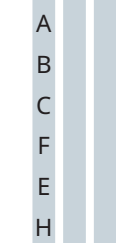
Housing material, valve body

Stainless steel 1.4404  
PEEK



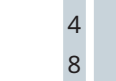
Seal material

FKM  
EPDM  
FFKM  
FKM FDA  
EPDM FDA  
FFKM FDA



Inlet connection, female thread

G¼  
G⅛



Outlet connection, male thread

G¼  
G⅛

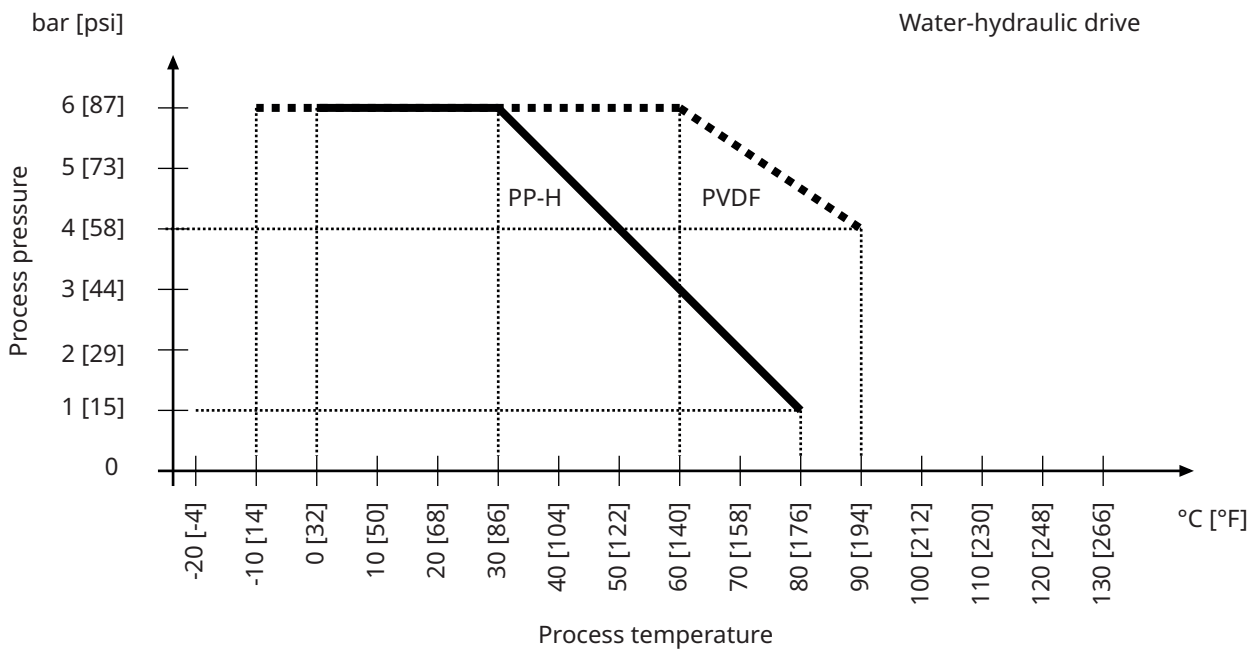
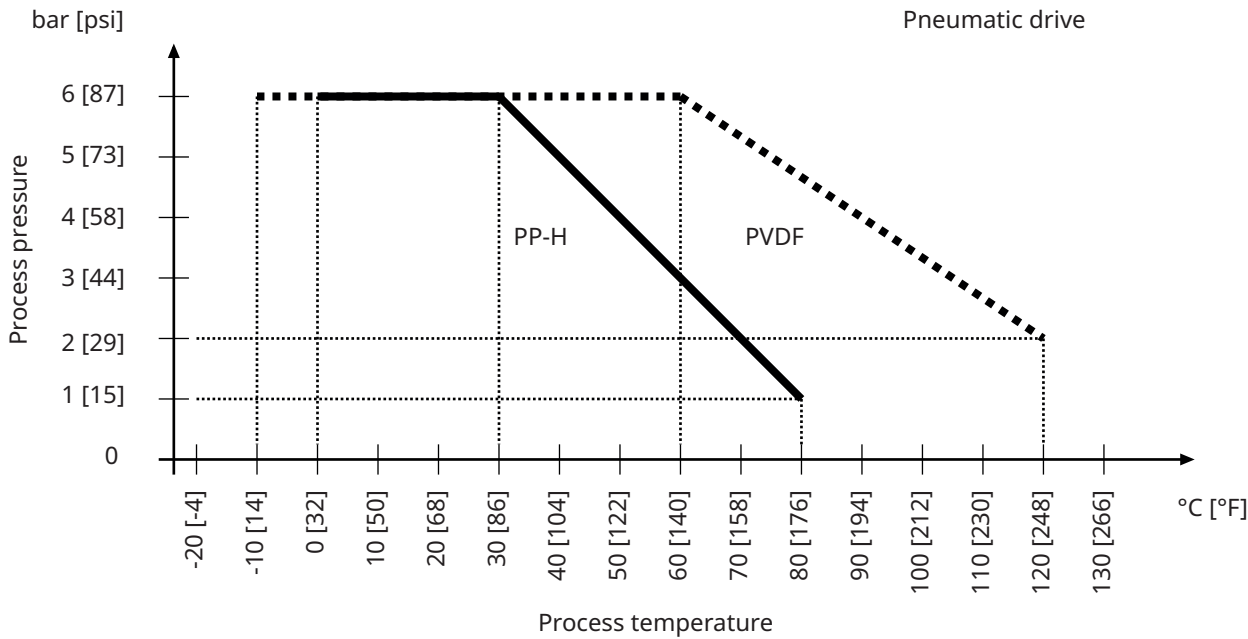


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## Specifications

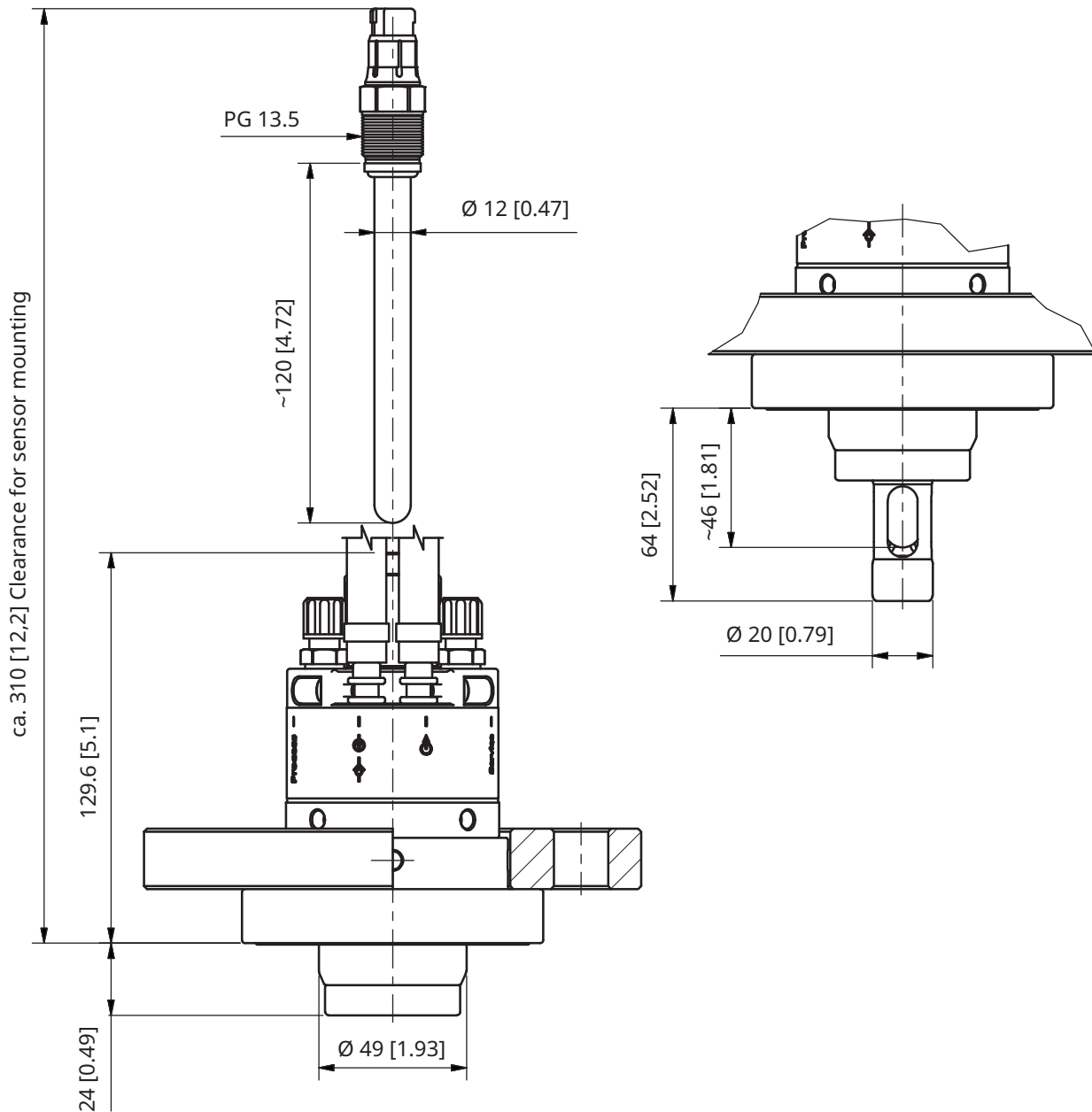
Permissible process pressure/ process temperature	5 ... 60 °C (41 ... 140 °F) 90 °C (194 °F)	6 bar (90 psi) Linear drop to 4 bar (58 psi)
Permissible pressure/ temperature during hydrostatic pressure testing	5 ... 30 °C (41 ... 86 °F), maximum 60 min, drive in SERVICE position	10 bar (150 psi)
Ambient temperature	-5 ... 70 °C (5 ... 158 °F)	
Transport/storage temperature	-10 ... 70 °C (14 ... 158 °F)	
Drive pressure, minimum	3 ... 8 bar (43.5 ... 116 psi) and at least same process pressure	
Compressed air quality for pneumatic drive	Standard	according to ISO 8573-1:2001
	Quality class	3.3.3 or 3.4.3
	Solid contaminants	3 (max. 5 µm, max. 5 mg/m <sup>3</sup> )
	Water content for temperatures > 15 °C (59 °F)	Class 4, pressure dew point 3 °C (37.4 °F) or lower
	Water content for temperatures 5 ...15 °C (41...59 °F)	Class 3, pressure dew point -20 °C (-4 °F) or lower
	Oil content	Class 3 (max. 1 mg/m <sup>3</sup> )
Water quality	Filtered 100 µm	
Permissible rinsing pressure/ rinse medium temperature	5 ... 90 °C (41 ... 194 °F)	8 bar (116 psi)
Rinse inlet	Hose NW 6 (EPDM, check valve in inlet)	
Rinsing outlet	Hose NW 6 mm (EPDM, gated)	
Materials	Drive seal material	FKM
Process-wetted materials	Fitting housing	PVDF
	Immersion tube	PEEK
	Seal material	FFKM
Rinse-wetted materials	PEEK, Hastelloy 2.4610, EPDM	
Degree of protection according to EN 60529	IP66	
Sensors	PG 13.5	120 mm long
Process connection	see Product Line	

Pressure/Temperature Diagram



# WA111 Retractable Fitting

## Dimension drawings



All dimensions in mm [inches]