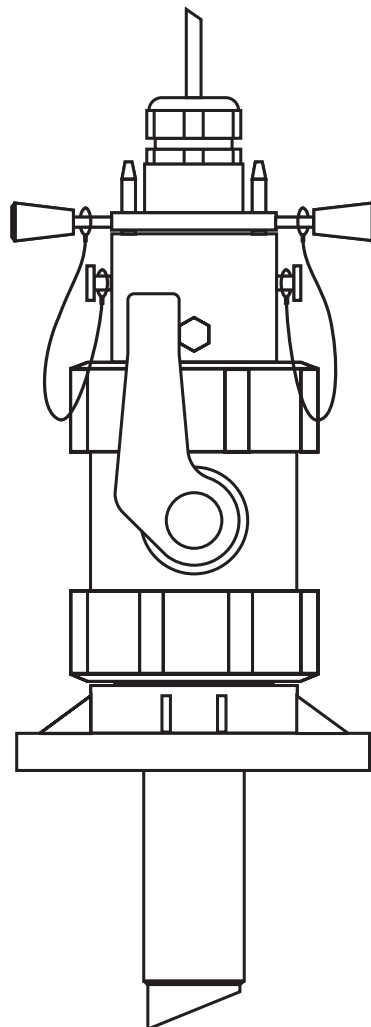


Retractable Assembly for Turbidity Measurement *ProbFit CUA 461*

Retractable assembly for the CUS 1 and CUS 4 sensors



Areas of application

- Sludge extraction and recirculation in sewage treatment plant
- Sludge centrifuge monitoring
- Filter monitoring and reversible flow filter
- Monitoring of phase separation processes
- Monitoring of cooling water

Benefits at a glance

The process assembly CUA 461 permits installation and replacement of a CUS 1 or CUS 4 turbidity sensor under process conditions and during ongoing operation.

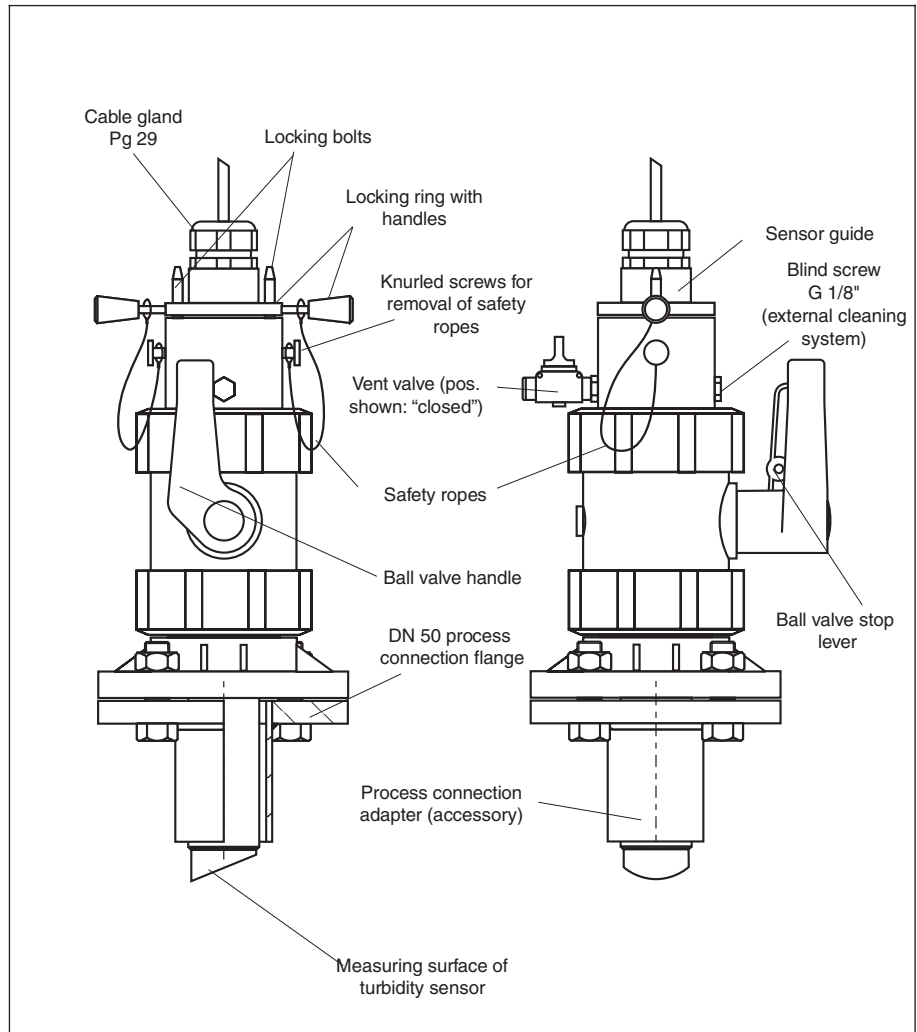
Safe isolation from the process is assured by the following assembly features:

- Ball valve with lockable handle
- Sensor holding tube is fixed in position by locking washer and locking bolt to provide accurate sensor guidance
- Welding socket (option)
- Sensor can be cleaned while installed as a rinse connector for an external cleaning system is available
- Optional feeding of sealing water via rinse connector during withdrawal of sensor possible

The use of retractable assemblies is very advantageous for turbidity and solids concentration measurement in pipelines and tanks. These assemblies permit sensor checking and cleaning without interrupting the process, thereby guaranteeing safe and credible measurement

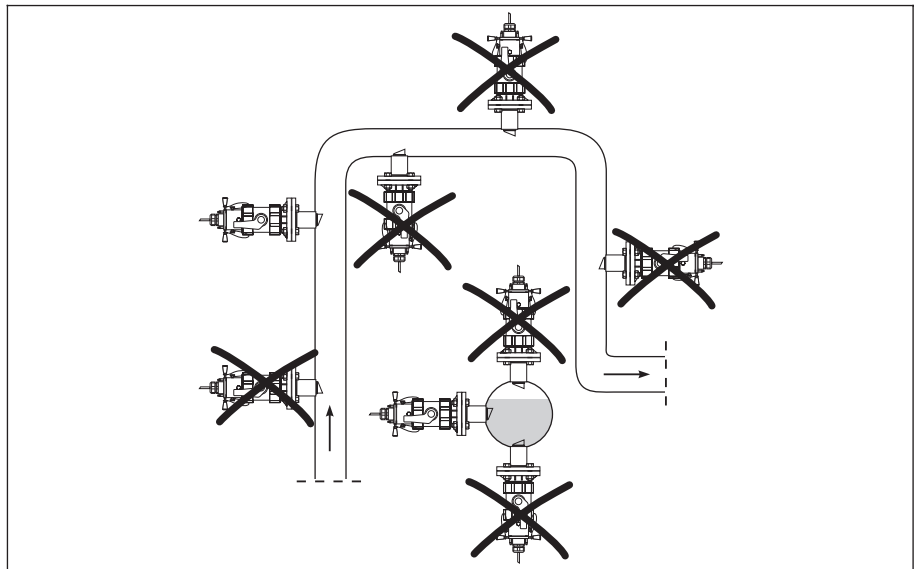


Design



Design of assembly
ProbFit CUA 461

Installation



Recommended
mounting position for
ProbFit CUA 461

Installation and application notes

The CUA 461 assembly with the built-in turbidity sensor should preferably be installed in places with uniform flow conditions. The minimum pipe diameter should be DN 80. Optimal installation conditions can be obtained by using the process connection adapter.

Caution:

Do not install the assembly in places where air may collect, where foam bubbles are likely to form or where suspended solids may settle.

Inaccurate measurement may result if the sensor is not completely immersed in the medium or if the measuring optics are covered up by deposits.

Dimensions

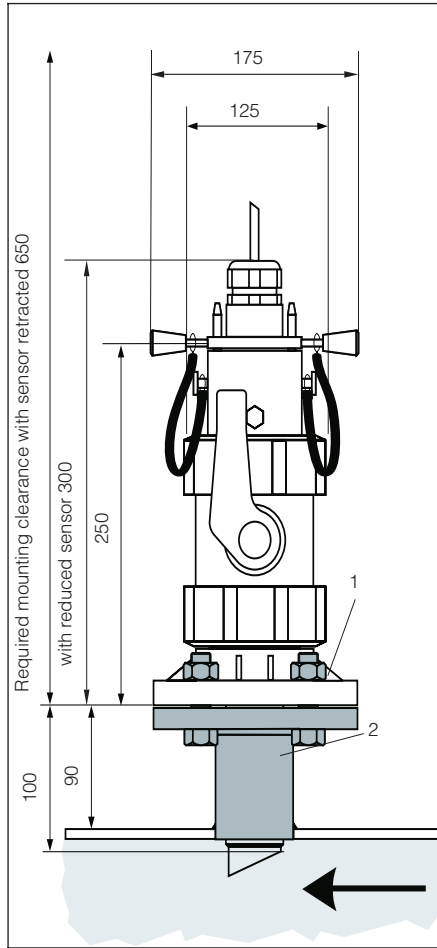
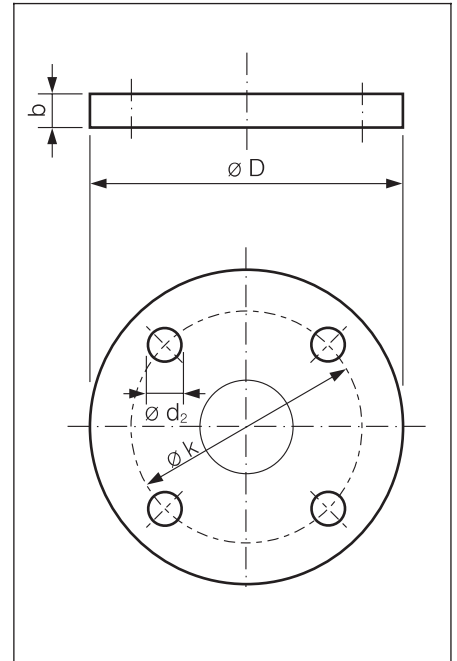


Figure left:
Dimensions ProbFit
CUA 461
1 Process connection
DIN flange DN 50 or
2" ANSI
2 Process connection
adapter (accessory)

Figure right:
Flange dimensions
CUA 461



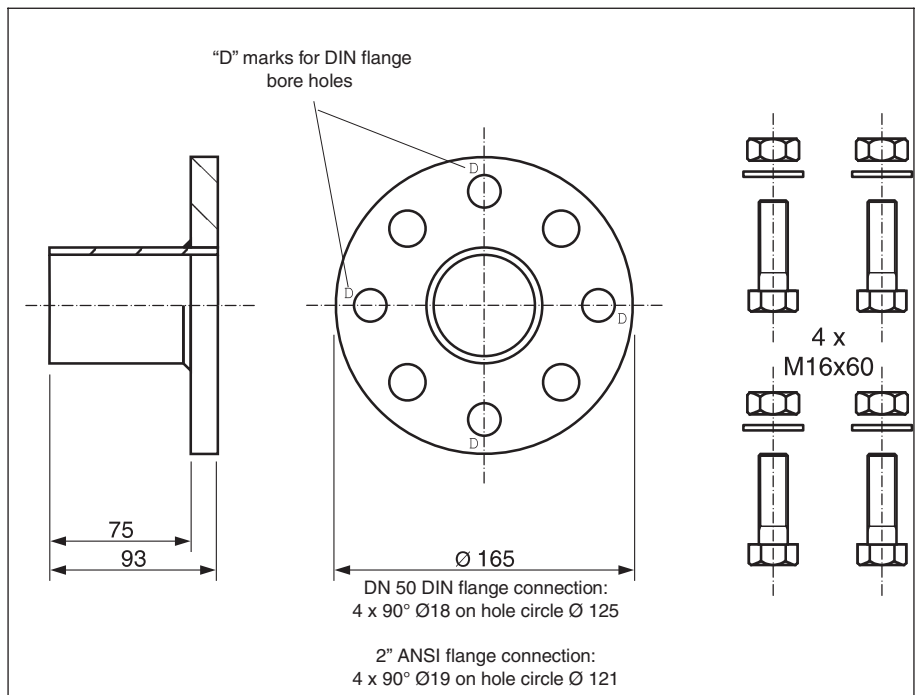
	DN 50 (mm)	ANSI 2" (mm)
Ø D	165	165
Ø k	125	121
Ø d ₂	18	19
b	18	18

Accessories

- Adapter for process connection:
Welded fitting for pipe diameters of
more than 80 mm, with DN 50 / 2"
ANSI combination flange, flange seal

4 M16x60 screws, 4 M16 nuts and
4 M16 washers out of stainless steel
1.4571, PVC or PP.

Process connection adapter DN 50 / 2" ANSI	Version	Order number
	stainless steel 1.4571	50080249
	Polyvinyl chloride PVC	50080250
	Polypropylene PP	50080251



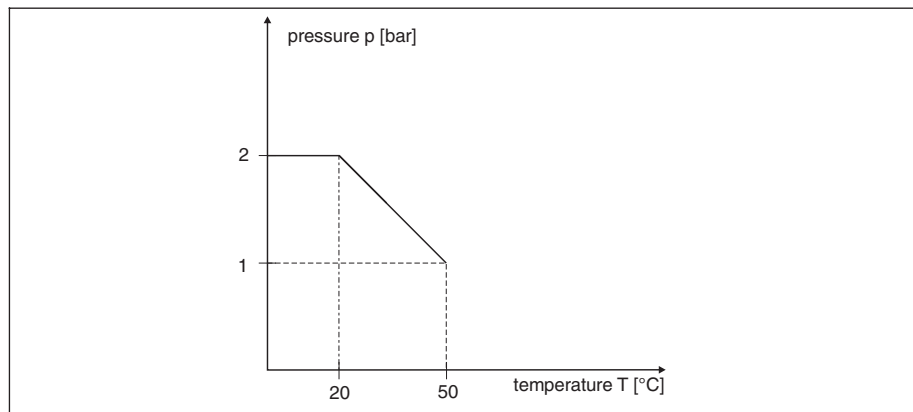
Process connection
adapter for diameter
larger than 80 mm

Technical data

Materials in contact with medium	PP, partially glass fibre-reinforced
O-ring seals in contact with medium	EPDM/Viton
Dimensions of O-rings in sensor guide	ID x W: 48.90 x 2.62
Dimensions of O-rings in sensor sleeve	ID x W: 41.00 x 1.78
	ID x W: 39.34 x 2,62
Locking ring, bolts	stainless steel
Safety ropes	stainless steel 1.4301, tensile strength 200 kp
Process connection	DIN flange DN 50 / ANSI flange 2"
Process pressure	max. 2 bar at 20 °C or max. 1 bar at 50 °C
Temperature	max. 50 °C
Rins ports	G 1/8"
Dimensions:	
Sensor moved out of process	installation height: 300 mm
Sensor withdrawn	required clearance above flange: 650 mm
Immersion depth	100 mm from lower flange
	to beginning of sensor inclination
Weight	approx. 3 kg
Sensor mounting	G 1"

Subject to modifications.

Temperature/pressure
specification



How to order

Retractable assembly ProbFit CUA 461

Version / mounting type

A Process connection DN 50 DIN flange

B Process connection 2" ANSI flange

O-ring seals

1Material EPDM

2Material Viton

CUA 461- ← complete order code

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Endress + Hauser

Nothing beats know-how

