

Certified according to DIN EN ISO 9001

Technical Datasheet



KPS

Turbidity Meter

Application

With the turbidity meter KPS it is possible to capture and reproduce turbidity changes in industrial processes. It is mainly used in the following areas: beer industry, dairies and beverage production. Here, KPS assumes tasks such as: monitoring of filter, condensate in the cooling water circuit, separator and waste water, phase separation, monitoring of concentrations and it contributes not only to improving and optimizing the processes but also helps to save resources.

Principle and Design

KPS is an optical sensor which is installed directly in the manufacturing process piping. The sensor emits an infrared light beam and measures backscattering which is caused by solid substances and other particles in the medium. The resulting absorbance is captured by a highly sensitive, frequency infrared receiver and processed by a high-performance microprocessor. The degree of dispersion is in the range from 4 to 20 mA.

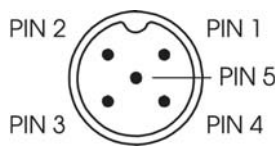
Technical Data

Applications

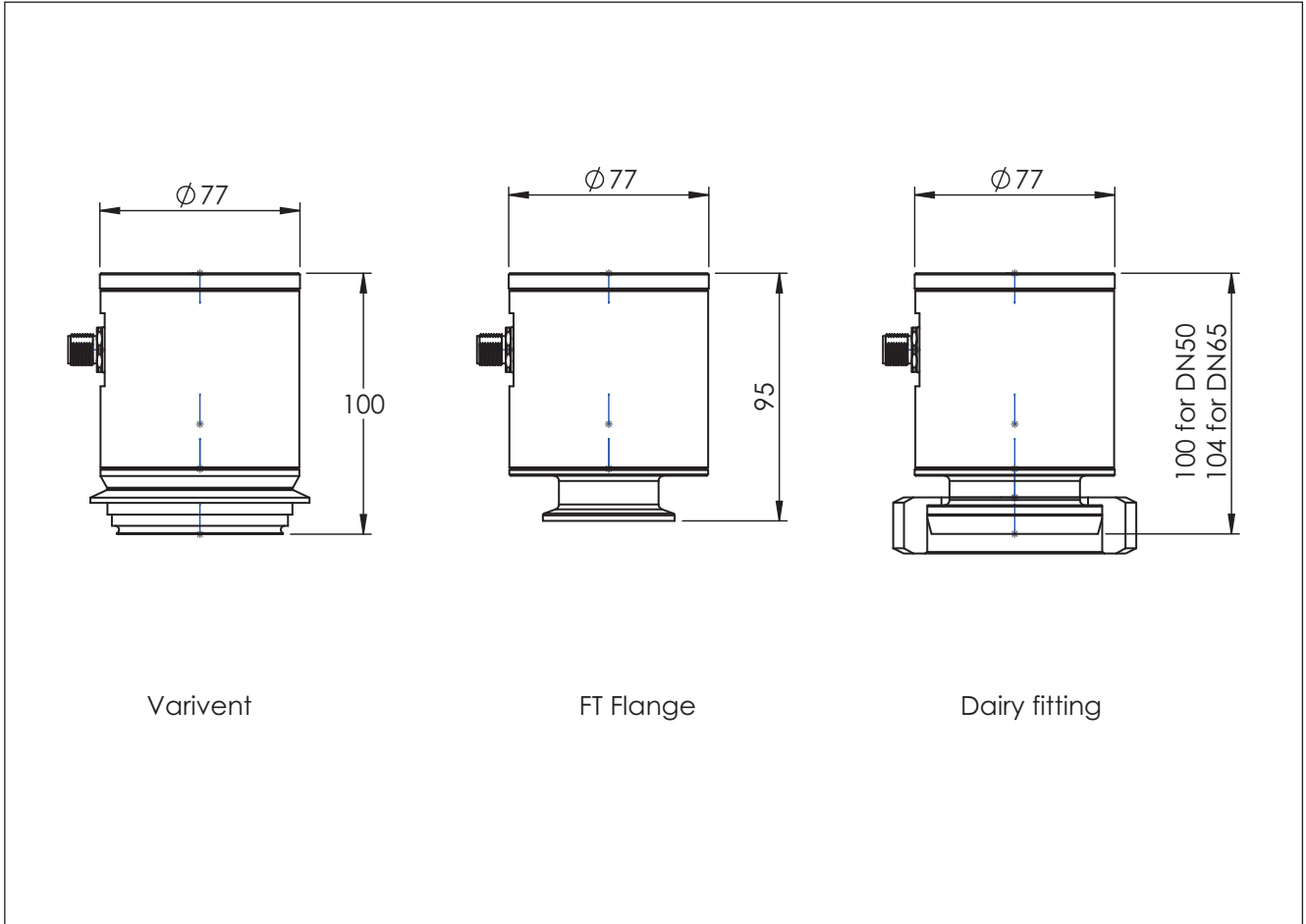
- Product monitoring
- CIP-monitoring
- Phase break
- Detect filter breaks
- Monitor waste streams

Features

- Short response time
- Compact version
- Hochwertige Werkstoffe
- 3A-approval
- Different connections
- Simple operation

General	
Measuring principle	ultrared light scatter
Measuring range	150 to 4.000 NTU
Linearity	± 0,2% of span
Repeatability	± 1% of span
Pressure	max. 14 bar
Temperature	ambience: 0 to +50°C process: 0 to +100°C CIP cleaning: to +150°C (max. 30 min.)
Materials	housing and connector: accord. to DIN 1.4404 (SS316L) lense: sapphire lense seal: silicone rubber, FDA-approved
Connections	FT-Flange accord. to DIN 32676; dairy fitting accord. to DIN 1185; Varivent N
Weight	approx. 1,4 kg
Protection class	IP 67
Approval	3-A sanitary standards
Electrical Data	
Output signal	4 to 20mA
Power consumption	0,45 W
Supply voltage	15 to 24 V DC
Electrical connection	5-pin plug, M12 x 1 A-Coding Pin 1 = -Iout Pin 2 = +Iout Pin 3 = +UB 15-24 V DC Pin 4 = -UB Pin 5 = n.c.
	

Dimensional Drawings (mm) - KPS



KPS Type	Varivent DN	FT-Flange DN 32676	Dairy pipe connection DN 1185
KPS 1.5	-	50.4	-
KPS 2.0	-	63.9	-
KPS 2.5	-	77.4	-
KPS 3.0	-	90.9	-
KPS 40	68 (Form N)	-	-
KPS 50	-	-	DN 50
KPS 65	-	-	DN 65