

Contiflow

Sampling System for liquids or solids

DIN-EN: DN 15 – 100 / PN 10 – 40

ASME: NPS ½" – 4" / class 150 – 300

PT range: $-40 < T < 230^{\circ}\text{C}$, vacuum 10^{-8} mbar

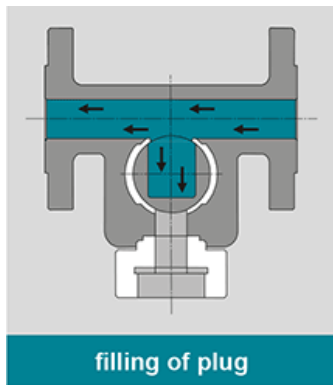


Design Features

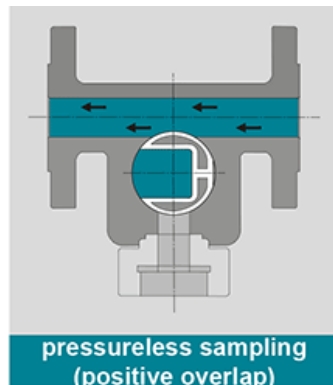
Design Characteristics

- free of cavity
- closed system
- maintenance free – self lubricating
- pressureless sampling
- defined representative sample quantity (25ml)
- piggable
- no flow interruption
- simple and foolsafe handling
- sampling in vacuum possible
- fugitive emission resp. clean air act certified (TA – Luft 2002 approval)
- Directive 2014/68/EU

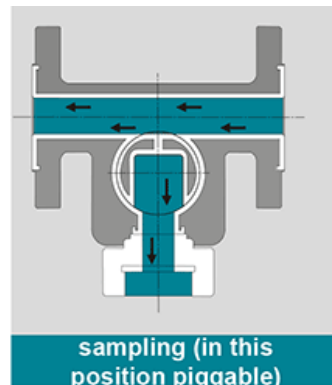
Functional Principle



filling of plug



pressureless sampling
(positive overlap)



sampling (in this
position piggable)

Design variations

- CONTIFLOW = Sampling plug valve with PTFE sleeve
- CONTIFLOW TRF = Sampling plug valve with lined plug (pharmaceutical cip competent)
- CONTIFLOW TRF-A = Sampling plug valve with lined body and plug (pharmaceutical cip competent)

Bottle connection

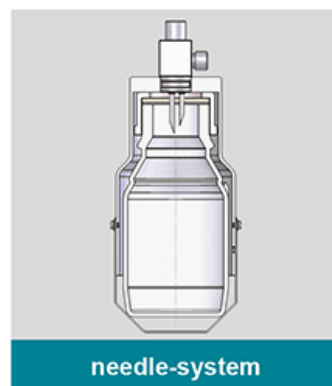
- PTFE-Adapter: for laboratory bottle with ISO-thread GL 32/45. Application: For less toxic resp. polluted media.
- Clamping Retainer: For fast and easy exchange of laboratory bottle, even for heated version.
- Needle system: closed needle system for laboratory bottle with septum (Butyl and PTFE). Needle System NH and NH-S with diverse internal diameter (2-6 mm). Application for high toxic resp. polluted media for spillning eliminated an contamination free sampling.



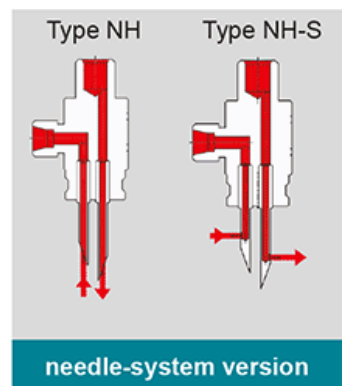
PTFE-adapter
(for laboratory-bottle)



clamping retainer



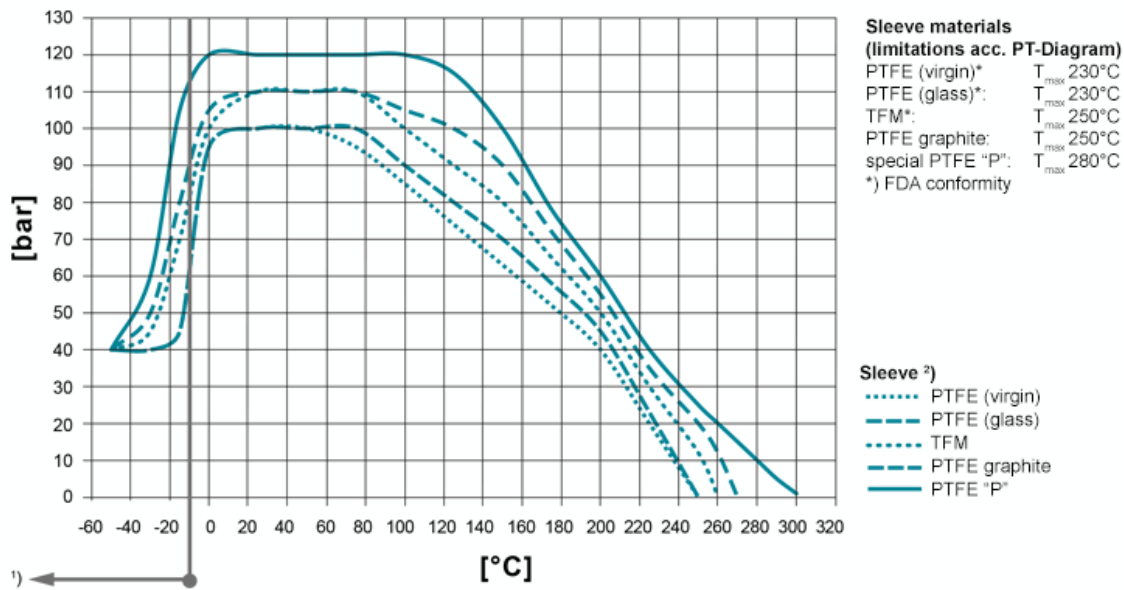
needle-system



needle-system version

PT-Diagram

General Pressure-Temperature-Diagram



Operating temperatures < -30°C and > 220 °C have to be checked and approved by AZ according to the operating conditions.

Besides the P/T value of the sleeve the limitations of the valve bodies also have to be considered. Please refer to the EN 12516-1 resp. ASME B16.34 in order to choose a proper pressure rating (PN/class). The shown values refer to austenitic stainless steel 1.4408 (A351 Gr. CF8M).

- 1) For operating temperatures below -10°C low temperature / austenitic steels are required.
- 2) Sleeve: There are different sleeve materials / compounds available.

Materials

Standard body materials

- Carbon Steel 1.0619, ASTM A216 WCB
- Stainless Steel 1.4408, ASTM A351 CF8M
- Stainless Steel 1.4308, ASTM A351 CF8
- Unalloyed stainless steel casting (low Temp.) 1.1138, LCC/LCB/A352

Standard plug materials

- Stainless Steel 1.4408, ASTM A351 CF8M
- Stainless Steel 1.4308, ASTM A351 CF8

Special materials

- Alloy
- Monel
- Nickel

- Zirconium
- Titan
- Tantal
- other materials on request

Lining materials (Type TRF / TRF-A)

- PFA, PFA-conductive, FEP

Sealing Systems

Standard sealing for all major applications;
Tmax 230°C

Type STD

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Firesafe sealing (API 607) with graphite
packing for additional
stem sealing; Tmax 230°C

Type FS

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Chemical sealing to prevent fugitive emission
of aggressive and toxic media
with PTFE packing for additional stem sealing;
T_{max} 230°C

Type CA

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Firesafe safety sealing (API 607) for fluctuating
temperatures
with 3x graphite packing (adjustable) for additional
stem sealing; Tmax 280°C

Type FSN

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Firesafe safety sealing (API 607) for fluctuating
temperatures
with 3x graphite packing (live loaded disc springs) for
additional
stem sealing; Tmax 280°C

Type FSN-SL

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Chemical safety sealing for fluctuating temperatures
with 3x PTFE packing (adjustment) for additional stem
sealing;
Tmax 230°C

Type CASN

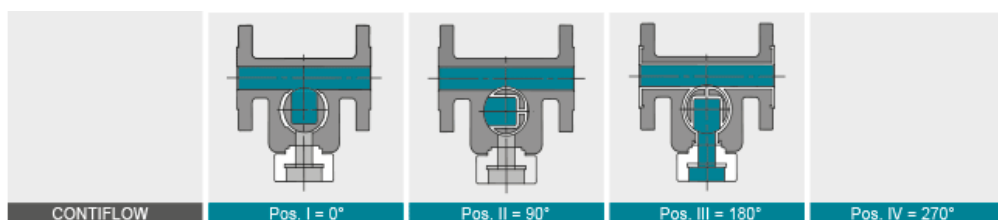
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Chemical safety sealing for fluctuation temperatures
with 3x PTFE packing (live loaded disc springs) for additional
stem sealing; Tmax 230°C

Type CASN-SL

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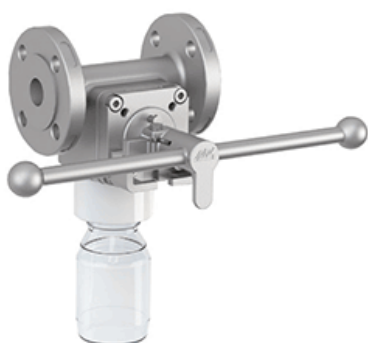
Port Forms



Dimensions

	DN	PN	L	H	R	E	
DIN EN 1092/1 588-1	15	10-40	130	128	380	73,5	
	25	10-40	160	128	380	111	
	40	10-40	200	128	380	120	
	50	10-40	230	141,5	465	133	
	80	10-40	310	141,5	465	152	
	100	10-40	350	141,5	465	165	
ASME B 16.5 / 16.10	½"	150	127	128	380	73,5	
	1"	150	127	128	380	111	
	1½"	150	165	128	380	120	
	2"	150	178	141,5	465	133	
	3"	150	203	141,5	465	152	
	4"	150	229	141,5	465	165	

CONTIFLOW
for standard installation



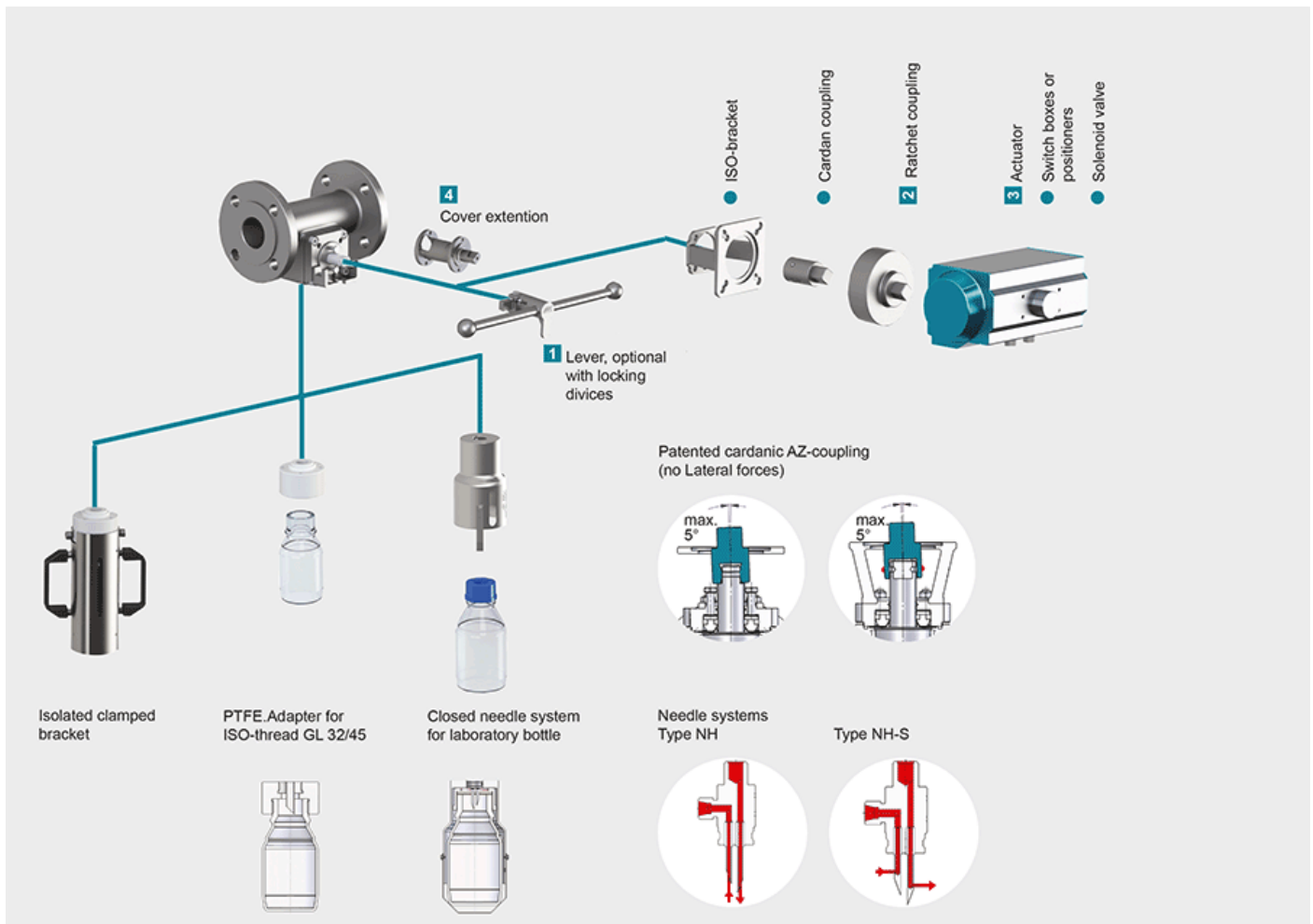
CONTIFLOW-V
for horizontal installation



CONTIFLOW-W
for vertical installation



Actuation



1 Locking Devices

Pilot valve combinations, pad lock eyelets, linear key conception, indexing plunger arrestor.
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2 Plug stem extension

Solid construction in stainless steel with T-wrench, Standard extension 100 mm or 150 mm, non standard lengths are available on request
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3 Actuators

Actuators for mounting-flange acc. to DIN ISO 5211
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4 Ratched coupling

To usw on multiport valves with standard 90° actuator for bigger switchpositions than 90°
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5 Cover extension

Solid construction in stainless steel, Standard extension 100 mm or 150 mm high, non standard lengths are available on request . Hexagonal bolts on adjustment ring freely accessible. Note: Don't use with sealing

FSN/FSN-SL and CASN/CASN-SL
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