

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



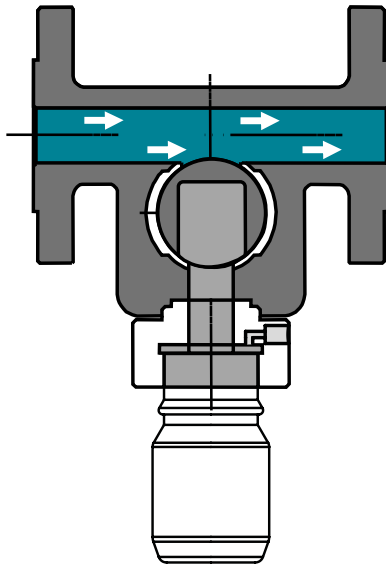
Reliably Working for our Customers

Media

Sampling media: Acetic acid • Ammonia • Benzene • Ethanol • Ethyl alcohol • Fluoride • Hydrochloric acid • Hydrofluoric acid • Nitric acid • Sulphate • Urea • NH₃ • CO₂ • H₂O solution • Resins • Hot oil • Propionic acid • Tower acid • Hydrochloric acid (HCL) • Pyrolysis Oil • Methanol • Sulphuric acid • Methyl tert-butyl ether • Caustic • Propionic acid • Tower acid

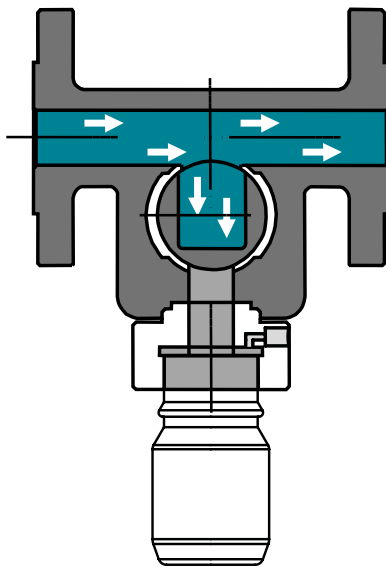
Functional Principle

Media flow,
standard position



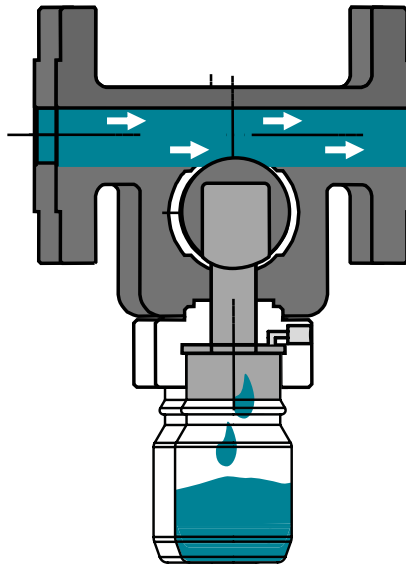
Pos. 1
0°

Filling the plug,
defined volume



Pos. 2
180°

Isolation
- pressure-less ! -



Pos 4
90°

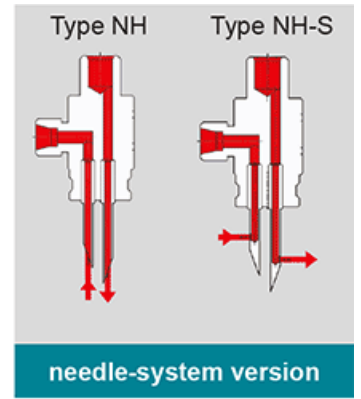
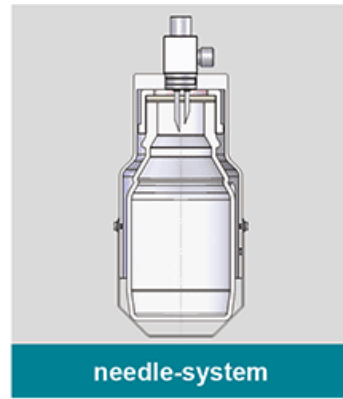
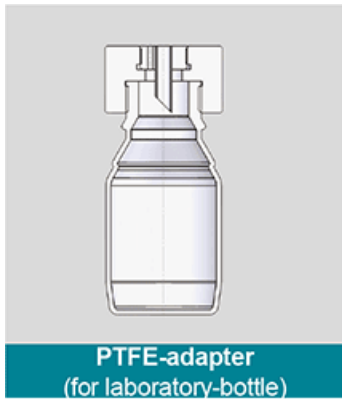
Design Features

Design Characteristics

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

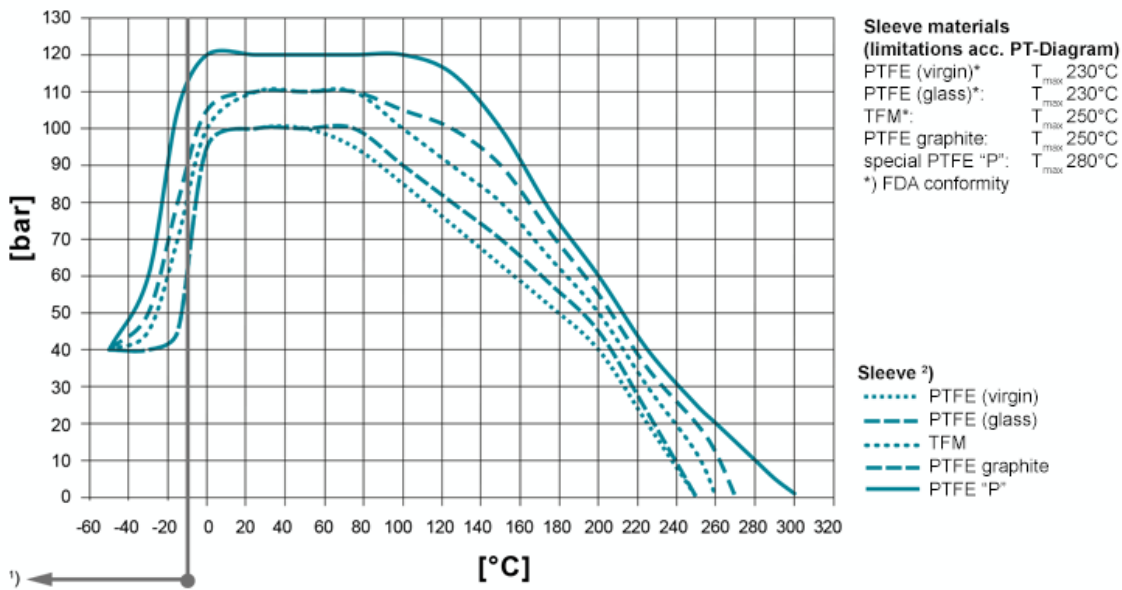
Bottle connection

- 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 spill-free and contamination-free sampling.



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

[read more \[...\]](#)

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

[read more \[...\]](#)

Chemical sealing to prevent fugitive emission of aggressive and toxic media with PTFE packing for additional stem sealing;

T_{\max} 230°C

Type CA

[read more \[...\]](#)

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

T_{\max} 230°C

Type CASN

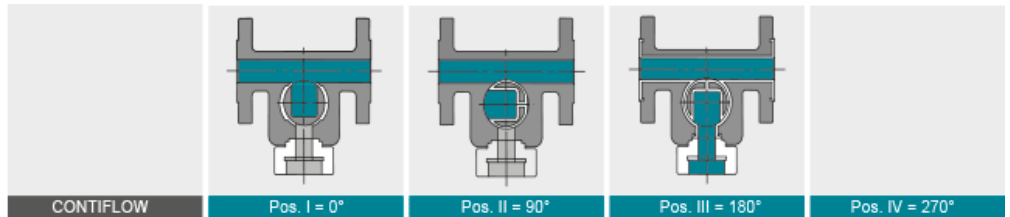
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Chemical safety sealing for fluctuation temperatures with 3x PTFE packing (live loaded disc springs) for additional stem sealing; T_{\max} 230°C

Type CASN-SL

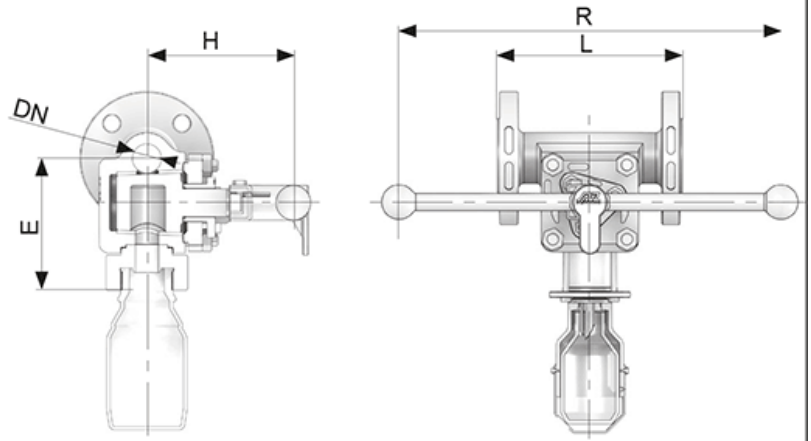
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Port Forms

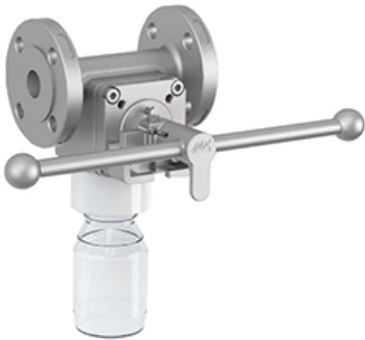


Dimensions

DIN EN 1092/1 588-1	DN	PN	L	H	R	E
	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



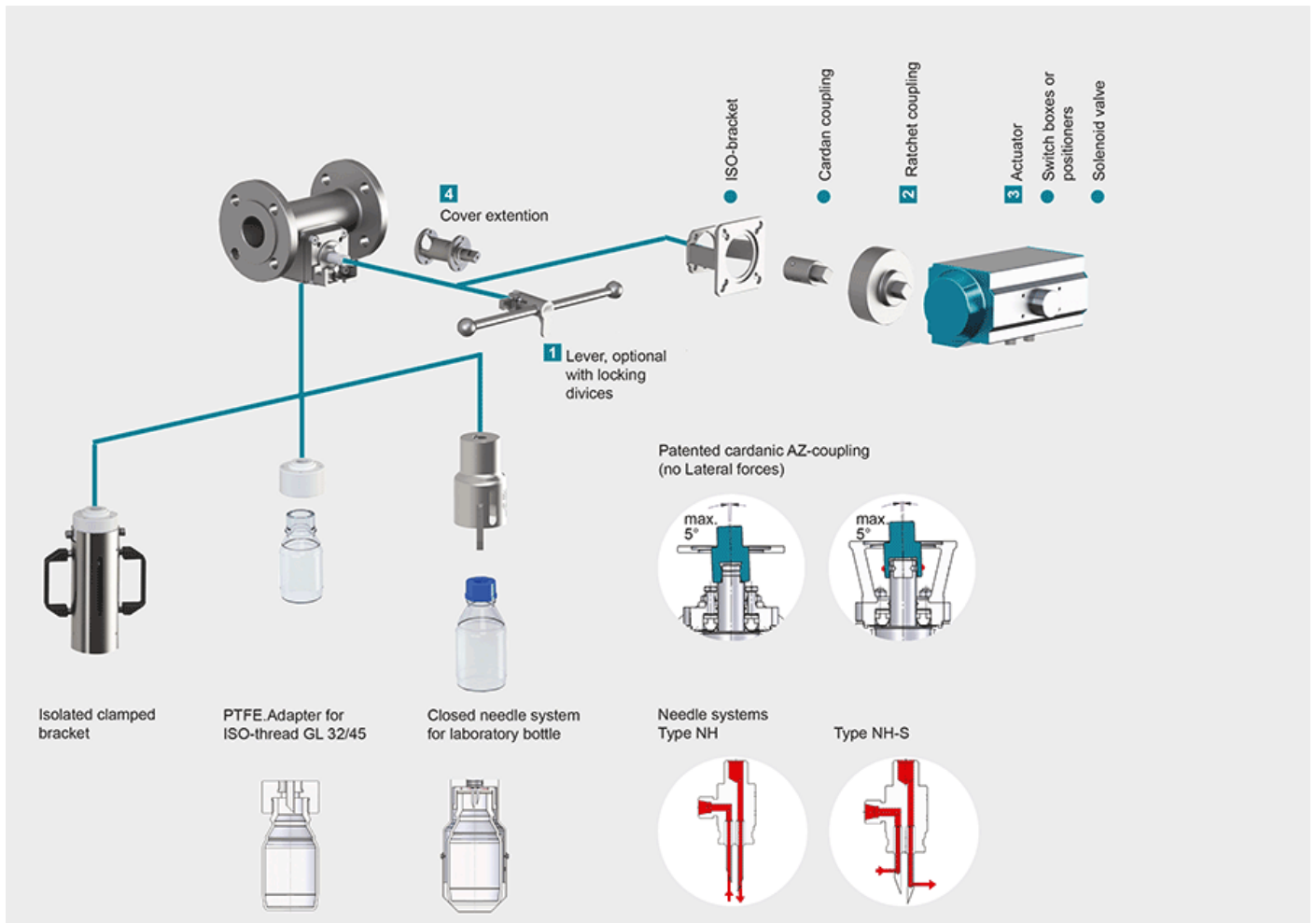
CONTIFLOW-V
for horizontal installation



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
[read more \[...\]](#)

3 Actuators

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

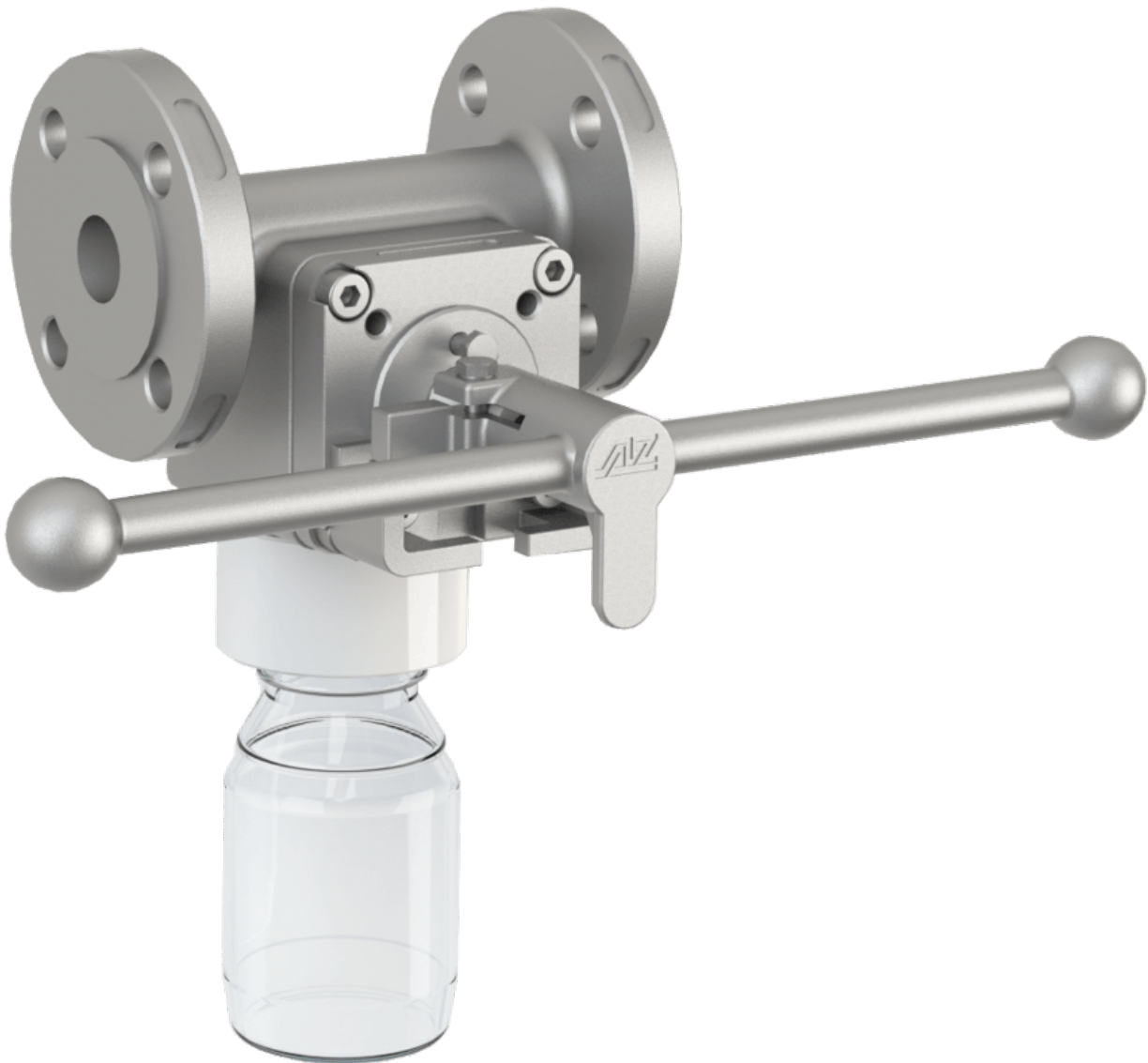
To usw on multiport valves with standard 90° actuator for bigger switchpositions than 90°
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5 Cover extension

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
[read more \[...\]](#)

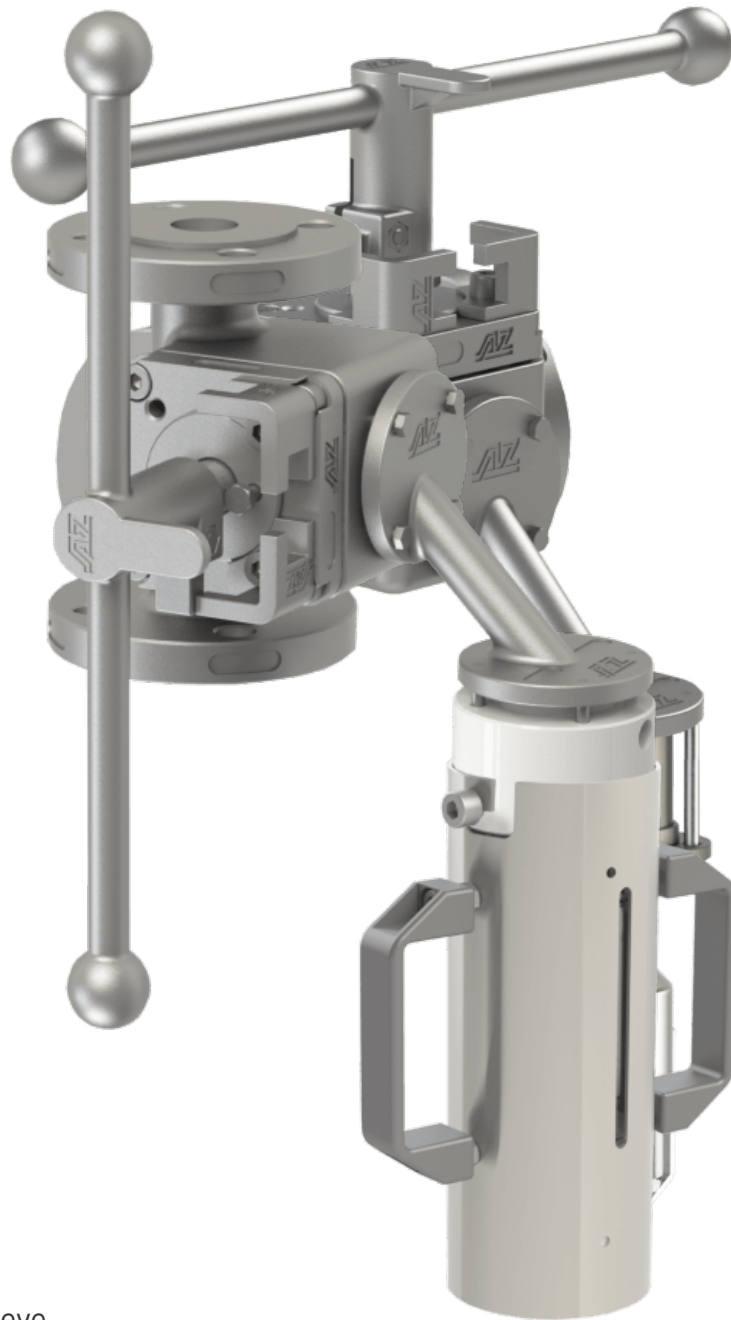
Product range

Type CONTIFLOW



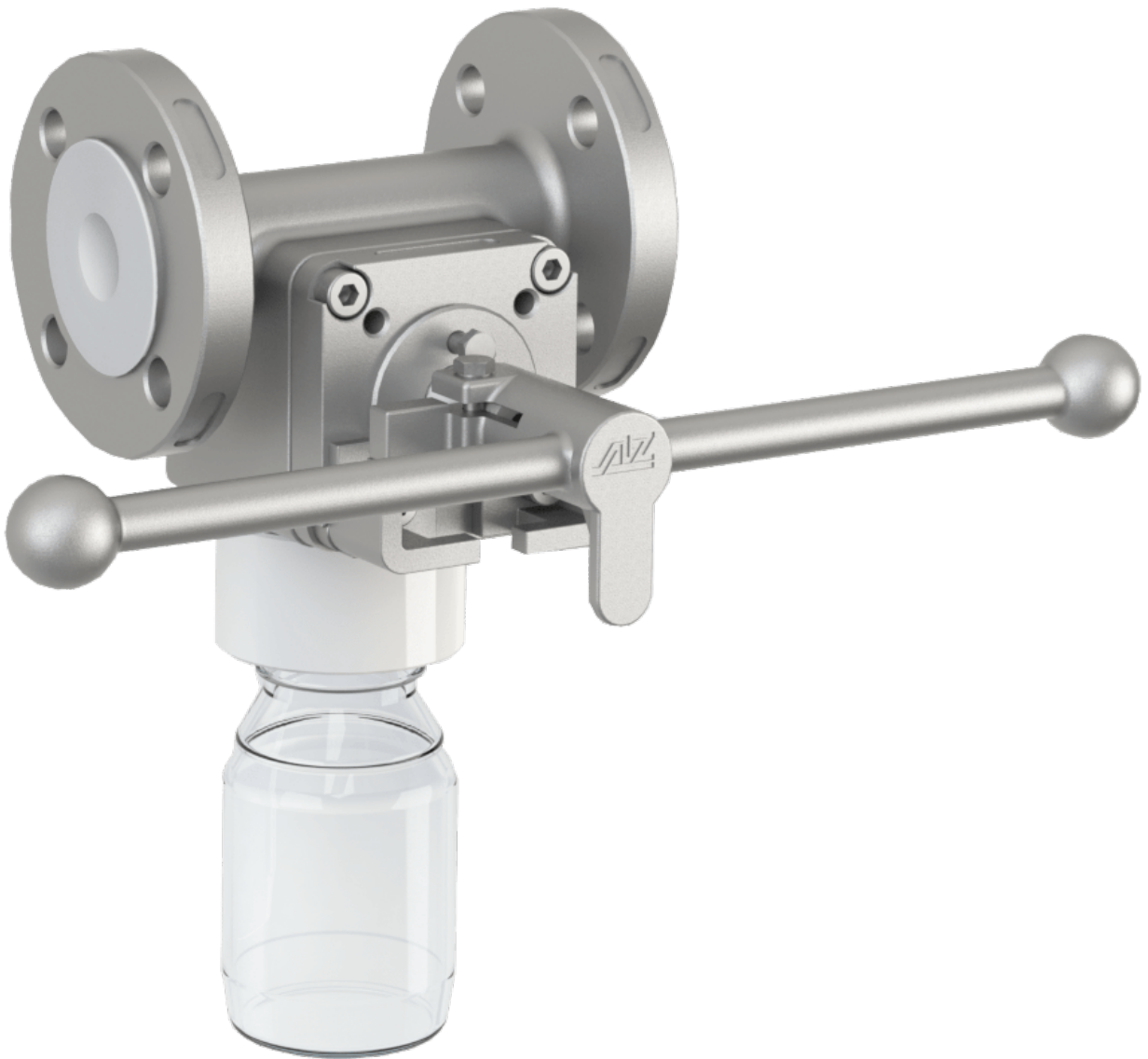
- with PTFE sleeve
- Installation: standard
- Actuation: hand lever, front
- Bottle holder: PTFE adapter

Type **CONTIFLOW-W**



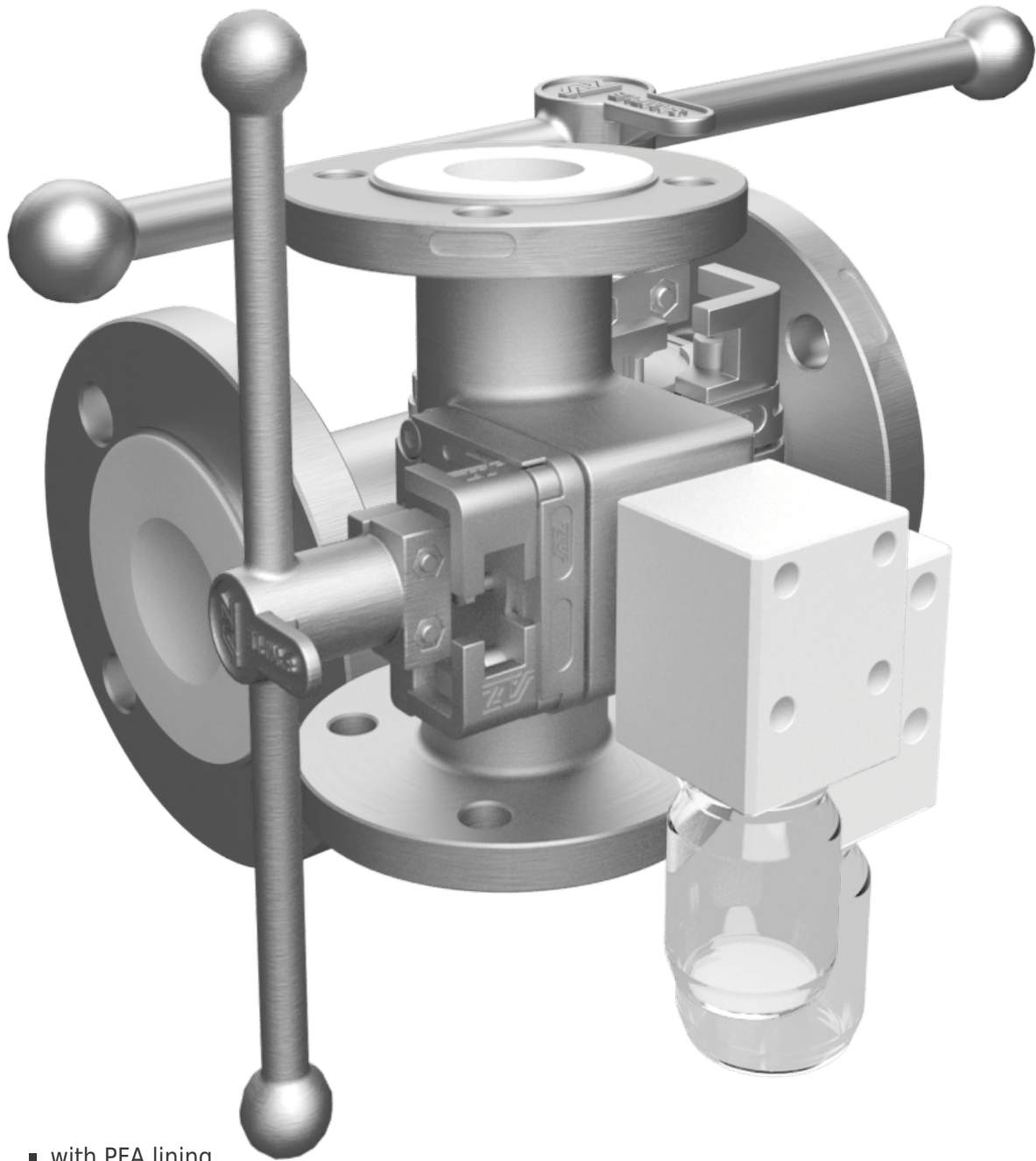
- with PTFE sleeve
- Installation: horizontal
- Actuation: hand lever, top
- Bottle holder: needle system
- Installation: vertical
- Actuation: hand lever, front
- Bottle holder: Clamping bottle holder

CONTIFLOW-A



- with PFA lining
- Installation: standard
- Actuation: hand lever, front
- Bottle holder: PTFE adapter

CONFIDOMA-A-W



- with PFA lining
- Installation: horizontal
- Actuation: hand lever, top
- with PFA lining
- Bottle holder: PTFE adapter
- Installation: vertical
- Actuation: hand lever, front
- Bottle holder: PTFE adapter

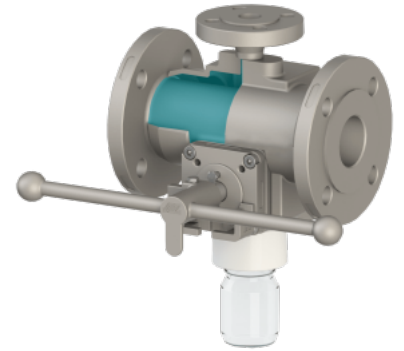
Supplementary equipment

Heating / cooling jacket

- Heating / cooling jacket
- heating from flange to flange
- cover seating included

Various connection for heating medium

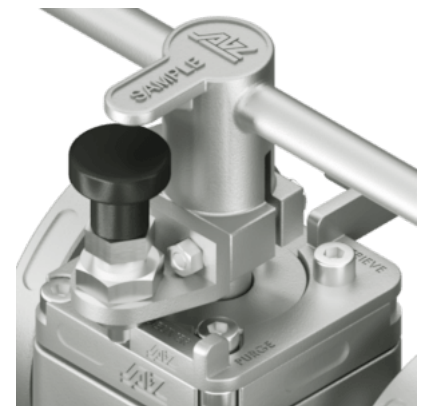
- flanged
- threaded
- weld ends



Purging device

Purging of plug, needle system and lab bottle in 200° position with Nitrogen or steam

- index plunger for safe purging position
- purging of the plug is possible in-situ (no additional valve necessary)



Cleaning in Place - CIP

- CIP-compliant
- with PTFE/PFA lined plug
- without sleeve
- gapless
- for pharmaceutical applications

Protection box for lab bottle

Types

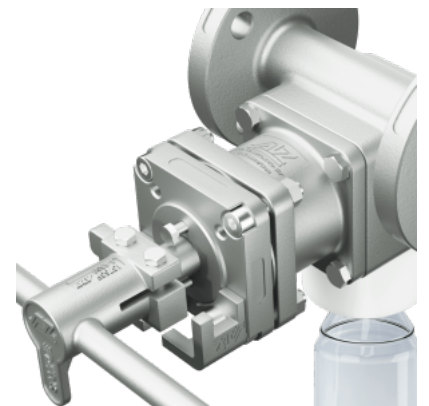
- for the whole sampling valve
- with ventilation, exhausting
- lockable
- heatable
- with lighting



Modular Design

Increase of plug sample volume with additional flange plug volume

- 25 ml (Standard)
- 50 ml
- 75 ml
- 100 ml



Customized solutions

on request

Example:

- 6" flanged valve (or bigger) for main stream
- hand lever, front
- Bottle holder: PTFE adapter

