

Energy

Valves for nuclear power plants

**UK6612
delivered.**



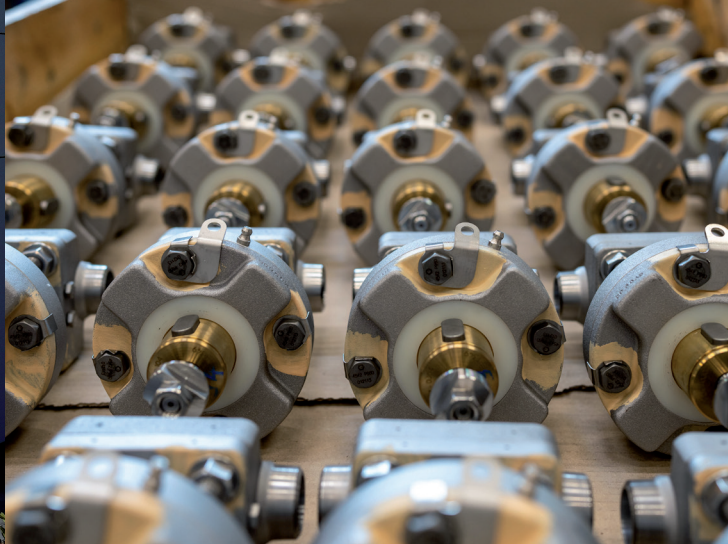
Company



SISTO Armaturen S.A. – a company of the KSB Group – is developing, designing, manufacturing and distributing valves and accessories for the nuclear power industry.

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Qualifications

System based

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018
AD 2000 / DIN EN ISO 3834-2:2021
Directive 2014/68/EU
KTA 1401
HAF 604
ESPN
NPE
GQAS
DIN EN 764-5:2014

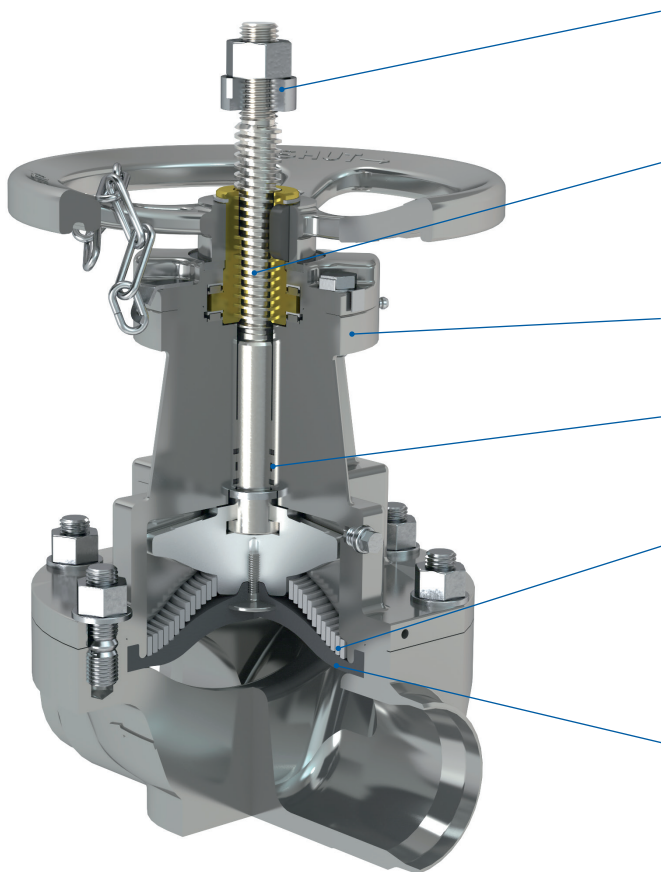
Design and Manufacturing standards

Hard rubber lining according to AVSD 6.1/50
Diaphragm manufacturing according to WPB-A 21.00-2/2
PMUC
ACQPA
WRAS
ACS
RCC-M (CTS 45.C.015)



SISTO-20NA

Diaphragm valve



1. Integrated travel stop in closed direction
Perfect diaphragm position (valve closed)
Overload protection of the diaphragm against excessive force application (handwheel and actuator)
2. Non-rotating, rising stem
Position indicator
Direct actuator mounting possible
3. Actuator flange according to EN ISO 5210
Electrical actuator mounting possible under operation load PB and in any position without bonnet disassembling
4. Back-up seal by two o-rings
Grease chamber between the two o-rings for a reliable stem guide
5. Spiral spring support
Optimized functional security in any position (open-closed-intermediate)
Increased service life of the diaphragms
Maintenance free
6. Enclosed diaphragm in off-load area
Bonnet and body assembled metal on metal in force closure
Absolute tightness to atmosphere and passage
All moving parts are hermetically separated from the fluid by the diaphragm
Long service life

DN08 – DN150

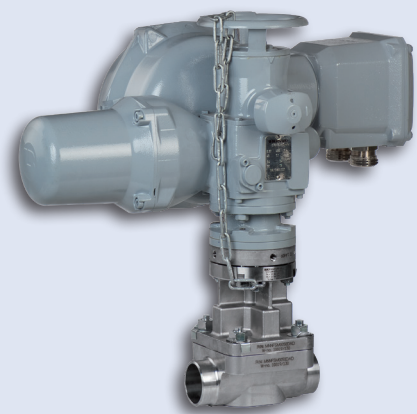
PN20 or according to pressure and temperature specification and pipe loads

Temperature: max. 100°C (higher temperatures on demand)

Materials according specifications (e.g.: RCC-M, ASME, KTA)

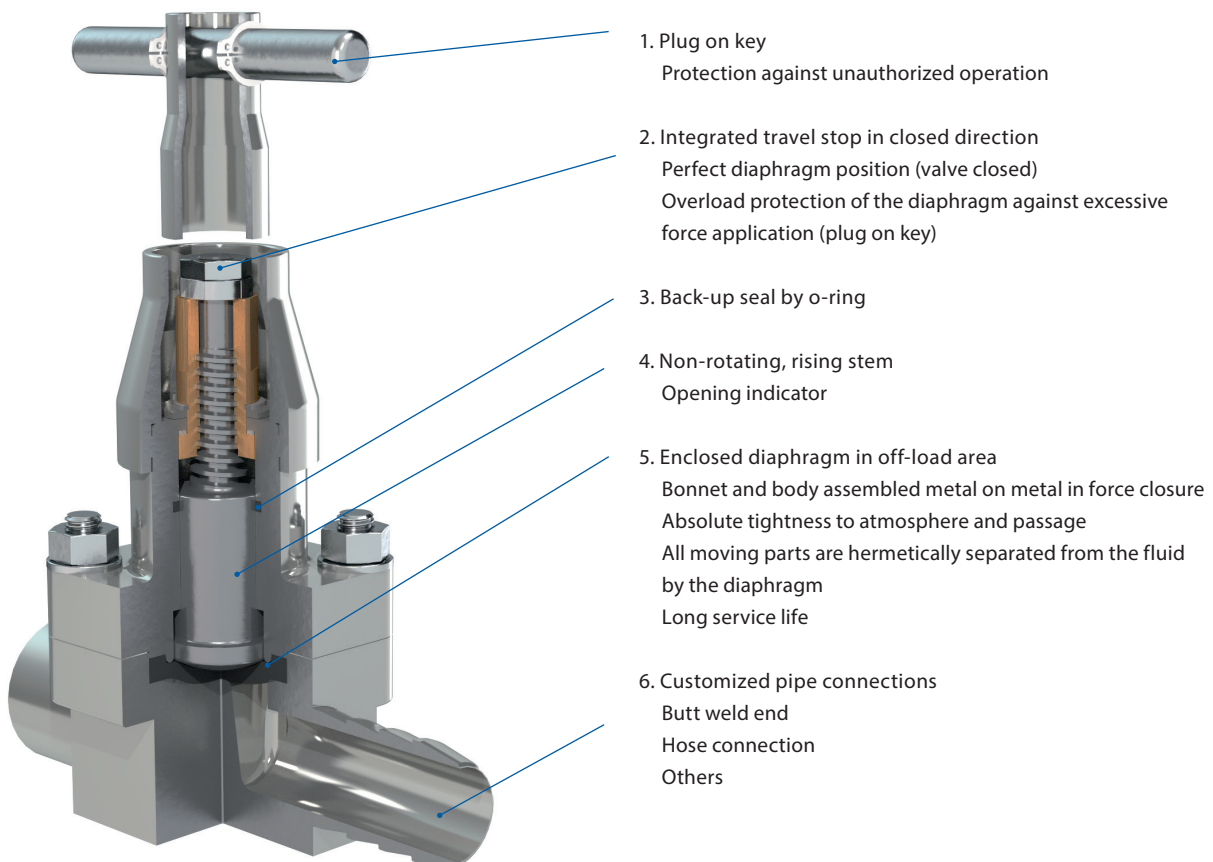
References

Hinkley Point C - United Kingdom	Q2, Q3
Taishan 1 + 2 – China (Type 120/121/220/221/222)	Q2, Q3, NC
Flamanville 3 - France	NC
Ringhals - Sweden	Q2



SISTO-DrainNA

Drain valve / Diaphragm valve



DN15 – DN25

PN16 or according to pressure and temperature specification and pipe loads

Temperature: max. 100 °C (higher temperatures on demand)

Materials according to specifications (e.g.: RCC-M, ASME, KTA)

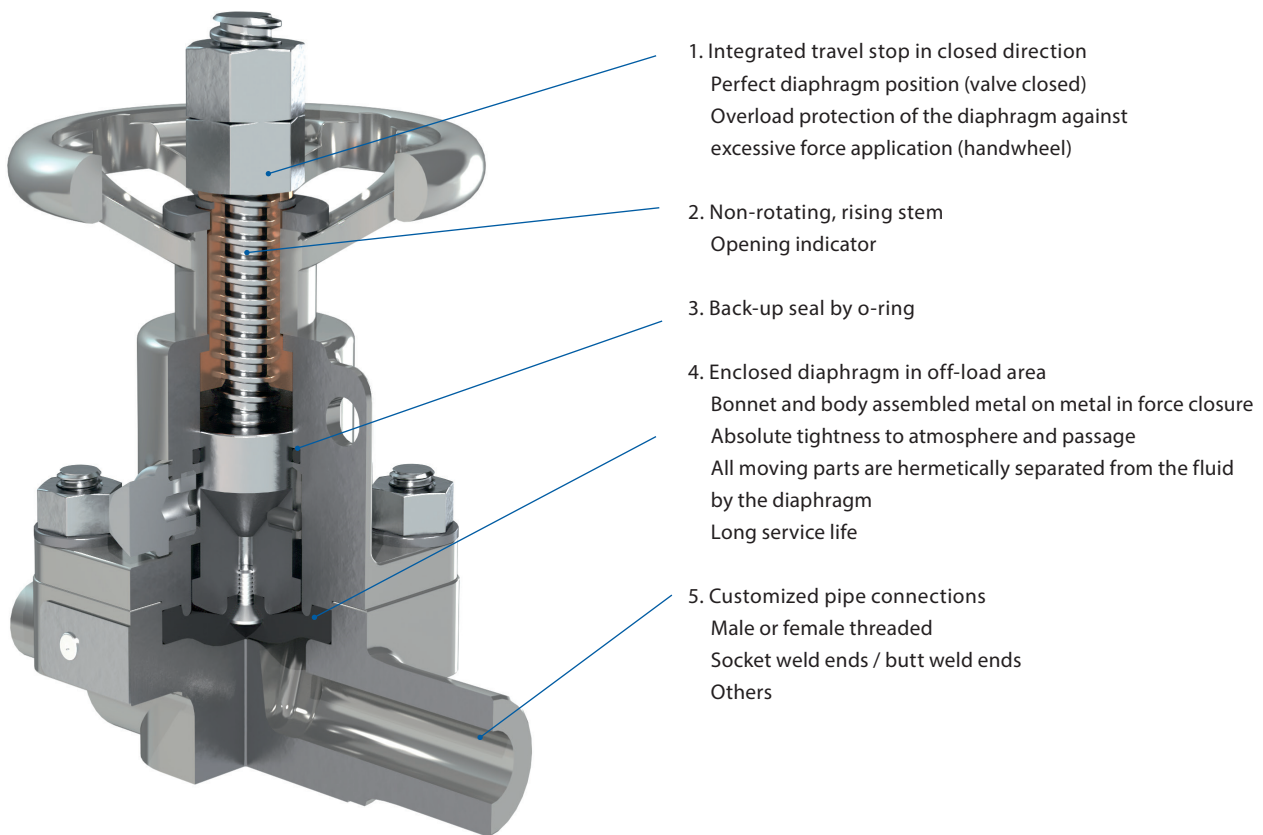
References

Olkiluoto 3 – Finland (Type 640)	Q3
Taishan 1 + 2 – China (Type 653)	Q2, Q3, NC
P4 and P'4 design reactors – France	Q3



SISTO-InstNA

Instrument isolation valve / Diaphragm valve



1. Integrated travel stop in closed direction
Perfect diaphragm position (valve closed)
Overload protection of the diaphragm against excessive force application (handwheel)
2. Non-rotating, rising stem
Opening indicator
3. Back-up seal by o-ring
4. Enclosed diaphragm in off-load area
Bonnet and body assembled metal on metal in force closure
Absolute tightness to atmosphere and passage
All moving parts are hermetically separated from the fluid by the diaphragm
Long service life
5. Customized pipe connections
Male or female threaded
Socket weld ends / butt weld ends
Others

DN15

PN16 or according to pressure and temperature specification and pipe loads

Temperature: max. 100 °C (higher temperatures on demand)

Materials according to specifications (e.g.: RCC-M, ASME, KTA)

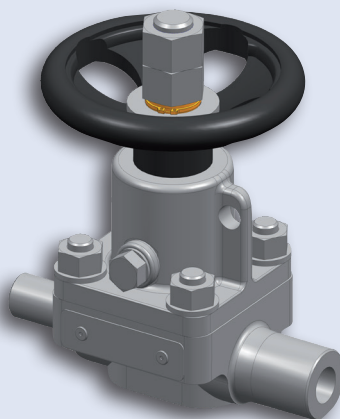
References

P4 and P'4 design reactors – France

Q3

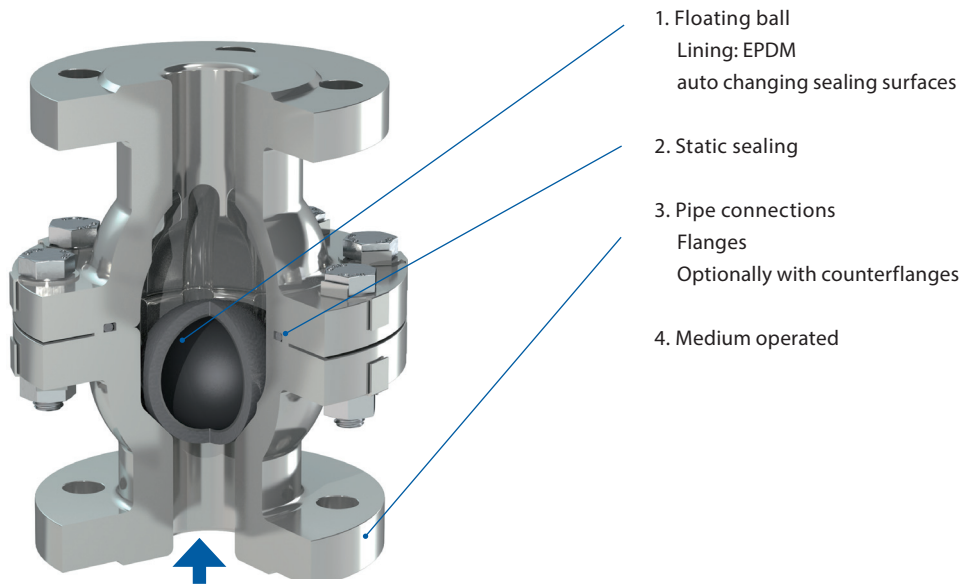
Hinkley Point C - United Kingdom

Q3



SISTO-KRVNA

Floating ball vent valve



1. Floating ball
Lining: EPDM
auto changing sealing surfaces
2. Static sealing
3. Pipe connections
Flanges
Optionally with counterflanges
4. Medium operated

DN25, 50, 80, 100, 150
 PN16, PN40 or according to pressure and temperature specification
 and pipe loads
 Temperature: max. 100°C (higher temperatures on demand)
 Materials according to specifications (e.g.: RCC-M, ASME, KTA)

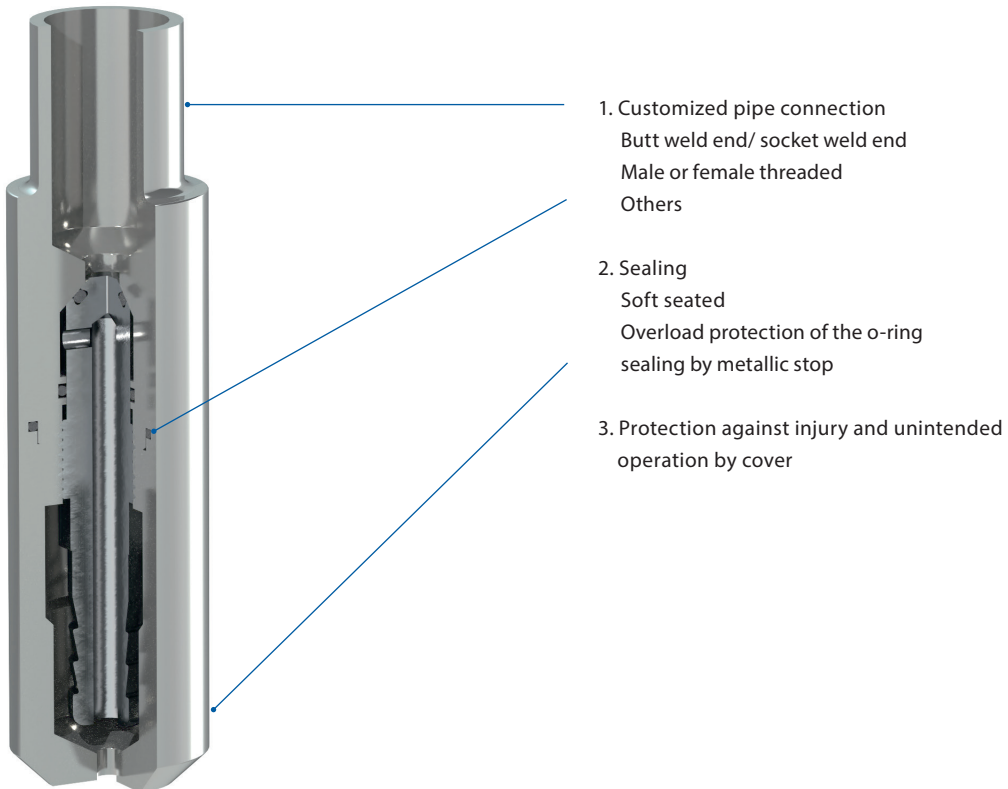
References

Hinkley Point C - United Kingdom	Q2, Q3
Taishan 1 + 2 – China (Type 330)	Q3
Flamanville 3 – France	Q3
Olkiluoto 3 – Finland (Type 53)	Q3
Angra 1 + 2 + 3 – Brazil (Type 98)	AS3
Isar 2 – Germany (Type 98)	AS3
Neckarwestheim 2 – Germany (Type 98)	AS3
Emsland – Germany (Type 98)	AS3
Fangchanggang 3 +4 - China	Q3
P4-P'4-CPY-CPO-N4 - France	Q3
Forsmark - Sweden	NC
Jules Horowitz - France	NC
Philippsburg 2 (Type 98) - Germany	AS3
NPP Oskarshamm 3 - Sweden	NC



SISTO-VentNA

Vent valve



DN15

PN16

Temperature: max. 120 °C

Materials according to specifications (e.g.: RCC-M, ASME, KTA)

References

Olkiluoto 3 – Finland (Type 641)

Q3

Taishan 1 + 2 – China (Type 441)

Q2, Q3, NC

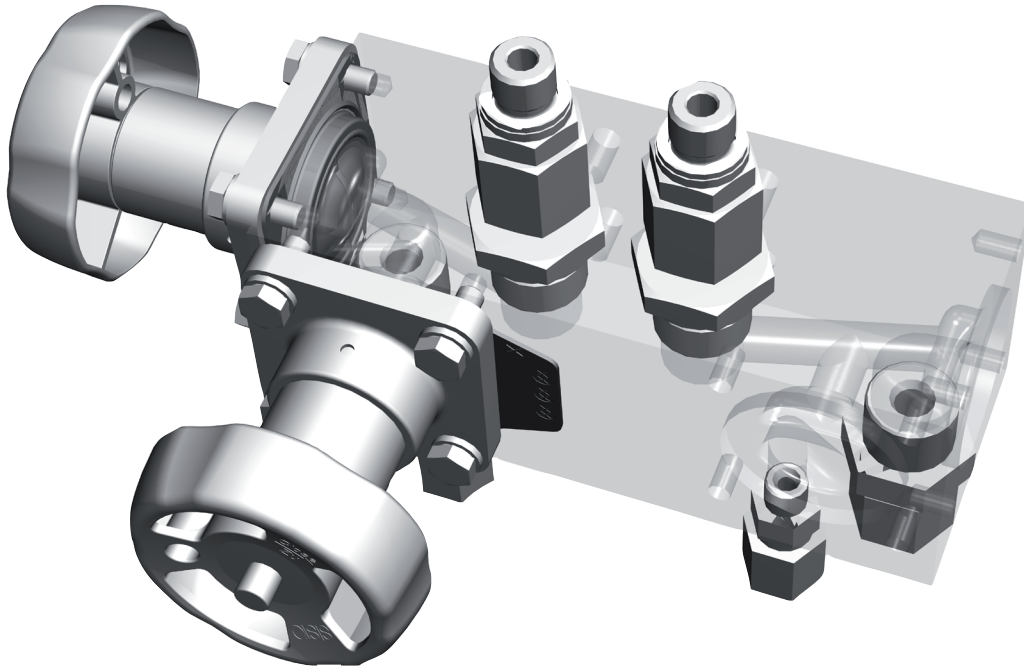
P4 and P'4 design reactors – France

Q3



SISTO-MultiportNA

Compact multiport diaphragm valve



Compact design

Minimized dead zone

Multifunctional

Customized connections

PN20

Temperature: max. 100°C

Materials according to specifications (e.g.: RCC-M, ASME, KTA)

References

P4 and P'4 design reactors – France

NC



Installation example

SISTO-20

diaphragm valve



1. Opening indicator
2. Integrated travel stop in closed and open direction
Perfect diaphragm position (valve closed)
Overload protection of the diaphragm against excessive force application (Handwheel)
flow control
3. Sprial spring support
Optimized functional security in any position (open-closed-intermediate)
Increased service life of diaphragm
Maintenance free
4. Enclosed diaphragm
Absolute tightness to atmosphere and passage
All moving parts are hermetically separated from all the fluid by the diaphragm
Long service life
5. Customized pipe connections
Butt weld ends
socket weld ends
threaded socket
flanged connection

DN15 - DN200

PN16

Temperature: max. 100 °C

Materials according to specifications (e.g.: RCC-M, ASME, KTA)

References

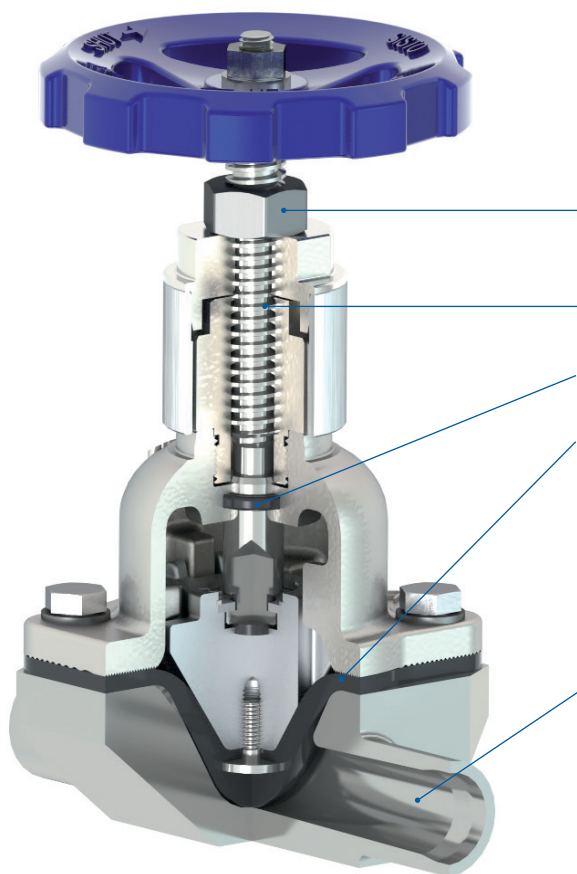
CPO, CPY, P4, P'4, N4 - France

Q3



SISTO-KBNA

Diaphragm valve



1. Integrated travel stop in closed direction
Perfect diaphragm position (valve closed)
Overload protection of the diaphragm against excessive force application (handwheel)
2. Rising stem
3. Back-up seal by o-ring
4. Elastomer diaphragm
Absolute tightness to atmosphere and passage
All moving parts are hermetically separated from the fluid by the diaphragm
5. Customized pipe connections
Butt weld end
socket weld end
threaded socket
flanged connection

DN15 – DN200

PN16

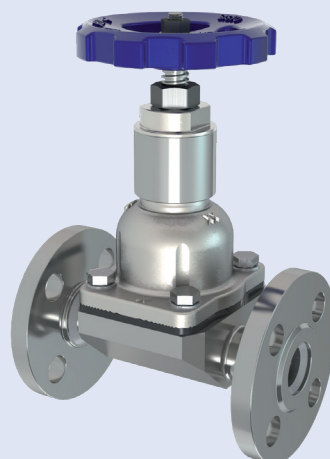
Temperature: max. 100 °C (higher temperatures on demand)

Materials according to specifications (e.g.: RCC-M, ASME, KTA)

References

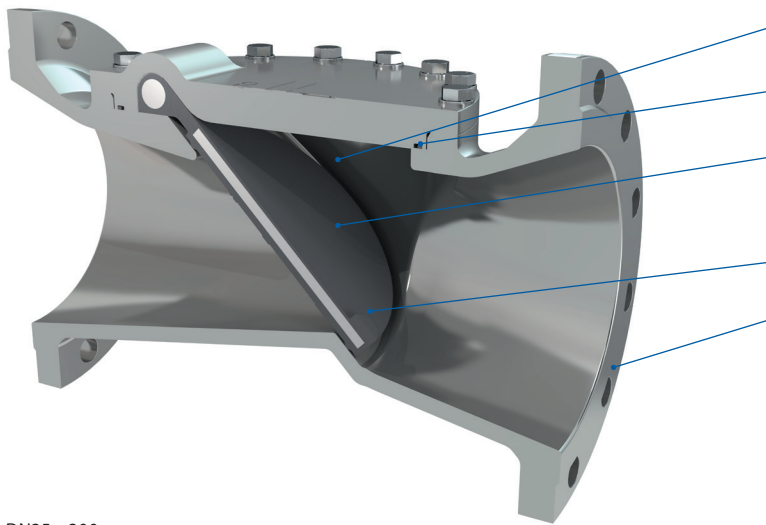
Reprocessing plant - Brésil

NC



SISTO-RSKNA

Swing check valve



1. Body and cover
Hard rubber lining or without lining
2. Static sealing
3. Soft sealing check valve
Straight through type (design)
4. Pre-stressed disc to avoid water hammer
5. Customized pipe connections
Flanges or weld ends
Optionally with counterflanges
6. Medium operated
7. No rotation parts
8. Short calming stretches (1xD)

DN25 – 300

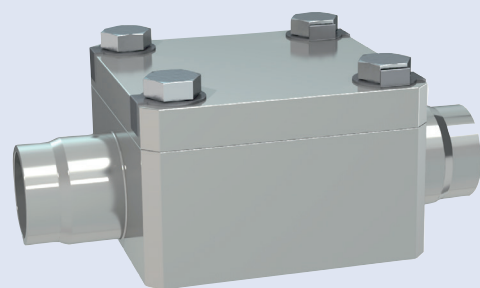
PN16 or according to pressure and temperature specification and pipe loads

Temperature: max. 100 °C (higher temperatures on demand)

Material: Body and cover JS-1025, steel or stainless steel or according to specification (e.g.: RCC-M, ASME, KTA)

References

Olkiluoto 3 – Finland (Type 216)	Q3, Q4, NC
Taishan 1 + 2 – China (Type 375)	Q3
Isar 2 – Germany (Type 216)	AS3, AS5
Neckarwestheim 2 – Germany (Type 216)	AS3, AS5
Emsland – Germany (Type 216)	AS3, AS5
Beznau – Switzerland (AKZ)	Q3
Unterweser – Germany (Type 216)	AS3
Biblis B – Germany (Type 216)	AS3
Philippsburg 2 – Germany	AS3
Brunsbüttel – Germany	AS3
Angra 2 / Angra 3 – Brazil (Type 216, 327, 328, 345, 455)	D3, D5
Hinkley Point C - United Kingdom	Q3



SISTO products and competencies

Diaphragm valves for sterile processes



SISTO-C



SISTO-C

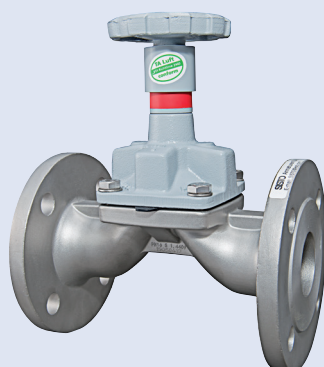
Diaphragm valves for energy, industry und building services



SISTO-KB



SISTO-20



SISTO-20 stainless steel



SISTO-16RGAMAXX

Actuators for valves



SISTO-LAP

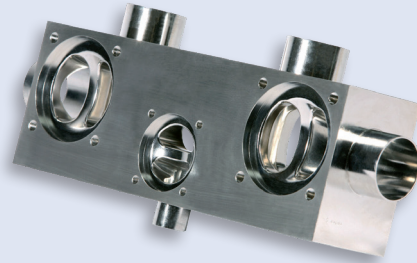
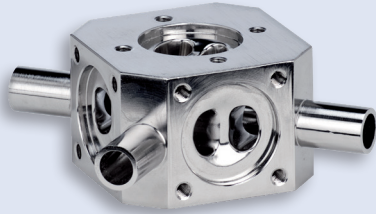


SISTO-LAD



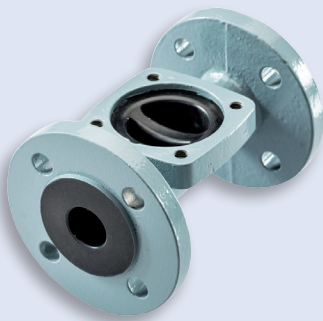
SISTO-LAE

Complex machining



mechanically polished and electropolished

Lining and coating

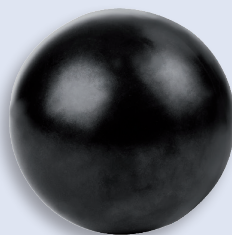


Rubber

Polyamide

PTFE

Elastomer parts

PMUC

Diaphragms

Balls

Discs



In house execution of customized corrosion protections with **ACQPA** (level 1 and 2) certified personnel.

In house execution of **visual inspections** with ISO 9712 (level 1 and 2) certified personnel according customized inspection plans.



Execution of **Non-destructive testing (NDT)** with ISO 9712 (level 1, 2 and 3) certified personnel according customized inspection plans.





Your local representative



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