

**Maintenance-free
Diaphragm valves
lined
and
unlined**

flanged
PN 10
DN 15 - 200
ND 1/2" - 8"

Fields of application

- chemical and industrial process engineering
 - general industries
 - power plants
- Suitable for water, air, oil as well as abrasive and aggressive media.

Operating data

- operating temperature range from -10°C up to +160°C
- operating pressure range from vacuum up to 10 bar

Design

Soft sealing valve, weir type. Sealing in the passage and towards the outside by a diaphragm with a supporting spiral spring (starting with DN 065). Position indicator with integrated stem protection.

Specification

valve - manufactured and tested EN 13397
- designated DIN/EN 19 (ISO 5209)

flange - dimensions ASME B 16.5 - 1996 Cl.150
DIN EN 1092-2 (BS 4504)
- surface ASME B 16.5 - 1996 Cl.150FF
DIN EN 1092-2 Form B (RF)

face-to-face length SISTO-10 S EN 558-1 R7 (ISO 5752/7)
(BS 5156)

Inspection

certificate- material EN 10204 2.2
EN 10204 3.1
- final inspection EN 10204 3.1

Materials

| | | | |
|------------|------------------------------|------------------------|----------------------|
| Body | grey cast iron | JL-1040 | GJL-250 |
| Bonnet | grey cast iron | JL-1040 | GJL-250 |
| Compressor | grey cast iron zinc alloy | JL-1030 GD-ZnAl4Cu1 | GJS-300-15 2.2141 |
| Stem | stainless steel | X12CrMoS17 | 1.4104 |
| Diaphragm | | EPDM | +140°C |
| Handwheel | cast iron/plastic | JL-1030/ABS | |

Variants

| | | | |
|--------------------|------------------|---------|--------|
| Body Lining | NR-H | Ebonite | +100°C |
| | | IIR | Butyl |
| Body Coating | ECTFE | Halar | +90°C |
| Diaphragm Material | IIR | | +120°C |
| | NBR | | +90°C |
| | CSM | | +100°C |
| | PTFE/EPDM 2layer | | +160°C |

These data are given as a guide only and do not apply to all operating conditions.

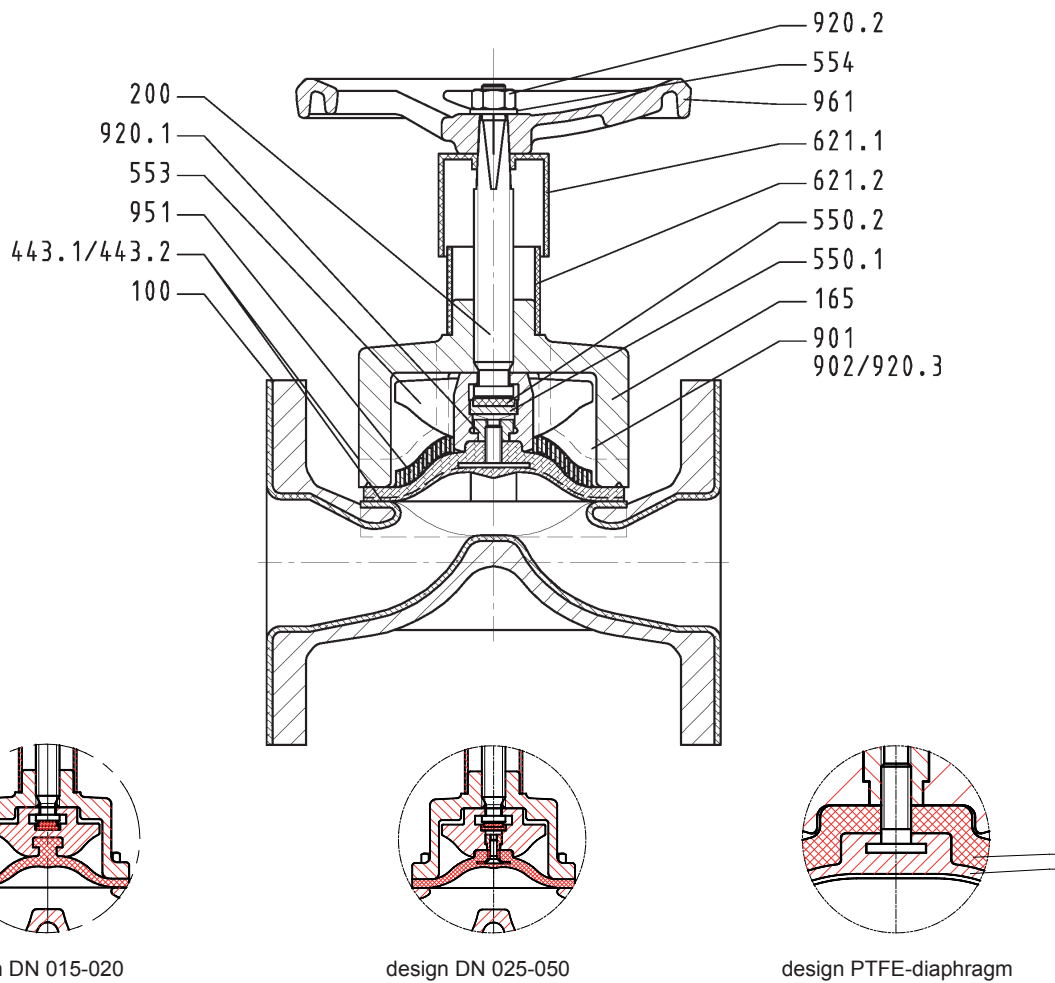
On all inquiries / orders please specify

- | | |
|---------------------------|----------------------------------|
| 1 - type | 7 - medium |
| 2 - PN | 8 - pipe connection |
| 3 - DN | 9 - variants |
| 4 - working pressure | 10 - certificate |
| 5 - differential pressure | 11 - type series booklet -number |
| 6 - operating temperature | |

SISTO valves comply with the safety requirements of the Pressure Equipment Directive 97/23/EG, fluid group 1+2, modul H.

SISTO valves have no own potential ignition source and can therefore, according to ATEX 94/9/EG, be used in hazardous locations of the group II, category 2 (zone 1+21) and category 3 (zone 2 +22)





| Item no. | Designation | Material | Note |
|----------|-------------------------|---------------|----------------------------|
| 100 | body | JL-1040 | |
| 165 | bonnet | JL-1040 | standard |
| 200 | stem | 1.4104 | |
| 443* | diaphragm | EPDM | standard |
| 443.1* | backing diaphragm | EPDM | |
| 443.2* | diaphragm | PTFE | |
| 550.1 | bearing disc | 9S20 | on DN 025 - 200 |
| 550.2 | disc | PTFE/graphite | on DN 025 - 200 |
| 553 | compressor | JL-1040 | GD-ZnAlCu1 on DN 015 - 020 |
| 554 | disc | St A2E | |
| 621.1 | upper opening indicator | ABS Luran | on DN 025 - 200 |
| 621.2 | lower opening indicator | ABS Luran | |
| 901 | hexagon screw | A2-70 | on DN 015 - 065 |
| 902 | stud | A2-70 | on DN 080 - 200 |
| 920.1 | nut | 9S20K | on DN 025 - 200 |
| 920.2 | hexagon nut | A2 | on DN 025 - 200 |
| 920.3 | hexagon nut | A2 | on DN 080 - 200 |
| 951 | support spiral spring | St 2K BK | on DN 065 - 200 |
| 961 | handwheel | JL-1030 | on DN 015 - 020 ABS Luran |

*recommended spare part

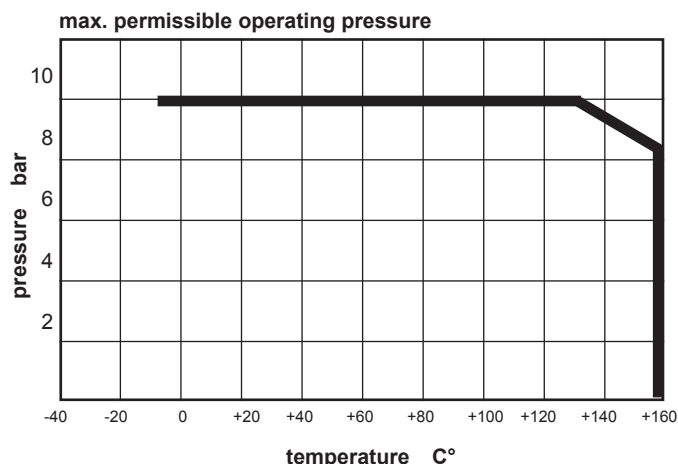
Operating instructions

0570.821

material limitations

data sheet

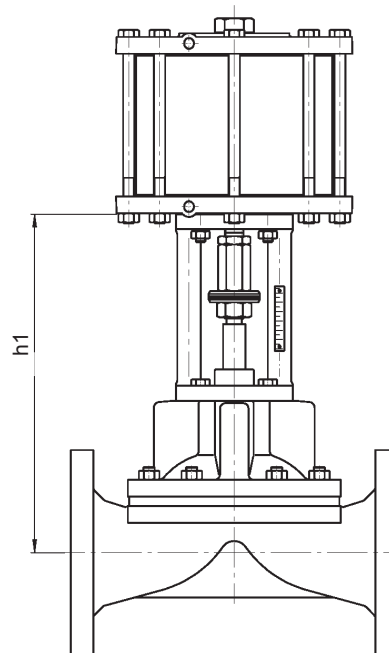
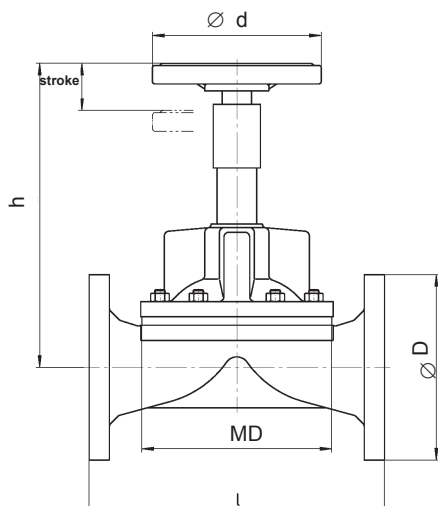
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flow values

| DN | Kv-value m³/h | DN | Kv-value m³/h |
|-----|------------------|-----|------------------|
| 015 | 5,0 | 065 | 87,0 |
| 020 | 7,9 | 080 | 126 |
| 025 | 12,0 | 100 | 216 |
| 032 | 19,0 | 125 | 311 |
| 040 | 30,0 | 150 | 414 |
| 050 | 55,0 | 200 | 1120 |

temperature C°
There is no need to reduce the max. permissible operating pressure in relation to temperature and valve size.
The temperature limit is determined by the applied material.



| nominal size DN | diaphragm MD Ø AxB | face-to-face length l** | flange DIN Ø D | valve stroke Hub | manual valves | | | | actuated valves | |
|--------------------|--------------------------|-------------------------------|----------------------|---------------------|---------------|------------------|-------------------------------|--------------|-----------------|---------------------|
| | | | | | height h* | handwheel Ø d | handwheel turns approx. | weight kg | height h1* | actuator flanges |
| 015 | 58 x 62 | 108 | 95 | 8 | 108 | 63 | 3 | 2,5 | 213 | F10 |
| 020 | 58 x 62 | 117 | 105 | 8 | 108 | 63 | 3 | 3,0 | 213 | |
| 025 | 68 x 72 | 127 | 115 | 11 | 140 | 100 | 4 | 4,0 | 217 | |
| 032 | 90 x 100 | 146 | 140 | 18 | 165 | 100 | 6 | 5,5 | 227 | |
| 040 | 90 x 100 | 159 | 150 | 18 | 165 | 100 | 6 | 8,0 | 227 | |
| 050 | 107 x 124 | 190 | 165 | 26 | 200 | 125 | 7 | 11,5 | 242 | |
| 065 | 132 x 144 | 216 | 185 | 34 | 245 | 200 | 9 | 19,0 | 312 | F10/F14 |
| 080 | 157 x 187 | 254 | 200 | 40 | 265 | 200 | 10 | 25,0 | 320 | |
| 100 | Ø 226 | 305 | 229 | 56 | 340 | 200 | 11 | 39,0 | 363 | |
| 125 | Ø 258 | 356 | 254 | 72 | 405 | 250 | 15 | 53,0 | 395 | |
| 150 | Ø 303 | 406 | 285 | 81 | 450 | 400 | 14 | 78,0 | 485 | |
| 200 | Ø 415 | 521 | 343 | 115 | 595 | 400 | 20 | 162,0 | 550 | |

SISTOMAT-P

type series booklet 9210.1

all dimensions in mm

SISTOMAT-E, MTAE/LAE

on request

*with rubber lining add. 5 mm

SISTOMAT-PC

type series booklet 8641.1PC

**with rubber lining add. 6 mm

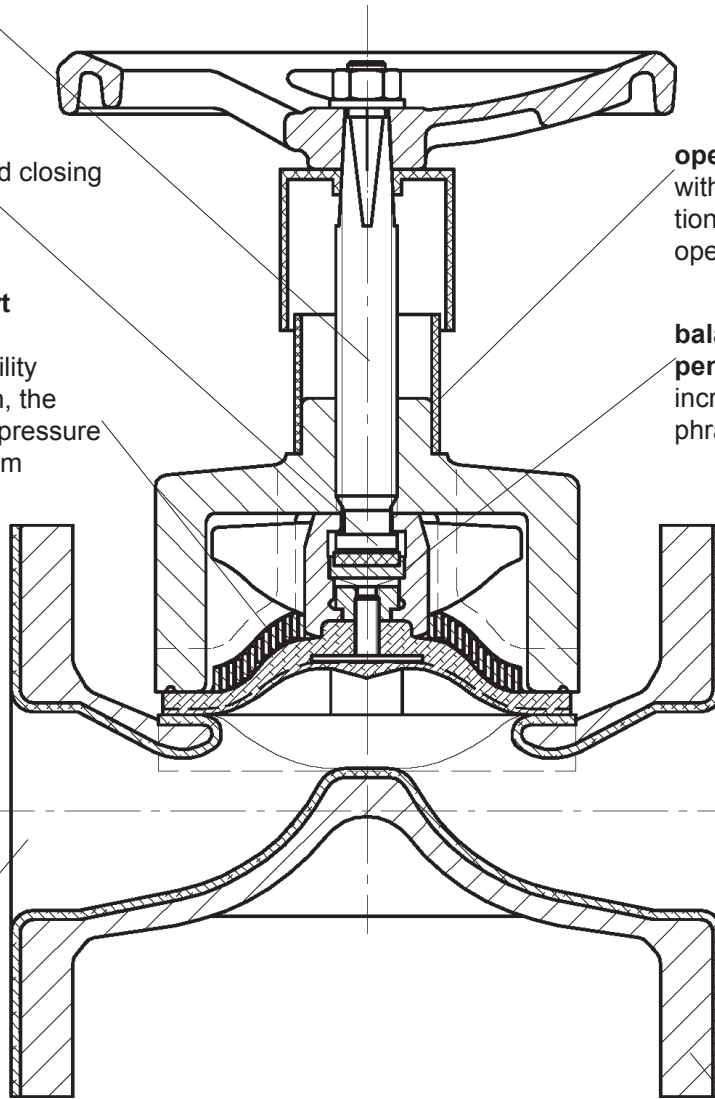
all moving parts
are separated from the
medium by the diaphragm

thrust bearing
reduces the required closing
torques

diaphragm support
(DN 065 - 300)
increases the reliability
during the operation, the
service life and the pressure
limit of the diaphragm

opening indicator
with integrated stem protec-
tion increases the reliability of
operation

**balanced diaphragm sus-
pension**
increases life time of the dia-
phragm



no entrapment areas
only diaphragm and body
are in contact with the
medium

body on request
- without lining
- with rubber lining
- with plastic coating

This document is not contractual and
may be amended without notice.

8641.101/7-10 / 08.07.2010