

**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
		Butyl	+120°C
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.**

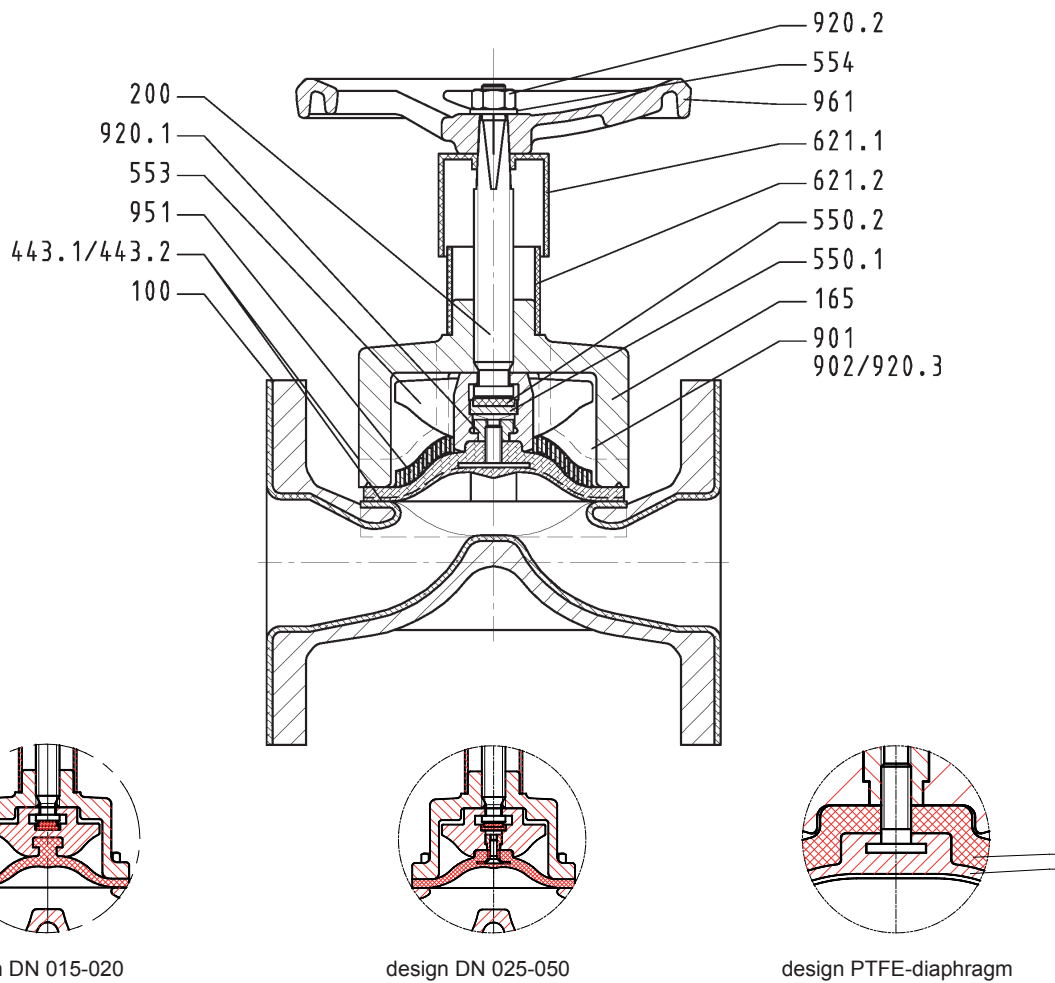
### On all inquiries / orders please specify

- |                           |                                  |
|---------------------------|----------------------------------|
| 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

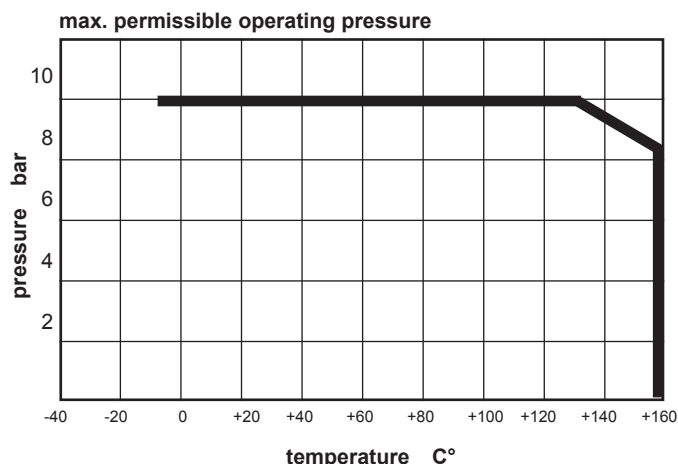
Operating instructions

0570.821

material limitations

data sheet

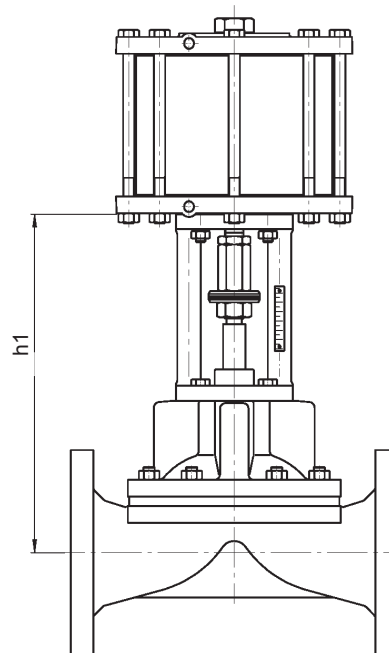
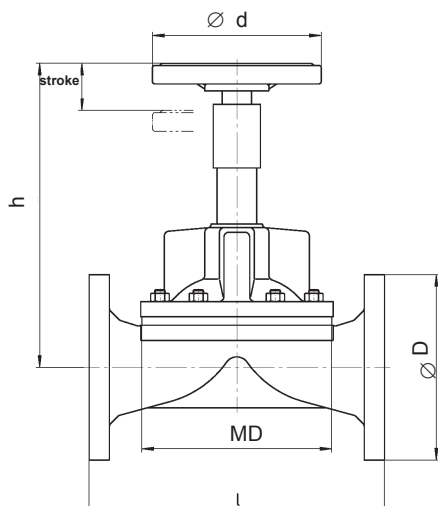
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**flow values**

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	
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

SISTOMAT-E, MTAE/LAE

SISTOMAT-PC

type series booklet 9210.1

on request

type series booklet 8641.1PC

all dimensions in mm

\*with rubber lining add. 5 mm

\*\*with rubber lining add. 6 mm

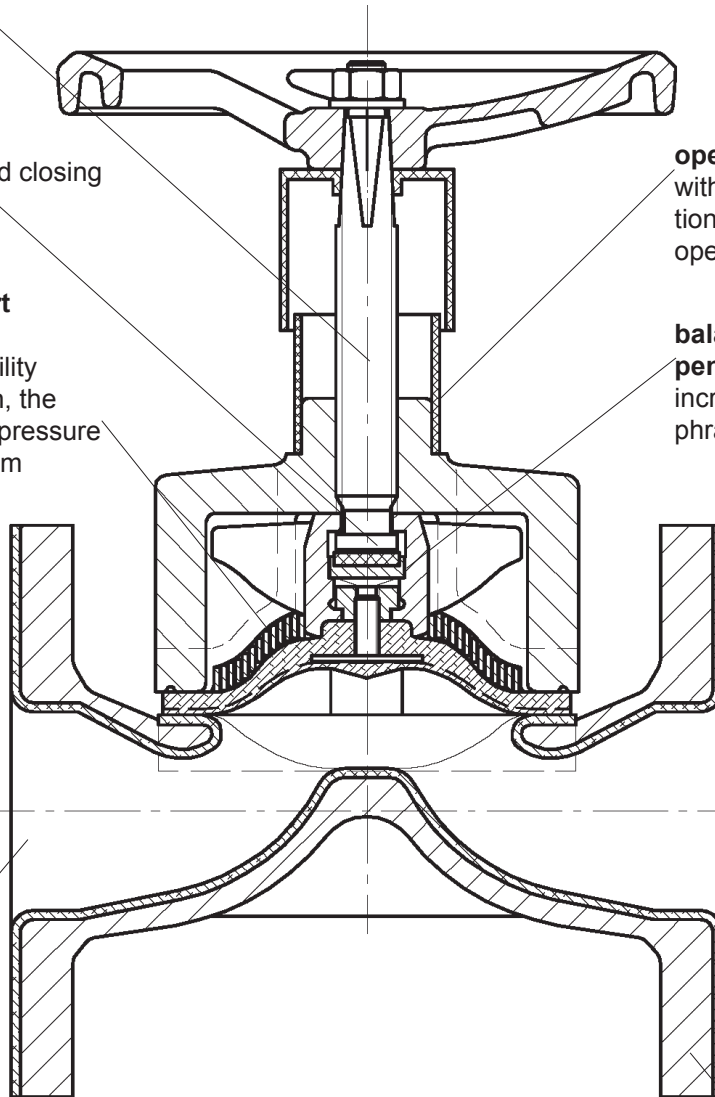
**all moving parts**  
are separated from the  
medium by the diaphragm

**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