

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

with flanges  
**DIN PN 16  
DN 15 - 200**

with flanges  
**ISO PN 20  
DN 15 - 125**

### Fields of application

- food and beverage industries
- domestic applications
- chemical and industrial process engineering
- power plants
- general industries

Suitable for drinking water, utility water, air, oil and technical gases as well as aggressive and abrasive media.

### Operating data

- operating temperature range from -10°C up to +160°C
- operating pressure range from vacuum up to 16 bar

### Design

Soft sealing valve, weir type.  
Sealing in the passage and towards the outside by a completely enclosed diaphragm with a supporting spiral spring.  
Position indicator with integrated protection of the stem.

### Specification

valve	- manufactured and tested	DIN 3359
	- designated	DIN/EN 19 (ISO 5209)
flange	- dimensions	DIN 2501 (BS 4504)
	- surface	DIN EN 1092-2 Form B
face-to-face length		EN 558-1 R1 (ISO 5752/1)

### Inspection

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

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)

### Materials

Body	nodular cast iron	JS-1049	GJS-400-18U-LT
Bonnet	nodular cast iron	JS-1049	GJS-400-18U-LT
Compressor	nod. cast iron	JS-1030	GJS-400-15
	zinc alloy	GD-ZnAl4Cu1	2.2141
Stem	stainless steel	X12CrMoS17	1.4104
Diaphragm		EPDM	+140°C
Handwheel	cast iron	JL-1030	

### Variants

Body	G-X6GrNiMo	1810	1.4408
Body Lining	NR-H	Ebonite	+100°C
	IIR	Butyl	+120°C
	PTFE/TFM	TF1641	+160°C
	TFM	TFM1600	+160°C
Body Coating	PA-KTW	Rilsan	+90°C
	ECTFE	Halar	+90°C
Diaphragm Material	EPDM/W 270		+90°C
	EPDM-V (vacuum)		+140°C
	NBR		+90°C
	CSM		+100°C
	IIR		+120°C
	PTFE/EPDM 2layer		+160°C
	TFM/EPDM 2layer		+160°C

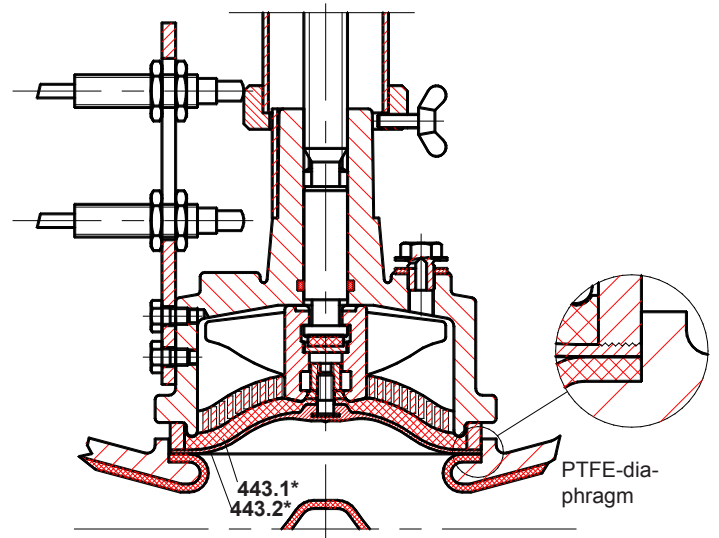
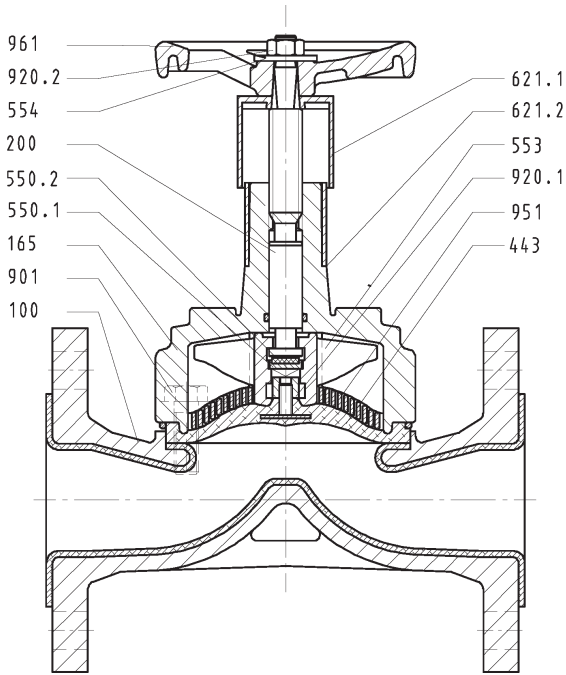
Gearbox recommended > 10 bar from DN 100

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

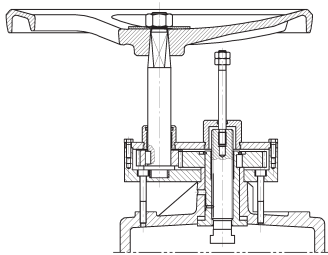
### On all inquiries / orders please specify

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

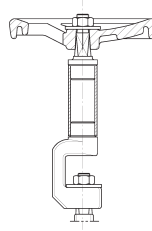




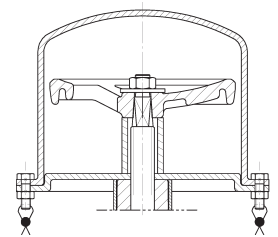
limitswitch, leak indication, locking device



gear



stem extended



cap for plumbing

Item no.	Designation	Material	Note
100	body	JS-1049	standard
165	bonnet	JS-1049	standard
200	stem	1.4104	
<b>443*</b>	<b>diaphragm</b>	<b>EPDM</b>	standard
<b>443.1*</b>	<b>backing diaphragm</b>	<b>EPDM</b>	
<b>443.2*</b>	<b>diaphragm</b>	<b>PTFE</b>	
550.1	bearing disc	9S20	on DN 032 - 200
550.2	disc	PTFE/graphite	on DN 032 - 200
553	compressor	JS-1030	GD-ZnAl4Cu1 on DN 015 - 025
554	disc	Al	
621.1	upper opening indicator	ABS	
621.2	lower opening indicator	ABS	
901	hexagon screw	A2 (1.4301)	
920.1	nut	9S20K	
920.2	hexagon nut	A2 (1.4301)	
951	support spiral spring	St 2K BK	
961	handwheel	JL-1030	

**\*recommended spare part**

**Operating instructions**

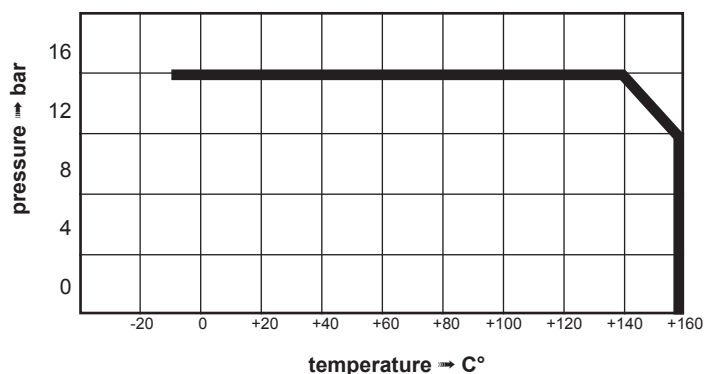
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**material limitations**

data sheet

8630.165

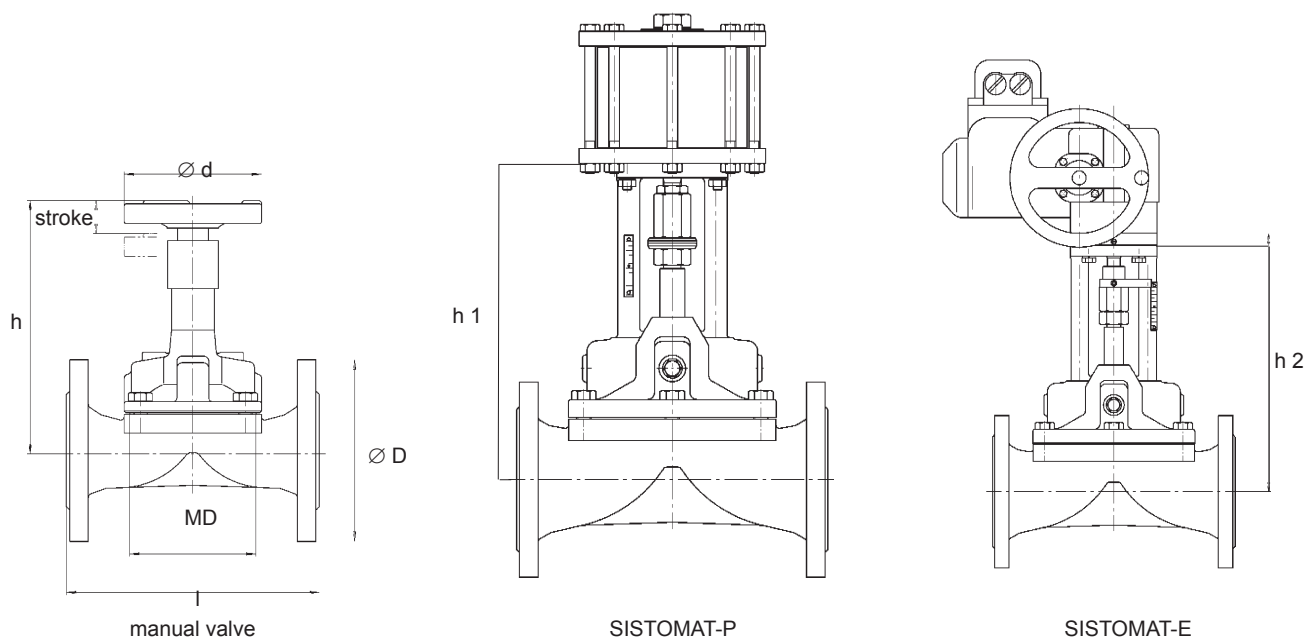
## max. permissible operating pressure



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.

## flow values

DN	Kv-value m³/h	DN	Kv-value m³/h
015	7,7	065	141
020	11,5	080	195
025	14,0	100	304
032	35,0	125	298
040	43,0	150	601
050	72,0	200	478



nominal size DN	diaphragm MD	face-to-face length l	flange Ø D	stroke	manual valves			weight kg	actuated valves		
					height *h	handwheel Ø d	handwheel turns approx.		height MAT-P *h1	height MTAE *h2 F 07/F 10	height F 14
015	65	130**	95	13	150	100	4	3,0	210	210	
020	65	150**	105	22	192		3,5	7,0	230	230	
025	65	160	115			30	231				4,0
032	92	180	140	45	322			7,0	20,5	305	320
040	92	200	150			60	388	7,5			
050	115	230	165	80	512			8	80,0	435	460
065	168	290	185			200	(250)***	9			
080	168	310	200	250	(315)***			12	44,0		
100	202	350	220			400	(500)***	13			
125	202	400	250								
150	280	480	285								
200	280	600	340								

\*\*\*optional operating pressure > 10 bar

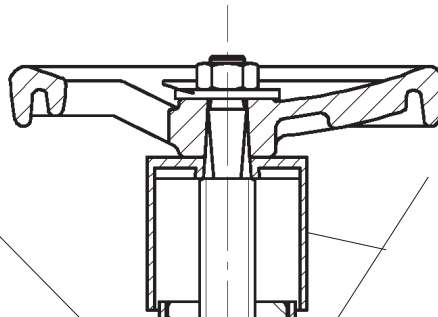
SISTOMAT-P type series booklet 9210.1  
SISTOMAT-E, MTAE/LAE on request  
SISTOMAT-PC type series booklet 8635.1 PC

all dimensions in mm  
\*with rubber lining add. 5 mm  
\*\*face-to-face length with PTFE-lining 160 mm

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

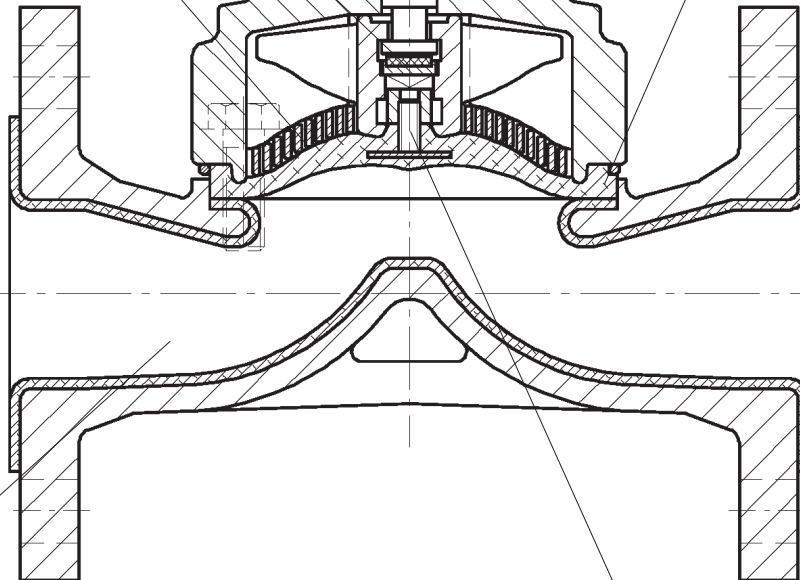
**thrust bearing**  
reduces the required closing  
torques

**diaphragm support**  
increases the reliability  
during the operation, the  
service life and the pressure  
limit of the diaphragm



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

**enclosed diaphragm** guarantees  
- absolute tightness towards the outside  
- hermetic sealing of the stem



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

**balanced diaphragm suspension**  
increases life time of the diaphragm

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

8643.1/10-10 / 05.09.2006