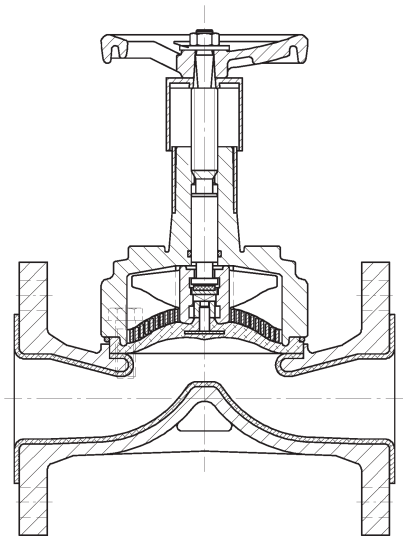


Maintenance-free
Diaphragm valve
lined
and
unlined

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 form -20°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	EN 13397
	- 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

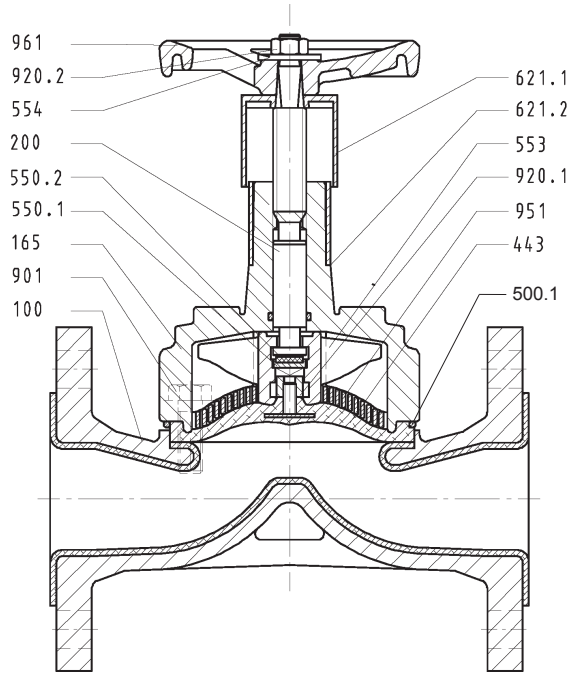
Gearbox recommended > 10 bar from DN 100

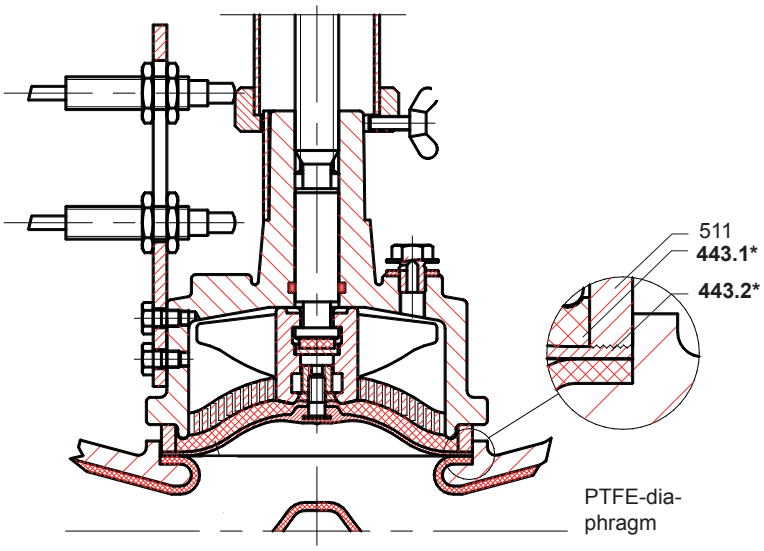
These data are given as a guide only and do not apply to all operating conditions.

On all inquiries / orders please specify

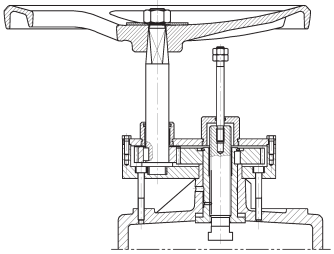
1 - type
2 - PN
3 - DN
4 - working pressure
5 - differential pressure
6 - operating temperature
7 - medium
8 - pipe connection
9 - variants
10 - certificate
11 - type series booklet-number

TÜV CERT DIN ISO 9001 TÜV CERT PED 97/23/EC CE

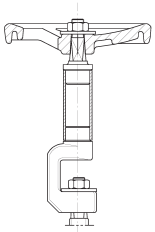




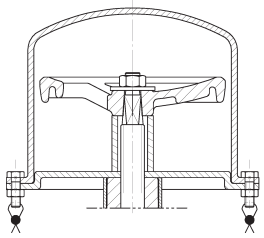
limitswitch, leak indication, locking device



gear



stem extended



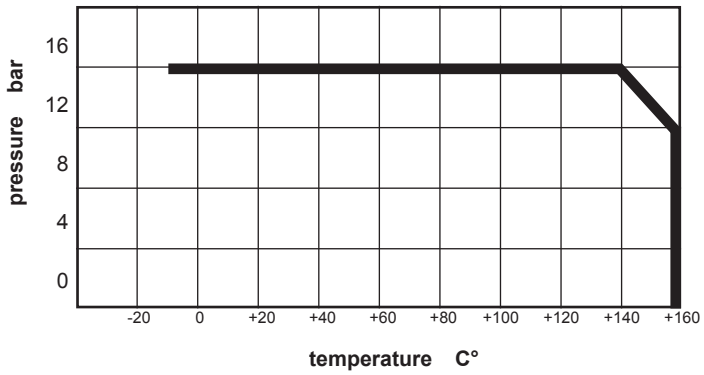
cap for plombing

Item no.	Designation	Material	Note
100	body	JS-1049	standard
165	bonnet	JS-1049	standard
200	stem	1.4104	
443*	**diaphragm**	**EPDM**	standard
443.1*	**backing diaphragm**	**EPDM**	
443.2*	**diaphragm**	**PTFE**	
500.1	ring	ST 37 / A2E	
511	backing ring	ST 37 / A2E	
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	A2-70	Execution PTFE/TFM - material 8.8
920.1	nut	9S20K	
920.2	hexagon nut	A2	
951	support spiral spring	St 2K BK	
961	handwheel	JL-1030	

***recommended spare part**

Operating instructions		0570.821
material limitations	data sheet	8630.165

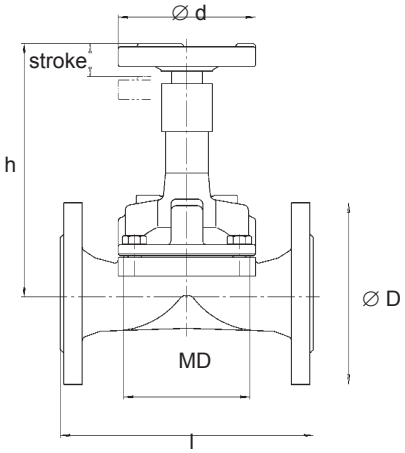
max. permissible operating pressure



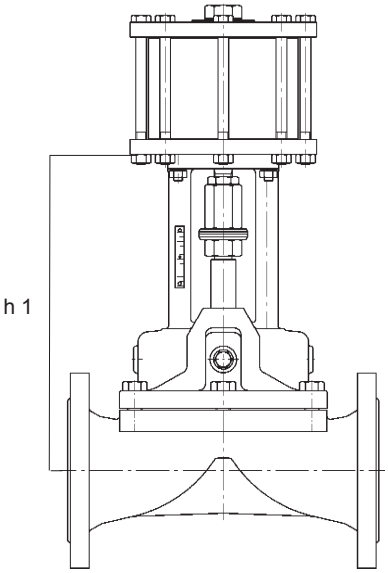
There is no need to reduce the max. permissible operating pressure in relation to temperature and valve size.
The temperature limit ist determined by the applied material.

flow values

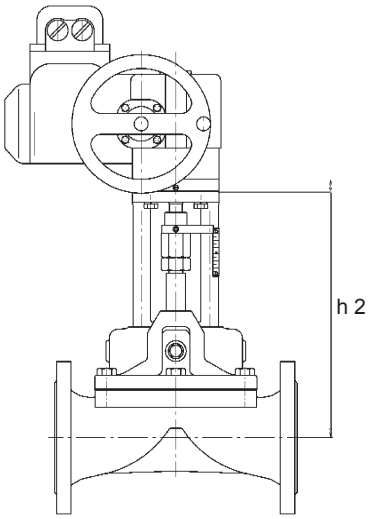
DN	Kv-value m³/h	DN	Kv-value m³/h
015	7,7	065	141
020	11,5	080	195
025	14,0	100	304
032	35,0	125	298
040	43,0	150	601
050	72,0	200	478



manual valve



SISTOMAT-P



SISTOMAT-E

					manual valves				actuated valves		
nominal size DN	diaphragm MD ∅	face-to-face length l	flange ∅ D	stroke	height h*	handwheel ∅ d	handwheel turns approx.	weight kg	height MAT-P h1*	height MTAE h2* F 07/F 10	F 14
015	65	130**	95	13	150		4	3,0	210	210	
020	65	150**	105					3,5			
025	65	160	115			100		4,0			
032	92	180	140	22	192		7	7,0	230	230	
040	92	200	150					7,5			
050	115	230	165	30	231	125	8	11,0	250	250	
065	168	290	185	45	322	200	9	20,5	305	320	
080	168	310	200			(250)***		23,0			
100	202	350	220	60	388	250	12	36,5	355	370	
125	202	400	250			(315)***		44,0			
150	280	480	285	80	512	400	13	80,0	435	460	480
200	280	600	340			(500)***		95,0			

***optional operating pressure > 10 bar

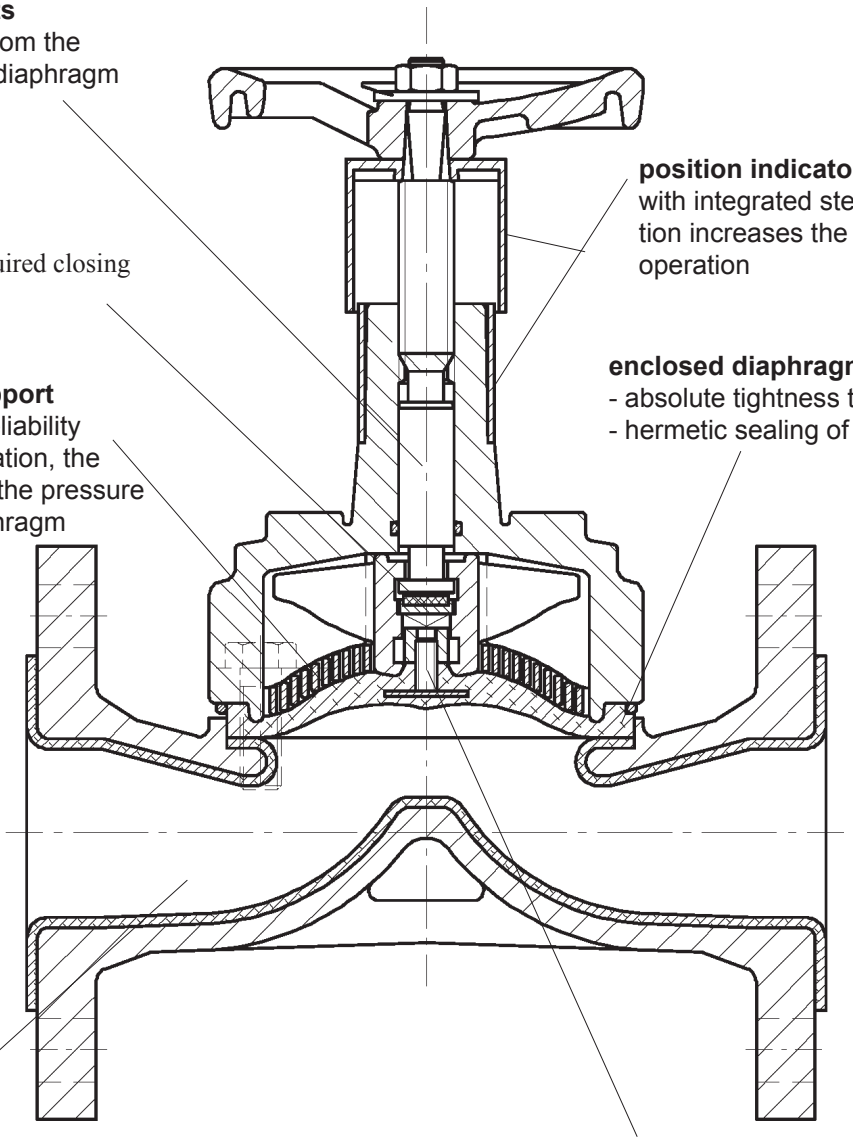
SISTOMAT-P type series booklet 9210.1
SISTOMAT-E, MTAE/LAE on request
SISTOMAT-PC type series booklet 8635.1 PC

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

all moving parts
are seperated 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 protection 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

8643.1/15-10 / 08.07.2010

SISTO

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