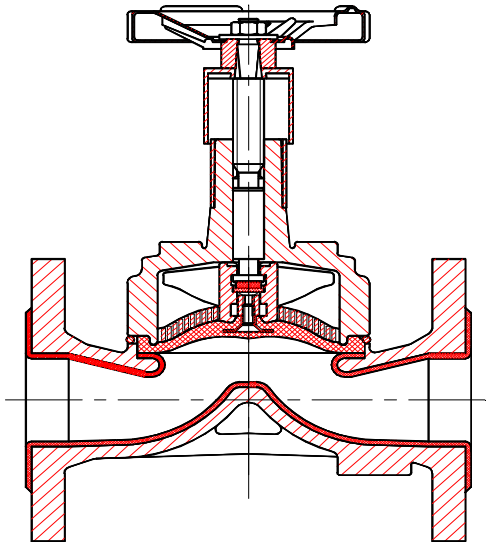
type series booklet
8635.1/12-10

SISTO®-16/16 S



Maintenance-free Diaphragm valves lined and unlined

flanged
PN 16
DN 15 - 200

Prüfzeichen:
DIN-DVGW

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 stem protection.

Specifications

valve	- manufactured and tested	DIN 3359
	- designated	DIN/EN 19 (ISO 5209)
	- DVGW registered	DVGW-sheet W 900
flange	- dimensions	DIN 2501 (BS 4504)
	- surface	DIN EN 1092-2 Form B
face to face length		
	- SISTO-16	EN 558-1 R1 (ISO 5752/1) (DIN 3202-F1)
	- SISTO-16 S	EN 558-1 R7 (ISO 5752/7) (BS 5156)

Inspection

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

SISTO valves comply with the safety requirements of the Pressure Equipment Directive 97/23/EG, fluid group 1+2, modul A1.
SISTO valves have no own potential ignition source and can therefore, according to ATEX 94/9/EG, be used in hazardous locations of the groupe II, category 2 (zone 1+21) and category category 3 (zone 2 +22)

Materials

Body	grey cast iron	JL-1040	GJL-250	+160°C
Bonnet	grey cast iron	JL-1040	GJL-250	
Compressor	grey cast iron zinc alloy	JL-1040 GD-ZnAl4Cu1	GJL-250 2.2141	
Stem	stainless steel	X12CrMoS17	1.4104	
Diaphragm		EPDM		+140°C
Handwheel	plastic/steel	ABS/St14		

Variants

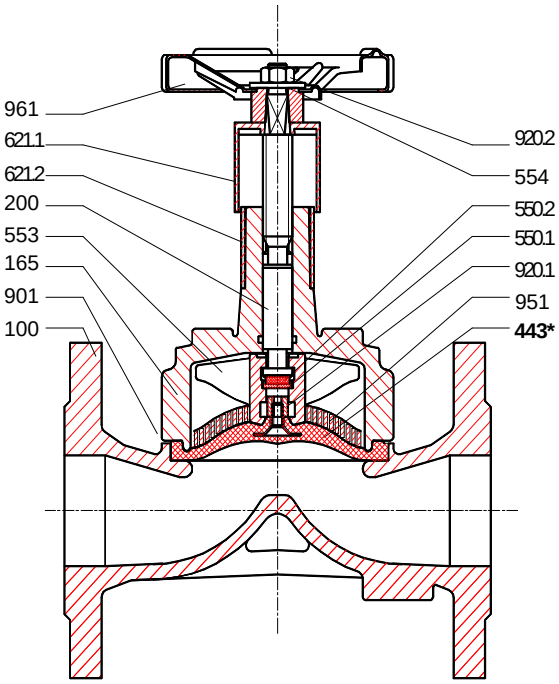
Body S-16 S	JS-1025	GJS-400-18-LT	+160°C
Body Lining	NR-H	Ebonite	+100°C
	CSM	Hypalon	+100°C
	IIR	Butyl	+120°C
S-16 S	JS-1025/PTFE		+160°C
Body Coating	PA-KTW	Rilsan	+90°C
	ECTFE	Halar	+120°C
Diaphragm Materials	EPDM/W 270		+90°C
	EPDM-V (Vacuum)		+140°C
	NBR		+90°C
	CSM		+100°C
	IIR		+120°C
	PTFE/EPDM		+160°C
Bonnet S-16 S	JS-1025	GJS-400-18LT	
Gearbox recommended > 10 bar from DN 100			

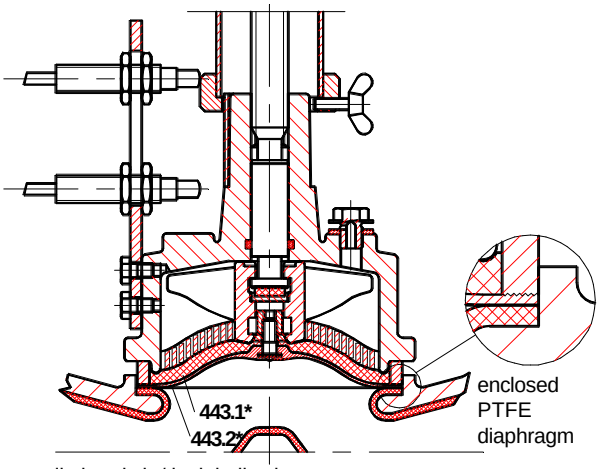
These data are given as a guide only and do not apply to all operating conditions.

On all inquiries / orders please specify

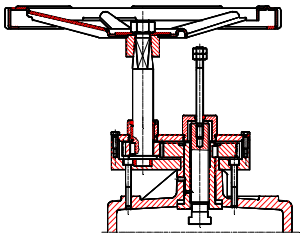
1 - type
2 - PN
3 - DN
4 - working pressure
5 - differential pressure
6 - operating temperature
7 - medium
8 - pipe connection
9 - variants
10 - certificate
11 - type series booklet- number

SISTO®-16/16 S

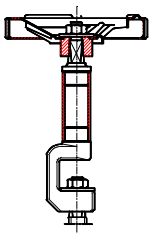




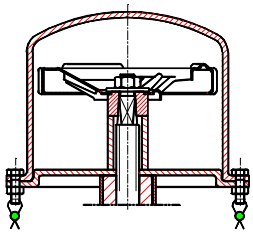
limit switch / leak indication
locking device



gear



stem extended



cap for plombing

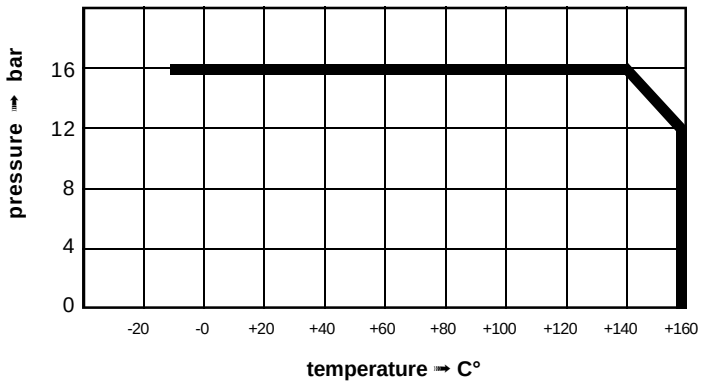
Item no.	Designation	Material	Note
100	body	JL-1040	Standard, DN 200 JS-1025
165	bonnet	JL-1040	Standard
200	stem	1.4104	
443*	**diaphragm**	**EPDM**	Standard
443.1*	**backing diaphragm**	**EPDM**	
443.2*	**diaphragm**	**PTFE**	
550.1	bearing disc	9S20	on DN 032 - 200
550.2	disc	PTFE/graphite	on DN 032 - 200
553	compressor	JS-1030	GD-ZnAlCu1 on DN 015 - 025
554	disc	Al	
621.1	upper opening indicator	ABS Luran	on DN 032 - 200
621.2	lower opening indicator	ABS Luran	
901	hexagon screw	ADW	
920.1	nut	9S20K	
920.2	hexagon nut	A2 (1.4301)	
951	support spiral spring	St 2K BK	
961	handwheel	St14	on DN 015 - 025 ABS Luran

***recommended replacement part**

Operating instructions		0570.821
material limitations	data sheet	8630.165

SISTO®-16/16 S

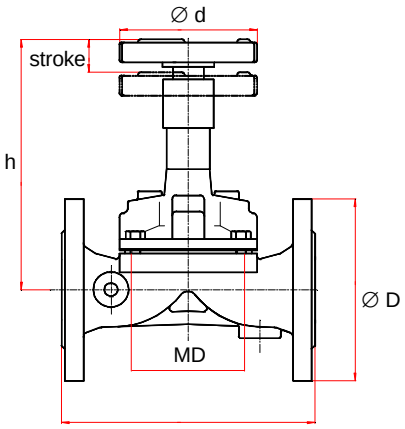
max. permissible operating pressure



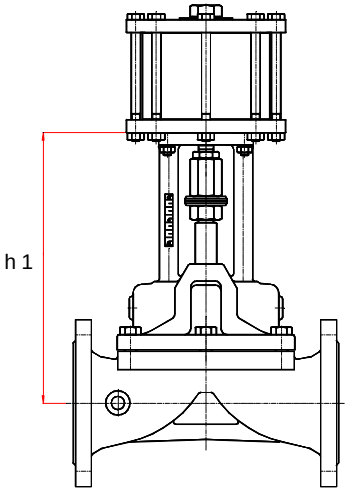
There is no need to reduce the max. permissible operating pressure in relation to temperature and valve size.
The temperature limit is determined by the applied material.

flow values

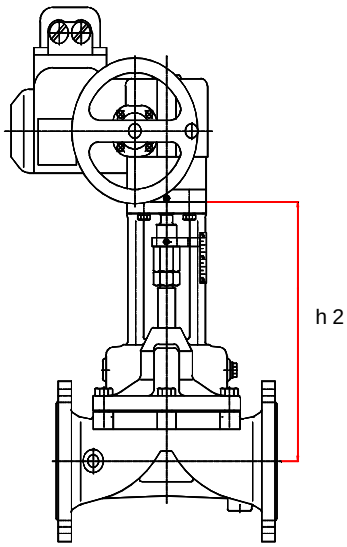
DN	Kv-value m³/h	DN	Kv-value m³/h
015	7,7	065	141
020	11,5	080	195
025	14,0	100	304
032	35,0	125	298
040	43,0	150	601
050	72,0	200	478



manual valve



SISTOMAT-P



SISTOMAT-E

	nominal size DN	diaphragm MD	face-to-face length l	stroke s	manual valves height *h	handwheel d	handwheel turns approx.	weight kg	actuated valves height MAT-P *h1	height MTAE *h2 F 07/F 10	F 14
SISTO-16	015	65	130	13	150	80	4	3,0	210	210	
	020	65	150					3,5			
	025	65	160					4,0			
	032	92	180	22	192	100	7	7,0	230	230	
	040	92	200					7,5			
	050	115	230	30	231	125	8	11,0	250	250	
	065	168	290	45	322	200	9	20,5	305	320	
	080	168	310			(250)		23,0			
	100	202	350	60	388	250	12	36,5	355	370	
	125	202	400			(315)		44,0			
	150	278	480	80	512	400	13	80,0	435	460	480
	200	278	600			(500)		95,0			
SISTO-16 S	020	65	117**	13	150	80	4	3,4	210	210	
	025	65	127**					3,8			
	032	65	146**					5,0			
	040	92	159**	22	192	100	7	7,0	230	230	
	050	115	190**	30	231	125	8	10,5	250	250	
	065	115	216**					12,5			
	080	168	254**	45	322	200(250)	9	21,5	305	320	
	100	202	305**	60	388	250	12	35,0	355	370	
	125	202	356**			(315)		40,0			
	150	280	406**	80	512	400	13	72,0	435	460	480
	200	280	521**			(500)		90,0			

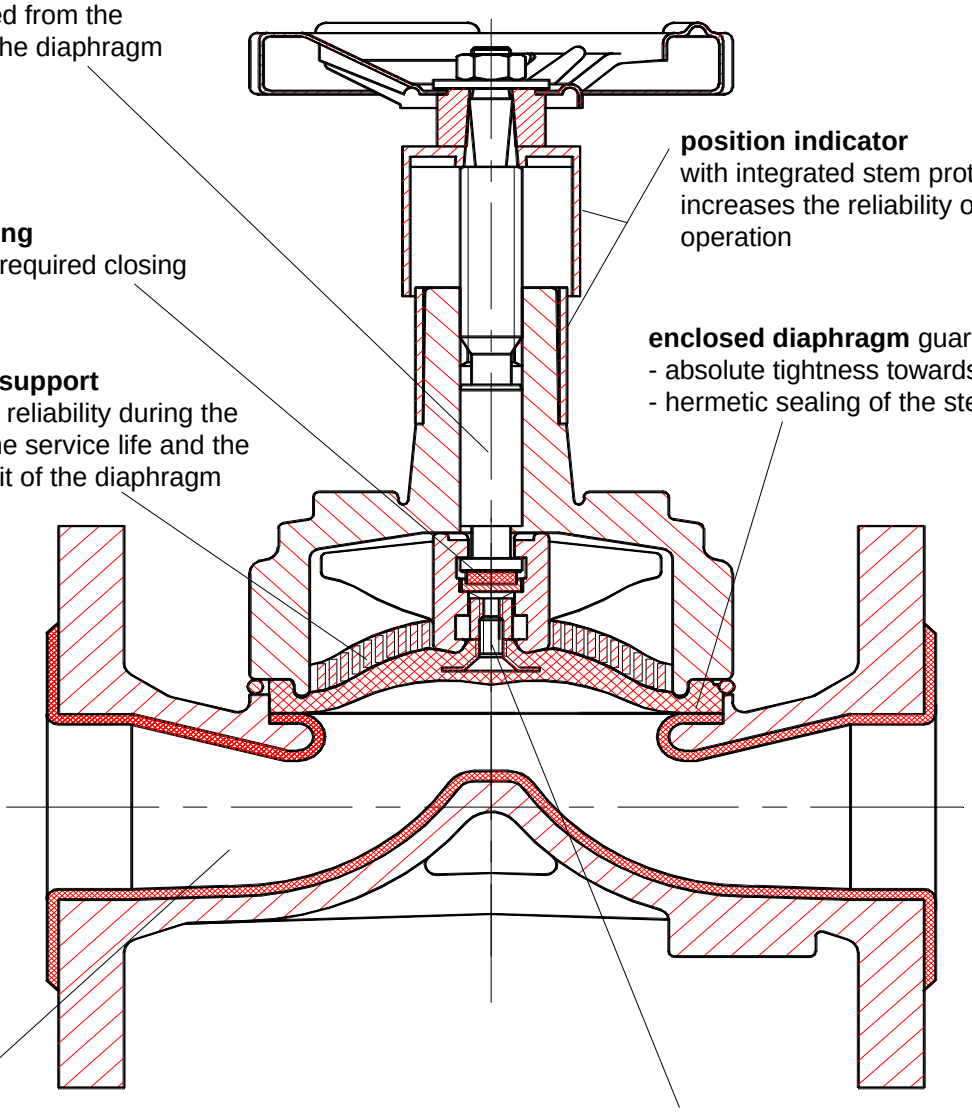
SISTOMAT-P type series booklet 9210.1
SISTOMAT-E, MTAE/LAE on request
SISTOMAT-PC type series booklet 8635.1PC

all dimensions in mm
*with rubber lining add. 5 mm
**with PTFE, NR-H and IIR-lining add. 6 mm

all moving parts
are seperated from the medium by the diaphragm

thrust bearing
reduces the required closing torques

diaphragm support
increase 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

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

DIN-DVGW
Prüfzeichen:

SISTO-16 diaphragm valves with flanges DN 15-100 are registerd under the above mentioned test certificate according to DVGW-sheet W900. The diaphragm quality EPDM/W270 and the body coating Rilsan (PA) fulfill KTW recommendation of the Federal German Public Health Department (BGBI., 1977, 1 u. 2. Mitt. ff.).

8635.1/12-10 / 01.09.2003

KSB

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