

pneumatic actuated
diaphragm valve

type SISTO-10/10S

with diaphragm actuator
Compact-construction

PN 10
DN 15- 125

Fields of application / Specifications / Materials / Options

according to diaphragm valve:
SISTO-10, type series booklet 8641.1
SISTO-10S, type series booklet 8641.101

Operating data

actuator

- max. closing force: 13500 N
- operating medium: air pressure (max. +80°C/6 bar)

valve

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

Design

- soft sealing diaphragm valve with pneumatic diaphragm actuator mounted directly on bonnet: *compact construction*
- O-ring sealed stem
- mechanical travel limitation in closed and opened position
- emergency actuation on spring close actuator (SF)

Inspection

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

Accessories

limit switches, solenoid valve, throttling valve, silencer and valve positioner

Actuator function

Standard

- fail safe - spring closing typ LAD-SF

Options

- fail safe - spring opening typ LAD-ÖF
- pneumatic double acting typ LAD-AZ

On all inquiries / orders please specify

Actuator

- 1 - type
- 2 - operating pressure P_{St}
- 3 - accessories
- 4 - type series booklet-number

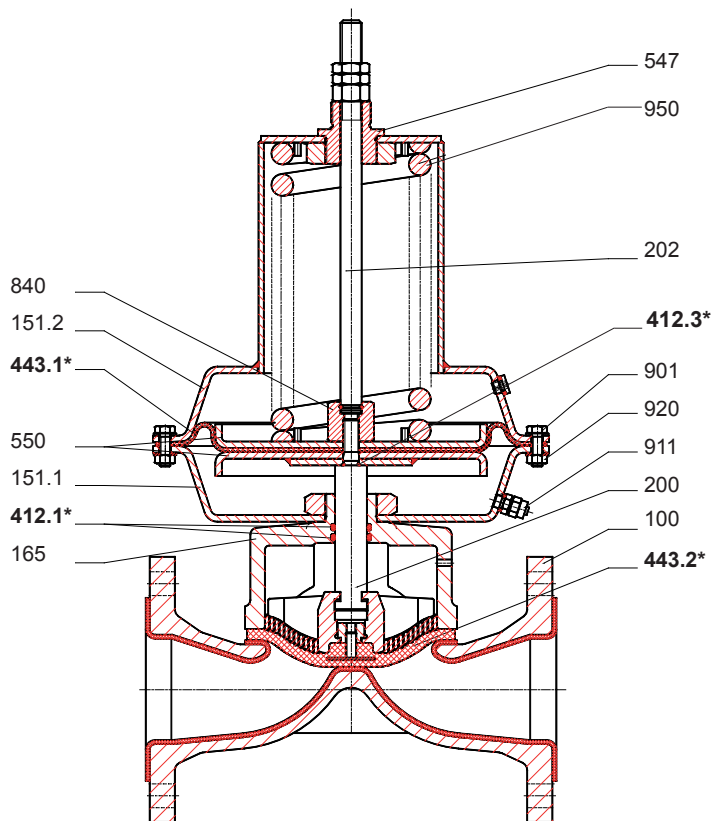
Valve

- 5 - type
- 6 - PN
- 7 - DN
- 8 - working pressure
- 9 - differential pressure
- 10 - working temperature
- 11 - medium
- 12 - pipe connection
- 13 - variants
- 14 - certificate

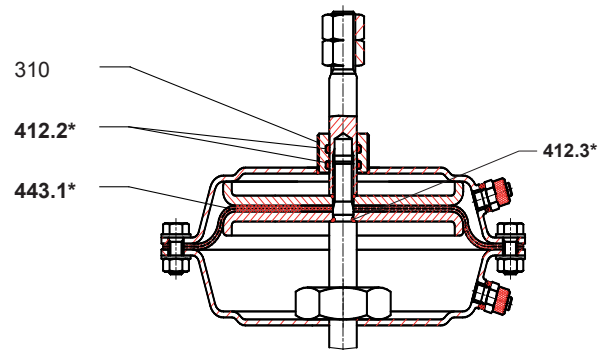


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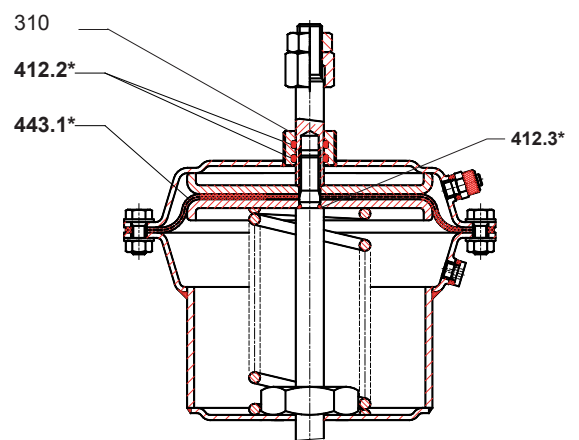
Construction



Typ LAD-SF



Typ LAD-AZ



Typ LAD-ÖF

Item no.	Designation	Material	Note
151.1	lower cover	St 37/RN	variants refer to type series booklet SISTO-10/10S for PA-tube 8 x 1
151.2	upper cover	St 37/RN	
165	bonnet	JS-1025	
200	slide stem	1.4104	
202	thrust stem	1.4104	
310	slide stem	1.4305	
412.1*	O-ring	NBR	
412.2*	O-ring	NBR	
412.3*	Sealing ring	NBR	
443.1*	actuator diaphragm	NBR	
443.2*	valve diaphragm	EPDM	
547	guide bush	SoMs59	
550	diaphragm support	St 37/galvanized	
840	coupling	1.4104	
901	bolt	8.8 A2E	
911	compressed air connection	Ms	
920	hexagon nut	A2-70	
950	spring	spring steel	

*recommended spare part

Operating instructions

0570.821

material limitations

data sheet

8630.165

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SISTO-10/10S

table for maximal permissible line pressure in bar

minimal required operating pressure: 4 bar

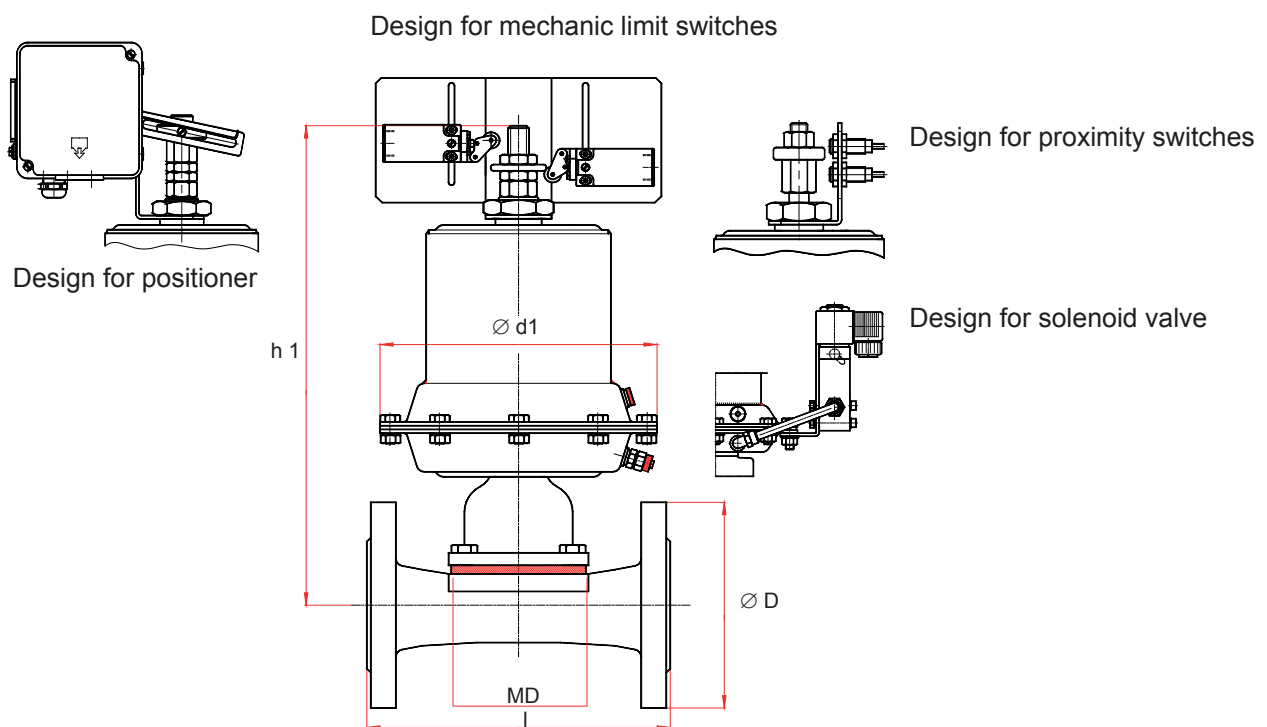
actuator	DN 15/20	DN 25	DN 32- 40	DN 50	DN 65	DN 80	DN 100	DN 125									
function:	double acting actuators																
LAD-AZ-100	10	8	10	8	8	x	x	x	x	x	x	x	x	x	x	x	d1 = 160
LAD-AZ-150	-	10	-	10	10	10	10	9	10	2	x	x	x	x	x	x	d1 = 210
LAD-AZ-220	-	-	-	-	-	-	-	10	-	10	10	10	10	4	6	x	d1 = 290
function:	fail safe spring open																
LAD-ÖF-100.014	10	5	10	5	7	x	x	x	x	x	x	x	x	x	x	x	d1 = 160
LAD-ÖF-150.102	-	10	-	10	10	10	10	6	10	x	x	x	x	x	x	x	d1 = 210
LAD-ÖF-220.001	-	-	-	-	-	-	-	10	-	10	10	10	9	2	6	x	d1 = 290
function:	fail safe spring close																
LAD-SF-100.001.5	10	4	10	4	5	x	x	x	x	x	x	x	x	x	x	x	d1 = 160
LAD-SF-150.002	-	10	-	10	10	10	10	4	8	x	x	x	x	x	x	x	d1 = 210
LAD-SF-220.003.7	-	-	-	-	-	-	-	10	10	10	10	7	6	x	4	x	d1 = 290

- select a smaller actuator

▒ rubber diaphragm

x select a bigger actuator

□ PTFE-diaphragm



nom. size DN	diaphragm MD (Ø /A x B)	overall-length		flange diameter Ø D	max. height h1**))									weight approx. in kg type LAD-SF		
		S-10	S-10S		100			150			220			100	150	220
					AZ	ÖF	SF	AZ	ÖF	SF	AZ	ÖF	SF			
015	58 x 62	130	108 ¹⁾	95	190	250	250	220	290	340	-	-	-	9,5	11,5	-
020	58 x 62	150	117 ¹⁾	105	190	250	250	220	290	340	-	-	-	10,0	12,0	-
025	68 x 72	160	127 ¹⁾	115	210	270	270	240	310	360	-	530	530	11,0	13,0	-
032	90 x 100	180	146 ¹⁾	140	210	270	270	240	310	360	-	530	530	12,5	14,5	-
040	90 x 100	200	159 ¹⁾	150	210	270	270	240	310	360	-	530	530	15,0	17,0	-
050	107 x 124	230	190 ¹⁾	165	-	-	-	250	320	370	-	540	540	-	20,5	26,5
065	157 x 187	290	216 ¹⁾	185	-	-	-	290	360	410	410	580	580	-	28,0	34,0
080	Ø 198	310	254 ¹⁾	200	-	-	-	-	-	-	430	600	600	-	-	40,0
100	-	350	305 ¹⁾	220	-	-	-	-	-	-	510	680	680	-	-	54,0
125	-	400	356 ¹⁾	250	-	-	-	-	-	-	-	-	-	-	-	68,0

*) with rubber lining add. 5 mm

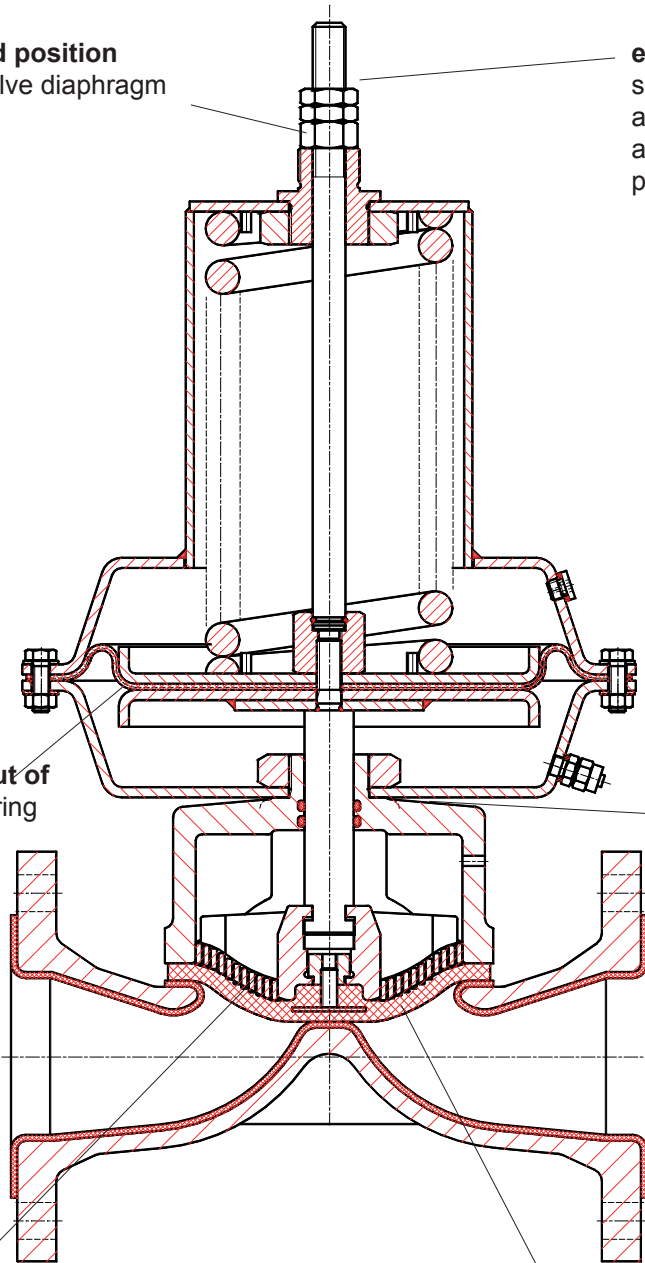
**) with limit switches add. 50 mm

1) with rubber lining add. 6 mm

all dimensions in mm

travel limitation in closed position
increases service life of valve diaphragm

emergency actuation
standard at spring closing
actuator (SF),
actuation possible without air
pressure supply.



diaphragm of actuator out of NBR
minimizes friction during
operation

compact construction
actuator mounted directly
on bonnet

diaphragm support
(DN 65 - DN 125)
increases the reliability
during the operation, the
service life and the pressure
limits of the diaphragm

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

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

8641.1 PC/5-10 / 04.09.2009