Flexachem.com
PUMPS - SEALS - VALVES - PROCESS EQUIPMENT

SED Manual Diaphragm Valves

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Diaphragms

Elastomer

PTFE/EPDM

EPDM
Ethylene-propylene elastomer peroxide cured. SED's EPDM is a specifically developed compound reinforced with a vulcanized woven fabric inlay and is always manufactured in the molded open position. This diaphragm design achieves higher stability for the diaphragm at higher temperatures and pressures. In addition, the woven fabric inlay is vulcanized over the embedded compressor stud in order to reinforce the elastomer-metal connection. Thus, the EPDM diaphragm is ideal for vacuum applications.

PTFE (TFM)
These PTFE diaphragms have been designed to offer the highest degree of chemical resistance, increased stability, longer flex life, less porosity, reduced cold flow and superior performance through temperature fluctuations between hot and cold and steam sterilization cycles.

MA8 and MA10
The diaphragm dimensions MA8 and MA10 are designed as one-piece diaphragms: This means that the EPDM back is bonded with the PTFE.
The diaphragms are always manufactured in the molded open position. These one-piece diaphragms feature smaller surface areas and are subject to shorter linear strokes which explains the excellent performance that has proved itself over time.

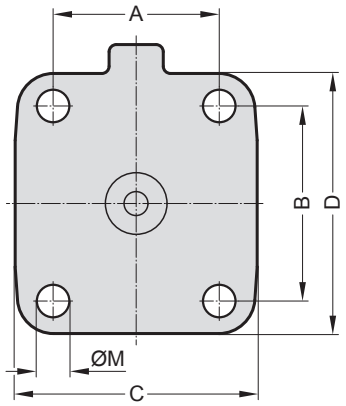
MA8 diaphragm incorporates an elastomer button for assembly with the valve operating mechanism. The MA10 utilizes a threaded stud assembly with the valve operating mechanism. Both these features eliminate the potential for point loading at the center of the diaphragm.

MA25 to MA100
The diaphragm dimensions MA25 to MA100 are designed as two-piece diaphragms-consisting of a separate EPDM backing cushion and a PTFE diaphragm. The diaphragm is always manufactured in the molded closed position. The advantage of this design for the MA25 to MA100 is that the diaphragm is in its molded shape while in the closed position of the valve. This reduces the force to close the valve and increases the diaphragm's life cycle.
In the two piece diaphragms the threaded stud connection is embedded in the PTFE of the diaphragm. To eliminate the potential of point loading at the center of the diaphragm, a floating suspension connection to the valve operating mechanism is utilized.

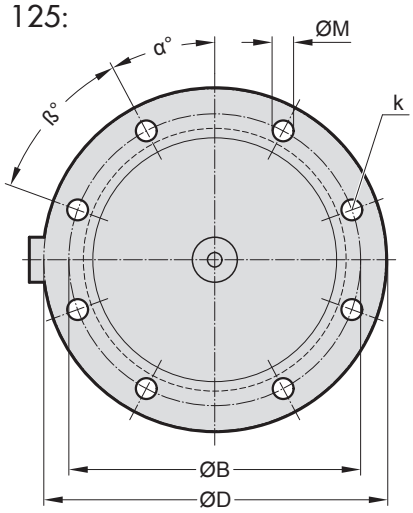
Note: Other diaphragm sizes and materials on request.

Diaphragms

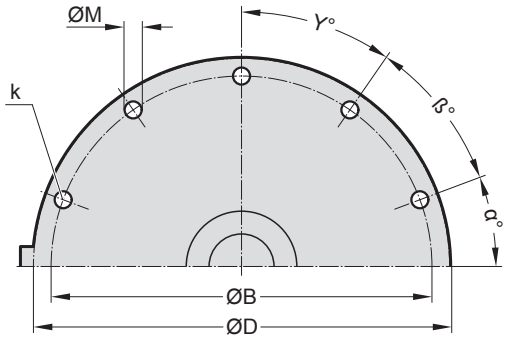
MA 8 - 80:



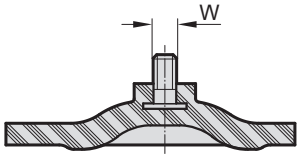
MA 100 - 125:



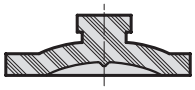
MA 150:



MA 10 - 150:



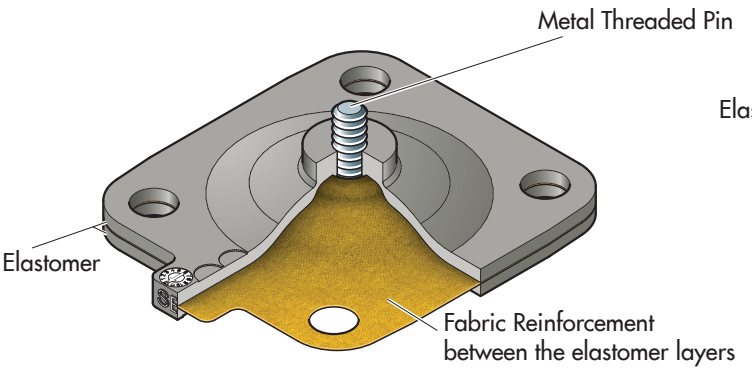
MA 8:



Dimensions (mm)

DN	NPS	MA	A	B	C	D	ØM	k	W	α	β	γ
4 - 15	1/4" - 1/2"	8	22	22	31,5	31,5	4,5	4	-	-	-	-
8 - 20	3/8" - 1/2"	10	42.5	37.5	52	47	5.5	4	M4	-	-	-
15 - 25	1/2" - 1"	25	46	54	67	72	9	4	1/4"	-	-	-
32 - 40	1 1/4" - 1 1/2"	40	65	70	90	100	13.5	4	1/4"	-	-	-
50	2"	50	78	82	106	124	13	4	1/4"	-	-	-
65R	2 1/2"	50	78	82	106	124	13	4	1/4"	-	-	-
65 - 80	2 1/2" - 3"	80	114	127	156	186	18	4	5/16"	-	-	-
100	4"	100	-	194	-	228	14.5	8	5/16"	20	42	-
125	5"	125	-	222	-	254	17.5	8	3/8"	43.5	43.5	-
150	6"	150	-	273	-	298.5	17.5	10	3/8"	35	35	35

Diaphragm Code 28

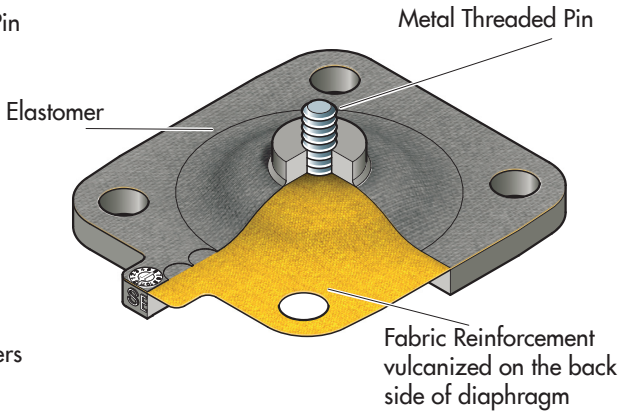


After a long and successful development accompanied by stringent tests, simulation of actual aseptic process applications and sterilization protocol, SED has released an improved elastomer formulation for our EPDM diaphragms. This EPDM diaphragm is made out of an improved compound material targeting critical aseptic applications with SIP steam sterilizing cycles and processes.

Features:

- The elastomer formulation for our Code 28 EPDM diaphragm is identical to the Code 20 EPDM diaphragm which has a different design and manufacturing process.
- Woven fabric reinforcement is positioned between two elastomer layers.
- Increased lifetime span under steam.
- All required approvals and conformities are available (See page 18).
- Diaphragm is interchangeable with all other SED diaphragm valves.

Diaphragm Code 20



Typically an elastomer is manufactured with a woven fabric reinforcement positioned in the middle of the EPDM diaphragm to improve it's mechanical properties, like strength and durability. This is accomplished by vulcanizing the woven fabric reinforcement between two elastomer layers.

A specific manufacturing process has been developed to vulcanize the woven fabric reinforcement on the back side of the EPDM diaphragm. With this manufacturing process the diaphragm achieves better performance in SIP steam sterilizing cycles and processes with reliability in critical sterile processes.

Features:

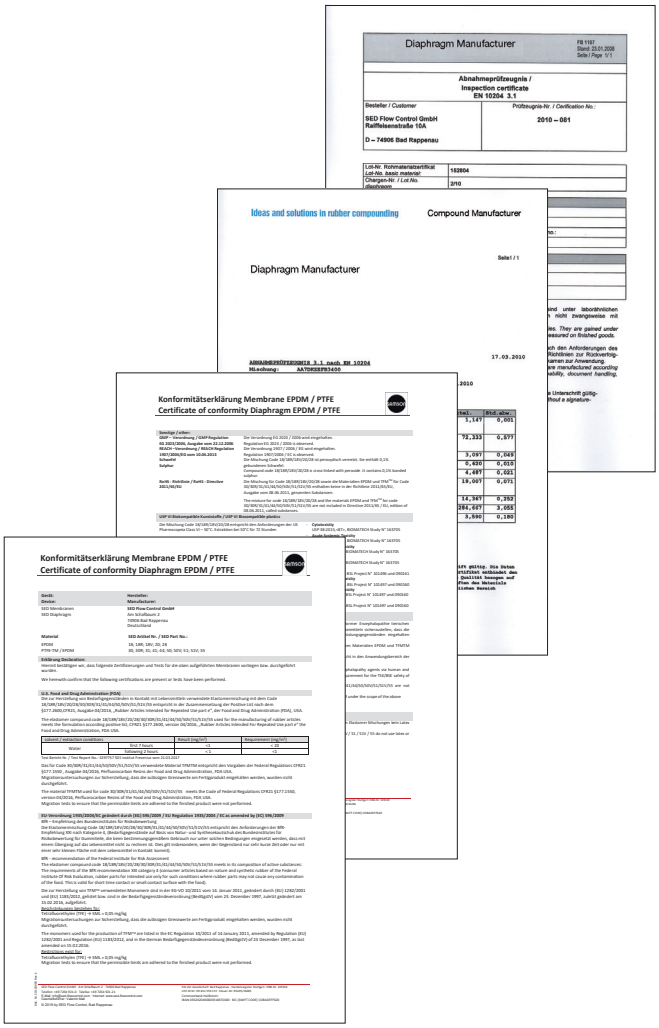
- The elastomer formulation for our Code 20 EPDM diaphragm is identical to the Code 28 EPDM diaphragm.
- Maximum distance from the media fabric to contact surface.
  - Damage to the fabric can be easily spotted.
- Friction between compressor and the back of the diaphragm is minimized.
  - Therefore reduced wear and longer life cycle.
- Better load distribution because of the maximum height of pure elastomer when the fabric is on the back side.
- Increased process safety due to only one fabric layer. The position of the fabric on the back side is exactly geometrically defined.
- Production control is easier when the fabric is on the back side.
- All required approvals and conformities are available (See page 18).
- Diaphragm is interchangeable with all other SED diaphragm valves.

Diaphragms

Certification and Compliance for Validation

At SED, we recognize the importance of the validation process in the aseptic industry.
This has led to an internal awareness and specific restructuring within the company to provide the highest level of reliability and regulatory compliance through the complete supply chain to provide a complete package of documentation for all components in contact with the medium.
With regard to this, the diaphragm is the key component to the valve's performance.

- All resin and additives used in the manufacturing process are FDA compliant.
- Compounding, physical properties and manufacturing process are documented
- Certificate of Conformance with FDA for all diaphragms
  - 21CFR177.2600 for Elastomers
  - 21CFR177.1550 for Perfluorocarbon resins
- Certificate of Conformance with USP 28 Class VI, Chapter 87 In-Vitro and Chapter 88 In-Vivo
- Testing for extractable organic substances on the basis of ISO 10993-18 (detection by GC-MS)
- Certificate of Conformance with 3-A
- TSE/BSE (ADCF) Certification of Compliance to EMEA/410/01 "Guidance on Minimising the Risk of Transmitting Animal Spongiform Encephalopathy Agents via Human and Veterinary Medical Products"
- Certificate of Traceability according EN 10204 3.1 of compounding and molding process with material analysis
- Test data available upon request
- REACH-Verordnung (EU) 1907/2006/EG is observed
- RoHS Directive 2011/65/EU is observed
- Certificate of Conformance with (EG) 596/2009



Diaphragms

Diaphragm Traceability

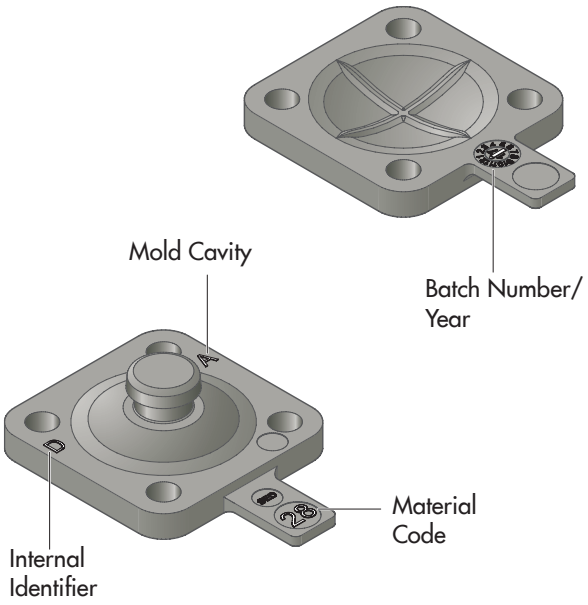
Every diaphragm is clearly identified, and the material is batch traceable by a set of unique codes molded into the diaphragm.

Information provided on the order and shipping documents as well as on the packaging is described by the following. With the request of the Material Analysis Traceability Certificate DIN EN 10204 3.1 for manufacturing and formulation the additionally provided information is shown in bold type.

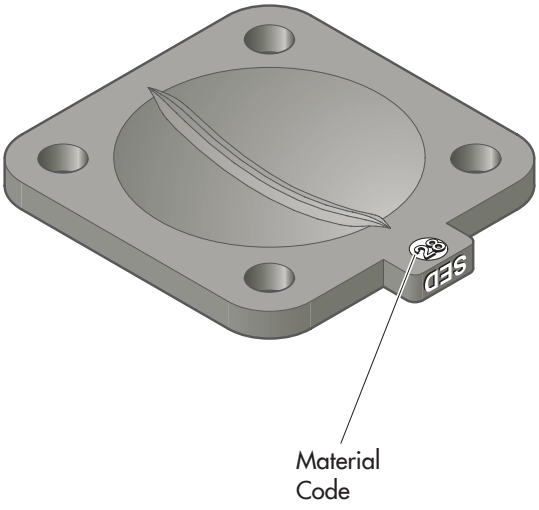
... on the order and shipping documents:
- SED article number, material code with description
- Customer article number on request
- **Batch number**
- **Shelf Life**

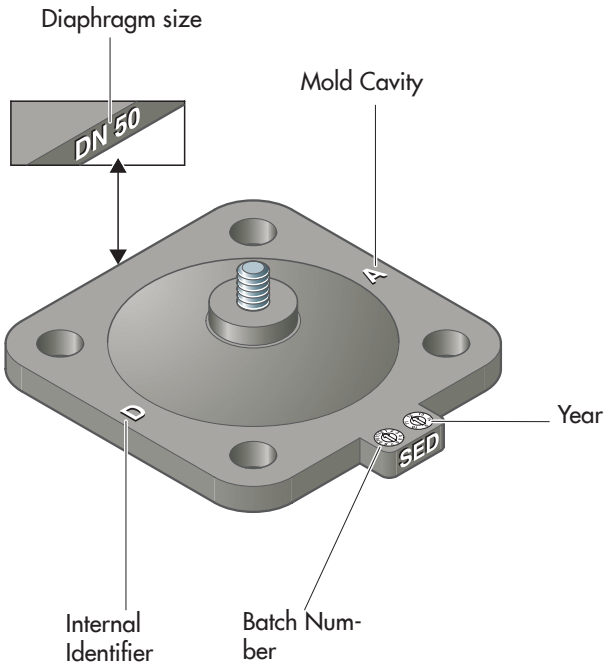
... on packaging in which the diaphragm is bagged and sealed in plastic:
- SED article number, material code with description
- Internal order series number
- Packaging quantity
- Customer article number on request
- **Batch number**
- **Shelf Life**

Example markings MA8



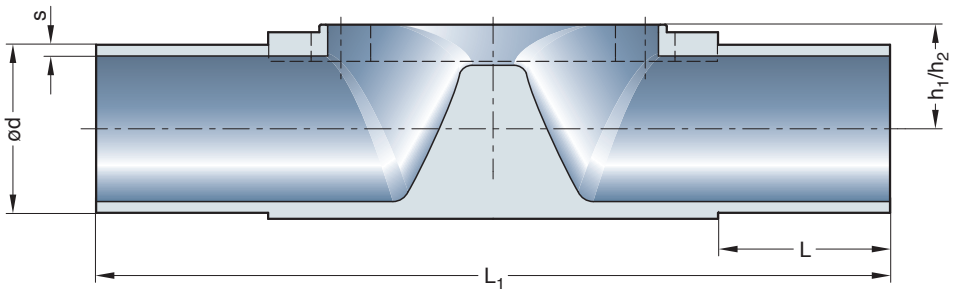
Example markings MA ≥ 25





Butt Weld Tube Ends

We offer tube end outside diameter and wall thickness dimensions in accordance to several international standards. These standards and dimensions are listed in the table below.
In order to install a proper aseptic process piping system, it is important that the correct and consistent international tube end standards be followed throughout said aseptic process piping system. If the connecting tube ends are not identical and of the same diameter standard, performance reduction in the process piping system may occur, or the ability of self draining ends is not guaranteed.
The most common standard connection is the butt-welding of the tube endings without any additional material.
Examples of butt welding include automatic and orbital welding.
Besides the standard any customer-specified connection type is possible.
Some examples are displayed on the following pages.



h_1 = Investment cast bodies
h_2 = forged bodies

Butt weld Tube End Standard							ISO 1127	DIN 11850		DIN	ASTM 269	BS O.D.	SMS	JIS G	JIS G
								Series 1	Series 2	Selection	ASME BPE	4825	3008	3447	3459
							DIN 11866 Series B		DIN 11866 Series A	Series	DIN 11866 Series C				
Code							40	41	42	39	45 [1]	94	49	97	98 [3]
DN	NPS	MA	L(min)	L1	h1	h2	ød x s	ød x s	ød x s	ød x s	ød x s	ød x s	ød x s	ød x s	ød x s
Valve Type Manually Operated 205 / 206 / 290 /297 Valve Type Pneumatically Operated 190 / 207 / 217															
4	-	**8**	20	72	9	9	-	-	-	6x1,0	-	-	-	-	-
6	-	**8**	20	72	9	9	-	-	8x1,0 [2]	8x1,0	-	-	-	-	10,5x1,2
8	1/4	**8**	20	72	9	9	**13,5x1,6**	-	10x1,0 [2]	10x1,0	6,35x0,89	-	-	-	13,8x1,65
10	3/8	**8**	20	72	9	9	-	12x1,0	**13x1,5**	-	9,53x0,89	-	-	-	-
15	1/2	**8**	20	72	9	9	-	-	-	-	**12,7x1,65**	12,7x1,2	-	-	-
Valve Type Manually Operated 289 / 295 / 397 Valve Type Pneumatically Operated 188 / 195 / 317 / 392 / 394															
8	-	**10**	25	108	12	12	13,5x1,6	-	-	-	-	-	-	-	-
10	3/8	**10**	25	108	12	12	**17,2x1,6**	12x1,0	13x1,5	-	9,53x0,89 [3]	-	-	-	17,3x1,65
15	1/2	**10**	25	108	12	12	**21,3x1,6**	18x1,0	**19x1,5**	18x1,5	12,7x1,65	12,7x1,2	-	-	21,7x2,1
20	3/4	**10**	25	108	12	12	-	-	23x1,5	22x1,5	**19,05x1,65**	19,05x1,2	-	-	-
Valve Type Manually Operated 905 / 907 / 982 / 985 / 995 /997 Valve Type Pneumatically Operated 385 / 395 / 402 / 407/ 417 / 495 / 592															
15	-	**25**	25	120	13	16	21,3x1,6	18x1,0	19x1,5	-	12,7x1,65 [3]	-	-	-	21,7x2,1
20	3/4	**25**	25	120	16	16	**26,9x1,6**	22x1,0	**23x1,5**	-	19,05x1,65	-	-	-	27,2x2,1
25	1	**25**	25	120	19	19	**33,7x2,0**	28x1,0	**29x1,5**	28x1,5	**25,4x1,65**	-	25,0x1,2	25,4x1,2	-
32	1 1/4	**40**	25	153	24	26	**42,4x2,0**	34x1,0	**35x1,5**	-	31,75x1,65 [3]	-	33,7x1,2	31,8x1,2 [3]	-
40	1 1/2	**40**	25	153	24	26	**48,3x2,0**	40x1,0	**41x1,5**	-	**38,1x1,65**	-	38,0x1,2	38,1x1,2	-
50	2	**50**	30	173	32	32	**60,3x2,0**	52x1,0	**53x1,5**	-	**50,8x1,65**	-	51,0x1,2	50,8x1,5	-
65	2 1/2	**50**	30	173	32	32	-	-	-	-	**63,5x1,65**	-	63,5x1,6	63,5x2,0 [3]	-
65	2 1/2	**80**	25	216	47	47	**76,1x2,0**	-	**70x2,0**	-	**63,5x1,65**	-	63,5x1,6	63,5x2,0 [3]	-
80	3	**80**	30	254	47	47	**88,9x2,3**	-	**85x2,0**	-	**76,2x1,65**	-	76,1x1,6	76,3x2,0	-
100	4	**100**	30	305	61	58	**114,3x2,3**	-	**104x2,0**	-	**101,6x2,11**	-	101,6x2,0	101,6x2,1	-
125	5	**150**	30	450	100	90	**139,7x2,6**	-	**129x2,0**	-	-	-	-	-	-
150	6	**150**	30	450	100	96	**168,3x2,6**	-	**154x2,0**	-	**152,4x2,77**	-	-	-	-

Dimensions in mm; MA = Diaphragm size / Upon request, other tube end standards are available / Preferred standards bold

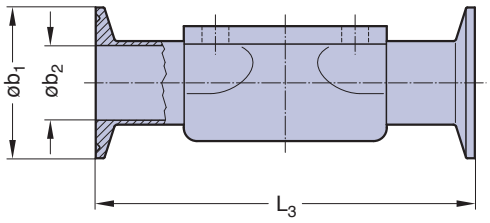
[1] ASTM 269 ASME BPE tube diameter (Code 45) in forged version optional also available in tube end length according ASME BPE (Code 95); Tube Size 1/4" to 2 1/2" L = 1,5" (38,1 mm); Tube Size 3" L = 1,75" (44,45 mm); Tube Size 4" L = 2" (50,8 mm); Tube Size 6" L = 2,5" (63,5 mm)
[2] DIN 11866 only
[3] Available only in forged design

Aseptic Connections

Clamps

Clamp connections are the most popular connection for easy assembly and breakdown of process lines and valves. Clamp end connections are designed for a face-to-face joint that is leak proof and free of crevices.
The clamp end has a machined beveled seat and is used with specifically formed sealing gaskets made of EPDM or PTFE.
The gasket is inserted between the opposing clamp ends and is tightened with a wing nut quick disconnect clamp.
In general, valve clamps ends are welded to the valve butt weld ends and polished according to the specified interior valve body surface finish.

Welded clamp ends are 100% visually inspected and compression tested. Clamp connections are available for all current pipe standard diameters.
If the connecting clamp ends are not identical and of the same diameter standard, there may be a reduction or step in the process piping system, or the ability of self draining ends is not guaranteed.
If assembled correctly, the clamp end process system offers a smooth, crevice-free, self-aligning joint that reduce the hazards of contamination and minimizes turbulence and pressure drop in the system.



Dimensions Inch

Clamp End Ident. / **Tube End Ident.**			**ASME BPE** / **ASME BPE**			**ASME BPE** / **ASME BPE**		
Code FtF			645			545		
Standard FtF			DIN EN 558-1			ASME BPE DT-V-1		
DN	NPS	**MA**	L_3	b_2	b_1	L_3	b_2	b_1
8	1/4	**8**	-	-	-	2,5	0,18	1
10	3/8	**8**	-	-	-	2,5	0,31	1
15	1/2	**8**	2,5	0,37	1	2,5	0,37	1
10	3/8	**10**	-	-	-	-	-	-
15	1/2	**10**	4,25	0,37	1	3,5	0,37	1
20	3/4	**10**	4,60	0,62	1	4,0	0,62	1
15	1/2	**25**	4,25	0,37	1	4,0	0,37	1
20	3/4	**25**	4,60	0,62	1	4,0	0,62	1
25	1	**25**	5,00	0,87	2	4,5	0,87	2
32	1 1/4	**40**	-	-	-	-	-	-
40	1 1/2	**40**	6,25	1,37	2	5,5	1,37	2
50	2	**50**	7,50	1,87	2,5	6,25	1,87	2,5
65	2 1/2	**80**	8,50	2,37	3	*8,75	2,37	3
80	3	**80**	10,00	2,87	3,5	8,75	2,87	3,5
100	4	**100**	12,00	3,83	4,5	11,5	3,83	4,5

Dimensions mm

Clamp End Ident. / **Tube End Ident.**			Similar **ISO 2852** / **ISO 1127**			**DIN 32676** / **DIN 11850**			**ASME BPE** / **ASME BPE**			**ASME BPE** / **ASME BPE**			**SMS 3017** / **SMS 3008**		
Code Face to face (FtF)			640			641/642			645			545			649		
Standard FtF			DIN EN 558-1			DIN EN 558-1			DIN EN 558-1			ASME BPE DT-4.4.1-1			DIN EN 558-1		
DN	NPS	**MA**	L_3	b_2	b_1	L_3	b_2	b_1	L_3	b_2	b_1	L_3	b_2	b_1	L_3	b_2	b_1
8	1/4	**8**	*63,5	10,3	25,0	-	-	-	-	-	-	63,5	4,57	25,0	-	-	-
10	3/8	**8**	-	-	-	*63,5	10,0	34,0	-	-	-	63,5	7,75	25,0	-	-	-
15	1/2	**8**	-	-	-	-	-	-	*63,5	9,40	25,0	63,5	9,40	25,0	-	-	-
10	3/8	**10**	108,0	14,0	25,0	108,0	10,0	34,0	-	-	-	-	-	-	-	-	-
15	1/2	**10**	108,0	18,1	50,5	108,0	16,0	34,0	108,0	9,40	25,0	88,9	9,40	25,0	-	-	-
20	3/4	**10**	-	-	-	117,0	20,0	34,0	117,0	15,75	25,0	101,6	15,75	25,0	-	-	-
15	1/2	**25**	108,0	18,1	50,5	108,0	16,0	34,0	108,0	9,40	25,0	101,6	9,40	25,0	-	-	-
20	3/4	**25**	117,0	23,7	50,5	117,0	20,0	34,0	117,0	15,75	25,0	101,6	15,75	25,0	-	-	-
25	1	**25**	127,0	29,7	50,5	127,0	26,0	50,5	127,0	22,10	50,5	114,3	22,10	50,5	127,0	22,6	50,5
32	1 1/4	**40**	146,0	38,4	50,5	146,0	32,0	50,5	146,0	28,45	50,5	139,7	28,45	50,5	146,0	31,3	50,5
40	1 1/2	**40**	159,0	44,3	64,0	159,0	38,0	50,5	159,0	34,80	50,5	139,7	34,80	50,5	159,0	35,6	50,5
50	2	**50**	190,0	56,3	77,5	190,0	50,0	64,0	190,0	47,50	64,0	158,8	47,50	64,0	190,0	48,6	64,0
65	2 1/2	**80**	216,0	72,1	91,0	216,0	66,0	91,0	216,0	60,20	77,5	*222,3	60,20	77,5	216,0	60,3	77,5
80	3	**80**	254,0	84,3	106,0	254,0	81,0	106,0	254,0	72,90	91,0	222,3	72,90	91,0	254,0	72,9	91,0
100	4	**100**	305,0	109,7	130,0	305,0	100,0	119,0	305,0	97,38	119,0	292,1	97,38	119,0	305,0	97,6	119,0

*Length differing from standard; other lengths on request

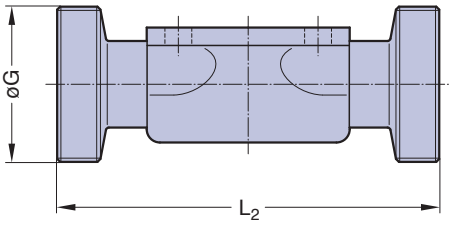
Aseptic Connections

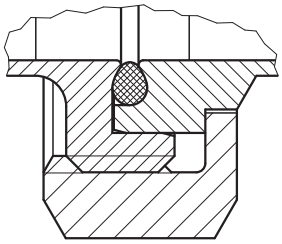
Aseptic Threads

Threaded spigot, liner and the interjacent seal are compressed with a spigot nut.

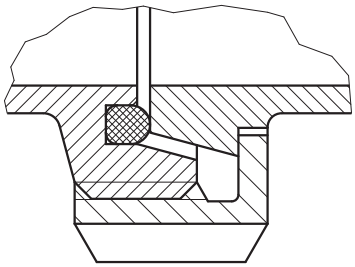
- Milk-threaded ends DIN 11851 with form sealing
- Aseptic connection according to DIN 11864-1 A with partly open o-ring for optimized cleaning features and a reduced dead leg. The threaded spigot, the liner and the interjacent o-ring are compressed against a metallic block with a spigot nut.

Connections are available for the current pipe standards within the aseptic application.
The threaded spigot and liner are welded with the pipe ends and the weld seam is polished according to the specified interior valve surface finish.





DIN 11864-1-A

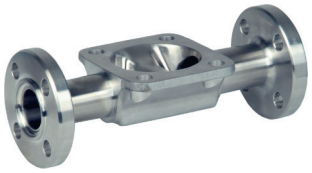


DIN 11851

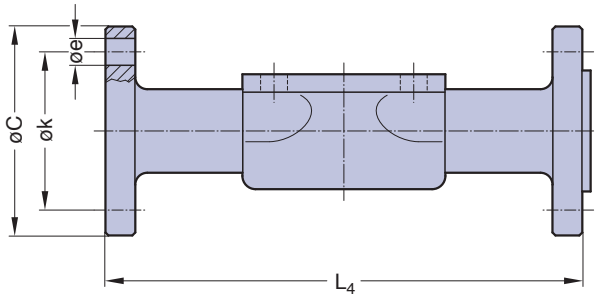
L in mm			DIN 11851 Code 8..		DIN 11864-1-A Code 4..	
DN	NPS	**MA**	L_2	G	L_2	G
4	-	**8**	-	-	-	-
6	-	**8**	-	-	-	-
8	1/4	**8**	-	-	-	-
10	3/8	**8**	92	Rd 28 x 1/8	92	Rd 28 x 1/8
15	1/2	**8**	-	-	-	-
8	1/4	**10**	-	-	-	-
10	3/8	**10**	118	Rd 28 x 1/8	118	Rd 28 x 1/8
15	1/2	**10**	118	Rd 34 x 1/8	118	Rd 34 x 1/8
20	3/4	**10**	-	-	-	-
15	1/2	**25**	118	Rd 34 x 1/8	120	Rd 34 x 1/8
20	3/4	**25**	118	Rd 44 x 1/6	144	Rd 44 x 1/6
25	1	**25**	128	Rd 52 x 1/6	164	Rd 52 x 1/6
32	1 1/4	**40**	147	Rd 58 x 1/6	192	Rd 58 x 1/6
40	1 1/2	**40**	160	Rd 65 x 1/6	214	Rd 65 x 1/6
50	2	**50**	191	Rd 78 x 1/6	244	Rd 78 x 1/6
65	2 1/2	**80**	246	Rd 95 x 1/6	314	Rd 95 x 1/6
80	3	**80**	256	Rd 110 x 1/4	342	Rd 110 x 1/4
100	4	**100**	-	-	-	Rd 130 x 1/4

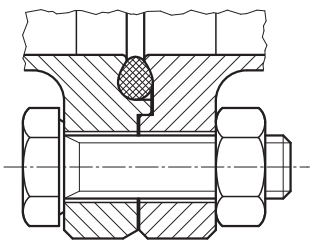
Aseptic Flanges

Aseptic flanges according to DIN 11864-2 Form A are connections with a partly open o-ring for optimized cleaning features and a reduced dead leg. The round flange and the groove flange are welded with the pipe ends and the weld seam is polished according to the specified interior valve body surface finish.



Connections are available for the current pipe standards within the aseptic application.
The round flange and the groove flange are welded orbital with the pipe endings and the weld seam is polished mechanically according to the valve body.





			DIN 11864-2-A Code 3.. (mm)			
DN	NPS	**MA**	L_4	C	k	e
10	3/8	**10**	130	54	37	ø 9
15	1/2	**25**	130	59	42	ø 9
20	3/4	**25**	150	64	47	ø 9
25	1	**25**	160	70	53	ø 9
32	1 1/4	**40**	180	76	59	ø 9
40	1 1/2	**40**	200	82	65	ø 9
50	2	**50**	230	94	77	ø 9
65	2 1/2	**80**	290	113	95	ø 9
80	3	**80**	310	133	112	ø 11
100	4	**100**	350	159	137	ø 11

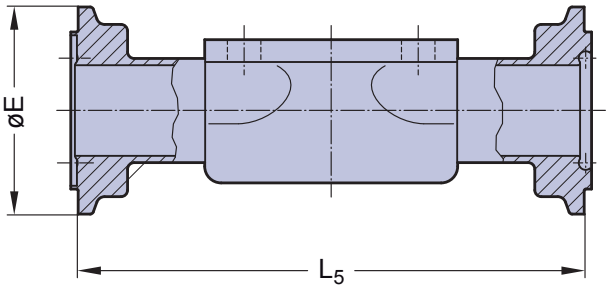
Aseptic Connections

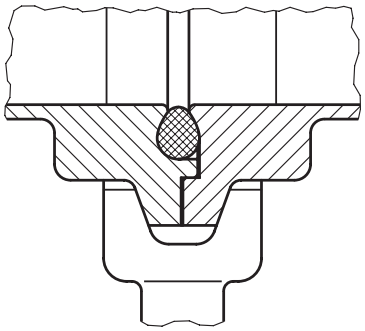
Aseptic Clamps

Aseptic connection according to DIN 11864-3 with partly open o-ring for optimized cleaning features and a reduced dead leg. The aseptic clamp with groove, the aseptic clamp with collar and the interjacent o-ring are compressed against a metallic block with a closure clamp.

Connections are available for the current pipe standards within the aseptic application. The aseptic clamp with groove and the aseptic clamp with collar are welded with the pipe ends and the weld seam is polished according to the specified interior valve surface finish.

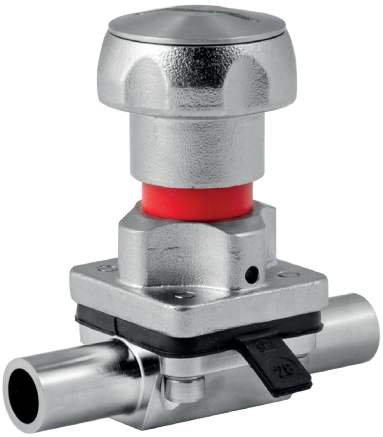
DN	NPS	MA	DIN 11864-3 L_5	DIN 11864-3 E
10	3/8	**8**	63,5	34
10	3/8	**10**	108	34
15	1/2	**10**	108	34
20	3/4	**10**	117	42
15	1/2	**25**	108	34
20	3/4	**25**	117	42
25	1	**25**	127	42
32	1 1/4	**40**	146	42
40	1 1/2	**40**	159	54
50	2	**50**	190	62
65	2 1/2	**80**	216	78
80	3	**80**	254	93
100	4	**100**	305	115





Steripur 206

Manually operated Valve DN 4 - 15 mm (1/4" - 1/2")



Features
- **Stainless steel bonnet and hand wheel**
- Autoclavable
- Rising hand wheel
- Sealed bonnet with optical indicator
- Adjustable internal travel stop
- CDSA sealing concept, see page 32
- Flexible diaphragm suspension

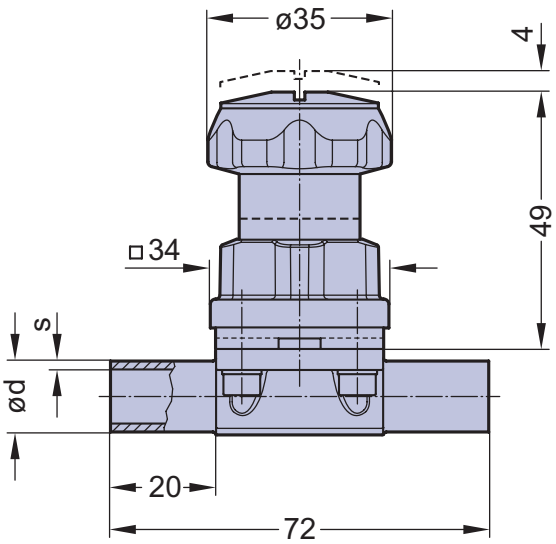
Optional
- Locking device

Butt weld ends
MA 8
Fold out page 21

Technical Data

Control function:	Manually operated
Max. working pressure:	10 bar (150 psi)
Max. working temperature:	160°C (320°F) dependent on application
Diaphragm material:	EPDM or PTFE
Body material:	Forged 1.4435/ 316L ASME/BPE Investment cast 1.4435/ 316L Other Alloys
End connection:	Butt weld ends see fold out page 21 Clamps and flanges see page 22 to 24 Special ends
Bonnets suitable for:	Two-Way bodies Welded configurations T- bodies Multiport bodies Tank bottom bodies
Flow rate:	Kv in m^3/h (Cv in GPM) see page 9
Diaphragm size:	MA 8
Weight:	ca. 0,3 kg

Technical data also valid for multiport valve.



Valve type overview see page 26 and 27.
Ordering key see page 66 to 68.

Steripur 397

Manually operated Valve DN 8 - 20 mm (3/8" - 3/4")

Features
- **Stainless steel bonnet and hand wheel**
- Autoclavable
- Rising hand wheel
- Sealed bonnet with optical indicator
- Adjustable internal travel stop
- CDSA sealing concept, see page 32
- Flexible diaphragm suspension
- Encapsulated diaphragm

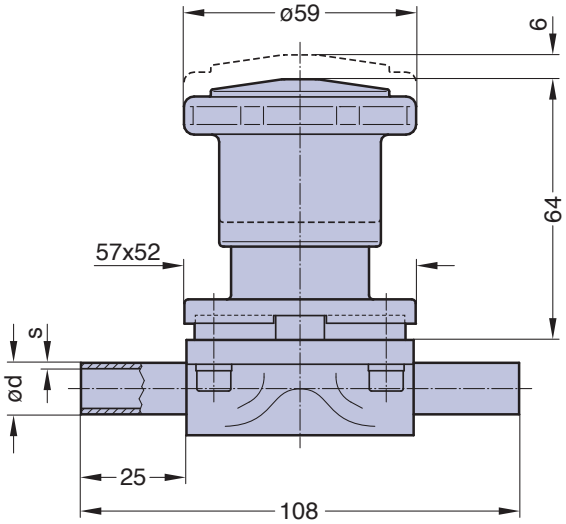
Optional
- Locking device

Technical Data

Control function:	Manually operated
Max. working pressure:	10 bar (150 psi)
Max. working temperature:	160°C (320°F) dependent on application
Diaphragm material:	EPDM or PTFE
Body material:	Forged 1.4435/ 316L ASME/BPE Investment cast 1.4435/ 316L Other Alloys
End connection:	Butt weld ends see fold out page 21 Clamps and flanges see page 22 to 24 Special ends
Bonnets suitable for:	Two-Way bodies / Welded configurations T- bodies / Multiport bodies Tank bottom bodies
Flow rate:	Kv in m^3/h (Cv in GPM) see page 9
Diaphragm size:	MA 10
Weight:	ca. 0,8 kg

Technical data also valid for multiport valve.

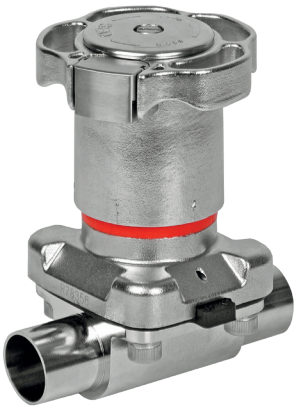
Butt weld ends
MA 10
Fold out page 21



Valve type overview see page 26 and 27.
Ordering key see page 66 to 68.

Steripur 907

Manually operated Valve DN 15 - 50 mm (3/4" - 2 1/2")



Steripur 907, T01

Features
- **Stainless steel bonnet and hand wheel**
- Autoclavable
- Rising hand wheel with optical indicator and stroke indicator
- Sealed bonnet
- Internal travel stop
- Locking device
- CDSA sealing concept, see page 32
- Flexible diaphragm suspension
- Encapsulated diaphragm

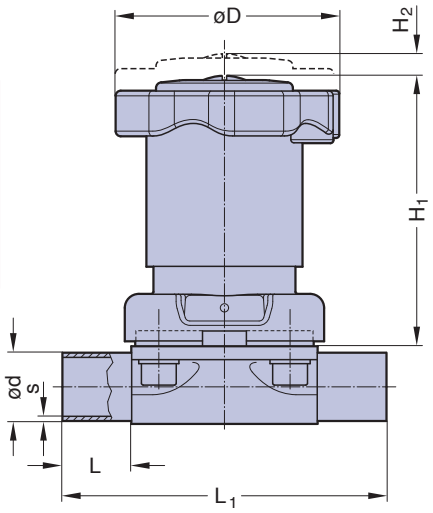
Optional
- Adjustable internal stroke limiter
- U-Lock for hand wheel
- Assembly of proximity switches

Technical Data

Control function:	Manually operated
Max. working pressure:	10 bar (150 psi)
Max. working temperature:	160°C (320°F) dependent on application
Diaphragm material:	EPDM or PTFE
Valve body material:	Forged 1.4435/ 316L ASME/BPE Investment cast 1.4435/ 316L Other Alloys
End connection:	Butt weld ends see fold out page 21 Clamps and flanges see page 22 to 24 Special ends
Bonnets suitable for:	Two-Way bodies Welded configurations T- bodies Multiport bodies Tank bottom bodies
Flow rate:	Kv in m 3/h (Cv in GPM) see page 9
Diaphragm size:	MA see table

Technical data also valid for multiport valve.

Butt weld ends
MA 25 - 50
Fold out page 21



DN (mm)	MA	Dimensions (mm)					Total weight ca. (kg) Steripur 907	
		L	L_1	H_1	H_2	D	Investment cast	Forged
15-25	25	25	120	100	10	84	2,1	2,2
32-40	40	25	153	119	16	112	3,5	3,7
50	50	30	173	136	20	135	4,8	5,9

Valve type overview see page 26 and 27.
Ordering key see page 66 to 68.

Manually operated Valve DN 65 - 100 mm (3/4" - 4")

DN 65 - 100

Features

- **Stainless steel bonnet and hand wheel**
- Non rising hand wheel with optical indicator
- Sealed bonnet
- Autoclavable
- CDSA sealing concept, see page 32
- Flexible diaphragm suspension
- Encapsulated diaphragm

Optional

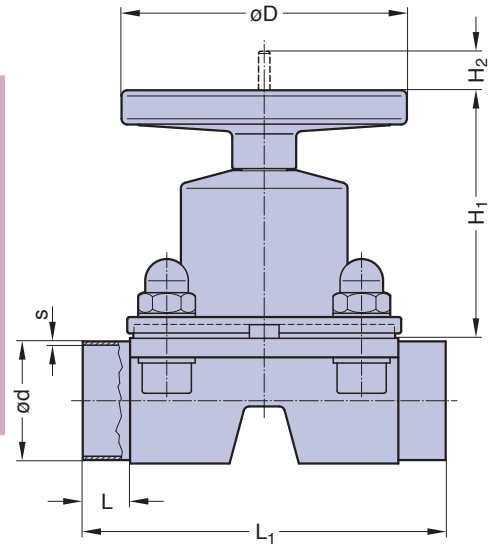
- Adjustable travel stop or stroke limiter
- Sealed bonnet
- Locking device

Technical Data

Control function:	Manually operated
Max. working pressure:	10 bar (150 psi) DN 65-100 diaphragm PTFE 8 bar (115 psi)
Max. working temperature:	160°C (320°F) dependent on application
Diaphragm material:	EPDM or PTFE
Valve body material:	Forged 1.4435/ 316L ASME/BPE Investment cast 1.4435/ 316L Other Alloys
End connection:	Butt weld ends see fold out page 21 Clamps and flanges see page 22 to 24 Special ends
Bonnets suitable for:	Two-Way bodies Welded configurations T- bodies Multiport bodies Tank bottom bodies
Flow rate:	Kv in m^3/h (Cv in GPM) see page 9
Diaphragm size:	MA see table

Technical data also valid for multiport valve.

Butt weld ends
MA 25 - 100
Fold out page 21

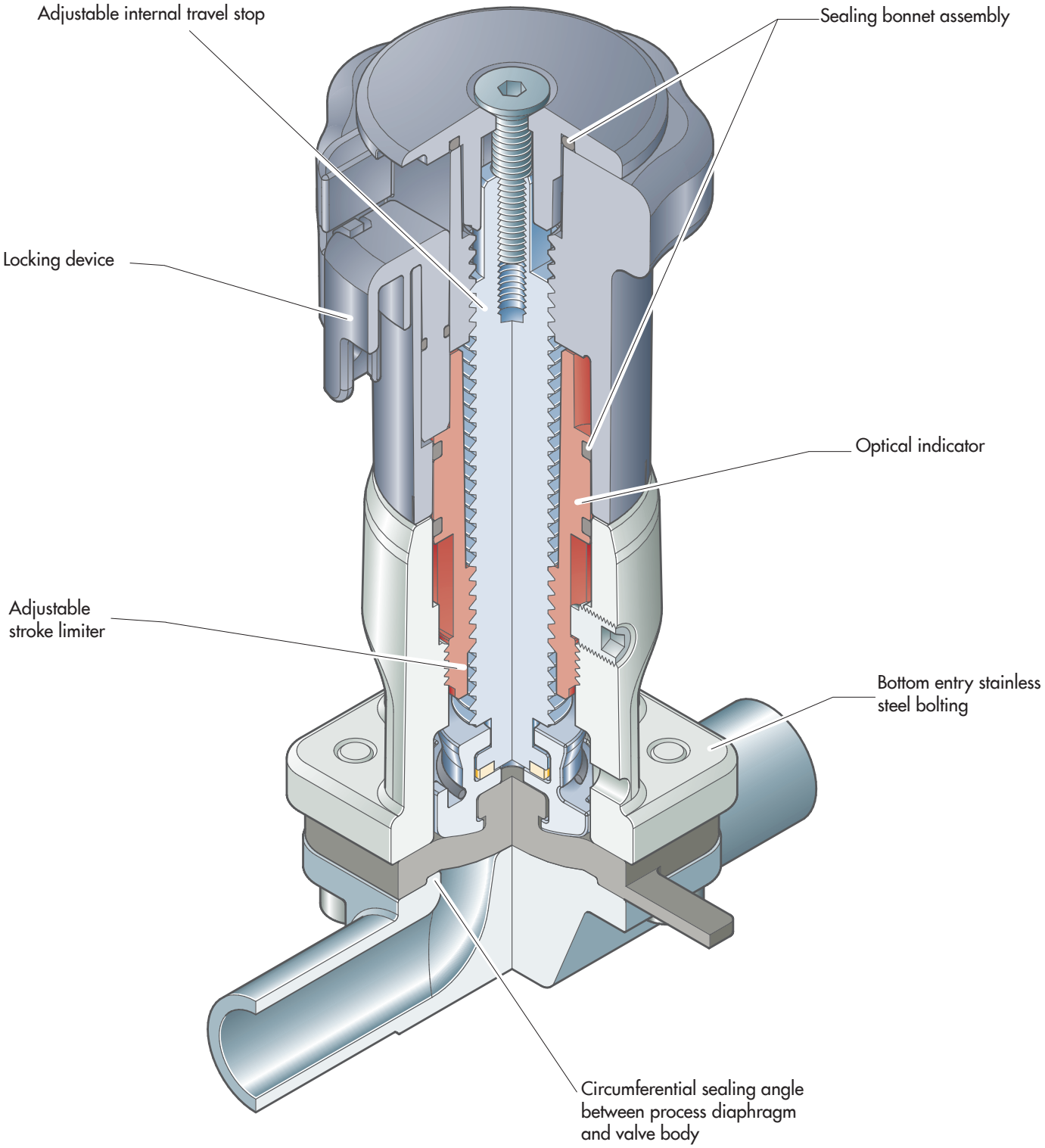


DN 65 - 100 (Drawing MA 80)

DN (mm)	MA	Dimensions (mm)					Total weight ca. (kg)	
		L	L_1	H_1	H_2	D	Investment cast	Forged
65	80	30	216	180	38	198	13,0	15,0
80	80	30	254	180	38	198	13,0	15,0
100	100	30	305	220	50	252	22,0	20,0

Valve type overview see page 26 and 27.
Ordering key see page 66 to 68.

KMA 205


Adjustable internal travel stop
Sealing bonnet assembly
Locking device
Optical indicator
Adjustable
stroke limiter
Bottom entry stainless
steel bolting
Circumferential sealing angle
between process diaphragm
and valve body

KMA 205

Manually operated Valve DN 4 - 15 mm (1/4" - 1/2")

KMA 205, S03

KMA 205, S02

Butt weld ends
MA 8
Fold out page 21

Features
- **Stainless steel bonnet and plastic hand wheel**
- Manually operated diaphragm Valve with plastic hand wheel is suitable for a limited number of cycles of autoclaving.
- Rising hand wheel
- Sealed bonnet with optical indicator
- Adjustable internal travel stop
- CDSA sealing concept, see page 32
- Flexible diaphragm suspension

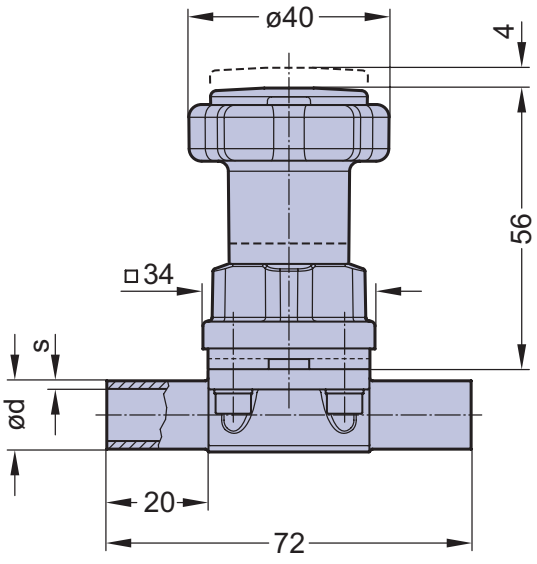
Specific features S02
- Adjustable internal stroke limiter
- Locking device

Optional features S02
- U-Lock for hand wheel
- Assembly of proximity switches

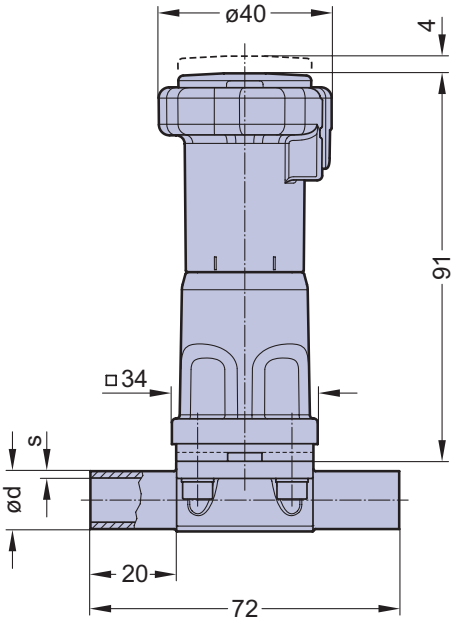
Technical Data

Control function:	Manually operated
Max. working pressure:	10 bar (150 psi)
Max. working temperature:	160°C (320°F) dependent on application
Diaphragm material:	EPDM or PTFE
Body material:	Forged 1.4435/ 316L ASME/BPE Investment cast 1.4435/ 316L Other Alloys
End connection:	Butt weld ends see fold out page 21 Clamps and flanges see page 22 to 24 Special ends
Bonnets suitable for:	Two-Way bodies Welded configurations T- bodies Multiport bodies Tank bottom bodies
Flow rate:	Kv in m^3/h (Cv in GPM) see page 9
Diaphragm size:	MA 8
Weight:	ca. 0,2 kg

Technical data also valid for multiport valve.



KMA 205

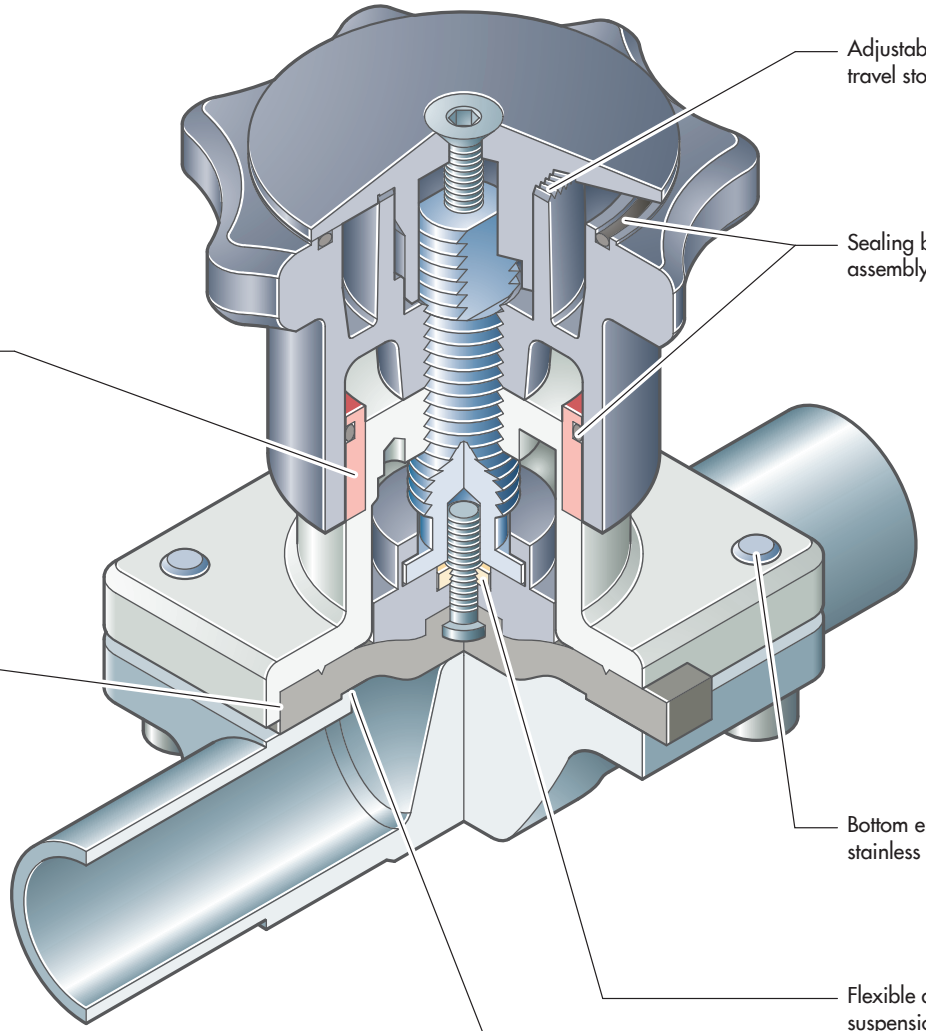


KMA 205

Valve type overview see page 26 and 27.
Ordering key see page 66 to 68.

KMA 295

Manually operated Valve DN 8 - 20 mm (3/8" - 3/4")



Butt weld ends
MA 10
Fold out page 21

KMA 295

Manually operated Valve DN 8 - 20 mm (3/8" - 3/4")

Features

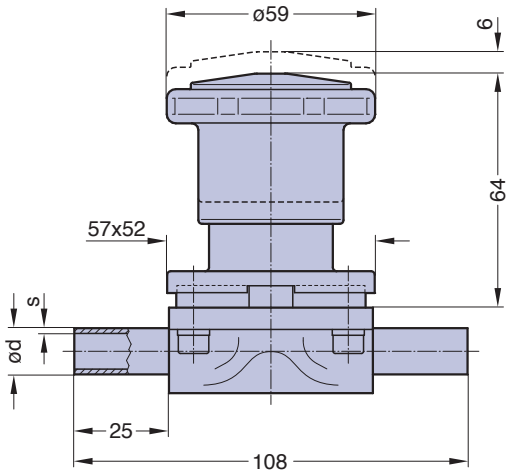
- **Stainless steel bonnet and plastic hand wheel**
- Manually operated diaphragm Valve with plastic hand wheel is suitable for a limited number of cycles of autoclaving.
- Rising hand wheel
- Sealed bonnet with optical indicator
- Adjustable internal travel stop
- CDSA sealing concept, see page 32
- Flexible diaphragm suspension
- Encapsulated diaphragm

Technical Data

Control function:	Manually operated
Max. working pressure:	10 bar (150 psi)
Max. working temperature:	160°C (320°F) dependent on application
Diaphragm material:	EPDM or PTFE
Body material:	Forged 1.4435/ 316L ASME/BPE Investment cast 1.4435/ 316L Other Alloys
End connection:	Butt weld ends see fold out page 21 Clamps and flanges see page 22 to 24 Special ends
Bonnets suitable for:	Two-Way bodies / Welded configurations T- bodies / Multiport bodies Tank bottom bodies
Flow rate:	Kv in m^3/h (Cv in GPM) see page 9
Diaphragm size:	MA 10
Weight:	ca. 0,6 kg

Technical data also valid for multiport valve.

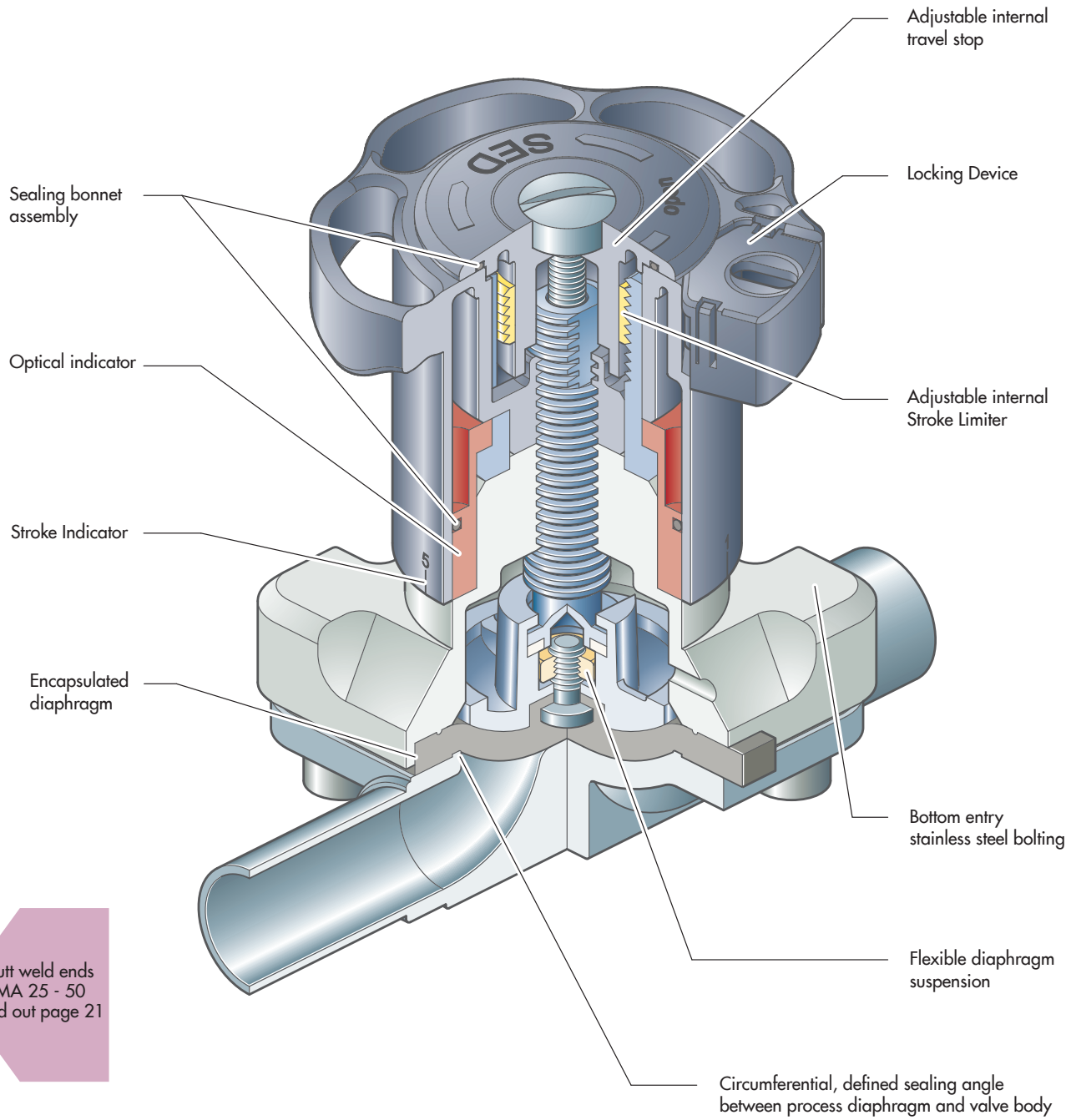
Butt weld ends
MA 10
Fold out page 21



Valve type overview see page 26 and 27.
Ordering key see page 66 to 68.

KMA 905

Manually operated Valve DN 15 - 50 mm (3/4" - 2 1/2")



Butt weld ends
MA 25 - 50
Fold out page 21

Introduction Video
https://www.youtube.com/channel/UCLbTtlLODsUzPKCQAcP7Lkw

Manually operated Valve DN 15 - 50 mm (3/4" - 2 1/2")

KMA 905 , S11

Features

- **Stainless steel bonnet and plastic hand wheel**
- Manually operated diaphragm Valve with plastic hand wheel is suitable for a limited number of cycles of autoclaving.
- Rising hand wheel with optical indicator and stroke indicator
- Sealed bonnet
- Internal travel stop
- Locking device
- CDSA sealing concept, see page 32
- Flexible diaphragm suspension
- Encapsulated diaphragm

Optional

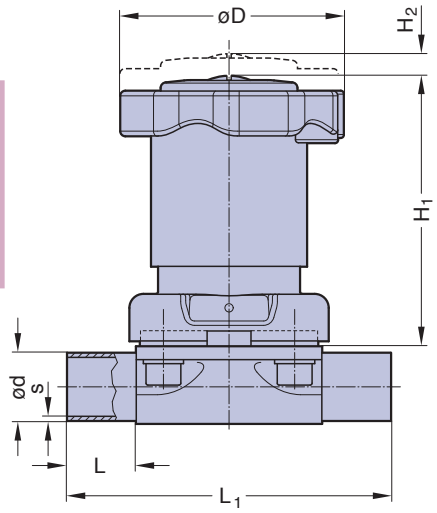
- Adjustable internal stroke limiter
- U-Lock for hand wheel
- Assembly of proximity switches

Technical Data

Control function:	Manually operated
Max. working pressure:	10 bar (150 psi)
Max. working temperature:	160°C (320°F) dependent on application
Diaphragm material:	EPDM or PTFE
Valve body material:	Forged 1.4435/ 316L ASME/BPE Investment cast 1.4435/ 316L Other Alloys
End connection:	Butt weld ends see fold out page 21 Clamps and flanges see page 22 to 24 Special ends
Bonnets suitable for:	Two-Way bodies Welded configurations T- bodies Multiport bodies Tank bottom bodies
Flow rate:	Kv in m 3/h (Cv in GPM) see page 9
Diaphragm size:	MA see table

Technical data also valid for multiport valve.

Butt weld ends
MA 25 - 50
Fold out page 21



DN (mm)	MA	Dimensions (mm)					Total weight ca. (kg) KMA 905	
		L	L_1	H_1	H_2	D	Investment cast	Forged
15-25	25	25	120	100	10	84	1,4	1,6
32-40	40	25	153	119	16	112	2,8	3,0
50	50	30	173	136	20	135	3,8	4,6

Valve type overview see page 26 and 27.
Ordering key see page 66 to 68.

KMA 995

Manually operated Valve DN 65 - 100 mm (2 1/2" - 4")

DN 80, KMA 995

Features
- **Stainless steel bonnet** and **plastic hand wheel**
- Non rising hand wheel with optical indicator
- Flexible diaphragm suspension
- Encapsulated diaphragm
- CDSA sealing concept, see page 32

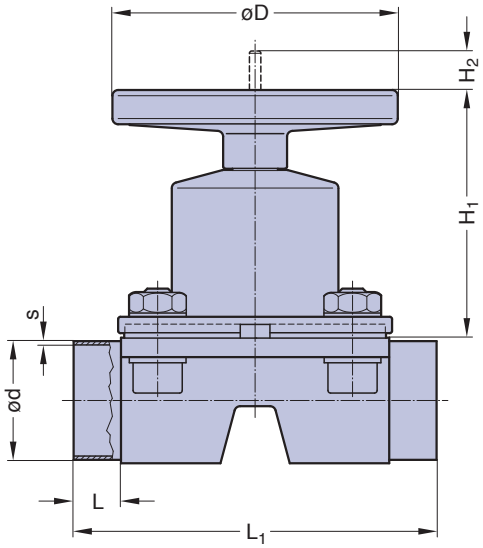
Optional
- Adjustable travel stop or stroke limiter
- Sealed bonnet
- Locking device

Technical Data

Control function:	Manually operated
Max. working pressure:	EPDM 10 bar (150 psi)
	PTFE 8 bar (115 psi)
Max. working temperature:	160°C (320°F) dependent on application
Diaphragm material:	EPDM or PTFE
Valve body material:	Forged 1.4435/ 316L ASME/BPE
	Investment cast 1.4435/ 316L
	Other Alloys
End connection:	Butt weld ends see fold out page 21
	Clamps and flanges see page 22 to 24
	Special ends
Bonnets suitable for:	Two-Way bodies
	Welded configurations
	T- bodies
	Multiport bodies
	Tank bottom bodies
Flow rate:	Kv in m^3/h (Cv in GPM) see page 9
Diaphragm size:	MA see table

Technical data also valid for multiport valve.

Butt weld ends
MA 25 - 100
Fold out page 21



DN 65 - 100 (Drawing MA 80)

DN (mm)	MA	Dimensions (mm)					Total weight ca. (kg)	
		L	L_1	H_1	H_2	D	Investment cast	Forged
65	80	30	216	180	38	198	10,0	13,0
80	80	30	254	180	38	198	10,0	13,0
100	100	30	305	220	50	252	19,0	17,0

Valve type overview see page 26 and 27.
Ordering key see page 66 to 68.