



Type 483

Safety Relief Valves
– spring loaded

Metric Units + US Units

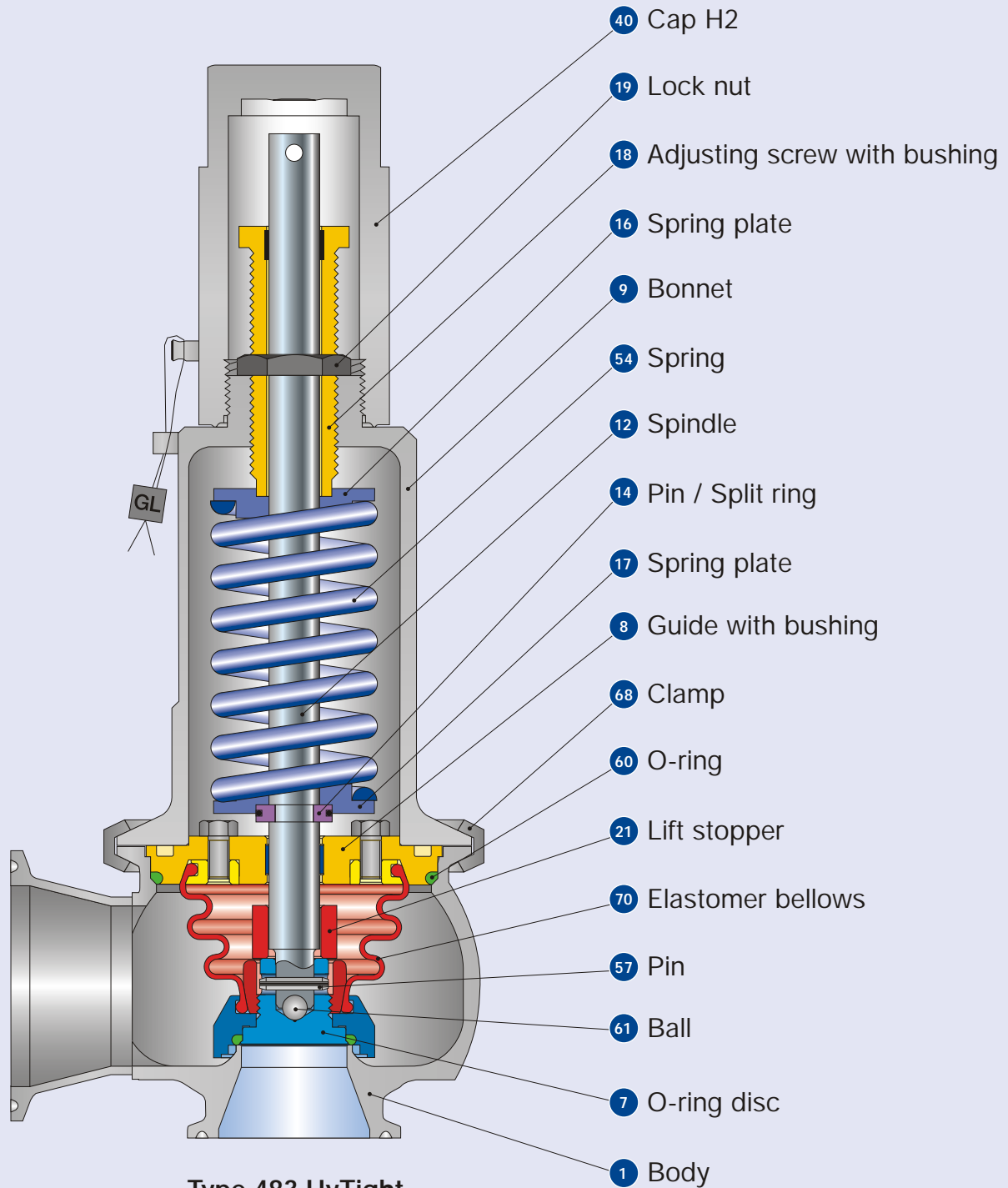


Facts

LESER









The-Safety-Valve.com

HyTight Assembly



Type 483 HyTight
 Cap H2
 Inlet and outlet:
 Clamp connection

HyTight Assembly

Materials			
Item	Component	Remarks	Type 4834 HyTight
1	Body		1.4435 (BN 2) ^{*)}
			SA 479 316L
7	O-ring disc	HyTight Assembly	1.4435 316L
7.1	Soft seal O-ring	"D"  	EPDM
		"K"	CR
		"L" 	FKM
		"N"	NBR
		"C"  	FFKM
8	Guide with bushing	PTFE + 15 % glass	1.4435
			316L
9	Bonnet		1.4404
			316L
12	Spindle		1.4404
			316L
14	Pin / Split ring		1.4310 / 1.4404
			Stainless steel / 316L
16 / 17	Spring plate		1.4404
			316L
18	Adjusting screw with bushing	PTFE + 15 % glass	1.4404 / PTFE
			316L / PTFE
19	Lock nut		1.4404
			316L
21	Lift stopper		1.4404
			316L
40	Cap H2		1.4404
			316L
54	Spring		1.4310
			Stainless steel
57	Pin		1.4310
			Stainless steel
60	O-ring	 	EPDM
61	Ball		1.4401
			316
68	Clamp		1.4401
			316
70	Elastomer bellows		EPDM

^{*)} The material 1.4435/SA 479 316L fulfils the requirements of the Swiss chemical and pharmaceutical industry Basler Norm (BN 2). For details please refer to LWN 290.90.

Please notice:

- Modifications reserved by LESER.
- LESER can upgrade materials without notice.
- Every part can be replaced by other material acc. to customer specification.

How to order – Article numbers

Article numbers				
Actual Orifice diameter d_0 [mm]			13	25
Actual Orifice area A_0 [mm ²]			133	491
Actual Orifice diameter d_0 [inch]			0,512	0,984
Actual Orifice area A_0 [inch ²]			0,206	0,761
O-ring material			EPDM "D" J22	EPDM "D" J22
			CR "K" J21	CR "K" J21
			FKM "L" J23	FKM "L" J23
			NBR "N" J30	NBR "N" J30
			FFKM "C" J20	FFKM "C" J20
Body material: 1.4435 (316L)				
Bonnet closed	H2	Art.-No. 4834.	7702	7712
	H4	Art.-No. 4834.	7704	7714
	H8	Art.-No. 4834.	7708	7718
		p [bar] S/G/L	0,3 – 16	0,1 – 16
		p [psig] S/G/L	4,4 – 232	1,5 – 232

Pressure temperature ratings

Metric Units					
Actual Orifice diameter d_0 [mm]			13	25	
Actual Orifice area A_0 [mm ²]			133	491	
Body material: 1.4435 (316L)					
Inlet body	Pressure rating	For pressure ratings and connection size please refer to chapter dimensions and weights (page 02/09)			
Outlet body	Pressure rating				
Minimum set pressure	p [bar] S/G/L		0,3	0,1	
Maximum set pressure	p [bar] S/G/L		16	16	
Temperature range ¹⁾		Minimum	Maximum	Minimum	Maximum
EPDM	[°C]	-45	+150	-45	+150
CR	[°C]	-40	+100	-40	+100
FKM	[°C]	-20	+180	-20	+180
NBR	[°C]	-25	+110	-25	+110
FFKM	[°C]	0	+250	0	+250

US Units					
Actual Orifice diameter d_0 [inch]			0,512	0,984	
Actual Orifice area A_0 [inch ²]			0,206	0,761	
Body material: 1.4435 (316L)					
Inlet body	Pressure rating	For pressure ratings and connection size please refer to chapter dimensions and weights (page 02/09)			
Outlet body	Pressure rating				
Minimum set pressure	p [psig] S/G/L		4,4	1,5	
Maximum set pressure	p [psig] S/G/L		232	232	
Temperature range ¹⁾		Minimum	Maximum	Minimum	Maximum
EPDM	[°F]	-49	+302	-49	+302
CR	[°F]	-40	+212	-40	+212
FKM	[°F]	-4	+356	-4	+356
NBR	[°F]	-13	+230	-13	+230
FFKM	[°F]	+32	+482	+32	+482

¹⁾ The temperature is limited by the soft seal material. Refer to table "Soft seal selection" on page 99/11.

Dimensions – Bestseller

For shortest delivery time please select bestsellers. The specified bestsellers can vary depending on different market requirements.

For further available connections please refer to page 02/10.

Metric Units

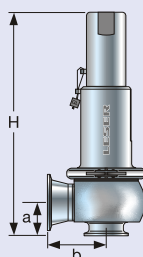
Actual Orifice diameter d_0 [mm]		13	
Actual Orifice area A_0 [mm ²]		133	
Clamp connections		Inlet a	Outlet b
COCO		1"	1 1/2"
Option code		L96I79L97A80	
Center to face	[mm]	29	52
Clamp diameter	d_{inner} [mm]	23	36
	d_{outer} [mm]	51	51
Height – H4	H max. [mm]	206	
SOSO		25	25
Option code		L79I16L86A16	
Center to face	[mm]	29	52
Clamp diameter	d_{inner} [mm]	26	26
	d_{outer} [mm]	51	51
Height – H4	H max. [mm]	206	
Threaded connections		Inlet a	Outlet b
KOGO		25	25
Option code		H85L76I16A85L81A16	
Center to face	[mm]	40	70
Height – H4	H max. [mm]	217	
Flanged connections		Inlet a	Outlet b
ANAN		25	25
Option code		H85L92I16L93A85A16	
Center to face	[mm]	45	76
Height – H4	H max. [mm]	222	

US Units

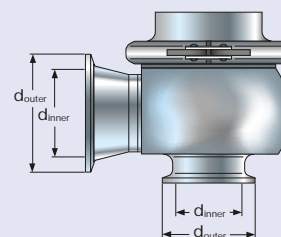
Actual Orifice diameter d_0 [inch]		0,512	
Actual Orifice area A_0 [inch ²]		0,206	
Clamp connections		Inlet a	Outlet b
COCO		1"	1 1/2"
Option code		L96I79L97A80	
Center to face	[inch]	1 5/32	2 1/16
Clamp diameter	d_{inner} [inch]	29/32	1 13/32
	d_{outer} [inch]	2	2
Height – H4	H max. [inch]	8 3/32	
SOSO		1"	1"
Option code		L79I16L86A16	
Center to face	[inch]	1 1/8	2 1/16
Clamp diameter	d_{inner} [inch]	1 1/32	1 1/32
	d_{outer} [inch]	2	2
Height – H4	H max. [inch]	8 1/8	
Threaded connections		Inlet a	Outlet b
KOGO		25	25
Option code		H85L76I16A85L81A16	
Center to face	[inch]	1 9/16	2 3/4
Height – H4	H max. [inch]	8 17/32	
Flanged connections		Inlet a	Outlet b
ANAN		25	25
Option code		H85L92I16L93A85A16	
Center to face	[inch]	1 3/4	3
Height – H4	H max. [inch]	8 3/4	

		25	
		491	
Clamp connections		Inlet a	Outlet b
COCO		1 1/2"	2"
Option code		L96I80L97A81	
Center to face	[mm]	44	60
Clamp diameter	d_{inner} [mm]	36	49
	d_{outer} [mm]	51	64
Height – H4	H max. [mm]	303	
SOSO		40	40
Option code		L79I17L86A17	
Center to face	[mm]	44	60
Clamp diameter	d_{inner} [mm]	38	38
	d_{outer} [mm]	51	51
Height – H4	H max. [mm]	303	
Threaded connections		Inlet a	Outlet b
KOGO		40	40
Option code		H85L76I17A85L81A17	
Center to face	[mm]	48	78
Height – H4	H max. [mm]	304	
Flanged connections		Inlet a	Outlet b
ANAN		40	40
Option code		H85L92I17L93A85A17	
Center to face	[mm]	51	82
Height – H4	H max. [mm]	310	

		0,984	
		0,761	
Clamp connections		Inlet a	Outlet b
COCO		1 1/2"	2"
Option code		L96I80L97A81	
Center to face	[inch]	1 23/32	2 3/8
Clamp diameter	d_{inner} [inch]	1 13/32	1 15/16
	d_{outer} [inch]	2	2 17/16
Height – H4	H max. [inch]	11 15/16	
SOSO		1 1/2"	1 1/2"
Option code		L79I17L86A17	
Center to face	[inch]	1 23/32	2 3/8
Clamp diameter	d_{inner} [inch]	1 1/2	1 1/2
	d_{outer} [inch]	2	2
Height – H4	H max. [inch]	11 5/16	
Threaded connections		Inlet a	Outlet b
KOGO		40	40
Option code		H85L76I17A85L81A17	
Center to face	[inch]	1 7/8	3 1/16
Height – H4	H max. [inch]	11 31/32	
Flanged connections		Inlet a	Outlet b
ANAN		40	40
Option code		H85L92I17L93A85A17	
Center to face	[inch]	2	3 1/4
Height – H4	H max. [inch]	12 3/16	



Type 483 – Cap H2



Type 483 – Clamp diameters

Dimensions and weights

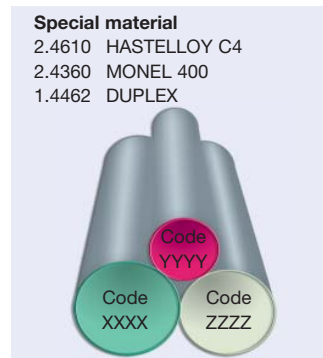
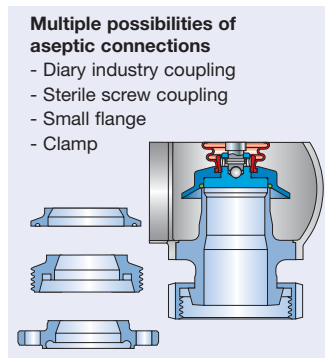
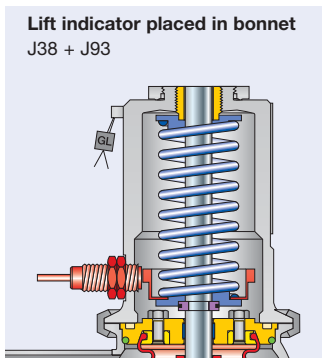
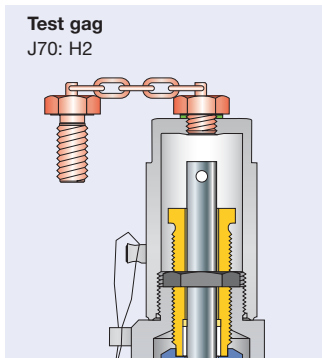
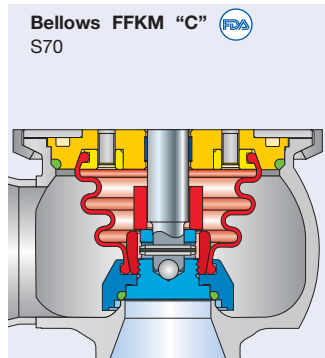
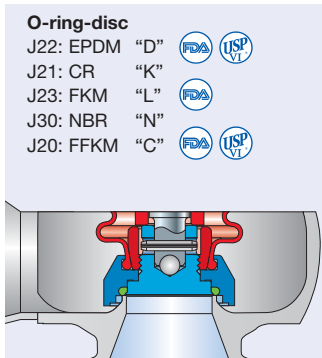
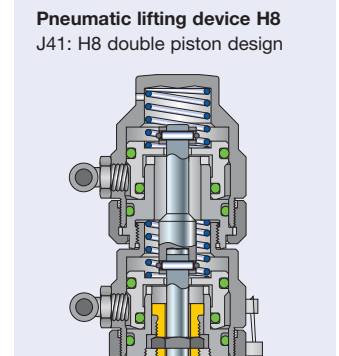
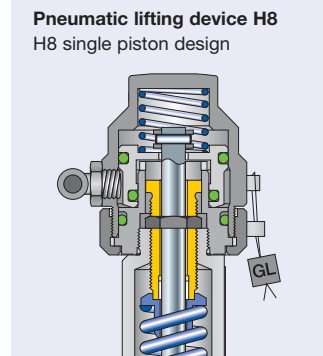
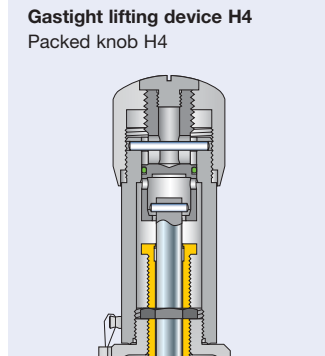
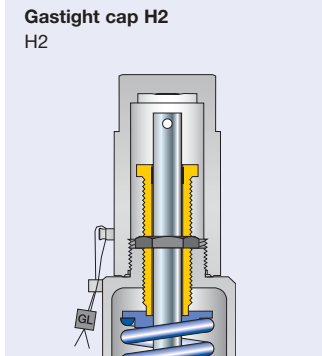
Metric Units			
Actual Orifice diameter d_0 [mm]		13	25
Actual Orifice area A_0 [mm ²]		133	491
Welded connections		Inlet a	
	PN	16	16
Center to face	[mm]	-	-
Height – H4	H max. [mm]	-	-
Height – H8	H max. [mm]	-	-
double piston design			
Clamp connections		Inlet a	
	PN	16	16
Center to face	[mm]	29	44
Clamp diameter	d_{inner} [mm]	For varying clamp diameters please refer to page 00/11	
	d_{outer} [mm]		
Height – H4	H max. [mm]	206	303
Height – H8	H max. [mm]	234	311
double piston design			
Threaded connections		Inlet a	
	PN	16	16
Center to face	[mm]	40	48
Height – H4	H max. [mm]	217	304
Height – H8	H max. [mm]	245	312
double piston design			
Flanged connections		Inlet a	
	PN	16	16
Center to face	[mm]	45	51
Height – H4	H max. [mm]	222	310
Height – H8	H max. [mm]	250	318
double piston design			
Weight			
Weight	max. [kg]	1,6	3,7
US Units			
Actual Orifice diameter d_0 [inch]		0,512	0,984
Actual Orifice area A_0 [inch ²]		0,206	0,761
Welded connections		Inlet a	
	PN	16	16
Center to face	[inch]	-	-
Height – H4	H max. [inch]	-	-
Height – H8	H max. [inch]	-	-
double piston design			
Clamp connections		Inlet a	
	PN	16	16
Center to face	[inch]	1 ⁵ / ₃₂	1 ²³ / ₃₂
Clamp diameter	d_{inner} [inch]	For varying clamp diameters please refer to page 00/11	
	d_{outer} [inch]		
Height – H4	H max. [inch]	1 ⁵ / ₃₂	1 ²³ / ₃₂
Height – H8	H max. [inch]	8 ¹ / ₈	11 ¹⁵ / ₁₆
double piston design			
Threaded connections		Inlet a	
	PN	16	16
Center to face	[inch]	1 ⁹ / ₁₆	1 ⁷ / ₈
Height – H4	H max. [inch]	8 ¹⁷ / ₃₂	11 ³¹ / ₃₂
Height – H8	H max. [inch]	9 ²⁷ / ₃₂	12 ¹⁷ / ₃₂
double piston design			
Flanged connections		Inlet a	
	PN	16	16
Center to face	[inch]	1 ²⁵ / ₃₂	2
Height – H4	H max. [inch]	8 ³ / ₄	12 ⁷ / ₃₂
Height – H8	H max. [inch]	9 ²⁷ / ₃₂	12 ¹⁷ / ₃₂
double piston design			
Weight			
Weight	max. [lb]	3,527	8,157
		13	25
		133	491
		Outlet b	
		16	16
		81,5	91,5
		-	-
		-	-
		Outlet b	
		16	16
		52	60
		For varying clamp diameters please refer to page 00/11	
		-	-
		-	-
		Outlet b	
		16	16
		70	78
		-	-
		-	-
		Outlet b	
		16	16
		76	82
		-	-
		-	-
		0,512	0,984
		0,206	0,761
		Outlet b	
		16	16
		3 ⁷ / ₃₂	3 ¹⁹ / ₃₂
		-	-
		-	-
		Outlet b	
		16	16
		2 ¹ / ₁₆	2 ³ / ₈
		For varying clamp diameters please refer to page 00/11	
		-	-
		-	-
		Outlet b	
		16	16
		2 ³ / ₄	3 ¹ / ₁₆
		-	-
		-	-
		Outlet b	
		16	16
		3	3 ⁷ / ₃₂
		-	-
		-	-

Option codes for available connections

For detailed information about the available connections please refer to "How to use" on page 00/07

Connections					
	d ₀ [mm]	13		25	
	d ₀ [inch]	0,512		0,984	
Clamps					
		Option code inlet			
	DN	25		40	
For dimensions refer to page 00/07	SO	L79I16		L79I17	
	DO	I73I16		I73I17	
	NPS	1"	1 1/2"	1 1/2"	2"
	BO	I75I79	I75I80	I75I80	I75I81
	CO	L96I79	L96I80	L96I80	L96I81
		Option code outlet			
	DN	25		40	
	SO	L86A16		L86A17	
	DO	I74A16		I74A17	
	NPS	1 1/2"		2"	
	BO	I76A80		I76A81	
	CO	L97A80		L97A81	
Clamp connections suitable for NA-Connect available					
Threaded connections					
		Option code inlet			
Pipe standard	DN	25		40	
DIN 11850 / DIN 11866 Range A	00	-			
	GS	H85H34I16		H85H34I17	
	BS	H85H36I16		H85H36I17	
	GT	H85H54I16		H85H54I17	
	BT	H85H56I16		H85H56I17	
	GO	H85L75I16		H85L75I17	
	KO	H85L76I16		H85L76I17	
	GD	H85H60I16		H85H60I17	
	BD	H85H58I16		H85H58I17	
Pipe standard	DN	25		40	
DIN EN ISO 1127 / DIN 11866 Range B	GS	H86H34I16		H86H34I17	
	BS	H86H36I16		H86H36I17	
	GT	H86H54I16		H86H54I17	
	BT	H86H56I16		H86H56I17	
	GD	H86H60I16		H86H60I17	
	BD	H86H58I16		H86H58I17	
Pipe standard	NPS	1"	1 1/2"	1 1/2"	2"
BS 4825-1 DIN 11866 Range C	GS	H66H34I79	H66H34I80	H66H34I80	H66H34I81
	BS	H66H36I79	H66H36I80	H66H36I80	H66H36I81
	GT	H66H54I79	H66H54I80	H66H54I80	H66H54I81
	BT	H66H56I79	H66H56I80	H66H56I80	H66H56I81
Flange connections					
		Option code inlet			
Pipe standard	DN	25		40	
DIN 11850 / DIN 11866 Range A	NF	H85H71I16		H85H71I17	
	BF	H85H73I16		H85H73I17	
	NG	H85H75I16		H85H75I17	
	BG	H85H77I16		H85H77I17	
	TN	H85H78I16		H85H78I17	
	AF	H85L90I16		H85L90I17	
	AN	H85L92I16		H85L92I17	
	VG	H85I82I16		-	
	VH	H85I83I16		H85I83I17	
Pipe standard	DN	25		40	
DIN EN ISO 1127 / DIN 11866 Range B	NF	H86H71I16			
	BF	H86H73I16			
	NG	H86H75I16			
	BG	H86H77I16			
Pipe standard	NPS	1"	1 1/2"	1 1/2"	2"
BS 4825-1 DIN 11866 Range C	NF	H66H71I79	H66H71I80	H66H71I80	H66H71I81
	BF	H66H73I79	H66H73I80	H66H73I80	H66H73I81
	NG	H66H75I79	H66H75I80	H66H75I80	H66H75I81
	BG	H66H77I79	H66H77I80	H66H77I80	H66H77I81
		Option code outlet			
Pipe standard	DN	25		40	
DIN 11850 / DIN 11866 Range A	NF	A85H72A16		A85H72A17	
	BF	A85H74A16		A85H74A17	
	NG	A85H76A16		A85H76A17	
	BG	A85H78A16		A85H78A17	
	TN	A85L84A16		A85L84A17	
	AF	A85L91A16		A85L91A17	
	AN	A85L93A16		A85L93A17	
	VC	-			
	VE	-			
Pipe standard	DN	25		40	
DIN EN ISO 1127 / DIN 11866 Range B	NF	A86H72A16		A86H72A17	
	BF	A86H74A16		A86H74A17	
	NG	A86H76A16		A86H76A17	
	BG	A86H78A16		A86H78A17	
Pipe standard	NPS	1 1/2"		2"	
BS 4825-1 DIN 11866 Range C	NF	A84H72A80		A84H72A81	
	BF	A84H74A80		A84H74A81	
	NG	A84H76A80		A84H76A81	
	BG	A84H78A80		A84H78A81	

Available options



Type 483

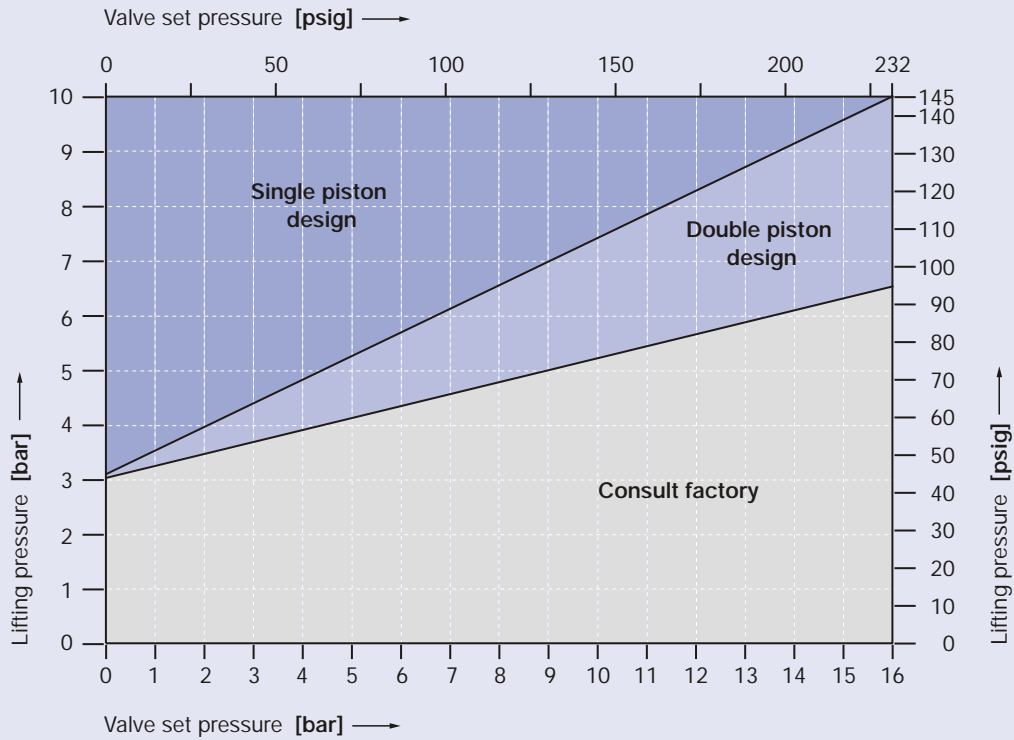
Selection chart H8

Depending on the set pressure and lifting pressure (air supply) a double piston lifting device (option code J41) may be required instead of a single piston. The chart below determines the required lifting device.

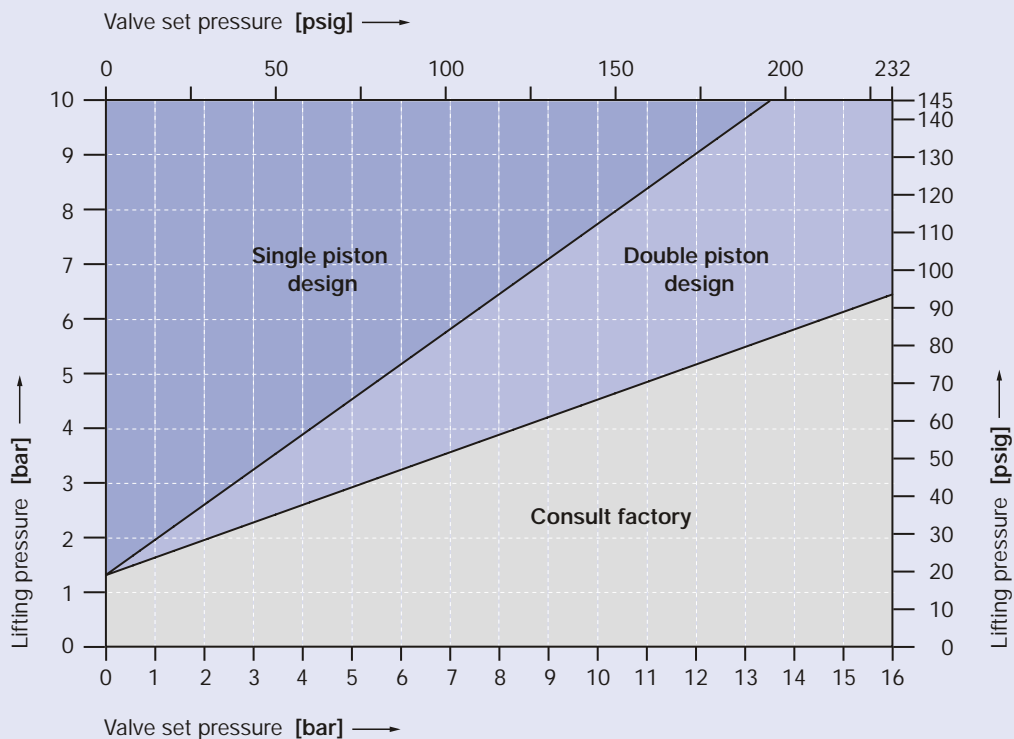
For information about this chart please refer to "How to use" on page 00/12.

Type 483

Selection chart lifting device H8, size 0. d_0 13 mm / 0,512 inch



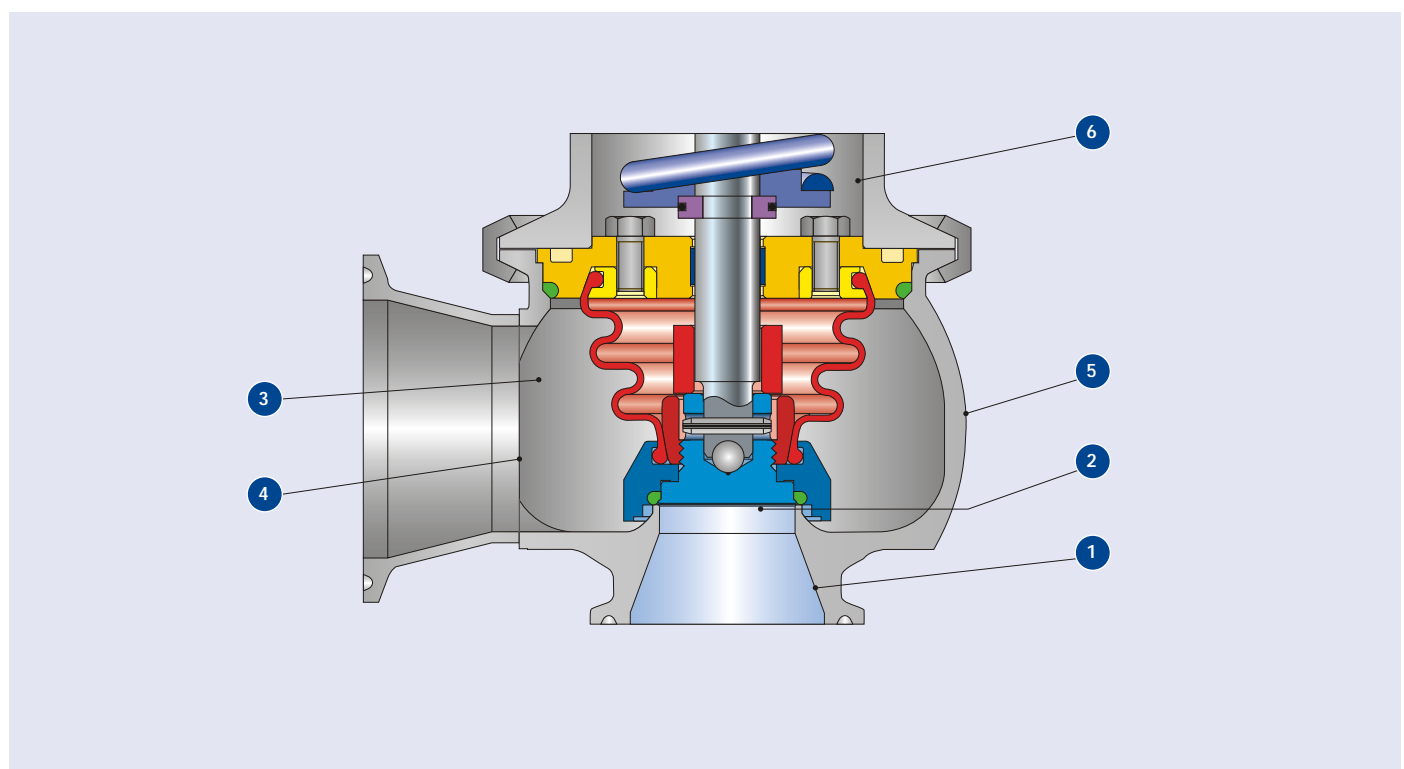
Selection chart lifting device H8, size I. d_0 25 mm / 0,984 inch



Surface quality

Surface quality			LESER Surface package			
Type of surface	Area		Option code	Clean finish	HyClean finish	Sterile finish
	Description	No.		B53	B54	B55
				R _a max.	R _a max.	R _a max.
			LESER Surface grade			
Product contact surface	Inlet	1	[μm]	M4	ME4	ME1
			[μinch]	0,750	0,750	0,375
	Bottom side of disc	2	[μm]	M4	ME4	ME1
			[μinch]	0,750	0,750	0,375
Blow off surface	Inside surface of outlet area	3	[μm]	M5	ME5	ME4
			[μinch]	1,500	1,500	0,750
	Welding seam	4	[μm]	M6	ME6	ME6
			[μinch]	3,000	3,000	3,000
Outer surface	Outside surface of body, bonnet and cap/lifting device	5	[μm]	M5	ME5	ME4
			[μinch]	1,500	1,500	0,750
Shielded surface	Surface never in contact with the product because it is shielded by the bellows	6		No definition		

If required surface deviates from standard specify No. and required LESER Surface Grade.



Type 483