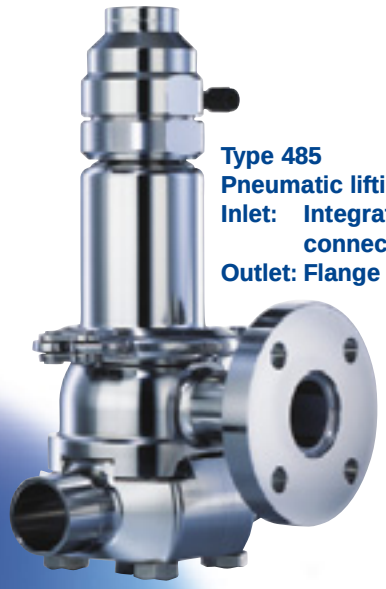
Type 485

Safety Relief Valves – spring loaded



Type 485
Pneumatic lifting device H8
Inlet: Integrated pipework connection Type 5034
Outlet: Flange connection

Type 485
Cap H2
Inlet: Integrated pipework connection Type 5034
Outlet: Welded end connection

Type 5034
Integrated pipework connection

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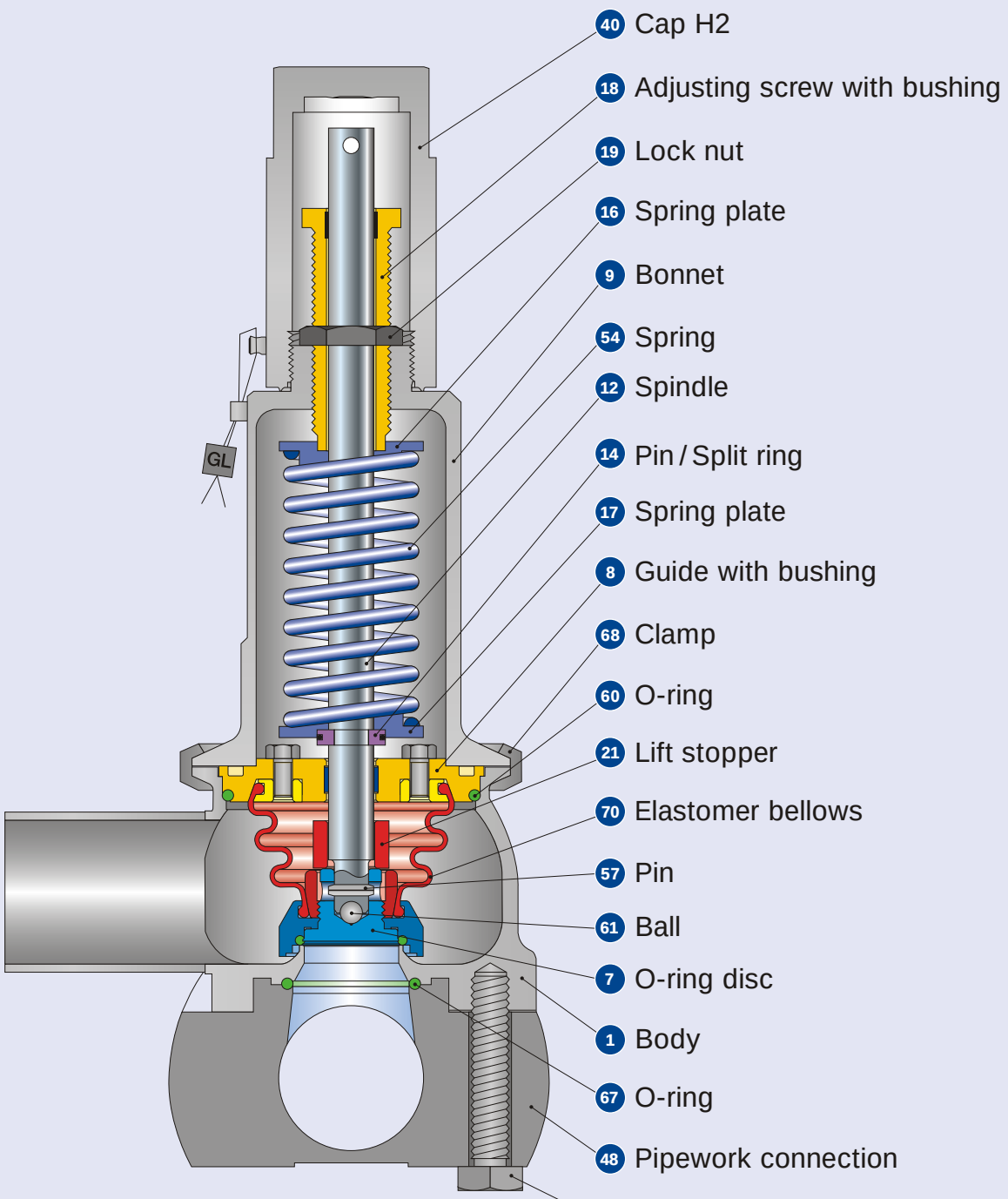
HyTight Assembly



Type 485 HyTight
Cap H2
Inlet: Integrated pipework connection Type 5034
Outlet: Welded end connection

HyTight Assembly

Materials

Item	Component	Remarks	Type 4854 HyTight
1	Body		1.4435 (BN 2)*) SA 479 316L
7	Disc	HyTight Assembly	1.4435 316L
7.1	Soft seal O-ring	"D" FDA USP VI	EPDM
		"K"	CR
		"L" FDA	FKM
		"N"	NBR
		"C" FDA USP VI	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	FDA USP VI	EPDM
61	Ball		1.4401 316
68	Clamp		1.4401 316
70	Elastomer bellows	FDA	EPDM
Integrated pipework connection Type 5034			
48	Pipework connection		1.4435 (BN 2)*) SA 479 316L
67	O-ring	FDA USP VI	EPDM
92	Screw		1.4401 316
–	Blind flange for pressure test		1.4404 316L

*) 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 – Numbering system

1 Article Number

1	2		3	4
485	4	.	774	8

1 Type 485
– Small to medium capacity
– High aseptic requirements

2 Material code

Code	Body material
4	1.4435 (316L)

3 Valve code
Identifies valve size and body material, refer to page 02/07.

Code	d_0
774	13
775	25

4 Code for lifting device

Code	Lifting device	
2	Screwed cap	H2
4	Packed knob	H4
8	Pneumatic lifting device	H8

4854.7748

Article Number

2 Set Pressure

Please state unit (in gauge)!

Please do not exceed pressure range mentioned in the spring charts.

For pressure range, refer to page 05/07

4 bar

Set Pressure

3 Connections

Inlet:

Type 4854.774x

Integrated pipework connection		
Article No.	Pipe standard	Size
5034.0991	DIN 11850	DN 25
5034.0994	ISO 2037	DN 25
5034.0998	DIN EN ISO 1127	DN 25

Type 4854.775x

Integrated pipework connection		
Article No.	Pipe standard	Size
5034.0992	DIN 11850	DN 40
5034.0993		DN 50
5034.0995	ISO 2037	DN 40
5034.0996		DN 50
5034.0999	DIN EN ISO 1127	DN 40
–		DN 50

Outlet:

Standard outlet is butt-welded end.
If another connection is required, state in writing, please.

A85L83A16

Connections

4 Options

Type 485			Option code
• O-ring-disc			
Standard:	EPDM	"D"	J22
Option:	CR	"K"	J21
	FKM	"L"	J23
	NBR	"N"	J30
	FFKM	"C"	J20
• Adaptor for lift indicator Bonnet			J38
• Lift indicator			J93
• Pneumatic lifting device H8 Double piston design			J41
• Bellows	FFKM	"C"	S70
• LESER Surface package HyClean finish			B69
Sterile finish			B70

For detailed information refer to page 05/15

Option code applies only if not standard

5 Documentation

Please select requested documentation:

Inspections, tests:	Option code
DIN EN 10204-3.2: TÜV-Nord Certificate for test pressure	M33
LESER CGA (Certificate for Global Application)	H03

- Inspection certificate 3.1 acc. to DIN EN 10204
- Declaration of conformity acc. to PED 97/23/EC

Material test certificate:
DIN EN 10204-3.1

Part	Option code
Body	H01
Bonnet	L30
Cap / lever cover	L31
Disc	L23
Certificate of surface quality	N04

6 Code and Medium

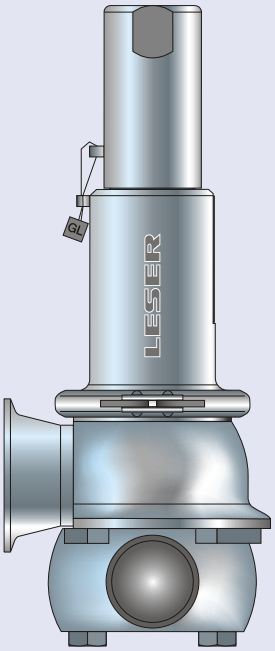
1	2
2	. 0

1 Code
1. ASME Section VIII
2. CE / VdTUEV
3. ASME Section VIII + CE / VdTUEV

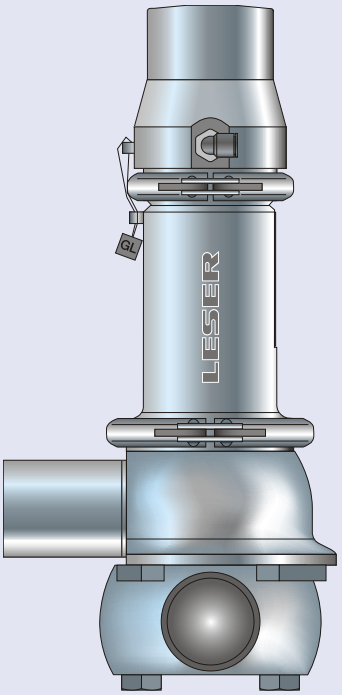
2 Medium
.1 Gases
.2 Liquids
.3 Steam
.0 Steam / Gases / Liquids (valid only for CE / VdTUEV)

J41	J93	H01	L30	2.0
Options		Documentation		Code and Medium

How to order – Article numbers

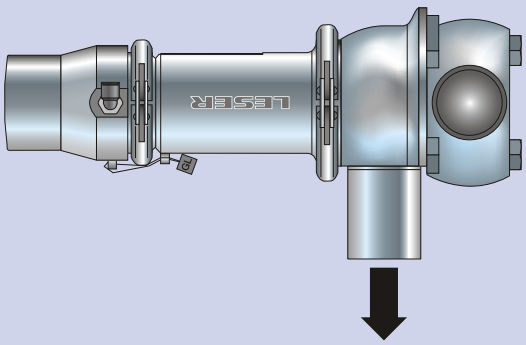


Type 485
Cap H2
Inlet: Integrated pipework connection Type 5034
Outlet: Clamp connection



Type 485
Pneumatic lifting device H8
Inlet: Integrated pipework connection Type 5034
Outlet: Welded end connection

Certified for horizontal fitting.



Attention! Only with **outlet**
in downward direction.

How to order – Article numbers

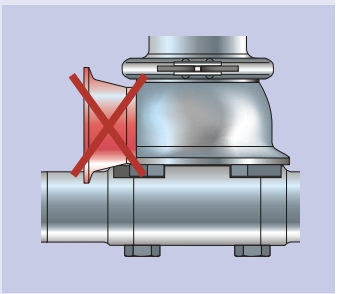
Article numbers

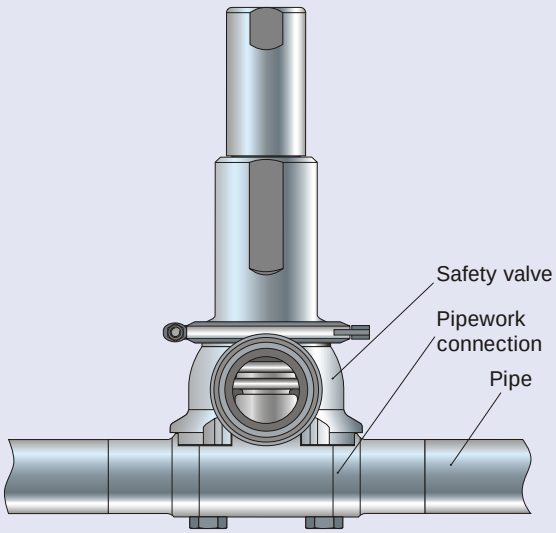
Actual Orifice diameter d_0 [mm]		13	25	
Actual Orifice area A_0 [mm²]		133	491	
Actual Orifice diameter d_0 [inch]		0,512	0,984	
Actual Orifice area A_0 [inch²]		0,206	0,761	
O-ring material		EPDM "D" J22	EPDM "D" J22	
		CR "K" J21	CR "K" J21	
		FKM "L" J23	FKM "L" J23	
		NBR "N" J30	NBR "N" J30	
		FFKM "C" J20	FFKM "C" J20	
Body material: 1.4435 (316L)				
Bonnet closed	**H2**	Art.-No. **4854.**	**7742**	**7752**
	H4	Art.-No. **4854.**	**7744**	**7754**
	H8	Art.-No. **4854.**	**7748**	**7758**
		p [bar] S/G/L	**0,3 – 16**	**0,1 – 16**
		p [psig] S/G/L	**4,4 – 232**	**1,5 – 232**

Integrated pipework connection material: 1.4435 (316L)		**Please order separately**		
	DN	**25**	**40**	**50**
DIN 11850	Art.-No. **5034.**	**0991**	**0992**	**0993**
ISO 2037	Art.-No. **5034.**	**0994**	**0995**	**0996**
DIN EN ISO 1127	Art.-No. **5034.**	**0998**	**0999**	**–**

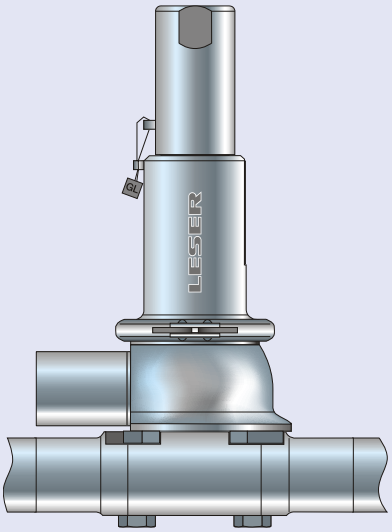
Blind flange for pressure test: 1.4404 (316L)	**Please order separately**	
Art.-No.	**138.8949.9000**	**138.8749.9000**

Fitting information





Type 5034
Installation: Integrated pipework connection, safety valve



Type 5034
If the outlet has the same direction like the pipe, the Clamp is not possible

Pressure temperature ratings

Metric Units

Actual Orifice diameter d_0 [mm]		13		25	
Actual Orifice area A_0 [mm²]		133		491	
Body material: 1.4435 (316L)					
Minimum set pressure	p [bar] S/G/L	0,3		0,1	
Maximum set pressure	p [bar] S/G/L	16		16	
Temperature range[*)]		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 [inch²]		0,206		0,761	
Body material: 1.4435 (316L)					
Minimum set pressure	p [psig] S/G/L	4,4		1,5	
Maximum set pressure	p [psig] S/G/L	232		232	
Temperature range[*)]		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

[*)] The temperature is limited by the soft seal material. Refer to table “Soft seal selection” on page 99/11.