Type 526

Type 526
Packed lever H4
Closed bonnet
Conventional design

Flanged Safety Relief Valves – spring loaded

Contents **Chapter/Page**

Type 526

LESER

Article numbers – Overview

Article numbers

Material	WCB	CF8M	WC6	LCB	WCB	CF8M	WC6	LCB	WCB	CF8M	WC6	LCB
	1.0619	1.4408	1.7357		1.0619	1.4408	1.7357		1.0619	1.4408	1.7357	
Flange class	**150 x 150**				**300L x 150**				**300 x 150**			
Valve size	1 D 2				1 D 2				1 D 2			
D	**5262. 001**¤	**5264. 010**¤	–	**5263. 500**¤	Use 1 D 2 300 x 150				**5262. 002**¤	**5264. 011**¤	**5267. 006**¤	**5263. 501**¤
	1 E 2				1 E 2				1 E 2			
E	**5262. 015**¤	**5264. 024**¤	–	**5263. 505**¤	Use 1 E 2 300 x 150				**5262. 016**¤	**5264. 025**¤	**5267. 020**¤	**5263. 506**¤
	1 1/2 F 2				1 1/2 F 2				1 1/2 F 2			
F	**5262. 029**¤	**5264. 039**¤	–	**5263. 510**¤	**5262. 030**¤	**5264. 040**¤	–	**5263. 511**¤	**5262. 031**¤	**5264. 041**¤	**5267. 035**¤	**5263. 512**¤
	1 1/2 G 3				1 1/2 G 3				1 1/2 G 3			
G	**5262. 045**¤	**5264. 110**¤	–	**5263. 516**¤	**5262. 046**¤	**5264. 111**¤	–	**5263. 517**¤	**5262. 047**¤	**5264. 112**¤	**5267. 052**¤	**5263. 518**¤
Flange class	**150 x 150**				**300L x 150**				**300 x 150**			
Valve size	1 1/2 H 3				1 1/2 H 3				2 H 3			
H	**5262. 142**¤	**5264. 152**¤	–	**5263. 523**¤	**5262. 143**¤	**5264. 153**¤	–	**5263. 524**¤	**5262. 144**¤	**5264. 154**¤	**5267. 148**¤	**5263. 525**¤
	2 J 3				2 J 3				3 J 4			
J	**5262. 162**¤	**5264. 196**¤	–	**5263. 529**¤	**5262. 163**¤	**5264. 197**¤	–	**5263. 530**¤	**5262. 164**¤	**5264. 198**¤	**5267. 168**¤	**5263. 531**¤
	3 K 4				3 K 4				3 K 4			
K	**5262. 202**¤	**5264. 211**¤	–	**5263. 535**¤	Use 3 K 4 300 x 150				**5262. 203**¤	**5264. 212**¤	**5267. 207**¤	**5263. 536**¤
Flange class	**150 x 150**				**300L x 150**				**300 x 150**			
Valve size	3 L 4				3 L 4				4 L 6			
L	**5262. 232**¤	**5264. 242**¤	–	**5263. 540**¤	**5262. 233**¤	**5264. 243**¤	–	**5263. 541**¤	**5262. 234**¤	**5264. 244**¤	**5267. 238**¤	**5263. 542**¤
	4 M 6				4 M 6				4 M 6			
M	**5262. 580**¤	**5264. 587**¤	–	**5263. 546**¤	Use 4 M 6 300 x 150				**5262. 581**¤	**5264. 588**¤	**5267. 584**¤	**5263. 547**¤
	4 N 6				4 N 6				4 N 6			
N	**5262. 590**¤	**5264. 597**¤	–	**5263. 550**¤	Use 4 N 6 300 x 150				**5262. 591**¤	**5264. 598**¤	**5267. 594**¤	**5263. 551**¤
	4 P 6				4 P 6				4 P 6			
P	**5262. 645**¤	**5264. 653**¤	–	**5263. 554**¤	**5262. 646**¤	**5264. 654**¤	–	**5263. 555**¤	**5262. 647**¤	**5264. 655**¤	**5267. 650**¤	**5263. 556**¤
	6 Q 8				6 Q 8				6 Q 8			
Q	**5262. 657**¤	**5264. 662**¤	–	**5263. 559**¤	Use 6 Q 8 300 x 150				**5262. 658**¤	**5264. 663**¤	**5267. 660**¤	**5263. 560**¤
	6 R 8				6 R 8				6 R 10			
R	**5262. 665**¤	**5264. 671**¤	–	**5263. 562**¤	**5262. 666**¤	**5264. 672**¤	**5267. 669**¤	**5263. 563**¤	**5262. 667**¤	**5264. 673**¤	–	**5263. 564**¤
	8 T 10				8 T 10				8 T 10			
T	**5262. 675**¤	**5264. 678**¤	–	**5263. 566**¤	Use 8 T 10 300 x 150				**5262. 676**¤	**5264. 679**¤	**5267. 677**¤	**5263. 567**¤

Article numbers – Overview

Article numbers

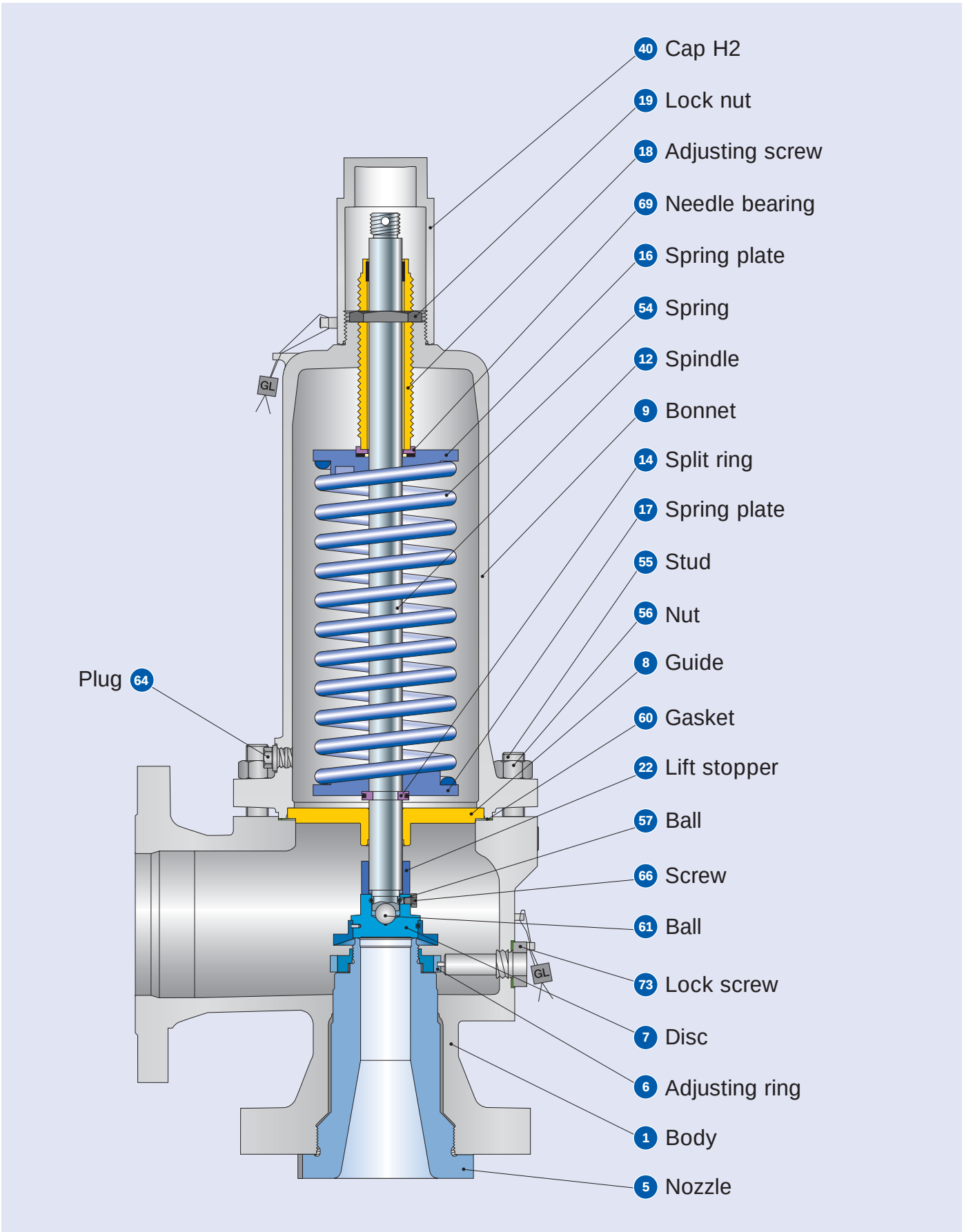
Material	WCB	CF8M	WC6	LCB	WCB	CF8M	WC6	LCB	WCB	CF8M	WC6	LCB	WCB	CF8M	WC6	LCB
	1.0619	1.4408	1.7357		1.0619	1.4408	1.7357		1.0619	1.4408	1.7357		1.0619	1.4408	1.7357	
Flange class	**600 x 150**				**900 x 300**				**1500 x 300**				**2500 x 300**			
Valve size	1 D 2				1 1/2 D 2				1 1/2 D 2				1 1/2 D 3			
D	**5262. 003¤**	**5264. 012¤**	**5267. 007¤**	**5263. 502¤**	Use 1 1/2 D 2 1500 x 300				**5262. 004¤**	**5264. 013¤**	**5267. 008¤**	**5263. 503¤**	**5262. 005¤**	**5264. 014¤**	**5267. 009¤**	**5263. 504¤**
	1 E 2				1 1/2 E 2				1 1/2 E 2				1 1/2 E 3			
E	**5262. 017¤**	**5264. 026¤**	**5267. 021¤**	**5263. 507¤**	Use 1 1/2 E 2 1500 x 300				**5262. 018¤**	**5264. 027¤**	**5267. 022¤**	**5263. 508¤**	**5262. 019¤**	**5264. 028¤**	**5267. 023¤**	**5263. 509¤**
	1 1/2 F 2				1 1/2 F 3				1 1/2 F 3				1 1/2 F 3			
F	**5262. 032¤**	**5264. 042¤**	**5267. 036¤**	**5263. 513¤**	Use 1 1/2 F 3 1500 x 300				**5262. 033¤**	**5264. 043¤**	**5267. 037¤**	**5263. 514¤**	**5262. 034¤**	**5264. 044¤**	**5267. 038¤**	**5263. 515¤**
	1 1/2 G 3				1 1/2 G 3				2 G 3				2 G 3			
G	**5262. 048¤**	**5264. 113¤**	**5267. 053¤**	**5263. 519¤**	**5262. 049¤**	**5264. 114¤**	**5267. 054¤**	**5263. 520¤**	**5262. 050¤**	**5264. 115¤**	**5267. 055¤**	**5263. 521¤**	**5262. 051¤**	**5264. 116¤**	**5267. 056¤**	**5263. 522¤**
Flange class	**600 x 150**				**900 x 150**				**1500 x 300**							
Valve size	2 H 3				2 H 3				2 H 3							
H	**5262. 145¤**	**5264. 155¤**	**5267. 149¤**	**5263. 526¤**	**5262. 146¤**	**5264. 156¤**	**5267. 150¤**	**5263. 527¤**	**5262. 147¤**	**5264. 157¤**	**5267. 151¤**	**5263. 528¤**				
	3 J 4				3 J 4				3 J 4							
J	**5262. 165¤**	**5264. 199¤**	**5267. 169¤**	**5263. 532¤**	**5262. 166¤**	**5264. 200¤**	**5267. 170¤**	**5263. 533¤**	**5262. 167¤**	**5264. 201¤**	**5267. 171¤**	**5263. 534¤**				
	3 K 4				3 K 6				3 K 6							
K	**5262. 204¤**	**5264. 213¤**	**5267. 208¤**	**5263. 537¤**	**5262. 205¤**	**5264. 214¤**	**5267. 209¤**	**5263. 538¤**	**5262. 206¤**	**5264. 215¤**	**5267. 210¤**	**5263. 539¤**				
Flange class	**600 x 150**				**900 x 150**				**1500 x 150**							
Valve size	4 L 6				4 L 6				4 L 6							
L	**5262. 235¤**	**5264. 245¤**	**5267. 239¤**	**5263. 543¤**	**5262. 236¤**	**5264. 246¤**	**5267. 240¤**	**5263. 544¤**	**5262. 237¤**	–	**5267. 241¤**	**5263. 545¤**				
	4 M 6				4 M 6											
M	**5262. 582¤**	**5264. 589¤**	**5267. 585¤**	**5263. 548¤**	**5262. 583¤**	–	**5267. 586¤**	**5263. 549¤**								
	4 N 6				4 N 6											
N	**5262. 592¤**	**5264. 599¤**	**5267. 595¤**	**5263. 552¤**	**5262. 593¤**	–	**5267. 596¤**	**5263. 553¤**								
	4 P 6				4 P 6											
P	**5262. 648¤**	**5264. 656¤**	**5267. 651¤**	**5263. 557¤**	**5262. 649¤**	–	**5267. 652¤**	**5263. 558¤**								
	6 Q 8															
Q	**5262. 659¤**	**5264. 664¤**	**5267. 661¤**	**5263. 561¤**												
	6 R 10															
R	**5262. 668¤**	**5264. 674¤**	**5267. 670¤**	**5263. 565¤**												
	8 T 10															
T	–	–	–	–												

¤) Please add code for the required cap or lifting device.

Code for lifting device	H2	H3	H4	H3
Bonnet	**closed**	**closed**	**closed**	**open**
WCB 1.0619, WC6 1.7357, LCB	**2**	**3**	**4**	**5**
CF8M 1.4408	**2**	–	**4**	–

LESER

Conventional design



Type 526

Conventional design

Materials

Item	Component	Standard Service Type 5262 Trim: Standard	Corrosive Service Type 5264 Trim: Standard	Type 5267 Trim: Standard	Type 5263 Trim: Standard
1	**Body**	1.0619 SA 216 WCB	1.4408 SA 315 CF8M	1.7357 SA 217 WC6	 SA 352 LCB
5	Nozzle[1)]	1.4404 316 L	1.4404 316L	1.4404 stellited 316L stellited	1.4404 316L
6	Adjusting ring	1.4408 CF8M	1.4408 CF8M	1.4404 316L	1.4408 CF8M
7	Disc	1.4122 Hardened stainless steel	1.4404 stellited 316L stellited	1.4122 Hardened stainless steel	1.4122 Hardened stainless steel
8	Guide	1.4404 316 L	1.4404 316L	1.4404 316L	1.4404 316L
9	**Bonnet**	1.0619 SA 216 WCB	1.4404, 1.4571 SA 479 316L, 316Ti	1.7357 SA 217 WC6	 SA 352 LCB
12	Spindle	1.4021 420	1.4021 420	1.4021 420	1.4021 420
14	Split ring	1.4104 Chrome steel	1.4404 316L	1.4104 Chrome steel	1.4104 Chrome steel
16 / 17	Spring plate	1.0718 Steel	1.4404 316L	1.0718 Steel	1.0718 Steel
18	Adjusting screw	1.4104 Chrome steel	1.4404 tenifer 316L tenifer	1.4104 Chrome steel	1.4104 Chrome steel
	with bushing	PTFE with 15% Glas – " –	PTFE 15% Glas – " –	PTFE 15% Glas – " –	PTFE 15% Glas – " –
19	Lock nut	1.0718 Steel	1.4404 316L	1.0718 Steel	1.0718 Steel
22	Lift stopper	1.4404 316L	1.4404 316L	1.4404 316L	1.4404 316L
40	Cap H2	1.0718 Steel	1.4404 316L	1.0718 Steel	1.0718 Steel
54	Spring	1.8159 High temp. alloy steel	1.4310 Stainless steel	1.8159 High temp. alloy steel	1.8159 High temp. alloy steel
55	Stud	1.4401 B8M	1.4401 B8M	1.4401 B8M	1.4401 B8M
56	Nut	1.4401 8M	1.4401 8M	1.4401 8M	1.4401 8M
57	Ball	1.4401 316	1.4401 316	1.4401 316	1.4401 316
60	Gasket	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316
61	Ball	1.3541 Hardened stainless steel	1.4401 316	1.3541 Hardened stainless steel	1.3541 Hardened stainless steel
64	Plug	Steel – " –	1.4401 B8M	Steel – " –	Steel – " –
66	Screw	1.4401 B8M	1.4401 B8M	1.4401 B8M	1.4401 B8M
69	Needle bearing	1.4404 316L	1.4404 316 L	1.4404 316L	1.4404 316L
73	Lock screw	1.4404 8M	1.4404 8M	1.4404 8M	1.4404 8M

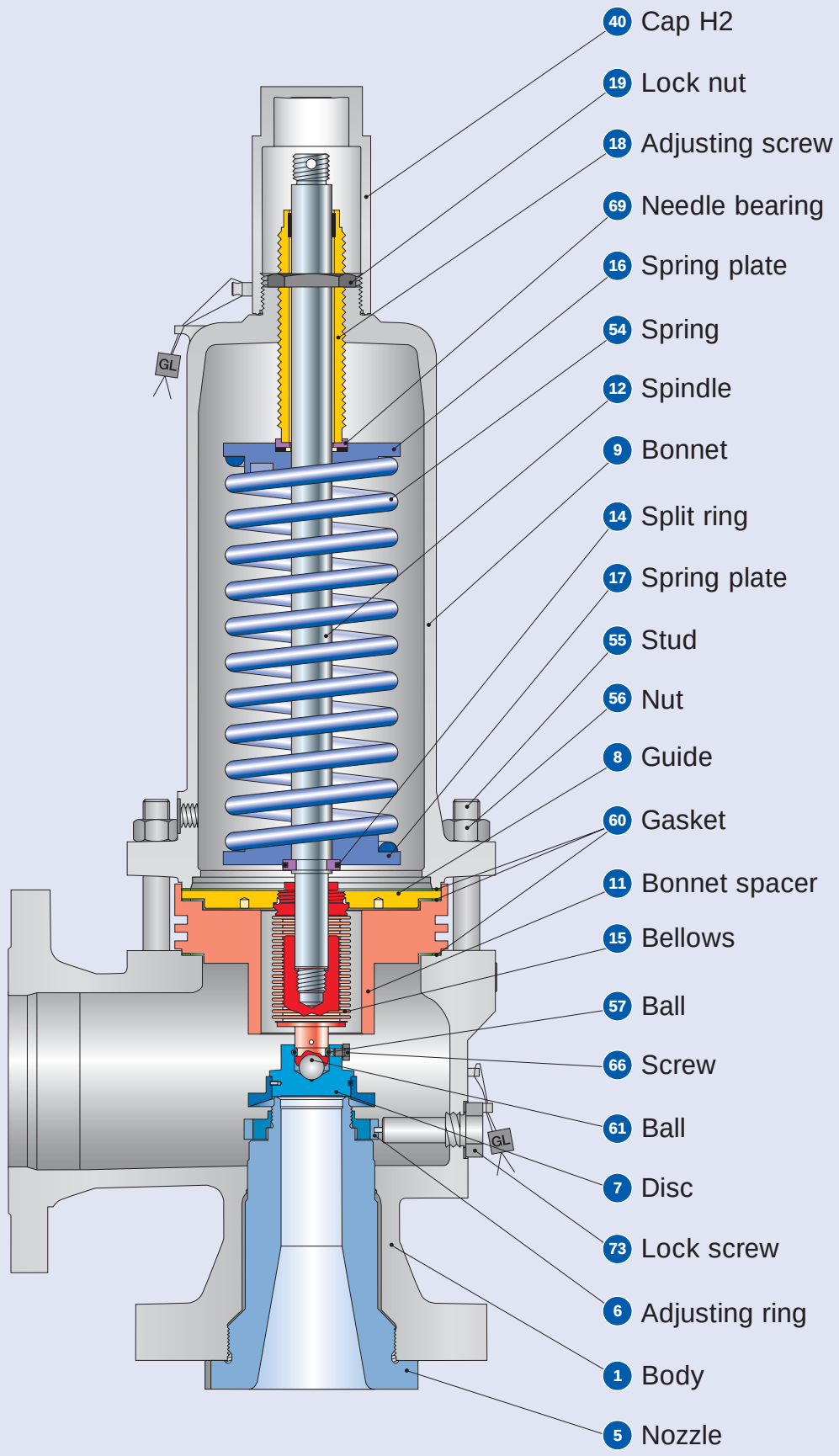
[1)] Stellited sealing surfaces please refer to page 99/06

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

Special materials:
Body and trim available in various materials (Monel®, Hastelloy® ...).
For nozzle and disc machined from the bar a short lead time is possible.

LESER

Balanced bellows design



Balanced bellows design

Materials

Item	Component	Standard Service Type 5262 Trim: Standard	Corrosive Service Type 5264 Trim: Standard	Type 5267 Trim: Standard	Type 5263 Trim: Standard
1	**Body**	1.0619 SA 216 WCB	1.4408 SA 315 CF8M	1.7357 SA 217 WC6	 SA 352 LCB
5	Nozzle[2)]	1.4404 316 L	1.4404 316L	1.4404 stellited 316L stellited	1.4404 316L
6	Adjusting ring	1.4408 CF8M	1.4408 CF8M	1.4404 316L	1.4408 CF8M
7	Disc	1.4122 Hardened stainless steel	1.4404 stellited 316L stellited	1.4122 Hardened stainless steel	1.4122 Hardened stainless steel
8	Guide	1.4404 316 L	1.4404 316L	1.4404 316L	1.4404 316L
9	**Bonnet**	1.0619 SA 216 WCB	1.4404, 1.4571 SA 479 316L, 316Ti	1.7357 SA 217 WC6	 SA 352 LCB
	Valve size 6 R 10, 8T10	1.0305 Steel	1.4571 SA 479 316Ti	1.0305 Steel	1.0305 Steel
11	Bonnet spacer[1)]	1.0460 Carbon steel	1.4404 SA 479 316L	1.4404 SA 479 316L	1.4404 316L
12	Spindle	1.4021 420	1.4021 420	1.4021 420	1.4021 420
14	Split ring	1.4104 Chrome steel	1.4404 316L	1.4104 Chrome steel	1.4104 Chrome steel
15	Bellows	1.4571 316 Ti	1.4571 316 Ti	1.4571 316 Ti	1.4571 316 Ti
16 / 17	Spring plate	1.0718 Steel	1.4404 316L	1.0718 Steel	1.0718 Steel
18	Adjusting screw	1.4104 Chrome steel	1.4404 tenifer 316L tenifer	1.4104 Chrome steel	1.4104 Chrome steel
	with bushing	PTFE with 15% Glas – " –	PTFE 15% Glas – " –	PTFE 15% Glas – " –	PTFE 15% Glas – " –
19	Lock nut	1.0718 Steel	1.4404 316L	1.0718 Steel	1.0718 Steel
22	Lift stopper	1.4404 316L	1.4404 316L	1.4404 316L	1.4404 316L
40	Cap H2	1.0718 Steel	1.4404 316L	1.0718 Steel	1.0718 Steel
54	Spring	1.8159 High temp. alloy steel	1.4310 Stainless steel	1.8159 High temp. alloy steel	1.8159 High temp. alloy steel
55	Stud	1.4401 B8M	1.4401 B8M	1.7709 B16	1.4401 B8M
56	Nut	1.4401 8M	1.4401 8M	1.7258 7M	1.4401 8M
57	Ball	1.4401 316	1.4401 316	1.4401 316	1.4401 316
60	Gasket	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316	Graphite / 1.4401 Graphite / 316
61	Ball	1.3541 Hardened stainless steel	1.4401 316	1.3541 Hardened stainless steel	1.3541 Hardened stainless steel
66	Screw	1.4401 B8M	1.4401 B8M	1.4401 B8M	1.4401 B8M
69	Needle bearing	1.4404 316L	1.4404 316 L	1.4404 316L	1.4404 316L
73	Lock screw	1.4404 8M	1.4404 8M	1.4404 8M	1.4404 8M

[1)] Valve size 6 R 10 and 8 T 10 without bonnet spacer

[2)] Stellited sealing surfaces please refer to page 99/06

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

Special materials:
Body and trim available in various materials (Monel®, Hastelloy® ...).
For nozzle and disc machined from the bar a short lead time is possible.

Type 526

Dimensions

Metric Units

Safety valve dimensions [mm]			a	b	s	$H_{max.}$	$H_{max.}$ with bellows	a	b	s	$H_{max.}$	$H_{max.}$ with bellows	a	b	s	$H_{max.}$	$H_{max.}$ with bellows
Support brackets [mm]			A	B	C	D	E	A	B	C	D	E	A	B	C	D	E
Flange rating class			**150 x 150**					**300L x 150**					**300 x 150**				
Valve size			1 D 2					1 D 2					1 D 2				
D	d_0 [mm]	**14**	105	114	30	440	465	Please see 1 D 2 300 x 150					105	114	30	440	465
	A_0 [mm²]	**154**	130	–	Ø 14	132	16						130	–	Ø 14	132	16
Valve size			1 E 2					1 E 2					1 E 2				
E	d_0 [mm]	**14**	105	114	30	440	465	Please see 1 E 2 300 x 150					105	114	30	440	465
	A_0 [mm²]	**154**	130	–	Ø 14	132	16						130	–	Ø14	132	16
Valve size			1 1/2 F 2					1 1/2 F 2					1 1/2 F 2				
F	d_0 [mm]	**18**	124	121	32	536	561	124	121	32	536	561	124	152	35	536	561
	A_0 [mm²]	**254**	162	–	Ø 14	148	16	162	–	Ø 14	148	16	162	–	Ø 14	148	16
Valve size			1 1/2 G 3					1 1/2 G 3					1 1/2 G 3				
G	d_0 [mm]	**22,5**	124	121	32	536	574	124	121	32	536	574	124	152	35	536	574
	A_0 [mm²]	**398**	162	–	Ø 14	148	16	162	–	Ø 14	148	16	162	–	Ø 14	148	16
Flange rating class			**150 x 150**					**300L x 150**					**300 x 150**				
Valve size			1 1/2 H 3					1 1/2 H 3					2 H 3				
H	d_0 [mm]	**28,3**	130	124	38	542	580	130	124	38	542	580	130	124	43	666	692
	A_0 [mm²]	**629**	162	–	Ø 14	155	16	162	–	Ø 14	155	16	184	110	Ø 14	177	16
Valve size			2 J 3					2 J 3					2 J 3				
J	d_0 [mm]	**36**	137	124	49	673	722	137	124	49	673	722	184	181	49	786	824
	A_0 [mm²]	**1018**	184	110	Ø 14	184	16	184	110	Ø 14	184	16	238	140	Ø 18	234	25
Valve size			3 K 4					3 K 4					3 K 4				
K **WCB, LCB, CF8M (WC6)**	d_0 [mm]	**43**	156	162	49	758	796	Please see 3 K 4 300 x 150					156	162	49	758	796
	A_0 [mm²]	**1452**	238	140	Ø 18	206	25						238	140	Ø 18	206	25
WC6																	
Flange rating class			**150 x 150**					**300L x 150**					**300 x 150**				
Valve size			3 L 4					3 L 4					4 L 6				
L	d_0 [mm]	**53,5**	156	165	49	758	796	156	165	49	758	796	179	181	49	853	886
	A_0 [mm²]	**2248**	238	140	Ø 18	206	25	238	140	Ø 18	206	25	278	160	Ø 18	262	25
Valve size			4 M 6					4 M 6					4 M 6				
M	d_0 [mm]	**60,3**	178	184	48	852	885	Please see 4 M 6 300 x 150					178	184	48	852	885
	A_0 [mm²]	**2856**	278	160	Ø 18	260	25						278	160	Ø 18	260	25
Valve size			4 N 6					4 N 6					4 N 6				
N	d_0 [mm]	**66**	197	210	48	871	904	Please see 4 N 6 300 x 150					197	210	48	871	904
	A_0 [mm²]	**3421**	278	160	Ø 18	280	25						278	160	Ø 18	280	25
Valve size			4 P 6					4 P 6					4 P 6				
P	d_0 [mm]	**80**	181	229	48	855	888	181	229	48	855	888	225	254	62	1079	1138
	A_0 [mm²]	**5027**	278	160	Ø 18	262	25	278	160	Ø 18	262	25	370	210	Ø 18	306	25
Valve size			6 Q 8					6 Q 8					6 Q 8				
Q	d_0 [mm]	**105,5**	240	241	68	1120	1200	Please see 6 Q 8 300 x 150					240	241	68	1120	1200
	A_0 [mm²]	**8742**	370	210	Ø 18	346	25						370	210	Ø 18	346	25
Valve size			6 R 8					6 R 8					6 R 10				
R	d_0 [mm]	**126,5**	240	241	68	1120	1200	240	241	68	1120	1200	240	267	68	1426	1426
	A_0 [mm²]	**12568**	370	210	Ø 18	346	25	370	210	Ø 18	346	25	470	150	Ø 18	460	25
Valve size			8 T 10					8 T 10					8 T 10				
T	d_0 [mm]	**161,5**	276	279	62	1462	1462	Please see 8 T 10 300 x 150					276	279	62	1462	1462
	A_0 [mm²]	**20485**	470	150	Ø 18	497	25						470	150	Ø 18	497	25

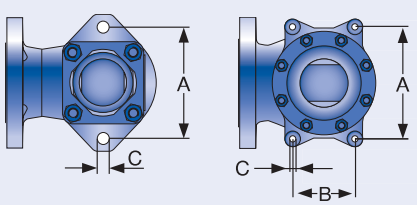
d_0 = Actual orifice diameter
A_0 = Actual orifice area

a	b	s	$H_{max.}$	$H_{max.}$ with bellows
A	B	C	D	E
600 x 150				
1 D 2				
105	114	30	440	465
130	–	Ø 14	132	16
1 E 2				
105	114	30	440	465
130	–	Ø 14	132	16
1 1/2 F 2				
124	152	35	536	561
162	–	Ø 14	148	16
1 1/2 G 3				
124	152	35	536	574
162	–	Ø 14	148	16
600 x 150				
2 H 3				
154	162	56	691	717
184	110	Ø 14	202	16
3 J 4				
184	181	49	786	824
238	140	Ø 18	234	25
3 K 4				
184	181	49	786	824
238	140	Ø 18	234	25
156	162	49	758	796
238	140	Ø 18	206	25
600 x 150				
4 L 6				
179	203	57	853	886
278	160	Ø 18	262	25
4 M 6				
178	203	56	852	885
278	160	Ø 18	260	25
4 N 6				
197	222	72	871	904
278	160	Ø 18	280	25
4 P 6				
225	254	62	1079	1138
370	210	Ø 18	306	25
6 Q 8				
240	241	68	1120	1200
370	210	Ø 18	346	25
6 R 10				
240	267	68	1426	1426
470	150	Ø 18	460	25
		–		
		–		
		–		

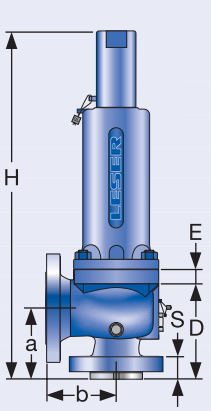
a	b	s	$H_{max.}$	$H_{max.}$ with bellows
A	B	C	D	E
900 x 300				
1 1/2 D 2				
Please see 1 1/2 D 2 1500 x 300				
1 1/2 E 2				
Please see 1 1/2 E 2 1500 x 300				
1 1/2 F 3				
Please see 1 1/2 F 3 1500 x 300				
1 1/2 G 3				
124	165	44	560	573
162	–	Ø 14	174	16
900 x 150				
2 H 3				
154	162	56	691	717
184	110	Ø 14	202	16
3 J 4				
184	181	65	786	824
238	140	Ø 18	234	25
3 K 6				
198	216	67	880	880
278	160	Ø 18	288	25
900 x 150				
4 L 6				
197	222	72	871	904
278	160	Ø 18	280	25
4 M 6				
197	222	72	871	904
278	160	Ø 18	280	25
4 N 6				
197	222	72	871	904
278	160	Ø 18	280	25
4 P 6				
225	254	62	1079	1138
370	210	Ø 18	306	25

a	b	s	$H_{max.}$	$H_{max.}$ with bellows
A	B	C	D	E
1500 x 300				
1 1/2 D 2				
105	140	44	517	542
162	–	Ø 14	129	16
1 1/2 E 2				
105	140	44	517	542
162	–	Ø 14	129	16
1 1/2 F 3				
124	165	44	560	560
162	–	Ø 14	174	16
2 G 3				
156	172	68	688	705
184	110	Ø 14	198	16
1500 x 300				
2 H 3				
154	162	56	691	717
184	110	Ø 14	202	16
3 J 4				
184	181	65	786	824
238	140	Ø 18	234	25
3 K 6				
197	216	65	879	879
278	160	Ø 18	287	25
1500 x 150				
4 L 6				
197	222	72	871	904
278	160	Ø 18	280	25

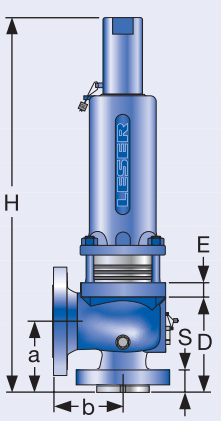
a	b	s	$H_{max.}$	$H_{max.}$ with bellows
A	B	C	D	E
2500 x 300				
1 1/2 D 3				
140	178	57	576	576
162	–	Ø 14	189	16
1 1/2 E 3				
140	178	57	576	576
162	–	Ø 14	189	16
1 1/2 F 3				
140	178	57	576	576
162	–	Ø 14	189	16
2 G 3				
156	172	68	688	705
184	110	Ø 14	198	16



Support brackets



Conventional design



Balanced bellows design

Type 526

LESER

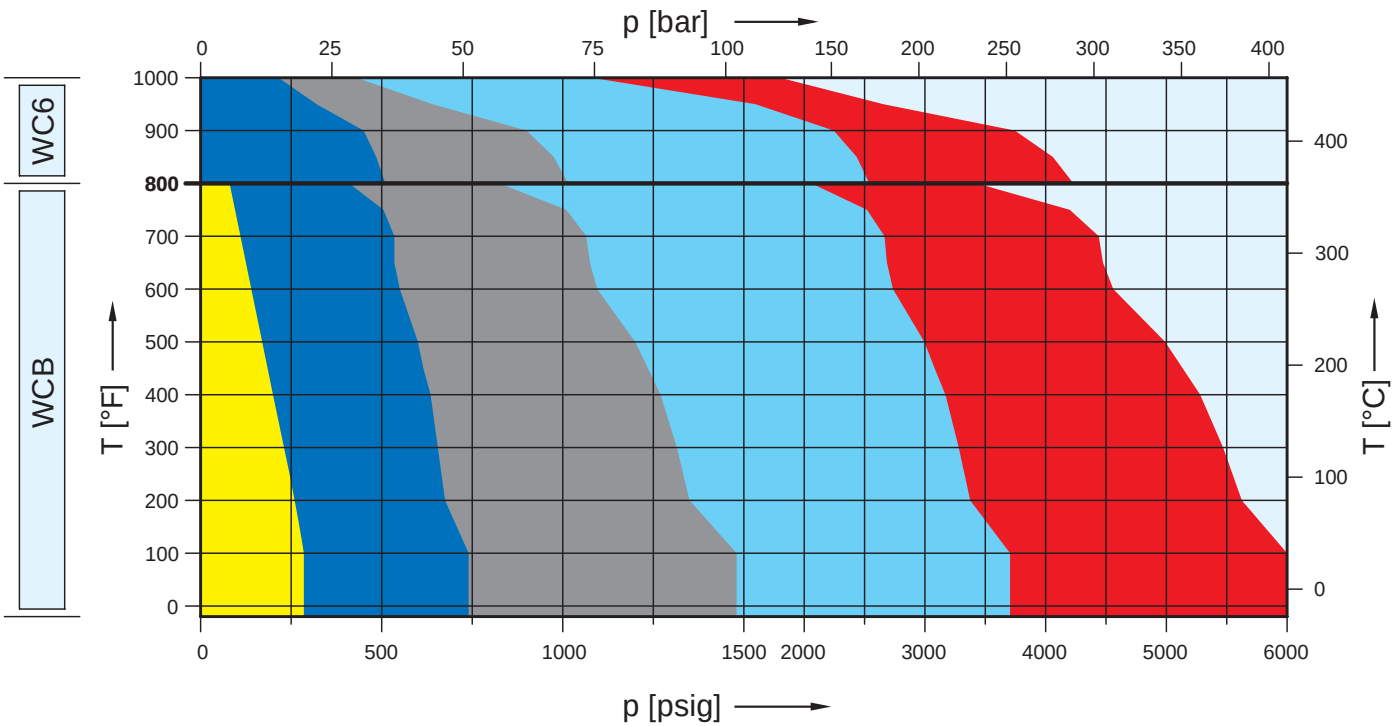
Weights

Metric Units

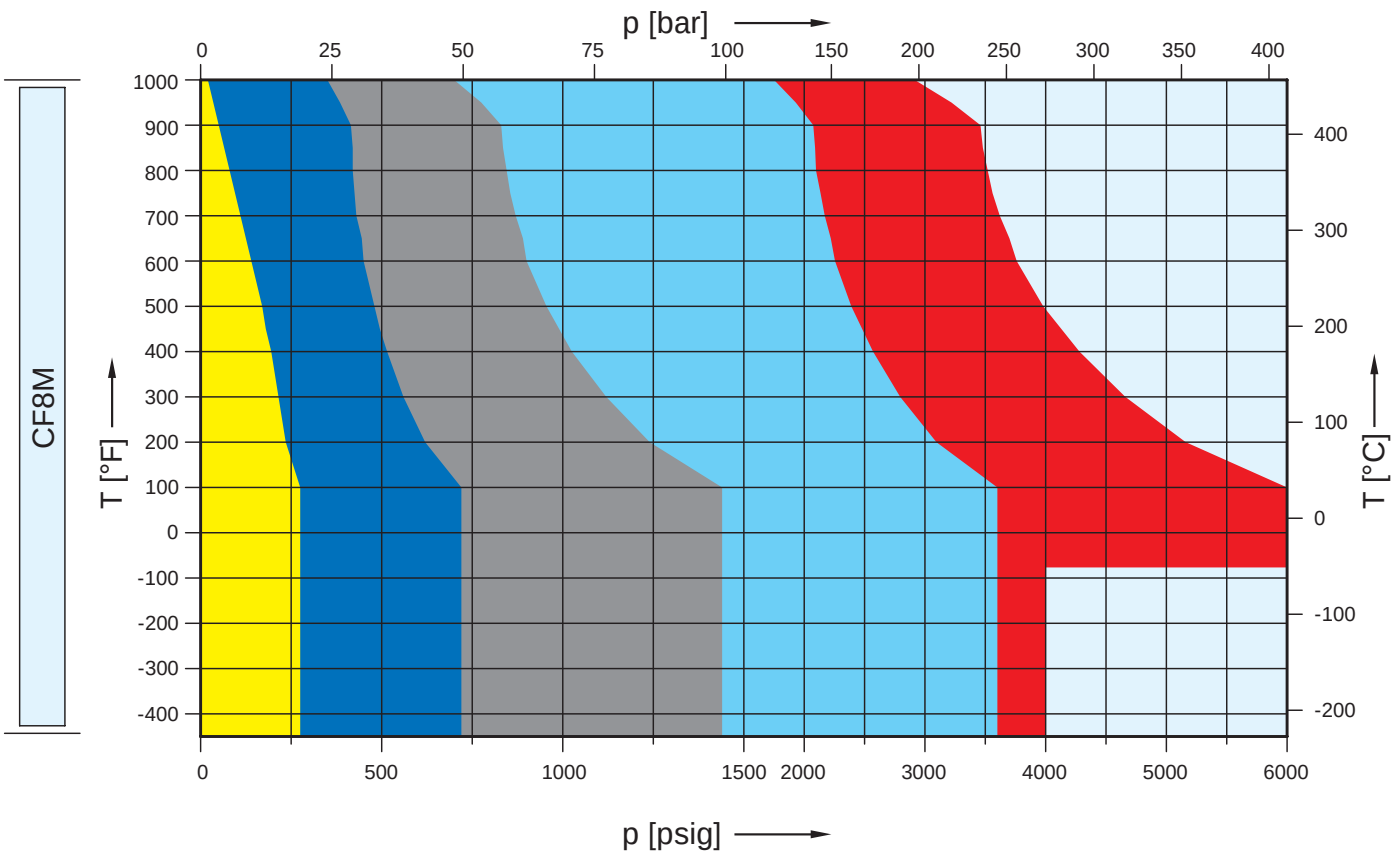
	Bonnet	**all**						
	Lifting device	**all**						
Flange class		**150 x 150**	**300L x 150**	**300 x 150**	**600 x 150**	**900 x 300**	**1500 x 300**	**2500 x 300**
Valve size		1 D 2	1 D 2	1 D 2	1 D 2	1 1/2 D 2	1 1/2 D 2	1 1/2 D 3
D	Weight [kg]	17,3	Use 300 lbs dimensions for this size	17,3	17,3	Use 1500 lbs dimensions for this size	31,1	41,8
	with bellows [kg]	18,4		18,4	18,4		33,1	44,6
		1 E 2	1 E 2	1 E 2	1 E 2	1 1/2 E 2	1 1/2 E 2	1 1/2 E 3
E	Weight [kg]	17,3	Use 300 lbs dimensions for this size	17,3	17,3	Use 1500 lbs dimensions for this size	31,1	41,8
	with bellows [kg]	18,4		18,4	18,4		33,1	44,6
		1 1/2 F 2	1 1/2 F 2	1 1/2 F 2	1 1/2 F 2	1 1/2 F 3	1 1/2 F 3	1 1/2 F 3
F	Weight [kg]	30,6	30,6	32,5	32,5	Use 1500 lbs dimensions for this size	36,3	41,8
	with bellows [kg]	33,1	33,1	35	35		38,6	44,6
		1 1/2 G 3	1 1/2 G 3	1 1/2 G 3	1 1/2 G 3	1 1/2 G 3	2 G 3	2 G 3
G	Weight [kg]	30,6	30,6	32,5	32,5	36,3	69,9	69,9
	with bellows [kg]	33,1	33,1	35	35	38,6	72,5	72,5
Flange class		**150 x 150**	**300L x 150**	**300 x 150**	**600 x 150**	**900 x 150**	**1500 x 300**	
Valve size		1 1/2 H 3	1 1/2 H 3	2 H 3	2 H 3	2 H 3	2 H 3	
H	Weight [kg]	30,6	30,6	44,6	62,2	62,2	62,2	
	with bellows [kg]	33,1	33,1	48,4	65,3	65,3	65,3	
		2 J 3	2 J 3	3 J 4	3 J 4	3 J 4	3 J 4	
J	Weight [kg]	44,6	44,6	77,7	77,7	100,2	100,2	
	with bellows [kg]	48,4	48,4	83,2	83,2	105,7	105,7	
		3 K 4	3 K 4	3 K 4	3 K 4	3 K 6	3 K 6	
K			Use 300 lbs dimensions for this size		**Other** / **WC6**			
	Weight [kg]	70,1		70,1	77,7 / 70,1	127,5	127,5	
	with bellows [kg]	75,7		75,7	83,2 / 75,7	134,1	134,1	
Flange class		**150 x 150**	**300L x 150**	**300 x 150**	**600 x 150**	**900 x 150**	**1500 x 150**	
Valve size		3 L 4	3 L 4	4 L 6	4 L 6	4 L 6	4 L 6	
L	Weight [kg]	70,1	70,1	112,2	122	134,1	127,5	
	with bellows [kg]	75,7	75,7	118,8	128,6	140,7	134,1	
		4 M 6	4 M 6	4 M 6	4 M 6	4 M 6		
M	Weight [kg]	112,1	Use 300 lbs dimensions for this size	112,1	122	134,1		
	with bellows [kg]	118,7		118,7	128,6	140,7		
		4 N 6	4 N 6	4 N 6	4 N 6	4 N 6		
N	Weight [kg]	128,6	Use 300 lbs dimensions for this size	128,6	134,1	134,1		
	with bellows [kg]	135,2		135,2	140,7	140,7		
		4 P 6	4 P 6	4 P 6	4 P 6	4 P 6		
P	Weight [kg]	107,7	107,7	164	164	164		
	with bellows [kg]	114,8	114,8	172	172	172		
		6 Q 8	6 Q 8	6 Q 8	6 Q 8			
Q	Weight [kg]	221	Use 300 lbs dimensions for this size	221	221			
	with bellows [kg]	230		230	230			
		6 R 8	6 R 8	6 R 10	6 R 10			
R	Weight [kg]	221	221	277	277			
	with bellows [kg]	230	230	288	288			
		8 T 10	8 T 10	8 T 10				
T	Weight [kg]	287	Use 300 lbs dimensions for this size	287				
	with bellows [kg]	298		298				

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
WCB	5262.001X	–	5262.002X	5262.003X	–	5262.004X	5262.005X
WC6	–	–	5267.006X	5267.007X	–	5267.008X	5267.009X



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
CF8M	5264.010X	–	5264.011X	5264.012X	–	5264.013X	5264.014X



Article numbers, dimensions and weights

Article numbers

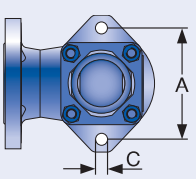
Valve size		1 D 2	1 D 2	1 D 2	1 D 2	1 1/2 D 2	1 1/2 D 2	1 1/2 D 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
Actual Orifice diameter d_0 [mm]		14	14	14	14	14	14	14
Actual Orifice area A_0 [mm²]		154	154	154	154	154	154	154
Body material								
WCB 1.0619	Art.-No.	**5262.001**¤	Use 1 D 2 300 x 150	**5262.002**¤	**5262.003**¤	Use 1 1/2 D 2 1500 x 300	**5262.004**¤	**5262.005**¤
CF8M 1.4408	Art.-No.	**5264.010**¤		**5264.011**¤	**5264.012**¤		**5264.013**¤	**5264.014**¤
WC6 1.7357	Art.-No.	–		**5267.006**¤	**5267.007**¤		**5267.008**¤	**5267.009**¤
LCB	Art.-No.	**5263.500**¤		**5263.501**¤	**5263.502**¤		**5263.503**¤	**5263.504**¤

¤) Please add code for the required cap or lifting device. See below.

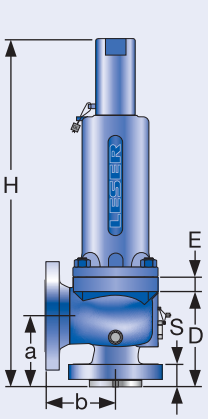
Dimensions and weights

Metric Units								
Weight [kg]		17,3	Use 1 D 2 300 x 150	17,3	17,3	Use 1 1/2 D 2 1500 x 300	31,1	41,8
	with bellows	18,4		18,4	18,4		33,1	44,6
Center to face [mm]	Inlet a	105		105	105		105	140
	Outlet b	114		114	114		140	178
	s	30		30	30		44	57
Height (H4) [mm]	Standard H max.	440		440	440		517	576
	Bellows H max.	465		465	465		542	576
Support brackets [mm]	A	130		130	130		162	162
	B	–		–	–		–	–
	C	Ø 14		Ø 14	Ø 14		Ø 14	Ø 14
	D	132		132	132		129	189
	E	16		16	16		16	16
US Units								
Weight [lbs]		38,1	Use 1 D 2 300 x 150	38,1	38,1	Use 1 1/2 D 2 1500 x 300	68,6	92,2
	with bellows	40,5		40,5	40,5		73	98,4
Center to face [inch]	Inlet a	4 1/8		4 1/8	4 1/8		4 1/8	5 1/2
	Outlet b	4 1/2		4 1/2	4 1/2		5 1/2	7
	s	1 3/16		1 3/16	1 3/16		1 3/4	2 1/4
Height (H4) [inch]	Standard H max.	17 5/16		17 5/16	17 5/16		20 11/32	22 11/16
	Bellows H max.	18 5/16		18 5/16	18 5/16		21 11/32	22 11/16
Support brackets [inch]	A	5 1/8		5 1/8	5 1/8		6 3/8	6 3/8
	B	–		–	–		–	–
	C	Ø 9/16		Ø 9/16	Ø 9/16		Ø 9/16	Ø 9/16
	D	5 7/32		5 7/32	5 7/32		5 7/32	7 15/32
	E	5/8		5/8	5/8		5/8	5/8

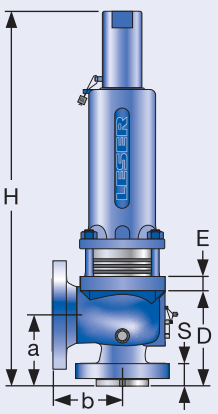
¤ Code for lifting device				
Lifting device	H2	H3	H4	H3
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

D

Pressure temperature ratings

Metric Units

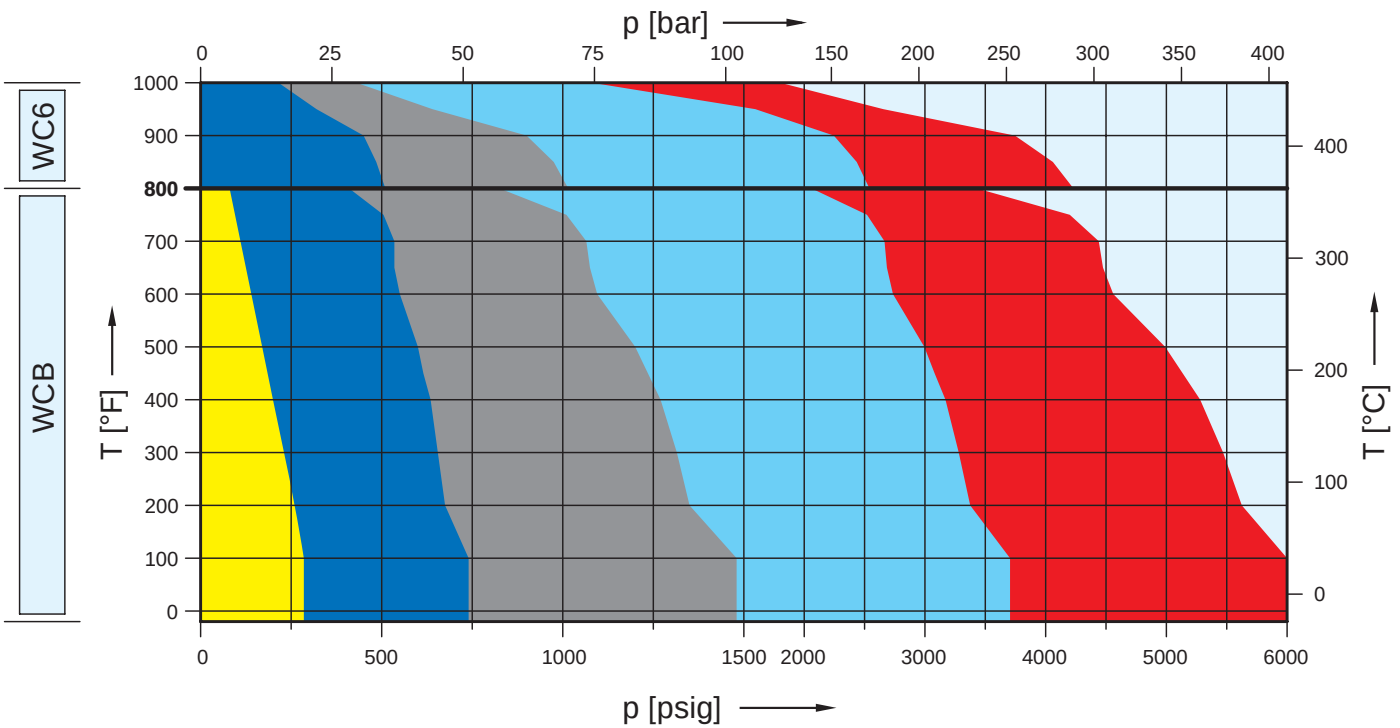
Valve size		1 D 2	1 D 2	1 D 2	1 D 2	1 1/2 D 2	1 1/2 D 2	1 1/2 D 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
Actual Orifice diameter d_0 [mm]		14	14	14	14	14	14	14
Actual Orifice area A_0 [mm²]		154	154	154	154	154	154	154
Body material: WCB 1.0619								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-29 to 38 °C	19,7	Use 1 D 2 300 x 150	51,0	102,1	Use 1 1/2 D 2 1500 x 300	255,5	413,8
	39 to 232 °C	12,8		42,4	85,2		212,4	354,1
	233 to 427 °C	5,5		28,3	56,9		142,1	236,6
Outlet pressure limit Conventional design		19,7		19,7	19,7		41,4	51,0
Outlet pressure limit Balanced bellows design		15,9		15,9	15,9		34,5	34,5
Body material: CF8M 1.4408								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-268 to -60 °C	19,0	Use 1 D 2 300 x 150	49,7	99,3	Use 1 1/2 D 2 1500 x 300	248,3	275,9
	-59 to -29 °C	19,0		49,7	99,3		248,3	413,8
	-28 to 38 °C	19,0		49,7	99,3		248,3	413,8
	39 to 232 °C	12,4		34,1	68,3		171,0	284,8
	233 to 427 °C	5,5		29,0	58,3		145,5	242,8
	428 to 538 °C	1,4		24,1	48,3		120,7	201,0
Outlet pressure limit Conventional design		19,0		19,0	19,0		41,4	49,7
Outlet pressure limit Balanced bellows design		15,9		15,9	15,9		34,5	34,5
Body material: WC6 1.7357								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	233 to 427 °C	–	–	35,2	70,0	Use 1 1/2 D 2 1500 x 300	175,2	291,7
	428 to 538 °C	–	–	14,8	29,7		74,5	124,1
Outlet pressure limit Conventional design		–	–	19,7	19,7		41,4	51,0
Outlet pressure limit Balanced bellows design		–	–	15,9	15,9		34,5	34,5
Body material: LCB								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-46 to 38 °C	18,4	Use 1 D 2 300 x 150	48,0	96,0	Use 1 1/2 D 2 1500 x 300	240,1	400,1
	39 to 200 °C	13,8		42,5	85,1		212,7	354,4
	201 to 343 °C	8,4		36,4	72,8		182,0	303,3
Outlet pressure limit Conventional design		19,7		19,7	19,7		41,4	51,0
Outlet pressure limit Balanced bellows design		15,9		15,9	15,9		34,5	34,5

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

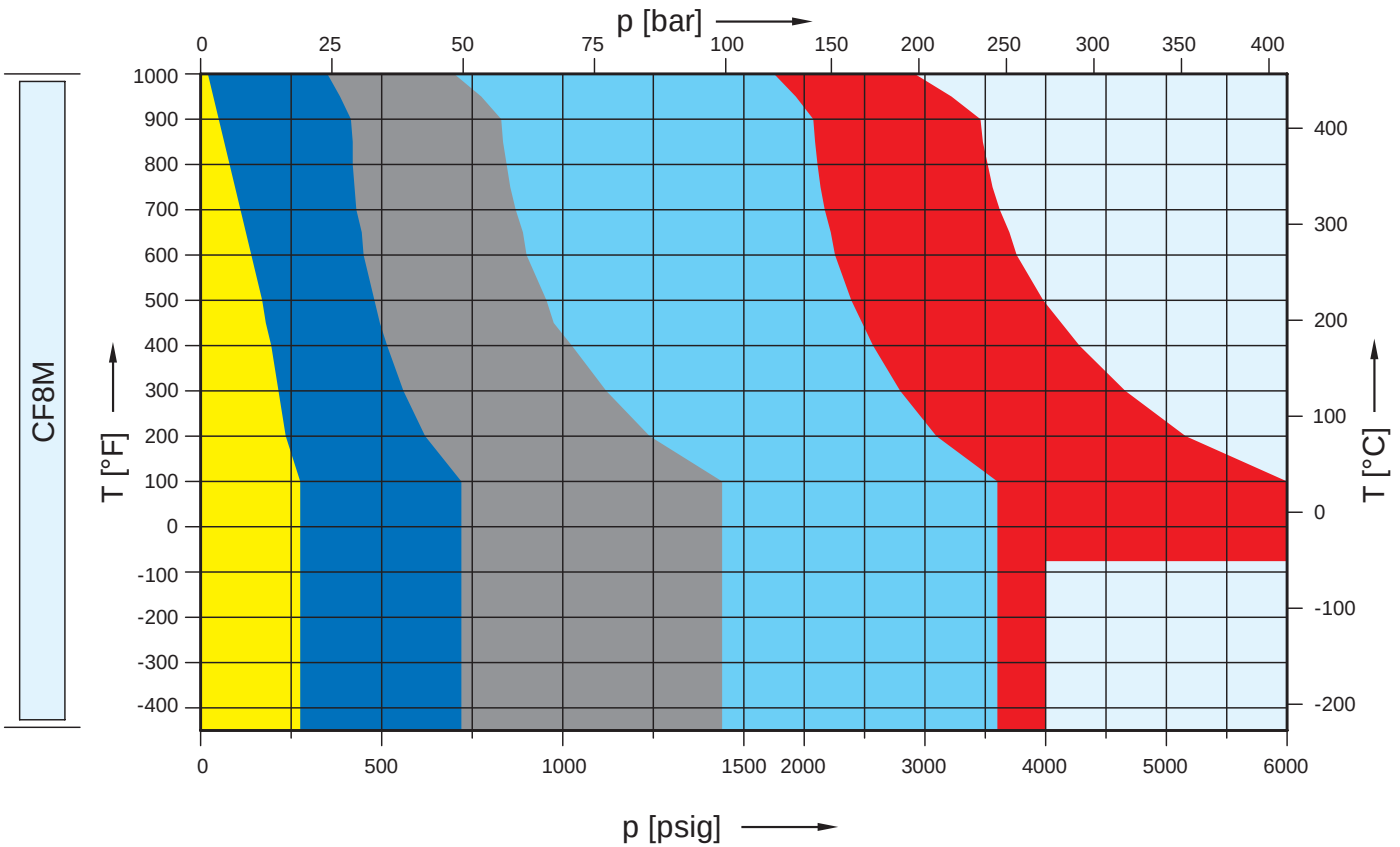
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
WCB	5262.015X	–	5262.016X	5262.017X	–	5262.018X	5262.019X
WC6	–	–	5267.020X	5267.021X	–	5267.022X	5267.023X



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
CF8M	5264.024X	–	5264.025X	5264.026X	–	5264.027X	5264.028X



Article numbers, dimensions and weights

Article numbers

Valve size		1 E 2	1 E 2	1 E 2	1 E 2	1 1/2 E 2	1 1/2 E 2	1 1/2 E 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
Actual Orifice diameter d_0 [mm]		14	14	14	14	14	14	14
Actual Orifice area A_0 [mm²]		154	154	154	154	154	154	154
Body material								
WCB 1.0619	Art.-No.	**5262.015**¤	Use 1 E 2 300 x 150	**5262.016**¤	**5262.017**¤	Use 1 1/2 E 2 1500 x 300	**5262.018**¤	**5262.019**¤
CF8M 1.4408	Art.-No.	**5264.024**¤		**5264.025**¤	**5264.026**¤		**5264.027**¤	**5264.028**¤
WC6 1.7357	Art.-No.	–		**5267.020**¤	**5267.021**¤		**5267.022**¤	**5267.023**¤
LCB	Art.-No.	**5263.505**¤		**5263.506**¤	**5263.507**¤		**5263.508**¤	**5263.509**¤

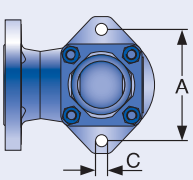
¤) Please add code for the required cap or lifting device. See below.

E

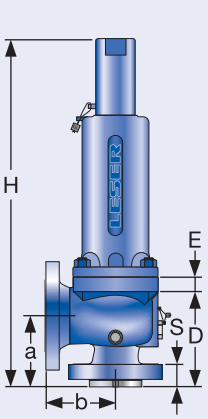
Dimensions and weights

Metric Units								
Weight [kg]		17,3	Use 1 E 2 300 x 150	17,3	17,3	Use 1 1/2 E 2 1500 x 300	31,1	41,8
	with bellows	18,4		18,4	18,4		33,1	44,6
Center to face [mm]	Inlet a	105		105	105		105	140
	Outlet b	114		114	114		140	178
	s	30		30	30		44	57
Height (H4) [mm]	Standard H max.	440		440	440		517	576
	Bellows H max.	465		465	465		542	576
Support brackets [mm]	A	130		130	130		162	162
	B	–		–	–		–	–
	C	Ø 14		Ø 14	Ø 14		Ø 14	Ø 14
	D	132		132	132		129	189
	E	16		16	16		16	16
US Units								
Weight [lbs]		38,1	Use 1 E 2 300 x 150	38,1	38,1	Use 1 1/2 E 2 1500 x 300	68,6	92,2
	with bellows	40,5		40,5	40,5		73	98,4
Center to face [inch]	Inlet a	4 1/8		4 1/8	4 1/8		4 1/8	5 1/2
	Outlet b	4 1/2		4 1/2	4 1/2		5 1/2	7
	s	1 3/16		1 3/16	1 3/16		1 3/4	2 1/4
Height (H4) [inch]	Standard H max.	17 5/16		17 5/16	17 5/16		20 11/32	22 11/16
	Bellows H max.	18 5/16		18 5/16	18 5/16		21 11/32	22 11/16
Support brackets [inch]	A	5 1/8		5 1/8	5 1/8		6 3/8	6 3/8
	B	–		–	–		–	–
	C	Ø 9/16		Ø 9/16	Ø 9/16		Ø 9/16	Ø 9/16
	D	5 7/32		5 7/32	5 7/32		5 7/32	7 15/32
	E	5/8		5/8	5/8		5/8	5/8

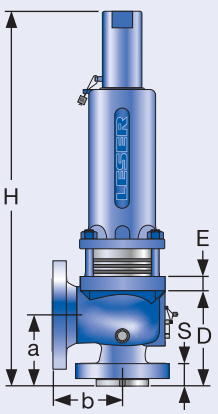
¤ Code for lifting device				
Lifting device	**H2**	**H3**	**H4**	**H3**
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

Pressure temperature ratings

Metric Units

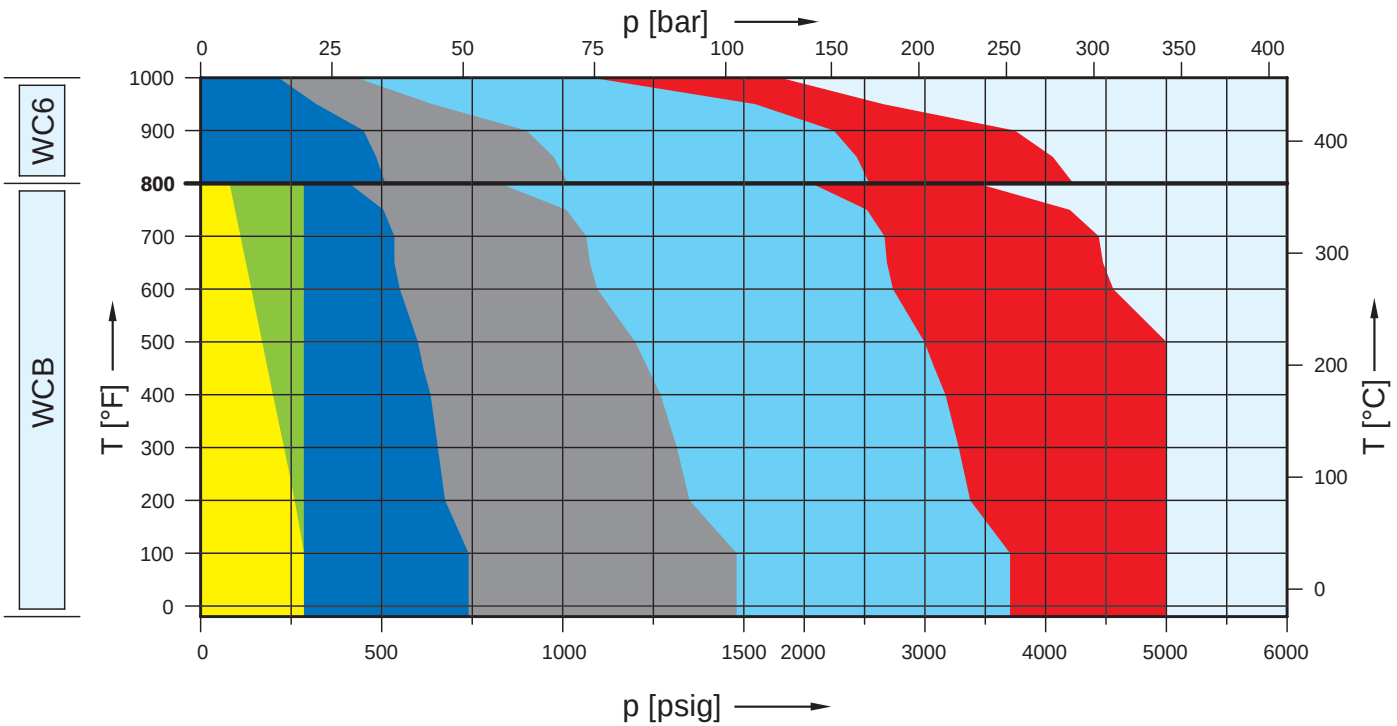
Valve size		1 E 2	1 E 2	1 E 2	1 E 2	1 1/2 E 2	1 1/2 E 2	1 1/2 E 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
Actual Orifice diameter d_0 [mm]		14	14	14	14	14	14	14
Actual Orifice area A_0 [mm²]		154	154	154	154	154	154	154
Body material: WCB 1.0619								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-29 to 38 °C	19,7	Use 1 E 2 300 x 150	51,0	102,1	Use 1 1/2 E 2 1500 x 300	255,5	413,8
	39 to 232 °C	12,8		42,4	85,2		212,4	354,1
	233 to 427 °C	5,5		28,3	56,9		142,1	236,6
Outlet pressure limit Conventional design		19,7		19,7	19,7		41,4	51,0
Outlet pressure limit Balanced bellows design		15,9		15,9	15,9		34,5	34,5
Body material: CF8M 1.4408								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-268 to -60 °C	19,0	Use 1 E 2 300 x 150	49,7	99,3	Use 1 1/2 E 2 1500 x 300	248,3	275,9
	-59 to -29 °C	19,0		49,7	99,3		248,3	413,8
	-28 to 38 °C	19,0		49,7	99,3		248,3	413,8
	39 to 232 °C	12,4		34,1	67,2		171,0	284,8
	233 to 427 °C	5,5		29,0	58,3		145,5	242,8
	428 to 538 °C	1,4		24,1	48,3		120,7	201,0
Outlet pressure limit Conventional design		19,0		19,0	19,0		41,4	49,7
Outlet pressure limit Balanced bellows design		15,9		15,9	15,9		34,5	34,5
Body material: WC6 1.7357								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	233 to 427 °C	–	–	35,2	70,0	Use 1 1/2 E 2 1500 x 300	175,2	291,7
	428 to 538 °C	–	–	14,8	29,7		74,5	124,1
Outlet pressure limit Conventional design		–	–	19,7	19,7		41,4	51,0
Outlet pressure limit Balanced bellows design		–	–	15,9	15,9		34,5	34,5
Body material: LCB								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-46 to 38 °C	18,4	Use 1 E 2 300 x 150	48,0	96,0	Use 1 1/2 E 2 1500 x 300	240,1	400,1
	39 to 200 °C	13,8		42,5	85,1		212,7	354,4
	201 to 343 °C	8,4		36,4	72,8		182,0	303,3
Outlet pressure limit Conventional design		19,7		19,7	19,7		41,4	51,0
Outlet pressure limit Balanced bellows design		15,9		15,9	15,9		34,5	34,5

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

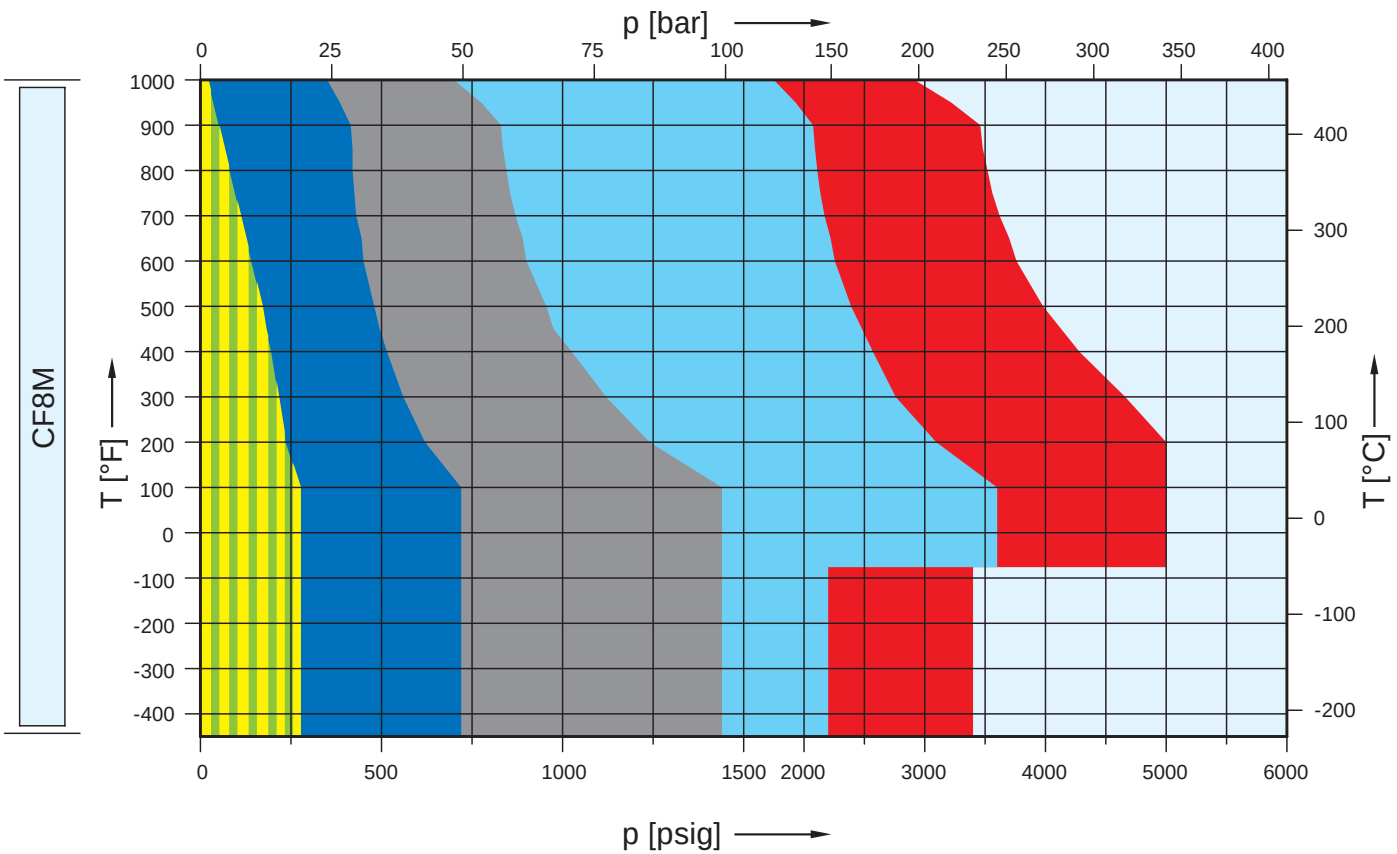
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
WCB	5262.029X	5262.030X	5262.031X	5262.032X	–	5262.033X	5262.034X
WC6	–	–	5267.035X	5267.036X	–	5267.037X	5267.038X



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
CF8M	5264.039X	5264.040X	5264.041X	5264.042X	–	5264.043X	5264.044X



Article numbers, dimensions and weights

Article numbers

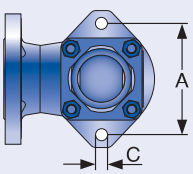
Valve size		1 1/2 F 2	1 1/2 F 2	1 1/2 F 2	1 1/2 F 2	1 1/2 F 3	1 1/2 F 3	1 1/2 F 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
Actual Orifice diameter d_0 [mm]		18	18	18	18	18	18	18
Actual Orifice area A_0 [mm²]		254	254	254	254	254	254	254
Body material								
WCB 1.0619	Art.-No.	**5262.029**¤	**5262.030**¤	**5262.031**¤	**5262.032**¤	Use 1 1/2 F 3 1500 x 300	**5262.033**¤	**5262.034**¤
CF8M 1.4408	Art.-No.	**5264.039**¤	**5264.040**¤	**5264.041**¤	**5264.042**¤		**5264.043**¤	**5264.044**¤
WC6 1.7357	Art.-No.	–	–	**5267.035**¤	**5267.036**¤		**5267.037**¤	**5267.038**¤
LCB	Art.-No.	**5263.510**¤	**5263.511**¤	**5263.512**¤	**5263.513**¤		**5263.514**¤	**5263.515**¤

¤) Please add code for the required cap or lifting device. See below.

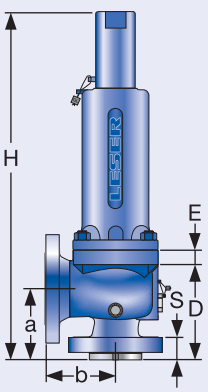
Dimensions and weights

Metric Units								
Weight [kg]		30,6	30,6	32,5	32,5	Use 1 1/2 F 3 1500 x 300	36,3	41,8
	with bellows	33,1	33,1	35	35		38,6	44,6
Center to face [mm]	Inlet a	124	124	124	124		124	140
	Outlet b	121	121	152	152		165	178
	s	32	32	35	35		44	57
Height (H4) [mm]	Standard H max.	536	536	536	536		560	576
	Bellows H max.	561	561	561	561		560	576
Support brackets [mm]	A	162	162	162	162		162	162
	B	–	–	–	–		–	–
	C	Ø 14		Ø 14	Ø 14		Ø 14	Ø 14
	D	148	148	148	148		174	189
	E	16	16	16	16		16	16
US Units								
Weight [lbs]		67,5	67,5	71,1	71,1	Use 1 1/2 F 3 1500 x 300	80	92,2
	with bellows	73	73	77,2	77,2		85,1	98,4
Center to face [inch]	Inlet a	4 7/8	4 7/8	4 7/8	4 7/8		4 7/8	5 1/2
	Outlet b	4 3/4	4 3/4	6	6		6 1/2	7
	s	1 1/4	1 1/4	1 13/32	1 13/32		1 3/4	2 1/4
Height (H4) [inch]	Standard H max.	21 3/32	21 3/32	21 3/32	21 3/32		22 1/16	22 11/16
	Bellows H max.	22 3/32	22 3/32	22 3/32	22 3/32		22 1/16	22 11/16
Support brackets [inch]	A	6 3/8	6 3/8	6 3/8	6 3/8		6 3/8	6 3/8
	B	–	–	–	–		–	–
	C	Ø 9/16	Ø 9/16	Ø 9/16	Ø 9/16		Ø 9/16	Ø 9/16
	D	5 27/32	5 27/32	5 27/32	5 27/32		6 27/32	6 27/32
	E	5/8	5/8	5/8	5/8		5/8	5/8

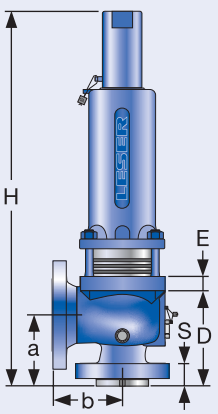
¤ Code for lifting device				
Lifting device	**H2**	**H3**	**H4**	**H3**
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

F

Pressure temperature ratings

Metric Units

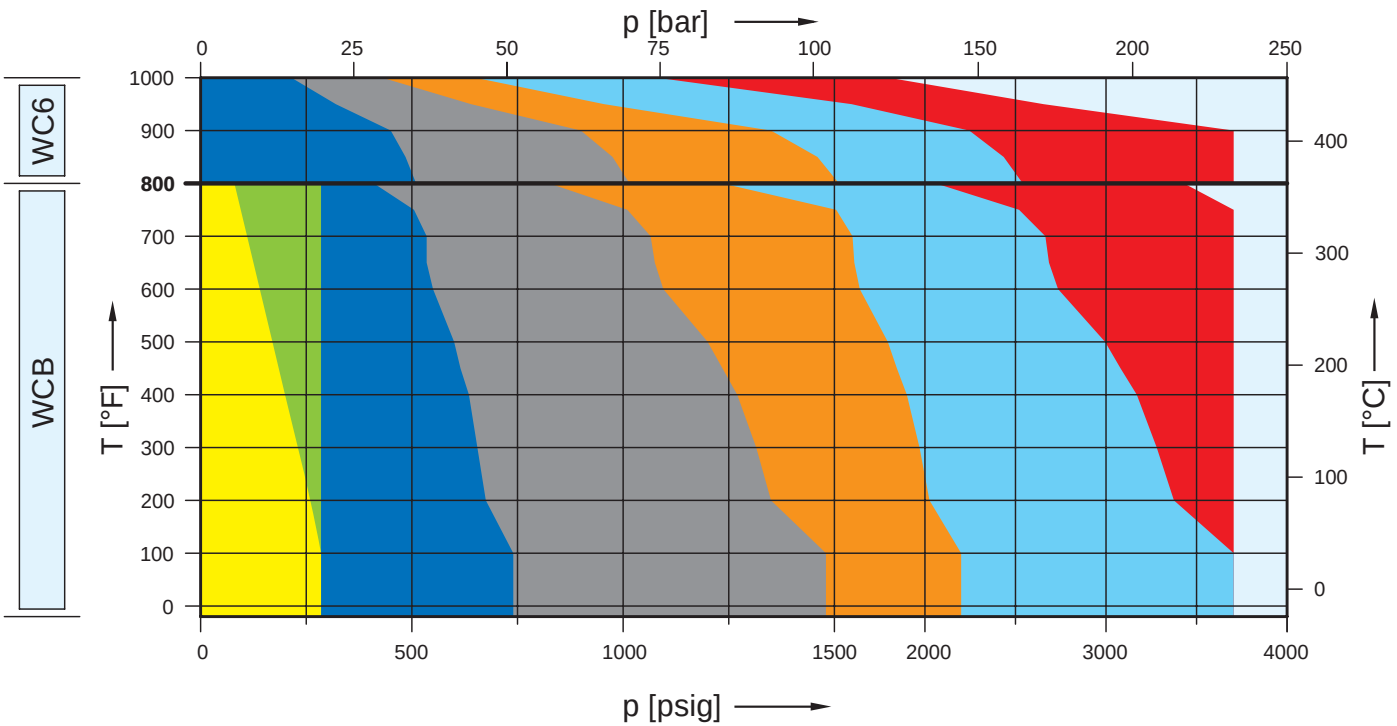
Valve size		1 1/2 F 2	1 1/2 F 2	1 1/2 F 2	1 1/2 F 2	1 1/2 F 3	1 1/2 F 3	1 1/2 F 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
Actual Orifice diameter d_0 [mm]		18	18	18	18	18	18	18
Actual Orifice area A_0 [mm²]		254	254	254	254	254	254	254
Body material: WCB 1.0619								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-29 to 38 °C	19,7	19,7	51,0	102,1	Use 1 1/2 F 3 1500 x 300	255,5	344,8
	39 to 232 °C	12,8	19,7	42,4	85,2		212,4	344,8
	233 to 427 °C	5,5	19,7	28,3	56,9		142,1	236,6
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7		51,0	51,0
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9		34,5	34,5
Body material: CF8M 1.4408								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-268 to -60 °C	19,0	19,0	49,7	99,3	Use 1 1/2 F 3 1500 x 300	151,7	234,5
	-59 to -29 °C	19,0	19,0	49,7	99,3		248,3	344,8
	-28 to 38 °C	19,0	19,0	49,7	99,3		248,3	344,8
	39 to 232 °C	12,4	12,4	34,1	67,2		171,0	284,8
	233 to 427 °C	5,5	5,5	29,0	58,3		145,5	242,8
	428 to 538 °C	1,4	1,4	24,1	48,3		120,7	201,0
Outlet pressure limit Conventional design		19,0	19,0	19,0	19,0		41,4	49,7
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9		34,5	34,5
Body material: WC6 1.7357								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	233 to 427 °C	–	–	35,2	70,0	Use 1 1/2 F 3 1500 x 300	175,2	291,7
	428 to 538 °C	–	–	14,8	29,7		74,5	124,1
Outlet pressure limit Conventional design		–	–	19,7	19,7		51,0	51,0
Outlet pressure limit Balanced bellows design		–	–	15,9	15,9		34,5	34,5
Body material: LCB								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-46 to 38 °C	18,4	18,4	48,0	96,0	Use 1 1/2 F 3 1500 x 300	240,1	400,1
	39 to 200 °C	13,8	13,8	42,5	85,1		212,7	354,4
	201 to 343 °C	8,4	8,4	36,4	72,8		182,0	303,3
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7		51,0	51,0
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9		34,5	34,5

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

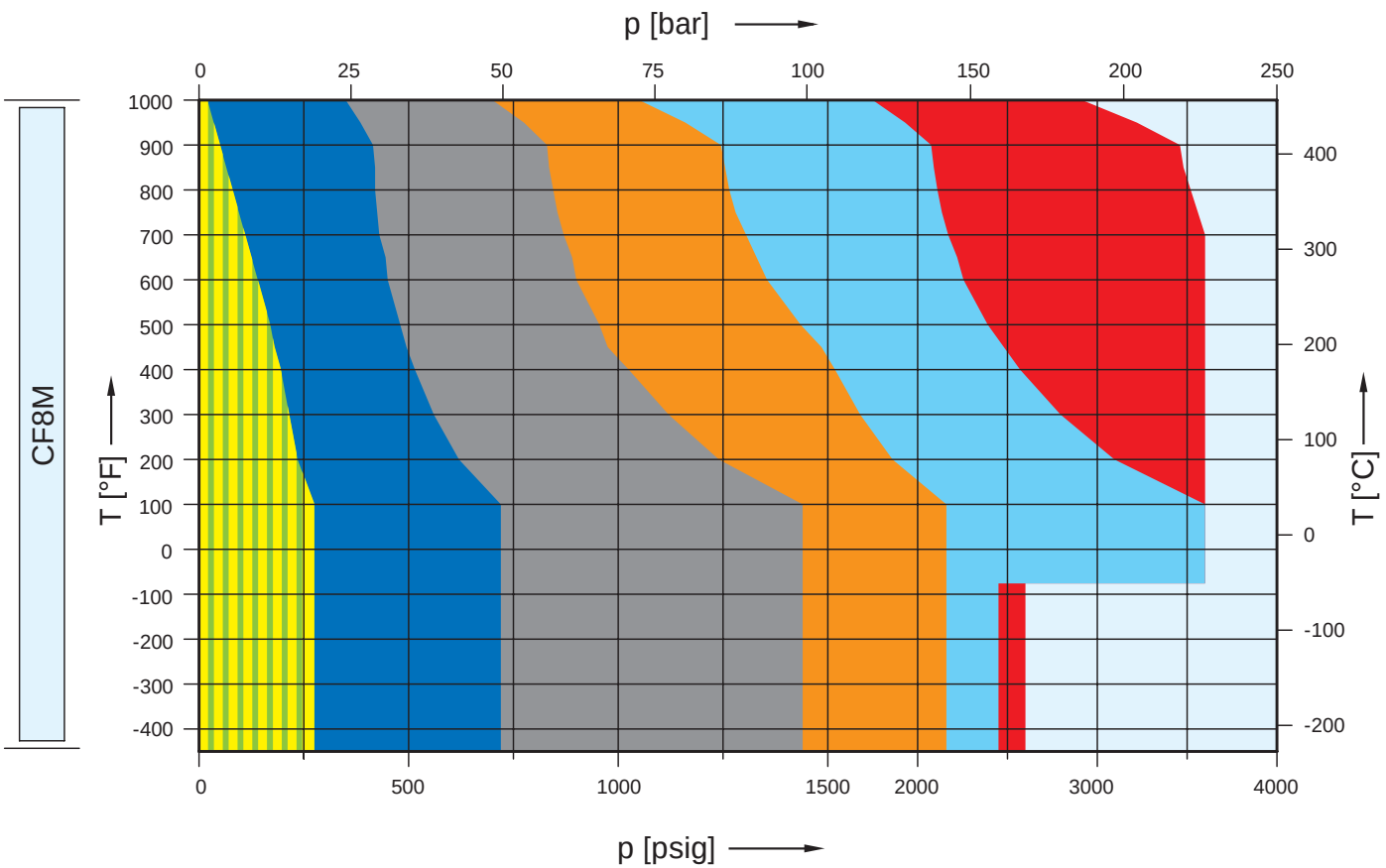
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
WCB	5262.045X	5262.046X	5262.047X	5262.048X	5262.049X	5262.050X	5262.051X
WC6	–	–	5267.052X	5267.053X	5267.054X	5267.055X	5267.056X



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
CF8M	5264.110X	5264.111X	5264.112X	5264.113X	5264.114X	5264.115X	5264.116X



Article numbers, dimensions and weights

Article numbers

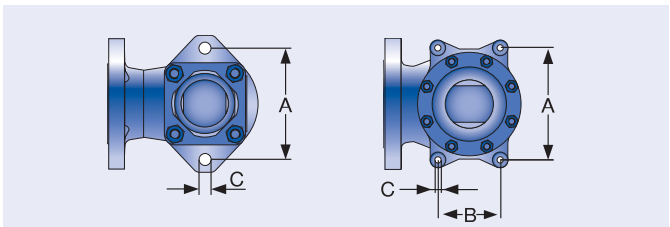
Valve size		1 1/2 G 3	1 1/2 G 3	1 1/2 G 3	1 1/2 G 3	1 1/2 G 3	2 G 3	2 G 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
Actual Orifice diameter d_0 [mm]		22,5	22,5	22,5	22,5	22,5	22,5	22,5
Actual Orifice area A_0 [mm²]		398	398	398	398	398	398	398
Body material								
WCB 1.0619	Art.-No.	**5262.045**¤	**5262.046**¤	**5262.047**¤	**5262.048**¤	**5262.049**¤	**5262.050**¤	**5262.051**¤
CF8M 1.4408	Art.-No.	**5264.110**¤	**5264.111**¤	**5264.112**¤	**5264.113**¤	**5264.114**¤	**5264.115**¤	**5264.116**¤
WC6 1.7357	Art.-No.	–	–	**5267.052**¤	**5267.053**¤	**5267.054**¤	**5267.055**¤	**5267.056**¤
LCB	Art.-No.	**5263.516**¤	**5263.517**¤	**5263.518**¤	**5263.519**¤	**5263.520**¤	**5263.521**¤	**5263.522**¤

¤) Please add code for the required cap or lifting device. See below.

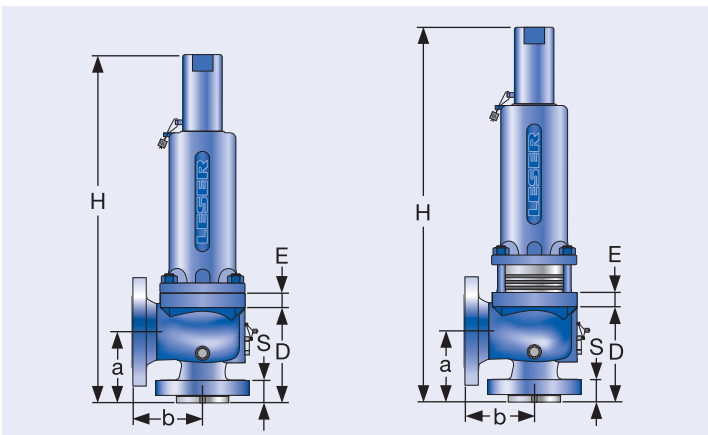
Dimensions and weights

Metric Units								
Weight [kg]		30,6	30,6	32,5	32,5	36,3	69,9	69,9
	with bellows	33,1	33,1	35	35	38,6	72,5	72,5
Center to face [mm]	Inlet a	124	124	124	124	124	156	156
	Outlet b	121	121	152	152	165	172	172
	s	32	32	35	35	44	68	68
Height (H4) [mm]	Standard H max.	536	536	536	536	560	688	688
	Bellows H max.	574	574	574	574	573	705	705
Support brackets [mm]	A	162	162	162	162	162	184	184
	B	–	–	–	–	–	110	110
	C	Ø 14	Ø 14	Ø 14	Ø 14	Ø 14	Ø 14	Ø 14
	D	148	148	148	148	174	198	198
	E	16	16	16	16	16	16	16
US Units								
Weight [lbs]		67,5	67,5	71,7	71,7	80	154,1	154,1
	with bellows	73	73	77,2	77,2	85,1	159,9	159,9
Center to face [inch]	Inlet a	4 7/8	4 7/8	4 7/8	4 7/8	4 7/8	6 1/8	6 1/8
	Outlet b	4 3/4	4 3/4	6	6	6 1/2	6 3/4	6 3/4
	s	1 1/4	1 1/4	1 13/32	1 13/32	1 3/4	2 11/16	2 11/16
Height (H4) [inch]	Standard H max.	21 3/32	21 3/32	21 3/32	21 3/32	22 1/16	27 3/32	27 3/32
	Bellows H max.	22 19/32	22 19/32	22 19/32	22 19/32	22 9/16	27 3/4	27 3/4
Support brackets [inch]	A	6 3/8	6 3/8	6 3/8	6 3/8	6 3/8	7 1/4	7 1/4
	B	–	–	–	–	–	4 11/32	4 11/32
	C	Ø 9/16	Ø 9/16	Ø 9/16	Ø 9/16	Ø 9/16	Ø 9/16	Ø 9/16
	D	5 27/32	5 27/32	5 27/32	5 27/32	6 27/32	7 13/16	7 13/16
	E	5/8	5/8	5/8	5/8	5/8	5/8	5/8

¤ Code for lifting device				
Lifting device	H2	H3	H4	H3
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design

Balanced bellows design

Pressure temperature ratings

Metric Units

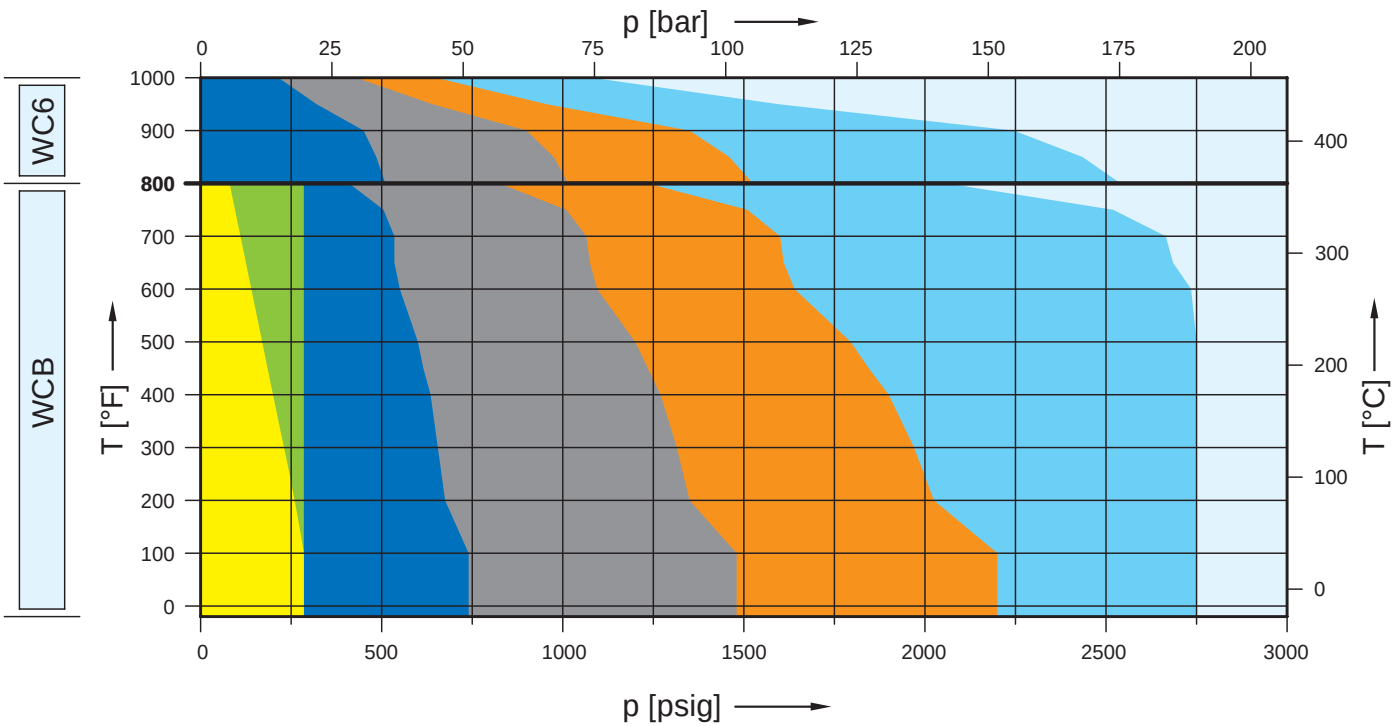
Valve size		1 1/2 G 3	1 1/2 G 3	1 1/2 G 3	1 1/2 G 3	1 1/2 G 3	2 G 3	2 G 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 300	1500 x 300	2500 x 300
Actual Orifice diameter d_0 [mm]		22,5	22,5	22,5	22,5	22,5	22,5	22,5
Actual Orifice area A_0 [mm²]		398	398	398	398	398	398	398
Body material: WCB 1.0619								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-29 to 38 °C	19,7	19,7	51,0	102,1	153,1	255,5	255,5
	39 to 232 °C	12,8	19,7	42,4	85,2	127,2	212,4	255,5
	233 to 427 °C	5,5	19,7	28,3	56,9	85,2	142,1	236,6
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	51,0	51,0	51,0
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9	32,4	32,4	32,4
Body material: CF8M 1.4408								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-268 to -60 °C	19,0	19,0	49,7	99,3	149,0	169,0	179,3
	-59 to -29 °C	19,0	19,0	49,7	99,3	149,0	248,3	248,3
	-28 to 38 °C	19,0	19,0	49,7	99,3	149,0	248,3	248,3
	39 to 232 °C	12,4	12,4	34,1	67,2	102,4	171,0	248,3
	233 to 427 °C	5,5	5,5	29,0	58,3	87,2	145,5	242,8
	428 to 538 °C	1,4	1,4	24,1	48,3	72,4	120,7	201,0
Outlet pressure limit Conventional design		19,0	19,0	19,0	19,0	41,4	41,4	49,7
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9	32,4	32,4	32,4
Body material: WC6 1.7357								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	233 to 427 °C	–	–	35,2	70,0	105,2	175,2	255,5
	428 to 538 °C	–	–	14,8	29,7	44,8	74,5	124,1
Outlet pressure limit Conventional design		–	–	19,7	19,7	51,0	51,0	51,0
Outlet pressure limit Balanced bellows design		–	–	15,9	15,9	32,4	32,4	32,4
Body material: LCB								
Temperature range		Pressure range p [bar] S/G/L						
Maximum set pressure	-46 to 38 °C	18,4	18,4	48,0	96,0	144,1	240,1	400,1
	39 to 200 °C	13,8	13,8	42,5	85,1	127,6	212,7	354,4
	201 to 343 °C	8,4	8,4	36,4	72,8	109,2	182,0	303,3
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	51,0	51,0	51,0
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9	32,4	32,4	32,4

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

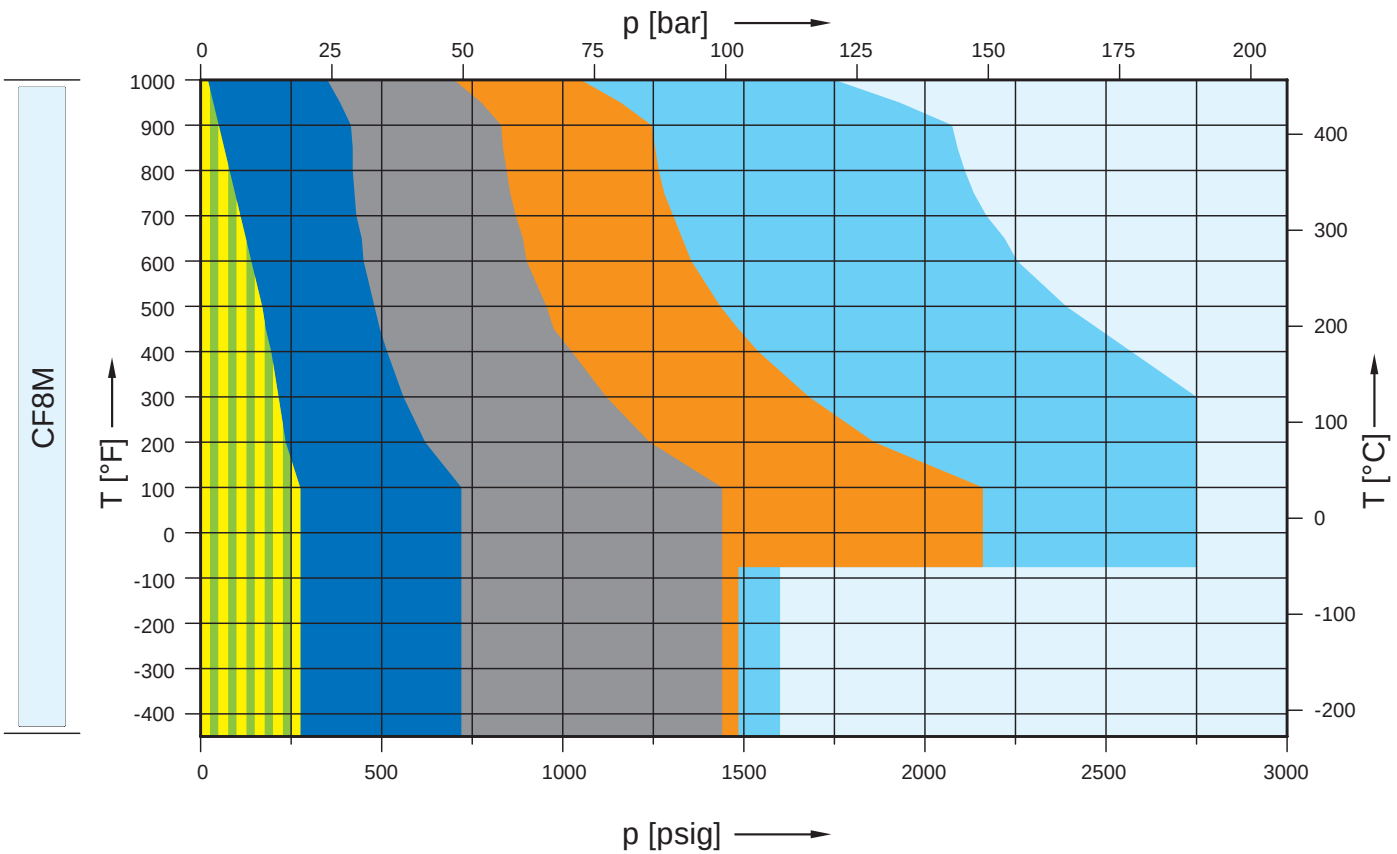
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300	2500 x 300
WCB	5262.142X	5262.143X	5262.144X	5262.145X	5262.146X	5262.147X	–
WC6	–	–	5267.148X	5267.149X	5267.150X	5267.151X	–



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300	2500 x 300
CF8M	5264.152X	5264.153X	5264.154X	5264.155X	5264.156X	5264.157X	–



Article numbers, dimensions and weights

Article numbers

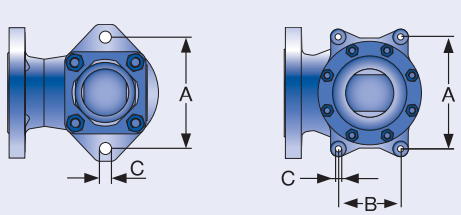
Valve size		1 1/2 H 3	1 1/2 H 3	2 H 3	2 H 3	2 H 3	2 H 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300
Actual Orifice diameter d_0 [mm]		28,3	28,3	28,3	28,3	28,3	28,3
Actual Orifice area A_0 [mm²]		629	629	629	629	629	629
Body material							
WCB 1.0619	Art.-No.	**5262.142**¤	**5262.143**¤	**5262.144**¤	**5262.145**¤	**5262.146**¤	**5262.147**¤
CF8M 1.4408	Art.-No.	**5264.152**¤	**5264.153**¤	**5264.154**¤	**5264.155**¤	**5264.156**¤	**5264.157**¤
WC6 1.7357	Art.-No.	–	–	**5267.148**¤	**5267.149**¤	**5267.150**¤	**5267.151**¤
LCB	Art.-No.	**5263.523**¤	**5263.524**¤	**5263.525**¤	**5263.526**¤	**5263.527**¤	**5263.528**¤

¤) Please add code for the required cap or lifting device. See below.

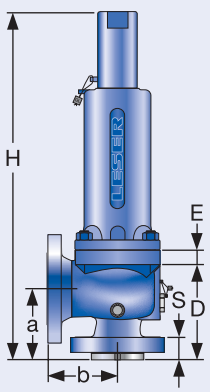
Dimensions and weights

Metric Units							
Weight [kg]		30,6	30,6	44,6	62,2	62,2	62,2
	with bellows	33,1	33,1	48,4	65,3	65,3	65,3
Center to face [mm]	Inlet a	130	130	130	154	154	154
	Outlet b	124	124	124	162	162	162
	s	38	38	43	56	56	56
Height (H4) [mm]	Standard H max.	542	542	666	691	691	691
	Bellows H max.	580	580	692	717	717	717
Support brackets [mm]	A	162	162	184	184	184	184
	B	–	–	110	110	110	110
	C	Ø 14	Ø 14	Ø 14	Ø 14	Ø 14	Ø 14
	D	155	155	177	202	202	202
	E	16	16	16	16	16	16
US Units							
Weight [lbs]		67,5	67,5	98,3	137,2	137,2	137,2
	with bellows	73	73	106,7	144	144	144
Center to face [inch]	Inlet a	5 1/8	5 1/8	5 1/8	6 1/16	6 1/16	6 1/16
	Outlet b	4 7/8	4 7/8	4 7/8	6 3/8	6 3/8	6 3/8
	s	1 1/2	1 1/2	1 1/16	2 3/16	2 3/16	2 3/16
Height (H4) [inch]	Standard H max.	21 11/32	21 11/32	26 7/32	27 7/32	27 7/32	27 7/32
	Bellows H max.	22 27/32	22 27/32	27 1/4	28 7/32	28 7/32	28 7/32
Support brackets [inch]	A	6 3/8	6 3/8	7 1/4	7 1/4	7 1/4	7 1/4
	B	–	–	4 11/32	4 11/32	4 11/32	4 11/32
	C	Ø 9/16	Ø 9/16	Ø 9/16	Ø 9/16	Ø 9/16	Ø 9/16
	D	6 3/32	6 3/32	6 31/32	7 15/16	7 15/16	7 15/16
	E	5/8	5/8	5/8	5/8	5/8	5/8

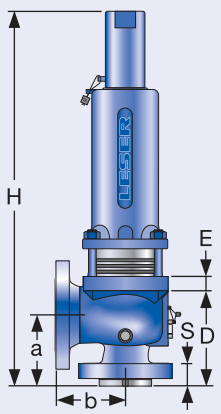
¤ Code for lifting device				
Lifting device	**H2**	**H3**	**H4**	**H3**
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

Pressure temperature ratings

Metric Units

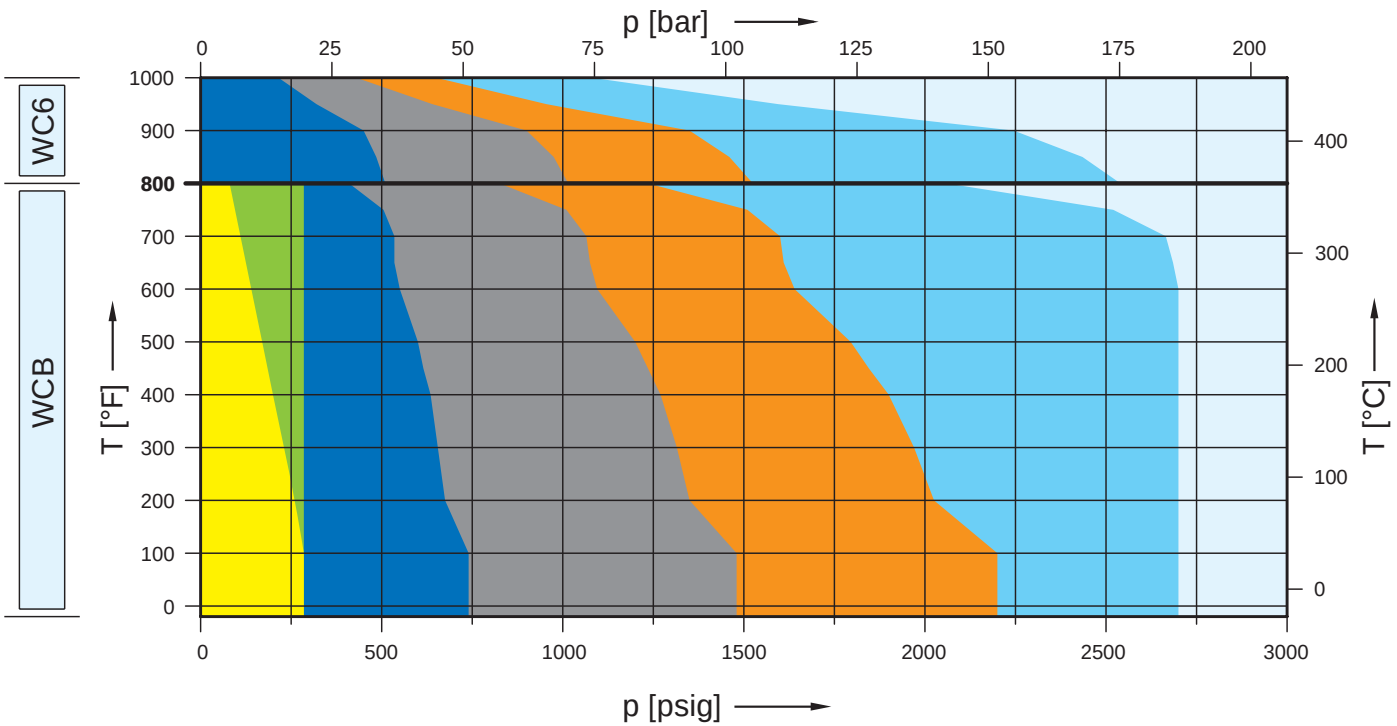
Valve size		1 1/2 H 3	1 1/2 H 3	2 H 3	2 H 3	2 H 3	2 H 3
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300
Actual Orifice diameter d_0 [mm]		28,3	28,3	28,3	28,3	28,3	28,3
Actual Orifice area A_0 [mm²]		625	625	625	625	625	625
Body material: WCB 1.0619							
Temperature range		Pressure range p [bar] S/G/L					
Maximum set pressure	-29 to 38 °C	19,7	19,7	51,0	102,1	153,1	189,7
	39 to 232 °C	12,8	19,7	42,4	85,2	127,2	189,7
	233 to 427 °C	5,5	19,7	28,3	56,9	85,2	142,1
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	19,7	51,0
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9	15,9	28,6
Body material: CF8M 1.4408							
Temperature range		Pressure range p [bar] S/G/L					
Maximum set pressure	-268 to -60 °C	19,0	19,0	49,7	99,3	102,4	110,3
	-59 to -29 °C	19,0	19,0	49,7	99,3	149,0	189,7
	-28 to 38 °C	19,0	19,0	49,7	99,3	149,0	189,7
	39 to 232 °C	12,4	12,4	34,1	67,2	102,4	171,0
	233 to 427 °C	5,5	5,5	29,0	58,3	87,2	145,5
	428 to 538 °C	1,4	1,4	24,1	48,3	72,4	120,7
Outlet pressure limit Conventional design		19,0	19,0	19,0	19,0	41,4	41,4
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9	15,9	28,6
Body material: WC6 1.7357							
Temperature range		Pressure range p [bar] S/G/L					
Maximum set pressure	233 to 427 °C	–	–	35,2	70,0	105,2	175,2
	428 to 538 °C	–	–	14,8	29,7	44,8	74,5
Outlet pressure limit Conventional design		–	–	19,7	19,7	19,7	51,0
Outlet pressure limit Balanced bellows design		–	–	15,9	15,9	15,9	28,6
Body material: LCB							
Temperature range		Pressure range p [bar] S/G/L					
Maximum set pressure	-46 to 38 °C	18,4	18,4	48,0	96,0	144,1	240,1
	39 to 200 °C	13,8	13,8	42,5	85,1	127,6	212,7
	201 to 343 °C	8,4	8,4	36,4	72,8	109,2	182,0
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	19,7	51,0
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9	15,9	28,6

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

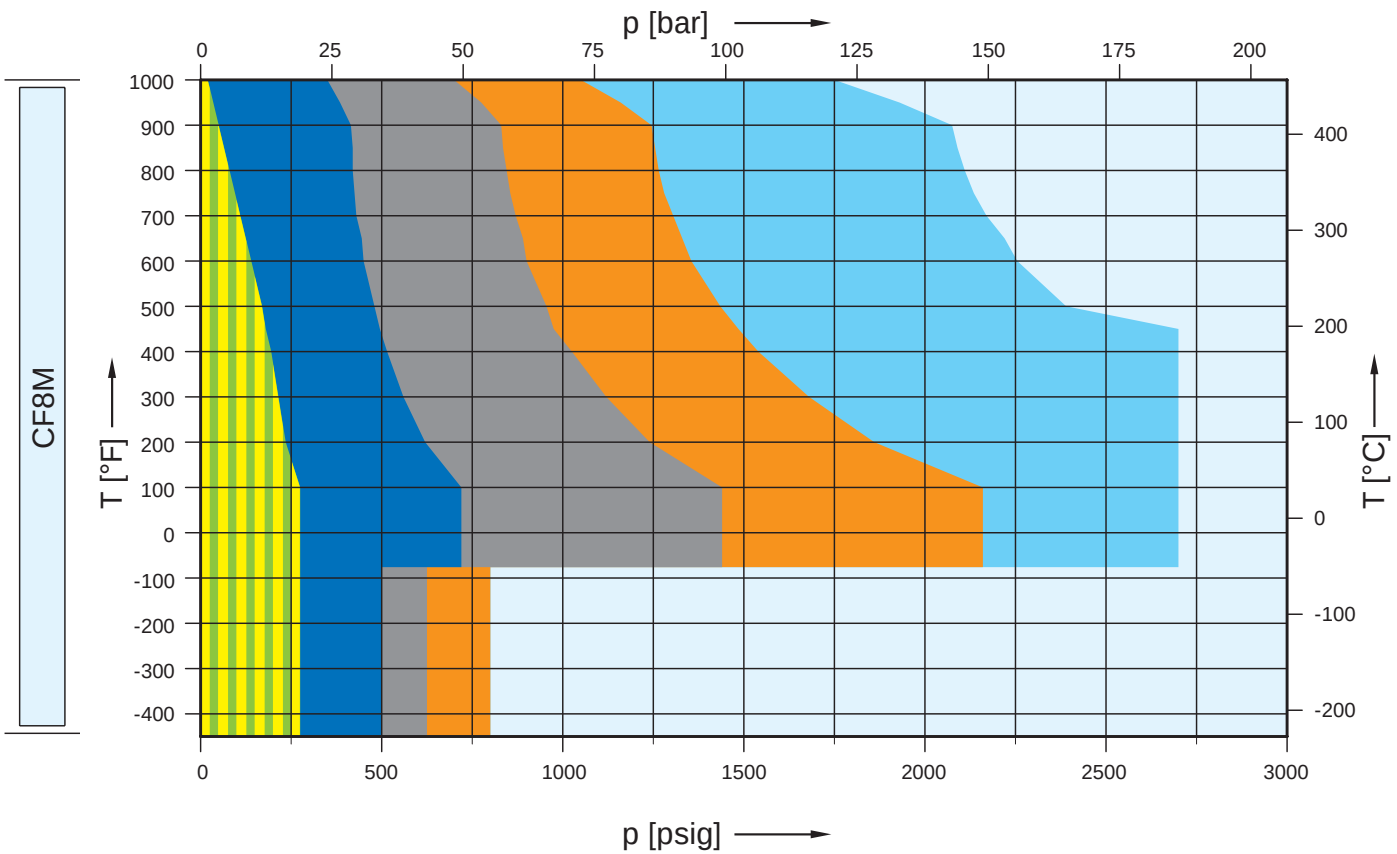
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300	2500 x 300
WCB	5262.162X	5262.163X	5262.164X	5262.165X	5262.166X	5262.167X	–
WC6	–	–	5267.168X	5267.169X	5267.170X	5267.171X	–



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300	2500 x 300
CF8M	5264.196X	5264.197X	5264.198X	5264.199X	5264.200X	5264.201X	–



J

Article numbers, dimensions and weights

Article numbers

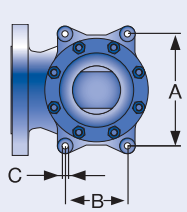
	Valve size	2 J 3	2 J 3	3 J 4	3 J 4	3 J 4	3 J 4
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300
	Actual Orifice diameter d_0 [mm]	36	36	36	36	36	36
	Actual Orifice area A_0 [mm²]	1018	1018	1018	1018	1018	1018
Body material							
WCB 1.0619	Art.-No.	**5262.162¤**	**5262.163¤**	**5262.164¤**	**5262.165¤**	**5262.166¤**	**5262.167¤**
CF8M 1.4408	Art.-No.	**5264.196¤**	**5264.197¤**	**5264.198¤**	**5264.199¤**	**5264.200¤**	**5264.201¤**
WC6 1.7357	Art.-No.	–	–	**5267.168¤**	**5267.169¤**	**5267.170¤**	**5267.171¤**
LCB	Art.-No.	**5263.529¤**	**5263.530¤**	**5263.531¤**	**5263.532¤**	**5263.533¤**	**5263.534¤**

¤) Please add code for the required cap or lifting device. See below.

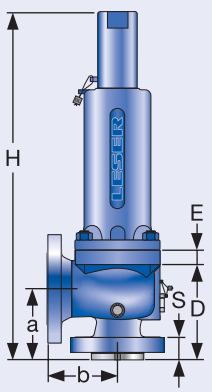
Dimensions and weights

Metric Units							
Weight [kg]		44,6	44,6	77,7	77,7	100,2	100,2
	with bellows	48,4	48,4	83,2	83,2	105,7	105,7
Center to face [mm]	Inlet a	137	137	184	184	184	184
	Outlet b	124	124	181	181	181	181
	s	49	49	49	49	65	65
Height (H4) [mm]	Standard H max.	673	673	786	786	786	786
	Bellows H max.	722	722	824	824	824	824
Support brackets [mm]	A	184	184	238	238	238	238
	B	110	110	140	140	140	140
	C	Ø 14	Ø 14	Ø 18	Ø 18	Ø 18	Ø 18
	D	184	184	234	234	234	234
	E	16	16	25	25	25	25
US Units							
Weight [lbs]		98,3	98,3	171,3	171,3	220,9	220,9
	with bellows	106,7	106,7	183,5	183,5	233,1	233,1
Center to face [inch]	Inlet a	5 3/8	5 3/8	7 1/4	7 1/4	7 1/4	7 1/4
	Outlet b	4 7/8	4 7/8	7 1/8	7 1/8	7 1/8	7 1/8
	s	1 15/16	1 15/16	1 15/16	1 15/16	2 9/16	2 9/16
Height (H4) [inch]	Standard H max.	26 1/2	26 1/2	30 15/16	30 15/16	30 15/16	30 15/16
	Bellows H max.	28 7/16	28 7/16	32 7/16	32 7/16	32 7/16	32 7/16
Support brackets [inch]	A	7 1/4	7 1/4	9 3/8	9 3/8	9 3/8	9 3/8
	B	4 11/32	4 11/32	5 1/2	5 1/2	5 1/2	5 1/2
	C	Ø 9/16	Ø 9/16	Ø 23/32	Ø 23/32	Ø 23/32	Ø 23/32
	D	7 1/4	7 1/4	9 7/32	9 7/32	9 7/32	9 7/32
	E	5/8	5/8	31/32	31/32	31/32	31/32

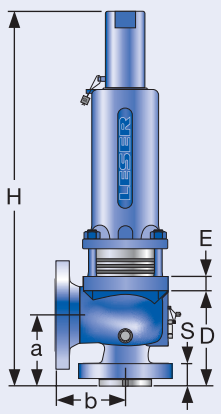
¤ Code for lifting device				
Lifting device	**H2**	**H3**	**H4**	**H3**
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

Pressure temperature ratings

Metric Units

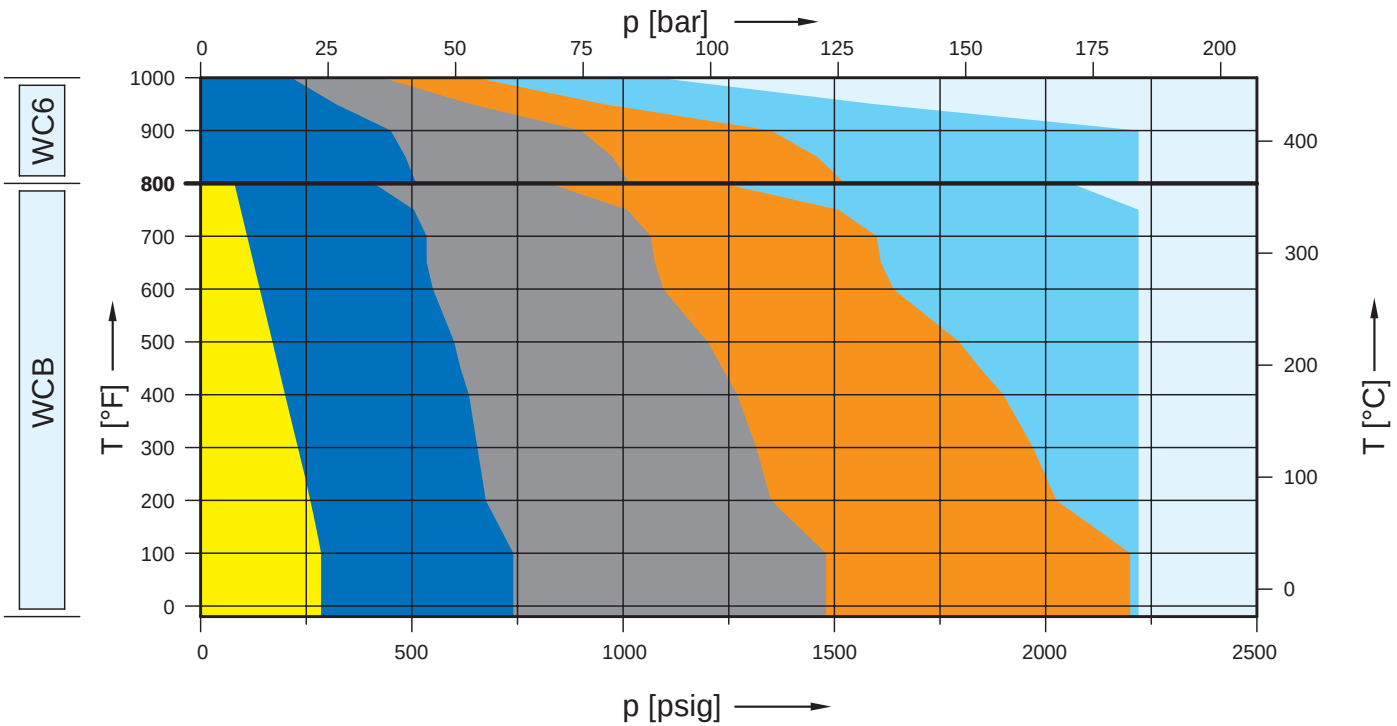
	Valve size	2 J 3	2 J 3	3 J 4	3 J 4	3 J 4	3 J 4
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300
	Actual Orifice diameter d_0 [mm]	36	36	36	36	36	36
	Actual Orifice area A_0 [mm²]	1018	1018	1018	1018	1018	1018
Body material: WCB 1.0619							
	Temperature range	Pressure range p [bar] S/G/L					
Maximum set pressure	-29 to 38 °C	19,7	19,7	51,0	102,1	153,1	186,2
	39 to 232 °C	12,8	19,7	42,4	85,2	127,2	186,2
	233 to 427 °C	5,5	19,7	28,3	56,9	85,2	142,1
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	19,7	41,4
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9	15,9	15,9
Body material: CF8M 1.4408							
	Temperature range	Pressure range p [bar] S/G/L					
Maximum set pressure	-268 to -60 °C	19,0	19,0	34,5	43,1	55,2	55,2
	-59 to -29 °C	19,0	19,0	49,7	99,3	149,0	186,2
	-28 to 38 °C	19,0	19,0	49,7	99,3	149,0	186,2
	39 to 232 °C	12,4	12,4	34,1	67,2	102,4	171,0
	233 to 427 °C	5,5	5,5	29,0	58,3	87,2	145,5
	428 to 538 °C	1,4	1,4	24,1	48,3	72,4	120,7
Outlet pressure limit Conventional design		19,0	19,0	19,0	19,0	19,0	41,4
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9	15,9	15,9
Body material: WC6 1.7357							
	Temperature range	Pressure range p [bar] S/G/L					
Maximum set pressure	233 to 427 °C	–	–	35,2	70,0	105,2	175,2
	428 to 538 °C	–	–	14,8	29,7	44,8	74,5
Outlet pressure limit Conventional design		–	–	19,7	19,7	19,7	41,4
Outlet pressure limit Balanced bellows design		–	–	15,9	15,9	15,9	15,9
Body material: LCB							
	Temperature range	Pressure range p [bar] S/G/L					
Maximum set pressure	-46 to 38 °C	18,4	18,4	48,0	96,0	144,1	240,1
	39 to 200 °C	13,8	13,8	42,5	85,1	127,6	212,7
	201 to 343 °C	8,4	8,4	36,4	72,8	109,2	182,0
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	19,7	41,4
Outlet pressure limit Balanced bellows design		15,9	15,9	15,9	15,9	15,9	15,9

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

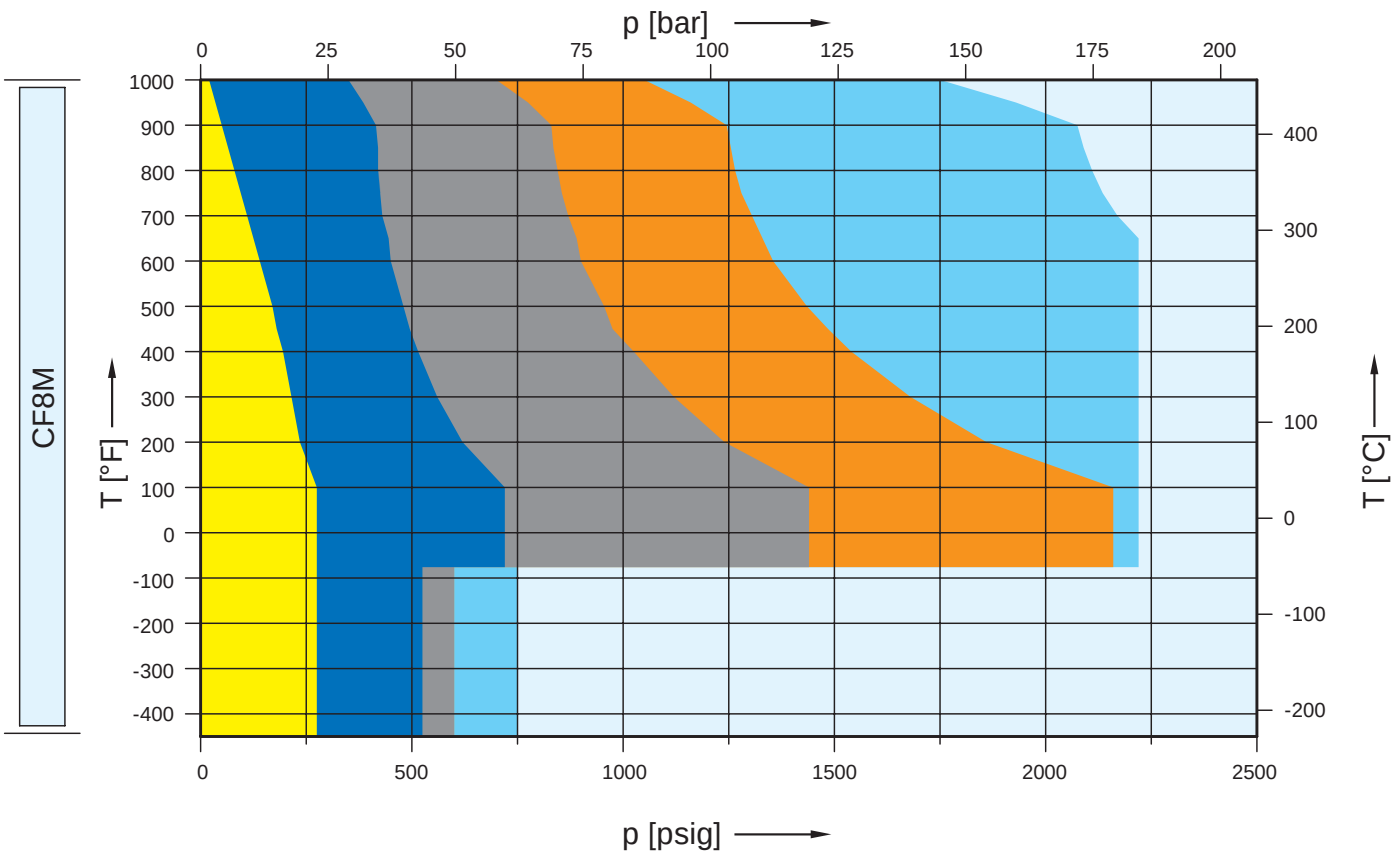
Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300	2500 x 300
WCB	5262.202X	–	5262.203X	5262.204X	5262.205X	5262.206X	–
WC6	–	–	5267.207X	5267.208X	5267.209X	5267.210X	–



K

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300	2500 x 300
CF8M	5264.211X	–	5264.212X	5264.213X	5264.214X	5264.215X	–



Article numbers, dimensions and weights

Article numbers

Valve size		3 K 4	3 K 4	3 K 4	3 K 4	3 K 6	3 K 6
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300
Actual Orifice diameter d_0 [mm]		43	43	43	43	43	43
Actual Orifice area A_0 [mm²]		1452	1452	1452	1452	1452	1452
Body material							
WCB 1.0619	Art.-No.	**5262.202**¤	Use 3 K 4 300 x 150	**5262.203**¤	**5262.204**¤	**5262.205**¤	**5262.206**¤
CF8M 1.4408	Art.-No.	**5264.111**¤		**5264.112**¤	**5264.113**¤	**5264.114**¤	**5264.115**¤
WC6 1.7357	Art.-No.	–		**5267.207**¤	**5267.208**¤	**5267.209**¤	**5267.210**¤
LCB	Art.-No.	**5263.535**¤		**5263.536**¤	**5263.537**¤	**5263.538**¤	**5263.539**¤

¤) Please add code for the required cap or lifting device. See below.

Dimensions and weights

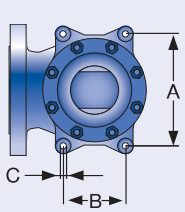
Metric Units

					Other	WC6		
Weight [kg]		70,1	Use 3 K 4 300 x 150	70,1	77,7	70,1	127,5	127,5
	with bellows	75,7		75,7	83,2	75,7	134,1	134,1
Center to face [mm]	Inlet a	156		156	184	156	198	197
	Outlet b	162		162	181	162	216	216
	s	49		49	49	49	67	65
Height (H4) [mm]	Standard H max.	758		758	786	758	880	879
	Bellows H max.	796		796	824	796	880	879
Support brackets [mm]	A	238		238	238	238	278	278
	B	140		140	140	140	160	160
	C	Ø 18		Ø 18	Ø 18	Ø 18	Ø 18	Ø 18
	D	206		206	234	206	288	287
	E	25		25	25	25	25	25

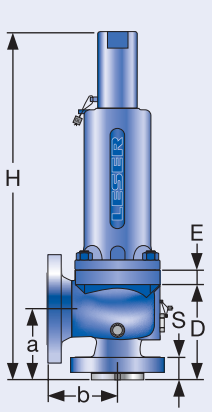
US Units

Weight [lbs]		154,6	Use 3 K 4 300 x 150	154,6	171,3	154,6	281,1	281,1
	with bellows	166,9		166,9	183,5	166,9	295,7	295,7
Center to face [inch]	Inlet a	6 1/8		6 1/8	7 1/4	6 1/8	7 13/16	7 3/4
	Outlet b	6 3/8		6 3/8	7 1/8	6 3/8	8 1/2	8 1/2
	s	1 15/16		1 15/16	1 15/16	1 15/16	2 9/16	2 9/16
Height (H4) [inch]	Standard H max.	29 27/32		29 27/32	30 15/16	29 27/32	34 21/32	34 19/32
	Bellows H max.	31 11/32		31 11/32	32 7/16	31 11/32	34 21/32	34 19/32
Support brackets [inch]	A	9 3/8		9 3/8	9 3/8	9 3/8	10 15/16	10 15/16
	B	5 1/2		5 1/2	5 1/2	5 1/2	6 5/16	6 5/16
	C	Ø 23/32		Ø 23/32	Ø 23/32	Ø 23/32	Ø 23/32	Ø 23/32
	D	8 3/32		8 3/32	9 7/32	8 3/32	11 11/32	11 9/32
	E	31/32		31/32	31/32	31/32	31/32	31/32

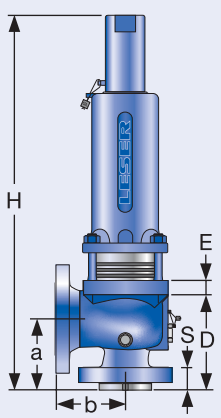
¤ Code for lifting device				
Lifting device	H2	H3	H4	H3
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

Pressure temperature ratings

Metric Units

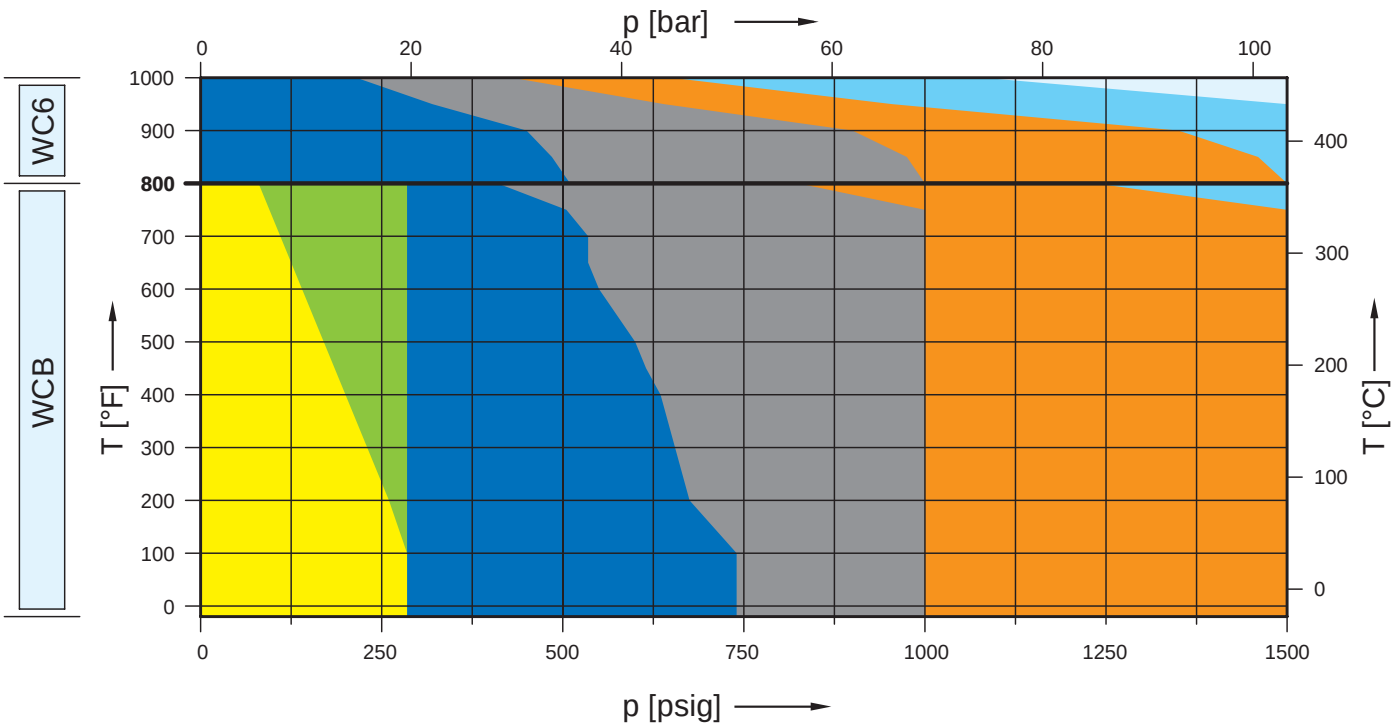
Valve size		3 K 4	3 K 4	3 K 4	3 K 4	3 K 6	3 K 6
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 300
Actual Orifice diameter d_0 [mm]		43	43	43	43	43	43
Actual Orifice area A_0 [mm²]		1452	1452	1452	1452	1452	1452
Body material: WCB 1.0619							
Temperature range		Pressure range p [bar] S/G/L					
Maximum set pressure	-29 to 38 °C	19,7	Use 3 K 4 300 x 150	51,0	102,1	153,1	153,1
	39 to 232 °C	12,8		42,4	85,2	127,2	153,1
	233 to 427 °C	5,5		28,3	56,9	85,2	142,1
Outlet pressure limit Conventional design		19,7		19,7	19,7	19,7	41,4
Outlet pressure limit Balanced bellows design		10,3		10,3	13,8	13,8	13,8
Body material: CF8M 1.4408							
Temperature range		Pressure range p [bar] S/G/L					
Maximum set pressure	-268 to -60 °C	19,0	Use 3 K 4 300 x 150	36,2	41,4	41,4	51,7
	-59 to -29 °C	19,0		49,7	99,3	149,0	153,1
	-28 to 38 °C	19,0		49,7	99,3	149,0	153,1
	39 to 232 °C	12,4		34,1	67,2	102,4	171,0
	233 to 427 °C	5,5		29,0	58,3	87,2	145,5
	428 to 538 °C	1,4		24,1	48,3	72,4	120,7
Outlet pressure limit Conventional design		19,0		19,0	19,0	19,0	41,4
Outlet pressure limit Balanced bellows design		10,3		10,3	13,8	13,8	13,8
Body material: WC6 1.7357							
Temperature range		Pressure range p [bar] S/G/L					
Maximum set pressure	233 to 427 °C	–	–	35,2	70,0	105,2	153,1
	428 to 538 °C	–	–	14,8	29,7	44,8	74,5
Outlet pressure limit Conventional design		–	–	19,7	19,7	19,7	41,4
Outlet pressure limit Balanced bellows design		–	–	10,3	13,8	13,8	13,8
Body material: LCB							
Temperature range		Pressure range p [bar] S/G/L					
Maximum set pressure	-46 to 38 °C	18,4	Use 3 K 4 300 x 150	48,0	96,0	144,1	240,1
	39 to 200 °C	13,8		42,5	85,1	127,6	212,7
	201 to 343 °C	8,4		36,4	72,8	109,2	182,0
Outlet pressure limit Conventional design		19,7		19,7	19,7	19,7	41,4
Outlet pressure limit Balanced bellows design		10,3		10,3	13,8	13,8	13,8

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

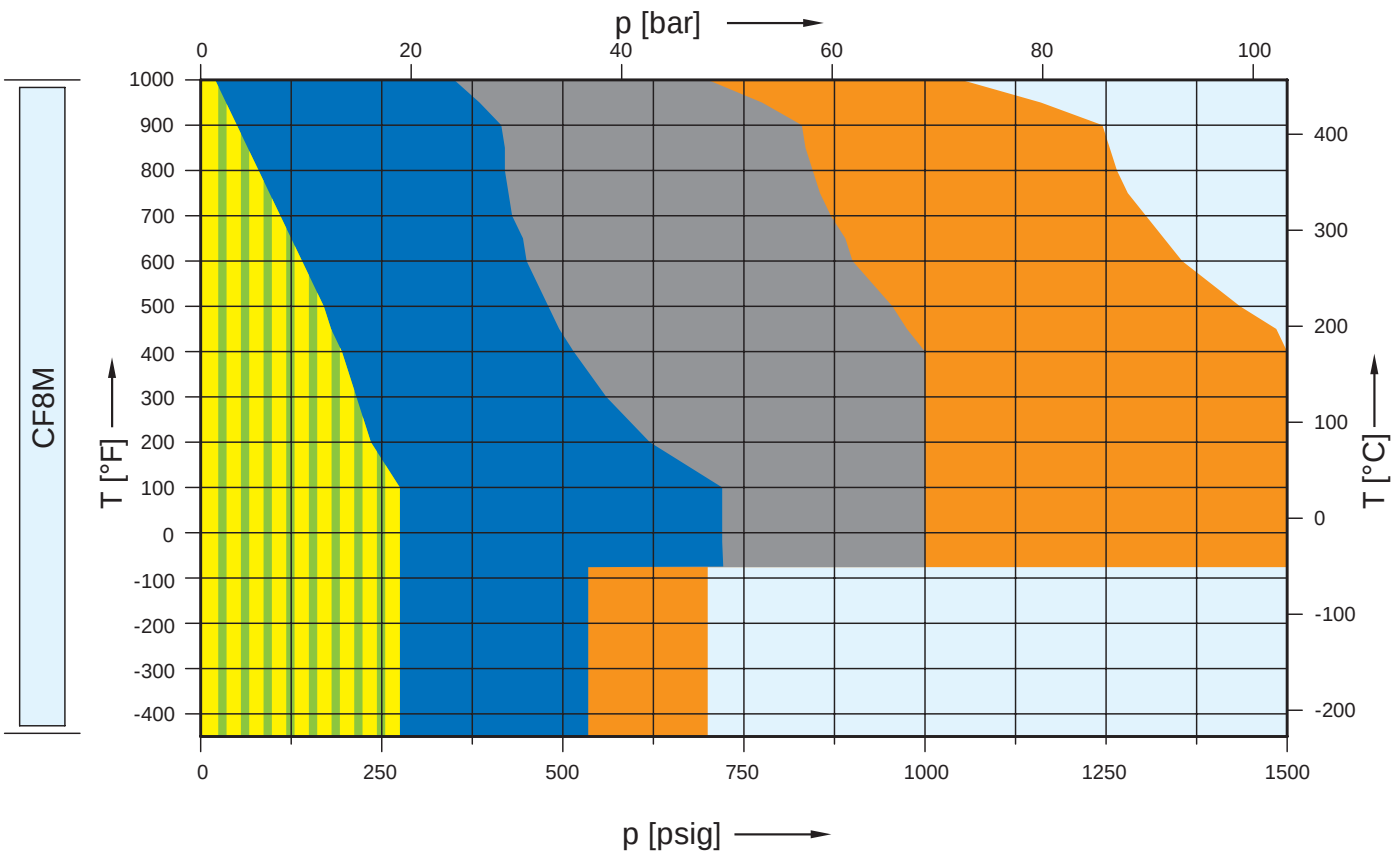
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
WCB	5262.232X	5262.233X	5262.234X	5262.235X	5262.236X	5262.237X	–
WC6	–	–	5267.238X	5267.239X	5267.240X	5267.241X	–



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
CF8M	5264.242X	5264.243X	5264.244X	5264.245X	5264.246X	–	–



Article numbers, dimensions and weights

Article numbers

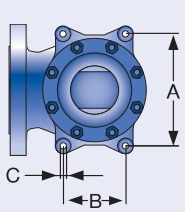
Valve size		3 L 4	3 L 4	4 L 6	4 L 6	4 L 6	4 L 6
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150
Actual Orifice diameter d_0 [mm]		53,5	53,5	53,5	53,5	53,5	53,5
Actual Orifice area A_0 [mm²]		2248	2248	2248	2248	2248	2248
Body material							
WCB 1.0619	Art.-No.	**5262.232**¤	**5262.233**¤	**5262.234**¤	**5262.235**¤	**5262.236**¤	**5262.237**¤
CF8M 1.4408	Art.-No.	**5264.242**¤	**5264.243**¤	**5264.244**¤	**5264.245**¤	**5264.246**¤	–
WC6 1.7357	Art.-No.	–	–	**5267.238**¤	**5267.239**¤	**5267.240**¤	**5267.241**¤
LCB	Art.-No.	**5263.540**¤	**5263.541**¤	**5263.542**¤	**5263.543**¤	**5263.544**¤	**5263.545**¤

¤) Please add code for the required cap or lifting device. See below.

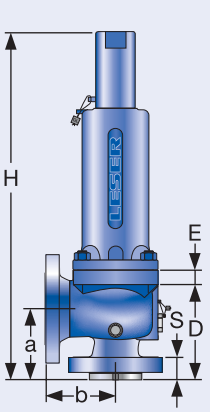
Dimensions and weights

Metric Units							
Weight [kg]		70,1	70,1	112,2	122	134,1	127,5
	with bellows	75,7	75,7	118,8	128,6	140,7	134,1
Center to face [mm]	Inlet a	156	156	179	179	197	197
	Outlet b	165	165	181	203	222	222
	s	49	49	49	57	72	72
Height (H4) [mm]	Standard H max.	758	758	853	853	871	871
	Bellows H max.	796	796	886	886	904	904
Support brackets [mm]	A	238	238	278	278	278	278
	B	140	140	160	160	160	160
	C	Ø 18	Ø 18	Ø 18	Ø 18	Ø 18	Ø 18
	D	206	206	262	262	280	280
	E	25	25	25	25	25	25
US Units							
Weight [lbs]		154,6	154,6	247,4	269	295,7	281,1
	with bellows	166,9	166,9	262	283,6	310,2	295,7
Center to face [inch]	Inlet a	6 1/8	6 1/8	7 1/16	7 1/16	7 3/4	7 3/4
	Outlet b	6 1/2	6 1/2	7 1/8	8	8 3/4	8 3/4
	s	1 15/16	1 15/16	1 15/16	2 1/4	2 3/4	2 3/4
Height (H4) [inch]	Standard H max.	29 27/32	29 27/32	33 19/32	33 19/32	34 9/32	34 9/32
	Bellows H max.	31 11/32	31 11/32	34 7/8	34 7/8	35 19/32	35 19/32
Support brackets [inch]	A	9 3/8	9 3/8	10 15/16	10 15/16	10 15/16	10 15/16
	B	5 1/2	5 1/2	6 5/16	6 5/16	6 5/16	6 5/16
	C	Ø 23/32	Ø 23/32	Ø 23/32	Ø 23/32	Ø 23/32	Ø 23/32
	D	8 3/32	8 3/32	10 15/16	10 15/16	11	11
	E	31/32	31/32	31/32	31/32	31/32	31/32

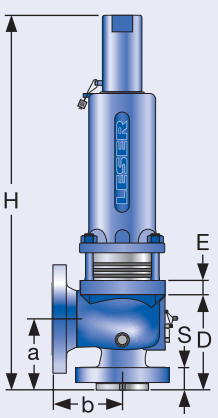
¤ Code for lifting device				
Lifting device	**H2**	**H3**	**H4**	**H3**
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

Pressure temperature ratings

Metric Units

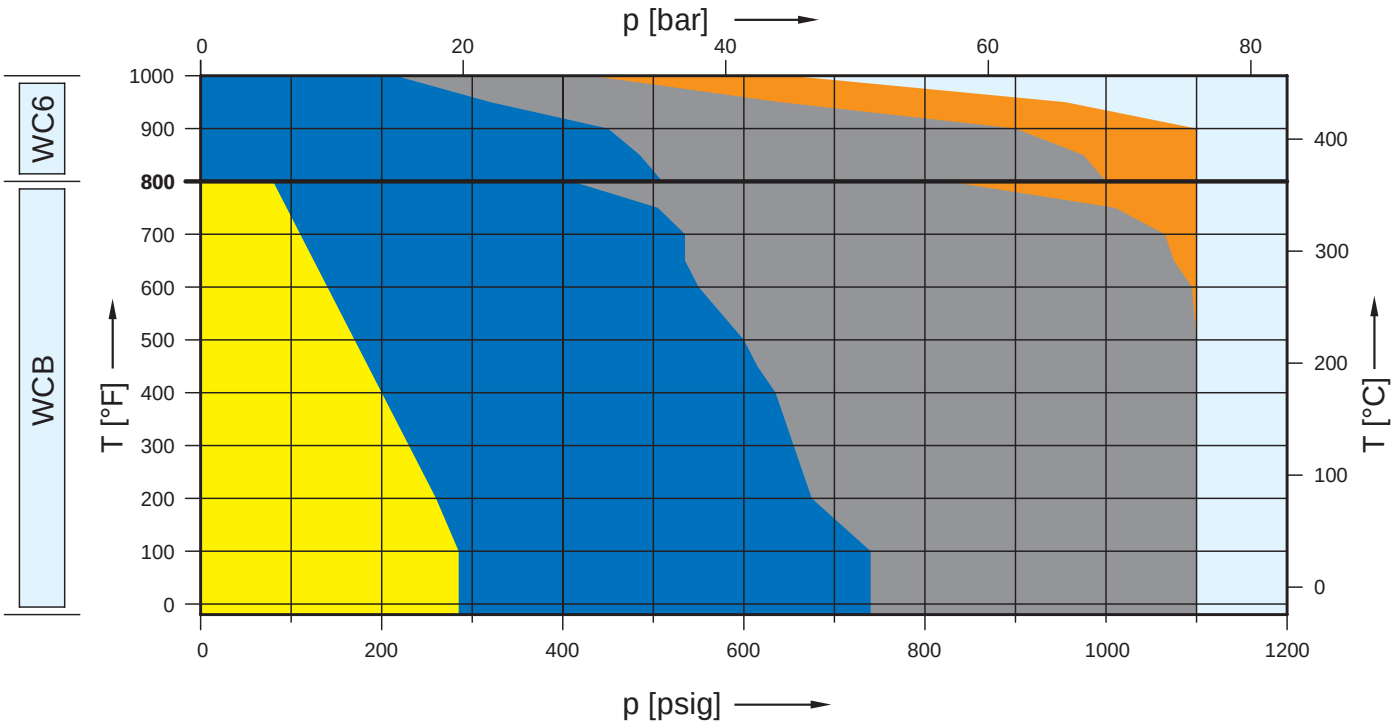
	Valve size	3 L 4	3 L 4	4 L 6	4 L 6	4 L 6	4 L 6
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150
	Actual Orifice diameter d_0 [mm]	53,5	53,5	53,5	53,5	53,5	53,5
	Actual Orifice area A_0 [mm²]	2248	2248	2248	2248	2248	2248
Body material: WCB 1.0619							
	Temperature range	Pressure range p [bar] S/G/L					
Maximum set pressure	-29 to 38 °C	19,7	19,7	51,0	69,0	103,4	–
	39 to 232 °C	12,8	19,7	42,4	69,0	103,4	–
	233 to 427 °C	5,5	19,7	28,3	56,9	85,2	103,4
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		6,9	6,9	11,7	11,7	11,7	11,7
Body material: CF8M 1.4408							
	Temperature range	Pressure range p [bar] S/G/L					
Maximum set pressure	-268 to -60 °C	19,0	19,0	36,2	36,9	48,3	–
	-59 to -29 °C	19,0	19,0	49,7	69,0	103,4	–
	-28 to 38 °C	19,0	19,0	49,7	69,0	103,4	–
	39 to 232 °C	12,4	12,4	34,1	67,2	102,4	–
	233 to 427 °C	5,5	5,5	29,0	58,3	87,2	–
	428 to 538 °C	1,4	1,4	24,1	48,3	72,4	–
Outlet pressure limit Conventional design		19,0	19,0	19,0	19,0	19,0	–
Outlet pressure limit Balanced bellows design		6,9	6,9	11,7	11,7	11,7	–
Body material: WC6 1.7357							
	Temperature range	Pressure range p [bar] S/G/L					
Maximum set pressure	233 to 427 °C	–	–	35,2	69,0	103,4	103,4
	428 to 538 °C	–	–	14,8	29,7	44,8	74,5
Outlet pressure limit Conventional design		–	–	19,7	19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		–	–	11,7	11,7	11,7	11,7
Body material: LCB							
	Temperature range	Pressure range p [bar] S/G/L					
Maximum set pressure	-46 to 38 °C	18,4	18,4	48,0	96,0	144,1	240,1
	39 to 200 °C	13,8	13,8	42,5	85,1	127,6	212,7
	201 to 343 °C	8,4	8,4	36,4	72,8	109,2	182,0
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		6,9	6,9	11,7	11,7	11,7	11,7

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

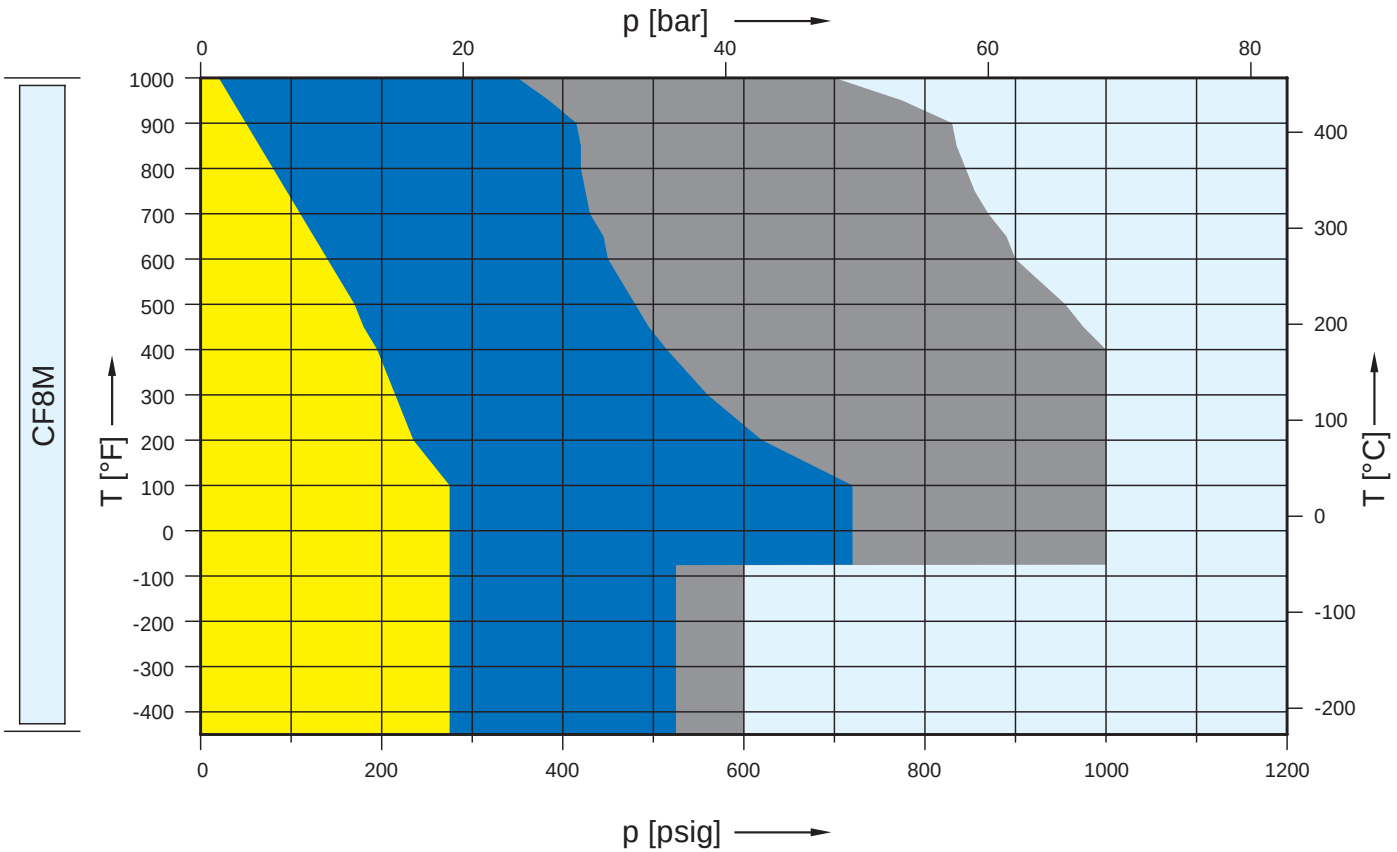
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
WCB	5262.580X	–	5262.581X	5262.582X	5262.583X	–	–
WC6	–	–	5267.584X	5267.585X	5267.586X	–	–



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
CF8M	5264.587X	–	5264.588X	5264.589X	–	–	–



M

Article numbers, dimensions and weights

Article numbers

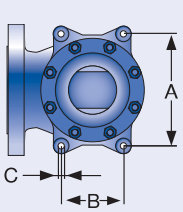
	Valve size	4 M 6	4 M 6	4 M 6	4 M 6	4 M 6
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150
	Actual Orifice diameter d_0 [mm]	60,3	60,3	60,3	60,3	60,3
	Actual Orifice area A_0 [mm²]	2856	2856	2856	2856	2856
Body material						
WCB 1.0619	Art.-No.	**5262.580**¤	Use 4 M 6 300 x 150	**5262.581**¤	**5262.582**¤	**5262.583**¤
CF8M 1.4408	Art.-No.	**5264.587**¤		**5264.588**¤	**5264.589**¤	–
WC6 1.7357	Art.-No.	–		**5267.584**¤	**5267.585**¤	**5267.586**¤
LCB	Art.-No.	**5263.546**¤		**5263.547**¤	**5263.548**¤	**5263.549**¤

¤) Please add code for the required cap or lifting device. See below.

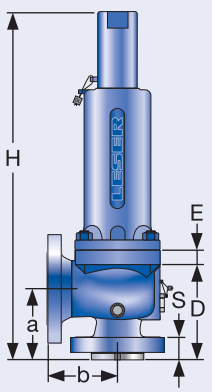
Dimensions and weights

Metric Units						
Weight [kg]		112,1	Use 4 M 6 300 x 150	112,1	122	134,1
	with bellows	118,7		118,7	128,6	134,1
Center to face [mm]	Inlet a	178		178	178	197
	Outlet b	184		184	203	222
	s	48		48	56	72
Height (H4) [mm]	Standard H max.	852		852	852	871
	Bellows H max.	885		885	885	904
Support brackets [mm]	A	278		278	278	278
	B	160		160	160	160
	C	Ø 18		Ø 18	Ø 18	Ø 18
	D	260		260	260	280
	E	25		25	25	25
US Units						
Weight [lbs]		247,2	Use 4 M 6 300 x 150	247,2	269	295,7
	with bellows	261,7		261,7	283,6	310,2
Center to face [inch]	Inlet a	7		7	7	7 3/4
	Outlet b	7 1/4		7 1/4	8	8 3/4
	s	1 7/8		1 7/8	2 3/16	2 3/4
Height (H4) [inch]	Standard H max.	33 17/32		33 17/32	33 17/32	33 17/32
	Bellows H max.	34 27/32		34 27/32	34 27/32	34 27/32
Support brackets [inch]	A	10 15/16		10 15/16	10 15/16	10 15/16
	B	6 5/16		6 5/16	6 5/16	6 5/16
	C	Ø 23/32		Ø 23/32	Ø 23/32	Ø 23/32
	D	10 1/4		10 1/4	10 1/4	11
	E	31/32		31/32	31/32	31/32

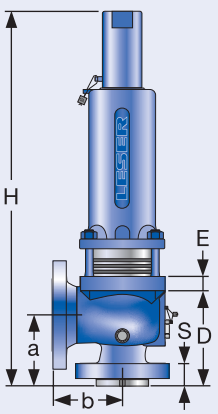
¤ Code for lifting device				
Lifting device	**H2**	**H3**	**H4**	**H3**
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

M

Pressure temperature ratings

Metric Units

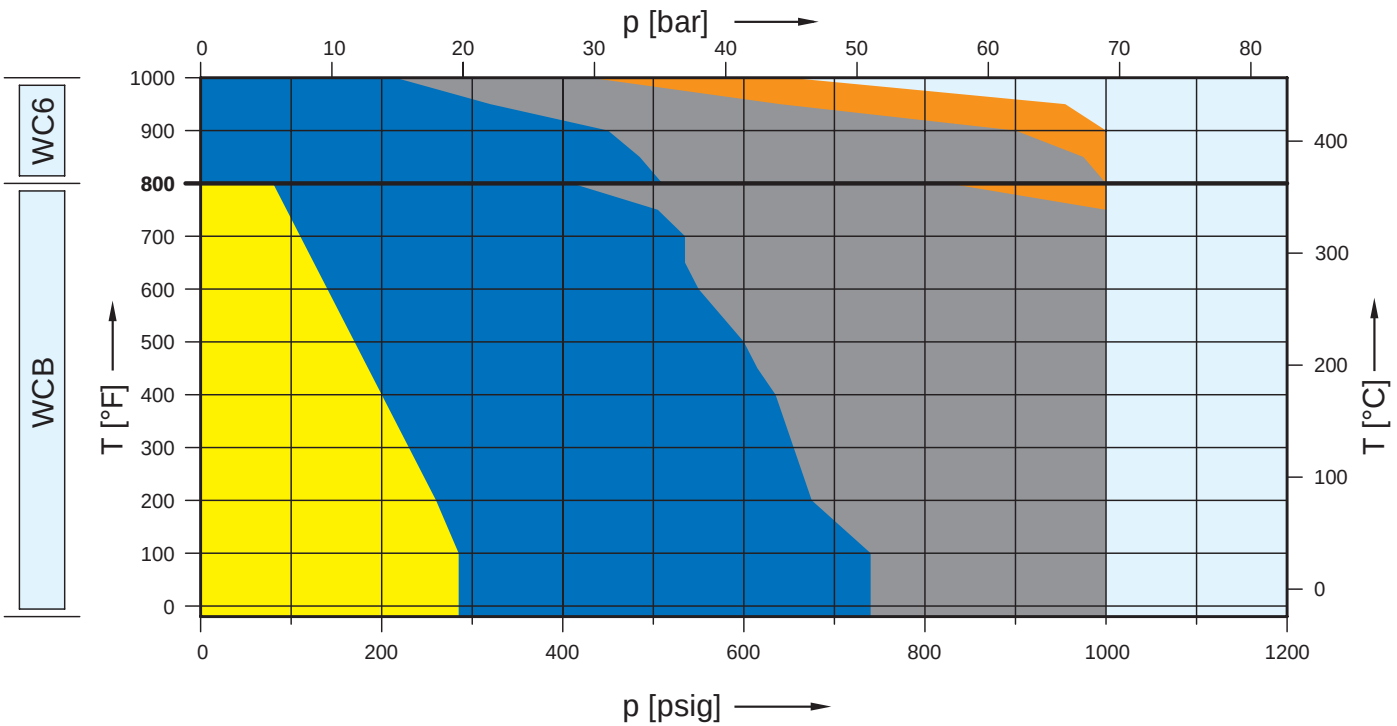
Valve size		4 M 6	4 M 6	4 M 6	4 M 6	4 M 6
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 150
Actual Orifice diameter d_0 [mm]		60,3	60,3	60,3	60,3	60,3
Actual Orifice area A_0 [mm^2]		2846	2846	2846	2846	2846
Body material: WCB 1.0619						
Temperature range			Pressure range p [bar] S/G/L			
Maximum set pressure	-29 to 38 °C	19,7	Use 4 M 6 300 x 150	51,0	75,9	–
	39 to 232 °C	12,8		42,4	75,9	–
	233 to 427 °C	5,5		28,3	56,9	75,9
Outlet pressure limit Conventional design		19,7		19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		5,5		11,0	11,0	11,0
Body material: CF8M 1.4408						
Temperature range			Pressure range p [bar] S/G/L			
Maximum set pressure	-268 to -60 °C	19,0	Use 4 M 6 300 x 150	36,2	41,4	–
	-59 to -29 °C	19,0		49,7	69,0	–
	-28 to 38 °C	19,0		49,7	69,0	–
	39 to 232 °C	12,4		34,1	67,2	–
	233 to 427 °C	5,5		29,0	58,3	–
	428 to 538 °C	1,4		24,1	48,3	–
Outlet pressure limit Conventional design		19,0		19,0	19,0	–
Outlet pressure limit Balanced bellows design		5,5		11,0	11,0	–
Body material: WC6 1.7357						
Temperature range			Pressure range p [bar] S/G/L			
Maximum set pressure	233 to 427 °C	–	Use 4 M 6 300 x 150	35,2	69,0	75,9
	428 to 538 °C	–		14,8	29,7	44,8
Outlet pressure limit Conventional design		–		19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		–		11,0	11,0	11,0
Body material: LCB						
Temperature range			Pressure range p [bar] S/G/L			
Maximum set pressure	-46 to 38 °C	18,4	Use 4 M 6 300 x 150	48,0	96,0	144,1
	39 to 200 °C	13,8		42,5	85,1	127,6
	201 to 343 °C	8,4		36,4	72,8	109,2
Outlet pressure limit Conventional design		19,7		19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		5,5		11,0	11,0	11,0

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

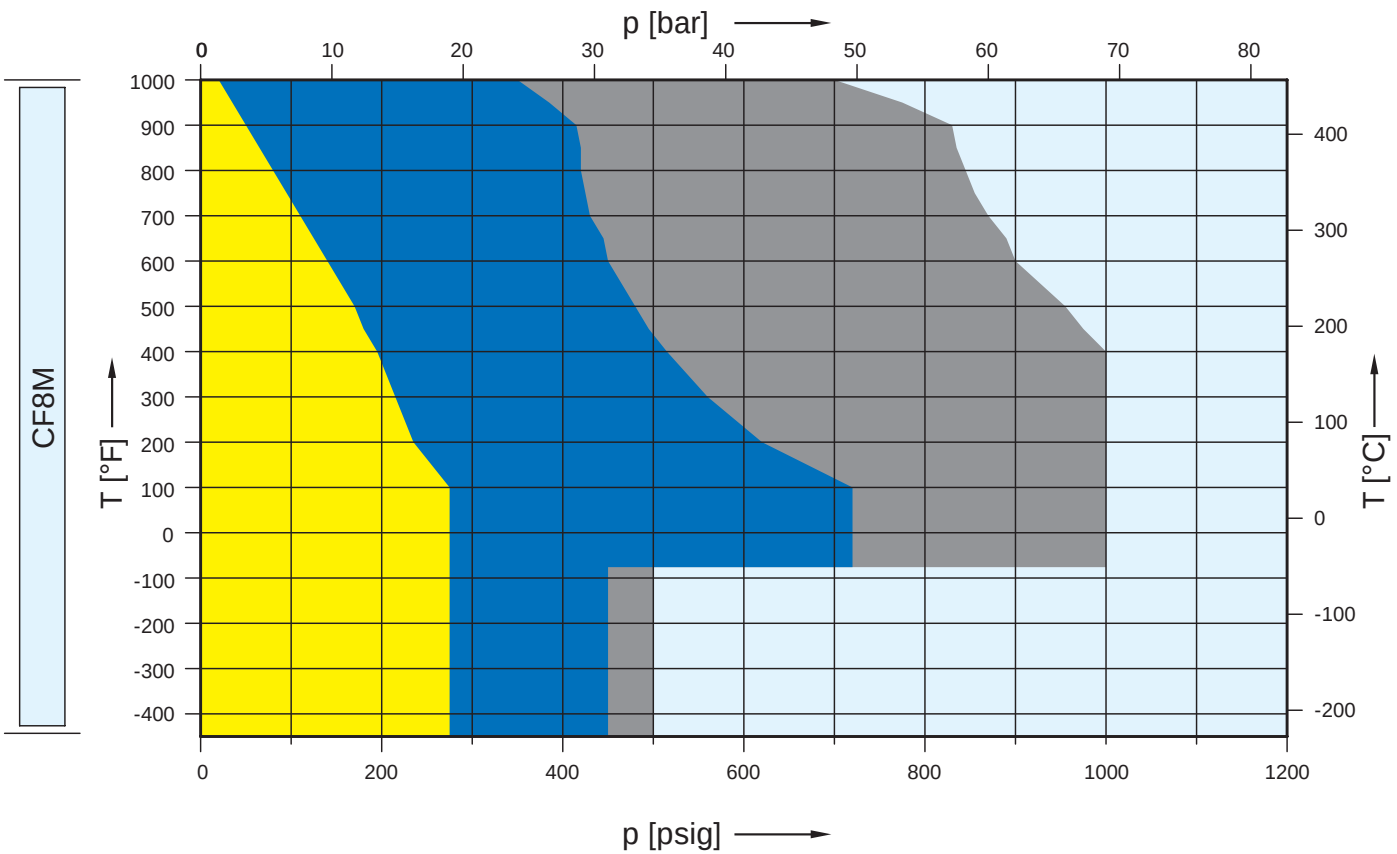
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
WCB	5262.590X	–	5262.591X	5262.592X	5262.593X	–	–
WC6	–	–	5267.594X	5267.595X	5267.596X	–	–



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
CF8M	5264.597X	–	5264.598X	5264.599X	–	–	–



N

Article numbers, dimensions and weights

Article numbers

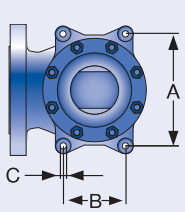
	Valve size	4 N 6	4 N 6	4 N 6	4 N 6	4 N 6
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150
	Actual Orifice diameter d_0 [mm]	66	66	66	66	66
	Actual Orifice area A_0 [mm²]	3421	3421	3421	3421	3421
Body material						
WCB 1.0619	Art.-No.	**5262.590**¤	Use 4 N 6 300 x 150	**5262.591**¤	**5262.592**¤	**5262.593**¤
CF8M 1.4408	Art.-No.	**5264.597**¤		**5264.598**¤	**5264.599**¤	–
WC6 1.7357	Art.-No.	–		**5267.594**¤	**5267.595**¤	**5267.596**¤
LCB	Art.-No.	**5263.550**¤		**5263.551**¤	**5263.552**¤	**5263.553**¤

¤) Please add code for the required cap or lifting device. See below.

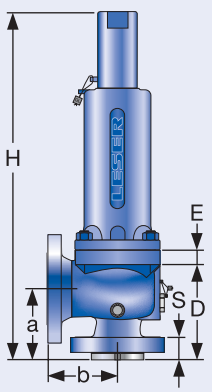
Dimensions and weights

Metric Units						
Weight [kg]		128,6	Use 4 N 6 300 x 150	128,6	134,1	134,1
	with bellows	135,2		135,2	140,7	140,7
Center to face [mm]	Inlet a	197		197	197	197
	Outlet b	210		210	222	222
	s	48		48	72	72
Height (H4) [mm]	Standard H max.	871		871	871	871
	Bellows H max.	904		904	904	904
Support brackets [mm]	A	278		278	278	278
	B	160		160	160	160
	C	Ø 18		Ø 18	Ø 18	Ø 18
	D	280		280	280	280
	E	25		25	25	25
US Units						
Weight [lbs]		283,6	Use 4 N 6 300 x 150	283,6	295,7	295,7
	with bellows	298,1		298,1	310,2	310,2
Center to face [inch]	Inlet a	7 3/4		7 3/4	7 3/4	7 3/4
	Outlet b	8 1/4		8 1/4	8 3/4	8 3/4
	s	1 7/8		1 7/8	2 3/4	2 3/4
Height (H4) [inch]	Standard H max.	34 9/32		34 9/32	34 9/32	34 9/32
	Bellows H max.	35 19/32		35 19/32	35 19/32	35 19/32
Support brackets [inch]	A	10 15/16		10 15/16	10 15/16	10 15/16
	B	6 5/16		6 5/16	6 5/16	6 5/16
	C	Ø 23/32		Ø 23/32	Ø 23/32	Ø 23/32
	D	11		11	11	11
	E	31/32		31/32	31/32	31/32

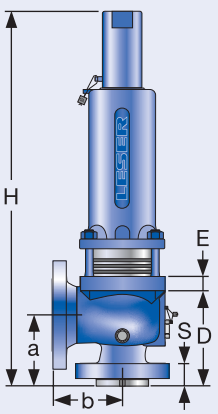
¤ Code for lifting device				
Lifting device	**H2**	**H3**	**H4**	**H3**
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

N

Pressure temperature ratings

Metric Units

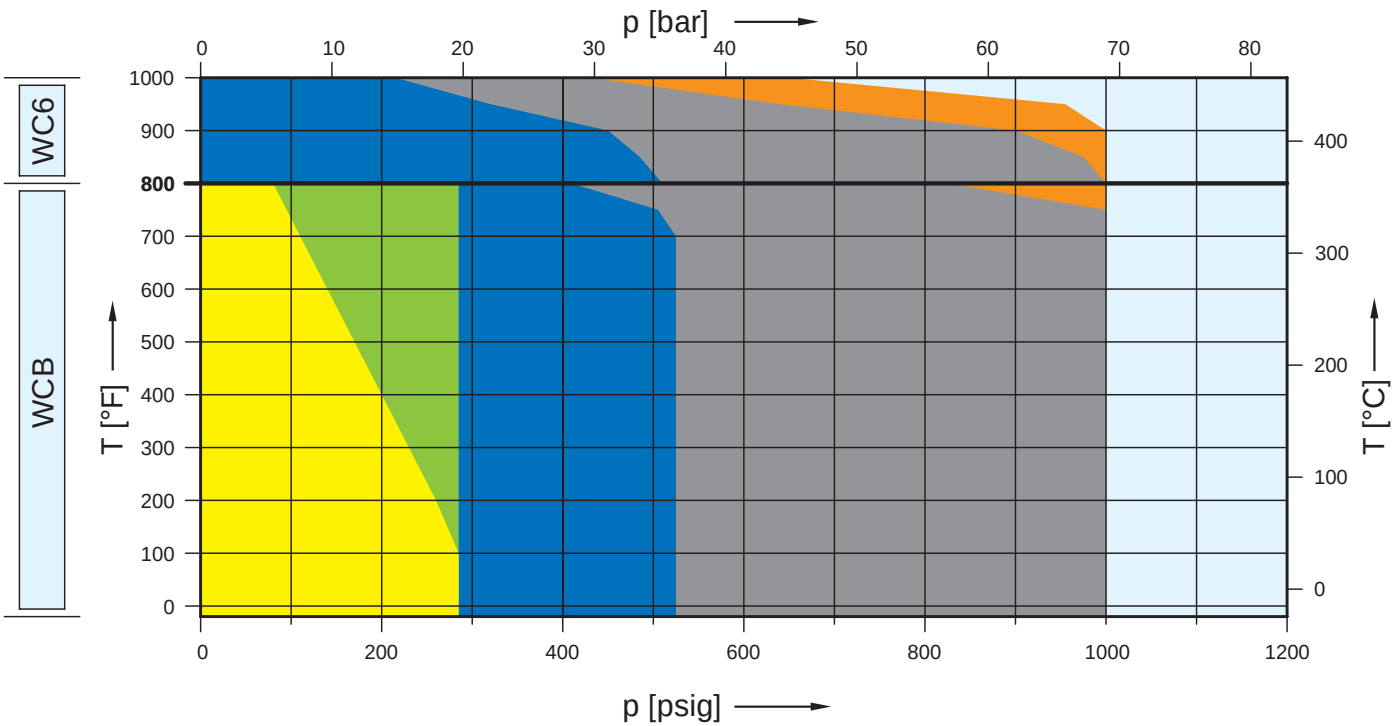
Valve size		4 N 6	4 N 6	4 N 6	4 N 6	4 N 6
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150	600 x 150	900 x 150
Actual Orifice diameter d_0 [mm]		66	66	66	66	66
Actual Orifice area A_0 [mm²]		3421	3421	3421	3421	3421
Body material: WCB 1.0619						
Temperature range			Pressure range p [bar] S/G/L			
Maximum set pressure	-29 to 38 °C	19,7	Use 4 N 6 300 x 150	51,0	69,0	–
	39 to 232 °C	12,8		42,4	69,0	–
	233 to 427 °C	5,5		28,3	56,9	69,0
Outlet pressure limit Conventional design		19,7		19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		5,5		11,0	11,0	11,0
Body material: CF8M 1.4408						
Temperature range			Pressure range p [bar] S/G/L			
Maximum set pressure	-268 to -60 °C	19,0	Use 4 N 6 300 x 150	31,0	34,5	–
	-59 to -29 °C	19,0		49,7	69,0	–
	-28 to 38 °C	19,0		49,7	69,0	–
	39 to 232 °C	12,4		34,1	67,2	–
	233 to 427 °C	5,5		29,0	58,3	–
	428 to 538 °C	1,4		24,1	48,3	–
Outlet pressure limit Conventional design		19,0		19,0	19,0	–
Outlet pressure limit Balanced bellows design		5,5		11,0	11,0	–
Body material: WC6 1.7357						
Temperature range			Pressure range p [bar] S/G/L			
Maximum set pressure	233 to 427 °C	–	Use 4 N 6 300 x 150	35,2	69,0	69,0
	428 to 538 °C	–		14,8	29,7	44,8
Outlet pressure limit Conventional design		–		19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		–		11,0	11,0	11,0
Body material: LCB						
Temperature range			Pressure range p [bar] S/G/L			
Maximum set pressure	-46 to 38 °C	18,4	Use 4 N 6 300 x 150	48,0	96,0	144,1
	39 to 200 °C	13,8		42,5	85,1	127,6
	201 to 343 °C	8,4		36,4	72,8	109,2
Outlet pressure limit Conventional design		19,7		19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		5,5		11,0	11,0	11,0

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

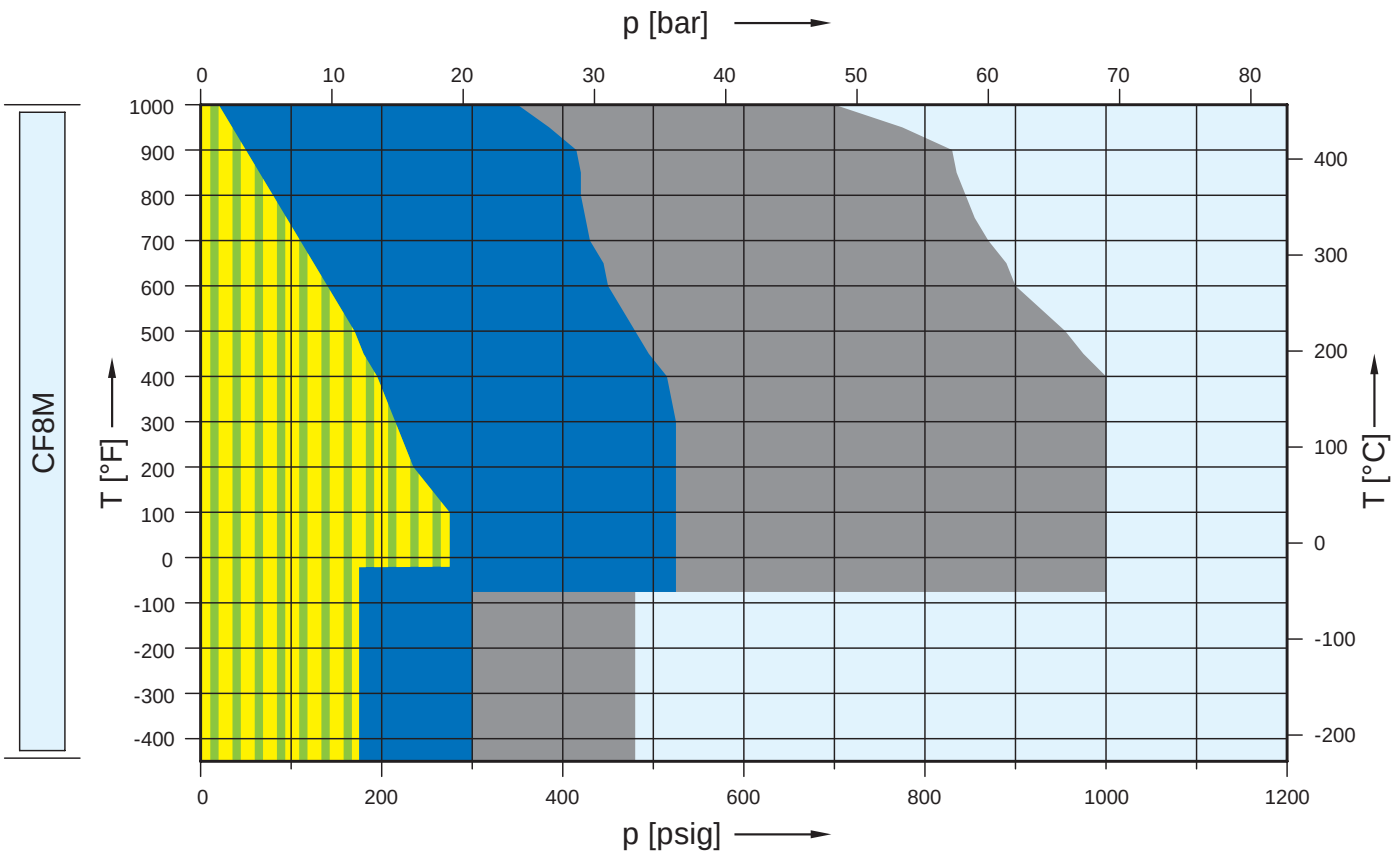
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
WCB	5262.645X	5262.646X	5262.647X	5262.648X	5262.649X	–	–
WC6	–	–	5267.650X	5267.651X	5267.652X	–	–



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
CF8M	5264.653X	5264.654X	5264.655X	5264.656X	–	–	–



P

Article numbers, dimensions and weights

Article numbers

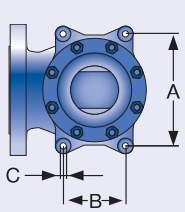
	Valve size	4 P 6	4 P 6	4 P 6	4 P 6	4 P 6
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150
	Actual Orifice diameter d_0 [mm]	80	80	80	80	80
	Actual Orifice area A_0 [mm²]	5027	5027	5027	5027	5027
Body material						
WCB 1.0619	Art.-No.	**5262.645**¤	**5262.646**¤	**5262.647**¤	**5262.648**¤	**5262.649**¤
CF8M 1.4408	Art.-No.	**5264.653**¤	**5264.654**¤	**5264.655**¤	**5264.656**¤	–
WC6 1.7357	Art.-No.	–	–	**5267.550**¤	**5267.551**¤	**5267.552**¤
LCB	Art.-No.	**5263.554**¤	**5263.555**¤	**5263.556**¤	**5263.557**¤	**5263.558**¤

¤) Please add code for the required cap or lifting device. See below.

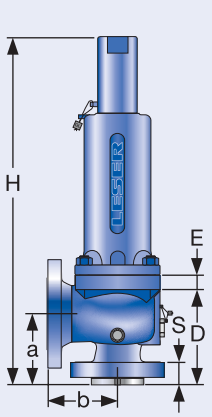
Dimensions and weights

Metric Units						
Weight [kg]		107,7	107,7	164	164	164
	with bellows	114,8	114,8	172	172	172
Center to face [mm]	Inlet a	181	181	225	225	225
	Outlet b	229	229	254	254	254
	s	48	48	62	62	62
Height (H4) [mm]	Standard H max.	855	855	1079	1079	1079
	Bellows H max.	888	888	1138	1138	1138
Support brackets [mm]	A	278	278	370	370	370
	B	160	160	210	210	210
	C	Ø 18	Ø 18	Ø 18	Ø 18	Ø 18
	D	262	262	306	306	306
	E	25	25	25	25	25
US Units						
Weight [lbs]		237,5	237,5	361,6	361,6	361,6
	with bellows	253,1	253,1	379,3	379,3	379,3
Center to face [inch]	Inlet a	7 1/8	7 1/8	8 7/8	8 7/8	8 7/8
	Outlet b	9	9	10	10	10
	s	1 7/8	1 7/8	2 7/16	2 7/16	2 7/16
Height (H4) [inch]	Standard H max.	33 21/32	33 21/32	42 1/2	42 1/2	42 1/2
	Bellows H max.	34 31/32	34 31/32	44 13/16	44 13/16	44 13/16
Support brackets [inch]	A	10 15/16	10 15/16	14 9/16	14 9/16	14 9/16
	B	6 5/16	6 5/16	8 9/32	8 9/32	8 9/32
	C	Ø 23/32	Ø 23/32	Ø 23/32	Ø 23/32	Ø 23/32
	D	10 5/16	10 5/16	12 1/16	12 1/16	12 1/16
	E	31/32	31/32	31/32	31/32	31/32

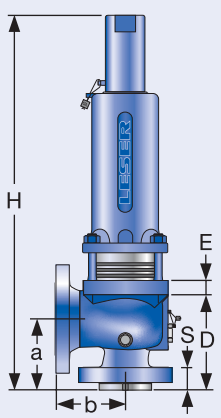
¤ Code for lifting device				
Lifting device	**H2**	**H3**	**H4**	**H3**
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

P

Pressure temperature ratings

Metric Units

	Valve size	4 P 6	4 P 6	4 P 6	4 P 6	4 P 6
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150
	Actual Orifice diameter d_0 [mm]	80	80	80	80	80
	Actual Orifice area A_0 [mm²]	5027	5027	5027	5027	5027
Body material: WCB 1.0619						
	Temperature range	Pressure range p [bar] S/G/L				
Maximum set pressure	-29 to 38 °C	19,7	19,7	36,2	69,0	–
	39 to 232 °C	12,8	19,7	36,2	69,0	–
	233 to 427 °C	5,5	19,7	28,3	56,9	69,0
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		5,5	5,5	10,3	10,3	10,3
Body material: CF8M 1.4408						
	Temperature range	Pressure range p [bar] S/G/L				
Maximum set pressure	-268 to -60 °C	12,1	12,1	20,7	33,1	–
	-59 to -29 °C	19,0	19,0	36,2	69,0	–
	-28 to 38 °C	19,0	19,0	36,2	69,0	–
	39 to 232 °C	12,4	12,4	34,1	67,2	–
	233 to 427 °C	5,5	5,5	29,0	58,3	–
	428 to 538 °C	1,4	1,4	24,1	48,3	–
Outlet pressure limit Conventional design		19,0	19,0	19,0	19,0	–
Outlet pressure limit Balanced bellows design		5,5	5,5	10,3	10,3	–
Body material: WC6 1.7357						
	Temperature range	Pressure range p [bar] S/G/L				
Maximum set pressure	233 to 427 °C	–	–	35,2	69,0	69,0
	428 to 538 °C	–	–	14,8	29,7	44,8
Outlet pressure limit Conventional design		–	–	19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		–	–	10,3	10,3	10,3
Body material: LCB						
	Temperature range	Pressure range p [bar] S/G/L				
Maximum set pressure	-46 to 38 °C	18,4	18,4	48,0	96,0	144,1
	39 to 200 °C	13,8	13,8	42,5	85,1	127,6
	201 to 343 °C	8,4	8,4	36,4	72,8	109,2
Outlet pressure limit Conventional design		19,7	19,7	19,7	19,7	19,7
Outlet pressure limit Balanced bellows design		5,5	5,5	10,3	10,3	10,3

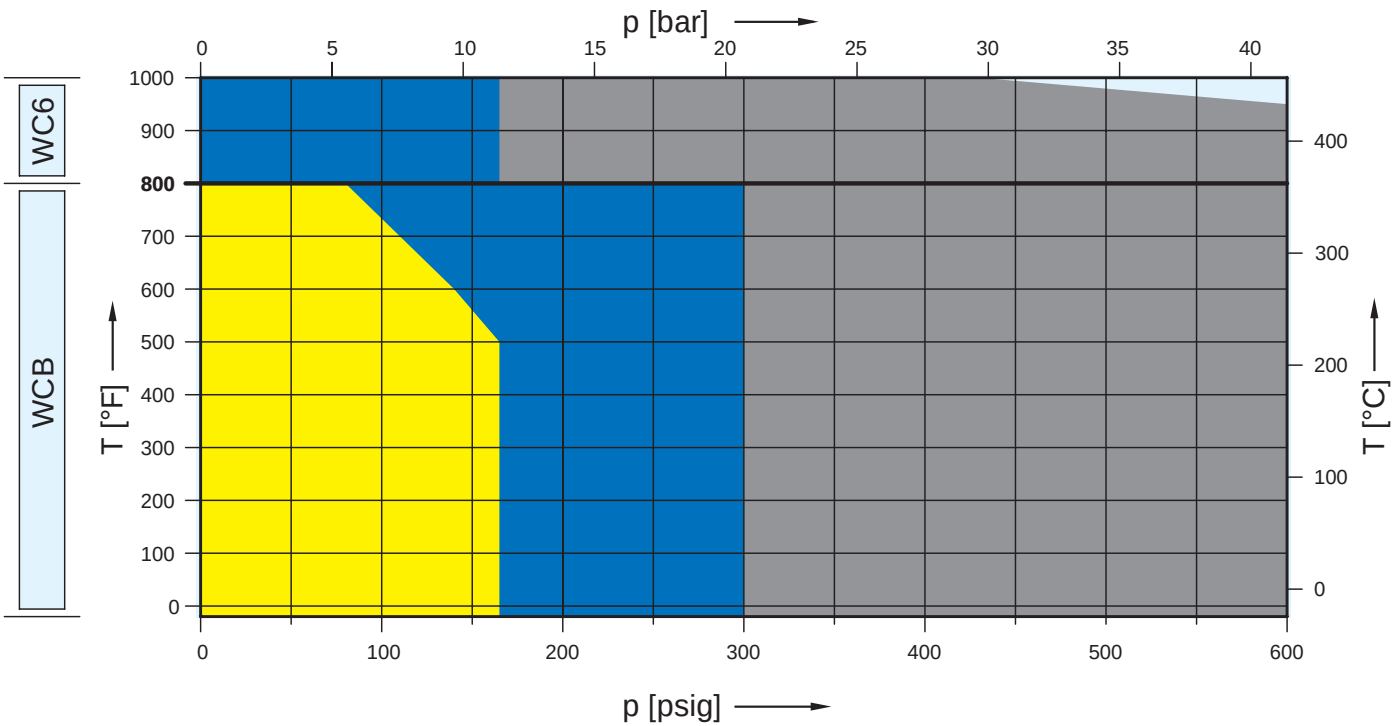
Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

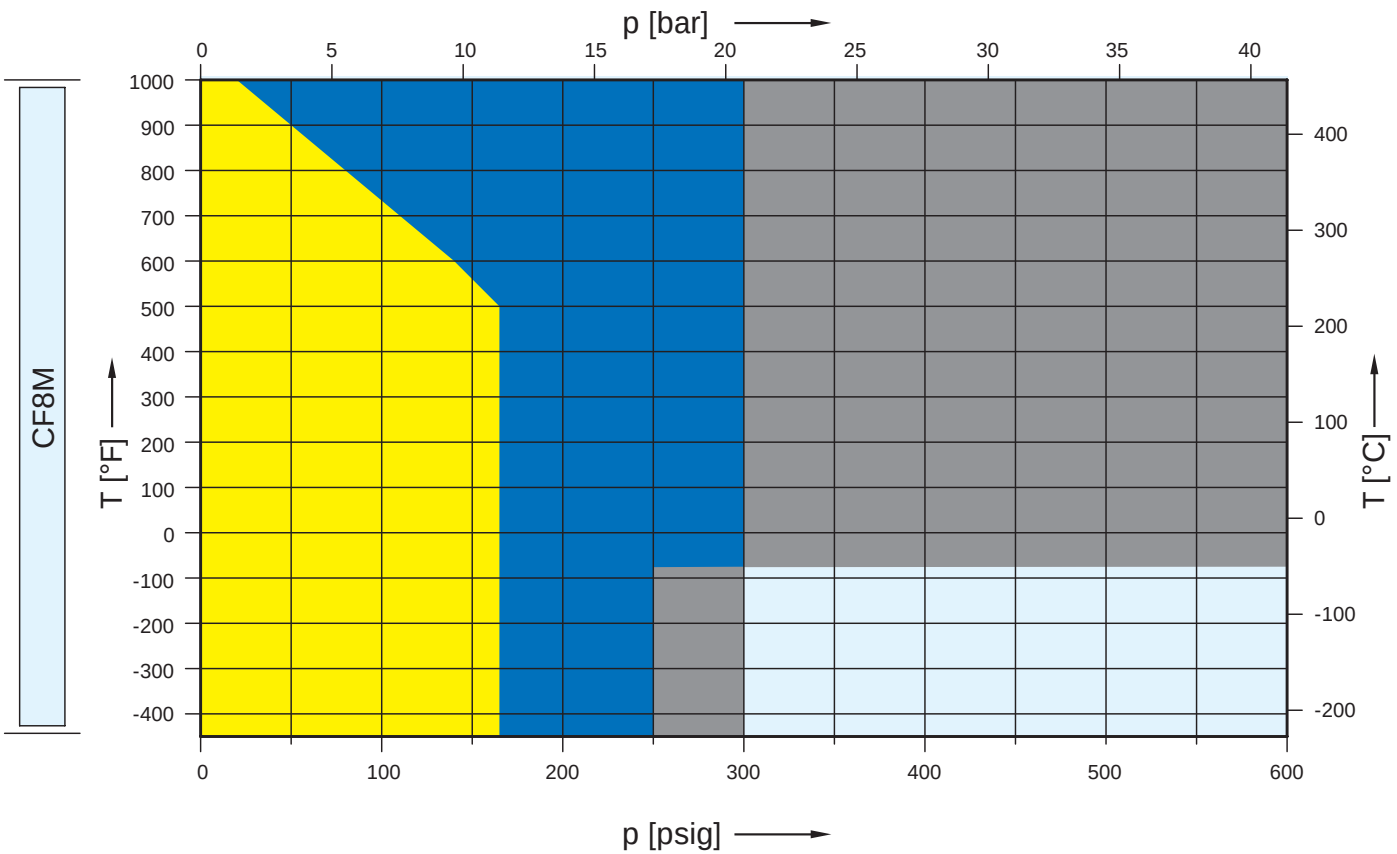
P

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
WCB	5262.657X	–	5262.658X	5262.659X	–	–	–
WC6	–	–	5267.660X	5267.661X	–	–	–



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
CF8M	5264.662X	–	5264.663X	5264.664X	–	–	–



Q

Article numbers, dimensions and weights

Article numbers

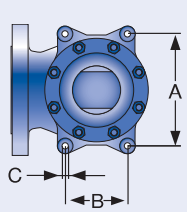
	Valve size	6 Q 8	6 Q 8	6 Q 8	6 Q 8
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150
	Actual Orifice diameter d_0 [mm]	105,5	105,5	105,5	105,5
	Actual Orifice area A_0 [mm²]	8742	8742	8742	8742
Body material					
WCB 1.0619	Art.-No.	**5262.657**¤	Use 6 Q 8 300 x 150	**5262.658**¤	**5262.659**¤
CF8M 1.4408	Art.-No.	**5264.662**¤		**5264.663**¤	**5264.664**¤
WC6 1.7357	Art.-No.	–		**5267.660**¤	**5267.661**¤
LCB	Art.-No.	**5263.559**¤		**5263.560**¤	**5263.561**¤

¤) Please add code for the required cap or lifting device. See below.

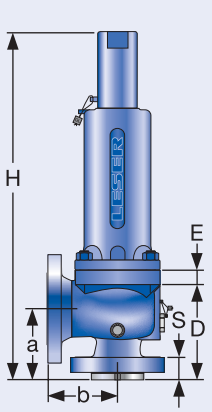
Dimensions and weights

Metric Units					
Weight [kg]		221	Use 6 Q 8 300 x 150	221	221
	with bellows	230		230	230
Center to face [mm]	Inlet a	240		240	240
	Outlet b	241		241	241
	s	68		68	68
Height (H4) [mm]	Standard H max.	1120		1120	1120
	Bellows H max.	1200		1200	1200
Support brackets [mm]	A	370		370	370
	B	210		210	210
	C	Ø 18		Ø 18	Ø 18
	D	346		346	346
	E	25		25	25
US Units					
Weight [lbs]		487,3	Use 6 Q 8 300 x 150	487,3	487,3
	with bellows	507,2		507,2	507,2
Center to face [inch]	Inlet a	9 7/16		9 7/16	9 7/16
	Outlet b	9 1/2		9 1/2	9 1/2
	s	2 11/16		2 11/16	2 11/16
Height (H4) [inch]	Standard H max.	44 1/8		44 1/8	44 1/8
	Bellows H max.	47 1/4		47 1/4	47 1/4
Support brackets [inch]	A	14 9/16		14 9/16	14 9/16
	B	8 9/32		8 9/32	8 9/32
	C	Ø 23/32		Ø 23/32	Ø 23/32
	D	13 5/8		13 5/8	13 5/8
	E	31/32		31/32	31/32

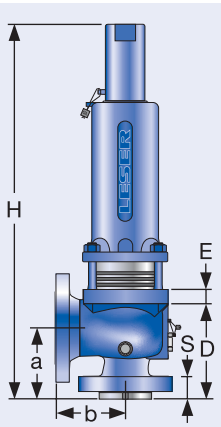
¤ Code for lifting device				
Lifting device	**H2**	**H3**	**H4**	**H3**
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

Q

Pressure temperature ratings

Metric Units

	Valve size	6 Q 8	6 Q 8	6 Q 8	6 Q 8
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150
	Actual Orifice diameter d_0 [mm]	105,5	105,5	105,5	105,5
	Actual Orifice area A_0 [mm²]	8742	8742	8742	8742
Body material: WCB 1.0619					
	Temperature range	Pressure range p [bar] S/G/L			
Maximum set pressure	-29 to 38 °C	11,4	Use 6 Q 8 300 x 150	20,7	41,4
	39 to 232 °C	11,4		20,7	41,4
	233 to 427 °C	5,5		20,7	41,4
Outlet pressure limit Conventional design		7,9		7,9	7,9
Outlet pressure limit Balanced bellows design		4,8		7,9	7,9
Body material: CF8M 1.4408					
	Temperature range	Pressure range p [bar] S/G/L			
Maximum set pressure	-268 to -60 °C	11,4	Use 6 Q 8 300 x 150	17,2	20,7
	-59 to -29 °C	11,4		20,7	41,4
	-28 to 38 °C	11,4		20,7	41,4
	39 to 232 °C	11,4		20,7	41,4
	233 to 427 °C	5,5		20,7	41,4
	428 to 538 °C	1,4		20,7	41,4
Outlet pressure limit Conventional design		7,9		7,9	7,9
Outlet pressure limit Balanced bellows design		4,8		7,9	7,9
Body material: WC6 1.7357					
	Temperature range	Pressure range p [bar] S/G/L			
Maximum set pressure	233 to 427 °C	–	Use 6 Q 8 300 x 150	11,4	41,4
	428 to 538 °C	–		11,4	29,7
Outlet pressure limit Conventional design		–		7,9	7,9
Outlet pressure limit Balanced bellows design		–		7,9	7,9
Body material: LCB					
	Temperature range	Pressure range p [bar] S/G/L			
Maximum set pressure	-46 to 38 °C	18,4	Use 6 Q 8 300 x 150	48,0	96,0
	39 to 200 °C	13,8		42,5	85,1
	201 to 343 °C	8,4		36,4	72,8
Outlet pressure limit Conventional design		7,9		7,9	7,9
Outlet pressure limit Balanced bellows design		4,8		7,9	7,9

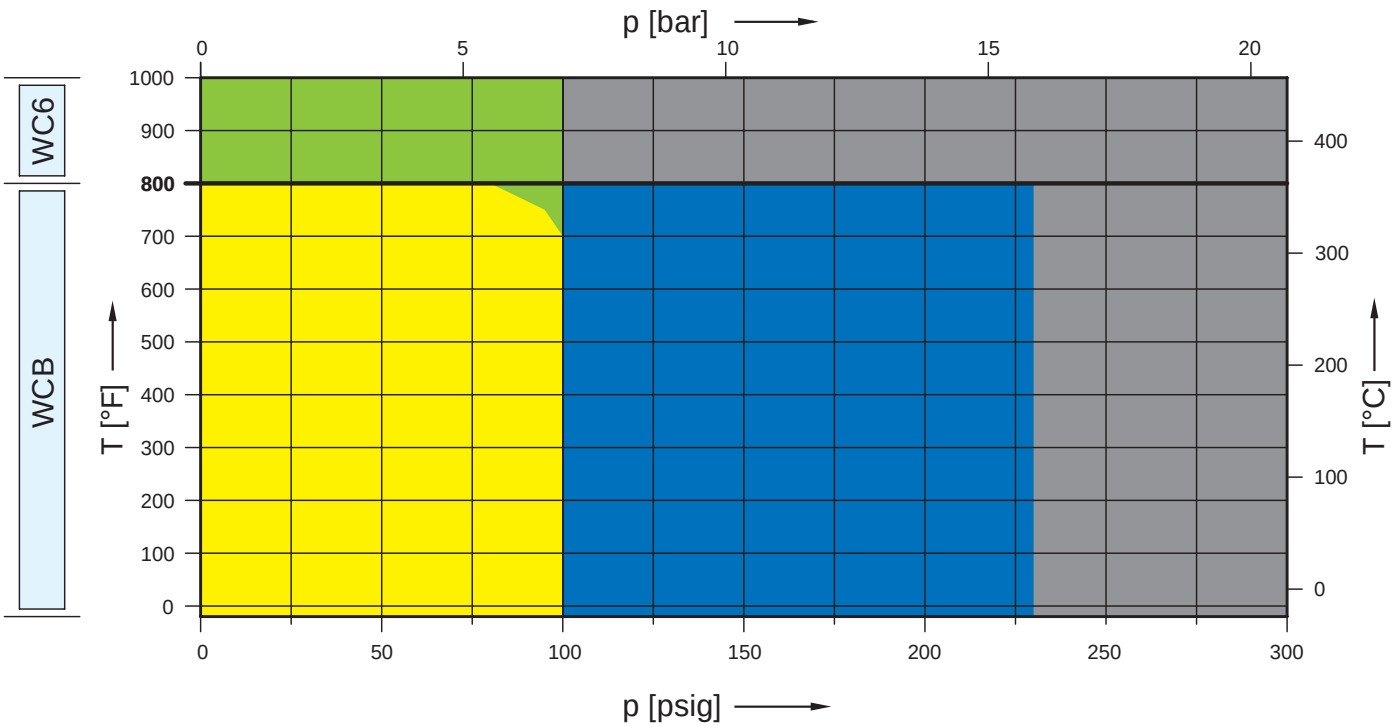
Q

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

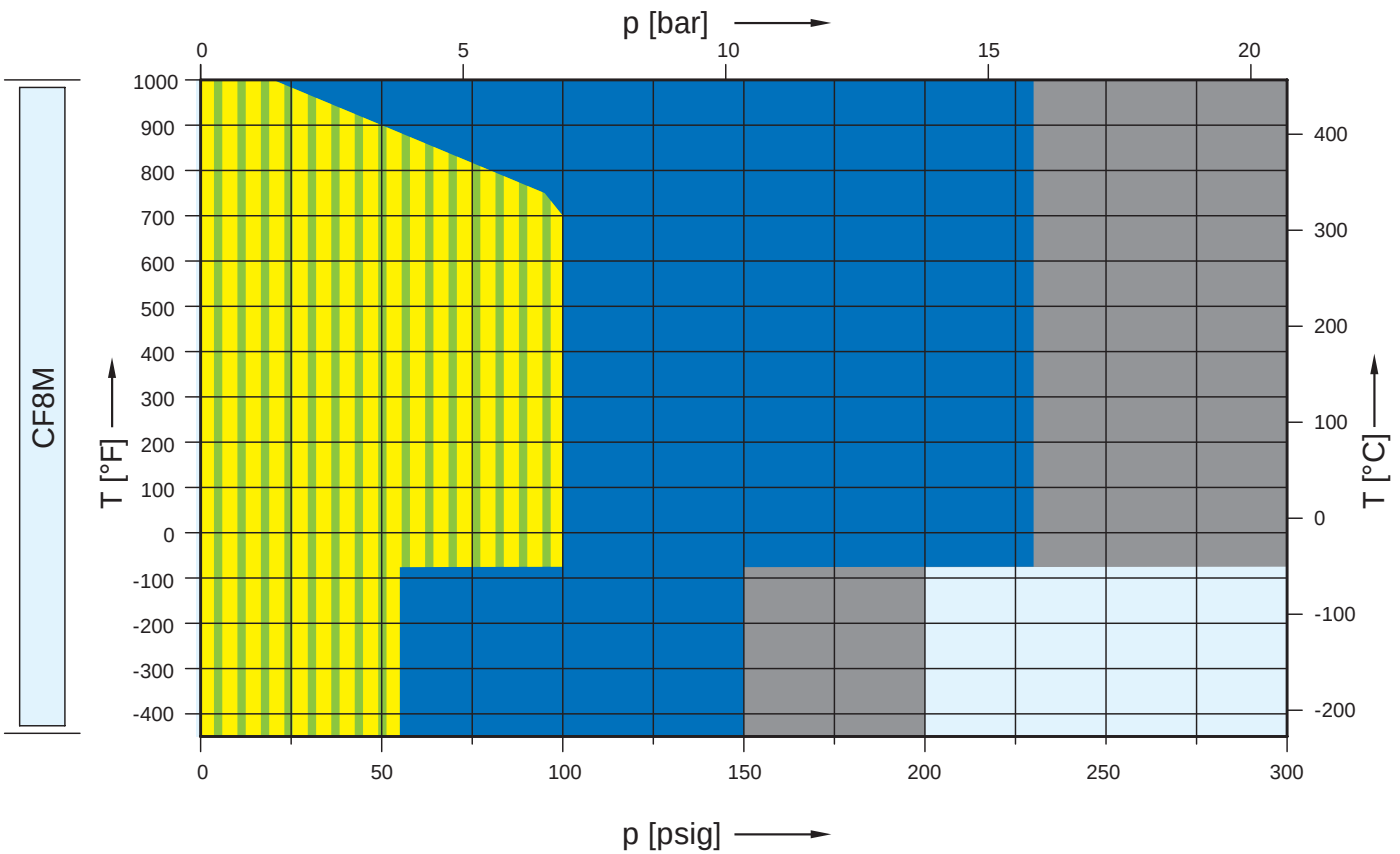
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
WCB	5262.665X	5262.666X	5262.667X	5262.668X	–	–	–
WC6	–	5267.669X	–	5267.670X	–	–	–



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
CF8M	5264.671X	5264.672X	5264.673X	5264.674X	–	–	–



R

Article numbers, dimensions and weights

Article numbers

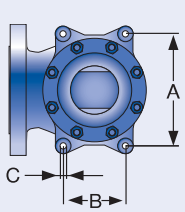
	Valve size	6 R 8	6 R 8	6 R 10	6 R 10
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150
	Actual Orifice diameter d_0 [mm]	126,5	126,5	126,5	126,5
	Actual Orifice area A_0 [mm²]	12568	12568	12568	12568
Body material					
WCB 1.0619	Art.-No.	**5262.665**¤	**5262.666**¤	**5262.667**¤	**5262.668**¤
CF8M 1.4408	Art.-No.	**5264.671**¤	**5264.672**¤	**5264.673**¤	**5264.674**¤
WC6 1.7357	Art.-No.	–	**5267.669**¤	–	**5267.670**¤
LCB	Art.-No.	**5263.562**¤	**5263.563**¤	**5263.564**¤	**5263.565**¤

¤) Please add code for the required cap or lifting device. See below.

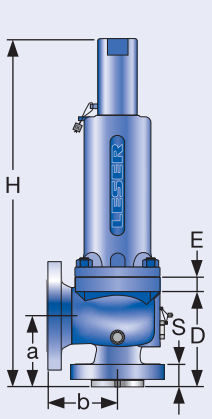
Dimensions and weights

Metric Units					
Weight [kg]		221	221	277	277
	with bellows	230	230	288	288
Center to face [mm]	Inlet a	240	240	240	240
	Outlet b	241	241	241	241
	s	68	68	70	70
Height (H4) [mm]	Standard H max.	1120	1120	1426	1426
	Bellows H max.	1200	1200	1426	1426
Support brackets [mm]	A	370	370	470	470
	B	210	210	150	150
	C	Ø 18	Ø 18	Ø 18	Ø 18
	D	346	346	460	460
	E	25	25	25	25
US Units					
Weight [lbs]		487,3	487,3	610,8	610,8
	with bellows	507,2	507,2	635	635
Center to face [inch]	Inlet a	9 7/16	9 7/16	9 7/16	9 7/16
	Outlet b	9 1/2	9 1/2	10 1/2	10 1/2
	s	2 11/16	2 11/16	2 3/4	2 3/4
Height (H4) [inch]	Standard H max.	44 1/8	44 1/8	56 1/8	56 1/8
	Bellows H max.	47 1/4	47 1/4	56 1/8	56 1/8
Support brackets [inch]	A	14 9/16	14 9/16	5 1/8	5 1/8
	B	8 9/32	8 9/32	5 29/32	5 29/32
	C	Ø 23/32	Ø 23/32	Ø 23/32	Ø 23/32
	D	13 5/8	13 5/8	18 1/8	18 1/8
	E	31/32	31/32	31/32	31/32

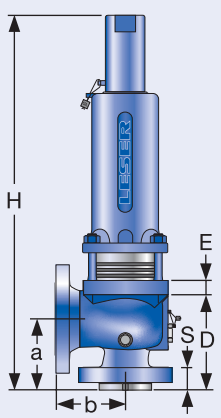
¤ Code for lifting device				
Lifting device	H2	H3	H4	H3
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

R

Pressure temperature ratings

Metric Units

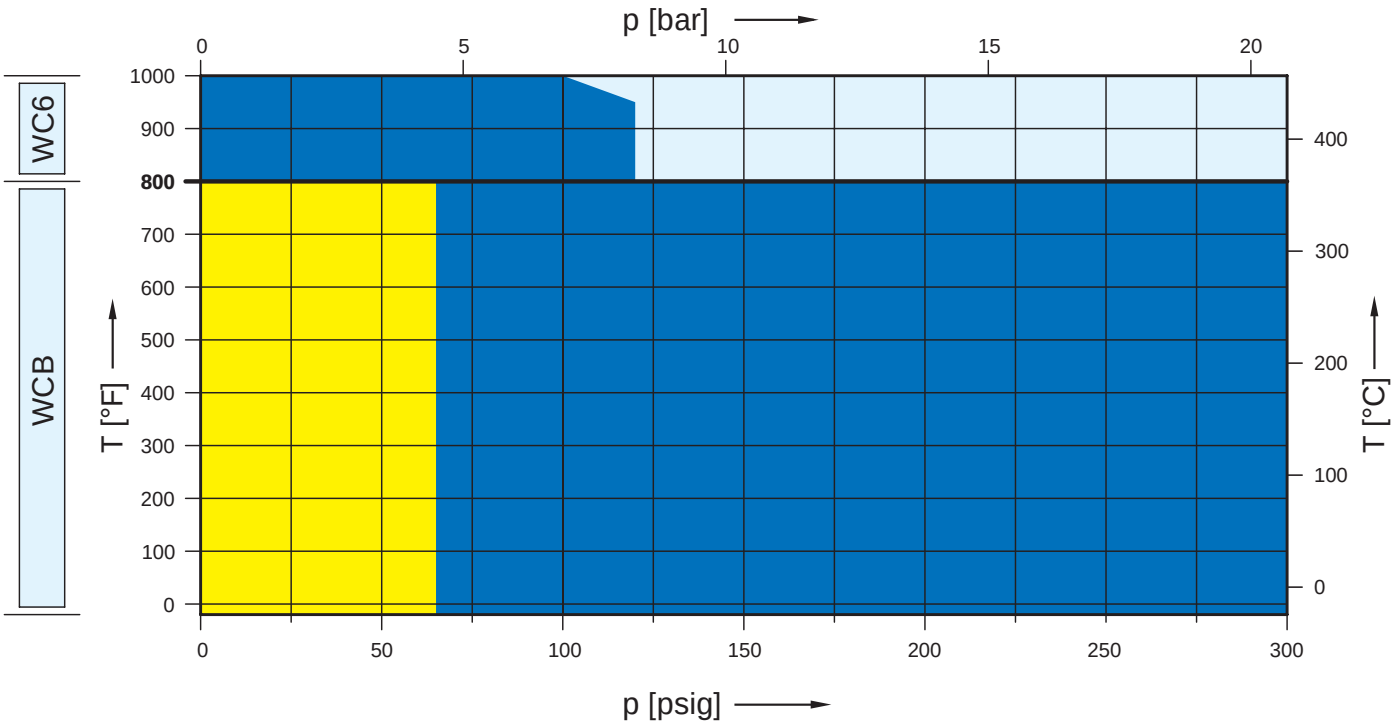
	Valve size	6 R 8	6 R 8	6 R 10	6 R 10
	Flange rating class Inlet x Outlet	150 x 150	300L x 150	300 x 150	600 x 150
	Actual Orifice diameter d_0 [mm]	126,5	126,5	126,5	126,5
	Actual Orifice area A_0 [mm^2]	12668	12668	12668	12668
Body material: WCB 1.0619					
	Temperature range	Pressure range p [bar] S/G/L			
Maximum set pressure	-29 to 38 °C	6,9	6,9	15,9	20,7
	39 to 232 °C	6,9	6,9	15,9	20,7
	233 to 427 °C	5,5	6,9	15,9	20,7
Outlet pressure limit Conventional design		4,1	4,1	6,9	6,9
Outlet pressure limit Balanced bellows design		4,1	4,1	6,9	6,9
Body material: CF8M 1.4408					
	Temperature range	Pressure range p [bar] S/G/L			
Maximum set pressure	-268 to -60 °C	3,8	3,8	10,3	13,8
	-59 to -29 °C	6,9	6,9	15,9	20,7
	-28 to 38 °C	6,9	6,9	15,9	20,7
	39 to 232 °C	6,9	6,9	15,9	20,7
	233 to 427 °C	5,5	5,5	15,9	20,7
	428 to 538 °C	1,4	1,4	15,9	20,7
Outlet pressure limit Conventional design		4,1	4,1	6,9	6,9
Outlet pressure limit Balanced bellows design		4,1	4,1	6,9	6,9
Body material: WC6 1.7357					
	Temperature range	Pressure range p [bar] S/G/L			
Maximum set pressure	233 to 427 °C	–	–	6,9	20,7
	428 to 538 °C	–	–	6,9	20,7
Outlet pressure limit Conventional design		–	–	4,1	6,9
Outlet pressure limit Balanced bellows design		–	–	4,1	6,9
Body material: LCB					
	Temperature range	Pressure range p [bar] S/G/L			
Maximum set pressure	-46 to 38 °C	18,4	18,4	48,0	96,0
	39 to 200 °C	13,8	13,8	42,5	85,1
	201 to 343 °C	8,4	8,4	36,4	72,8
Outlet pressure limit Conventional design		4,1	4,1	6,9	6,9
Outlet pressure limit Balanced bellows design		4,1	4,1	6,9	6,9

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

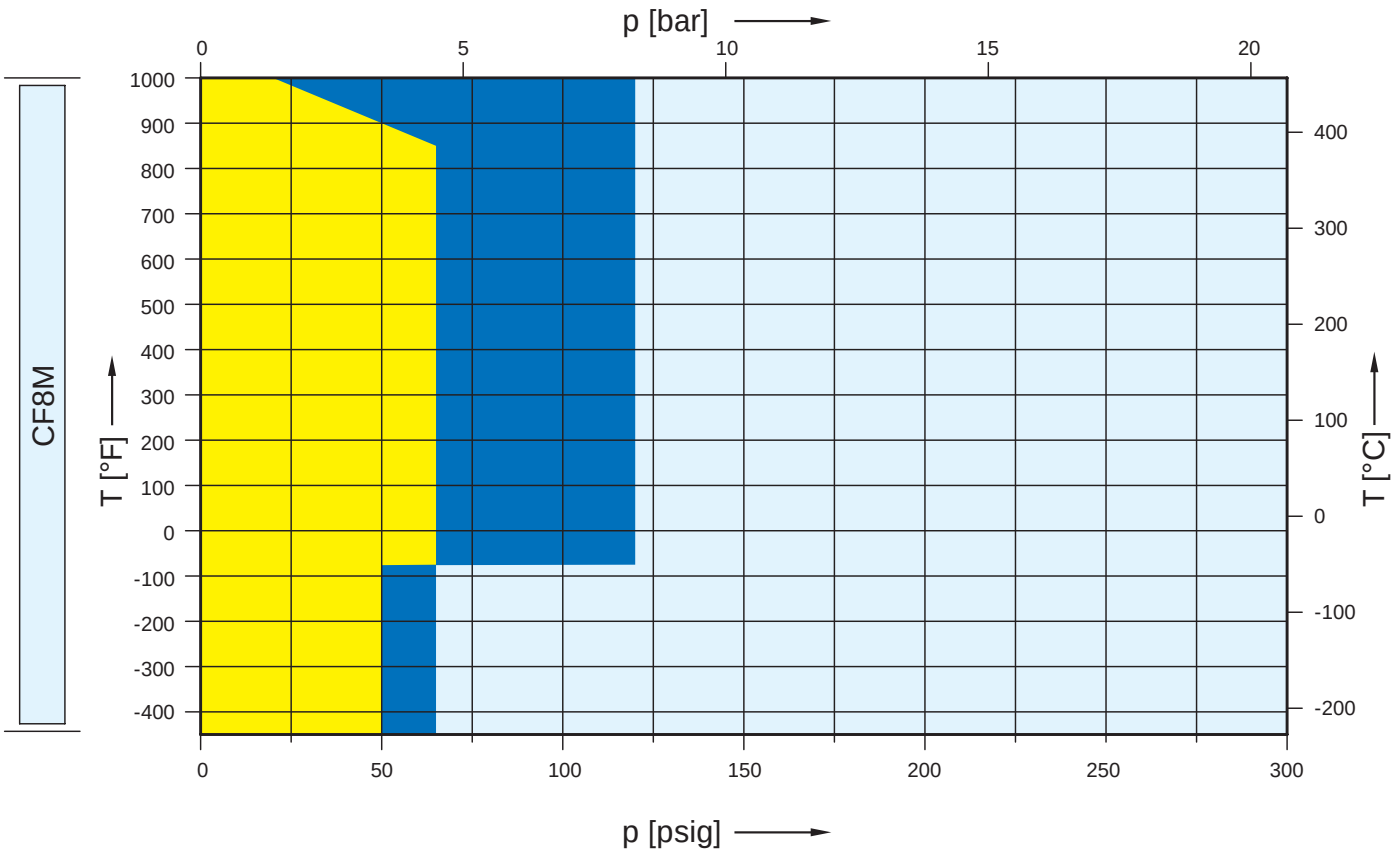
Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

Selection chart

	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
WCB	5262.675X	–	5262.676X	–	–	–	–
WC6	–	–	5267.677X	–	–	–	–



	150 x 150	300L x 150	300 x 150	600 x 150	900 x 150	1500 x 150	2500 x 300
CF8M	5264.678X	–	5264.679X	–	–	–	–



T

Article numbers, dimensions and weights

Article numbers

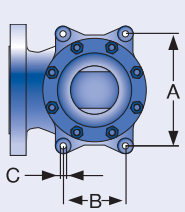
Valve size		8 T 10	8 T 10	8 T 10
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150
Actual Orifice diameter d_0 [mm]		161,5	161,5	161,5
Actual Orifice area A_0 [mm²]		20485	20485	20485
Body material				
WCB 1.0619	Art.-No.	**5262.675**¤	Use 8 T 10 300 x 150	**5262.676**¤
CF8M 1.4408	Art.-No.	**5264.678**¤		**5264.679**¤
WC6 1.7357	Art.-No.	–		**5267.677**¤
LCB	Art.-No.	**5263.566**¤		**5263.567**¤

¤) Please add code for the required cap or lifting device. See below.

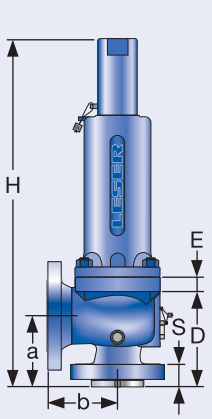
Dimensions and weights

Metric Units				
Weight [kg]		287	Use 8 T 10 300 x 150	287
	with bellows	298		298
Center to face [mm]	Inlet a	276		276
	Outlet b	279		279
	s	62		62
Height (H4) [mm]	Standard H max.	1462		1462
	Bellows H max.	1462		1462
Support brackets [mm]	A	470		470
	B	–		–
	C	Ø 18		Ø 18
	D	497		497
	E	25		25
US Units				
Weight [lbs]		632,8	Use 8 T 10 300 x 150	632,8
	with bellows	657,1		657,1
Center to face [inch]	Inlet a	10 7/8		10 7/8
	Outlet b	11		11
	s	2 7/16		2 7/16
Height (H4) [inch]	Standard H max.	57 9/16		57 9/16
	Bellows H max.	57 9/16		57 9/16
Support brackets [inch]	A	18 1/2		18 1/2
	B	–		–
	C	Ø 23/32		Ø 23/32
	D	19 9/16		19 9/16
	E	31/32		31/32

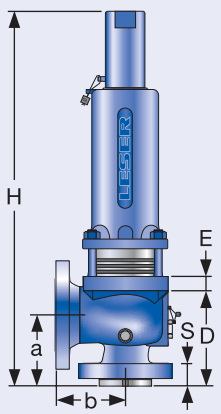
¤ Code for lifting device				
Lifting device	H2	H3	H4	H3
Bonnet	closed	closed	closed	open
WCB 1.0619, WC6 1.7357, LCB	2	3	4	5
CF8M 1.4408	2	–	4	–



Support brackets



Conventional design



Balanced bellows design

T

Pressure temperature ratings

Metric Units

Valve size		8 T 10	8 T 10	8 T 10
Flange rating class Inlet x Outlet		150 x 150	300L x 150	300 x 150
Actual Orifice diameter d_0 [mm]		161,5	161,5	161,5
Actual Orifice area A_0 [mm²]		20485	20485	20485
Body material: WCB 1.0619				
Temperature range			Pressure range p [bar] S/G/L	
Maximum set pressure	-29 to 38 °C	4,5	Use 8 T 10 300 x 150	20,7
	39 to 232 °C	4,5		20,7
	233 to 427 °C	4,5		20,7
Outlet pressure limit Conventional design		2,1		6,9
Outlet pressure limit Balanced bellows design		2,1		6,9
Body material: CF8M 1.4408				
Temperature range			Pressure range p [bar] S/G/L	
Maximum set pressure	-268 to -60 °C	3,4	Use 8 T 10 300 x 150	4,5
	-59 to -29 °C	4,5		8,3
	-28 to 38 °C	4,5		8,3
	39 to 232 °C	4,5		8,3
	233 to 427 °C	4,5		8,3
	428 to 538 °C	1,4		8,3
Outlet pressure limit Conventional design		2,1		4,1
Outlet pressure limit Balanced bellows design		2,1		4,1
Body material: WC6 1.7357				
Temperature range			Pressure range p [bar] S/G/L	
Maximum set pressure	233 to 427 °C	–	Use 8 T 10 300 x 150	20,7
	428 to 538 °C	–		15,5
Outlet pressure limit Conventional design		–		6,9
Outlet pressure limit Balanced bellows design		–		6,9
Body material: LCB				
Temperature range			Pressure range p [bar] S/G/L	
Maximum set pressure	-46 to 38 °C	18,4	Use 8 T 10 300 x 150	48,0
	39 to 200 °C	13,8		42,5
	201 to 343 °C	8,4		36,4
Outlet pressure limit Conventional design		2,1		6,9
Outlet pressure limit Balanced bellows design		2,1		6,9

Remark: SA 352 Gr. LCB is not listed in the API 526. Pressure-Temperature Rating acc. to ASME B16.34 Table 2-1.3
The stated Pressure-Temperature Rating are taken from ASME B16.34 Table 2-1.3

Due to the extended material test certificate the LESER LCB can be applied as LCC, WCB, WCC and 1.0619 with the respective pressure-temperature range as well.

LESER

Flange drillings

Standard						Flange drillings according to DIN EN 1092 (up to PN 100) and DIN 2501 (from PN 160 up)													
	Inlet		Outlet	Material			Inlet									Outlet				
Orifice	NPS [inch]	standard flange class	NPS [inch]	WCB/ LCB	WC6	CF8M	PN 10/16	PN 25	PN 40	PN 63	PN 100	PN 160	PN 250	PN 320	PN 400	PN 10	PN 16	PN 25	PN 40	PN 63
D	1"	300	2"				H45	H46	H47	–	–	–	–	–	–	H50	H51	H52	H15	–
	1"	600	2"				–	–	–	H10	H17	–	–	–	–	H50	H51	H52	H15	–
	1 1/2"	1500	2"				–	–	–	–	–	H11	H12	–	–	H50	H51	H52	H15	–
	1 1/2"	2500	3"				–	–	–	–	–	–	H12	H13	–	H50	H51	H52	H15	H16
E	1"	300	2"				H45	H46	H47	–	–	–	–	–	–	H50	H51	H52	H15	–
	1"	600	2"				–	–	–	H10	H17	–	–	–	–	H50	H51	H52	H15	–
	1 1/2"	1500	2"				–	–	–	–	–	H11	H12	–	–	H50	H51	H52	H15	–
	1 1/2"	2500	3"				–	–	–	–	–	–	H12	H13	–	H50	H51	H52	H15	H16
F	1 1/2"	300L	2"		–		H45	–	–	–	–	–	–	–	–	H50	H51	H52	H15	–
	1 1/2"	300	2"				–	H46	H47	–	–	–	–	–	–	H50	H51	H52	H15	–
	1 1/2"	1500	3"				–	–	–	H10	H17	H11	H12	–	–	H50	H51	H52	H15	H16
	1 1/2"	2500	3"				–	–	–	–	–	–	H12	H13	–	H50	H51	H52	H15	H16
G	1 1/2"	300L	3"		–		H45	–	–	–	–	–	–	–	–	H50	H51	H52	H15	–
	1 1/2"	300	3"				–	H46	H47	H10	–	–	–	–	–	H50	H51	H52	H15	–
	1 1/2"	600	3"				–	–	–	H10	H17	H11	–	–	–	H50	H51	H52	H15	–
	1 1/2"	900	3"				–	–	–	–	H17	H11	–	–	–	H50	H51	H52	H15	H16
	2"	1500	3"				–	–	–	–	–	–	H12	H13	–	H50	H51	H52	H15	H16
	2"	2500	3"				–	–	–	–	–	–	–	–	H14	H50	H51	H52	H15	H16
H	1 1/2"	300L	3"		–		H45	H46	H47	–	–	–	–	–	–	H50	H51	H52	H15	–
	2"	300	3"				–	–	H47	H10	–	–	–	–	–	H50	H51	H52	H15	–
	2"	600	3"	–		–	–	–	H47	H10	–	–	–	–	–	H50	H51	H52	H15	–
	2"	600	3"		–		–	–	H47	H10	–	–	–	–	–	H50	H51	H52	H15	H16
	2"	900	3"				–	–	–	–	H17	H11	–	–	–	H50	H51	H52	H15	H16
	2"	1500	3"				–	–	–	–	–	H11	H12	–	–	H50	H51	H52	H15	H16
J	2"	300L	3"		–		H45	H46	H47	H10	–	–	–	–	–	H50	H51	H52	H15	–
	3"	600	4"				–	–	H47	H10	–	–	–	–	–	H50	H51	H52	H15	–
	3"	900	4"				–	–	–	–	H17	H11	–	–	–	H50	H51	H52	H15	H16
	3"	1500	4"				–	–	–	–	–	H11	H12	–	–	H50	H51	H52	H15	H16
K	3"	300	4"				H45	H46	H47	H10	–	–	–	–	–	H50	H51	H52	H15	–
	3"	600	4"		–		–	–	H47	H10	–	–	–	–	–	H50	H51	H52	H15	–
	3"	900	6"	–		–	–	–	–	H10	H17	H11	H12	–	–	H50	H51	–	–	–
	3"	900	6"		–		–	–	–	H10	H17	H11	H12	–	–	H50	H51	H52	H15	–
	3"	1500	6"				–	–	–	H10	H17	H11	H12	–	–	H50	H51	H52	H15	–
L	3"	300L	4"		–		H45	H46	H47	H10	–	–	–	–	–	H50	H51	H52	H15	–
	4"	300	6"				H45	H46	H47	H10	–	–	–	–	–	H50	H51	–	–	–
	4"	600	6"				–	–	–	H10	H17	H11	–	–	–	H50	H51	–	–	–
	4"	900	6"				–	–	–	–	H17	H11	–	–	–	H50	H51	–	–	–
	4"	1500	6"			–	–	–	–	–	–	–	H12	–	–	H50	H51	–	–	–
M	4"	300	6"				H45	H46	H47	H10	–	–	–	–	–	H50	H51	–	–	–
	4"	600	6"				–	–	–	H10	H17	H11	–	–	–	H50	H51	–	–	–
	4"	900	6"			–	–	–	–	–	H17	H11	H12	–	–	H50	H51	–	–	–
N	4"	300	6"				H45	H46	H47	H10	–	–	–	–	–	H50	H51	–	–	–
	4"	600	6"				–	–	–	–	H17	H11	–	–	–	H50	H51	–	–	–
	4"	900	6"			–	–	–	–	–	–	–	H12	–	–	H50	H51	–	–	–
P	4"	300L	6"		–		H45	H46	H47	–	–	–	–	–	–	H50	H51	–	–	–
	4"	300	6"				–	H46	H47	–	–	–	–	–	–	H50	H51	–	–	–
	4"	600	6"				–	–	–	H10	H17	–	–	–	–	H50	H51	–	–	–
	4"	900	6"			–	–	–	–	–	–	H11	H12	–	–	H50	H51	–	–	–
Q	6"	300	8"				H45	H46	H47	–	–	–	–	–	–	H50	H51	H52	–	–
	6"	600	8"				–	–	–	H10	H17	H11	–	–	–	H50	H51	H52	–	–
R	6"	300L	8"				H45	H46	H47	H10	–	–	–	–	–	H50	H51	H52	–	–
	6"	300	10"		–		–	–	H47	H10	–	–	–	–	–	H50	H51	–	–	–
	6"	600	10"				–	–	H47	H10	–	–	–	–	–	H50	H51	–	–	–
T	8"	300	10"				–	H46	H47	–	–	–	–	–	–	H50	H51	–	–	–

Note: Flange drillings and facings meet always the requirements of mentioned flange standards. Flange thickness and outer diameter may vary from flange standard.
For signs and symbols refer to page 00/05

Flange facings

Indication	Standard	Inlet	Outlet	Remark
General				
Flange undrilled	–	H38	H39	
Linde-V-Nut, Form V48	Linde Standard 420-08 LWN 313.36	J07	J08	Groove: Rz 16
Linde-V-Nut, Form V48A		J05	J06	Groove: Rz 4, e.g. with hydrogen
Lens seal form L (without sealing lens)	DIN 2696 LWN 313.35	J11	J12	

Acc. to DIN EN

Flange facing			Inlet		Outlet		Remark
DIN EN 1092 (new) (see also LWN 313.40)		DIN 2526 (old)	PN 10 – PN 40	PN 63 – PN 400	PN 10 – PN 40	PN 63	Rz-data according to DIN EN 1092 in µm
Raised face	Type B1	Type C	*	–	*	–	Facing: Rz = 12,5 – 50
		Type D	–	*	L38	*	
	Type B2	Type E	–		L38		Facing: Rz = 3,2 – 12,5
Tongue face C[1]		Tongue face F	L56		H92		
Groove face D[1]		Groove face N	L55		H91		
Male face E		Male face V13	I90		H98		
Female face F		Female face R13	I91		H99		
O-ring male face G		Male face V14	I93		J02		
O-ring female face H		Female face R14	I92		J04		

Acc. to ASME B16.5

Body material	Inlet	Outlet	Smooth finish[2]		Serrated finish		RTJ-groove						
			Inlet	Outlet	Inlet	Outlet	Inlet					Outlet	
			Option code		Option code		CL300	CL600	CL900	CL1500	CL2500	CL150	CL300
all	all	all	L52	L53	*	*	L58					H63	

[1] According to DIN EN 1092 groove depths and tongue heights increased compared to the formerly valid DIN (refer to LWN 313.40).
LESER manufactures the groove at flanged valves by milling. If a customer demands a turned surface in the soil of the groove according to DIN 2512 and/or DIN EN 1092-1 an additional option code is necessary: “S01: bottom of the groove drilled”. Groove and tongue for PN160 flanges refer to DIN 2512/LWN 313.32.
[2] Smooth finish is not defined in the effective standards. For LESER‘s definition for smooth finish see page 00/05.

For signs and symbols refer to page 00/05
Note: Flange drillings and facings meet always the requirements of mentioned flange standards. Flange thickness and outer diameter may vary from flange standard.

Stud-bolts length for flange connection inlet and outlet

All LESER safety valves Type 526 need at the inlet side longer stud-bolts for the flange connections as stated in ASME B16.5, due to the full nozzle design. Furthermore, due to the actual castings the stud bolts at the outlet can differ from ASME B16.5 as well.
LESER state the stud-bolt length in LWN 001.29-E. For calculation of stud-bolts length the measure “s” stated on page 01/10-01/13 can be used.

Connection acc. to API Standard 526 - 1984

Orifice	Valve size		Flange rating class	Option code
	Inlet	Outlet	Inlet	
E	1 1/2"	3" drilled 2 1/2"	2500	S01
F	1 1/2"	3" drilled 2 1/2"	900	S01
G	1 1/2"	3" drilled 2 1/2"	150 – 900	S01
K	2 1/2"	6"	900 – 1500	S01

Type 526

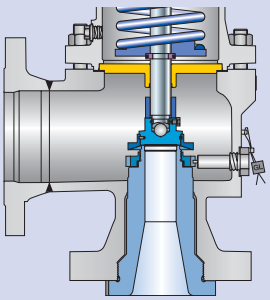
How to order Type 526 with outlet flange rating class 300

For customer specifications requiring a flange rating class 300 at the outlet LESER provides Type 526 with outlet flange rating class 300.
For ordering please state the article numbers and option codes which are listed in the table.

Outlet with flange class 300

Orifice	Valve size Inlet x Outlet / Center to face a x b	Body material	300 x 300		600 x 300	
			Art.-No.	Option code	Art.-No.	Option code
D	**1" x 2"**	WCB 1.0619	4582.610X	H65, H80, J18, J51	4582.610X	H67, H80, J18, J51
		CF10M 1.4581	4584.620X	H65, H80, J18, J51	4584.620X	H67, H80, J18, J51
	4 5/7" x 5 1/8"	WC6 1.7357	4587.630X	H65, H80, J18, J51	4587.630X	H67, H80, J18, J51
		LCB	–	–	–	–
D	**1 1/2" x 2"**	WCB 1.0619	5262.004X	H65, H80	5262.004X	H67, H80
		CF8M 1.4408	5264.013X	H65, H80	5264.013X	H67, H80
	4 1/8" x 5 1/2"	WC6 1.7357	5267.008X	H65, H80	5267.008X	H67, H80
		LCB	5263.503X	H65, H80	5263.503X	H67, H80
E	**1" x 2"**	WCB 1.0619	4582.610X	H65, H80, J18, J51	4582.610X	H67, H80, J18, J51
		CF10M 1.4581	4584.620X	H65, H80, J18, J51	4584.620X	H67, H80, J18, J51
	4 5/7" x 5 1/8"	WC6 1.7357	4587.630X	H65, H80, J18, J51	4587.630X	H67, H80, J18, J51
		LCB	–	–	–	–
E	**1 1/2" x 2"**	WCB 1.0619	5262.018X	H65, H80	5262.018X	H67, H80
		CF8M 1.4408	5264.027X	H65, H80	5264.027X	H67, H80
	4 1/8" x 5 1/2"	WC6 1.7357	5267.022X	H65, H80	5267.022X	H67, H80
		LCB	5263.508X	H65, H80	5263.508X	H67, H80
F	**1 1/2" x 2"**	WCB 1.0619	5262.031X	H65, H80	5262.032X	H67, H80
		CF8M 1.4408	5264.041X	H65, H80	5264.041X	H67, H80
	4 7/8" x 6"	WC6 1.7357	5267.035X	H65, H80	5267.036X	H67, H80
		LCB	5263.512X	H65, H80	5263.512X	H67, H80
G	**1 1/2" x 3"**	WCB 1.0619	5262.049X	H65, H80	5262.049X	H67, H80
		CF8M 1.4408	5264.114X	H65, H80	5264.114X	H67, H80
	4 7/8" x 6 1/2"	WC6 1.7357	5267.054X	H65, H80	5267.054X	H67, H80
		LCB	5263.520X	H65, H80	5263.520X	H67, H80
H	**2" x 3"**	WCB 1.0619	5262.146X	H65, H80	5262.146X	H67, H80
		CF8M 1.4408	5264.156X	H65, H80	5264.156X	H67, H80
	6 1/16" x 6 3/8"	WC6 1.7357	5267.150X	H65, H80	5267.150X	H67, H80
		LCB	5263.527X	H65, H80	5263.527X	H67, H80
J	**3" x 4"**	WCB 1.0619	5262.166X	H65, H80	5262.166X	H67, H80
		CF8M 1.4408	5264.200X	H65, H80	5264.200X	H67, H80
	7 1/4" x 7 1/8"	WC6 1.7357	5267.170X	H65, H80	5267.170X	H67, H80
		LCB	5263.533X	H65, H80	5263.533X	H67, H80
K	**3" x 4"**	WCB 1.0619	5262.204X	H65, H80	5262.204X	H67, H80
		CF8M 1.4408	5264.213X	H65, H80	5264.213X	H67, H80
	7 13/16" x 7 1/8"	WC6 1.7357	5267.209X	H65, H80	5267.209X	H67, H80
		LCB	5263.537X	H65, H80	5263.537X	H67, H80
L	**4" x 6"**	WCB 1.0619	5262.235X	H65, H80	5262.235X	H67, H80
		CF8M 1.4408	5264.245X	H65, H80	5264.245X	H67, H80
	7 3/4" x 8 1/2"	WC6 1.7357	5267.239X	H65, H80	5267.239X	H67, H80
		LCB	5263.543X	H65, H80	5263.543X	H67, H80
M	**4" x 6"**	WCB 1.0619	5262.582X	H65, H80	5262.582X	H67, H80
		CF8M 1.4408	5264.589X	H65, H80	5264.589X	H67, H80
	7 3/4" x 8 1/2"	WC6 1.7357	5267.585X	H65, H80	5267.585X	H67, H80
		LCB	5263.548X	H65, H80	5263.548X	H67, H80
N	**4" x 6"**	WCB 1.0619	5262.592X	H65, H80	5262.592X	H67, H80
		CF8M 1.4408	5264.599X	H65, H80	5264.599X	H67, H80
	7 3/4" x 8 1/2"	WC6 1.7357	5267.595X	H65, H80	5267.595X	H67, H80
		LCB	5263.552X	H65, H80	5263.552X	H67, H80
P	**4" x 6"** Welded outlet flange	WCB 1.0619	5262.647X	S01	5262.647X	S01
		CF8M 1.4408	5264.655X	S01	5264.655X	S01
	8 7/8" x 11 5/8"	WC6 1.7357	5267.650X	S01	5267.650X	S01
		LCB	5263.556X	S01	5263.556X	S01
Q	**6" x 8"** Welded outlet flange	WCB 1.0619	5262.658X	S01	5262.658X	S01
		CF8M 1.4408	5264.663X	S01	5264.663X	S01
	9 7/16" x 12"	WC6 1.7357	5267.660X	S01	5267.660X	S01
		LCB	5263.560X	S01	5263.560X	S01
R	**6" x 10"** Welded outlet flange	WCB 1.0619	5262.667X	S01	5262.667X	S01
		CF8M 1.4408	5264.673X	S01	5264.673X	S01
	9 7/16" x 13 1/5"	WC6 1.7357	5267.670X	S01	5267.670X	S01
		LCB	5263.564X	S01	5263.564X	S01
T	**8" x 10"** Welded outlet flange	WCB 1.0619	5262.676X	S01		
		CF8M 1.4408	5264.679X	S01		
	10 7/8" x 13 1/5"	WC6 1.7357	5267.677X	S01		
		LCB	5263.567X	S01		

Orifice	900 x 300		1500 x 300		2500 x 300	
	Art.-No.	Option code	Art.-No.	Option code	Art.-No.	Option code
D	Outlet flange rating class 300 is standard flange rating class acc. to API standard 526					
D						
E						
E						
F						
G						
H	5262.147X	Class 1500 x 300				
	5264.157X					
	5267.151X					
	5263.528X					
J	5262.166X	H68, H80				
	5264.200X	H68, H80				
	5267.170X	H68, H80				
	5263.533X	H68, H80				
K	5262.204X	H68, H80				
	5264.213X	H68, H80				
	5267.209X	H68, H80				
	5263.537X	H68, H80				
L	Welded outlet flange rating class 300 available on request.					
M						
N						
P						
Q						
R						
T						



Design details

Orifice D and E: 1 D 2 and 1 E 2 class 300 x 300 and 600 x 300 are realised by a modification of Type 458 DN 25 / 1".

Orifice L: 4 L 6 class 900 x 300 and 1500 x 300 can be realised by a welded outlet flange on request.

Orifice M-P: 4 M 6, 4 N 6 and 4 P 6 class 900 x 300 can be realised by a welded outlet flange on request.

Orifice P-T: 4 P 6 up to 8 T 10 are realised by a welded outlet flange class 300.

Center to face dimensions:
The center to face dimensions a and b for LESER Type 526 with outlet flange rating class 300 are not specified in API Standard 526. The actual dimensions are listed in the table. They differ from the dimensions which are specified in API 526 for safety valves with outlet flange class 150. Exceptions are the grey marked safety valves.

Grey marked safety valves

The center to face dimensions are equal to API standard 526 with outlet flange rating class 150.

Spare parts recommendations

The following recommendations for spare parts should be taken as a guideline.
The actual needs for the replacement of parts depend on various conditions like

- operating temperature
- set pressure and operating pressure
- fluid
- environment
- material selection

These operating conditions have a significant influence on the product life of safety relief valves.

Item	Component	Commision / start-up	Two year operating	Fife year operating
60	Gasket	1 per valve	1 per valve	2 per valve
7	Disc	1 per 5 valves	2 per 5 valves	1 per valve
61	Ball	1 per 5 valves	2 per 5 valves	1 per valve
57	Ball	1 set per 5 valves[1)]	2 sets per 5 valves[1)]	1 set per valve[1)]
5	Nozzle	0	0	1 per 5 valves
15	Stainless steel bellows	1 per 5 valves	2 per 5 valves	1 per valve
12	Spindle	0	0	1 per 5 valves

1 per valve: per each supplied safety valve one piece shall be provided
1 per 5 valves: one spare part per 5 supplied equal safety valves

[1)] 1 set = 15 pieces

Rework of seat and disc

Minor damages on the seating surfaces of nozzle and disc can be repaired by lapping or by machining and successive lapping. For this purpose LESER offers lapping stamps as well as lapping paste.

Lapping stamps

Orifice	Designation and size	Material-No.
D + E	Lapping stamp no. 3, $d_0$18 / orifice D + E	445.1359.0000
F + G	Lapping stamp no. 4, d_0 23 / orifice F + G	445.1459.0000
H	Lapping stamp no. 5, d_0 29 / orifice H	445.1559.0000
J	Lapping stamp no. 6, d_0 37 / orifice J	445.1659.0000
K	Lapping stamp no. 7, d_0 46 / orifice K	445.1759.0000
L + M	Lapping stamp no. 8, d_0 60 / orifice L + M	445.1859.0000
N	Lapping stamp no. 9, d_0 74 / orifice N	445.1959.0000
P	Lapping stamp no. 10, d_0 92 / orifice P	445.2059.0000
Q + R	Lapping stamp no. 12, d_0 125 / orifice Q + R	445.2259.0000
T	Lapping stamp no. 13, d_0 165 / orifice T	445.2359.0000

Lapping paste

Lapping paste	Supplying-lot	Designation	Application
Tetraboron paste “WL” F 800	Tubes to 100 g net	F grinding-paste 800	Primary lapping
Tetraboron paste “WL” F 1200	Tubes to 100 g net	F grinding-paste 1200	Finishing

Approvals

Approvals

	Orifice	D	E – T
Europe		**Coefficient of discharge K_{dr}**	
DIN EN ISO 4126-1	Approval No.	07 202 1111Z0012/2/26	
	S/G	0,455	0,801
	L	0,343	0,579
Germany		**Coefficient of discharge α_w**	
AD 2000-Merkblatt A2	Approval No.	TÜV SV 1082	
	S/G	0,455	0,801
	L	0,343	0,579
United States		**Coefficient of discharge K**	
ASME Sec. VIII	Approval No.	M37246	M37224
	S/G	Rated slope acc. to ASME VIII, Div. 1 UG-131 (d) (2)	0,801
		G: 1,99 SCFM/psia	
		S: 5,59 PPH/psia	
	Approval No.	M37257	M37235
	L	Rated slope acc. to ASME VIII, Div. 1 UG-131 (d) (2)	0,579
		3,11 GPM/$\sqrt{psid}$	
Canada		**Coefficient of discharge K**	
Canada: CRN	Approval No.	OG0873.9C	
	S/G	Rated slope acc. to ASME VIII, Div. 1 UG-131 (d) (2)	0,801
		G: 1,99 SCFM/psia	
		S: 5,59 PPH/psia	
	L	Rated slope acc. to ASME VIII, Div. 1 UG-131 (d) (2)	0,579
		3,11 GPM/$\sqrt{psid}$	
China		**Coefficient of discharge α_w**	
CSBQTS	Approval No.		
	S/G	0,455	0,801
	L	0,343	0,579
Russia		**Coefficient of discharge α_w**	
GGTN/ GOSGOTECHNADZOR GOST R	Approval No.	PPC 00-18458	
	S/G	0,455	0,801
	L	0,343	0,579

Classification societies		**Homepage**	
Bureau Veritas	BV	www.bureauveritas.com	The valid certification number is changed with every renewal. A sample certificate including the valid certification number can be taken from the homepage of the classification societies.
Det Norske Veritas	DNV	www.dnv.com	
Germanischer Lloyd	GL	www.gl-group.com	
Lloyd‘ s register EMEA	LREMEA	www.lr.org	
Registro Italiano Navale	RINA	www.rina.org	

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Capacities – Steam

Capacities for saturated steam according to AD 2000-Merkblatt A2, based on set pressure plus 10 % overpressure.
Capacities at 1 bar (14,5 psig) and below are based on 0,1 bar (1,45 psig) overpressure.

Metric Units **AD 2000-Merkblatt A2** [kg/h]

Orifice	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
Act. Orifice dia. d_0 [mm]	14	14	18	22,5	28,3	36	43	53,5	60,3	66	80	105,5	126,5	161,5
Act. Orifice area A_0 [mm²]	154	154	254	398	629	1018	1452	2248	2856	3421	5027	8742	12568	20485
$LEO_{S/G}$*) [inch²]	0,111	0,196	0,324	0,506	0,801	1,296	1,849	2,863	3,637	4,357	6,401	11,132	16,004	26,085
Set pressure [bar]	**Capacities** [kg/h]													
0,2	19	54	89	139	221	357	509	788	1001	1199	1762	3065	4372	7182
0,5	42	90	149	232	367	595	848	1313	1668	1999	2937	5107	7285	11968
1	71	134	221	345	546	883	1260	1951	2479	2969	4363	7587	10823	17780
2	120	217	359	561	888	1437	2050	3174	4032	4830	7096	12341	17603	28920
3	166	296	489	764	1209	1956	2791	4320	5488	6575	9660	16799	23962	39366
4	208	369	610	953	1507	2439	3480	5387	6843	8198	12045	20948	29879	49088
5	248	442	730	1141	1805	2920	4166	6449	8193	9815	14420	25078	35770	58766
6	289	514	850	1328	2101	3399	4850	7508	9537	11426	16787	29194	41642	68413
7	329	585	967	1511	2390	3867	5517	8540	10849	12997	19096	33210	47371	77824
8	369	657	1086	1697	2684	4343	6196	9592	12185	14597	21447	37299	53202	87404
9	410	729	1205	1882	2978	4818	6874	10642	13519	16195	23795	41382	59026	96973
10	450	801	1323	2068	3271	5293	7552	11691	14852	17792	26141	45461	64845	106532
12	531	872	1561	2439	3858	6243	8907	13788	17515	20983	30829	53615	76475	125639
14	610	944	1793	2802	4432	7172	10233	15841	20123	24107	35419	61598	87862	144347
16	691	1085	2030	3172	5018	8120	11584	17933	22781	27291	40097	69733	99467	163411
18	771	1228	2267	3542	5604	9068	12938	20027	25442	30479	44781	77879	111085	182499
20	852	1371	2505	3913	6191	10018	14293	22125	28107	33672	49473	86038	122723	201618
22	931	1515	2735	4273	6760	10940	15608	24161	30693	36770	54024	93952		
24	1012	1654	2973	4645	7349	11891	16965	26262	33363	39968	58723	102125		
26	1093	1798	3211	5018	7938	12845	18327	28369	36039	43175	63434	110318		
28	1174	1943	3451	5392	8529	13802	19692	30483	38724	46391	68159	118536		
30	1256	2087	3691	5766	9122	14762	21061	32602	41417	49617	72899	126779		
32	1338	2233	3931	6143	9718	15725	22435	34729	44118	52853	77654	135048		
34	1416	2378	4161	6502	10286	16644	23747	36760	46698	55944	82195	142945		
36	1498	2517	4403	6879	10883	17611	25126	38895	49411	59194	86970	151250		
38	1581	2663	4646	7259	11483	18582	26511	41039	52134	62457	91764	159586		
40	1664	2810	4889	7639	12085	19557	27901	43191	54868	65732	96576	167955		
50	2083	2958	6123	9567	15134	24490	34940	54088	68711	82315	120941			
60	2506	3704	7364	11506	18203	29456	42025	65055	82643	99006	145463			
70	2945	4455	8656	13525	21396	34624	49398	76467	97141					
80	3388	5236	9957	15558	24613	39828	56823	87962						
90	3854	6023	11326	17697	27997	45305	64636	100056						
100	4324	6852	12708	19856	31413	50832	72522	112264						
120	5349	7688	15720	24562	38858	62880	89710							
140	6505	9510	19117	29870	47255	76468	109096							
160	7842	11565	23045	36008	56965	92180								
180	9527	13941	27996	43744	69203	111985								
200	11793	16936	34657	54151										

*) $LEO_{S/G}$ = LESER Effective Orifice steam/gas please refer to page 00/07
How to use capacity-sheets refer to page 00/05

LESER

Capacities – Air

Capacities for air according to AD 2000-Merkblatt A2, based on set pressure plus 10 % overpressure at 0 °C and 1013 mbar.
Capacities at 1 bar (14,5 psig) and below are based on 0,1 bar (1,45 psig) overpressure.

Metric Units **AD 2000-Merkblatt A2** [m_n^3/h]

Orifice	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
Act. Orifice dia. d_0 [mm]	14	14	18	22,5	28,3	36	43	53,5	60,3	66	80	105,5	126,5	161,5
Act. Orifice area A_0 [mm^2]	154	154	254	398	629	1018	1452	2248	2856	3421	5027	8742	12568	20485
$LEO_{S/G}$*) [$inch^2$]	0,111	0,196	0,324	0,506	0,801	1,296	1,849	2,863	3,637	4,357	6,401	11,132	16,004	26,085
Set pressure [bar]	**Capacities** [m_n^3 /h]													
0,2	22	63	103	161	255	413	590	913	1159	1389	2041	3549	5062	8317
0,5	50	106	175	273	432	16,4	23,5	36,3	46,1	55,3	81,2	5999	8557	14058
1	84	159	263	411	651	23,3	33,2	51,4	65,3	78,2	5200	9044	12900	21192
2	145	262	434	678	1072	31,5	44,9	69,6	88,4	5833	8570	14905	21260	34927
3	203	361	597	934	1477	44,5	63,5	98,4	6705	8033	11802	20525	29277	48098
4	255	454	750	1172	1854	54,5	77,8	6625	8417	10083	14814	25764	36749	60374
5	307	546	902	1410	2231	63	89,9	7973	10128	12133	17827	31002	44221	72650
6	359	638	1055	1648	2608	70,4	6020	9320	11839	14183	20839	36241	51693	84925
7	411	730	1207	1887	2985	77,1	6891	10667	13551	16234	23851	41479	59165	97201
8	463	823	1360	2125	3362	83,3	7761	12014	15262	18284	26863	46718	66637	109477
9	515	915	1512	2363	3739	89,1	8631	13361	16973	20334	29875	51956	74109	121752
10	567	1007	1665	2601	4116	94,5	9501	14708	18685	22384	32887	57195	81581	134028
12	670	1099	1970	3078	4869	99,6	11242	17402	22107	26484	38912	67672	96526	158579
14	774	1192	2275	3555	5623	9100	12982	20097	25530	30585	44936	78149	111470	183131
16	878	1376	2580	4031	6377	10320	14723	22791	28953	34685	50961	88626	126414	207682
18	982	1561	2885	4508	7131	11539	16463	25485	32375	38785	56985	99102	141358	232233
20	1085	1745	3190	4984	7885	12759	18204	28179	35798	42886	63009	109579	156302	256785
22	1189	1930	3495	5461	8639	13979	19944	30874	39221	46986	69034	120056		
24	1293	2114	3800	5937	9393	15199	21685	33568	42643	51086	75058	130533		
26	1397	2299	4105	6414	10147	16419	23425	36262	46066	55187	81082	141010		
28	1501	2483	4410	6890	10900	17639	25166	38956	49489	59287	87107	151487		
30	1604	2668	4715	7367	11654	18859	26906	41651	52911	63387	93131	161964		
32	1708	2852	5020	7843	12408	20079	28647	44345	56334	67488	99155	172441		
34	1812	3037	5325	8320	13162	21299	30387	47039	59757	71588	105180	182918		
36	1916	3221	5630	8796	13916	22519	32128	49733	63179	75688	111204	193395		
38	2019	3406	5935	9273	14670	23739	33868	52428	66602	79789	117228	203872		
40	2123	3590	6240	9749	15424	24959	35608	55122	70025	83889	123253	214349		
50	2642	3775	7765	12132	19193	31058	44311	68593	87138	104390	153374			
60	3161	4697	9289	14515	22963	37158	53013	82064	104251	124892	183496			
70	3680	5620	10814	16898	26732	43258	61716	95536	121365					
80	4199	6542	12339	19280	30501	49357	70418	109007						
90	4718	7465	13864	21663	34271	55457	79120	122478						
100	5237	8387	15389	24046	38040	61557	87823	135949						
120	6274	9309	18439	28811	45579	73756	105227							
140	7312	11154	21489	33576	53118	85955	122632							
160	8350	12999	24539	38342	60657	98155								
180	9388	14844	27588	43107	68195	110354								
200	10426	16689	30638	47872										
220	11463	18534	33688	52638										
240	12501	20379	36738	57403										
260	13539	22224	39788											
280	14577	24069	42838											
300	15614	25914	45887											
350	18209	27759												
400	20803	32371												

*) $LEO_{S/G}$ = LESER Effective Orifice steam/gas please refer to page 00/07
How to use capacity-sheets refer to page 00/05

LESER

Capacities – Water

Capacities for water according to AD 2000-Merkblatt A2, based on set pressure plus 10 % overpressure at 20 °C (68 °F).
Capacities at 1 bar (14,5 psig) and below are based on 0,1 bar (1,45 psig) overpressure.

Metric Units **AD 2000-Merkblatt A2** [10^3kg/h]

Orifice	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
Act. Orifice dia. d_0 [mm]	14	14	18	22,5	28,3	36	43	53,5	60,3	66	80	105,5	126,5	161,5
Act. Orifice area A_0 [mm²]	154	154	254	398	629	1018	1452	2248	2856	3421	5027	8742	12568	20485
LEO_L*) [inch²]	0,126	0,213	0,351	0,549	0,868	1,405	2,005	3,104	3,943	4,724	6,940	12,070	17,353	28,283
Set pressure [bar]	**Capacities** [10^3kg/h]													
0,2	1,37	2,49	4,11	6,42	10,2	16,4	23,5	36,3	46,1	55,3	81,2	141	201	331
0,5	1,94	3,52	5,81	9,09	14,4	23,3	33,2	51,4	65,3	78,2	115	200	285	468
1	2,63	4,76	7,87	12,3	19,5	31,5	44,9	69,6	88,4	106	156	270	386	634
2	3,72	6,74	11,1	17,4	27,5	44,5	63,5	98,4	125	150	220	383	546	896
3	4,55	8,25	13,6	21,3	33,7	54,5	77,8	120	153	183	269	468	668	1098
4	5,26	9,53	15,7	24,6	38,9	63	89,9	139	177	212	311	541	772	1268
5	5,88	10,7	17,6	27,5	43,5	70,4	100	156	198	237	348	605	863	1417
6	6,44	11,7	19,3	30,1	47,7	77,1	110	170	216	259	381	663	945	1553
7	6,95	12,6	20,8	32,5	51,5	83,3	119	184	234	280	411	716	1021	1677
8	7,43	13,5	22,3	34,8	55,0	89,1	127	197	250	299	440	765	1091	1793
9	7,88	14,3	23,6	36,9	58,4	94,5	135	209	265	318	467	811	1157	1901
10	8,31	15,1	24,9	38,9	61,5	99,6	142	220	279	335	492	855	1220	2004
12	9,10	15,8	27,3	42,6	67,4	109	156	241	306	367	539	937	1336	2196
14	9,83	16,5	29,5	46,0	72,8	118	168	260	331	396	582	1012	1444	2372
16	10,5	17,8	31,5	49,2	77,8	126	180	278	353	423	622	1082	1543	2535
18	11,1	19,1	33,4	52,2	82,6	134	191	295	375	449	660	1148	1637	2689
20	11,8	20,2	35,2	55,0	87,0	141	201	311	395	473	696	1210	1725	2835
22	12,3	21,3	36,9	57,7	91,3	148	211	326	414	496	729	1269		
24	12,9	22,3	38,6	60,3	95,3	154	220	341	433	519	762	1325		
26	13,4	23,3	40,1	62,7	99,2	161	229	355	451	540	793	1379		
28	13,9	24,3	41,7	65,1	103	167	238	368	468	560	823	1431		
30	14,4	25,2	43,1	67,4	107	172	246	381	484	580	852	1481		
32	14,9	26,1	44,5	69,6	110	178	254	393	500	599	880	1530		
34	15,3	26,9	45,9	71,7	113	184	262	406	515	617	907	1577		
36	15,8	27,8	47,2	73,8	117	189	270	417	530	635	933	1623		
38	16,2	28,6	48,5	75,8	120	194	277	429	545	653	959	1667		
40	16,6	29,4	49,8	77,8	123	199	284	440	559	669	984	1711		
50	18,6	30,1	55,7	87,0	138	223	318	492	625	748	1100			
60	20,4	33,7	61,0	95,3	151	244	348	539	684	820	1205			
70	22,0	36,9	65,9	103	163	263	376	582	739					
80	23,5	39,8	70,4	110	174	282	402	622						
90	24,9	42,6	74,7	117	185	299	426	660						
100	26,3	45,2	78,7	123	195	315	449	696						
120	28,8	47,6	86,2	135	213	345	492							
140	31,1	52,2	93,2	146	230	373	532							
160	33,2	56,4	99,6	156	246	398								
180	35,3	60,2	106	165	261	423								
200	37,2	63,9	111	174										
220	39,0	67,4	117	182										
240	40,7	70,6	122	191										
260	42,4	73,8	127											
280	44,0	76,8	132											
300	45,5	79,7	136											
350	49,2	82,5												
400	52,6	89,1												

*) LEO_L = LESER Effective Orifice liquids please refer to page 00/08
How to use capacity-sheets refer to page 00/05

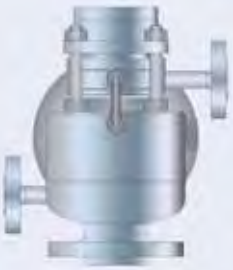
LESER

Available Options

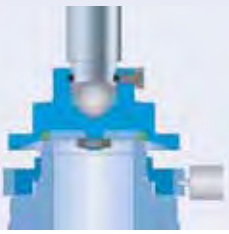
For further information refer to
“Accessories and Options”, page 99/01

Butt-weld connection

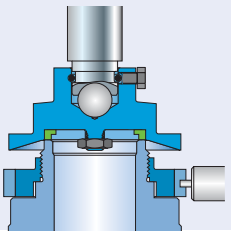
Heating jacket



O-ring disc
J20: FFKM “C”
J21: CR “K”
J22: EPDM “F”
J23: FKM “L”

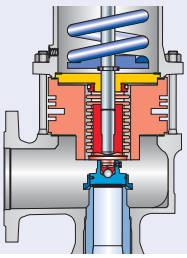


Disc with inserted sealing plate
J44: PTFE-FDA “A”
J48: PCTFE “G”
J49: SP “T”

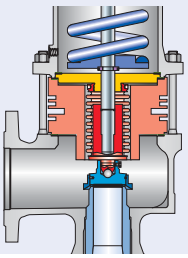


Open bonnet
See Art.-No.

Stainless steel bellows
J68: Open bonnet
J78: Closed bonnet
J88: High temperature equipment



Conversion kit for stainless steel bellows
See Art.-No. page 01/79

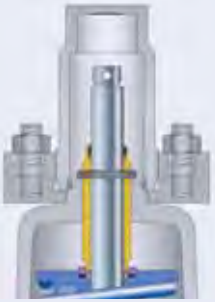


Screwed cap H2
H2

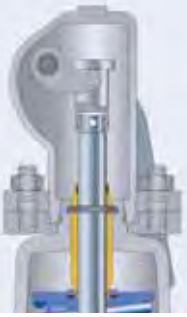
Plain lever H3
H3

Packed lever H4
H4

Bolted cap H1
H1

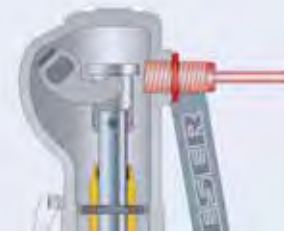


Bolted lifting device H6
H6



Test gag
J69: H4
J70: H2

Lift indicator
J39: Adaptor for lift indicator H4
J93: Lift indicator

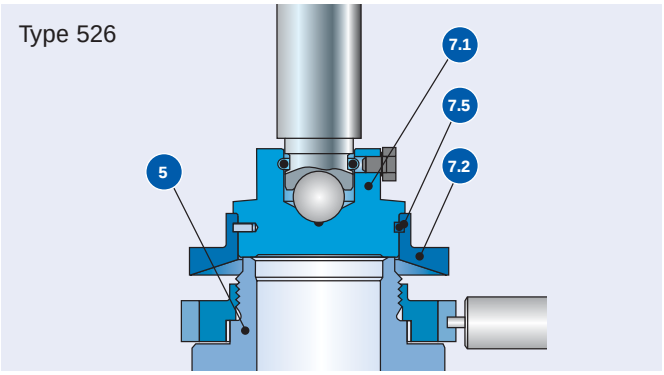


O-ring-damper H2
J65

O-ring-damper H4
J66

Metal seat – Nozzle item 5 and disc subassembly item 7

The LESER metal seats (disc and nozzle) are lapped to optical flatness to ensure a tight seal.
LESER safety relief valves are supplied with standard leak tightness according to API 527.
Improved tightness is available on request.



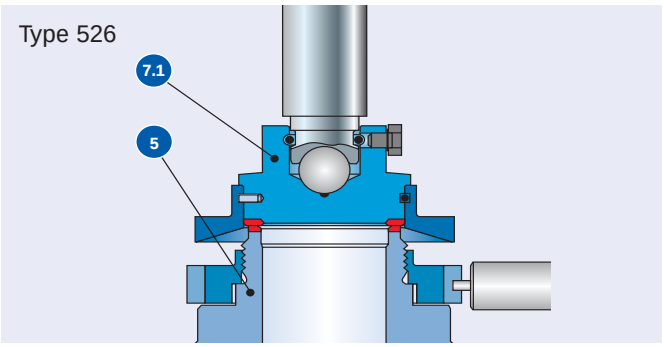
Stellited sealing surfaces

The sealing surfaces of stainless steel disc and nozzle can be stellited by build-up welding. Stellite is a cobalt-chromium based, non-ferrous alloy with increased hardness, corrosion resistance and wear resistance up to high temperatures.

LESER recommends stellited sealing surfaces for Type 526 valves (seat and disc 1.4404 / 316L) in the following cases:

- high pressure applications, due to the high stress of the sealing surfaces
- high temperature applications to avoid a permanent deformation of the sealing surfaces, due to the material properties of the seat and disc
- applications with abrasive fluids to increase the wear resistance of the sealing surfaces

The stellited sealing surfaces of disc and nozzle are standard for high pressure and high temperature designs;
see table materials page 99/07.



Materials for disc and nozzle see page 99/07.

Hardness metal seat

Material		Hardness of sealing surfaces		
EN	ASME	Values from standards or manufacturers specification		Average value LESER stock
EN 10088-3, 1.4122 hardened	Hardened stainless steel	≥ 40 HRC	LWN 325.01 Harding procedure	42 – 46 HRC
EN 10272, 1.4404	SA 479 316L	≤ 215 HBW	EN 10272 Table 7	16 – 19 HRC[1)]
EN 10272, 1.4404 stellited	SA 479 316L stellited	≥ 35 HRC	Manufacturers specification	40 HRC

HBW: BRINELL hardness acc. DIN EN ISO 6506-1 / HRC: ROCKWELL hardness acc. DIN EN ISO 6508-1

[1)] Rockwell hardness values below 20 HRC are not allowed according to DIN EN ISO 6508-1.
Lower, fictitious values were created for better comparison.

Soft seal selection

Soft seal selection

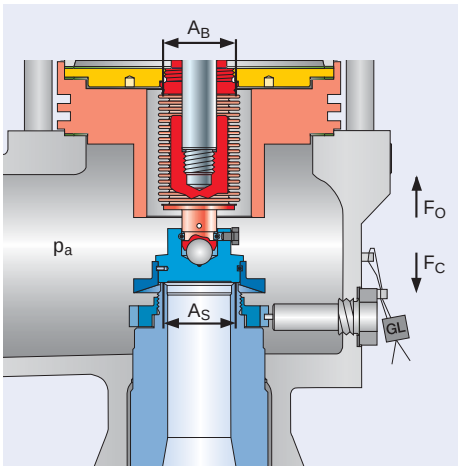
Abbrevation ASTM 1418	Trade name (Designation)	Code-letter[1)]	Option Code	T_{min} [°C]	T_{min} [°F]	T_{max} [°C]	T_{max} [°F]	Application[2)]
O-ring								
CR	Neoprene®	K	J21	-40	-40	100	212	Parafin oil, silicone oil and grease, water and waterbased solvents, refrigerants, ozone
NBR	Buna-N® (Nitrile-Butadiene)	N	J30	-25	-13	100	212	Hydraulic oil, vegetable and animal grease and oil
EPDM	Buna-EP® (Ethylene-Propylene-Dine)	D	J22	-45	-49	150	302	Hot water and superheated steam up to 150 °C, 302 °F, some organic and inorganic acids, silicone oil and grease, FDA compliant
FKM	Viton® (Fluorocarbon)	L	J23	20	-4	180	356	High temperature service (no superheated steam), mineral oil and grease, silicone oil and grease, vegetable and animal grease and oil, ozone, FDA compliant compound available on request
FFKM	Kalrez® (Perfluo)	C	J20	0	32	250	482	Nearly all chemicals, standard compound is Kalrez® 6375 with steam resistance, FDA compliant compound available on request
Sealing plate								
SP	VESPEL SP-1® (Polyimide)	T	J49	-270	-454	300	572	High temperature and high pressure applications (no steam), for chemical resistance refer to manufacturers guide
PCTFE	KEL-F® (Polychlorotri-fluoroethylene)	G	J48	-270	-454	204	400	Cryogenic and refrigeration applications, flammable media applications, (e.g. gaseous oxygen) up to 50 bar, 725 psig at 60 °C, 140 °F
PTFE	Teflon® (Polytetrafluoro-ethylene)	A	J44	-184	-300	150	302	Nearly all chemicals
Other than listed		X	For other materials please contact your local representative or sales@leser.com					

[1)] The code letters will be stamped on the disc (Item 1).
[2)] Pressure and temperature service must be considered in any case.
Chemical resistance information is supplied by the O-ring manufacturer. LESER can not take any warranty.

Balanced bellows – Subassembly item 15

LESER is able to provide a balanced bellows design through the use of stainless steel bellows.

Balanced bellows are generally used for two applications:
- to compensate for back pressure
- to seal off the bonnet from the outlet chamber



Compensation for back pressure

The back pressure acts on the reverse side of the disc, creating a force in the closing direction (F_c) of the safety valve. The magnitude of this force depends on the seat area and the level of the back pressure. The balanced bellows constitute an opposite area with the same area like the seat. The back pressure acts on, thereby reducing or eliminating the closing force. This reduction of the force in the closing direction can be viewed as a compensating force acting in the opening directon (F_o).

A quantitative representation is shown in the table below:

Actual area	Back pressure	Actual force	Direction of force	Compensation criteria
Seat area = A_S	p_a	$F_C = p_a \times A_S$	closing	$A_S = A_B$
Bellows area = A_B	p_a	$F_O = p_a \times A_B$	opening	$F_C = F_O$

Sealing the bonnet from the outlet chamber

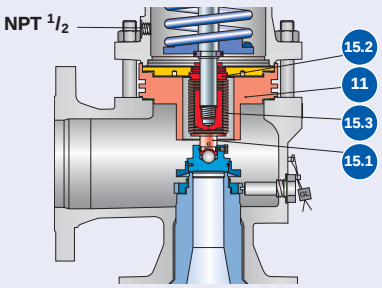
LESER's balanced bellows reliably seal the bonnet from the outlet chamber; protecting the guide, moving parts and the spring from problems associated with the fluid, such as dirt, corrosion, impurities of temperature.

Operating conditions

Temperature limits	[°C]	up to 550 °C			
	[°F]	up to 1000 °F			
Minimum set pressure	**Orifice**	**Steam /Air**		**Water**	
		[bar]	[psig]	[bar]	[psig]
	D	3,5	50,8	3,5	50,8
	E	3,5	50,8	3,5	50,8
	F	0,6	8,7	2,0	29
	G	3,2	46,4	2,8	40,6
	H	2,8	40,6	2,8	40,6
	J	3,5	50,8	5,0	72,5
	K	2,2	31,9	2,5	36,3
	L	3,5	50,8	3,5	50,8
	M	2,6	37,7	2,2	31,9
	N	1,8	26,1	1,8	26,1
	P	2,2	31,9	2,2	31,9
	Q	1,3	18,8	2,3	33,5
	R	1,0	14,5	1,4	20,3
	T	1,2	17,4	2,5	36,3

Balanced bellows – Subassembly item 15

Balanced bellows

Type 526		Orifice D – 6 R 8	6 R 10 – 8 T 10
Design			
Bonnet spacer		*	–
Bellows housing		*	*
The bellows housing protects the bellows against turbulences during discharge to avoid bellows vibration and to guarantee a longer life-time.			
Control thread	ASME B1.20.1 NPT 1/2	*	*
A control thread ASME B1.20.1 NPT 1/2 is fitted into the bonnet to monitor the condition of the bellows. A discharge pipe can be fitted to the NPT 1/2 control thread to allow safe discharge of aggressive or toxic fluids.			
Bellows materials		For standard bellows materials please refer to page 01/05. Hastelloy® and Inconel® are available as well.	
Option code			
Open bonnet	Standard bellows	J68	J68
	Low pressure bellows	–	–
	Other materials than stand.	S15 + material designation	S15 + material designation
Closed bonnet	Standard bellows	J78	J78
	Low pressure bellows	–	–
	Other materials than stand.	S15 + material designation	S15 + material designation

The dimensions and weights of a safety valve with balanced bellows are displayed in the tables “Dimensions and weights”.
The temperature range is displayed in the tables “Pressure temperature ratings”.

Balanced bellows conversion kits

LESER balanced bellows conversion kits are available to convert from a convential design into a balanced bellows design with little effort. The conversion kits contain all the necessary parts for conversion as well as instructions.

Conversion kits

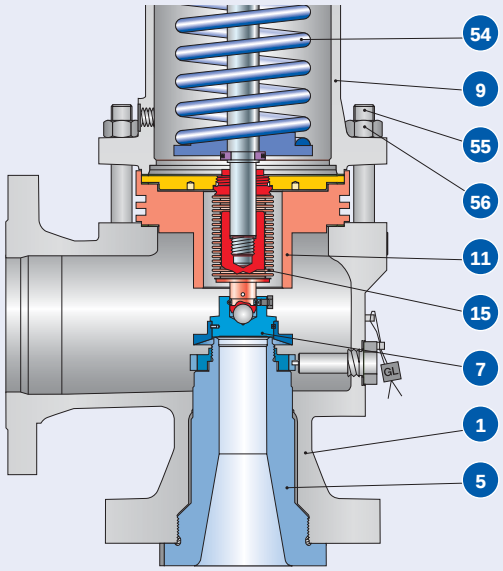
Item	Component	Quantity	Material	Remarks
8	Guide	1	1.4404 316L	
11	Bonnet spacer / Cooling spool	1	1.4404 316L	
12	Spindle	1	1.4404 316L	
15	Bellows	1	1.4571 316Ti	
55	Stud	4, 8, 12 depends on valve size	1.4401 B8M	
60	Gasket	2, 3 depends on valve size	Graphite / 1.4401 Graphite / 316	
–	Installation instruction	1		LWN 037.05

For article no. and spare parts please refer to spare part page 01/79.

High temperature equipment

For fluid temperatures higher than 400 °C / 752 °F high temperature equipment is necessary to protect the inner parts and the spring against inadmissible influence of temperature. The maximum inlet temperature is 550 °C / 1022 °F. The equipment shown is only fitted in Type 5267. For all other Types an open bonnet and a stainless steel bellows is necessary for fluid temperatures exceeding 400 °C / 752 °F up to max. 450 °C / 842 °F.

Specification

		Type 5267
Design		
Option code		J88
Operating conditions		
Temperature limits	[°C]	> 400 fluid temperature
	[°F]	> 752 fluid temperature
	max. [°C]	550 inlet temperature
	max. [°F]	1022 inlet temperature

Materials

High temperature equipment

Item	Component	
1	Body	1.7357 WC6
5	Nozzle	1.4404 316L
7	Disc	1.4404 stellited 316L stellited
9	Bonnet open	1.0619 WCB
11	Cooling spool	1.4404 316L
15	Bellows	1.4571 316L
54	Spring	1.7102, 1.8159 High temperature alloy steel
55	Studs	1.7709 B16
56	Nuts	1.7258 7M