

Type 526

Flanged Safety Relief Valves
- spring loaded



Capacities

LESER

The-Safety-Valve.com

Type 526 Approvals

Orifice		D	E - T
Europe			
Coefficient of discharge K_{dr}			
PED/DIN EN ISO 4126-1 12/2013	Approval No.	07 202 1111Z0012/2/26	
	S/G	0.45	0.80
	L	0.32	0.58
Germany			
Coefficient of discharge α_w			
PED/AD 2000-Merkblatt A2 07/2012	Approval No.	TÜV SV 1082	
	S/G	0.45	0.80
	L	0.32	0.58
United States			
Coefficient of discharge K			
ASME Sec. VIII Div. 1	Approval No.	M37246	M37224
	S/G	Rated slope acc. to ASME VIII. Div. 1 UG-131 (d) (2) G: 1.99 SCFM/psia S: 5.59 lb/hr/psia	0.801
	Approval No.	M37257	M37235
	L	Rated slope acc. to ASME VIII. Div. 1 UG-131 (d) (2) 3.11 GPM/ $\sqrt{\text{psid}}$	0.579
Canada			
Coefficient of discharge K			
Canada: CRN	Approval No.	For current approval no. see www.leser.com	
	S/G	Rated slope acc. to ASME VIII. Div. 1 UG-131 (d) (2) G: 1.99 SCFM/psia S: 5.59 lb/hr/psia	0.801
	L	Rated slope acc. to ASME VIII. Div. 1 UG-131 (d) (2) 3.11 GPM/ $\sqrt{\text{psid}}$	0.579
China			
Coefficient of discharge α_w			
AQSIQ	Approval No.	For current approval no. see www.leser.com	
	S/G	0.45	0.80
	L	0.32	0.58
Eurasian Custom Union			
Coefficient of discharge α_w			
EAC	Approval No.	For current approval no. see www.leser.com	
	S/G	0.45	0.80
	L	0.32	0.58
Classification societies			
		Homepage	
Bureau Veritas	BV	www.bureauveritas.com	
Det Norske Veritas	DNV	www.dnv.com	
Germanischer Lloyd	GL	www.gl-group.com	
Lloyd's register EMEA	LREMEA	www.lr.org	
U.S. Coast Guard	U.S.C.G	www.uscg.org	
ClassNK NIPPON Kaiji Kyokai (Japan)		www.classnk.or.jp	
		The valid certification number is changed with every renewal.	
		For a sample certificate including the valid certification number see www.leser.com	

Type 526 Capacities – Steam

Metric units

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.

AD 2000-Merkblatt A2 [kg/h]

Orifice	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
Actual Orifice diameter d_0 [mm]	14.0	14.0	18.0	22.5	28.3	36.0	43.0	53.5	60.3	66.0	80.0	105.5	126.0	161.5
Actual 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 [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	134185	220448
24	1012	1654	2973	4645	7349	11891	16965	26262	33363	39968	58723	102125	145784	239504
26	1093	1798	3211	5018	7938	12845	18327	28369	36039	43175	63434	110318	157406	258598
28	1174	1943	3451	5392	8529	13802	19692	30483	38724	46391	68159	118536	169055	277736
30	1256	2087	3691	5766	9122	14762	21061	32602	41417	49617	72899	126779	180734	296922
32	1338	2233	3931	6143	9718	15725	22435	34729	44118	52853	77654	135048	192444	316161
34	1416	2378	4161	6502	10286	16644	23747	36760	46698	55944	82195	142945	204189	335457
36	1498	2517	4403	6879	10883	17611	25126	38895	49411	59194	86970	151250	215971	354813
38	1581	2663	4646	7259	11483	18582	26511	41039	52134	62457	91764	159586	227791	
40	1664	2810	4889	7639	12085	19557	27901	43191	54868	65732	96576	167955	239653	
50	2083	2958	6123	9567	15134	24490	34940	54088	68711	82315	120941	210067	299636	
60	2506	3704	7364	11506	18203	29456	42025	65055	82643	99006	145463	253016	360897	
70	2945	4455	8656	13525	21396	34624	49398	76467	97141			297008		
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										

Grey marked: LESER Type 526 high pressure design. Set pressures and capacities exceed the limits of API 526

Type 526

Capacities – Steam

US units

Capacities for saturated steam according to ASME Section VIII (UV), based on set pressure plus 10% overpressure.
 Capacities at 2.07 bar (30 psig) and below are based on 0.207 bar (3 psig) overpressure.

ASME Section VIII [lb/h]

Orifice	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
Actual Orifice diameter d_0 [inch]	0.551	0.551	0.709	0.886	1.11	1.42	1.69	2.11	2.37	2.6	3.15	4.15	4.96	6.36
Actual Orifice area A_0 [inch ²]	0.239	0.239	0.394	0.616	0.975	1.58	2.25	3.48	4.43	5.30	7.79	13.55	19.33	31.75
LEO _{SG} [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 [psig]	Capacities [lb/h]													
15	183	321	531	830	1313	1981	3032	4694	5963	7144	10496	18253	26036	42774
20	211	371	613	957	1515	2415	3497	5413	6876	8237	12103	21048	30022	49323
30	266	469	775	1212	1917	3239	4425	6850	8702	10425	15317	26637	37995	62421
40	328	577	954	1491	2359	4001	5446	8431	10711	12831	18852	32786	46765	76829
50	389	686	1133	1771	2802	4788	6468	10012	12719	15237	22387	38934	55535	91237
60	451	794	1312	2051	3244	5520	7489	11593	14728	17644	25923	45082	64305	105644
70	512	902	1491	2330	3686	6251	8511	13174	16736	20050	29458	51231	73075	120052
80	574	1010	1670	2610	4129	6980	9532	14756	18745	22456	32994	57379	81845	134460
90	635	1119	1849	2889	4571	7686	10553	16337	20753	24862	36529	63527	90614	148868
100	697	1227	2028	3169	5014	8411	11575	17918	22762	27269	40064	69676	99384	163276
120	820	1444	2386	3728	5898	9857	13618	21080	26779	32081	47135	81973	116924	192092
140	943	1660	2744	4288	6783	11301	15660	24242	30796	36894	54206	94269	134464	220907
160	1066	1877	3102	4847	7668	12744	17703	27404	34814	41706	61276	106566	152004	249723
180	1189	2093	3460	5406	8553	14147	19746	30567	38831	46519	68347	118863	169544	278539
200	1312	2310	3818	5966	9438	15585	21789	33729	42848	51331	75418	131159	187084	307355
220	1435	2526	4176	6525	10323	17024	23831	36891	46865	56144	82489	143456	204623	336170
240	1558	2743	4534	7084	11207	18464	25874	40053	50882	60956	89559	155753	222163	364986
260	1681	2959	4892	7644	12092	19905	27917	43216	54899	65769	96630	168050	239703	393802
280	1804	3176	5250	8203	12977	21347	29960	46378	58917	70581	103701	180346	257243	422618
300	1927	3392	5608	8762	13862	22792	32003	49540	62934	75394	110772	192643	274783	451433
320	2050	3609	5966	9322	14747	24172	34045	52702	66951	80206	117842	204940	292354	480301
340	2173	3825	6324	9881	15632	25617	36088	55864	70968	85019	124913	217237	309894	509117
360	2296	4042	6682	10440	16516	27065	38131	59027	74985	89832	131984	229533	327434	537932
380	2419	4259	7040	10999	17401	28515	40174	62189	79002	94644	139055	241830	344974	566748
400	2542	4475	7398	11559	18286	29969	42217	65351	83020	99457	146125	254127	362514	595564
420	2665	4692	7756	12118	19171	31425	44259	68513	87037	104269	153196	266424	380054	624380
440	2788	4908	8114	12677	20056	32884	46302	71676	91054	109082	160267	278720	397593	653195
460	2911	5125	8471	13237	20940	34347	48345	74838	95071	113894	167338	291017	415133	682011
480	3034	5341	8829	13796	21825	35814	50388	78000	99088	118707	174408	303314	432673	710827
500	3157	5558	9187	14355	22710	37179	52430	81162	103105	123519	181479	315610	450213	480301
600	3772	6641	10977	17152	27134	44566	62644	96973	123191	147582	216833	377094	537912	
700	4387	7723	12767	19948	31558	52057	72858	112784	143277	171644	252186	438600	625611	
800	5002	8806	14557	22745	35983	59498	83072	128596	163363	195707	287540	500084	713311	
900	5617	9889	16347	25541	40407	67216	93286	144407	183449	219770	322894	561567	801010	
1000	6232	10971	18136	28338	44831	75076	103500	160218	203534	243832	358248	623051		
1100	6847	12054	19926	31134	49255	82854	113714	176029	223620					
1200	7462	13137	21716	33931	53679	91018	123928	191840						
1300	8077	14219	23506	36728	58103	99369	134142	207651						
1400	8680	15281	25260	39469	62439	107926	144153	223148						
1500	9352	16463	27215	42523	67272	116375	155310	240420						
2000	12930	22763	37628	58794	93013	164706	214738							
2500	17111	30123	49795	77805	123088	227979								

Grey marked: LESER Type 526 high pressure design. Set pressures and capacities exceed the limits of API 526

Type 526

Capacities – Air

Metric units

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.

AD 2000-Merkblatt A2 [m³/h]

Orifice	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
Actual Orifice diameter d ₀ [mm]	14.0	14.0	18.0	22.5	28.3	36.0	43.0	53.5	60.3	66.0	80.0	105.5	126.0	161.5
Actual 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 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	699	997	1543	1960	2348	3450	5999	8557	14058
1	84	159	263	411	651	1053	1502	2326	2954	3539	5200	9044	12900	21192
2	145	262	434	678	1072	1735	2476	3833	4869	5833	8570	14905	21260	34927
3	203	361	597	934	1477	2390	3410	5278	6705	8033	11802	20525	29277	48098
4	255	454	750	1172	1854	3000	4280	6625	8417	10083	14814	25764	36749	60374
5	307	546	902	1410	2231	3610	5150	7973	10128	12133	17827	31002	44221	72650
6	359	638	1055	1648	2608	4220	6020	9320	11839	14183	20839	36241	51693	84925
7	411	730	1207	1887	2985	4830	6891	10667	13551	16234	23851	41479	59165	97201
8	463	823	1360	2125	3362	5440	7761	12014	15262	18284	26863	46718	66637	109477
9	515	915	1512	2363	3739	6050	8631	13361	16973	20334	29875	51956	74109	121752
10	567	1007	1665	2601	4116	6660	9501	14708	18685	22384	32887	57195	81581	134028
12	670	1099	1970	3078	4869	7880	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	171226	281303
24	1293	2114	3800	5937	9393	15199	21685	33568	42643	51086	75058	130533	186167	305848
26	1397	2299	4105	6414	10147	16419	23425	36262	46066	55187	81082	141010	201107	330393
28	1501	2483	4410	6890	10900	17639	25166	38956	49489	59287	87107	151487	216048	354939
30	1604	2668	4715	7367	11654	18859	26906	41651	52911	63387	93131	161964	230988	379484
32	1708	2852	5020	7843	12408	20079	28647	44345	56334	67488	99155	172441	245928	404029
34	1812	3037	5325	8320	13162	21299	30387	47039	59757	71588	105180	182918	260869	428575
36	1916	3221	5630	8796	13916	22519	32128	49733	63179	75688	111204	193395	275809	453120
38	2019	3406	5935	9273	14670	23739	33868	52428	66602	79789	117228	203872	290750	
40	2123	3590	6240	9749	15424	24959	35608	55122	70025	83889	123253	214349	305690	
50	2642	3775	7765	12132	19193	31058	44311	68593	87138	104390	153374	266683	380393	
60	3161	4697	9289	14515	22963	37158	53013	82064	104251	124892	183496	319055	455095	
70	3680	5620	10814	16898	26732	43258	61716	95536	121365			371427		
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												

Grey marked: LESER Type 526 high pressure design. Set pressures and capacities exceed the limits of API 526

Type 526
Capacities – Air
 US units

Capacities for air according to ASME Section VIII (UV), based on set pressure plus 10 % overpressure at 16 °C (60 °F).
 Capacities at 2.07 bar (30 psig) and below are based on 0.207 bar (3 psig) overpressure.

ASME Section VIII [S.C.F.M.]

Orifice	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
Actual Orifice diameter d ₀ [inch]	0.551	0.551	0.709	0.886	1.11	1.42	1.69	2.11	2.37	2.6	3.15	4.15	4.96	6.36
Actual Orifice area A ₀ [inch ²]	0.239	0.239	0.394	0.616	0.975	1.58	2.25	3.48	4.43	5.30	7.79	13.55	19.33	31.75
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 [psig]	Capacities [S.C.F.M.]													
15	65.0	115	189	296	468	757	1080	1672	2124	2545	3739	6502	9275	15237
20	75.0	132	218	341	540	873	1246	1928	2449	2934	4311	7498	10695	17570
30	95.0	167	276	431	683	1105	1576	2440	3100	3714	5456	9489	13535	22236
40	117	206	340	531	840	1360	1940	3003	3815	4571	6715	11679	16659	27368
50	139	245	403	631	998	1615	2304	3566	4530	5428	7975	13869	19783	32501
60	161	283	467	730	1156	1870	2668	4129	5246	6285	9234	16060	22907	37633
70	183	322	531	830	1313	2125	3032	4692	5961	7142	10493	18250	26031	42765
80	205	361	594	929	1471	2380	3396	5256	6677	8000	11753	20440	29155	47898
90	227	399	658	1029	1628	2635	3759	5819	7392	8857	13012	22630	32279	53030
100	249	438	722	1128	1786	2891	4123	6382	8107	9714	14271	24821	35403	58163
120	293	515	849	1328	2101	3401	4851	7508	9538	11428	16790	29201	41651	68428
140	336	592	976	1527	2416	3911	5579	8635	10969	13143	19309	33582	47899	78693
160	380	670	1104	1726	2732	4421	6306	9761	12400	14857	21828	37962	54147	88957
180	424	747	1231	1925	3047	4931	7034	10887	13831	16571	24346	42343	60395	99222
200	468	824	1359	2124	3362	5441	7762	12014	15262	18286	26865	46723	66643	109487
220	512	901	1486	2323	3677	5951	8490	13140	16693	20000	29384	51104	72891	119752
240	556	979	1613	2522	3992	6462	9217	14266	18123	21715	31902	55484	79139	130017
260	600	1056	1741	2722	4308	6972	9945	15392	19554	23429	34421	59864	85388	140282
280	644	1133	1868	2921	4623	7482	10673	16519	20985	25143	36940	64245	91636	150547
300	688	1210	1995	3120	4938	7992	11400	17645	22416	26858	39458	68625	97884	160811
320	731	1288	2123	3319	5253	8502	12128	18771	23847	28572	41977	73006	104093	171011
340	775	1365	2250	3518	5568	9012	12856	19898	25278	30286	44496	77386	110338	181271
360	819	1442	2378	3717	5884	9522	13584	21024	26708	32001	47014	81767	116583	191531
380	863	1519	2505	3916	6199	10033	14311	22150	28139	33715	49533	86147	122828	201790
400	907	1597	2632	4116	6514	10543	15039	23277	29570	35429	52052	90528	129073	212050
420	951	1674	2760	4315	6829	11053	15767	24403	31001	37144	54571	94908	135318	222310
440	995	1751	2887	4514	7144	11563	16494	25529	32432	38858	57089	99289	141563	232570
460	1039	1829	3014	4713	7460	12073	17222	26656	33863	40573	59608	103669	147808	242830
480	1083	1906	3142	4912	7775	12583	17950	27782	35294	42287	62127	108050	154053	
500	1126	1983	3269	5111	8090	13093	18678	28908	36724	44001	64645	112430	160298	
600	1346	2369	3906	6107	9666	15644	22316	34540	43879	52573	77239	134333	191523	
700	1565	2756	4543	7103	11242	18195	25955	40171	51033	61145	89832	156163	222749	
800	1785	3142	5180	8098	12818	20745	29593	45803	58187	69717	102426	178054	253974	
900	2004	3528	5817	9094	14394	23296	33232	51435	65341	78289	115019	199946	285199	
1000	2224	3915	6454	10090	15970	25847	36870	57066	72496	86860	127613			
1100	2443	4301	7090	11085	17546	28398	40509	62698	79650					
1200	2663	4687	7727	12081	19122	30948	44147	68329						
1300	2882	5074	8364	13077	20698	33499	47786	73961						
1400	3101	5460	9001	14073	22274	36050	51424	79592						
1500	3321	5846	9638	15068	23850	38600	55063	85224						
2000	4418	7778	12822	20047	31730	51354	73256	113382						
2500	5515	9710	16007	25025	39610	64107								
3000	6613	11641	19191	30004										
3500	7710	13573	22375	34983										
4000	8807	15504	25560											
4500	9904	17436	28744											
5000	11002	19368	31928											
5500	12099	21299												
6000	13196	23231												

Grey marked: LESER Type 526 high pressure design. Set pressures and capacities exceed the limits of API 526

Type 526

Capacities – Water

Metric units

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.

AD 2000-Merkblatt A2 [10³kg/h]

Orifice	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
Actual Orifice diameter d ₀ [mm]	14.0	14.0	18.0	22.5	28.3	36.0	43.0	53.5	60.3	66.0	80.0	105.5	126.0	161.5
Actual Orifice area A ₀ [mm ²]	154	154	254	398	629	1018	1452	2248	2856	3421	5027	8742	12568	20485
LEO _F [inch ²]	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 ³ kg/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	1810	2973
24	12.9	22.3	38.6	60.3	95.3	154	220	341	433	519	762	1325	1890	3105
26	13.4	23.3	40.1	62.7	99.2	161	229	355	451	540	793	1379	1967	3232
28	13.9	24.3	41.7	65.1	103	167	238	368	468	560	823	1431	2041	3354
30	14.4	25.2	43.1	67.4	107	172	246	381	484	580	852	1481	2113	3472
32	14.9	26.1	44.5	69.6	110	178	254	393	500	599	880	1530	2182	3585
34	15.3	26.9	45.9	71.7	113	184	262	406	515	617	907	1577	2250	3696
36	15.8	27.8	47.2	73.8	117	189	270	417	530	635	933	1623	2315	3803
38	16.2	28.6	48.5	75.8	120	194	277	429	545	653	959	1667	2378	
40	16.6	29.4	49.8	77.8	123	199	284	440	559	669	984	1711	2440	
50	18.6	30.1	55.7	87.0	138	223	318	492	625	748	1100	1913	2728	
60	20.4	33.7	61.0	95.3	151	244	348	539	684	820	1205	2095	2988	
70	22.0	36.9	65.9	103	163	263	376	582	739			2263		
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												

Grey marked: LESER Type 526 high pressure design. Set pressures and capacities exceed the limits of API 526

Type 526 Capacities – Water

US units

Capacities for water according to ASME Section VIII (UV), based on set pressure plus 10 % overpressure at 21 °C (70 °F).
Capacities at 2.07 bar (30 psig) and below are based on 0.207 bar (3 psig) overpressure.

ASME Section VIII [US-G.P.M.]

Orifice	D	E	F	G	H	J	K	L	M	N	P	Q	R	T
Actual Orifice diameter d_o [inch]	0.551	0.551	0.709	0.886	1.11	1.42	1.69	2.11	2.37	2.6	3.15	4.15	4.96	6.36
Actual Orifice area A_o [inch ²]	0.239	0.239	0.394	0.616	0.975	1.58	2.25	3.48	4.43	5.30	7.79	13.55	19.33	31.75
LEO_F [inch ²]	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 [psig]	Capacities [US-G.P.M.]													
15	13.2	22.3	36.7	57.4	90.9	147	210	325	413	494	726	1263	1801	2960
20	14.9	25.2	41.5	64.9	103	166	237	367	466	559	821	1428	2036	3346
30	17.9	30.2	49.7	77.7	123	199	284	440	559	669	983	1710	2439	4007
40	20.6	34.8	57.4	89.8	142	230	328	508	645	773	1135	1975	2817	4627
50	23.1	38.9	64.2	100	159	257	367	568	721	864	1269	2208	3149	5173
60	25.3	42.7	70.3	110	174	282	402	622	790	947	1391	2418	3450	5667
70	27.3	46.1	76.0	119	188	304	434	672	853	1022	1502	2612	3726	6121
80	29.2	49.3	81.2	127	201	325	464	718	912	1093	1606	2793	3983	6544
90	31.0	52.2	86.1	135	213	345	492	762	968	1159	1703	2962	4225	6941
100	32.6	55.1	90.8	142	225	364	519	803	1020	1222	1795	3122	4453	7316
120	35.7	60.3	99.5	155	246	398	568	879	1117	1339	1967	3420	4878	8015
140	38.6	65.2	107	168	266	430	614	950	1207	1446	2124	3694	5269	8657
160	41.3	69.7	115	180	284	460	656	1015	1290	1546	2271	3949	5633	9255
180	43.8	73.9	122	190	301	488	696	1077	1368	1639	2409	4189	5975	9816
200	46.1	77.9	128	201	318	514	734	1135	1442	1728	2539	4416	6298	10347
220	48.4	81.7	135	211	333	539	769	1191	1513	1812	2663	4631	6605	10852
240	50.5	85.3	141	220	348	563	804	1244	1580	1893	2781	4837	6899	11335
260	52.6	88.8	146	229	362	586	836	1294	1644	1970	2895	5034	7181	11797
280	54.6	92.2	152	238	376	608	868	1343	1707	2045	3004	5224	7452	12243
300	56.5	95.4	157	246	389	630	898	1390	1766	2116	3109	5408	7713	12672
320	58.4	98.5	162	254	402	650	928	1436	1824	2186	3211	5585	7978	13107
340	60.2	102	167	262	414	670	956	1480	1881	2253	3310	5757	8224	13510
360	61.9	104	172	269	426	690	984	1523	1935	2318	3406	5924	8462	13902
380	63.6	107	177	277	438	709	1011	1565	1988	2382	3500	6086	8694	14283
400	65.2	110	182	284	449	727	1037	1606	2040	2444	3590	6244	8920	14954
420	66.9	113	186	291	460	745	1063	1645	2090	2504	3679	6399	9140	15016
440	68.4	116	190	298	471	763	1088	1684	2139	2563	3766	6549	9355	15369
460	70.0	118	195	304	482	780	1112	1722	2187	2621	3850	6696	9565	15715
480	71.5	121	199	311	492	797	1136	1759	2234	2677	3933	6840	9771	16053
500	72.9	123	203	317	502	813	1160	1795	2280	2732	4014	6982	9973	16384
600	79.9	135	222	348	550	891	1271	1966	2498	2993	4397	7648	10924	
700	86.3	146	240	376	594	962	1372	2124	2698	3233	4750	8272	11800	
800	92.3	156	257	401	635	1028	1467	2271	2885	3456	5078	8844	12614	
900	97.9	165	272	426	674	1091	1556	2408	3060	3666	5386	9380	13380	
1000	103	174	287	449	710	1150	1640	2539	3225	3864	5677			
1100	108	183	301	471	745	1206	1720	2663	3382					
1200	113	191	314	492	778	1260	1797	2781						
1300	118	199	327	512	810	1311	1870	2895						
1400	122	206	340	531	841	1360	1941	3004						
1500	126	213	352	550	870	1408	2009	3109						
2000	146	246	406	635	1005	1626	2320	3590						
2500	163	275	454	710	1123	1818								
3000	179	302	497	777										
3500	193	326	537	840										
4000	206	348	574											
4500	219	369	609											
5000	231	389	642											
5500	242	408												
6000	253	427												

Grey marked: LESER Type 526 high pressure design. Set pressures and capacities exceed the limits of API 526

Type 526

Determination of coefficient of discharge in case of lift restriction or back pressure

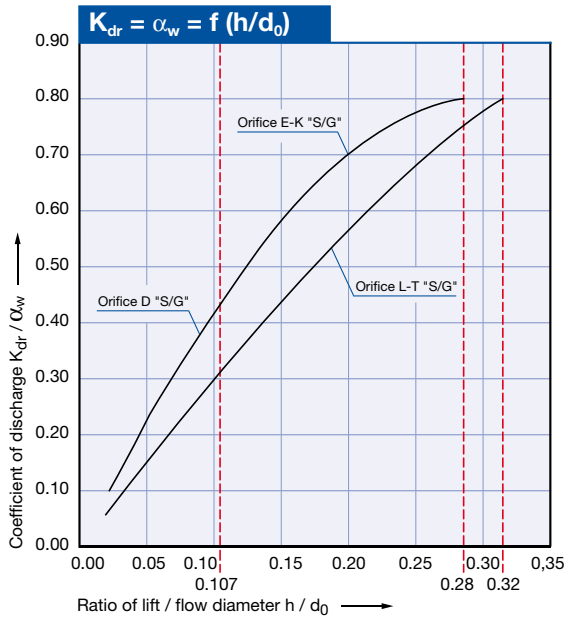
Diagram for evaluation of ratio of lift / flow diameter (h/d_0) in reference to the coefficient of discharge (K_{dr}/α_w)

Note: Lift restriction not approved for ASME-applications.

Legend

h	= Lift [mm]
d_0	= Flow diameter [mm] of selected safety valve, refer to table article numbers
h/d_0	= Ratio of lift / flow diameter
p_{a0}	= Back pressure [bar _a]
p_0	= Set pressure [bar _a]
p_{a0}/p_0	= Ratio of back pressure / set pressure
K_{dr}	= Coefficient of discharge acc. to DIN EN ISO 4126-1
α_w	= Coefficient of discharge acc. to AD 2000-Merkblatt A2
K_b	= Back pressure correction factor acc. to API 520 topic 3.3

Steam and gases



Liquids

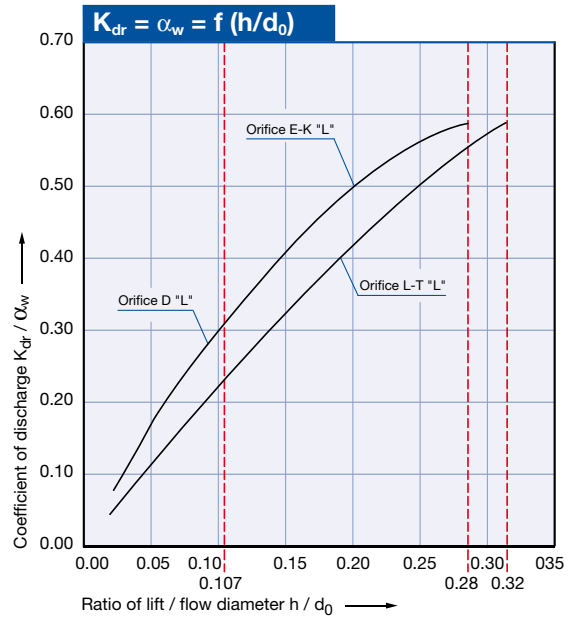
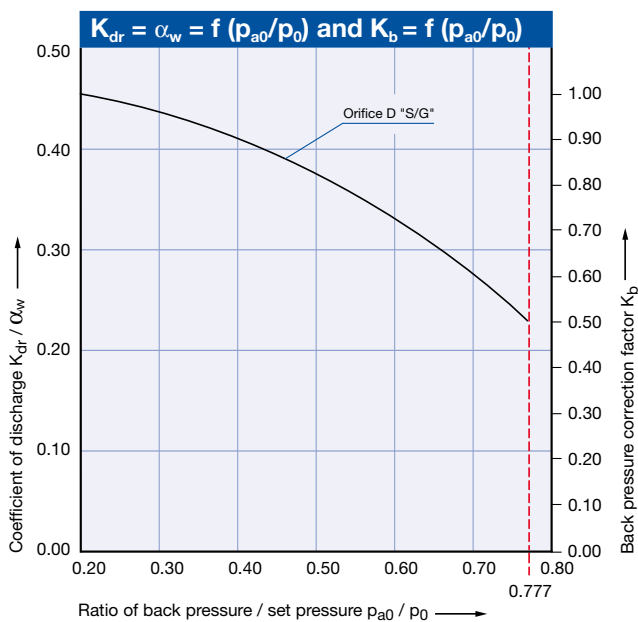


Diagram for evaluation of coefficient of discharge (K_{dr}/α_w) or K_b in reference to the ratio of back pressure / set pressure (p_{a0}/p_0)

Orifice D



Orifice E - T

