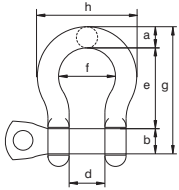


C



MLVI



Stainless steel bow shackle with screw pin

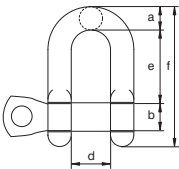
- **Material:** AISI 316, grade 5
- **Safety factor:** MBL equals 5 x WLL
- **Finish:** polished
- **Temperature range:** -40°C up to +200°C
- **Certification:** 2.1 2.2 3.1 CE
- **Note:** marked with WLL and CE

working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	width bow	length	width	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	kg
0.4	8	8	16	16	32	25	56	41	0.06
0.6	10	10	19	20	40	28	67	48	0.12
0.9	12	12	24	25	48	36	79	59	0.2
1.5	13	16	31	24	52	35	87	60	0.32
2.5	16	20	38	28	64	42	108	71	0.58
3	19	22	44	32	72	50	125	87	0.96
4	22	25	50	37	74	60	145	101	1.46
6	25	30	57	40	94	67	157	115	2.09

C



MDVI



Stainless steel dee shackle with screw pin

- **Material:** AISI 316, grade 5
- **Safety factor:** MBL equals 5 x WLL
- **Finish:** polished
- **Temperature range:** -40°C up to +200°C
- **Certification:** 2.1 2.2 3.1 CE
- **Note:** marked with WLL and CE

working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	length	weight each
t	a mm	b mm	c mm	d mm	e mm	f mm	kg
0.4	8	8	16	16	32	52	0.06
0.6	10	10	19	20	40	64	0.11
0.9	12	12	24	25	48	78	0.19
1.5	13	16	31	24	52	90	0.3
2.5	16	20	38	28	64	110	0.57
3	19	22	44	32	72	124	0.9
4	22	25	50	37	74	134	1.33
6	25	30	57	40	94	162	1.98

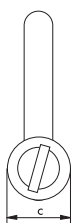
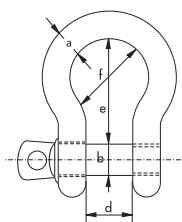
C

Shackles, bow shackles with screw pin

Bow shackles with screw pin



R-7825



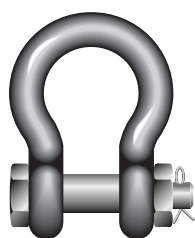
- **Material:** AISI 316
- **Safety factor:** MBL equals 6 x WLL
- **Standard:** generally to DIN 82103
- **Finish:** polished
- **Certification:** 2.1 2.2 3.1 CE
- **Note:** marked with WLL, CE and manufacturer identification symbol (VBS), except for 4 mm as it is too small

working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	width bow	weight per 100 pcs
t	a mm	b mm	c mm	d mm	e mm	f mm	kg
-	4	4	8	8	16	12	1.2
0.12	5	5	10	10	20	15	1.8
0.15	6	6	12	12	24	18	2.7
0.3	8	8	16	16	32	24	6.3
0.4	10	10	20	20	40	30	12.3
0.6	12	12	24	24	48	36	20.5
1	16	16	32	32	64	48	48
1.5	20	20	40	40	80	60	97
2	22	22	44	44	88	66	146
3	25	25	50	50	100	75	211
3.6	28	28	54	56	116	86	285

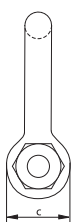
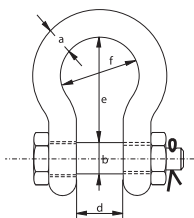
C

Shackles, bow shackles with safety bolt

Bow shackles with safety bolt



R-7827



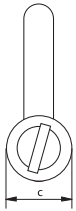
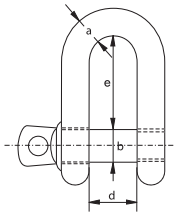
- **Material:** AISI 316
- **Safety factor:** MBL equals 6 x WLL
- **Finish:** polished
- **Certification:** 2.1 2.2 3.1 CE
- **Note:** marked with WLL, CE, traceability code and manufacturer identification symbol (VBS)

working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	width bow	weight per 100 pcs
t	a mm	b mm	c mm	d mm	e mm	f mm	kg
0.3	8	8	16	16	32	24	7.4
0.4	10	10	19	20	40	30	14.5
0.6	12	12	24	25	49	36	23
1	16	16	31	32	64	48	56.6
1.5	19	19	38	38	80	60	99.5
2	22	22	43	44	85	66	146
3	25	25	49	50	100	75	218

C



R-7821



Shackles, dee shackles with screw pin

Dee shackles with screw pin

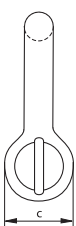
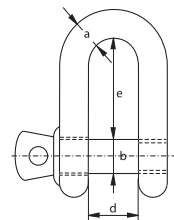
- **Material:** AISI 316
- **Safety factor:** MBL equals 6 x WLL
- **Standard:** generally to DIN 82102
- **Finish:** polished
- **Certification:** 2.1 2.2 3.1 CE
- **Note:** marked with WLL, CE and manufacturer identification symbol (VBS), except for 4 mm as it is too small

working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	weight per 100 pcs
t	a mm	b mm	c mm	d mm	e mm	kg
-	4	4	8	8	16	0.9
0.12	5	5	10	10	20	1.6
0.15	6	6	12	12	24	2.6
0.3	8	8	16	16	32	5.6
0.4	10	10	20	20	40	13
0.6	12	12	24	24	48	20
1	16	16	32	32	64	48
1.5	20	20	40	40	80	78
2	22	22	44	44	88	127
3	25	25	50	50	100	184
3.6	28	28	54	56	106	250

C



R-7823



Shackles, dee shackles with safety bolt

Dee shackles with safety bolt

- **Material:** AISI 316
- **Safety factor:** MBL equals 6 x WLL
- **Finish:** polished
- **Certification:** 2.1 2.2 3.1 CE
- **Note:** marked with WLL, CE, traceability code and manufacturer identification symbol (VBS)

working load limit	diameter bow	diameter pin	diameter eye	width inside	length inside	weight per 100 pcs
t	a mm	b mm	c mm	d mm	e mm	kg
0.3	8	8	16	16	32	7.1
0.4	10	10	19	20	40	14
0.6	12	12	24	25	48	23.6
1	16	16	31	32	64	54.5
1.5	19	19	38	38	76	96
2	22	22	43	44	85	142
3	25	25	49	50	95	209

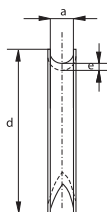
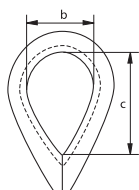
C

Thimbles, heavy type

- Material: AISI 316
- Finish: polished
- Certification: 2.1



R-7860



width groove	width inside	length inside	length	thickness	weight per 100 pcs
a mm	b mm	c mm	d mm	e mm	kg
2	9	15	23	1	0.2
2.5	9.5	15.7	24	1	0.2
3	10	16	25	1	0.3
4	11	17	28	1	0.5
5	13	20	32	1	0.5
6	16	25	39	1.2	0.8
7	18	28	40	1.2	1
8	20	32	49	1.4	1.2
10	26	40	55	1.9	3.4
12	28	45	70	2	4.5
14	34	56	80	2.2	7.3
16	37	62	85	2.5	12.2
18	42	65	95	2.5	15.1
20	45	78	115	3	19
22	50	88	125	3	22.3
24	58	96	135	4	40.5
26	66	105	140	4	49.7

C

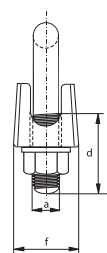
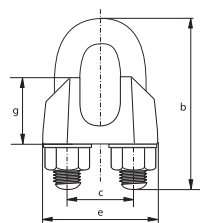
Wire rope clips

Generally to DIN 741

- Material: AISI 316
- Standard: generally to DIN 741
- Finish: polished
- Certification: 2.1



R-7863



diameter wire rope	diameter	length bow	width inside	length thread	length base	thickness base	height base	weight per 100 pcs
mm	a mm	b mm	c mm	d mm	e mm	f mm	g mm	kg
3	4	20	9	12	21	10	10	1.4
4	4	22	9	12	21	10	10	1.4
5	5	24	11	13	23	11	10	1.5
6	5	28	13	15	26	12	11	2.1
8	6	34	16	19	30	14	15	3.5
10	8	42	19	22	34	18	17	6.1
13	10	55	24	30	42	23	21	13
16	12	63	29	33	50	26	26	21
19	12	75	32	38	54	29	30	26
22	14	85	37	44	61	33	34	40
26	14	95	41	45	65	35	37	44



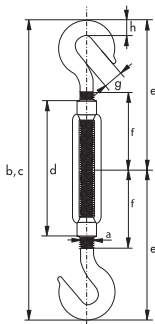
Open body rigging screws Hook-Hook

- Material: AISI 316
- Finish: polished
- Certification: 2.1



R-7837

diameter thread	length closed position	length open position	length body	length	length	length	opening hook	thickness	weight each
a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	h mm	kg
M 5	120	170	70	58	33	8	5	0.04	
M 6	150	210	90	73	43	9	6	0.08	
M 8	200	290	120	98	56	11	8	0.16	
M 10	240	355	150	117	71	12	9	0.27	
M 12	310	470	200	157	95	14	11	0.51	
M 16	390	590	250	186	116	16	15	1.2	
M 20	440	675	300	214	139	18	19	1.9	



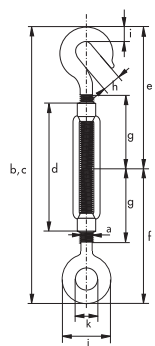
Open body rigging screws Hook-Eye

- Material: AISI 316
- Finish: polished
- Certification: 2.1



R-7838

diameter thread	length closed position	length open position	length body	length	length	length	length	opening hook	thickness	diameter eye outside	diameter eye inside	weight each
a mm	b mm	c mm	d mm	e mm	f mm	g mm	g mm	h mm	i mm	j mm	k mm	kg
M 5	120	170	70	58	56	33	33	8	5	17	8	0.04
M 6	150	210	90	73	71	43	43	9	6	21	10	0.08
M 8	200	290	120	98	95	56	56	11	8	28	14	0.16
M 10	240	355	150	117	118	71	71	12	9	34	16	0.27
M 12	310	470	200	157	154	95	95	14	11	40	18	0.51
M 16	390	590	250	186	190	116	116	16	15	54	26	1.2
M 20	440	675	300	214	220	139	139	18	19	64	30	1.9



C

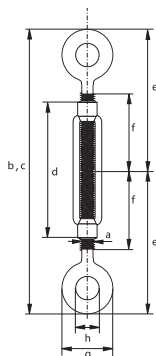
Open body rigging screws Eye-Eye

- Material: AISI 316
- Finish: polished
- Certification: 2.1



R-7839

diameter thread	length closed position	length open position	length body	length	length	diameter eye outside	diameter eye inside	weight each
a mm	b mm	c mm	d mm	e mm	f mm	g mm	h mm	kg
M 5	120	170	70	56	33	17	8	0.04
M 6	150	210	90	71	43	21	10	0.08
M 8	200	290	120	95	56	28	14	0.16
M 10	240	355	150	118	71	34	16	0.27
M 12	310	470	200	154	95	40	18	0.51
M 16	390	590	250	190	116	54	26	1.2
M 20	440	675	300	220	139	64	30	1.9



C

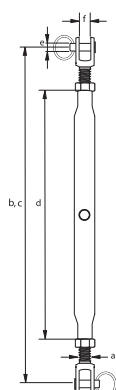
Closed body rigging screws Jaw-Jaw

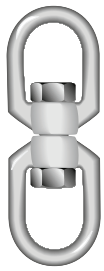
- Material: AISI 316
- Finish: polished
- Certification: 2.1



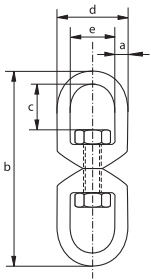
R-7830

diameter thread	length open	length closed	length body	diameter pin	width jaw inside	weight per 100 pcs
a mm	b mm	c mm	d mm	e mm	f mm	kg
M 5	190	125	80	5.2	6	6.5
M 6	210	155	95	6.2	7.5	8.1
M 8	240	180	105	8.7	10	15.9
M 10	270	220	125	9.7	12	29.9
M 12	360	255	150	12.7	14	53.2
M 14	385	270	165	12.7	14	64
M 16	450	320	190	16	16	116
M 20	450	355	210	19	20	145





R-7877



Swivels

Eye - Eye

- Material: AISI 316
- Finish: polished
- Certification: 2.1

diameter	length	length inside	width outside	width inside	weight per 100 pcs
a mm	b mm	c mm	d mm	e mm	kg
5	60	13	23	13	3.4
6	65	15	26	15	5.1
8	90	22	35	20	13.1
10	115	27	44	24	26
13	154	35	57	32	58
16	188	45	71	39	105
19	229	50	84	41	220

C

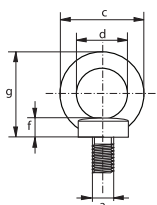
Eye bolts

Generally to DIN 580

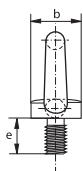
- **Material:** AISI 316
- **Standard:** generally to DIN 580
- **Finish:** polished
- **Certification:** 2.1



R-7840



diameter thread	diameter base	diameter eye outside	diameter eye inside	length thread	thickness base	height	weight per 100 pcs
a mm	b mm	c mm	d mm	e mm	f mm	g mm	kg
M 6	20	36	20	13	6	36	3
M 8	20	36	20	13	6	36	6
M 10	25	45	25	17	8	45	10.3
M 12	30	54	30	20.5	10	53	17.7
M 16	35	63	35	27	12	62	28
M 20	40	72	40	30	14	71	45
M 24	50	90	50	36	18	90	74



C

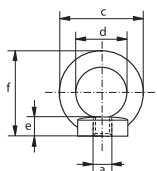
Eye nuts

Generally to DIN 582

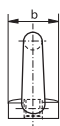
- **Material:** AISI 316
- **Standard:** generally to DIN 582
- **Finish:** polished
- **Certification:** 2.1



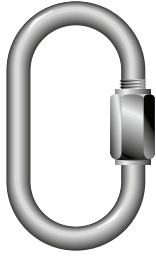
R-7842



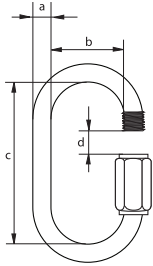
diameter thread	diameter base	diameter eye outside	diameter eye inside	thickness base	height	weight per 100 pcs
a mm	b mm	c mm	d mm	e mm	f mm	kg
M 6	20	36	20	8.5	36	4.2
M 8	20	36	20	8.5	36	5.2
M 10	25	45	25	10	45	9.4
M 12	30	54	30	11	53	14.8
M 16	35	63	35	13	62	23.7



C



R-7873

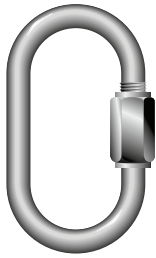


Quick links, standard type

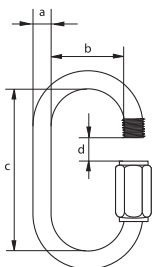
- Material: AISI 316
- Finish: polished
- Certification: 2.1

diameter	width inside	length inside	opening	minimum breaking load	weight per 100 pcs
a mm	b mm	c mm	d mm	kg	kg
3.5	10	29	5	155	0.9
4	12	32	5.5	450	1.2
5	13	39	6.5	585	2
6	14	46	7.5	790	3.3
7	16	51	8.5	1085	5.3
8	17	59	10.5	1380	7.5
9	17	64	11.5	1790	10.3
10	20	70	12.5	2085	13.7
12	23	83	14.5	2265	22.5

C



R-7874



Quick links, with enlarged opening

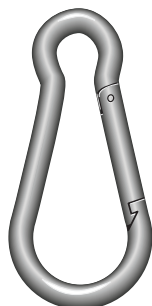
- Material: AISI 316
- Finish: polished
- Certification: 2.1

diameter	width inside	length inside	opening	minimum breaking load	weight per 100 pcs
a mm	b mm	c mm	d mm	kg	kg
3.5	10	40	10	155	1.2
5	14	52	14	585	2.6
6	16	60	16	790	4
8	18	74	18	1380	9.1
10	20	85	20	2085	15.9
12	23	98	23	2265	30.4
14	27	116	26	2540	40.2

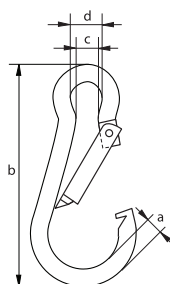
C

Carabine hooks, standard type

- Material: AISI 316
- Finish: polished
- Certification: 2.1



R-7872

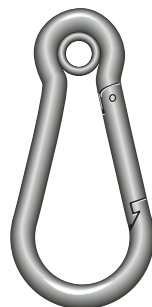


diameter	length	width inside	width inside	minimum breaking load	weight per 100 pcs
a mm	b mm	c mm	d mm	kg	kg
4	40	5	7	70	0.8
5	50	7	8	110	1.5
6	60	7	9	132	2.6
7	70	9	10	198	2.6
8	80	11	12	330	4.4
9	90	11	12	363	6.4
10	100	12	15	506	12.2
11	120	14	18	660	12.5
12	140	16	20	748	25
13	160	20	22	880	35
14	180	20	22	946	35

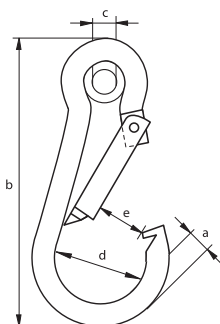
C

Carabine hooks, with pressed thimble

- Material: AISI 316
- Finish: polished
- Certification: 2.1

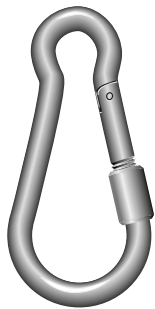


R-7875

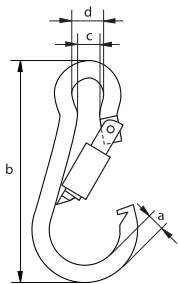


diameter	length	diameter inside thimble	width	minimum breaking load	weight per 100 pcs
a mm	b mm	c mm	d mm	kg	kg
4	40	5	14	70	0.9
5	50	5	16	110	1.6
6	60	5	18	132	2.8
7	70	7	22	198	4.4
8	80	10	24	330	6.4
9	90	10	26	363	9.3
10	100	13	30	506	12.5
11	120	13	36	660	18.7
12	140	15	40	748	25
13	160	17	44	880	35
14	180	17	48	946	50

C



R-7876



Carabine hooks, with screw nut

- Material: AISI 316
- Finish: polished
- Certification: 2.1

diameter	length	width inside	width inside	minimum breaking load	weight per 100 pcs
a mm	b mm	c mm	d mm	kg	kg
4	40	5	7	70	0.8
5	50	7	8	110	1.7
6	60	7	9	132	2.6
7	70	9	10	198	4.4
8	80	11	12	330	6.4
9	90	11	12	363	9.3
10	100	12	15	506	12.7
11	120	14	18	660	19.5
12	140	16	20	748	25
13	160	20	22	880	35
14	180	20	22	946	50

C

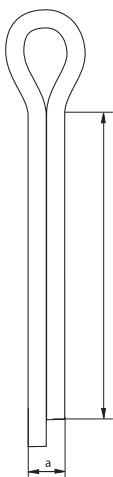
Cotter Pin

Stainless steel cotter pin

- Material: AISI 304
- Finish: polished
- Certification: 2.1



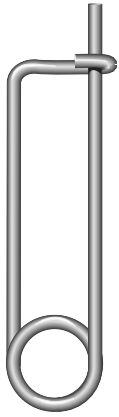
R-7856



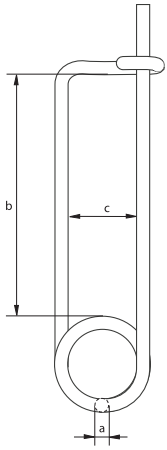
diameter	length	weight per 100 pcs
a mm	b mm	kg
2.5	20	0.08
4	32	0.3
5	36	0.6
6	45	1.2
8	63	2.8
8	80	4.4
10	71	5
10	90	6
10	100	6.6
10	120	4.4
12	140	7
12	160	7
12	180	7
13	110	12.1
16	160	16

split pin	for shackle									
	G-4163 G-4143	G-4153 G-4133	P-6036 P-6016 ≤150	G-6038 P-6018	P-6033 P-6013 ≤150	G-5263 G-5243	G-5163 G-5143	P-6031 P-6011 ≤150	G-4263 G-4243	G-4553
a x b mm	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t
2.5 x 20	0.5									
	0.75									
	1									
	1.5									
4 x 32	2	2				3.3	2			
	3.25	3.25				5	3.25			
5 x 36	4.75	4.75			7	7	4.75		4.75	4.6
	6.5	6.5				9.5	6.5			
6 x 45	8.5	8.5			12.5	12.5	8.5		6.5	8.6
	9.5	9.5			18	15	9.5		8.5	
	12	12				18	12		9.5	
8 x 63	13.5	13.5				21	13.5		12	15.5
	17	17				30	17		16	
8 x 80					30					
					40					
10 x 71	25	25				40	25		25	
	35	35				55	35		30	
10 x 90	42.5	42.5				85	42.5		55	
	55	55					55			
10 x 100	85	85			55	120	85		75	
					75					
10 x 120					125					
12 x 140					150					
					200					
12 x 160					250					
12 x 180					300					
13 x 110			120	120		150		120		
			150			175		150		
16 x 160			200					200		
			250					250		
			300					300		

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R-7850



Safety Pin

Stainless steel safety pin

- Material: AISI 304 or 316
- Finish: polished
- Certification: 2.1

diameter	length inside	width inside	weight per 100 pcs
a mm	b mm	c mm	kg
2	46	18	0.5
3	66	23	1.8
3	116	24	2.5
3	147	24	2.8
4	74	29	3.9
5	95	22	6.9
6	90	39	12.5

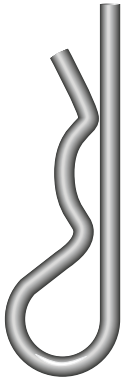
safety pin	for shackle							
	G-4163	G-4153	P-6033	G-5263	G-5163	G-4263	G-4553	P-5367
a x b mm	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t
2x46	4.75	4.75	7	7	4.75	4.75	4.6	
	6.5	6.5		9.5	6.5	6.5		
3x66	8.5	8.5	12.5	12.5	8.5	8.5	8.6	
	9.5	9.5	18	15	9.5	9.5		
	12	12		18	12	12		
3x116								12 - 55
3x147								85
								120
								150
4x74	13.5	13.5	30	21	13.5	16	15.5	
	17	17		30	17	25		
	25	25		40	25			
5x95	35	35	40	55	35	30		
	42.5	42.5	55		42.5			
6x90	55	55	75	85	55	55		
	85	85	125	120	85	75		

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Single Spring Pin

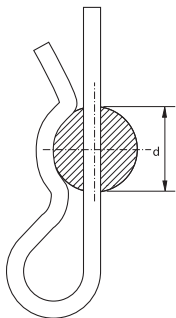
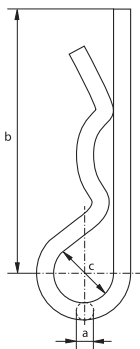
Stainless steel single type spring pin

- Material: AISI 304
- Finish: polished
- Certification: 2.1



R-7852

diameter	length	diameter	diameter	weight per 100 pcs
a mm	b mm	c mm	d mm	kg
2	50	10	9 - 14	0.3
3	60	18	10 - 16	0.9
4	60	20	16 - 20	1.6
5	85	24	20 - 28	3.3
6	105	30	28 - 40	6.2
7	105	30	28 - 45	8.3
8	110	28	30 - 45	10.5



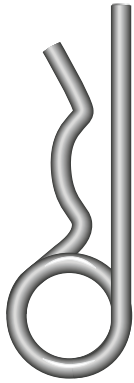
spring pin	for shackle						
	G-4163	G-4153	P-6033	G-5263	G-5163	G-4263	G-4553
diameter mm	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t
2	2	2		3.3	2		
3	3.25	3.25		5	3.25		
4	4.75	4.75	7	7	4.75	4.75	4.6
	6.5	6.5		9.5	6.5		
5	8.5	8.5	12.5	12.5	8.5	6.5	8.6
	9.5	9.5	18	15	9.5	8.5	
	12	12		18	12	9.5	
6	13.5	13.5		21	13.5	12	15.5
	17	17		30	17	16	
7	25	25	30	40	25	25	
			40				



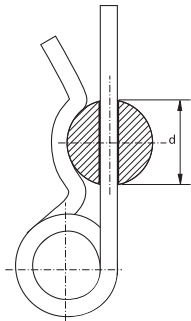
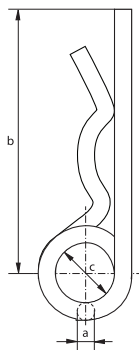
Spring Pins

Stainless steel double type spring pin

- **Material:** AISI 304 or 316
- **Finish:** polished
- **Certification:** 2.1



R-7854



diameter	length	diameter	diameter	weight per 100 pcs
a mm	b mm	c mm	d mm	kg
2	50	10	8 - 14	0.4
3	62	16	14 - 20	1.4
3	80	15	18 - 30	2.5
4	78	23	17 - 24	3
4	110	21	24 - 45	3
4	120	21	45 - 56	3
4	150	27	45 - 56	3
5	92	26	18 - 30	5.3
6	120	30	24 - 36	9.6
7	130	30	24 - 40	13.5
8	130	30	24 - 45	17.8

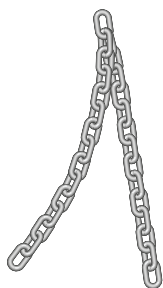
spring pin	for shackle											
	G-4163	G-4153	P-6033	G-5263	G-5163	G-4263	G-4553	P-5363	P-5365	P-5367	P-5361D/F	P-5362D/F
a x b mm	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t	WLL t
2 x 50	2	2		3.3	2							
3 x 62	3.25	3.25		5	3.25				6.5~12		6.5	
3 x 80										12		
										13.5		
4 x 78	4.75	4.75	7	7	4.75	4.75	4.6	6.5	17			
	6.5	6.5		9.5	6.5		8.6		25			
	8.5	8.5		12.5	8.5				35			
4 x 110										17		
										25		
										35		
4 x 120										42.5		12~55
										55		
4 x 150										85		
										120		
										150		
5 x 92	9.5	9.5	12.5	15	9.5	6.5		9.5	42.5~85		9.5	
	12	12	18	18	12	8.5		12	120~250			
						9.5						
6 x 120	13.5	13.5		21	13.5	12	15.5	17			12	
	17	17		30	17	16					17	
											25	
8 x 130	25	25	30	40	25	25		25			35	
			40									

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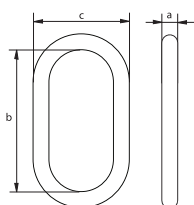
Short link chain

Generally to DIN 766 and DIN 5685-3

- **Material:** AISI 316
- **Standard:** generally to DIN 766 and DIN 5685-3
- **Certification:** [2.1](#)



R-7880



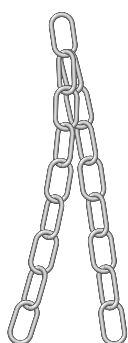
diameter	length inside	width outside	weight per meter
a mm	b mm	c mm	kg
3	16	11	0.17
4	16	14	0.32
5	18.5	17	0.5
6	18.5	20	0.75
8	24	26	1.35
10	28	34	2.25

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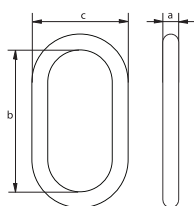
Long link chain

Generally to DIN 763 and DIN 5685-1

- **Material:** AISI 316
- **Standard:** generally to DIN 763 and DIN 5685-1
- **Certification:** [2.1](#)



R-7890



diameter	length inside	width outside	weight per meter
a mm	b mm	c mm	kg
3	26	12	0.14
4	32	16	0.27
5	36	20	0.43
6	42	24	0.63
7	48	28	0.86
8	54	32	1.1
10	66	40	1.75