



# 06 - STAINLESS STEEL

Wire Rope

Chain

Shackles

Thimbles

Eyebolts & Eyenuts

Hooks

Rigging Screws & Turnbuckles

## Stainless Steel Wire Rope

Bullivants sell a large range of Stainless Steel fittings and Wire Ropes. Stainless steel wire products have many uses in various industries. The main characteristics which make stainless steel wire such a popular product are its resistance to corrosion, attractive long lasting appearance, comparative economy and the full range of accessories available.

**Stainless steel has a lower resistance to bending stresses than galvanised rope. Failure due to work hardening and fatigue is to be avoided by using:**

1. Sheaves 25 times rope diameter.
2. Bending angles over 90 degrees.
3. The smallest rope diameter rope that meets job requirements.

### Constructions

**Three constructions are commonly available:**

**1 x 19 Wire Rope** - Non flexible - Suitable for standing rigging, mast stays, applications where the wire will not be subjected to bending stresses, i.e. should not be run over sheaves. Smooth surface.

**7 x 7 Wire Rope** - Flexible - Suitable for hand rails, hang glider struts. Luff wires in sails and trapeze wires.

**7 x 19 Wire Rope** - Very Flexible - Suitable for running rigging, control cables, fishing nets, cranes and winches.

### Grades

Bullivants stock a large range of stainless steel wire ropes and strand for use in marine and general engineering applications.

There are two common grades available, Grade 304 (AISI) and Grade 316 (AISI).

**Grade 304:** 304 Stainless steel will provide good results in most applications. It will resist organic chemicals and a wide range of inorganic chemicals. Grade 304 has good fatigue properties in engineering applications where rope is wound on a drum or passes over sheaves. Grade 304 is not recommended in environments of high temperature or high chloride or sulphate concentrations.

**Grade 316:** 316 stainless steel has a higher corrosion resistance than Grade 304 and has improved properties at higher temperatures and chloride and sulphate resistance. It is the recommended Grade for any standing applications particularly in marine environments. It has a lower breaking force than Grade 304.

### Maintenance

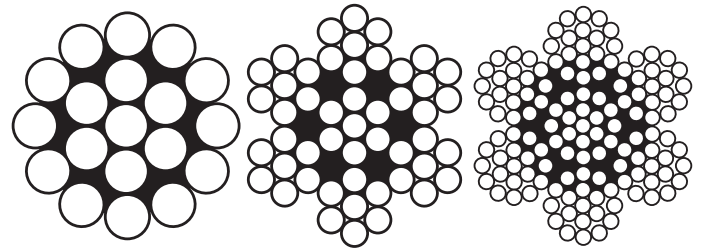
Stainless Steel is not maintenance free but maintenance friendly. When using stainless steel materials outdoors you need to clean periodically, especially in aggressive environments like coastal areas or swimming pools. For best results wash with soap or mild detergent and warm water followed by rinsing with clean cold water.

**Stainless Steel is NOT recommended for lifting purposes.**

## Wire Rope

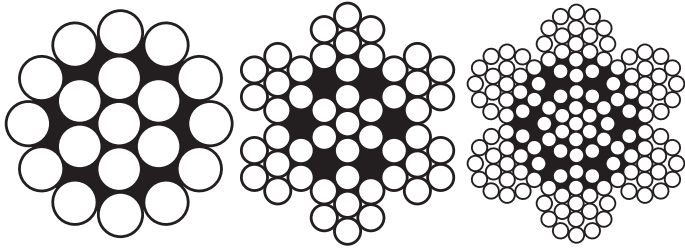
Stainless Steel is not recommended for lifting applications. Other sizes and configurations can be made to order.

**Grade 304: Unit of Measure - Metre**



ORDER CODE	Construction	Dia. (in)	Dia. (mm)	MBF (kN)	Average Mass (kg/100m)
110825	1x19	1/8	3.2	9.4	5.08
110751	7x7	3/64	1.2	0.9	0.60
110733	7x7	1/16	1.6	1.61	1.07
110722	7x7	5/64	2	2.49	1.68
110759	7x7	3/32	2.4	3.6	2.36
110743	7x7	1/8	3.2	6.42	4.04
110745	7x7	5/32	4	10.01	6.73
110815**	7x7	5/32	4	10.01	6.60
110729	7x7	5/16	8	40.03	26.9
122039*	7x7	3/32	2.4	3.6	2.36
110812**	7x7	1/8	3.2	6.42	4.04
110738	7x19	5/64	2	2.31	1.70
110735	7x19	1/16	1.6	1.49	1.20
110741	7x19	3/32	2.4	3.33	2.36
110723	7x19	1/8	3.2	5.95	4.18
110724	7x19	5/32	4	9.27	6.71
110726	7x19	3/16	4.8	13.32	9.50
110728	7x19	1/4	6.4	23.71	17.00
110730	7x19	5/16	8	37.07	26.90
110748	7x19	3/8	9.6	53.4	38.10
110749	7x19	1/2	12.7	94.84	65.50
* Blue PVC Coated					
** White PVC Coated					

**Grade 316: Unit of Measure - Metre**

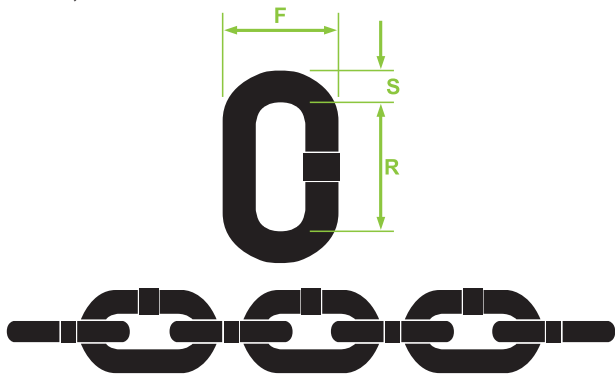


ORDER CODE	Construction	Dia. (in)	Dia. (mm)	MBF (kN)	Average Mass (kg/100m)
110774	1x19	1/8	3.2	8.34	5.08
110794	1x19	5/32	4	13	8.19
110801	1x19	1/4	6.4	33.27	20.8
110784	1x19	5/16	8	52.01	32.8
110827	7x7	3/32	2.4	3.19	27
110775	7x7	1/8	3.2	5.69	4.04
110773	7x19	1/8	3.2	5.24	4.18
110778	7x19	5/32	4	8.21	6.71
110780	7x19	3/16	4.8	11.08	9.5
110782	7x19	1/4	6.4	21.01	17
110785	7x19	5/16	8	32.85	26.9
110786	7x19	3/8	9.6	47.32	38.1
110810	7x19	1/2	12.7	84.03	65.5

**Chain**

**Short Link Stainless Steel Chain: Unit of Measure - Metre**

Stainless Steel Chain is extremely resistant to corrosion where salt water, acid or alkaline solutions are factors.

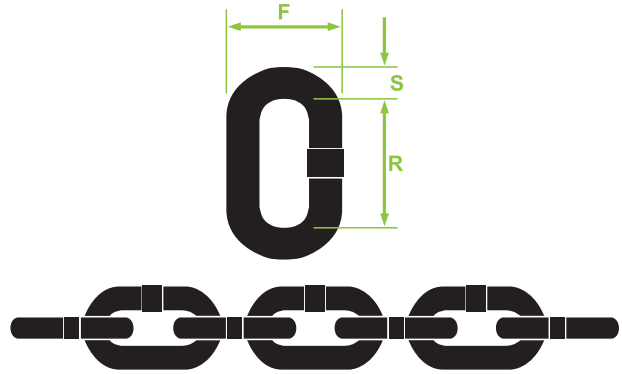


ORDER CODE	Chain Size (mm)	MWL (tonnes)	S (mm)	R (mm)	F (mm)	Weight (kg/100m)	Grade
121756	6	0.4	6.3	18.36	21.6	114.4	316
121757	8	0.64	8	23.8	27	70.2	316
121758	10	1	10	29.8	34.3	46	304

Other sizes available.

**Regular Link Stainless Steel Chain: Unit of Measure - Metre**

Stainless Steel Chain is extremely resistant to corrosion where salt water, acid or alkaline solutions are factors.

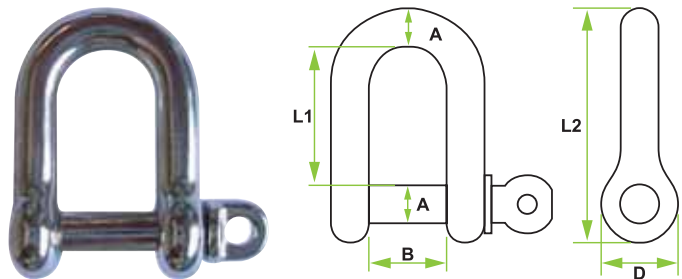


ORDER CODE	Chain Size (mm)	MWL (tonnes)	S (mm)	R (mm)	F (mm)	Weight (kg/100m)	Grade
121755	4	0.11	4	18.3	16.3	0.32	316
121649	6	0.32	6.3	26.4	24	0.8	304
121770	6	0.32	6.3	26.4	24	0.7	316
121671	8	0.53	8	34.3	30.1	1.25	304
122175	8	0.53	8	34.3	30.1	1.15	316
121672	10	0.86	10	41.5	36	1.98	304
121771	10	0.86	10	41.5	36	2.19	316

Other sizes available.

**Shackles**

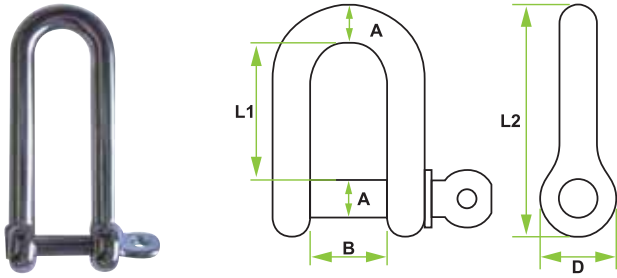
**Grade 316 Dee Shackles: Unit of Measure - Each**



ORDER CODE	Size A (mm)	B (mm)	D (mm)	L1 (mm)	L2 (mm)	TDL (kg)
162004	6	12	12	21	36	550
162011	8	16	18	28	48	1120
162012	10	20	21	35	60	1600
162060	12	26	23	42	70	2400
162061	16	32	31	56	95	3600
162304	19	38	38	66	110	4400

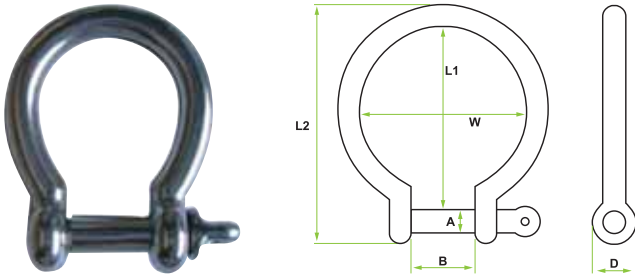
Other sizes available.

**Grade 316 Long Dee Shackles: Unit of Measure - Each**



ORDER CODE	Size A (mm)	B (mm)	D (mm)	L1 (mm)	L2 (mm)	TDL (kg)
162282	6	12	12	45	60	550
162290	8	16	16	60	80	1120
162058	10	20	20	73	97	1600
162298	12	25	24	90	118	2400

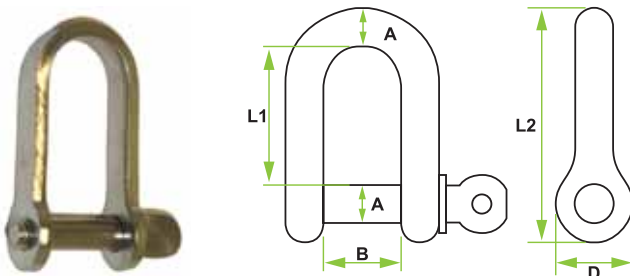
**Grade 316 Standard Bow Shackle: Unit of Measure - Each**



ORDER CODE	Size A (mm)	B (mm)	D (mm)	Bow I/D W	L1 (mm)	L2 (mm)	TDL (kg)
162056	8	16	16	28	37	55	1050
162057	10	22	20	35	45	70	1300
162059	12	26	24	42	55	84	2200

Other sizes available.

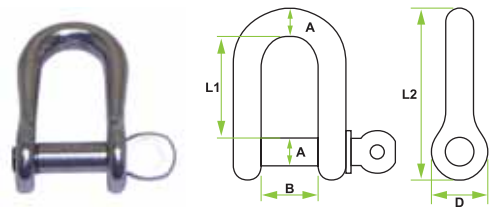
**Grade 304 Lightweight Strip Shackle: Unit of Measure - Each**



ORDER CODE	A (mm)	B (mm)	D (mm)	L1 (mm)	L2 (mm)
162277	4	10	10	17	25

Other sizes available.

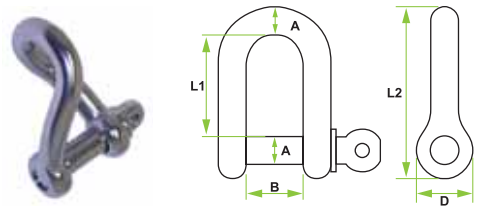
**Grade 304 Semi Round Dee Shackle: Unit of Measure - Each**



ORDER CODE	Size A (mm)	B (mm)	D (mm)	L1 (mm)	L2 (mm)	TDL (kg)
162054	5	12	12	19	30	400

Other sizes available.

**Grade 316 Twisted Shackles: Unit of Measure - Each**

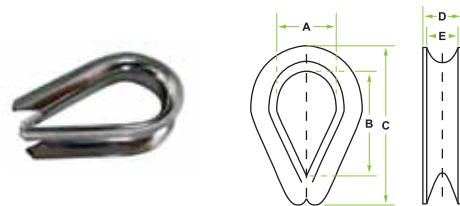


ORDER CODE	Size A (mm)	B (mm)	D (mm)	L1 (mm)	L2 (mm)	TDL (kg)
162297	10	20	20	45	70	1600

Other sizes available.

**Thimbles**

**Grade 304 Thimbles: Unit of Measure - Each**

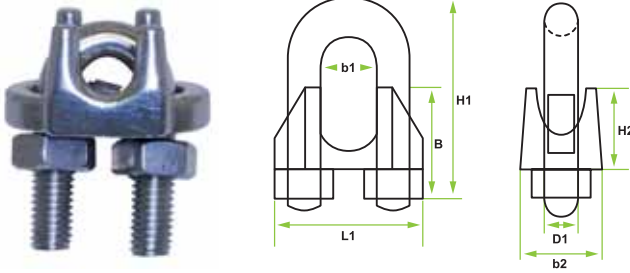


ORDER CODE	To Suit Rope Size (mm)	C (mm)	D (mm)	A (mm)	E (mm)	B (mm)
162062	2	23	5	7	3	16
162013	3	25.5	6.5	9.5	4.5	18
162005	4	27	6.5	10	5	19
162014	5	32.5	9	12	7	22
162015	6	37	9	15	7	27
162016	8	50	12	22	9	35
162063	10	56	14	25	11	40
162064	12	66	17	31	14	47

Other sizes available.

## Wire Rope Grips

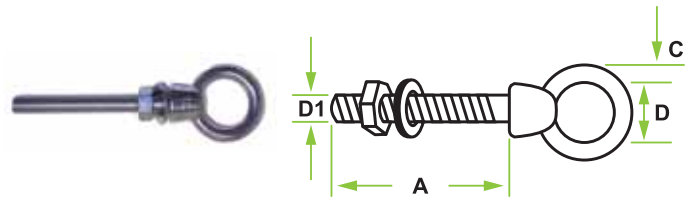
Grade 316 Wire Rope Grips: Unit of Measure - Each



ORDER CODE	To Suit Rope Size (mm)	B (mm)	B1 (mm)	B2 (mm)	D1 (mm)	H1 (mm)	H2 (mm)	L1 (mm)
162070	2	12	4	14	3	18	10	13
162021	3	14	5.5	16	3	22	11	16
162006	4	16	6	18	4	23	13	18
162022	5	19	7	21	5	27	15	21
162023	6	22	9	22	5	32	17	27
162071	8	27	11	28	8	40	20	34
162072	10	32	12	35	10	50	24	45
162367	12	37	15	38	12	62	28	50

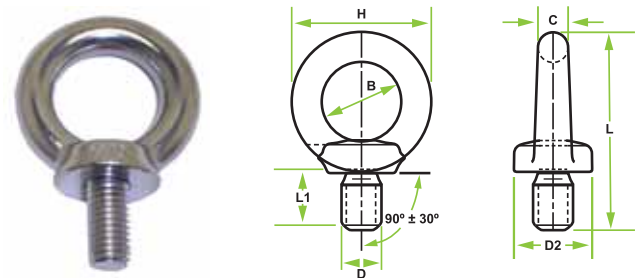
Other sizes available.

Grade 316 Eyebolt with Collar supplied with nut and washer: Unit of Measure - Each



ORDER CODE	D1 (mm)	A (mm)	D (mm)	C (mm)	Breaking Strain (kg)
162037	M12	100	30	10	4500

Grade 316 Eyebolts with Collar: Unit of Measure - Each

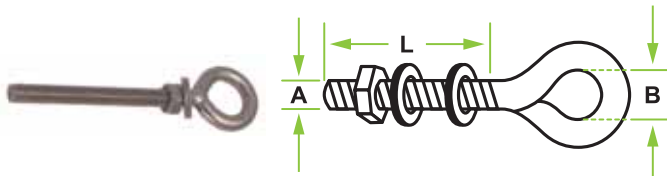


ORDER CODE	D (mm)	C (mm)	B (mm)	H (mm)	L (mm)	L1 (mm)	D2 (mm)	Breaking Strain (kg)
162166	M12	12	30	54	75	21	30	4500
162167	M16	16	35	63	90	27	35	7000

Other sizes available.

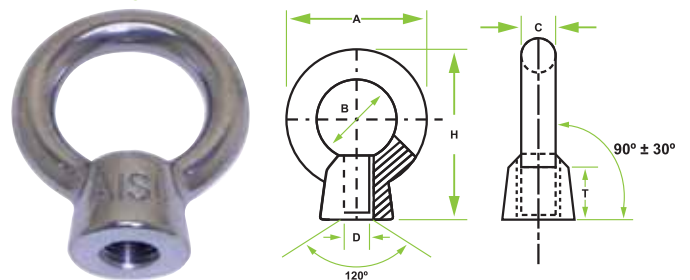
## Eyebolts & Eyenuts

Grade 304 Eyebolt supplied with nut & 2 washers: Unit of Measure - Each



ORDER CODE	A (mm)	L (mm)	B (mm)	Breaking Strain (kg)
162033	M6	40	13	1000
162161	M6	55	13	1000
162034	M6	80	13	1000
162035	M8	80	17	1800
162036	M8	100	17	1800
162008	M10	120	21	2400

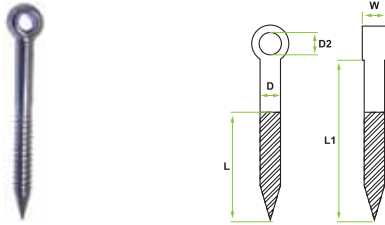
Grade 316 Eye Nut: Unit of Measure - Each



ORDER CODE	A (mm)	D (mm)	H (mm)	T (mm)	B (mm)	C (mm)	Breaking Strain (kg)
162038	40	M10	49	17	24	8	2600
162039	49	M12	61	20	30	10	4500
162177	59	M16	72	26.5	35	12	8000

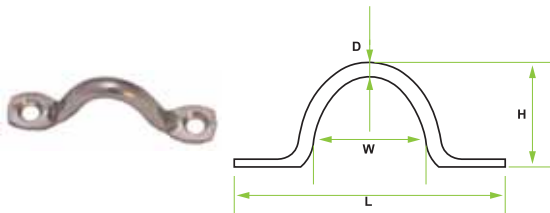


**Grade 316 Screw Eye: Unit of Measure - Each**



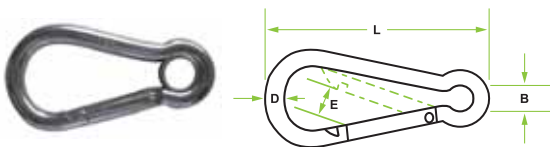
ORDER CODE	W (mm)	D (mm)	L1 (mm)	L (mm)	D2 (mm)
162029	5.2	6	57	38	6.2
162028	6	6	60	40	6.3
162150	9	8	59.5	39	8.4
162030	12	10	80	55	10.2
162151	14	12	100	64	12.1

**Grade 304 Medium Weight Saddles: Unit of Measure - Each**



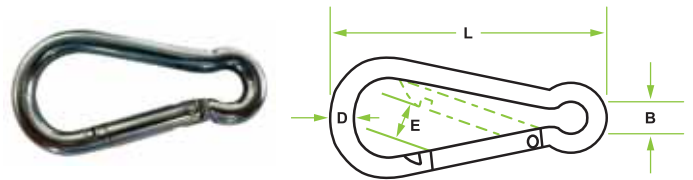
ORDER CODE	W (mm)	D (mm)	L1 (mm)	L (mm)	Gauge Fasteners
162007	5	50	14	18	5
162031	6	60	16	23	6
162032	8	65	16	24	8

**Grade 316 Spring Hook with Eye: Unit of Measure - Each**



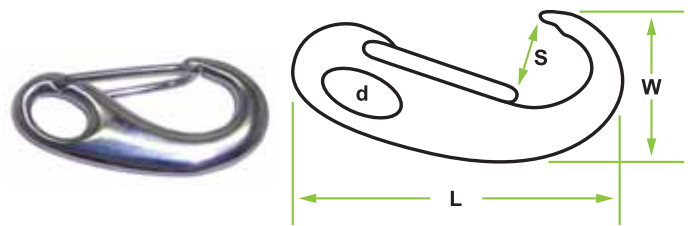
ORDER CODE	D (mm)	L (mm)	B (mm)	E (mm)	TDL (kg)
162045	5	50	7.5	8	150
162009	6	60	7	9	250
162010	8	80	10	9	400
162048	10	100	14	14	950
162235	11	120	18	18	1100

**Grade 316 Spring Hook without Eye: Unit of Measure - Each**



ORDER CODE	D (mm)	L (mm)	B (mm)	E (mm)	TDL (kg)
162047	6	60	9	9	250

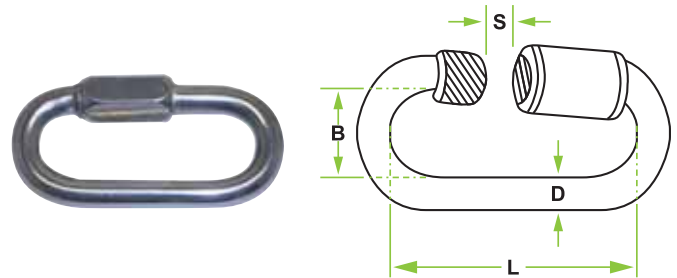
**Grade 316 Cast Snap Hooks: Unit of Measure - Each**



ORDER CODE	L (mm)	S (mm)	d (mm)	W (mm)	TDL (kg)
162222	50	10	6	23	140
162224	100	20	14	46	700

Other sizes available.

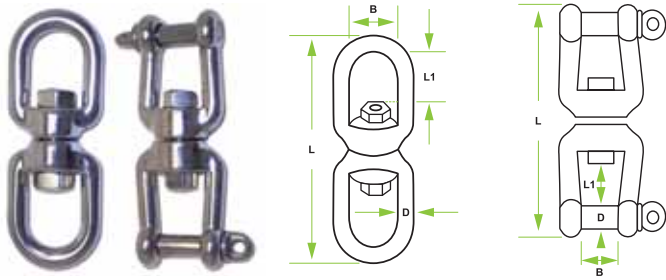
**Grade 316 Quick Link: Unit of Measure - Each**



ORDER CODE	Size (mm)	B (mm)	D (mm)	L (mm)	S (mm)	TDL (kg)
162043	6	14	6	46	7	550
162044	8	18	8.5	75	10	1120

Other sizes available.

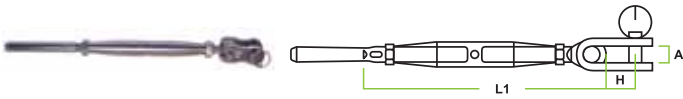
**Grade 316 Stainless Steel Swivel: Unit of Measure - Each**



ORDER CODE	Dia. D (mm)	Style	L (mm)	B (mm)	L1 (mm)	TDL (kg)
162370	6	Eye & Eye	65	15	15	550
162371	6	Jaw & Jaw	66	13	11.5	550
162073	10	Jaw & Jaw	118	20	22	1600

**Rigging Screws & Turnbuckles**

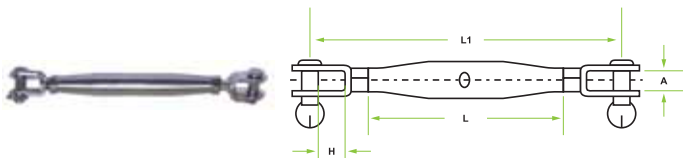
**Grade 316 Rigging Screw Jaw & Swage Stud: Unit of Measure - Each**



ORDER CODE	Thread Size (mm)	To Suit Wire Size (in)	Min (mm)	Max (mm)	H (mm)	A (mm)	D (mm)	TDL (kg)
162050	M5	1/8"	120	175	11.5	6	5	600
162052	M6	5/32"	140	215	12.5	8	6	1000

Other sizes available.

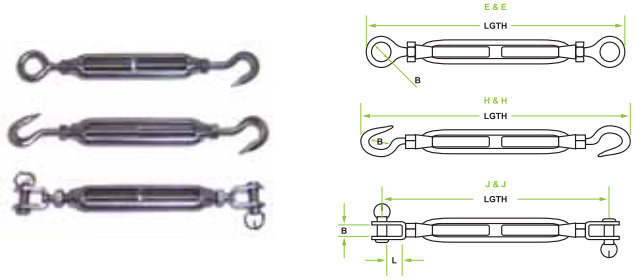
**Grade 316 Rigging Screw Jaw & Jaw with Lock Nuts: Unit of Measure - Each**



ORDER CODE	Dia. (mm)	Min (mm)	Max (mm)	L (mm)	H (mm)	A (mm)	TDL (kg)
162049	M5	130	190	80	11.5	6	750
162051	M6	145	220	90	12.5	7	1400

Other sizes available.

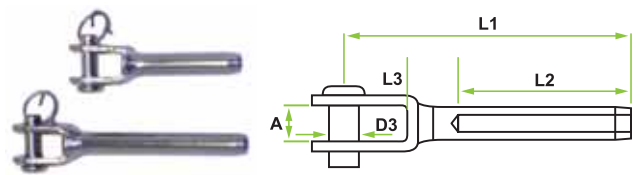
**Grade 316 Turnbuckles: Unit of Measure - Each**



ORDER CODE	Dia. D (mm)	Style	Length		B (mm)	L (mm)	TDL (kg)
			Min (mm)	Max (mm)			
162017	5	Eye & Eye	120	170	8	-	680
162065	5	Hook & Eye	120	170	7	-	130
162066	5	Jaw & Jaw	120	160	6	10	680
162018	6	Eye & Eye	150	220	10	-	1500
162019	6	Hook & Eye	155	220	9	-	350
162336	6	Jaw & Jaw	150	200	7	9	1500
162067	8	Eye & Eye	200	290	12	-	2300
162020	8	Hook & Eye	225	290	9	-	650
162339	8	Jaw & Jaw	195	265	10	11	2300
162068	9	Eye & Eye	245	350	15	-	3100
162069	9	Hook & Eye	255	350	13	-	800
162341	9	Jaw & Jaw	235	340	10	13	3100
162344	12	Eye & Eye	315	470	20	-	4400
162346	12	Jaw & Jaw	320	455	13	22	4400

Other sizes available.

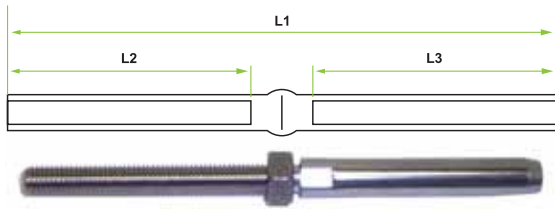
**Grade 316 Swage Fork Terminal: Unit of Measure - Each**



ORDER CODE	Wire Dia. (mm)	Wire Dia. (in)	D3 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	A (mm)
162263	-	1/8"	5	67	40	11.5	7
162041	-	1/8"	6	65	32	13	8
162053	4	5/32"	6	73	45	15	8
162265	4	5/32"	8	77	46	15	11

Other sizes available.

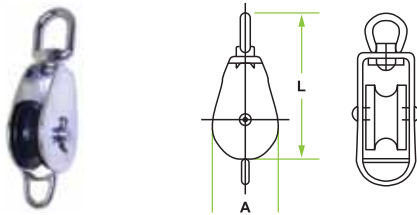
**Grade 316 Swage Stud (Threaded Terminal): Unit of Measure - Each**



ORDER CODE	Wire Dia. (mm)	Wire Dia. (in)	Thread (mm)	L1 (mm)	L2 (mm)	L3 (mm) Thread
162074	-	1/8"	M6	90.5	40	40
165001	-	1/8"	M5	90	40	40
162075	8	5/16"	M6	116	46	50
162396	8	5/16"	M16	215	97	112

Other sizes available.

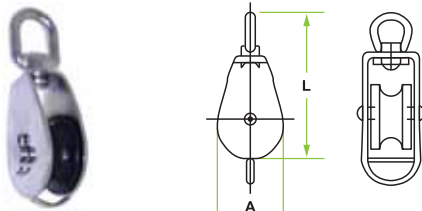
**Small & Medium Blocks with Swivel Head Nylon Sheave: Unit of Measure - Each**



ORDER CODE	Type	Sheave (mm)	Rope Dia. (mm)	TDL (kg)
162027	Single	32	9	600
162142	Single	50	12	600

Other sizes available.

**Grade 304 Mame Block Nylon Sheave with Becket: Unit of Measure - Each**



ORDER CODE	Type	Sheave (mm)	Rope Dia. (mm)	L (mm)	C (mm)	D (mm)	TDL (kg)
162025	Single	32	10	114	14	6	600

Other sizes available.

