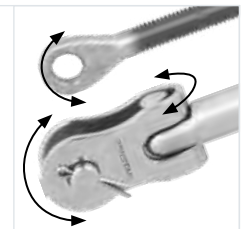


Rolled threads for maximum strength



Roll swage integrity



Versatile end connection options



Calibrated models

# TYPE 10 TURNBUCKLES

## ELEGANT DESIGN, EXCEPTIONAL PERFORMANCE

From their clean lines to the use of the highest grade materials and quality finish, Ronstan Type 10 turnbuckles are engineered to deliver performance while enhancing the appearance of any yacht, or tensile project.

### Type 10

Type 10 closed body turnbuckles have a sleek, modern profile with no sharp edges. They are easily adjusted by turning the unique adjustment nut, which is free to rotate within the sleeve on the turnbuckle body, and are secured with a quick turn on the locking nut. A sight hole is provided in the body to verify adequate thread engagement. With fine thread and single end adjustment, Type 10 turnbuckles are much easier to adjust than conventional turnbuckles, and the use of dissimilar but compatible metals for the threaded components avoids the risk of thread seizure. Toggles are designed with full lateral articulation for easy installation and connection compatibility.

### Fine, rolled threads

Ronstan rigging fittings have rolled threads for maximum strength and reliability – unlike cut threads, the stainless steel bar is formed up and down to create a thread with the grain remaining unbroken and flowing the full length of the thread. Threads are UNF (Unified National Fine), short pitch threads for fine adjustment and reduced adjustment effort.

### Roll swage integrity

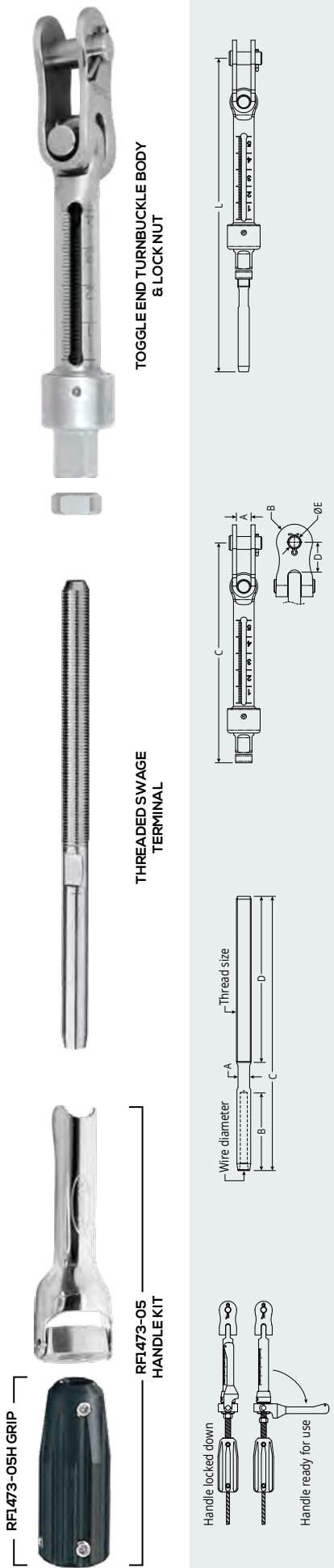
Swage fittings suit industry-standard roll swaging presses and dimensions are derived from the original 'Milspec' for maximum integrity. They are suitable for use with modern and traditional wire constructions, including 1x19, 7x19 and compact strand.

### Termination options

A full range of eye, fork and toggle fittings complement the turnbuckles to permit assembly of finished rigging elements to suit virtually any application.

### Calibrated turnbuckles

For accurate, repeatable settings of rig tension and precise adjustment, calibrated turnbuckle models are available for wire sizes up to 8mm (5/16"); thread sizes 1/4", 5/16", 3/8", 1/2" UNF.



**METRIC DIMENSIONS**

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g
3mm	760	RF1512M0304	1350	1/4" UNF	4.9	39.2	133	74	24	24
4mm	1350	RF1512M0404	1480	1/4" UNF	6.0	45.5	141	74	30	30
4mm	1350	RF1512M0405	1780	5/16" UNF	6.0	45.5	153	89	44	44
5mm	2120	RF1512M0505	2360	5/16" UNF	7.5	55.5	164	89	52	52
5mm	2120	RF1512M0506	2550	3/8" UNF	7.5	55.5	179	105	76	76
6mm	3020	RF1512M0606	3580	3/8" UNF	10.5	70.4	195	105	115	115
6mm	3020	RF1512M0608	5410	1/2" UNF	10.5	70.4	245	143	196	196
7mm	4120	RF1512M0708	5410	1/2" UNF	12.2	79	250	143	222	222
8mm	5380	RF1512M0808	5410	1/2" UNF	14.0	88.5	263	143	258	258

TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g
RF1481-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75
RF1481-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144
RF1481-06	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245
RF1481-08	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506

TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g
RF1481-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75
RF1481-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144
RF1481-06	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245
RF1481-08	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
RF1473-05	Handle kit, suits 5/16" threaded turnbuckle body combinations. Features 87mm (3 7/16") long handle for maximum tensioning leverage, and lift and re-position operation for ease of use or when rotation space is restricted. Handle snaps into snag-free locked position. Includes black plastic grip.	75	2.6
RF1473-05H	Black plastic upper grip for 5/16" threaded swage terminals	50	1.8

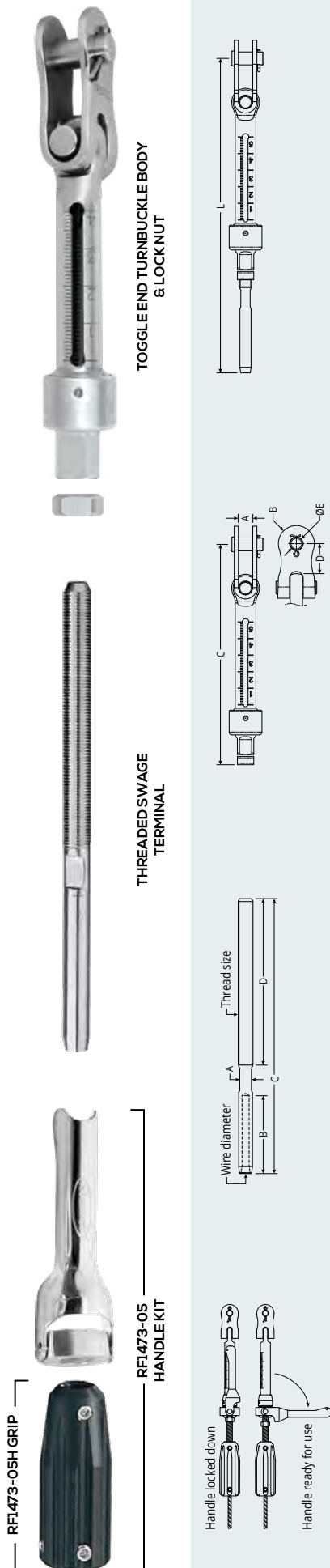
**Handles**

Handle kit, suits 5/16" threaded turnbuckle body combinations. Features 87mm (3 7/16") long handle for maximum tensioning leverage, and lift and re-position operation for ease of use or when rotation space is restricted. Handle snaps into snag-free locked position. Includes black plastic grip.

Black plastic upper grip for 5/16" threaded swage terminals

\* The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.

# CALIBRATED TURNBUCKLES - METRIC WIRE

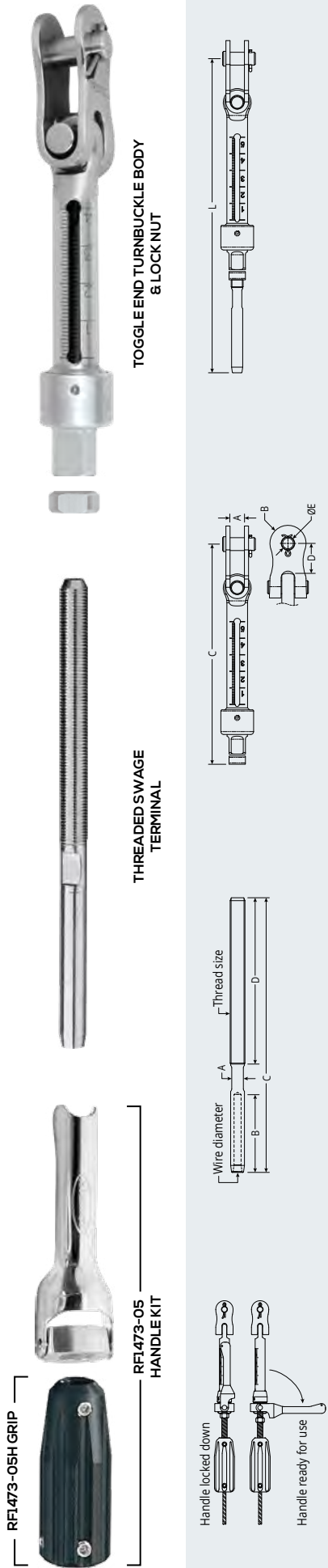


## IMPERIAL DIMENSIONS

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. lb	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	TURNBUCKLE B.L. lb	TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN. in	L MAX.* in
3mm	1670	RF1512M0304	2970	1/4" UNF	3/16	19/16	5 1/4	2 15/16	0.8	3250	RF1481-04	1/4" UNF	9/32	3/8	49/16	5/8	1/4	2.7	6 13/16	9
4mm	2970	RF1512M0404	3250	1/4" UNF	1/4	1 3/8	5 1/2	2 15/16	1.1	5190	RF1481-05	5/16" UNF	11/32	15/32	55/16	13/16	5/16	5.1	7 15/16	10 9/16
4mm	2970	RF1512M0405	3910	5/16" UNF	1/4	1 3/8	6	3 1/2	1.6	7870	RF1481-06	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	8 3/8	11
5mm	4660	RF1512M0505	5190	5/16" UNF	9/32	2 3/16	6 1/2	3 1/2	1.8	11900	RF1481-08	1/2" UNF	17/32	11/16	8 3/8	1 1/8	1/2	17.8	13 1/8	17 7/16
5mm	4660	RF1512M0506	5610	3/8" UNF	9/32	2 3/16	7 1/16	4 1/8	2.7	11900										
6mm	6640	RF1512M0606	7870	3/8" UNF	7/16	2 3/4	7 11/16	4 1/8	4.1	11900										
6mm	6640	RF1512M0608	11900	1/2" UNF	7/16	2 3/4	9 5/8	5 5/8	196	11900										
7mm	9060	RF1512M0708	11900	1/2" UNF	1/2	3 1/8	9 7/8	5 5/8	222	11900										
8mm	11840	RF1512M0808	11900	9/16	3 1/2	10 3/8	10 3/8	5 5/8	258	11900										

\* The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.

# CALIBRATED TURNBUCKLES - IMPERIAL WIRE



### METRIC DIMENSIONS

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g
1/8"	860	RF1510-0404	1300	1/4" UNF	49	39.2	133	74	22	22
5/32"	1350	RF1510-0504*	1480	1/4" UNF	60	45.5	141	74	30	30
5/32"	1350	RF1510-0505**	1780	5/16" UNF	60	45.5	153	89	44	44
3/16"	1930	RF1510-0605	2360	5/16" UNF	7.5	55.5	164	89	56	56
3/16"	1930	RF1510-0606	2620	3/8" UNF	7.5	55.5	179	105	78	78
7/32"	2630	RF1510-0706	3580	3/8" UNF	90	61.0	185	105	90	90
1/4"	3440	RF1510-0806	3580	1/2" UNF	90	70.4	195	105	110	110
1/4"	3450	RF1510-0808	5360	1/2" UNF	10.5	70.4	245	143	196	196
9/32"	4130	RF1510-0908**	5410	1/2" UNF	12.2	79	253	143	222	222
5/16"	5380	RF1510-1008**	5410	1/2" UNF	14.0	88.5	267	143	258	258

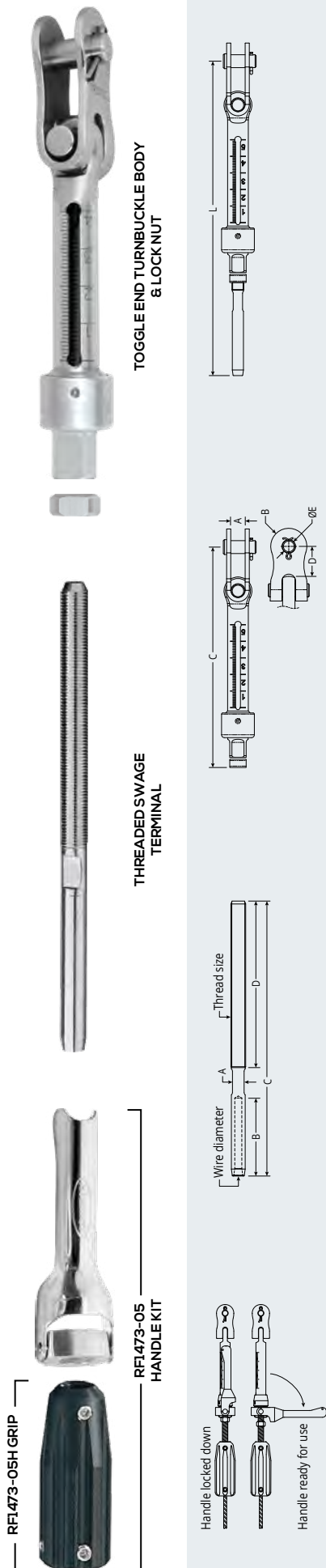
  

TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.*2 mm
RF1481-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	174	229
RF1481-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	182	237
RF1481-06	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	202	267
RF1481-08	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506	213	278

PRODUCT No.	DESCRIPTION	WEIGHT g	WEIGHT oz
<b>Handle Kit</b>			
RF1473-05	Handle kit, suits 5/16" threaded turnbuckle body combinations. Features 87mm (3 7/16") long handle for maximum tensioning leverage, and lift and re-position operation for ease of use or when rotation space is restricted. Handle snaps into snag-free locked position. Includes black plastic grip.	75	2.6
RF1473-05H	Black plastic upper grip for 5/16" threaded swage terminals	50	1.8

\*1 Product supplied as the metric equivalent with metric wire code stamping.  
 \*2 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.

# CALIBRATED TURNBUCKLES - IMPERIAL WIRE



## IMPERIAL DIMENSIONS

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. lb	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. lb	THREAD SIZE	A in	B in	C in	D in	WEIGHT oz
1/8"	1890	RF1510-0404	2860	1/4" UNF	3/16	19/16	5 1/4	2 15/16	0.8
5/32"	2980	RF1510-0504*	3250	1/4" UNF	1/4	1 3/8	5 1/2	2 15/16	1.1
5/32"	2980	RF1510-0505**	3920	5/16" UNF	1/4	1 3/8	6	3 1/2	1.6
3/16"	4260	RF1510-0605	5190	5/16" UNF	9/32	2 3/16	6 1/2	3 1/2	2.0
3/16"	4260	RF1510-0606	5760	9/32	2 3/16	7 1/16	4 1/8	4 1/8	2.8
7/32"	5810	RF1510-0706	7870	3/8" UNF	3/8	2 3/8	7 5/16	4 1/8	3.2
1/4"	7580	RF1510-0806	7870	3/8" UNF	3/8	2 3/4	7 11/16	4 1/8	3.9
1/4"	7990	RF1510-0808	11792	7/16	2 3/4	9 5/8	5 5/8	5 5/8	6.9
9/32"	9090	RF1510-0908**	11900	1/2" UNF	1/2	3 1/8	9 15/16	5 5/8	7.8
5/16"	11840	RF1510-1008**	11900	9/16	3 1/2	10 1/2	5 5/8	9 1/2	9.1

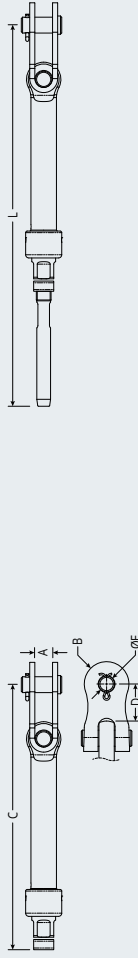
TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN in	L MAX** in
RF1481-04	3250	1/4" UNF	9/32	3/8	49/16	21/32	1/4	2.7	6 13/16	9
RF1481-05	5190	5/16" UNF	11/16	15/32	57/16	13/16	5/16	5.1	5 1/8	9 3/8
RF1481-06	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	7 15/16	10 9/16
RF1481-08	11900	1/2" UNF	17/32	11/16	8 3/8	1 1/8	1/2	17.8	8 3/8	11
									9 5/16	12 1/2
									9 9/16	12 11/16
									10 1/16	13 3/16
									12 1/4	16 5/8
									12 9/16	16 15/16
									13 1/8	17 7/16

\*1 Product supplied as the metric equivalent with metric wire code stamping.  
 \*2 The slight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the slight hole, but the length must not exceed the specified L MAX dimension.

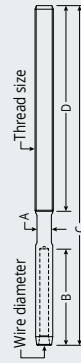
# SWAGE/TOGGLE TURNBUCKLES - METRIC WIRE



TOGGLE END TURNBUCKLE BODY & LOCK NUT



THREADED SWAGE TERMINAL



## METRIC DIMENSIONS

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g
3mm	760	RF1512M0304	1350	4.9	39.2	133	74	24		
4mm	1350	RF1512M0404	1480	6.0	45.5	141	74	30		
5mm	2120	RF1512M0504*1	1480	7.5	32.0	129	74	30		
4mm	1350	RF1512M0405	1780	6.0	45.5	153	89	44		
5mm	2120	RF1512M0505	2360	7.5	55.5	164	89	52		
5mm	2120	RF1512M0506	2550	7.5	55.5	179	105	76		
6mm	3020	RF1512M0606	3580	10.5	70.4	195	105	115		
6mm	3020	RF1512M0608	5410	10.5	70.4	245	143	196		
7mm	4120	RF1512M0708	5410	12.2	79.0	250	143	222		
8mm	5380	RF1512M0808	5410	14.0	88.5	263	143	258		
8mm	5380	RF1512M0810	7600	14.0	88.5	310	190	420		
10mm	8420	RF1512M1010	8390	15.8	110.5	330	190	446		
11mm	10570	RF1512M1112	10400	12.2	122.7	368	205	723		
12mm	12130	RF1512M1212	12140	12.2	140.4	386	205	755		
14mm	16510	RF1512M1414	16520	14.4	157.9	436	234	1150		
16mm	21500	RF1512M1616	22450	18.0	176.7	473	240	1610		

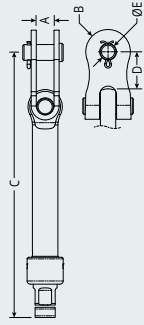
TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN mm	L MAX *2 mm
RF1480-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	174	229
RF1480-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	182	237
RF1480-06	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	170	225
RF1480-08	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506	202	267
RF1480-10	8670	5/8" UNF	17.0	20.8	267	40.8	15.7	939	213	278
RF1480-12	12630	3/4" UNF	20.0	23.8	314	47.2	18.9	1495	237	317
RF1480-14	17230	7/8" UNF	26.6	28.5	348	44.4	22.0	2444	253	333
RF1480-16	22450	1" UNF	29.3	31.8	379	63.3	25.2	3468	312	422

\*1 Threaded swage terminal B.L. is below the typical B.L. of grade 1570 1x19 stainless steel wire.  
 \*2 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.  
 Note: Larger sizes available to order.

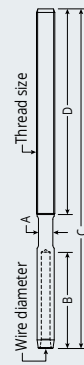
# SWAGE/TOGGLE TURNBUCKLES - METRIC WIRE



TOGGLE END TURNBUCKLE BODY &amp; LOCK NUT



THREADED SWAGE TERMINAL



## IMPERIAL DIMENSIONS

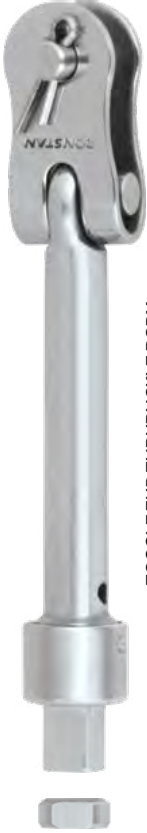
WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. lb	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. lb	THREAD SIZE	A in	B in	C in	D in	WEIGHT oz
3mm	1670	RF1512M0304	2970		3/16	19/16	5 1/4	2 15/16	0.9
4mm	2970	RF1512M0404	3250	1/4" UNF	1/4	13/8	5 1/2	2 15/16	1.1
5mm	4660	RF1512M0504*	3250	9/32	1 1/4	5 1/16	2 15/16	1.1	
4mm	2970	RF1512M0405	3910	5/16" UNF	1/4	13/8	6	3 1/2	1.6
5mm	4660	RF1512M0505	5190	3/8" UNF	9/32	23/16	6 1/2	3 1/2	1.8
5mm	4660	RF1512M0506	5610	9/32	23/16	7 1/16	4 1/8	2.9	
6mm	6640	RF1512M0606	7870	7/16	2 3/4	7 11/16	4 1/8	4.1	
6mm	6640	RF1512M0608	11900	7/16	2 3/4	9 5/8	5 5/8	6.8	
7mm	9060	RF1512M0708	11900	1/2" UNF	1/2	3 1/8	9 7/8	5 5/8	7.8
8mm	11840	RF1512M0808	11900	9/16	3 1/2	10 3/8	5 5/8	8.5	
8mm	11840	RF1512M0810	16720	5/8" UNF	9/16	3 1/2	12 3/8	7 1/2	14.8
10mm	18520	RF1512M1010	18450		5/8	4 3/8	13	7 1/2	15.7
11mm	23250	RF1512M1112	22880	3/4" UNF	1/2	4 13/16	14 1/2	8 1/16	25.5
12mm	26690	RF1512M1212	26700		1/2	5 1/2	15 3/16	8 1/16	26.6
14mm	36320	RF1512M1414	36340	7/8" UNF	9/16	6 1/4	17 3/16	9 1/4	40.6
16mm	47300	RF1512M1616	49390	1" UNF	3/4	6 15/16	18 5/8	9 7/16	56.8

## Swage/Toggle Turnbuckles - Metric Wire

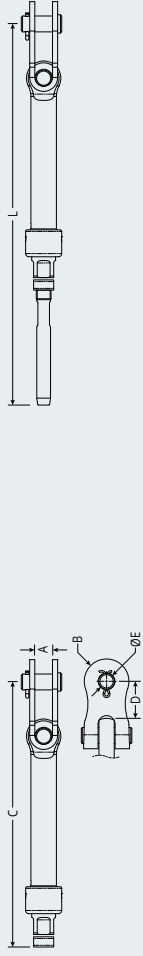
TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN. in	L MAX.*2 in
RF1480-04	3250	1/4" UNF	9/32	3/8	49/16	5/8	1/4	2.7	6 13/16	9
RF1480-05	5190	5/16" UNF	11/32	15/32	57/16	25/32	5/16	5.1	5 1/8	9 3/8
RF1480-06	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	6 11/16	8 7/8
RF1480-08	11900	1/2" UNF	17/32	11/16	8 3/8	1 1/8	1/2	17.8	7 15/16	10 9/16
RF1480-10	19070	5/8" UNF	21/32	27/32	10 7/8	1 5/8	5/8	33.1	8 3/8	11
RF1480-12	27780	3/4" UNF	25/32	15/16	12 3/8	1 7/8	3/4	52.7	9 5/16	12 1/2
RF1480-14	37900	7/8" UNF	1 1/32	1 1/8	13 11/16	1 3/4	7/8	86.2	9 15/16	13 1/8
RF1480-16	49390	1" UNF	1 1/8	1 1/4	14 15/16	2 1/2	1	122.3	10 1/8	14 1/2

\*1 Threaded swage terminal B.L. is below the typical B.L. of grade 1570 1x19 stainless steel wire.

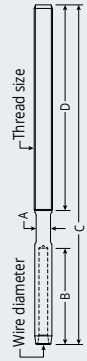
\*2 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension. Note: Larger sizes available to order.



TOGGLE END TURNBUCKLE BODY & LOCK NUT



THREADED SWAGE TERMINAL



**METRIC DIMENSIONS**

WIRE DIAM.	TYPICAL GRADE 1570.1x19 WIRE B.L. kg	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	WEIGHT g
1/8"	860	RF1510-0404	1300	1/4" UNF	4.9	39.2	133	74	22
5/32"	1360	RF1510-0504*2	1480	1/4" UNF	6.0	45.5	141	74	30
3/16"	1940	RF1510-0604*1	1480		7.5	32.0	129	74	32
5/32"	1360	RF1510-0505*2	1780	5/16" UNF	6.0	45.5	153	89	44
3/16"	1940	RF1510-0605	2360		7.5	55.5	164	89	56
3/16"	1940	RF1510-0606	2620		7.5	55.5	179	105	78
7/32"	2640	RF1510-0706	3580	3/8" UNF	9.0	61.0	185	105	90
1/4"	3450	RF1510-0806	3580		9.0	70.4	195	105	110
1/4"	3450	RF1510-0808	5360		10.5	70.4	245	143	196
9/32"	4130	RF1510-0908*2	5410	1/2" UNF	12.2	79.0	253	143	222
5/16"	5380	RF1510-1008*2	5410		14.0	88.5	267	143	258
5/16"	5380	RF1510-1010*2	7600	5/8" UNF	14.0	88.5	310	190	420
3/8"	7590	RF1510-1210	8670		15.8	110.5	328	190	452
7/16"	10570	RF1510-1412*2	10400	3/4" UNF	12.2	122.7	368	205	723
1/2"	13560	RF1510-1614*1	11360	7/8" UNF	14.4	140.4	423	234	1025
9/16"	16510	RF1510-1814*2	16520		14.4	157.9	436	234	1150
5/8"	21510	RF1510-2016*2	22450	1" UNF	18.0	176.7	473	240	1610

**Swage/Toggle Turnbuckles - Imperial Wire**

TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.*3 mm
RF1480-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	174	229
RF1480-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	182	237
RF1480-06	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	170	225
RF1480-08	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506	202	267
RF1480-10	8670	5/8" UNF	17.0	20.8	276	40.8	15.7	939	213	278
RF1480-12	12630	3/4" UNF	20.0	23.8	314	47.2	18.9	1495	237	317
RF1480-14	17230	7/8" UNF	26.6	28.5	348	44.4	22.0	2444	242	322
RF1480-16	22450	1" UNF	29.3	31.8	379	63.3	25.2	3468	255	335
									312	422
									320	430
									333	443
									397	537
									417	557
									480	640
									523	703
									553	733
									617	797

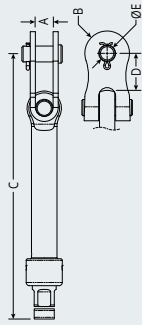
\*1 Threaded swage terminal B.L. is below the typical B.L. of grade 1570 1x19 stainless steel wire.  
 \*2 Product supplied as the metric equivalent with metric wire code stamping.  
 \*3 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.  
 Note: Larger sizes available to order.



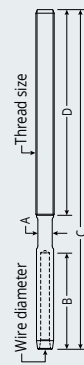
# SWAGE/TOGGLE TURNBUCKLES - IMPERIAL WIRE



TOGGLE END TURNBUCKLE BODY & LOCK NUT



THREADED SWAGE TERMINAL



## IMPERIAL DIMENSIONS

WIRE DIAM.	TYPICAL GRADE 1570 1x19 WIRE B.L. lb	THREADED SWAGE TERMINAL PRODUCT No.	THREADED SWAGE TERMINAL B.L. lb	THREAD SIZE	A in	B in	C in	D in	WEIGHT oz
1/8"	1890	RF1510-0404	2860	3/16	19/16	5 1/4	2 15/16	0.8	
5/32"	2980	RF1510-0504*2	3250	1/4	13/8	5 1/2	2 15/16	1.1	
3/16"	4260	RF1510-0604*1	3250	9/32	1 1/4	5 1/16	2 15/16	1.1	
5/32"	2980	RF1510-0505*2	3916	1/4	13/8	6	3 1/2	1.6	
3/16"	4260	RF1510-0605	5190	9/32	23/16	6 1/2	3 1/2	2.0	
3/16"	4260	RF1510-0606	5764	9/32	23/16	7 1/16	4 1/8	2.8	
7/32"	5810	RF1510-0706	7870	3/8	23/8	7 5/16	4 1/8	3.2	
1/4"	7990	RF1510-0806	7870	3/8	23/4	7 11/16	4 1/8	3.9	
1/4"	7990	RF1510-0808	11792	7/16	23/4	9 5/8	5 5/8	6.9	
9/32"	9090	RF1510-0908*2	11900	1/2	3 1/8	9 15/16	5 5/8	7.8	
5/16"	11840	RF1510-1008*2	11900	9/16	3 1/2	10 1/2	5 5/8	9.1	
5/16"	11840	RF1510-1010*2	16720	5/8	3 1/2	12 3/8	7 1/2	14.8	
3/8"	16700	RF1510-1210	19070	5/8	4 3/8	12 15/16	7 1/2	15.9	
7/16"	23250	RF1510-1412*2	22880	3/4	4 13/16	14 5/8	8 1/16	25.5	
1/2"	29830	RF1510-1614*1	24992	9/16	5 1/2	16 5/8	9 1/4	36.2	
9/16"	36320	RF1510-1814*2	36344	9/16	6 1/4	17 5/8	9 1/4	40.6	
5/8"	47320	RF1510-2016*2	49390	1 1/16	3/4	6 15/16	19	97/16	56.8

## Swage/Toggle Turnbuckles - Imperial Wire

TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN in	L MAX*3 in
RF1480-04	3250	1/4" UNF	9/32	3/8	49/16	5/8	1/4	2.7	6 13/16	9
RF1480-05	5190	5/16" UNF	3/8	15/32	57/16	25/32	5/16	5.1	5 1/8	9 3/8
RF1480-06	7870	3/8" UNF	13/32	19/32	63/8	29/32	3/8	8.6	6 11/16	8 7/8
RF1480-08	11900	1/2" UNF	17/32	11/16	83/8	1 1/8	1/2	17.8	7 15/16	10 9/16
RF1480-10	19070	5/8" UNF	21/32	27/32	107/8	1 5/8	5/8	33.1	8 3/8	11
RF1480-12	27780	3/4" UNF	25/32	15/16	123/8	1 7/8	3/4	52.7	9 5/16	12 1/2
RF1480-14	37900	7/8" UNF	1 1/32	1 1/8	13 11/16	1 3/4	7/8	86.2	9 1/2	12 11/16
RF1480-16	49390	1" UNF	1 1/8	1 1/4	14 15/16	2 1/2	1	122.3	10 1/16	13 3/16
									12 1/4	16 5/8
									12 9/16	16 15/16
									13 1/8	17 7/16
									15 5/8	21 3/16
									16 7/16	21 15/16
									18 15/16	25 3/16
									20 5/8	27 11/16
									21 3/4	28 7/8
									24 5/16	31 3/8

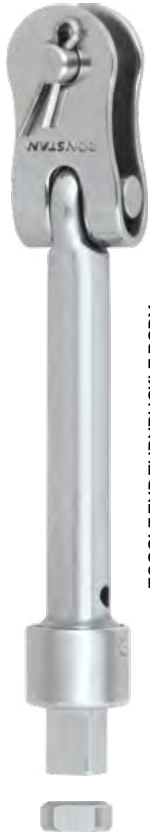
\*1 Threaded swage terminal B.L. is below the typical B.L. of grade 1570 1x19 stainless steel wire.

\*2 Product supplied as the metric equivalent with metric wire code stamping.

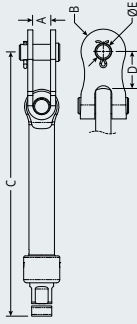
\*3 The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.

Note: Larger sizes available to order.

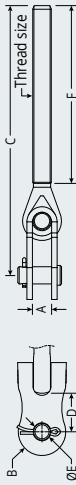
# TOGGLE/TOGGLE TURNBUCKLES



TOGGLE END TURNBUCKLE BODY & LOCK NUT



THREADED TOGGLE



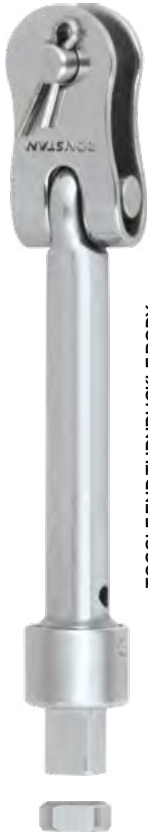
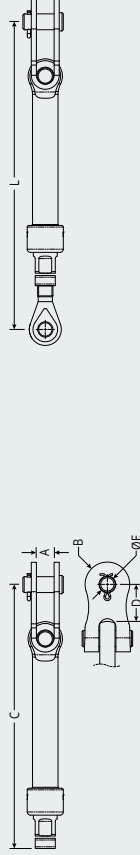
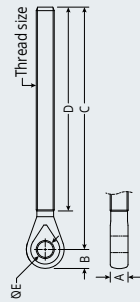
## METRIC DIMENSIONS

WIRE DIAM.	THREADED TOGGLE		THREADED TOGGLE							TOGGLE END TURNBUCKLE BODY & LOCK NUT											
	PRODUCT No.	TOGGLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g	PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.* mm
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	RF1504-0404	1480	1/4" UNF	7.8	9.1	112	15.5	6.2	74.6	46	RF1480-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	152	207
4mm, 5mm 5/32", 3/16"	RF1504-0505	2360	5/16" UNF	9.4	11.2	131	20.0	7.9	89.0	88	RF1480-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	180	245
5mm, 6mm 3/16", 7/32", 1/4"	RF1504-0606	3580	3/8" UNF	10.5	14.4	154	20.8	9.4	104.8	160	RF1480-06	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	212	292
6mm, 7mm, 8mm 1/4", 9/32", 5/16"	RF1504-0808	5410	1/2" UNF	13.9	17.5	212	28.0	12.4	142.8	358	RF1480-08	5410	1/2" UNF	13.9	17.5	213	29.1	12.4	506	282	392

## IMPERIAL DIMENSIONS

WIRE DIAM.	THREADED TOGGLE		THREADED TOGGLE							TOGGLE END TURNBUCKLE BODY & LOCK NUT											
	PRODUCT No.	TOGGLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	F in	WEIGHT oz	PRODUCT No.	TURNBUCKLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN. in	L MAX.* in
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	RF1504-0404	3250	1/4" UNF	9/32	3/8	4 3/8	5/8	1/4	2 15/16	1.6	RF1480-04	3250	1/4" UNF	9/32	3/8	4 9/16	5/8	1/4	2.7	6	8 1/8
4mm, 5mm 5/32", 3/16"	RF1504-0505	5190	5/16" UNF	3/8	7/16	5 3/16	13/16	5/16	3 1/2	3.1	RF1480-05	5190	5/16" UNF	11/32	15/32	5 7/8	25/32	5/16	5.1	7 1/16	9 5/8
5mm, 6mm 3/16", 7/32", 1/4"	RF1504-0606	7870	3/8" UNF	13/32	9/16	6 1/16	29/32	3/8	4 1/8	5.6	RF1480-06	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	8 3/8	11 1/2
6mm, 7mm, 8mm 1/4", 9/32", 5/16"	RF1504-0808	11900	1/2" UNF	9/16	11/16	8 3/8	1 1/8	1/2	5 5/8	12.6	RF1480-08	11900	1/2" UNF	17/32	11/16	8 3/8	1 1/8	1/2	17.8	11 1/8	15 7/16

\* The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.  
Note: Larger sizes available to order.


**TOGGLE END TURNBUCKLE BODY & LOCK NUT**

**THREADED EYE**

**METRIC DIMENSIONS**

WIRE DIAM.	THREADED EYE PRODUCT No.	THREADED EYE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	RF1502-0404	1480	1/4" UNF	4.6	5.7	88	75	6.5	19
4mm, 5mm 5/32", 3/16"	RF1502-0505	2360	5/16" UNF	6.1	9.0	102	87	8.1	37
5mm, 6mm 3/16", 7/32", 1/4"	RF1502-0606	3580	3/8" UNF	7.7	10.5	126	105	9.7	73

**Eye/Toggle Turnbuckles**

TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.* mm
RF1480-04	1480	1/4" UNF	7.8	9.1	115	16.3	6.2	75	130	185
RF1480-05	2360	5/16" UNF	9.4	11.2	138	20.7	7.9	144	150	215
RF1480-06	3580	3/8" UNF	10.5	14.4	162	23.2	9.4	245	178	258

**IMPERIAL DIMENSIONS**

WIRE DIAM.	THREADED EYE PRODUCT No.	THREADED EYE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	RF1502-0404	3250	1/4" UNF	3/16	7/32	3 1/2	2 15/16	1/4	0.7
4mm, 5mm 5/32", 3/16"	RF1502-0505	5190	5/16" UNF	1/4	11/32	4	3 7/16	5/16	1.3
5mm, 6mm 3/16", 7/32", 1/4"	RF1502-0606	7870	3/8" UNF	5/16	13/32	4 15/16	4 1/8	3/8	2.6

**Eye/Toggle Turnbuckles**

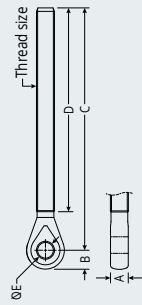
TOGGLE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. lb	THREAD SIZE	A in	B in	C in	D in	E in	WEIGHT oz	L MIN. in	L MAX.* in
RF1480-04	3250	1/4" UNF	9/32	3/8	4 9/16	5/8	1/4	2.7	5 1/8	7 5/16
RF1480-05	5190	5/16" UNF	11/32	15/32	5 7/8	25/32	5/16	5.1	5 15/16	8 1/2
RF1480-06	7870	3/8" UNF	13/32	19/32	6 3/8	29/32	3/8	8.6	7	10 3/16

\*The sight hole relates to a length (L) slightly less than L.MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L.MAX dimension.

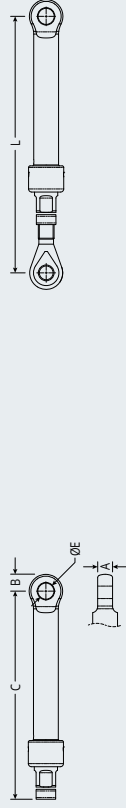
# EYE/EYE TURNBUCKLES



**THREADED EYE**



**EYE END TURNBUCKLE BODY & LOCK NUT**



**METRIC DIMENSIONS**

WIRE DIAM.	THREADED EYE PRODUCT No.	THREADED EYE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	RF1502-0404	1480	1/4" UNF	4.6	5.7	88	75	6.5	19
4mm, 5mm 5/32", 3/16"	RF1502-0505	2360	5/16" UNF	6.1	9.0	102	87	8.1	37
5mm, 6mm 3/16", 7/32", 1/4"	RF1502-0606	3580	3/8" UNF	7.7	10.5	126	105	9.7	73

**Eye/Eye Turnbuckles**

EYE END TURNBUCKLE BODY & LOCK NUT PRODUCT No.	TURNBUCKLE B.L. kg	THREAD SIZE	A mm	B mm	C mm	D mm	E mm	WEIGHT g	L MIN. mm	L MAX.* mm
RF1484-04	1480	1/4" UNF	4.6	7.0	92	-	6.5	48	107	162
RF1484-05	2360	5/16" UNF	6.1	8.8	109	-	8.1	93	121	186
RF1484-06	3580	3/8" UNF	7.7	9.8	129	-	9.7	153	145	225

**IMPERIAL DIMENSIONS**

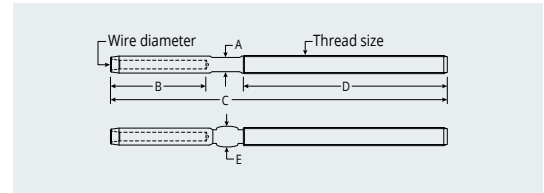
Eye/Eye Turnbuckles	lb	in	in	in	in	in	in	oz
3mm, 4mm, 5mm 1/8", 5/32", 3/16"	3250	3/16	7/32	3 1/2	2 15/16	1/4	0.7	
4mm, 5mm 5/32", 3/16"	5190	5/16" UNF	1/4	11/32	4	3 7/16	5/16	1.3
5mm, 6mm 3/16", 7/32", 1/4"	7870	3/8" UNF	5/16	13/32	4 15/16	4 1/8	3/8	2.6

Eye End Turnbuckle Body & Lock Nut	lb	in	in	in	in	in	in	oz	in	in
RF1484-04	3250	1/4" UNF	3/16	9/32	3 5/8	-	1/4	1.7	4 3/16	6 3/8
RF1484-05	5190	5/16" UNF	1/4	11/32	4 5/16	-	5/16	3.3	4 3/4	7 5/16
RF1484-06	7870	3/8" UNF	5/16	3/8	5 1/8	-	3/8	5.4	5 11/16	8 7/8

\*The sight hole relates to a length (L) slightly less than L MAX. If maximum length (L) is required the threaded end can be unscrewed beyond the sight hole, but the length must not exceed the specified L MAX dimension.



THREADED SWAGE  
TERMINAL



THREADED SWAGE TERMINAL PRODUCT No.	WIRE DIAM.	THREAD SIZE	SUITS TYPE 10 TURNBUCKLE BODY	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
<b>Threaded Swage Terminals - Metric Wire</b>															
<b>METRIC DIMENSIONS</b>															
<b>IMPERIAL DIMENSIONS</b>															
RF1512M0304	3mm		RF1480-04 RF1481-04	4.9	39.2	133	74	6.4	24	7/32	19/16	51/4	215/16	1/4	0.9
RF1512M0404	4mm	1/4" UNF		6.0	45.5	141	74	7.5	30	1/4	13/8	51/2	215/16	5/16	1.1
RF1512M0504*1	5mm			7.5	32.0	129	74	9.1	30	5/16	23/16	51/16	215/16	3/8	1.1
RF1512M0405	4mm	5/16" UNF	RF1480-05 RF1481-05	6.0	45.5	153	89	7.5	44	1/4	13/8	6	31/2	5/16	1.6
RF1512M0505	5mm			7.5	55.5	164	89	9.1	52	5/16	23/16	61/2	31/2	3/8	1.8
RF1512M0506	5mm	3/8" UNF	RF1480-06 RF1481-06	7.5	55.5	179	105	9.1	76	5/16	23/16	71/16	41/8	3/8	2.9
RF1512M0606	6mm			10.5	70.4	195	105	12.5	115	7/16	23/4	711/16	41/8	1/2	4.1
RF1512M0608	6mm	1/2" UNF	RF1480-08	10.5	70.4	245	143	12.5	194	7/16	23/4	95/8	55/8	1/2	6.8
RF1512M0708	7mm			12.2	79.0	250	143	14.3	222	1/2	31/8	97/8	55/8	9/16	7.8
RF1512M0808	8mm			14.0	88.5	263	143	16.1	258	9/16	31/2	103/8	55/8	21/32	8.5
RF1512M0810	8mm	5/8" UNF	RF1480-10	14.0	88.5	310	190	16.1	420	9/16	31/2	123/8	71/2	21/32	14.8
RF1512M1010	10mm			15.8	110.5	330	190	17.9	446	5/8	43/8	13	71/2	23/32	15.7
RF1512M1112	11mm	3/4" UNF	RF1480-12	12.2	122.7	368	205	20.7	723	1/2	413/16	141/2	81/16	13/16	25.5
RF1512M1212	12mm			12.2	140.4	386	205	21.4	755	1/2	51/2	153/16	81/16	27/32	26.6
RF1512M1414	14mm	7/8" UNF	RF1480-14	14.4	157.9	436	234	25.0	1150	9/16	61/4	173/16	91/4	1	40.6
RF1512M1616	16mm	1" UNF	RF1480-16	18.0	176.7	473	240	28.2	1610	3/4	615/16	185/8	97/16	11/8	56.8
<b>Threaded Swage Terminals - Imperial Wire</b>															
RF1510-0404	1/8"		RF1480-04 RF1481-04	4.9	39.2	133	74	6.4	22	7/32	19/16	51/4	215/16	1/4	0.8
RF1510-0504*2	5/32"	1/4" UNF		6.0	45.5	141	74	7.5	30	1/4	13/8	51/2	215/16	5/16	1.1
RF1510-0604*1	3/16"			7.5	32.0	129	74	9.1	32	5/16	11/4	51/16	215/16	3/8	1.1
RF1510-0505*2	5/32"	5/16" UNF	RF1480-05 RF1481-05	6.0	45.5	153	89	7.5	44	1/4	13/8	6	31/2	5/16	1.6
RF1510-0605	3/16"			7.5	55.5	164	89	9.1	56	5/16	23/16	61/2	31/2	3/8	2.0
RF1510-0606	3/16"	3/8" UNF	RF1480-06 RF1481-06	7.5	55.5	179	105	9.1	78	5/16	23/16	71/16	41/8	3/8	2.8
RF1510-0706	7/32"			9.0	61.0	185.0	105	10.8	90	3/8	23/8	75/16	41/8	7/16	3.2
RF1510-0806	1/4"			9.0	70.4	195.0	105	12.5	110	3/8	23/4	711/16	41/8	1/2	3.9
RF1510-0808	1/4"	1/2" UNF	RF1480-08	10.5	70.4	245	143	12.5	196	7/16	23/4	95/8	55/8	1/2	6.9
RF1510-0908*2	9/32"			12.2	79.0	253	143	14.3	222	1/2	31/8	915/16	55/8	9/16	7.8
RF1510-1008*2	5/16"			14.0	88.5	267	143	16.1	258	9/16	31/2	101/2	55/8	21/32	9.1
RF1510-1010*2	5/16"	5/8" UNF	RF1480-10	14.0	88.5	310	190	16.1	420	9/16	31/2	123/8	71/2	21/32	14.8
RF1510-1210	3/8"			15.8	110.5	328	190	17.9	452	5/8	43/8	1215/16	71/2	23/32	15.9
RF1510-1412*2	7/16"	3/4" UNF	RF1480-12	12.2	122.7	368	205	20.7	723	1/2	413/16	141/2	81/16	13/16	25.5
RF1510-1614*1	1/2"	7/8" UNF	RF1480-14	14.4	140.4	423	234	24.0	1025	9/16	51/2	165/8	91/4	31/32	36.2
RF1510-1814*2	9/16"			14.4	157.9	436	234	25.0	1150	9/16	61/4	173/16	91/4	1	40.6
RF1510-2016*2	5/8"	1" UNF	RF1480-16	18.0	176.7	473	240	28.2	1610	3/4	615/16	185/8	97/16	11/8	56.8

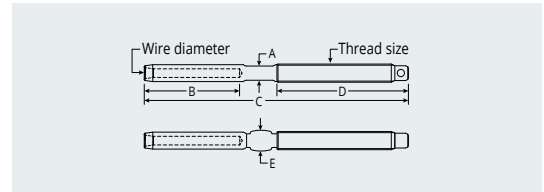
\*1 Threaded swage terminal BL is below the typical BL of grade 1570 1x19 stainless steel wire.

\*2 Product supplied as the metric equivalent with metric wire code stamping.

Note: Larger sizes available to order.



SHORT THREADED SWAGE TERMINAL



THREADED SWAGE TERMINAL PRODUCT No.	WIRE DIAM.	THREAD SIZE	SUITS OPEN BODY TURNBUCKLE*3	METRIC DIMENSIONS						IMPERIAL DIMENSIONS					
				A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
<b>Threaded Swage Terminals - Metric Wire</b>															
RF1519M0304	3mm	1/4" UNF	RF1532M0304	4.9	39.2	109	56.0	6.4	21	3/16	1 9/16	4 5/16	2 3/16	1/4	0.7
RF1519M0404	4mm		RF1532M0404	6.0	45.5	123	56.0	7.5	25	1/4	1 3/8	4 13/16	2 3/16	5/16	0.9
RF1519M0504*1	5mm		RF1532M0504	7.5	55.5	134	56.0	9.1	35	9/32	2 3/16	5 1/4	2 3/16	3/8	1.2
RF1519M0405	4mm	5/16" UNF	RF1532M0405	6.0	45.5	123	60.0	7.5	40	1/4	1 3/8	4 7/8	2 3/8	5/16	1.4
RF1519M0505	5mm		RF1532M0505	7.5	55.5	135	60.0	9.1	44	9/32	2 3/16	5 5/16	2 3/8	3/8	1.6
RF1519M0506	5mm	3/8" UNF	RF1532M0506	7.5	55.5	144	70.0	9.1	60	9/32	2 3/16	5 5/8	2 3/4	3/8	2.1
RF1519M0606	6mm		RF1532M0606	10.5	70.4	160	70.0	12.5	92	7/16	2 3/4	6 5/16	2 3/4	1/2	3.3
RF1519M0608	6mm	1/2" UNF	RF1532M0608	10.5	70.4	177	80.0	12.5	141	7/16	2 3/4	7	3 1/8	1/2	5.0
RF1519M0708	7mm		RF1532M0708	12.2	79.0	193	80.0	14.3	172	1/2	3 1/8	7 5/8	3 1/8	9/16	6.1
RF1519M0808	8mm		RF1532M0808	14.0	88.5	200	80.0	16.1	202	9/16	3 1/2	7 7/8	3 1/8	21/32	7.1
RF1519M0810	8mm	5/8" UNF	RF1532M0810	14.0	88.5	219	98.0	16.1	290	9/16	3 1/2	8 5/8	3 7/8	21/32	10.2
RF1519M1010	10mm		RF1532M1010	15.8	110.5	238	98.0	17.9	313	5/8	4 3/8	9 3/8	3 7/8	23/32	11.1
RF1519M1112	11mm	3/4" UNF	RF1532M1112	12.2	122.7	280	125.0	20.7	500	1/2	4 13/16	11	4 15/16	13/16	17.7
RF1519M1212	12mm		RF1532M1212	12.2	140.4	306	125.0	20.7	597	1/2	5 1/2	12 1/16	4 15/16	13/16	21.1
RF1519M1414	14mm	7/8" UNF	RF1532M1414	14.4	157.9	346	144.0	25.0	916	9/16	6 3/16	13 5/8	5 11/16	1	32.4
RF1519M1616	16mm	1" UNF	RF1532M1616	18.0	176.7	388	158.0	28.0	1323	3/4	6 15/16	15 1/4	6 1/4	1 1/8	46.7
<b>Threaded Swage Terminals - Imperial Wire</b>															
RF1518-0404	1/8"	1/4" UNF	RF1531-0404	4.9	39.2	109	56.0	6.4	21	3/16	1 9/16	4 5/16	2 3/16	1/4	0.7
RF1518-0504*2	5/32"		RF1531-0504	6.0	45.5	123	56.0	7.5	25	1/4	1 3/8	4 13/16	2 3/16	5/16	0.9
RF1518-0604*1	3/16"		RF1531-0604	7.5	55.5	134	56.0	9.1	35	9/32	2 3/16	5 1/4	2 3/16	3/8	1.2
RF1518-0505*2	5/32"	5/16" UNF	RF1531-0505	6.0	45.5	123	60.0	7.5	40	1/4	1 3/8	4 7/8	2 3/8	5/16	1.4
RF1518-0605	3/16"		RF1531-0605	7.5	55.5	135	60.0	9.1	44	9/32	2 3/16	5 5/16	2 3/8	3/8	1.6
RF1518-0606	3/16"	3/8" UNF	RF1531-0606	7.5	55.5	144	70.0	9.1	60	9/32	2 3/16	5 5/8	2 3/4	3/8	2.1
RF1518-0706	7/32"		RF1531-0706	9.0	61.0	150	70.0	10.8	70	3/8	2 3/8	5 7/8	2 3/4	7/16	2.5
RF1518-0806	1/4"		RF1531-0806	10.5	70.4	160	70.0	12.5	94	3/8	2 3/4	6 5/16	2 3/4	1/2	3.3
RF1518-0808	1/4"	1/2" UNF	RF1531-0808	10.5	70.4	177	80.0	12.5	139	7/16	2 3/4	7	3 1/8	1/2	4.9
RF1518-0908*2	9/32"		RF1531-0908	12.2	79.0	193	80.0	14.3	172	1/2	3 1/8	7 5/8	3 1/8	9/16	6.1
RF1518-1008*2	5/16"		RF1531-1008	14.0	88.5	200	80.0	16.1	202	9/16	3 1/2	7 7/8	3 1/8	21/32	7.1
RF1518-1010*2	5/16"	5/8" UNF	RF1531-1010	14.0	88.5	219	98.0	16.1	290	9/16	3 1/2	8 5/8	3 7/8	21/32	10.2
RF1518-1210	3/8"		RF1531-1210	15.8	110.5	238	98.0	17.9	323	5/8	4 3/8	9 3/8	3 7/8	23/32	11.4
RF1518-1412*2	7/16"	3/4" UNF	RF1531-1412	12.2	122.7	280	125.0	20.7	500	1/2	4 13/16	11	4 15/16	13/16	17.7
RF1518-1614*1	1/2"	7/8" UNF	RF1531-1614	14.4	140.4	331	144.0	24.0	758	9/16	5 1/2	13	5 11/16	31/32	26.8
RF1518-1814*2	9/16"		RF1531-1814	14.4	157.9	346	144.0	25.0	916	9/16	6 3/16	13 5/8	5 11/16	1	32.4
RF1518-2016*2	5/8"	1" UNF	RF1531-2016	18.0	176.7	388	158.0	27.4	1323	23/32	6 31/32	15 9/32	6 1/8	1 3/32	46.7

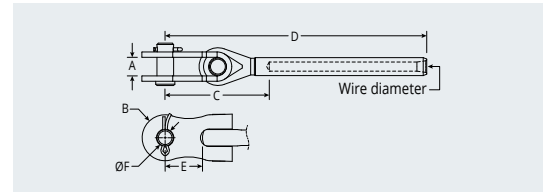
\*1 Threaded swage terminal BL is below the typical BL of grade 1570 1x19 stainless steel wire.

\*2 Product supplied as the metric equivalent with metric wire code stamping.

\*3 'Open Body' turnbuckles discontinued in 2017.



**TOGGLE SWAGE  
TERMINAL**

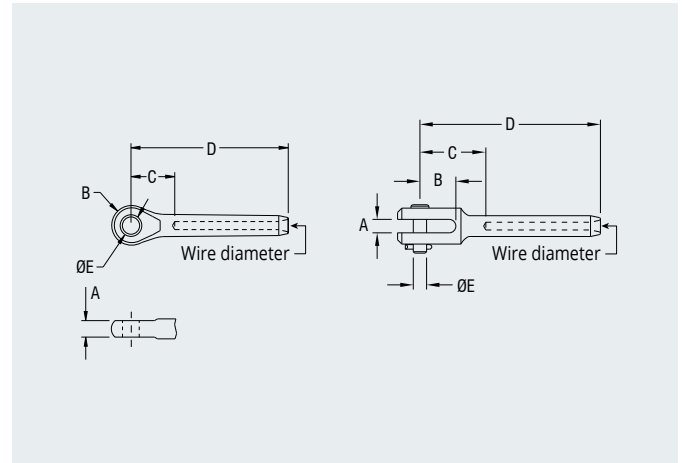
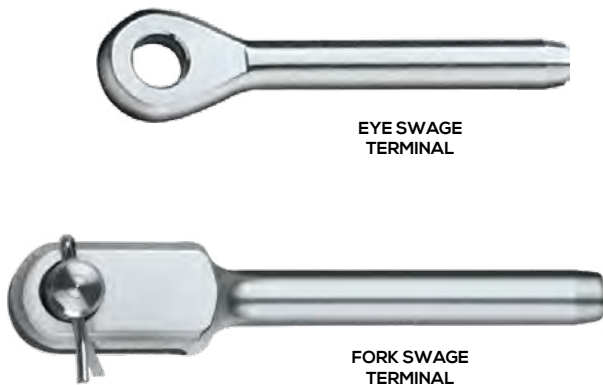


PRODUCT No.	WIRE DIAM.	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g	A in	B in	C in	D in	E in	F in	WEIGHT oz
<b>Toggle Swage Terminals - Metric Wire</b>															
RF1507M0304	3mm	7.8	9.1	37.9	77.0	16.8	6.2	44	5/16	11/32	1 1/2	3 1/32	21/32	1/4	1.6
RF1507M0404	4mm	7.8	9.1	43.2	87.1	16.8	6.2	44	5/16	11/32	1 11/16	3 7/16	21/32	1/4	1.6
RF1507M0405	4mm	9.4	11.2	48.1	93.6	20.7	7.9	74	3/8	7/16	1 29/32	3 11/16	13/16	5/16	2.6
RF1507M0504*1	5mm	7.8	9.1	38.4	94.8	16.8	6.2	72	5/16	11/32	1 1/2	3 23/32	21/32	1/4	2.5
RF1507M0505	5mm	9.4	11.2	48.2	103.7	20.7	7.9	56	3/8	7/16	1 29/32	4 3/32	13/16	5/16	2.0
RF1507M0506	5mm	10.0	14.4	49.4	104.9	23.0	9.4	130	13/32	9/16	1 15/16	4 1/8	29/32	3/8	4.6
RF1507M0606	6mm	10.0	14.4	58.1	128.5	23.0	9.4	129	13/32	9/16	2 9/32	5 1/16	29/32	3/8	4.6
RF1507M0608	6mm	13.9	17.5	70.9	141.3	29.4	12.4	285	9/16	11/16	2 25/32	5 9/16	1 5/32	1/2	10.1
RF1507M0708	7mm	13.9	17.5	73.2	151.9	29.4	12.4	332	17/32	11/16	2 7/8	5 31/32	1 5/32	1/2	11.7
RF1507M0808	8mm	13.9	17.5	72.1	160.6	29.4	12.4	365	9/16	11/16	2 27/32	6 3/8	1 5/32	1/2	12.9
RF1507M0810	8mm	17.0	20.8	87.5	176.0	42.2	15.7	492	21/32	13/16	3 7/16	6 15/16	1 21/32	5/8	17.4
RF1507M1010	10mm	17.0	20.8	87.7	198.2	42.2	15.7	540	21/32	13/16	3 7/16	7 13/16	1 21/32	5/8	19.1
RF1507M1112	11mm	20.0	23.8	101.9	224.4	48.9	18.9	838	3/4	15/16	4	8 27/32	1 15/16	3/4	29.6
RF1507M1212	12mm	20.0	23.8	108.2	249.0	46.0	18.9	930	25/32	15/16	4 1/4	9 13/16	1 13/16	3/4	32.8
RF1507M1414	14mm	26.5	28.5	120.4	278.3	44.4	22.0	1460	1 1/32	1 1/8	4 3/4	10 31/32	1 3/4	7/8	51.5
RF1507M1616	16mm	29.3	31.8	147.8	324.5	60.3	25.2	2350	1 5/32	1 1/4	5 13/16	12 25/32	2 3/8	1	82.9
<b>Toggle Swage Terminals - Imperial Wire</b>															
RF1506-0404	1/8"	7.8	9.1	37.9	77.0	16.8	6.2	44	5/16	11/32	1 1/2	3 1/16	21/32	1/4	1.6
RF1506-0504*2	5/32"	7.8	9.1	42.2	87.1	16.8	6.2	44	5/16	11/32	1 21/32	3 7/16	21/32	1/4	1.6
RF1506-0505*2	5/32"	9.4	11.2	48.1	93.6	20.7	7.9	70	3/8	7/16	1 29/32	3 11/16	13/16	5/16	2.5
RF1506-0604*1	3/16"	7.8	9.1	38.7	94.8	16.8	6.2	56	5/16	11/32	1 1/2	3 23/32	21/32	1/4	2.0
RF1506-0605	3/16"	9.4	11.2	42.5	98.0	20.7	7.9	78	3/8	7/16	1 11/16	3 27/32	13/16	5/16	2.8
RF1506-0606	3/16"	10.0	14.4	49.4	104.9	23.0	9.4	130	13/32	9/16	1 15/16	4 1/8	29/32	3/8	4.6
RF1506-0706	7/32"	10.0	14.4	49.9	110.9	23.0	9.4	142	13/32	9/16	1 31/32	4 3/8	29/32	3/8	5.0
RF1506-0806	1/4"	10.0	14.4	58.1	128.5	23.0	9.4	185	13/32	9/16	2 9/32	5 1/16	29/32	3/8	6.5
RF1506-0808	1/4"	13.9	17.5	70.9	141.3	29.4	12.4	276	17/32	11/16	2 25/32	5 9/16	1 5/32	1/2	9.7
RF1506-0908*2	9/32"	13.9	17.5	73.2	151.9	29.4	12.4	322	9/16	11/16	2 7/8	5 31/32	1 5/32	1/2	11.4
RF1506-1008*2	5/16"	13.9	17.5	72.1	160.6	29.4	12.4	356	9/16	11/16	2 27/32	6 11/32	1 5/32	1/2	12.6
RF1506-1010*2	5/16"	17.0	20.8	87.5	176.0	42.2	15.7	494	21/32	13/16	3 7/16	6 15/16	1 21/32	5/8	17.4
RF1506-1210	3/8"	17.0	20.8	87.7	198.2	42.2	15.7	554	21/32	13/16	3 7/16	7 13/16	1 21/32	5/8	19.5
RF1506-1412*2	7/16"	20.0	23.8	101.9	224.4	48.9	18.9	838	3/4	15/16	4	8 27/32	1 15/16	3/4	29.6
RF1506-1614	1/2"	26.6	28.5	116.5	257.0	44.4	22.0	1368	1 1/16	1 1/8	4 19/32	10 1/8	1 3/4	7/8	48.3
RF1506-1814*2	9/16"	26.5	28.5	120.4	278.3	44.4	22.0	1536	1 1/16	1 1/8	4 3/4	10 31/32	1 3/4	7/8	54.2
RF1506-2016*2	5/8"	29.3	31.8	147.8	324.5	60.3	25.2	2632	1 5/32	1 1/4	5 13/16	12 25/32	2 3/8	1	92.8

\*1 Toggle swage terminal BL is below the typical BL of grade 1570, 1x19 stainless steel wire.

\*2 Product supplied as the metric equivalent with metric wire code stamping.

Note: Larger sizes available to order.



PRODUCT No.	WIRE DIAM.	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
-------------	------------	------	------	------	------	------	----------	------	------	------	------	------	-----------

**Eye Swage Terminals - Metric Wire**

RF1501M2.503	2.5mm	3.1	6.3	15.2	48.0	5.1	8	1/8	1/4	19/32	1 7/8	3/16	0.4
RF1501M0304	3mm	4.6	6.2	16.1	55.3	6.5	14	3/16	1/4	21/32	2 3/16	1/4	0.5
RF1501M0405	4mm	6.1	8.5	18.5	64.0	8.1	22	1/4	11/32	5/8	2 1/2	5/16	0.9
RF1501M0505	5mm	6.1	8.5	19.1	74.6	8.1	30	1/4	11/32	5/8	3	5/16	1.1
RF1501M0506	5mm	7.7	10.0	21.1	76.6	9.7	38	9/32	13/32	7/8	3 1/16	3/8	1.6
RF1501M0608	6mm	9.5	12.5	27.1	97.5	13.0	95	3/8	1/2	1 3/16	3 14/16	1/2	3.4
RF1501M0708	7mm	12.5	13.5	30.9	109.9	13.0	138	1/2	17/32	1 3/16	4 5/16	1/2	5.5
RF1501M0808	8mm	12.5	13.5	29.5	118.0	13.0	174	1/2	9/16	1 1/4	4 11/16	1/2	6.5
RF1501M0810	8mm	14.0	15.5	28.0	116.5	16.3	182	9/16	5/8	1 1/4	4 5/8	5/8	7.1
RF1501M1010	10mm	14.0	15.5	29.0	139.5	16.3	228	5/8	5/8	1 7/16	5 3/4	5/8	9.9
RF1501M1112	11mm	15.5	18.2	35.9	158.6	19.5	324	23/32	23/32	1 1/2	6 1/4	3/4	9.9
RF1501M1212	12mm	15.5	19.5	42.4	182.8	19.5	420	5/8	11/16	1 5/8	7 1/8	3/4	14.1
RF1501M1414	14mm	20.0	23.2	54.2	212.1	22.5	746	27/32	15/16	2 3/16	8 5/16	7/8	28.1
RF1501M1616	16mm	25.0	27.2	58.1	234.8	25.8	1074	1	11/16	2 3/8	9 1/8	1	41.3

**Eye Swage Terminals - Imperial Wire**

RF1500-0303*	3/32"	3.1	6.3	15.2	48.0	5.1	8	1/8	1/4	19/32	1 7/8	3/16	0.4
RF1500-0404	1/8"	4.6	6.2	16.1	55.3	6.5	12	3/16	1/4	21/32	2 3/16	1/4	0.4
RF1500-0505*	5/32"	6.1	8.5	18.5	64.0	8.1	20	1/4	11/32	5/8	2 1/2	5/16	0.5
RF1500-0605	3/16"	6.1	8.5	19.1	74.6	8.1	32	1/4	11/32	5/8	3	5/16	1.1
RF1500-0606	3/16"	7.7	10.0	21.1	76.9	9.7	38	5/16	13/32	7/8	3 1/16	3/8	0.7
RF1500-0706	7/32"	7.7	10.0	22.4	83.4	9.7	56	3/8	13/32	1	3 5/16	3/8	1.3
RF1500-0808	1/4"	9.5	12.5	27.1	97.5	13.0	90	3/8	1/2	1 3/16	3 7/8	1/2	2.3
RF1500-0908*	9/32"	12.5	13.5	30.9	109.9	13.0	138	1/2	17/32	1 5/16	4 5/16	1/2	3.4
RF1500-1008*	5/16"	12.5	13.5	29.5	118.0	13.0	174	1/2	17/32	1 1/4	4 5/8	1/2	5.1
RF1500-1010*	5/16"	14.0	15.5	28.0	116.5	16.3	182	9/16	5/8	1 1/4	4 5/8	5/8	6.5
RF1500-1210	3/8"	14.0	15.5	29.0	139.5	16.3	232	9/16	5/8	1 1/2	5 5/8	5/8	7.8
RF1500-1412*	7/16"	15.5	18.2	35.9	158.6	19.5	324	23/32	23/32	1 1/2	6 1/4	3/4	9.9
RF1500-1614	1/2"	20.0	24.0	51.8	192.2	22.5	566	27/32	15/16	2 3/16	7 11/16	7/8	13.1
RF1500-1814*	9/16"	20.0	23.2	54.2	212.1	22.5	730	27/32	15/16	2 3/16	8 5/16	7/8	21.9
RF1500-2016*	5/8"	25.0	27.2	58.1	234.8	25.8	1070	1	11/16	2 3/8	9 1/4	1	29.6

PRODUCT No.	WIRE DIAM.	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
-------------	------------	------	------	------	------	------	----------	------	------	------	------	------	-----------

**Fork Swage Terminals - Metric Wire**

RF1509M0304	3mm	4.9	15.4	25.1	64.4	6.2	22	3/16	19/32	1	2 17/32	1/4	0.8
RF1509M0405	4mm	4.9	16.8	30.0	75.5	7.8	34	3/16	21/32	1 3/16	2 31/32	5/16	1.2
RF1509M0506	5mm	6.3	18.2	33.7	89.3	9.4	65	1/4	23/32	1 5/16	3 17/32	3/8	2.3

**Fork Swage Terminals - Imperial Wire**

RF1508-0404	1/8"	4.9	15.4	25.1	64.4	6.2	22	3/16	19/32	1	2 17/32	1/4	0.8
RF1508-0505*	5/32"	4.9	16.8	30.0	75.5	7.8	34	3/16	21/32	1 3/16	2 31/32	5/16	1.2
RF1508-0606	3/16"	6.3	18.2	33.7	89.3	9.4	65	1/4	23/32	1 5/16	3 17/32	3/8	2.3

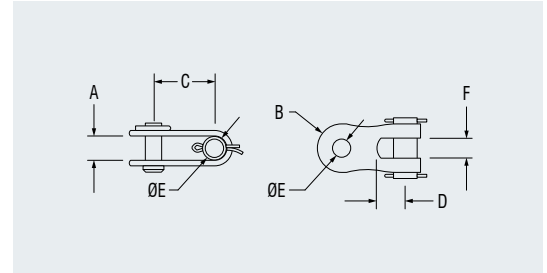
\* Product supplied as the metric equivalent with metric wire code stamping.





**DOUBLE JAW TOGGLE**

✓ Double jaw toggles are supplied with washers and split pins as shown.



PRODUCT No.	PIN DIAM. mm	A mm	B mm	C mm	D mm	E mm	F mm	WEIGHT g	PIN DIAM. in	A in	B in	C in	D in	E in	F in	WEIGHT oz
<b>Double Jaw Toggles</b>																
RF1505-05	7.9	9.4	11.2	28.5	8.3	7.9	7.1	55	5/16	3/8	7/16	1 1/8	5/16	5/16	9/32	2.0
RF1505-06	9.4	10.0	14.4	32.5	10.2	9.4	8.8	99	3/8	13/32	9/16	1 9/32	3/8	3/8	11/32	3.5
RF1505-08	12.5	13.9	17.5	42.0	15.1	12.5	13.4	202	1/2	17/32	11/16	1 21/32	19/32	1/2	17/32	7.1
RF1505-10	15.7	17.0	20.8	57.6	18.1	15.7	15.5	350	5/8	21/32	13/16	2 9/32	5/8	5/8	5/8	12.4
RF1505-12	18.9	20.0	23.8	66.2	18.5	18.9	16.2	577	3/4	25/32	15/16	2 19/32	23/32	3/4	5/8	20.3



**LOCK NUT, R/H THREAD**

PRODUCT No.	THREAD TYPE
<b>Lock Nuts, R/H Thread</b>	
RF1415-04	1/4" UNF
RF1415-05	5/16" UNF
RF1415-06	3/8" UNF
RF1415-08	1/2" UNF
RF1415-10	5/8" UNF
RF1415-12	3/4" UNF
RF1415-14	7/8" UNF
RF1415-16	1" UNF

## SWAGING DIMENSIONS

Correct installation of a swage fitting requires that the swage portion of the fitting be formed down onto the wire with specialised dies and presses in accordance with the following dimensions:

WIRE DIAM. mm	CODE mm	LENGTH OF WIRE INSIDE SWAGE mm	O.D. BEFORE SWAGING mm	O.D. AFTER SWAGING mm	TOLERANCE ON O.D. mm
<b>Swaging Dimensions - Metric Wire</b>					
2.5	2.5M	32.3	5.54	4.83	+0, -0.13
3.0	03M	38.4	6.35	5.56	+0, -0.13
4.0	04M	45.0	7.54	6.35	+0, -0.13
5.0	05M	55.0	9.12	7.95	+0, -0.13
5.6	-	60.5	10.85	9.53	+0, -0.18
6.0	06M	70.0	12.55	11.13	+0, -0.18
7.0	07M	78.5	14.30	12.70	+0, -0.20
8.0	08M	88.0	16.13	14.30	+0, -0.20
10.0	10M	110.0	17.86	15.88	+0, -0.20
11.0	-	122.0	19.84	17.48	+0, -0.20
12.0	12M	140.0	21.44	19.05	+0, -0.23
14.0	14M	157.0	24.99	22.23	+0, -0.23
16.0	16M	176.0	28.17	25.40	+0, -0.26

WIRE DIAM. in	CODE in	LENGTH OF WIRE INSIDE SWAGE in	O.D. BEFORE SWAGING in	O.D. AFTER SWAGING in	TOLERANCE ON O.D. in
<b>Swaging Dimensions - Imperial Wire</b>					
3/32	03	1.27	0.218	0.190	+0, -0.005
1/8	04	1.51	0.250	0.219	+0, -0.005
5/32	05	1.77	0.297	0.250	+0, -0.005
3/16	06	2.17	0.359	0.313	+0, -0.005
7/32	07	2.38	0.427	0.375	+0, -0.007
1/4	08	2.76	0.494	0.438	+0, -0.007
9/32	09	3.09	0.563	0.500	+0, -0.008
5/16	10	3.46	0.635	0.563	+0, -0.008
3/8	12	4.33	0.703	0.625	+0, -0.008
7/16	14	4.80	0.781	0.688	+0, -0.008
1/2	16	5.51	0.844	0.750	+0, -0.009
9/16	18	6.18	0.984	0.875	+0, -0.009
5/8	20	6.93	1.109	1.000	+0, -0.010



**SPLIT RINGS**  
RF113  
RF114



**SPLIT RINGS**  
RF686  
RF687  
RF688



**RETAINING CLIP**  
RF413



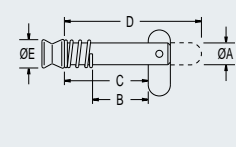
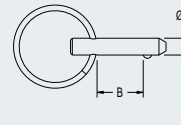
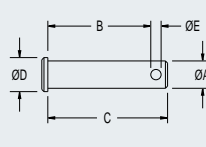
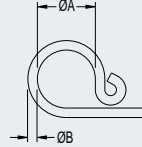
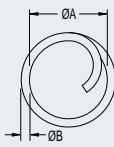
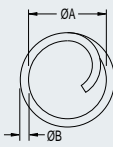
**CLEVIS PINS**



**FAST PIN**  
RF5310



**TOGGLE PINS**



PRODUCT No.	SUITS CLEVIS PINS	DESCRIPTION	A mm	B mm	WEIGHT g	A in	B in	WEIGHT oz
<b>Split Rings &amp; Clips</b>								
RF113	RF258 - RF266	Split ring	9.5	1.0	1	3/8	1/32	0.1
RF114	RF260 - RF266	Split ring	11.1	1.3	2	7/16	1/16	0.1
RF413	RF267 - RF274	Retaining clip	16.0	2.7	3	5/8	3/32	0.1
RF686	RF260 - RF274	Split ring	14.3	1.3	4	9/16	1/16	0.1
RF687	RF260 - RF274	Split ring	18.8	1.6	5	3/4	1/16	0.2
RF688	RF267 - RF278	Split ring	25.0	2.0	5	1	3/32	0.2

PRODUCT No.	A mm	B mm	C mm	D mm	E mm	WEIGHT g	A in	B in	C in	D in	E in	WEIGHT oz
<b>Clevis Pins</b>												
RF259	4.6	9.0	12.2	6.4	2.0	2	3/16	11/32	15/32	1/4	5/64	0.1
RF260	4.8	12.7	16.0	6.4	2.2	3	3/16	1/2	5/8	1/4	3/32	0.1
RF261	4.8	19.0	22.0	6.4	2.2	3	3/16	3/4	7/8	1/4	3/32	0.1
RF262	4.8	25.0	28.0	6.4	2.2	5	3/16	1	1 1/8	1/4	3/32	0.2
RF263	6.4	12.7	16.5	7.9	2.4	5	1/4	1/2	21/32	5/16	3/32	0.2
RF264	6.4	19.0	23.0	7.9	2.4	5	1/4	3/4	29/32	5/16	3/32	0.2
RF265	6.4	25.0	30.0	7.9	2.4	10	1/4	1	1 3/16	5/16	3/32	0.4
RF266	6.4	32.0	36.0	7.9	2.4	10	1/4	1 1/4	1 7/16	5/16	3/32	0.4
RF267	7.9	12.7	16.5	9.5	2.7	10	5/16	1/2	21/32	3/8	3/32	0.4
RF268	7.9	19.0	23.0	9.5	2.7	10	5/16	3/4	29/32	3/8	3/32	0.4
RF269	7.9	25.0	30.0	9.5	2.7	10	5/16	1	1 3/16	3/8	3/32	0.4
RF270	7.9	32.0	36.0	9.5	2.7	15	5/16	1 1/4	1 7/16	3/8	3/32	0.5
RF271	9.5	19.0	24.0	12.7	4.0	15	3/8	3/4	15/16	1/2	5/32	0.5
RF272	9.5	25.0	31.0	12.7	3.6	20	3/8	1	1 1/4	1/2	5/32	0.7
RF273	9.5	32.0	37.0	12.7	3.7	20	3/8	1 1/4	1 7/16	1/2	5/32	0.7
RF274	9.5	38.0	43.0	12.7	3.7	25	3/8	1 1/2	1 11/16	1/2	5/32	0.9
RF275	12.7	19.0	25.0	15.9	3.5	30	1/2	3/4	1	5/8	1/8	1.1
RF276	12.7	25.0	31.0	15.9	3.5	35	1/2	1	1 1/4	5/8	1/8	1.2
RF277	12.7	32.0	38.0	15.9	3.5	40	1/2	1 1/4	1 1/2	5/8	1/8	1.4
RF278	12.7	38.0	44.0	15.9	3.5	50	1/2	1 1/2	1 3/4	5/8	1/8	1.8
RF537	15.9	25.0	33.0	19.0	4.0	55	5/8	1	1 5/16	3/4	5/32	1.9
RF538	15.9	32.0	38.0	19.0	4.4	65	5/8	1 1/4	1 1/2	3/4	5/32	2.3
RF539	15.9	38.0	45.0	19.0	4.4	75	5/8	1 1/2	1 3/4	3/4	5/32	2.7

**Fast Pin**

RF5310	4.8	12.5	-	-	-	7	3/16	1/2	-	-	-	0.2
--------	-----	------	---	---	---	---	------	-----	---	---	---	-----

**Toggle Pins**

RF115 x 1/2	6.4	7.8*	17.4	32.5	7.9	10	1/4	5/16*	11/16	1 9/32	5/16	0.4
RF115 x 5/8	6.4	11.2*	20.8	35.9	7.9	10	1/4	7/16*	13/16	1 13/32	5/16	0.4
RF115 x 3/4	6.4	14.2*	23.8	38.9	7.9	10	1/4	9/16*	15/16	1 17/32	5/16	0.4
RF115 x 1	6.4	20.5*	30.1	45.2	7.9	10	1/4	13/16*	1 1/8	1 25/32	5/16	0.4
RF115 x 1 1/4	6.4	27.1*	36.7	51.8	7.9	13	1/4	1 1/16*	1 7/16	2	5/16	0.5

\*Maximum thickness of material the toggle pin can pass through, allowing correct toggle operation.



**THIMBLES**



**SAILMAKER THIMBLES**



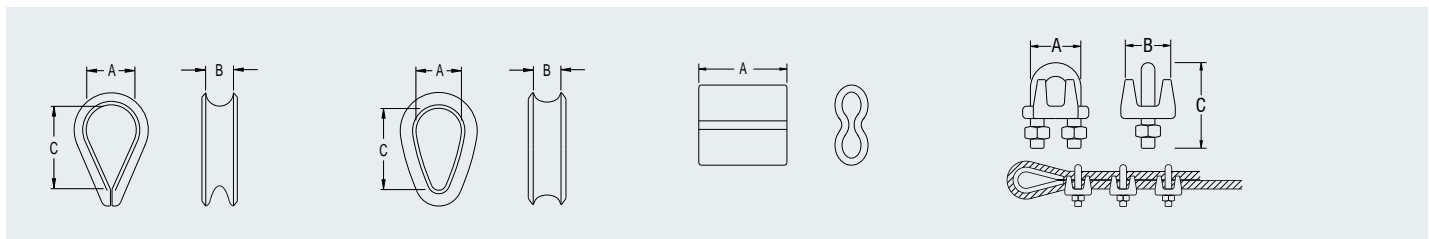
**COPPER FERRULES**



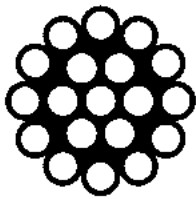
**WIRE ROPE GRIPS**

✔ Copper ferrules are nickel plated for aesthetic appearance and long-term weather resistance.

✔ Stainless steel wire rope grips require no special tools for assembly and can be disassembled and reused.

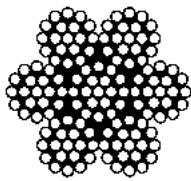


PRODUCT No.	WIRE DIAM. mm	A mm	B mm	C mm	WEIGHT g	WIRE DIAM. in	A in	B in	C in	WEIGHT oz
<b>Thimbles - Stainless Steel</b>										
RF481	2.5	9.0	3.0	16	2	3/32	11/32	1/8	5/8	0.1
RF482	3.0	10.0	4.0	18	2	1/8	3/8	5/32	23/32	0.1
RF483	4.0	11.0	5.0	19	5	5/32	7/16	3/16	3/4	0.2
RF484	5.0	13.0	6.0	23	5	3/16	1/2	1/4	29/32	0.2
RF485	6.0, 7.0	19.0	9.0	36	15	1/4, 9/32	3/4	11/32	1 3/8	0.5
RF486	8.0	21.0	10.5	38	25	5/16	13/16	13/32	1 1/2	0.9
RF487	10.0	27.0	11.5	53	40	3/8	1 1/16	7/16	2 1/16	1.4
RF2488	12.0	29.0	15.5	55	65	1/2	1 1/8	5/8	2 3/16	2.3
RF2490	16.0	40.0	20.0	67	125	5/8	1 9/16	25/32	2 5/8	4.4
RF2492	19.0	51.0	22.0	87	275	3/4	2	7/8	3 7/16	9.7
RF2494	26.0	65.0	29.0	115	615	1	2 1/2	1 1/8	4 1/2	21.7
<b>Sailmaker Thimbles - Stainless Steel</b>										
RF2180	3.0	9.0	4.5	16	3	1/8	11/32	3/16	5/8	0.1
RF2181	4.0	11.0	5.5	20	5	5/32	7/16	7/32	25/32	0.2
RF2182	5.0	17.0	6.3	27	10	3/16	21/32	1/4	1 1/16	0.4
RF2183	6.0	21.0	8.5	33	20	1/4	13/16	11/32	1 5/16	0.7
RF2184	8.0	26.0	11.0	40	40	5/16	1	7/16	1 9/16	1.4
<b>Copper Ferrules</b>										
RF3169	1.5	8.0	-	-	2	1/16	5/16	-	-	0.1
RF3170	2.0	10.0	-	-	2	5/64	3/8	-	-	0.1
RF3171	2.5	11.0	-	-	3	3/32	7/16	-	-	0.1
RF3172	3.0	14.0	-	-	5	1/8	9/16	-	-	0.2
RF3173	4.0	18.5	-	-	10	5/32	23/32	-	-	0.4
RF3174	5.0	19.0	-	-	15	3/16	3/4	-	-	0.5
RF3175	6.0	20.0	-	-	22	1/4	25/32	-	-	0.8
<b>Wire Rope Grips</b>										
RF1685-2	2.0	14.0	14.0	18	10	5/64	23/32	23/32	11/16	0.3
RF1685-4	4.0	18.0	18.0	24	20	5/32	11/16	23/32	15/16	0.7
RF1685-5	5.0	18.0	20.0	28	30	3/16	11/16	13/16	1 1/8	1.0
RF1685-6	6.0	21.0	21.0	33	40	1/4	27/32	27/32	1 9/32	1.4
RF1685-8	8.0	27.0	24.0	43	80	5/16	1 1/16	15/16	1 5/8	2.8
RF1685-10	10.0	31.6	34.0	51	140	3/8	1 7/8	1 5/16	2	4.9
RF1685-12	12.0	37.7	36.0	65	220	1/2	1 1/2	1 7/16	2 9/16	7.7



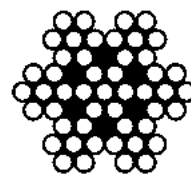
**1 X 19  
CONSTRUCTION**  
19 single strands

- ✓ Strongest
- ✓ Lowest stretch
- ✓ Least flexible
- ⬆ Standing rigging
- ⬆ Life lines



**7 X 19  
CONSTRUCTION**  
7 strands of 19 wires

- ✓ Most flexible
- ⬆ Halyards
- ⬆ Steering
- ⬆ Running rigging
- ⬆ Vang cascades



**7 X 7  
CONSTRUCTION**  
7 strands of 7 wires

- ✓ Semi-flexible
- ✓ PVC coated (optional)
- ⬆ Soft luff dinghy forestay (coilable)
- ⬆ Removable dinghy stays (coilable)

## STRETCH IN WIRE

Stretch is a characteristic of all wire, initially as permanent stretch when the load is first applied and the individual wires bed down, and then as conventional elastic stretch within the wires as load increases. Where stretch is critical to the application, initial stretch can be accounted for with cables stretched (pre-stressed) during swaging and cable manufacturing. Elastic stretch can be estimated by the following formula:

$$\text{Elastic stretch (mm)} = \frac{W \times L}{E \times A}$$

where:

**W** = Applied load (kN)

**L** = Cable length (mm)

**E** = Strand modulus (kN/mm<sup>2</sup>)

**A** = Metallic Cross Sectional Area (mm<sup>2</sup>) as indicated in the tables below

### Typical values for E are:

**1 x 19** 127 kN/mm<sup>2</sup> (18.42 x 10<sup>6</sup> P.S.I.)

**7 x 19** 97.1 kN/mm<sup>2</sup> (14.08 x 10<sup>6</sup> P.S.I.)

**7 x 7** 106 kN/mm<sup>2</sup> (15.37 x 10<sup>6</sup> P.S.I.)

PRODUCT No.	WIRE DIAM. mm	A mm <sup>2</sup>	REEL LENGTH m	B.L.* <sup>3</sup> kg	WEIGHT PER METRE kg	A in <sup>2</sup>	REEL LENGTH ft	B.L.* <sup>3</sup> lb	WEIGHT PER 100ft lb
<b>1 x 19 Grade 316 Stainless Steel [Tensile Strength Grade 1570 N/mm<sup>2</sup>]*<sup>1</sup></b>									
WR6119-1.5M	1.5	1.3	305	180	0.012	0.002	1000	397	0.77
WR6119-02M	2.0	2.3	305	330	0.020	0.004	1000	728	1.37
WR6119-2.5M	2.5	3.7	305	530	0.032	0.006	1000	1168	2.14
WR6119-03M	3.0	5.4	305	760	0.046	0.008	1000	1675	3.09
WR6119-04M	4.0	9.6	305	1350	0.082	0.015	1000	2975	5.49
WR6119-05M	5.0	15.0	305	2100	0.128	0.023	1000	4630	8.61
WR6119-06M	6.0	21.5	305	3020	0.184	0.033	1000	6657	12.37
WR6119-07M	7.0	29.2	305	4130	0.250	0.045	1000	9105	16.81
WR6119-08M	8.0	38.2	305	5380	0.320	0.059	1000	11860	21.92
WR6119-10M	10.0	59.7	305	8420	0.510	0.093	1000	18562	34.29
WR6119-12M	12.0	86.0	305	12130	0.734	0.133	1000	26742	49.35
WR6119-14M	14.0	117.0	305	16510	1.000	0.181	1000	36398	67.24
WR6119-16M	16.0	153.0	305	21510	1.310	0.237	1000	47421	88.09
<b>7 x 19 Grade 316 Stainless Steel</b>									
WR6719-1.5M	1.5	1.2	305	150	0.009	0.002	1000	331	0.62
WR6719-02M	2.0	2.0	305	250	0.016	0.003	1000	551	1.10
WR6719-2.5M	2.5	3.2	305	380	0.026	0.005	1000	838	1.72
WR6719-03M	3.0	4.6	305	540	0.037	0.007	1000	1191	2.47
WR6719-04M	4.0	8.2	305	960	0.066	0.013	1000	2117	4.40
WR6719-05M	5.0	12.9	305	1480	0.103	0.020	1000	3263	6.90
WR6719-06M	6.0	18.5	305	2150	0.148	0.029	1000	4740	9.92
WR6719-07M	7.0	25.1	305	2920	0.201	0.039	1000	6439	13.47
WR6719-08M	8.0	32.8	305	3810	0.262	0.051	1000	8401	17.55
WR6719-10M	10.0	51.3	305	5960	0.410	0.080	1000	13140	27.47
WR6719-12M	12.0	73.8	305	8600	0.590	0.114	1000	18960	39.53
WR6719-14M	14.0	100.5	305	11690	0.804	0.156	1000	25772	53.87
WR6719-16M	16.0	131.3	305	14450	1.050	0.204	1000	31857	70.35
<b>7 x 7 Grade 316 Stainless Steel</b>									
WR677-03M	3.0	4.2	305	580	0.037	0.007	1000	1279	2.35
WR677-04M	4.0	7.5	305	1040	0.066	0.012	1000	2293	4.23
WR677-03MP* <sup>2</sup>	3.0	4.2	305	580	0.055	0.007	1000	1279	4.84

\*1 Larger diameters available on request.

\*2 Wire diameter excludes PVC Coating, Ø including PVC = 5.0mm

\*3 Cable Breaking Load: does not include the typical 10% reduction in cable strength due to swaging. B.L. ratings are for standard Ronstan mill ordered, and stocked wire. From time to time wire may be sourced from other suppliers and ratings may vary.