A wide range of high-quality lifting points for every application.







G-277



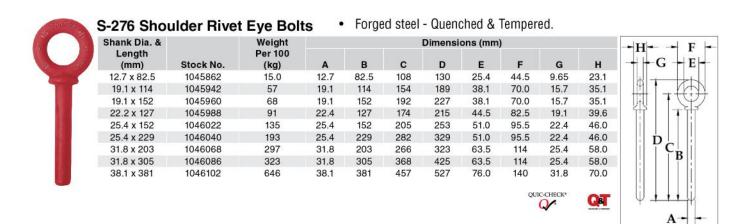
- Forged steel, Quenched & Tempered.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Working Load Limits shown are for in-line pull. For angle loading, see warnings and application section.
- Meets or exceeds all requirements of ASME B30.26, including identification, ductility, design factor, proof load, and temperature requirements. Importantly, these bolts meet other critical performance requirements, including fatigue life, impact properties, and material traceability not addressed by ASME B30.26.
- All bolts hot-dip Galvanized after threading (UNC).
- Furnished with standard hot-dip Galvanized, heavy hex nuts.

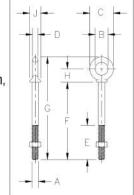
#### **G-277 Shoulder Nut Eye Bolts**

Shank Diameter & Length		Working Load Limit	Weight Per 100				Dime	ensions	(mm)			
(mm)	Stock No.	(t)	(kg)	Α	в	С	D	E	F	G	н	J
7.94 x 57.0	1045050	.54	5.67	7.85	15.7	28.4	6.35	38.1	57.0	89.0	17.5	14.2
7.94 x 108	1045078	.54	8.53	7.85	15.7	28.4	6.35	63.5	108	140	17.5	14.2
9.53 x 63.5	1045096	.70	9.71	9.65	19.1	35.1	7.85	38.1	63.5	101	19.8	16.8
9.53 x 114	1045112	.70	11.5	9.65	19.1	35.1	7.85	63.5	114	152	19.8	16.8
12.7 x 82.5	1045130	1.18	19.3	12.7	25.4	44.5	9.65	38.1	82.5	130	25.4	23.1
12.7 x 152	1045158	1.18	25.8	12.7	25.4	44.5	9.65	76.0	152	200	25.4	23.1
15.9 x 102	1045176	2.35	31.1	15.7	31.8	57.0	12.7	51.0	102	164	33.3	28.4
15.9 x 152	1045194	2.35	46.4	15.7	31.8	57.0	12.7	76.0	152	214	33.3	28.4
19.1 x 114	1045210	3.26	66	19.1	38.1	70.0	15.7	51.0	114	189	39.6	35.1
19.1 x 152	1045238	3.26	76	19.1	38.1	70.0	15.7	76.0	152	227	39.6	35.1
22.2 x 127	1045256	4.80	102	22.4	44.5	82.5	19.1	63.5	127	215	46.7	39.6
25.4 x 152	1045292	6.03	166	25.4	51.0	95.5	22.4	76.0	152	253	53.0	46.0
25.4 x 229	1045318	6.03	192	25.4	51.0	95.5	22.4	102	229	329	53.0	46.0
31.8 x 203	1045336	9.52	295	31.8	63.5	114	25.4	102	203	323	62.5	58.0
31.8 x 305	1045354	9.52	361	31.8	63.5	114	25.4	102	305	425	62.5	58.0
38.1 x 381	1045372	10.8	646	38.1	76.0	140	31.8	152	381	527	76.0	70.0

5:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit.



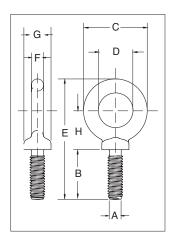








- Forged steel Quenched & Tempered.
- Working Load Limits shown are for in-line pull. For angle loading, see Warnings & Applications.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Recommended for in-line pull.
- S-279 threaded UNC.
- M-279 metric threaded.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these bolts meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



#### S-279 UNC Shoulder Type Machinery Eye Bolts

	Working Load	Weight			Din	nensions	(in)			
Stock No.	Limit (lb)	Per 100 (lb)	A* Thread	в	с	D	Е	F	G	н
9900182	650	5.00	1/4 - 20	1.02	1.13	.75	2.29	.19	.53	.77
9900191	1200	9.00	5/16 - 18	1.15	1.38	.88	2.74	.25	.59	.95
9900208	1550	15.00	3/8 - 16	1.27	1.62	1.00	3.07	.31	.69	1.05
9900217	2600	28.00	1/2 - 13	1.53	1.95	1.19	3.70	.38	.91	1.27
9900226	5200	55.00	5/8 - 11	1.79	2.38	1.38	4.45	.50	1.13	1.53
9900235	7200	96.00	3/4 - 10	2.05	2.76	1.50	5.07	.63	1.38	1.71
9900244	10600	154.00	7/8 - 9	2.31	3.25	1.75	5.87	.75	1.56	2.00
9900253	13300	238.00	1-8	2.57	3.76	2.00	6.66	.88	1.81	2.30
9900257	15000	320.00	1-1/8 - 7	2.75	4.19	2.25	7.20	.97	2.06	2.35
9900262	21000	399.00	1-1/4 - 7	3.09	4.50	2.50	7.95	1.00	2.28	2.73
9900271	24000	720.00	1-1/2 - 6	3.60	5.50	3.00	9.49	1.25	2.75	3.28
9900280	34000	1040.00	1-3/4 - 5	3.75	6.26	3.50	10.48	1.38	3.00	3.60
9900289	42000	1880.00	2-4-1/2	4.00	7.62	4.00	12.31	1.81	3.38	4.50
9900298	65000	3250.00	2-1/2 - 4	5.00	8.76	4.50	14.88	2.12	4.25	5.50
	9900182 9900191 9900208 9900217 9900226 9900235 9900244 9900257 9900257 9900257 9900262 9900271 9900280 9900280	Stock No.         (lb)           9900182         650           9900191         1200           9900208         1550           9900217         2600           9900226         5200           9900235         7200           9900244         10600           9900257         15000           9900262         21000           9900263         34000           9900280         342000	Limit (lb)Per 100 (lb)99001826505.0099001826505.00990019112009.009900208155015.009900217260028.009900235720096.00990024410600154.00990025313300238.00990025715000399.00990026221000399.00990027124000720.009900280340001040.009900289420001880.00	Limit Stock No.         Limit (lb)         Per 100 (lb)         A* Thread           9900182         650         5.00         1/4-20           9900191         1200         9.00         5/16-18           9900208         1550         15.00         3/8-16           9900217         2600         28.00         1/2-13           9900235         7200         96.00         3/4-10           9900253         13300         238.00         1-8           9900257         15000         3/99.00         1/1/8-7           9900262         21000         399.00         1-1/4-7           9900263         34000         1040.00         13/4-5           9900280         34000         1040.00         2-4-1/2	Limit (b)         Per 100 (b)         A* Thread         B           9900182         650         5.00         1/4-20         102           9900182         650         5.00         1/4-20         102           9900191         1200         9.00         5/16-18         1.15           9900208         1550         15.00         3/8-16         127           9900217         2600         28.00         1/2-13         1.53           9900226         5200         55.00         5/8-11         1.79           9900235         7200         96.00         3/4-10         2.05           9900244         10600         154.00         7/8-9         2.31           9900257         15000         320.00         1-1/8-7         2.75           9900262         21000         399.00         1-1/4-7         3.09           9900271         24000         720.00         1-1/2-6         3.60           9900280         34000         1040.00         1-3/4-5         3.75           9900289         42000         1880.00         2-41/2         4.00	Working Load Limit         Weight Per 100 (lb)         A* Thread         B         C           9900182         650         5.00         1/4 - 20         1.02         1.13           9900191         1200         9.00         5/16 - 18         1.15         1.38           9900208         1550         15.00         3/8 - 16         1.27         1.62           9900217         2600         28.00         1/2 - 13         1.53         1.95           9900226         5200         55.00         5/8 - 11         1.79         2.38           9900235         7200         96.00         3/4 - 10         2.05         2.76           9900253         13300         238.00         1 - 8         2.57         3.76           9900257         15000         320.00         1-1/8 - 7         2.75         4.19           9900262         21000         399.00         1-1/4 - 7         3.09         4.50           9900271         24000         720.00         1-1/2 - 6         3.60         5.50           9900280         34000         1040.00         1-3/4 - 5         3.75         6.26           9900289         42000         1880.00         2 - 4-1/2         4.00 <td>Working Load Limit         Weight Per 100 (lb)         A*         B         C         D           9900182         650         5.00         1/4-20         1.02         1.13         .75           9900191         1200         9.00         5/16-18         1.15         1.38         .88           9900208         1550         15.00         3/8-16         127         1.62         1.00           9900217         2600         28.00         1/2-13         1.53         1.95         1.19           9900226         5200         55.00         5/8-11         1.79         2.38         1.38           9900235         7200         96.00         3/4-10         2.05         2.76         1.50           9900244         10600         154.00         7/8-9         2.31         3.25         1.75           9900257         15000         320.00         1-18         2.57         3.76         2.00           9900252         21000         399.00         1-1/4-7         3.09         4.50         2.50           9900252         1000         320.00         1-1/4-7         3.09         4.50         2.50           9900262         21000         399.00</td> <td>Limit (b)         Per 100 (b)         A* Thread         B         C         D         E           9900182         650         5.00         1/4 - 20         102         1.13         .75         2.29           9900182         650         5.00         1/4 - 20         102         1.13         .75         2.29           9900191         1200         9.00         5/16 - 18         115         1.38         .88         2.74           9900208         1550         15.00         .3/6 - 16         127         1.62         1.00         .0.07           9900217         2600         28.00         1/2 - 13         1.53         1.95         1.19         .3.70           9900226         5200         55.00         5/8 - 11         1.79         2.38         1.38         4.45           9900235         7200         96.00         3/4 - 10         2.05         2.76         1.50         5.07           9900253         13300         238.00         1-8         2.57         3.76         2.00         6.66           9900257         15000         320.00         1-1/8 - 7         2.75         4.19         2.25         7.20           9900262         2</td> <td>Working Load Limit         Weight Per 100 (lb)         A* Thread         B         C         D         E         F           9900182         650         5.00         1/4 - 20         1.02         1.13         .75         2.29         .19           9900191         1200         9.00         5/16 - 18         1.15         1.38         .88         2.74         .25           9900208         1550         15.00         3/8 - 16         127         1.62         1.00         3.07         .31           9900226         5200         28.00         1/2 - 13         1.53         1.95         1.19         3.70         .38           9900226         5200         55.00         5/8 - 11         1.79         2.38         1.38         4.45         .50           9900235         7200         96.00         3/4 - 10         2.05         2.76         1.50         5.07         .63           9900244         10600         154.00         7/8 - 9         2.31         3.25         1.75         5.87         .75           9900257         15000         320.00         1-1/8 - 7         2.75         4.19         2.25         7.20         .97           9900262</td> <td>Working Load LimitWeight Per 100 (lb)<math>A^*</math> ThreadBCDEFG99001826505.00<math>1/4 \cdot 20</math>1.021.13.752.29.19.53990019112009.00<math>5/16 \cdot 18</math>1.151.38.882.74.25.599900208155015.00<math>3/8 \cdot 16</math>1.271.621.003.07.31.699900217260028.00<math>1/2 \cdot 13</math>1.531.951.193.70.38.919900226520055.005/8 \cdot 111.792.381.384.45.501.139900235720096.00<math>3/4 \cdot 10</math>2.052.761.505.07.631.38990024410600154.007/8 - 92.313.251.755.87.751.56990025715000320.001.1/8 - 72.754.192.257.20.972.0699002622100039.001.1/4 - 73.094.502.507.951.002.28990027124000720.001.1/2 - 63.605.503.009.491.252.759900280340001040.001.3/4 - 53.756.263.5010.481.383.00990289420001880.002 - 4.1/24.007.624.0012.311.813.38</td>	Working Load Limit         Weight Per 100 (lb)         A*         B         C         D           9900182         650         5.00         1/4-20         1.02         1.13         .75           9900191         1200         9.00         5/16-18         1.15         1.38         .88           9900208         1550         15.00         3/8-16         127         1.62         1.00           9900217         2600         28.00         1/2-13         1.53         1.95         1.19           9900226         5200         55.00         5/8-11         1.79         2.38         1.38           9900235         7200         96.00         3/4-10         2.05         2.76         1.50           9900244         10600         154.00         7/8-9         2.31         3.25         1.75           9900257         15000         320.00         1-18         2.57         3.76         2.00           9900252         21000         399.00         1-1/4-7         3.09         4.50         2.50           9900252         1000         320.00         1-1/4-7         3.09         4.50         2.50           9900262         21000         399.00	Limit (b)         Per 100 (b)         A* Thread         B         C         D         E           9900182         650         5.00         1/4 - 20         102         1.13         .75         2.29           9900182         650         5.00         1/4 - 20         102         1.13         .75         2.29           9900191         1200         9.00         5/16 - 18         115         1.38         .88         2.74           9900208         1550         15.00         .3/6 - 16         127         1.62         1.00         .0.07           9900217         2600         28.00         1/2 - 13         1.53         1.95         1.19         .3.70           9900226         5200         55.00         5/8 - 11         1.79         2.38         1.38         4.45           9900235         7200         96.00         3/4 - 10         2.05         2.76         1.50         5.07           9900253         13300         238.00         1-8         2.57         3.76         2.00         6.66           9900257         15000         320.00         1-1/8 - 7         2.75         4.19         2.25         7.20           9900262         2	Working Load Limit         Weight Per 100 (lb)         A* Thread         B         C         D         E         F           9900182         650         5.00         1/4 - 20         1.02         1.13         .75         2.29         .19           9900191         1200         9.00         5/16 - 18         1.15         1.38         .88         2.74         .25           9900208         1550         15.00         3/8 - 16         127         1.62         1.00         3.07         .31           9900226         5200         28.00         1/2 - 13         1.53         1.95         1.19         3.70         .38           9900226         5200         55.00         5/8 - 11         1.79         2.38         1.38         4.45         .50           9900235         7200         96.00         3/4 - 10         2.05         2.76         1.50         5.07         .63           9900244         10600         154.00         7/8 - 9         2.31         3.25         1.75         5.87         .75           9900257         15000         320.00         1-1/8 - 7         2.75         4.19         2.25         7.20         .97           9900262	Working Load LimitWeight Per 100 (lb) $A^*$ ThreadBCDEFG99001826505.00 $1/4 \cdot 20$ 1.021.13.752.29.19.53990019112009.00 $5/16 \cdot 18$ 1.151.38.882.74.25.599900208155015.00 $3/8 \cdot 16$ 1.271.621.003.07.31.699900217260028.00 $1/2 \cdot 13$ 1.531.951.193.70.38.919900226520055.005/8 \cdot 111.792.381.384.45.501.139900235720096.00 $3/4 \cdot 10$ 2.052.761.505.07.631.38990024410600154.007/8 - 92.313.251.755.87.751.56990025715000320.001.1/8 - 72.754.192.257.20.972.0699002622100039.001.1/4 - 73.094.502.507.951.002.28990027124000720.001.1/2 - 63.605.503.009.491.252.759900280340001040.001.3/4 - 53.756.263.5010.481.383.00990289420001880.002 - 4.1/24.007.624.0012.311.813.38

5:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. \*All bolts threaded UNC.

#### Fullger Rated QT QUIC-CHECK

APPLICATION AND WARNING INFORMATION SECTION 17

#### M-279 Metric Shoulder Type Machinery Eye Bolts

		Working Load				Dime	nsions (I	mm)			
Size (mm)	Stock No.	Limit (kg)	Weight Each (kg)	A* Thread	в	с	D	Е	F	G	н
M6 x 13	1045753	200	.03	M6 x 1.0	13.0	28.7	19.1	47.0	4.9	13.5	19.6
M8 x 13	1045789	400	.05	M8 x 1.25	13.0	35.1	22.4	54.6	6.4	15.0	24.1
M10 x 17	1045833	640	.07	M10 x 1.5	17.0	41.1	25.4	64.3	7.9	17.5	26.5
M12 x 20.5	1045869	1000	.11	M12 x 1.75	20.5	49.5	30.2	77.7	9.7	23.1	32.8
M16 x 27	1045913	1800	.25	M16 x 2.0	27.0	60.5	35.1	96.0	12.7	28.7	38.9
M20 x 30	1045995	2500	.42	M20 x 2.5	30.0	70.0	38.1	108	16.0	35.1	43.4
M24 x 36	1046029	4000	1.05	M24 x 3.0	36.0	95.5	51.0	142	22.4	46.0	58.4
M27 x 69.8	1046038	5000	1.42	M27 x 3.0	69.8	107	57.1	183	24.6	52.3	59.7
M30 x 45	1046075	6000	1.77	M30 x 3.5	45.0	114	63.5	171	25.4	58.0	69.3
M36 x 54	1046109	8500	3.12	M36 x 4.0	54.0	140	76.0	207	31.8	70.0	83.3
M42 x 95.2	1046118	14000	4.58	M42 x 4.5	95.2	159	88.9	266	35.0	76.2	91.4
M48 x 102	1046127	17300	8.71	M48 x 5.0	102	194	101	313	46.0	85.9	114
M64 x 127	1046136	29500	14.74	M64 x 6.0	127	223	114	378	53.8	108	140

5:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit.

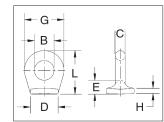


#### S-264



- Forged steel Quenched & Tempered.
- Forged from 1035 carbon steel.
- Excellent welding qualities.
- Widely used on farm machinery, trucks, steel hulled marine vessels and material handling equipment.





QT

QT

S-264 Pad Eyes

Size		Weight Per 100			Dim	ensions (in)			
No.	Stock No.	(lb)	В	С	D	E	G	н	L
* 0	1090722	2.80	.25	.19	.63	.31	.63	.09	.75
* 1	1090740	6.50	.38	.25	.88	.41	.88	.13	1.03
* 1-1/2	1090768	10.40	.63	.25	1.00	.44	1.13	.16	1.31
2	1090786	21.10	.75	.38	1.06	.50	1.50	.19	1.63
4	1090802	52.20	1.00	.56	1.44	.78	2.13	.22	2.34
5	1090820	82.50	1.25	.69	1.75	.81	2.63	.25	2.75

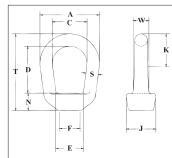
\*Meets the requirements of Military Specification MS-51930A.

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#### G-400



- Forged steel Quenched & Tempered.
- Hot-dip galvanized
- Tapped with standard UNC class 2 threads after galvanizing.
- Also available in blank (as forged) item (S-4028).
- Meets or exceeds all requirements of ASME B30.26.



#### G-400 Eye Nuts

	_,	-													
	"S"		Std. Tap	Working	Weight					Dimens	ions (in)	)			
Size No.	Stock Size (in)	Stock No	Size (in)	Load Limit (lb)	Each (lb)	А	с	D	Е	F	J	к	N	т	w
1	.25	1090438	1/4	520	.09	1.25	.75	1.00	.75	.50	.69	.63	.38	1.72	.31
2	.31	1090474	3/8	1250	.17	1.62	1.00	1.20	.83	.56	.81	.89	.50	2.09	.41
ЗA	.38	1090517	1/2	2250	.28	2.00	1.25	1.44	1.08	.81	1.00	1.09	.62	2.55	.50
4	.50	1090535	5/8	3600	.60	2.50	1.50	1.92	1.35	1.00	1.31	1.31	.69	3.25	.69
5	.63	1090553	3/4	5200	1.00	3.00	1.75	2.38	1.59	1.12	1.50	1.57	.88	3.89	.84
6	.75	1090571	7/8	7200	1.65	3.50	2.00	2.63	1.96	1.38	1.88	1.77	.94	4.32	1.00
7	.88	1090599	1	10000	2.69	4.00	2.25	3.06	2.21	1.56	2.13	2.02	1.07	5.01	1.19
8	1.00	1090633	1-1/4	15500	4.38	4.50	2.50	3.50	2.46	1.88	2.38	2.27	1.25	5.78	1.38
9	1.13	1090651	1-3/8	18500	5.00	5.00	2.75	4.00	2.69	2.00	2.56	2.53	1.38	6.51	1.50
10	1.25	1090679	1-1/2	22500	6.78	5.62	3.12	4.31	3.09	2.25	3.00	2.82	1.50	7.06	1.66
11	1.50	1090697	2	40000	14.60	7.12	4.10	6.20	4.09	3.13	3.75	3.68	2.06	9.91	1.94

5:1 Design Factor. Working Load Limit shown is for In-Line pull. Rating based on standard tap size.



#### **User's Guide for Lifting Online Course**

This training resource covers rigging fundamentals through a series of self-paced lessons that explain the Crosby User's Guide for Lifting pocket rigging card.

Learn the fundamentals of rigging through

User's Guide for Lifting Online Course

User's Guide for Lifting

our self-paced online course

Take the online course

Take the online course

This training resource covers rigging fundamentals through a series of self-paced lessons includes a through a series of self-paced lessons includes a card. Each topic includes a through a series of self-paced lessons includes a through a series This training resource covers rigging tundamentals through a series of self-paced lessons a covers rigging tundamentals through a series of self-paced lessons a cover indudes a cover indudes through a series of self-paced lessons a cover indudes a cover indudes through a series of self-paced lessons a cover indudes a cover indudes through a series of self-paced lessons a cover indudes a cover indudes a cover indudes through a series of self-paced lessons a cover indudes a cover induce induces a cover induce induces a cover induces a cov thecrosbygroup.com/courses/users-guide-for-lifting

s Guide for Lifting





Color coded to distinguish between UNC (Red) and Metric (Silver) thread types.

HR-125M Swivel Hoist Ring

- Available in UNC and Metric thread sizes.
- UNC threads available in sizes from 800 pounds to 100,000 pounds Working Load Limit, with a design factor of 5 to 1.
- Metric threads available in sizes from 400kg to 16,900kg and dual rated in both a 4 to 1 and 5 to 1 design factor.
- All components are alloy steel Quenched & Tempered.
- · Designed to be used at full WLL within angular loading range.
- 100% individually proof tested to 2-1/2 times the Working Load Limit with certification and Statistically Magnetic Particle inspected. (Can be furnished 100% Magnetic Particle inspected when requested at time of order.)
- Each product has a Product Identification Code (PIC) for material traceability along with a Working Load Limit and the name Crosby or "CG" stamped into it.
- 360° swivel and 180° pivot action.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Individually packaged along with proper application instructions and warning information.
- Bolt is secured with E-clip, threads are grooved. This method allows for easy disassembly and assembly of hoist ring for thorough examination of all components. Replacement kits are available.
- Bolts are individually Proof Tested.
- Multiple bolt length available to meet specific application requirements.
- Zinc plated (yellow chromate) finish for increased corrosion protection.
- Meets or exceeds all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature
  requirements. Importantly, these hoist rings meet other critical performance requirements including fatigue life, impact properties and
  material traceability, not addressed by ASME B30.26.

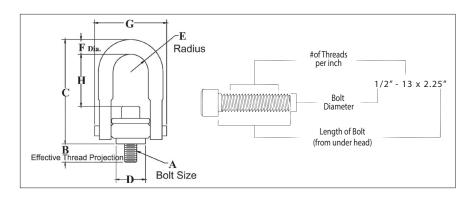


**HR-125** 

Swivel Hoist Ring







- Top washer has the following features:
  - The Working Load Limit and recommended torque value are permanently stamped into each washer.
  - Washer is color-coded for easy identification: Red UNC thread.
- Individually Proof Tested to 2-1/2 times Working Load Limit.
- Bolt specification is an alloy socket head cap screw to ASTM A 574.
- All threads listed are UNC.
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.

HR-125	UNC Threads
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							nsions in)	3				
Frame Size No.	Stock No.	Working Load Limit (Ib)	Torque in ft-lb	Bolt Size A	Effective Thread Projection Length B	с	D	Radius E	Diameter F	G	н	Weight Each (Ib)
1†	1016887	800	7	5/16 - 18 x 1.50	.58	2.72	.97	.46	.34	1.87	1.12	.37
1†	1016898	1000	12	3/8 - 16 x 1.50	.58	2.72	.97	.46	.34	1.87	1.05	.39
2	1016909	2500	28	1/2 - 13 x 2.00	.70	4.85	1.96	.87	.75	3.35	2.29	2.33
2†	1016912	2500	28	1/2 - 13 x 2.50	1.20	4.85	1.96	.87	.75	3.35	2.29	2.36
2	1016920	4000	60	5/8 - 11 x 2.00	.70	4.85	1.96	.87	.75	3.35	2.16	2.41
2†	1016924	4000	60	5/8 - 11 x 2.75	1.45	4.85	1.96	.87	.75	3.35	2.16	2.47
2	1016931	5000	100	3/4 - 10 x 2.25	.95	4.85	1.96	.87	.75	3.35	2.04	2.52
2 †	1016935	5000	100	3/4 - 10 x 2.75	1.45	4.85	1.96	.87	.75	3.35	2.04	2.59
3	1016942	7000*	100	3/4 - 10 x 2.75	.89	6.57	2.96	1.36	.94	4.87	2.97	6.72
3†	1016946	7000*	100	3/4 - 10 x 3.50	1.64	6.57	2.96	1.36	.94	4.87	2.97	6.81
3	1016953	8000	160	7/8 - 9 x 2.75	.89	6.57	2.96	1.36	.94	4.87	2.84	6.84
3†	1016957	8000	160	7/8 - 9 x 3.50	1.64	6.57	2.96	1.36	.94	4.87	2.84	6.96
3	1016964	10000	230	1 - 8 x 3.00	1.14	6.57	2.96	1.36	.94	4.87	2.72	7.09
3†	1016969	10000	230	1 - 8 x 4.00	2.14	6.57	2.96	1.36	.94	4.87	2.72	7.31
4	1016975	15000	470	1-1/4 - 7 x 4.50	2.21	8.72	3.71	1.75	1.19	6.18	3.93	14.51
5	1016986	24000	800	1-1/2 - 6 x 6.75	3.00	12.55	4.71	2.39	1.75	8.48	5.52	37.73
5	1016997	30000	1100	2 - 4-1/2 x 6.75	3.00	12.55	4.71	2.39	1.75	8.48	5.02	40.69
6	1017001	50000	2100	2-1/2 - 4 x 8.0	4.00	16.88	5.75	3.00	2.25	11.00	8.03	88.00
7	1017005	75000	4300	3 - 4 x 10.5	5.00	19.50	6.45	3.75	2.75	14.16	8.50	166.00
8	1017009	100000	5100	3-1/2 - 4 x 13.0 #	7.00	22.09	7.75	4.00	3.25	15.91	9.28	265.00

5:1 Design Factor. \*4:1 Design Factor when tested in 90 degree orientation. †Long Bolts are designed to be used with soft metal (i.e., aluminum) workpiece. While the long bolts may also be used with ferrous metal (i.e.,steel & iron) workpiece, short bolts are designed for ferrous workpieces only. Hex head bolt used on Frame 8 (100,000 lb) Hoist Ring.

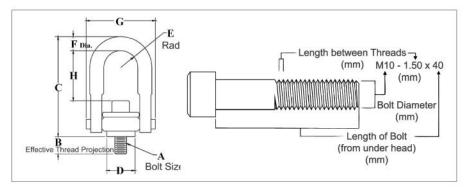
Load Rated 1

APPLICATION AND WARNING INFORMATION SECTION 17 L



#### HR-125M





- Top washer has the following features:
  - The Working Load Limit and recommended torque value are permanently stamped into each washer.
  - Washer is color-coded for easy identification: Silver Metric thread.
- Individually Proof Tested to 2-1/2 times Working Load Limit.
- Bolt specification is a Grade 12.9 alloy socket head cap screw to DIN 912. All threads listed are metric (ASME B18.3.1m).
- · Designed to be used with ferrous workpiece only.
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.

#### **HR-125M Metric Threads**

Frame Size No. 1 1 2 2 2 3 3 3		Working Load Limit (kg)					D	imensi (mm)					
	Stock No.	5:1 Design Factor †	4:1 Design Factor †	Torque (Nm)	Bolt Size A	Effective Thread Projection Length B	с	D	Radius E	Diameter F	G	н	Weight Each (kg)
1	1016602	400	500	10	M8X1.25X40	16.9	69.9	24.6	11.8	8.5	47.5	29.9	.17
1	1016613	450	550	16	M10X1.50X40	16.9	69.9	24.6	11.8	8.5	47.5	28.1	.18
2	1016624	1050	1300	38	M12X1.75X50	16.9	123	49.8	22.3	17.5	85.1	60.4	1.05
2	1016635	1900	2400	81	M16X2.00X60	26.9	123	49.8	22.3	17.5	85.1	56.3	1.11
2	1016644	2150	2700	136	M20X2.50X65	31.9	123	49.8	22.3	17.5	85.1	52.3	1.17
3	1016657	3000	3750	136	M20X2.50X75	27.8	167	75.2	34.7	25.4	124	76.6	3.09
3	1016668	4200	5250	312	M24X3.00X80	32.8	167	75.2	34.7	25.4	124	70.5	3.21
4	1016679	7000	8750	637	M30X3.50X120	61.7	222	94.2	44.5	30.5	157	102	6.53
5	1016690	11000	13750	1005	M36X4.00X150	54.0	318	120	60.7	44.5	215	142	16.8
5	1016701	12500	15600	1005	M42X4.50X160	64.0	318	120	60.7	44.5	215	136	17.4
5	1016712	13500	16900	1350	M48X5.00X160	74.0	318	120	60.7	44.5	215	130	18.0

Load Rate

† Individually proof loaded to 2-1/2 times the Working Load Limit based on the 4:1 design factor.

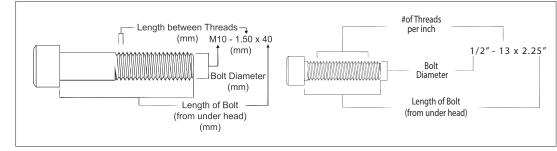
LIFTING POINTS

APPLICATION AND WARNING INFORMATION SECTION 17

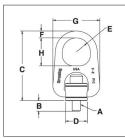
CE







- Forged bail provides the following:
  - Easily readable raised lettering showing the name Crosby or "CG" and PIC for material traceability.
  - Greater durability providing the increased "Toughness" desired in potentially abusive field conditions.
  - Larger opening than standard hoist ring bail.
- Top washer is color-coded for easy identification (Red for UNC threads and Silver for Metric threads)
- The Working Load Limit and recommended torque value are permanently stamped into each washer.
- Individually Proof Tested to 2-1/2 times Working Load Limit.
- Available in both UNC thread and Metric thread style.
- UNC bolt specification is an alloy socket head cap screw to ASTM A 574. Metric bolt specification is a Grade 12.9 alloy socket head cap screw to DIN 912.
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing. Illustration shows
  meaning of each dimension given.



#### **HR-1000 UNC Threads**

				Dimensions (in)									
Frame Size No.	Stock No.	Working Load Limit (Ib)	Torque in Ft. Lbs	Bolt Size A	Eff. Thread Projection Length B	с	D	Radius E	F	G	н	Weight Each (Ib)	
1	1068002	800	7	5/16 - 18 x 1.50	.52	3.69	.97	.62	.44	2.27	1.38	.60	
1	1068006	1000	12	3/8 - 16 x 1.50	.52	3.69	.97	.62	.44	2.27	1.38	.62	
2	1068010	2500	28	1/2 - 13 x 2.25	.69	6.26	1.96	1.25	.75	4.20	2.50	3.05	
2 †	1068014	2500	28	1/2 - 13 x 2.75	1.19	6.26	1.96	1.25	.75	4.20	2.50	3.07	
2	1068018	4000	60	5/8 - 11 x 2.25	.69	6.26	1.96	1.25	.75	4.20	2.50	3.11	
2 †	1068022	4000	60	5/8 - 11 x 3.00	1.44	6.26	1.96	1.25	.75	4.20	2.50	3.18	
2	1068026	5000	100	3/4 - 10 x 2.50	.94	6.26	1.96	1.25	.75	4.20	2.50	3.24	
2 †	1068030	5000	100	3/4 - 10 x 3.00	1.44	6.26	1.96	1.25	.75	4.20	2.50	3.30	
3	1068034	7000*	100	3/4 - 10 x 3.00	.85	8.66	2.96	1.63	1.00	6.25	3.25	10.09	
3†	1068038	7000*	100	3/4 - 10 x 3.50	1.35	8.66	2.96	1.63	1.00	6.25	3.25	10.21	
3	1068042	8000	160	7/8 - 9 x 3.00	.85	8.66	2.96	1.63	1.00	6.24	3.25	10.21	
3†	1068046	8000	160	7/8 - 9 x 3.50	1.35	8.66	2.96	1.63	1.00	6.24	3.25	10.40	
3	1068050	10000	230	1 - 8 x 3.50	1.35	8.66	2.96	1.63	1.00	6.24	3.25	10.50	
3†	1068054	10000	230	1 - 8 x 4.50	2.35	8.66	2.96	1.63	1.00	6.24	3.25	10.72	
4	1068058	15000	470	1-1/4 - 7 x 5.00	2.09	11.21	3.71	2.00	1.25	7.82	4.00	21.90	
4	1068062	24000	800	1-1/2 - 6 x 5.50	2.59	11.21	3.71	2.00	1.44	7.82	4.00	23.00	

5:1 Design Factor. \*4.5:1 Design Factor when tested in 90 degree orientation. †Long Bolts are designed to be used with soft metal (i.e., aluminum) workpiece.

#### **HR-1000M Metric Threads**

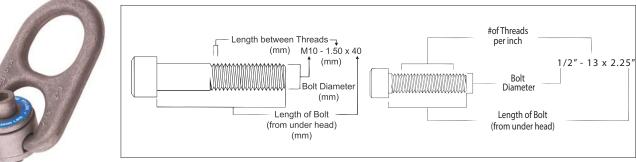
		Working Loa	ad Limit (kg)		Dimensions (mm)								
Frame Size No.	Stock No.	At a 5:1 Design Factor*	At a 4:1 Design Factor*	Torque in Nm	Bolt Size A	Eff. Thread Projection Length B	с	D	Radius E	F	G	н	Weight Each (kg)
1	1068307	400	500	10	M8 x 1.25 x 40	15.2	93.7	24.6	15.7	11.2	57.7	35.1	0.3
1	1068316	450	550	16	M10 x 1.50 x 40	15.2	93.7	24.6	15.7	11.2	57.7	35.1	0.3
2	1068325	1050	1300	38	M12 x 1.75 x 55	15.5	162	49.8	31.8	19.1	107	63.5	1.5
2	1068334	1900	2400	81	M16 x 2.00 x 65	25.5	162	49.8	31.8	19.1	107	63.5	1.5
2	1068343	2150	2700	136	M20 x 2.50 x 70	30.5	162	49.8	31.8	19.1	107	63.5	1.6
3	1068352	3000	3750	136	M20 x 2.50 x 80	25.4	220	75.2	41.4	25.4	159	82.6	4.6
3	1068361	4200	5250	312	M24 x 3.00 x 90	35.4	220	75.2	41.4	25.4	159	82.6	4.8
4	1068370	7000	8750	637	M30 x 3.50 x 140	66.2	285	94.2	50.8	31.8	199	102	9.7
4	1068389	11000	13750	1005	M36 x 4.00 x 130	56.2	285	94.2	50.8	31.8	199	102	10.2

\*Individually proof loaded to 2-1/2 times the Working Load Limit based on the 4:1 Design Factor.

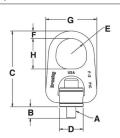


APPLICATION AND WARNING INFORMATION SECTION 17





- All load bearing components are heat treated, Quenched & Tempered alloy steel. •
- All components, with the exception of the retaining ring, are produced with maximum material hardness of 34 HRc. •
- All primary load-bearing components have Charpy impact testing. The body, bushing, washer and bail meet impact • requirements of 31 ft-lb min. avg. at -4°F. The bolt meets impact requirements of 20 ft-lb min. avg. at -150°F.
- Individually magnetic particle inspected with certification. •
- Forged bail provides the following:
  - Easily readable raised lettering showing the name Crosby or "CG" and PIC for material traceability.
  - Greater durability providing the increased toughness desired in potentially abusive field conditions.
  - Larger opening than standard hoist ring bail.
- Bolt specification is an alloy socket head cap screw to ASTM A320 Grade L7 or L43. •
- Top washer is color-coded for easy identification (blue for UN threads and grey for Metric threads).
- The Working Load Limit and recommended torque value are permanently stamped into each washer. •
- Individually Proof Tested to 2 times Working Load Limit (90° and in-line). •
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each • dimension given.
- Type approval and certification in accordance with DNV Offshore Standard DNV-OS-E101, Drilling Plant, Standard for ٠ Certification DNVGL-ST-0378, Lifting Appliances, and DNVGL-SI-0166.
- Individually serialized. •
- 100% MPI all primary load bearing components. •
- Coating: Thermo-diffusion galvanized. •
- Optional bolt sizes available upon request. •



#### **HR-1000CT UNC Threads**

		Working		Dimensions (in)								
Frame Size No.	Stock No.	Load Limit (Ib)	Torque (ft-lb)	Bolt Size A	Effective Thread Projection Length B	с	D	Radius E	Diameter F	G	Н	Mass Each (lb)
2	6608103	1900	28	1/2 - 13 x 2.25	0.70	6.32	1.96	1.25	0.75	4.20	2.50	3
2	6608112	1900	28	1/2 - 13 x 2.75	1.20	6.32	1.96	1.25	0.75	4.20	2.50	3
2	6608121	3000	60	5/8 - 11 x 2.25	0.70	6.32	1.96	1.25	0.75	4.20	2.50	3
3	6608130	4800	100	3/4 - 10 x 3.00	0.85	8.59	2.96	1.63	1.00	6.25	3.25	11
3	6608139	6200	160	7/8 - 9 x 3.00	0.85	8.59	2.96	1.63	1.00	6.25	3.25	11
3	6608148	8300	230	1 - 8 x 3.50	1.35	8.59	2.96	1.63	1.00	6.25	3.25	11
4	6608149	12500	470	1-1/4 - 7 x 5.00	2.10	11.31	3.71	2.00	1.44	8.13	4.00	24
4	6607669	20000	800	1-1/2 - 6 x 5.50	2.60	11.31	3.71	2.00	1.44	8.13	4.00	27
4	6607727	20000	800	1-1/2 - 8 x 5.50	2.60	11.31	3.71	2.00	1.44	8.13	4.00	27
5	6607670	28000	1100	2 - 4.5 x 7.50	3.20	15.15	4.00	2.69	1.75	11.64	5.00	69
6	6607671	45000	2100	2 1/2 - 4 x 9.50	3.73	19.93	5.75	3.00	2.75	14.47	5.62	157
5:1 Design	Factor.											

Land That

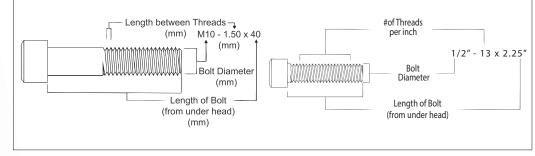
APPLICATION AND WARNING INFORMATION

SECTION 17

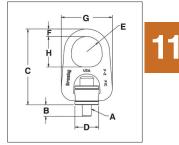


#### **HR-1000MCT**





- All load bearing components are heat treated, Quenched & Tempered alloy steel.
- All components, with the exception of the retaining ring, are produced with maximum material hardness of 34 HRc.
- All primary load-bearing components have Charpy impact testing. The body, bushing, washer and bail meet impact requirements of 31 ft-lb min. avg. at -4°F. The bolt meets impact requirements of 20 ft-lb min. avg. at -150°F.
- Individually magnetic particle inspected with certification.
- Forged bail provides the following:
  - Easily readable raised lettering showing the name Crosby or "CG" and PIC Code for material traceability.
  - Greater durability providing the increased toughness desired in potentially abusive field conditions.
  - Larger opening than standard hoist ring bail.
- Bolt specification is an alloy socket head cap screw to ASTM A320 Grade L7 or L43.
- Top washer is color-coded for easy identification (blue for UN threads and grey for Metric threads).
- The Working Load Limit and recommended torque value are permanently stamped into each washer.
- Individually Proof Tested to 2 times Working Load Limit (90° and in-line).
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.
- Type approval and certification in accordance with DNV Offshore Standard DNV-OS-E101, Drilling Plant, Standard for Certification DNVGL-ST-0378, Lifting Appliances, and DNVGL-SI-0166.
- Individually serialized.
- 100% MPI all primary load bearing components.
- Coating: Thermo-diffusion galvanized.
- Optional bolt sizes available upon request.



#### **HR-1000MCT Metric Threads**

		Wor Load (k	Limit		Dimensions (mm)								
Frame Size No.	Stock No.	Design Factor 5:1	Design Factor 4:1	Torque (Nm)	Bolt Size A	Eff. Thread Projection Length B	с	D	Radius E	Diameter F	G	н	Mass Each (kg)
2	6630058	825	1,030	38	M12 x 1.75 x 55	15.6	160.6	49.7	31.8	19.1	106.7	63.5	1
2	6630059	1,350	1,690	81	M16 x 2.00 x 65	25.5	160.6	49.7	31.8	19.1	106.7	63.5	1
3	6630060	2,250	2,810	136	M20 x 2.50 x 80	25.3	218.2	75.1	41.4	25.4	158.8	82.6	5
3	6630061	3,175	3,970	312	M24 x 3.00 x 90	35.4	218.2	75.1	41.4	25.4	158.8	82.6	5
4	6630062	5,450	6,810	637	M30 x 3.50 x 140	65.9	287.3	94.1	50.8	36.6	206.5	101.6	11
4	6630063	7,450	9,310	1,005	M36 x 4.00 x 130	56.3	287.3	94.1	50.8	36.6	206.5	101.6	12
5 5:1 Design	6630064 Factor.	13,250	16,560	1,350	M48 x 5.00 x 180	70.7	384.9	101.6	68.3	44.5	295.6	127.0	30

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Load Raild
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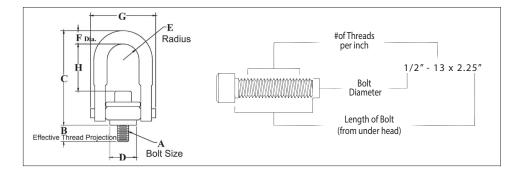
APPLICATION AND WARNING INFORMATION SECTION 17

#### LIFTING POINTS



#### SS-125UNC





- All components are 316 stainless steel, except bolt retainers, which are made from 15-7 PH (UNS 15700) magnetic stainless steel.
- Rated at 100 percent at 90 degree angle.
- Each product has a Product Identification Code (PIC) for material traceability, along with the Working Load Limit and the name Crosby or "CG" stamped into it.
- Individually proof tested to 2 times the Working Load Limit with certification.
- Fatigue Rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Washer is color-coded for easy identification (Red UNC thread).
- Bolt specification is 316 stainless steel socket head cap screw to ASTM F837 Group 1 (316).
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.

#### SS-125UNC Threads

						Dir	nensio	ns (in)				
Frame Size No.	Stock No.	Working Load Limit (lb)	Torque (ft-lb)	Bolt Size A	Effective Thread Projection Length B	с	D	Radius E	Diameter F	G	н	Weight Each (Ib)
1	1065000	400	3.5	5/16 - 18 x 1.0	.29	2.67	.85	.43	.34	1.84	1.27	.30
1	1065004	400	3.5	5/16 - 18 x 1.25	.54	2.67	.85	.43	.34	1.84	1.27	.30
1	1065008	500	6	3/8 - 16 x 1.25	.54	2.67	.85	.43	.34	1.84	1.27	.30
2	1065016	1250	14	1/2 - 13 x 2.0	.78	4.78	1.45	.88	.69	3.52	2.31	2.6
2	1065020	1250	14	1/2 - 13 x 2.25	1.03	4.78	1.45	.88	.69	3.52	2.31	2.6
2	1065024	1250	14	1/2 - 13 x 2.5	1.28	4.78	1.45	.88	.69	3.52	2.31	2.6
2	1065028	2000	30	5/8 - 11 x 2.0	.78	4.78	1.45	.88	.69	3.52	2.18	2.6
2	1065032	2000	30	5/8 - 11 x 2.25	1.03	4.78	1.45	.88	.69	3.52	2.18	2.6
2	1065036	2000	30	5/8 - 11 x 2.5	1.28	4.78	1.45	.88	.69	3.52	2.18	2.6
2	1065040	2500	50	3/4 - 10 x 2.25	1.03	4.78	1.45	.88	.69	3.52	2.06	3.0
2	1065044	2500	50	3/4 - 10 x 2.75	1.53	4.78	1.45	.88	.69	3.52	2.06	3.0
3	1065048	3500	50	3/4 - 10 x 2.75	1.04	6.52	2.20	1.40	.94	5.14	3.06	7.0
3	1065052	3500	50	3/4 - 10 x 3.25	1.54	6.52	2.20	1.40	.94	5.14	3.06	7.0
3	1065056	4000	80	7/8 - 9 x 2.75	1.04	6.52	2.20	1.40	.94	5.14	2.93	7.0
3	1065060	4000	80	7/8 - 9 x 3.0	1.29	6.52	2.20	1.40	.94	5.14	2.93	7.0
3	1065064	5000	115	1 - 8 x 3.0	1.29	6.52	2.20	1.40	.94	5.14	2.81	7.5
3	1065068	5000	115	1 - 8 x 3.25	1.54	6.52	2.20	1.40	.94	5.14	2.81	7.5
3	1065072	5000	115	1 - 8 x 4.0	2.29	6.52	2.20	1.40	.94	5.14	2.81	7.5
4	1065080	7500	235	1-1/4 - 7 x 4.0	1.89	8.73	3.19	1.75	1.25	6.50	4.12	14.0
5	1065084	12000	400	1-1/2 - 6 x 5.5	2.70	12.47	4.87	2.25	1.75	8.55	6.41	34.0
5	1065088	15000	550	2 - 4.5 x 5.75	2.96	12.47	4.87	2.25	1.75	8.55	5.91	36.0
6	1065092	25000	1050	2-1/2 - 4 x 8.0	4.00	16.87	6.52	3.00	2.25	11.67	8.03	88.0
6	1065096	25000	1050	2-1/2 - 8 x 8.0	4.00	16.87	6.52	3.00	2.25	11.67	8.03	88.0
7	1065100	37500	2150	3 - 4 x 10.25	5.00	19.50	8.10	3.75	2.75	14.15	8.48	166.0
8	1065104	50000	2550	3-1/2 - 4 x 13	7.00	22.09	8.60	4.00	3.25	15.90	9.28	265.0

5:1 Design Factor.

Load Rated Fullgae

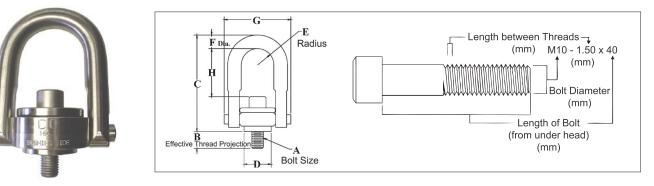
APPLICATION AND WARNING INFORMATION SECTION 17

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#### SS-125M

#### LIFTING POINTS



- All components are 316 stainless steel, except bolt retainers, which are made from 15-7 PH (UNS 15700) magnetic stainless steel.
- Rated at 100 percent at 90 degree angle.
- Each product has a Product Identification Code (PIC) for material traceability, along with the Working Load Limit and the name Crosby or "CG" stamped into it.
- Individually proof tested to 2 times the Working Load Limit with certification.
- Fatigue Rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Washer is color-coded for easy identification (Silver Metric thread)).
- Bolt specification is 316 stainless steel socket head cap screw to ASTM F 837M (316).
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.

						Dim	ensions	; (mm)				
Frame Size No.	Stock No.	Working Load Limit (kg)	Torque in Nm	Bolt Size A	Effective Thread Projection Length B	С	D	Radius E	Diameter F	G	н	Weight Each (kg)
1	1065203	200	4	M8 x 1.25	13	68	21.6	11	8.5	47	32	.17
1	1065207	250	8	M10 x 1.50	18	68	21.6	11	8.5	47	30	.17
2	1065211	525	18	M12 x 1.75	19	121	37	22	17.5	89	60	1.1
2	1065215	950	40	M16 x 2.00	29	121	37	22	17.5	89	56	1.1
2	1065219	1075	68	M20 x 2.50	34	121	37	22	17.5	89	52	1.2
3	1065223	1500	68	M20 x 2.50	32	166	56	36	25	131	78	3.0
3	1065227	2100	108	M24 x 3.00	37	166	56	36	25	131	74	3.1
3	1065231	2100	108	M30 x 3.50	58	206	56	36	25	131	108	3.1
4	1065235	3500	318	M30 x 3.50	42	222	81	45	31	165	106	6.3
4	1065239	3500	318	M30 x 3.50	62	222	81	45	31	165	106	6.4
5	1065243	5500	542	M36 x 4.00	64	317	124	57	43	217	166	15.5
5	1065247	6250	542	M42 x 4.50	82	317	124	57	43	217	160	16.0
5	1065251	6750	542	M48 x 5.00	82	317	124	57	43	217	154	16.8
6	1065255	11150	1423	M64 x 6.00	101	428	165	76	56	296	204	39.0
7	1065259	15750	2915	M72 x 6.00	132	495	206	95	69	359	220	74.0
8	1065263	22300	3459	M90 x 6.00	177	561	216	102	83	404	235	118.0

#### SS-125M Metric Threads

5:1 Design Factor

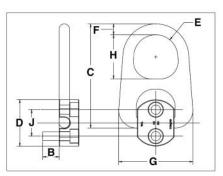
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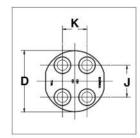






- · Forged bail provides the following:
  - Easily readable raised lettering showing the name Crosby or "CG" and PIC for material traceability.
  - More durability provides the increased toughness desired in potentially abusive field conditions.
  - Larger opening than standard hoist ring bails.
  - 180 degree pivot action at full capacity.
- · Bolts included as part of assembly.
- Individually Proof Tested to 2-1/2 times Working Load Limit.
- UNC Bolt specification is a Grade 8 alloy socket head cap screw to ASTM A574.





#### HR-100 Pivot Hoist Rings Coil Threads

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										nsions in)					
Frame Size No.	Stock No.	Working Load Limit (Ib)	Torque (ft-lb)	No. of Bolts	Weight Each (Ib)	Bolt Size	Effective Thread Projection Length B	с	Diameter D	Radius E	F	G	н	J	к
1	1067408	2000	7	2	.6	5/16-18 x 1.25	.82	3.43	2.00	.62	.44	2.27	1.38	1.00	-
2	1067417	2500	12	2	3.1	3/8-16 x 1.25	.65	6.03	2.25	1.25	.75	4.20	2.50	1.13	- 1
2	1067426	5000	28	2	3.3	1/2-13 x 2.00	1.40	6.03	2.63	1.25	.75	4.20	2.50	1.50	-
3	1067435	12000	28	4	10.5	1/2-13 x 2.75	1.65	8.27	3.13	1.63	1.00	6.25	3.25	1.63	1.25
4	1067444	20000	60	4	22.0	5/8-11 x 3.25	1.65	10.63	4.47	2.00	1.25	7.82	4.00	2.06	1.25

5:1 Design Factor

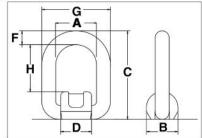


APPLICATION AND WARNING INFORMATION SECTION 17

S-265



- Widely used on farm machinery, trucks, steel hulled marine vessels and material handling equipment.
- Forged link and bracket Quenched & Tempered.
- · Excellent welding qualities.
- Reference American Welding Society specifications for proper welding procedures.



#### S-265 Forged Link

Working Lo	ad Limit (Ib)					Ľ	Dimension (in)	IS		
Design Factor 5:1	Design Factor 4:1	Stock No.	Weight Each (lb)	A	в	с	D	F	G	н
2200	2600	1290839	0.8	1.57	1.42	3.27	1.38	0.51	2.60	1.65
5500	7050	1290848	1.3	1.77	1.73	3.90	1.65	0.71	3.19	1.89
9250	11650	1290857	2.6	2.17	1.97	4.84	1.93	0.87	3.90	2.24
14100	17600	1290866	5.2	2.76	2.52	5.67	2.52	1.02	4.80	2.64
25450	33050	1290875	13.0	3.82	3.54	7.60	3.39	1.34	6.50	3.70

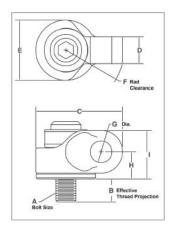
APPLICATION AND WARNING INFORMATION SECTION 17







- · Body components are alloy steel Quenched & Tempered.
- Rated at 100% of Working Load Limit for angles up to 90 degrees.
- Each product is stamped with a Product Identification Code (PIC) for material traceability, along with a Working Load Limit, and the name Crosby or "CG."
- Hoist ring body is furnished with a yellow chromate finish for improved corrosion resistance.
- Utilize standard Crosby Red Pin<sup>®</sup> Shackles to connect to wire rope or synthetic slings (sold separately).
- Multiple bolt lengths available to meet specific application requirements.
- Individually Proof Tested to 2-1/2 times Working Load Limit.



#### HR-1200 UNC Side Pull Hoist Rings

								D	imens (mm					Recommende Shackles	d	
	Working		Hoist Ring		Eff. Thread								Shac 209, 21 215, 213	0, 213,		Shackles S-281
Weight Each (kg)	Load Limit (kg)	Stock No.	Bolt Torque (Nm	Bolt Size A (in)	Proj. (mm) B	с	D	E	F	Dia. G	н	ı	Nominal Size (in)	WLL (t)	Web Size (mm)	WLL (t)
.16	290	1067700	10	5/16-18x1.50	15.0	49.0	18.3	25.4	39.6	20.3	21.6	36.3	1/2, 5/8	2, 3-1/4	50	2.95
.16	360	1067704	16	3/8-16x1.50	15.0	49.0	18.3	25.4	39.6	20.3	21.6	36.3	1/2, 5/8	2, 3-1/4	50	2.95
.64	900	1067708	38	1/2-13x2.00	18.0	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
.64	900	1067712	38	1/2-13x2.50	30.7	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
.68	1360	1067716	81	5/8-11x2.00	18.0	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
.68	1360	1067720	81	5/8-11x2.75	37.1	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
2.04	2260	1067724	136	3/4-10x2.75	22.9	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.09	2260	1067728	136	3/4-10x3.50	41.9	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.09	2940	1067732	217	7/8-9x2.75	22.9	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.18	2940	1067736	217	7/8-9x3.50	41.9	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.18	3620	1067740	312	1 -8x3.00	29.2	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.27	3620	1067744	312	1 -8x4.00	54.6	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
4.63	6350	1067748	637	1-1/4-7x4.5	56.4	142	39.9	95.3	99.3	37.3	48.8	86.9	1, 1-1/8, 1-1/4	8-1/2, 9-1/2, 12	75	7.70
10.7	7800	1067756	1085	1-1/2-6x6.5	75.7	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2, 1-3/4	13-1/2, 17, 25	-	-
11.5	13150	1067764	1491	2 -4.5x6.5	75.7	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2, 1-3/4	13-1/2, 17, 25	-	-
5:1 Design	Factor.															

#### HR-1200M Metric Side Pull Hoist Rings

								Dir	mensio (mm)					Recommende Shackles	d	
	Working		Hoist Ring		Eff. Thread								Shac 209, 21 215, 213	0, 213,		Shackles S-281
Weight Each (kg)	Load Limit (kg)	Stock No.	Bolt Torque (Nm)	Bolt Size A (mm)	Proj. (mm) B	с	D	E	F	G	н	1	Nominal Size (in)	WLL (t)	Web Size (mm)	WLL (t)
.18	300	1067803	10	M8x1.25x40	16.9	49.0	18.3	25.4	39.6	20.3	21.6	36.3	1/2, 5/8	2, 3-1/4	50	2.95
.18	400	1067807	16	M10x1.50x40	16.9	49.0	18.3	25.4	39.6	20.3	21.6	36.3	1/2, 5/8	2, 3-1/4	50	2.95
.63	1000	1067811	38	M12x1.75x50	17.2	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
.68	1400	1067815	81	M16x2.0x60	27.2	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
2.0	2250	1067823	136	M20x2.5x75	28.1	110	34.0	76.2	76.2	27.2	34.4	61.5	7/8	6-1/2	50	5.67
2.2	3500	1067827	312	M24x3.0x80	33.1	110	34.0	76.2	76.2	27.2	34.4	61.5	7/8	6-1/2	50	5.67
4.5	6250	1067831	637	M30x3.5x120	65.1	142	39.9	95.3	99.3	37.3	48.8	86.9	1, 1-1/8,1-1/4	8-1/2, 9-1/2, 12	75	7.70
10.4	7750	1067835	1005	M36x4.0x150	60.6	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2,1-3/4	13-1/2, 17, 25	-	-
10.7	10000	1067839	1005	M42x4.5x160	70.6	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2,1-3/4	13-1/2, 17, 25	-	
11.0	13000	1067843	1350	M48x5.0x160	70.6	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2,1-3/4	13-1/2, 17, 25	-	-
E-1 Deciar	Eastar															

5:1 Design Factor.

Load Railed CE

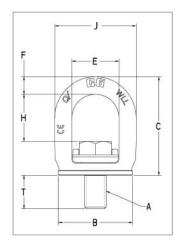
APPLICATION AND WARNING INFORMATION SECTION 17



#### SL-150



- When compared to respective size eye bolts, the Crosby SL-150 Slide-Loc<sup>™</sup> has a larger eye opening for easy access.
- Bail is forged alloy steel Quenched & Tempered.
- Bail swivels 360° degrees to keep the load aligned with the sling leg.
- Rated at 100% for 90 degree angle.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Meets the Machinery Directive 2006/42/EC guidelines and is marked with CE accordingly.
- Bolt specification for metric bolt is Grade 10.9 alloy cap screw to ISO 898-1.
- Unique locking mechanism makes the lifting point well suited for quick attachment to load surface. No need for tools.
- Features QUIC-CHECK<sup>®</sup> markings on bail to assist in knowing when device is ready for lifting.





CE

#### SL-150 UNC SLIDE-LOC™ LIFT POINT

Weight		Working	Bolt Size			Dimen: (mr				Effective Thread Projection Length
Each (kg)	Stock No.	Load Limit (t)*	(in)	в	с	Е	F	н	J	т
0.14	1068407	0.50	3/8 - 16 x 1	35.6	53.1	27.9	8.4	28.2	45.0	15.2
0.24	1068416	0.75	1/2 - 13 x 1 - 1/4	42.4	62.7	33.0	10.4	33.0	54.1	20.1
0.50	1068425	1.50	5/8 - 11 x 1 - 5/8	55.1	75.7	37.1	13.2	37.1	63.5	25.7
0.93	1068434	2.30	3/4 - 10 x 2	68.8	91.2	43.7	16.0	43.7	75.7	32.0
0.98	1068443	2.30	7/8 - 9 x 2	68.8	91.7	43.7	16.0	43.7	75.7	31.2
1.69	1068452	3.20	1 - 8 x 2 - 1/2	82.6	110.0	52.8	19.3	49.0	91.2	40.4

4:1 Design Factor.

#### SL-150 METRIC SLIDE-LOC™ LIFT POINT

Weight		Working		Dir	mensions (mm)					Effective Thread Projection Length
Each (kg)	Stock No.	Load Limit (t)*	Bolt Size A	в	с	Е	F	н	J	т
0.14	1068515	0.50	M10X1.5 X 25	35.5	53.0	28.0	8.5	27.8	45.0	14.6
0.23	1068524	0.75	M12x1.75x30	42.5	62.6	33.0	10.5	32.9	54.0	18.3
0.50	1068533	1.50	M16x2x40	55.0	75.7	37.0	13.2	37.0	63.4	24.5
0.94	1068542	2.30	M20x2.5x50	68.8	91.1	43.9	16.0	43.6	75.6	31.0
1.60	1068551	3.20	M24x3x60	82.5	110.0	52.8	19.2	52.8	91.2	37.0

4:1 Design Factor.





## **The Lifting Point Family**

We offer a wide range of lifting points that will fit most lifting and lashing applications. In our lifting point family you will find a full system, from master link to lifting point.

Choosing the right lifting point for your operation can be tricky, most lifting points can be used for a lot of purposes. But in order to give some guidance, and what we consider best practice, we have created a cross-chart (as seen on next page) to be used as indication to which lifting point that might be best suited for your specific purpose.

#### Rotating Eye Lifting Point - RELP

The RELP is a compact and robust lifting point, ideal for top-mounting and when it is important to have quick and easy on-hooking. The lifting point is easy to assemble/disassemble with a standard allen key. On the bolt itself information such as the working load limit, mounting torque and manufacturing ID is stamped, so it is always available for the operator.

The RELP will automatically adjust to the loading direction which decreases the risk to load it incorrectly and endangering the lifting operation. For sensitive load surfaces the RELP is ideal, as the connecting sling hook will be positioned mainly parallel to the load surface, thus completely avoiding the hook causing damage on impact on the load. CE marked.

#### Rotating Lifting Point - RLP

The RLP has an easily dismountable D-ring to enable assembly of wiresling, master link or hook directly onto the lifting point.

RLP has a hexagon bolt (RFID prepared) to make it easy to disassemble/assemble with a wrench. The bolt is also clearly marked with information such as working load limit, mounting torque and manufacturer ID so it is always available to the operator. The RLP rotates 360° and pivots 180°, making it strong, flexible and reliable. CE marked.

#### De-centered Lifting Point - DLP

The design of the DLP allows the link to be folded over the housing when idle, allowing the lifting point to be almost completely stowed away when not in use.

The closed, oblong link is also equipped with a "stay-up"-function for easy on-hooking, (sizes up to M24) especially when there is limited space. This saves both the load from damage due to impacts from the hook, as well as making rigging fast and easy. The DLP is ideal in narrow spaces, such as corners or edge position, as the housing has a compact design.

DLP has a hexagon bolt (RFID prepared) to make it easy to disassemble/assemble with a wrench. The bolt is also clearly marked with information such as working load limit, mounting torque and manufacturer ID so it is always available to the operator. CE marked.

#### Ball-bearing Lifting Point - BLP

The BLP is a very versatile lifting point and can safely be used for most applications. The ball-bearings in the BLP allow the load to be rotated during the lift, which is especially good when maintenance is needed on heavy tools and other types of equipment.

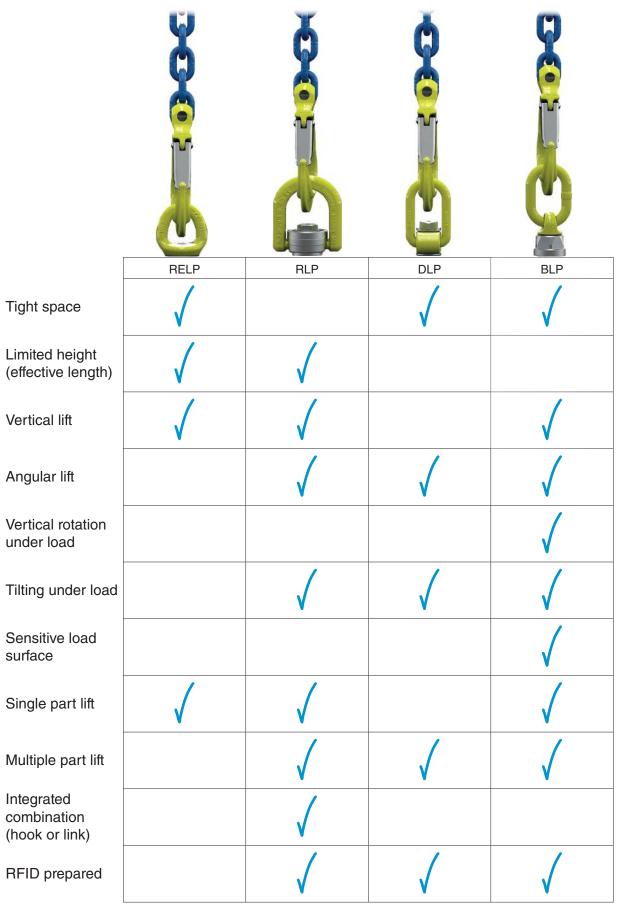
If the load surface is sensitive to impacts or scratches, the BLP is a good choice as it builds out from the load which makes it less likely that the lifting equipment will come in contact with it causing damage. The housing (RFID prepared) of the BLP is in-house drop-forged for increased strength and has a hexagon shape for easy mounting and dismounting. The housing is also clearly marked with information such as working load limit, mounting torque and manufacturer ID so it is always available to the operator. CE marked.









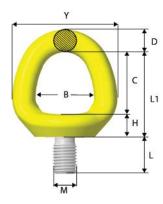


This chart is intended to give guidance in choosing the right lifting point for your operation and is not rules for usage. For more advice contact your closest Gunnebo Industries dealer.



CE

CE



Stock No.	Code				D	imensi	ons (m	m)			<b>Z</b> 29 38 40 46 44 64 74 91 102	Weigh
SLOCK NO.	Code	в	С	D	Е	н	L	L1	м	Y		(kg)
Z102408	RELP-M8 x 1.25	28	28	11	40	14	15	42	8	50	29	0.2
Z102410	RELP-M10 x 1.5	28	28	11	40	14	15	42	10	50	29	0.2
Z102412	RELP-M12 x 1.75	32	33	13	46	13	20	47	12	58	38	0.3
Z102416	RELP-M16 x 2	39	41	15	53	16	24	57	16	70	40	0.5
Z102420	RELP-M20 x 2.5	42	43	16	60	18	30	60	20	78	46	0.7
Z102424	RELP-M24 x 3	50	51	19	68	20	36	71	24	88	44	1.1
Z102430	RELP-M30 x 3.5	60	62	26	85	28	45	90	30	112	64	2.4
Z102436	RELP-M36 x 4	72	72	32	97	32	54	104	36	136	74	4.1
Z102442	RELP-M42 x 4.5	82	82	38	120	37	63	119	42	158	91	6.7
Z102448	RELP-M48 x 5	94	96	43	142	39	72	135	48	180	102	9.9

Bolt according to: ISO 898-1 Class 10.9

#### **RELP** with UNC thread

**Rotating Eye Lifting Point RELP** 

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Stock No.           Z102508           Z102510           Z102512           Z102516           Z102520           Z102521           Z102522           Z102524           Z102524	Orada				Dime	nsions	(mm)				м	Weight
STOCK NO.	Code	в	с	D	Е	н	L	L1	Y	z	M (in) 5/16" 3/8" 1/2" 5/8" 3/4" 7/8" 1 1/4" 1 1/2" 1 3/4" 2"	(kg)
Z102508	RELP 5/16"-18 UNC	28	28	11	40	14	15	42	50	29	5/16"	0.2
Z102510	RELP 3/8"-16 UNC	28	28	11	40	14	15	42	50	29	3/8"	0.2
Z102512	RELP 1/2"-13 UNC	32	33	13	46	13	20	47	58	38	1/2"	0.3
Z102516	RELP 5/8"-11 UNC	39	41	15	53	16	24	57	70	40	5/8"	0.5
Z102520	RELP 3/4"10 UNC	42	43	16	60	18	30	60	78	46	3/4"	0.7
Z102521	<b>RELP 7/8"-9 UNC</b>	42	43	16	60	18	30	60	78	46	7/8"	0.7
Z102524	RELP 1"-8 UNC	50	51	19	68	20	36	71	88	44	1"	1.1
Z102530	RELP 1 1/4"-7 UNC	60	62	26	85	28	45	90	112	64	1 1/4"	2.4
Z102536	RELP 1 1/2"-6 UNC	72	72	32	97	32	54	104	136	74	1 1/2"	4.1
Z102542	RELP 1 3/4"-5 UNC	82	82	38	120	37	63	119	158	91	1 3/4"	6.8
Z102548	<b>RELP 2"-4.5 UNC</b>	94	96	43	142	39	72	135	180	102	2"	10.0

Bolt according to: ISO 898-1 Class 10.9

#### Working Load Limits\* - RELP

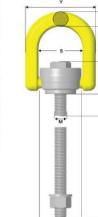
	1									
Symmetric Load (tonnes)					ß		ß			
No. of Legs	1	1	2	2	2 sym	metric	3 & 4 sy	/mmetric		
Angle ß	<b>0</b> °	<b>90</b> °	<b>0</b> °	90°	0 - 45°	45°- 60°	0 - 45°	45° - 60°	Tightening Torque	Allen Key
RELP -M8 x 1.25	0.7	0.3	1.4	0.7	0.4	0.3	0.6	0.4	10 Nm	8 mm
RELP 5/16"-18 UNC	0.7	0.3	1.4	0.7	0.4	0.3	0.6	0.4	7Ft.Lbs	5/16" UNC
RELP-M10x1,5	1.2	0.5	2.4	1.0	0.7	0.5	1.0	0.7	15 Nm	8 mm
RELP 3/8"-16 UNC	1.2	0.5	2.4	1.0	0.7	0.5	1.0	0.7	11Ft.Lbs	5/16" UNC
RELP - M12x1,75	2.0	0.8	4.0	1.6	1.1	0.8	1.6	1.2	27 Nm	8 mm
RELP 1/2"-13 UNC	2.0	0.8	4.0	1.6	1.1	0.8	1.6	1.2	20Ft.Lbs	5/16" UNC
RELP - M16x2	3.5	1.5	7.0	3.0	2.1	1.5	3.1	2.2	60 Nm	8 mm
RELP 5/8"-11 UNC	3.5	1.5	7.0	3.0	2.1	1.5	3.1	2.2	44Ft.Lbs	5/16" UNC
RELP - M20x2,5	6.1	2.4	12.2	4.8	3.3	2.4	5.0	3.6	90 Nm	8 mm
RELP 3/4"-10 UNC	5.0	2.3	10.0	4.6	3.1	2.3	4.8	3.4	66Ft.Lbs	5/16" UNC
RELP 7/8"-9 UNC	6.1	2.9	12.2	5.8	4.1	2.9	6.1	4.3	66Ft.Lbs	5/16" UNC
RELP - M24x3	8.1	3.3	16.2	6.6	4.6	3.3	6.9	4.9	135 Nm	19 mm
RELP 1"-8 UNC	8.1	3.3	16.2	6.6	4.6	3.3	6.9	4.9	100Ft.Lbs	3/4" UNC
RELP - M30x3,5	12.1	4.6	24.2	9.2	6.4	4.6	9.6	6.9	270 Nm	19 mm
RELP 1 1/4"-7 UNC	12.1	4.6	24.2	9.2	6.4	4.6	9.6	6.9	200Ft.Lbs	3/4" UNC
RELP - M36x4	16.1	7.1	32.2	14.2	9.9	7.1	14.9	10.6	320 Nm	19 mm
RELP 1 1/2"-6 UNC	16.1	7.1	32.2	14.2	9.9	7.1	14.9	10.6	236Ft.Lbs	3/4" UNC
RELP - M42x4,5	24	9.1	48	18.2	12.7	9.1	19.1	13.6	600 Nm	19 mm
RELP 1 3/4"-5 UNC	24	9.1	48	18.2	12.7	9.1	19.1	13.6	440Ft.Lbs	3/4" UNC
RELP - M48x5	32	12.1	64	24.2	16.9	12.1	25.4	18.1	800 Nm	19 mm
RELP 2"-4,5 UNC	32	12.1	64	24.2	16.9	12.1	25.4	18.1	590Ft.Lbs	3/4" UNC

\*4:1 Design Factor.

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#### **Rotating Lifting Point RLP**

Stock No. Standard	L	Stock No.	L2				D	imensio	ns (mm	)			Weight
Bolt Length	(mm)	Long Bolt Length**	(mm)	Code	в	с	D	L1	м	x	Y	z	(kg)***
Z101708	16	Z1017080L	101	RLP-M8 x 1.25	42	35	12	62	8	27	64	Ø40	0.3
Z101710	16	Z1017100L	101	RLP -M10 x 1.5	42	35	12	62	10	27	64	Ø40	0.3
Z101712	25	Z1017120L	120	RLP -M12 x 1.75	57	46	19	88	12	42	91	Ø54	1.0
Z101716	25	Z1017160L	160	RLP-M16 x 2	57	46	19	88	16	42	91	Ø54	1.0
Z101720	36	Z1017200L	200	RLP-M20 x 2.5	83	55	28	110	20	55	133	Ø80	2.9
Z101724	36	Z1017240L	240	RLP-M24 x 3	83	55	28	110	24	55	133	Ø80	2.9
Z101730	58	Z1017300L	300	RLP-M30 x 3.5	114	70	34	148	30	78	182	Ø111	7.1
Z101736	58	Z1017360L	300	RLP-M36 x 4	114	70	34	148	36	78	182	Ø111	7.3
Z101742	81	Z1017420L	301	RLP-M42 x 4.5	149	91	40	190	42	99	229	Ø142	14.3
Z101748	81	Z1017480L	301	RLP-M48 x 5	149	91	40	190	48	99	229	Ø142	14.5

\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length. Bolt, nut and washer according to: ISO 898-1 Class 10.9

#### **RLP with UNC thread**

Stock No.	L	Stock No.	L2				Dim	ensions	s (mm)			м	Weight
Standard Bolt Length	(mm)	Long Bolt Length**	(mm)	Code	в	с	D	L1	х	Y	z	(in)	(kg)***
Z101808	16	Z1018080L	101	RLP-5/16"-18 UNC	42	35	12	62	27	64	Ø40	5/16"	0.3
Z101810	16	Z1018100L	101	RLP-3/8"-16 UNC	42	35	12	62	27	64	Ø40	3/8"	0.3
Z101812	25	Z1018120L	120	RLP-1/2"-13 UNC	57	46	19	88	42	91	Ø54	1/2"	1.0
Z101816	25	Z1018160L	160	RLP-5/8"-11 UNC	57	46	19	88	42	91	Ø54	5/8"	1.0
Z101820	36	Z1018200L	200	RLP-3/4"-10 UNC	83	55	28	110	55	133	Ø80	3/4"	2.9
Z101821	36	Z1018210L	200	RLP-7/8"-9 UNC	83	55	28	110	55	133	Ø80	7/8"	2.9
Z101824	36	Z1018240L	240	RLP 1"-8 UNC	83	55	28	110	55	133	Ø80	1"	2.9
Z101830	58	Z1018300L	300	RLP 1 1/4"-7 UNC	114	70	34	148	78	182	Ø111	1 1/4"	7.1
Z101836	58	Z1018360L	300	RLP 1 1/2"-6 UNC	114	70	34	148	78	182	Ø111	1 1/2"	7.3
Z101842	81	Z1018420L	301	RLP 1 3/4"-5 UNC	149	91	40	190	99	229	Ø142	1 3/4"	14.4
Z101848	81	Z1018480L	301	RLP 2" -4.5 UNC	149	91	40	190	99	229	Ø142	2"	14.7

\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length. Bolt, nut and washer according to: ISO 898-1 Class 10.9

#### Working Load Limits\* - RLP



Disassembly of the RLP is made easy by just folding the D-ring forward and push down.

working Load Limits" - RLP													
Symmetric Load (tonnes)	↑ L				β		β						
No. of Legs	1	1	2	2	2 Syn	nmetric	3 & 4 S	ymmetric					
Angle ß	<b>0</b> °	90°	<b>0</b> °	90°	0 - 45°	45° - 60°	0 - 45°	45° - 60°	Tightening Torque	Spanner Size			
RLP - M8 x 1.25	0.8	0.4	1.6	0.8	0.5	0.4	0.8	0.6	10 Nm	13 mm			
RLP 5/16"-18 UNC	0.8	0.4	1.6	0.8	0.5	0.4	0.8	0.6	7 Ft.lb	1/2"			
RLP - M10 x 1.5	1.2	0.7	2.4	1.4	0.9	0.7	1.4	1.0	15 Nm	13 mm			
RLP 3/8"-16 UNC	1.2	0.65	2.4	1.3	0.9	0.6	1.3	0.9	11 Ft.lb	1/2"			
RLP - M12 x 1.75	2.0	1.2	4.0	2.4	1.6	1.2	2.5	1.8	27 Nm	24 mm			
RLP 1/2"-13 UNC	2.0	1.2	4.0	2.4	1.6	1.2	2.5	1.8	20 Ft.lb	15/16"			
RLP - M16 x 2	3.2	2.0	6.4	4.0	2.8	2.0	4.2	3.0	60 Nm	24 mm			
RLP 5/8"-11 UNC	3.2	2.0	6.4	4.0	2.8	2.0	4.2	3.0	44 Ft.lb	15/16"			
RLP - M20 x 2.5	5.6	2.8	11.2	5.6	3.9	2.8	5.8	4.2	90 Nm	32 mm			
RLP 3/4"-10 UNC	5.0	2.5	10.0	5.0	3.5	2.5	5.2	3.7	66 Ft.lb	1 5/16"			
RLP 7/8"-9 UNC	5.6	2.8	11.2	5.6	3.9	2.8	5.8	4.2	66 Ft.lb	1 5/16"			
RLP - M24 x 3	8.0	4.6	16.0	9.2	6.4	4.6	9.6	6.9	135 Nm	32 mm			
RLP 1"-8 UNC	8.0	4.6	16.0	9.2	6.4	4.6	9.6	6.9	100 Ft.lb	1 5/16"			
RLP - M30 x 3.5	12.0	6.0	24.0	12.0	8.4	6.0	12.6	9.0	270 Nm	55 mm			
RLP 1 1/4"-7 UNC	12.0	6.0	24.0	12.0	8.4	6.0	12.6	9.0	200 Ft.lb	2 1/4"			
RLP - M36 x 4	14.0	8.0	28.0	16.0	11.2	8.0	16.8	12.0	320 Nm	55 mm			
RLP 1 1/2"-6 UNC	14.0	8.0	28.0	16.0	11.2	8.0	16.8	12.0	236 Ft.lb	2 1/4"			
RLP - M42 x 4.5	16.0	14.0	32.0	28.0	19.6	14.0	29.4	21.0	600 Nm	75 mm			
RLP 1 3/4"-5 UNC	16.0	14.0	32.0	28.0	19.6	14.0	29.4	21.0	440 Ft.lb	3"			
RLP - M48 x 5	20.0	16.0	40.0	32.0	22.4	16.0	33.6	24.0	800 Nm	75 mm			
RLP 2" -4.5 UNC	20.0	16.0	40.0	32.0	22.4	16.0	33.6	24.0	590 Ft.lb	3"			

\*4:1 Design Factor.

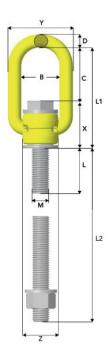
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CE



CE

CE





Stock No.	E	Stock No.	L2						Dime	nsion	s (mm	)				Weight
Standard Bolt Length	(mm)	Long Bolt Length**	(mm)	Code	в	с	D	Е	F	G	L1	м	x	Y	z	(kg)***
Z102208	13	Z1022080L	97.5	DLP-M8 x 1.25	35	48	10	39	14	10	78	8	30	55	26	0.3
Z102210	13	Z1022100L	97.5	DLP -M10 x 1.5	35	48	10	39	14	10	78	10	30	55	26	0.3
Z102212	23	Z1022120L	118	DLP -M12 x 1.75	35	48	12	51	20	14	91	12	44	59	32	0.5
Z102216	23	Z1022160L	158	DLP-M16 x 2	35	48	12	51	20	14	91	16	44	59	32	0.5
Z102220	34	Z1022200L	198	DLP-M20 x 2.5	54	88	18	71	28	18	145	20	58	90	48	1.6
Z102224	34	Z1022240L	238	DLP-M24 x 3	54	88	18	71	28	18	145	24	58	90	48	1.7
Z102230	53	Z1022300L	295	DLP-M30 x 3.5	82	94	26	104	39	27	182	30	88	122	75	5.0
Z102236	53	Z1022360L	295	DLP-M36 x 4	82	94	26	104	39	27	182	36	88	122	75	5.2
Z102242	73	Z1022420L	293	DLP-M42 x 4.5	100	104	36	136	54	34	216	42	113	156	110	11.6
Z102248	73	Z1022480L	293	DLP-M48 x 5	100	103	36	136	54	34	216	48	113	156	110	11.9

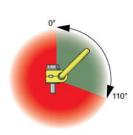
\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length. Bolt, nut and washer according to: ISO 898-1 Class 10.9

#### **DLP with UNC thread**

Stock No.	L	Stock No.	L2	~ .				Dim	ensio	ons (n	nm)				м	Weiah
Standard Bolt Length	(mm)	Long Bolt Length**	(mm)	Code	в	с	D	Е	F	G	L1	х	Y	z	(in)	(kg)**
Z102308	13	Z1023080L	97.5	DLP-5/16"-18 UNC	35	48	10	39	14	10	78	30	55	26	5/16"	0.3
Z102310	13	Z1023100L	97.5	DLP-3/8"-16 UNC	35	48	10	39	14	10	78	30	55	26	3/8"	0.3
Z102312	23	Z1023120L	118	DLP-1/2"-13 UNC	35	48	12	51	20	14	91	44	59	32	1/2"	0.5
Z102316	23	Z1023160L	158	DLP-5/8"-11 UNC	35	48	12	51	20	14	91	44	59	32	5/8"	0.5
Z102320	34	Z1023200L	198	DLP-3/4"-10 UNC	54	88	18	71	28	18	145	58	90	48	3/4"	1.6
Z102321	34	Z1023210L	198	DLP-7/8"-9 UNC	54	88	18	71	28	18	145	58	90	48	7/8"	1.6
Z102324	34	Z1023240L	238	DLP-1"-8 UNC	54	88	18	71	28	18	145	58	90	48	1"	1.7
Z102330	53	Z1023300L	295	DLP- 1 1/4"-7 UNC	82	94	26	104	39	27	182	88	122	75	1 1/4"	5.5
Z102336	53	Z1023360L	295	DLP-1 1/2"-6 UNC	82	94	26	104	39	27	182	88	122	75	1 1/2"	5.7
Z102342	73	Z1023420L	293	DLP-1 3/4"-5 UNC	100	103	36	136	54	34	216	113	156	110	1 3/4"	11.7
Z102348	73	Z1023480L	293	DLP-2"- 4.5 UNC	100	103	36	136	54	34	216	113	156	110	2"	12.1

Bolt, nut and washer according to: ISO 898-1 Class 10.9

#### Working Load Limits\* - DLP



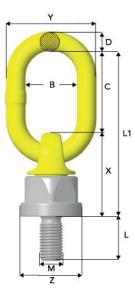
- The DLP can only be loaded from 0° to 110° degrees Rotation around screw axis
- when loaded at 0°-15° is not allowed.

Symmetric Load (tonnes) No. of Legs			β	metric	B			
						•		
Angle ß	0°< β < 90°	0°< ß < 90°	0 - 45°	45° - 60°	0 - 45°	45° - 60°	Tightening Torque	Spanner Size
DLP-M8	0.35	0.70	0.5	0.35	0.7	0.5	10 Nm	13 mm
DLP-5/16"-18 UNC	0.35	0.70	0.5	0.35	0.7	0.5	7Ft.lb	1/2"
DLP -M10	0.65	1.30	0.9	0.65	1.4	1.0	15 Nm	13 mm
DLP-3/8"-16 UNC	0.60	1.20	0.8	0.60	1.3	0.9	11Ft.lb	1/2"
DLP -M12	1.0	2.0	1.4	1.0	2.1	1.5	27 Nm	24 mm
DLP-1/2"-13 UNC	1.0	2.0	1.4	1.0	2.1	1.5	20Ft.lb	15/16"
DLP-M16	1.8	3.6	2.5	1.8	3.7	2.7	60 Nm	24 mm
DLP-5/8"-11 UNC	1.6	3.2	2.2	1.6	3.3	2.4	44Ft.lb	15/16"
DLP - M20x2.5	2.6	5.2	3.6	2.6	5.4	3.9	90 Nm	32 mm
DLP 3/4"-10 UNC	2.2	4.4	3.0	2.2	4.6	3.3	66Ft.lb	1 5/16"
DLP 7/8"-9 UNC	2.6	5.2	3.6	2.6	5.4	3.9	66Ft.lb	1 5/16"
DLP - M24x3	4.1	8.2	5.7	4.1	8.6	6.1	135 Nm	32 mm
DLP 1"-8 UNC	4.1	8.2	5.7	4.1	8.6	6.1	100Ft.lb	1 5/16"
DLP - M30x3.5	5.0	10.0	7.0	5.0	10.5	7.5	270 Nm	55 mm
DLP 1 1/4"-7 UNC	5.0	10.0	7.0	5.0	10.5	7.5	200Ft.lb	2 1/4"
DLP - M36x4	7.0	14.0	9.8	7.0	14.7	10.5	320 Nm	55 mm
DLP 1 1/2"-6 UNC	7.0	14.0	9.8	7.0	14.7	10.5	236Ft.lb	2 1/4"
DLP - M42x4.5	15.0	30.0	21.0	15.0	31.5	22.5	600 Nm	75 mm
DLP 1 3/4"-5 UNC	15.0	30.0	21.0	15.0	31.5	22.5	440Ft.lb	3"
DLP - M48x5	20.0	40.0	28.0	20.0	42.0	30.0	800 Nm	75 mm
DLP 2"-4.5 UNC	20.0	40.0	28.0	20.0	42.0	30.0	590Ft.lb	3"

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<b>Ball-bearing</b>	Lifting	Point	BLP
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Stock No.	Code		Dimensions (mm)									
SLOCK NO.	Code	в	С	D	L	L1	М	х	Y	z	(kg)	
Z102008	BLP-M8 x 1.25	35	55	13	16	112	8	57	62	Ø42	0.6	
Z102010	BLP -M10 x 1.5	35	55	13	20	112	10	57	61	Ø42	0.6	
Z102012	BLP -M12 x 1.75	35	55	13	24	112	12	57	61	Ø42	0.6	
Z102016	BLP-M16 x 2	35	55	13	30	112	16	57	61	Ø42	0.6	
Z102020	BLP-M20 x 2.5	34	51	17	30	126	20	75	67	Ø59	1.3	
Z102024	BLP-M24 x 3	50	70	17	36	145	24	75	84	Ø59	1.5	
Z102030	BLP-M30 x 3.5	54	96	22	45	102	30	106	99	Ø74	3.4	
Z102036	BLP-M36 x 4	54	96	22	54	102	36	106	99	Ø74	3.5	
Z102042	BLP-M42 x 4.5	70	120	28	63	242	42	122	127	Ø93	6.5	
Z102048	BLP-M48 x 5	70	120	28	72	242	48	122	127	Ø93	6.8	

#### **BLP with UNC thread**

Code

BLP-5/16"-18 UNC

BLP-3/8"-16 UNC

BLP-1/2"-13 UNC

BLP-5/8"-11 UNC

BLP-3/4"-10 UNC

BLP-7/8"-9 UNC

BLP-1"-8 UNC

BLP-1 1/4"-7 UNC

BLP-1 1/2"-6 UNC

BLP-1 3/4"-5 UNC

BLP-2"-4.5 UNC

в

35

35

35

35

34

50

54

54

70

70

70

С

55

55

55

55

51

51

70

96

96

120

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D

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17

17

22

22

28

28

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20

24

30

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30

38

48

57

67

76

L1

112

112

112

112

126

126

145

202

202

242

242

75

75

106

106

122

122

67

84

99

99

127

127

Stock No.

Z102108

Z102110

Z102112

Z102116

Z102120

Z102121

Z102124

Z102130

Z102136

Z102142

CE Dimensions (mm) Weight М (kg) Х Y z 57 61 Ø42 5/16" 0.6 57 61 Ø42 3/8" 0.6 57 61 Ø42 1/2" 0.6 57 61 Ø42 5/8" 0.6 75 67 Ø59 3/4" 1.3

Ø59

Ø59

Ø74

Ø74

Ø93

Ø93

7/8"

1"

1 1/4"

1 1/2"

1 3/4"

2"

1.3

1.5

3.4

3.6

6.6

7.0

CE

	Z102148
Working Load Limits* - B	LP

Symmetric Load (tonnes)				β		β		β			
No. of Legs	1	1	2	2	2	2 Syn	nmetric	3 & 4 S	ymmetric		
Angle ß	0°*	90°	<b>0</b> °	0 - 45°	90°	0 - 45°	45° - 60°	0 - 45°	45° - 60°	Tightening torque	Spanner Size
BLP -M8x1.25	0.6	0.3	1.2	0.4	0.6	0.4	0.3	0.6	0.45	10 Nm	36 mm
BLP 5/16"-18 UNC	0.6	0.3	1.2	0.4	0.6	0.4	0.3	0.6	0.45	7Ft.Lb	1 1/2" UNC
BLP -M10x1.5	1.0	0.5	2.0	0.7	1.0	0.7	0.5	1.3	0.75	15 Nm	36 mm
BLP 3/8"-16 UNC	0.8	0.4	1.6	0.5	0.8	0.5	0.4	0.8	0.6	11Ft.Lb	1 1/2" UNC
BLP -M12x1.75	1.5	0.75	3.0	1.1	1.5	1.1	0.75	1.5	1.1	27 Nm	36 mm
BLP 1/2"-13 UNC	1.5	0.75	3.0	1.1	1.5	1.1	0.75	1.5	1.1	20Ft.Lb	1 1/2" UNC
BLP -M16x2	3.0	1.5	6.0	2.1	3.0	2.1	1.5	3.1	2.2	60 Nm	36 mm
BLP 5/8"-11 UNC	3.0	1.5	6.0	2.1	3.0	2.1	1.5	3.1	2.2	44Ft.Lb	1 1/2" UNC
BLP -M20x2.5	5.0	2.5	10.0	3.5	5.0	3.5	2.5	5.2	3.7	90 Nm	50 mm
BLP 3/4"-10 UNC	4.5	2.25	9.0	3.1	4.5	3.1	2.25	4.7	3.3	66Ft.Lb	2" UNC
BLP 7/8"-9 UNC	6.0	3.0	12.0	4.2	6.0	4.2	3.0	6.3	4.5	66Ft.Lb	2" UNC
BLP-M24x3	7.0	4.0	14.0	5.6	8.0	5.6	4.0	8.4	6.0	135 Nm	50 mm
BLP-1"-8 UNC	7.0	4.0	14.0	5.6	8.0	5.6	4.0	8.4	6.0	100Ft.Lb	2" UNC
BLP-M30x3.5	12.0	6.0	24.0	8.4	12.0	8.4	6.0	12.6	9.0	270 Nm	65 mm
BLP-1 1/4"-7 UNC	12.0	6.0	24.0	8.4	12.0	8.4	6.0	12.6	9.0	200Ft.Lb	2 5/8" UNC
BLP-M36x4	14.0	8.0	28.0	11.2	16.0	11.2	8.0	16.8	12.0	320 Nm	65 mm
BLP-1 1/2"-6 UNC	14.0	8.0	28.0	11.2	16.0	11.2	8.0	16.8	12.0	236Ft.Lb	2 5/8" UNC
BLP-M42x4.5	16.0	10.0	32.0	14.0	20.0	14.0	10.0	21.0	15.0	600 Nm	85 mm
BLP-1 3/4"-5 UNC	16.0	10.0	32.0	14.0	20.0	14.0	10.0	21.0	15.0	440Ft.Lb	3 1/8" UNC
BLP-M48x5	18.0	13.0	36.0	18.2	26.0	18.2	13.0	27.3	19.5	800 Nm	85 mm
BLP-2"-4.5 UNC	18.0	13.0	36.0	18.2	26.0	18.2	13.0	27.3	19.5	590Ft.Lb	3 1/8" UNC

\* provided only axial loading takes place, ie no bending force applied in the direction of the thread. 4:1 Design Factor.

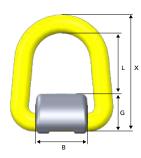


# D

#### **Master Link D**

							CC
Stock No.	Code	WLL (Ib)*	Е	D	L	R	Weight (lb)
Z7008771	D-14-10	5510	2.17	0.55	2.56	0.94	0.88
Z7008781	D-17-10	8800	2.52	0.67	2.44	1.14	1.10
Z7008801	D-22-10	15428	2.99	0.87	3.54	1.30	2.20
Z7008791	D-27-10	22040	3.35	1.06	3.86	1.50	4.19
Z7008792	D-32-10	35300	4.49	1.26	5.47	1.97	7.72

The load bearing width must be at least 0.5 x E.

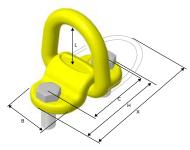


#### Weldable Lifting Point WLP

Stock No.	Code	WLL (lb)*	в	G	L	x	Weight (Ib)
Z7009001	WLP-2.5T	5510	1.97	1.06	2.09	3.74	1.10
Z7009011	WLP-4T	8800	2.28	1.34	1.89	3.82	1.76
Z7009021	WLP-7T	15428	2.52	1.61	2.87	5.31	3.97
Z7009031	WLP-10T	22040	2.56	2.05	2.87	5.98	7.50
Z7009041	WLP-16T	35300	3.54	2.60	4.13	7.99	14.77

Supplied with spring for stay up function.

Master Link measurements , see Master Link D above.

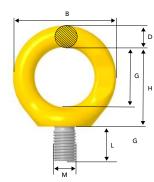


#### Screw-on Lifting Point SLP

	Stock No.	Code	WLL (Ib)*	в	с	н	L	M (metric thread)	x	Bolt Protrusion	Weight (Ib)	11
Ì	Z7009881	SLP-1T	2204	1.97	2.83	3.86	2.13	M14	5.47	25	1.76	
	Z7009871	SLP-3T	6612	2.28	3.31	4.49	1.93	M16	5.67	28	2.87	
	Z7009861	SLP-5T	11020	2.52	4.57	6.30	2.80	M20	7.99	34	5.73	

Supplied with bolt and spring for stay up function. Bolt according to: ISO 898-1 Class 10.9.

Master Link measurements, see Master Link D above.



#### **Eye Lifting Point ELP**

		WLL								Weight
Stock No.	Code	metric tonnes*	(lb)	В	D	G	н	L	М	Weight (lb)
Z100434	ELP-16-8	1.0**	2204	2.83	0.63	1.65	2.17	0.94	M16	0.88
Z100435	ELP-20-8	1.5**	3306	2.83	0.63	1.65	2.28	1.18	M20	0.88
Z100436	ELP-24-8	2.0**	4500	3.46	0.75	1.89	2.72	1.42	M24	1.98
Z100437	ELP-30-8	3.0**	6612	4.17	0.87	2.36	3.31	1.77	M30	3.09

\*\* In case of 1-leg application where loading is limited to straight loading in the direction of thread (no bending force) it is possible to use ELP with four times higher WLL. Note! Threaded depths need to be at least 1xM for steel, 1.25xM for cast iron and 2xM for aluminum alloy.

LIFTING POINTS

"

CE

257

CE

### **Spare Parts**

GUNNEBO

Standard length bolt and long bolt for RLP and DLP are available as spare parts.

**RDRLP - Metric** 

Standard length bolt including locking ring

Stock No.	Code
Z1017081	RDRLP-M8x1,25
Z1017101	RDRLP-M10x1,5
Z1017121	RDRLP-M12x1,75
Z1017161	RDRLP-M16x2
Z1017201	RDRLP-M20x2,5
Z1017241	RDRLP-M24x3
Z1017301	RDRLP-M30x3,5
Z1017361	RDRLP-M36x4
Z1017421	RDRLP-M42x4,5
Z1017481	RDRLP-M48x5

#### **RDRLP - UNC**

Standard length bolt including locking ring

Stock No.	Code
Z1018081	RDRLP-UNC 5/16"-18
Z1018101	RDRLP-UNC 3/8"-16
Z1018121	RDRLP-UNC 1/2"-13
Z1018161	RDRLP-UNC 5/8"-11
Z1018201	RDRLP-UNC 3/4"-10
Z1018211	RDRLP-UNC 7/8"-9
Z1018241	RDRLP-UNC 1"-8
Z1018301	RDRLP-UNC 1 1/4"
Z1018361	RDRLP-UNC 1 1/2"
Z1018421	RDRLP-UNC 1 3/4"
Z1018481	RDRLP-UNC 2"



#### **RDRLP - Metric**

Long bolt including nut, locking ring and washer

Stock No.	Code
Z10170801L	RDRLP-M8 LB
Z10171001L	RDRLP-M10 LB
Z10171201L	RDRLP-M12 LB
Z10171601L	RDRLP-M16 LB
Z10172001L	RDRLP-M20 LB
Z10172401L	RDRLP-M24 LB
Z10173001L	RDRLP-M30 LB
Z10173601L	RDRLP-M36 LB
Z10174201L	RDRLP-M42 LB
Z10174801L	RDRLP-M48 LB

#### **RDRLP - UNC**

Long bolt including nut, locking ring and washer

Stock No.	Code
Z10180801L	RDRLP-UNC 5/16" LB
Z10181001L	RDRLP-UNC 3/8" LB
Z10181201L	RDRLP-UNC 1/2" LB
Z10181601L	RDRLP-UNC 5/8" LB
Z10182001L	RDRLP-UNC 3/4" LB
Z10182101L	RDRLP-UNC 7/8" LB
Z10182401L	RDRLP-UNC 1" LB
Z10183001L	RDRLP-UNC 1 1/4" LB
Z10183601L	RDRLP-UNC 1 1/2" LB
Z10184201L	RDRLP-UNC 1 3/4" LB
Z10184801L	RDRLP-UNC 2" LB

#### **RDDLP - Metric**

Standard length bolt including locking ring

Stock No.	Code
Z1022081	RDDLP-M8x1,25
Z1022101	RDDLP-M10x1,5
Z1022121	RDDLP-M12x1,75
Z1022161	RDDLP-M16x2
Z1022201	RDDLP-M20x2,5
Z1022241	RDDLP-M24x3
Z1022301	RDDLP-M30
Z1022361	RDDLP-M36
Z1022421	RDDLP-M42
Z1022481	RDDLP-M48



#### **RDDLP - Metric**

Long bolt including nut, locking ring and washer

Stock No.	Code
Z10220801L	RDDLP M8 LB
Z10221001L	RDDLP M10 LB
Z10221201L	RDDLP M12 LB
Z10221601L	RDDLP M16 LB
Z10222001L	RDDLP M20 LB
Z10222401L	RDDLP M24 LB
Z10223001L	RDDLP M30 LB
Z10223601L	RDDLP M36 LB
Z10224201L	RDDLP M42 LB
Z10224801L	RDDLP M48 LB





Standard length bolt including locking ring

Stock No.	Code
Z1023081	RDDLP UNC 5/16"
Z1023101	RDDLP UNC 3/8"
Z1023121	RDDLP UNC 1/2"
Z1023161	RDDLP -UNC 5/8"
Z1023201	RDDLP -UNC 3/4"
Z1023211	RDDLP -UNC 7/8"
Z1023241	RDDLP -UNC 1"
Z1023301	RDDLP -UNC 1 1/4"
Z1023361	RDDLP UNC 1 1/2"
Z1023421	RDDLP -UNC 1 3/4"
Z1023481	RDDLP -UNC 2"



#### **RDDLP - UNC**

Long bolt including nut, locking ring and washer

Stock No.	Code
Z10230801L	RDDLP UNC 5/16" LB
Z10231001L	RDDLP UNC 3/8" LB
Z10231201L	RDDLP UNC 1/2" LB
Z10231601L	RDDLP UNC 5/8" LB
Z10232001L	RDDLP UNC 3/4" LB
Z10232101L	RDDLP UNC 7/8" LB
Z10232401L	RDDLP UNC 1" LB
Z10233001L	RDDLP UNC 1 1/4" LB
Z10233601L	RDDLP UNC 1 1/2" LB
Z10234201L	RDDLP UNC 1 3/4" LB
Z10234801L	RDDLP UNC 2" LB

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