

super  
20 YEARS of  
slings inc.

Secure Solutions

# LIFTING POINTS



## RUD Lifting Points

As a family-owned company, and operating internationally, we provide future-oriented solutions with chain systems and components for a wide range of applications.

In lifting technology and load securing, our mountable lifting points attest to our top quality, ergonomics and safety.

More than 700 different, tested, threaded and weldable lashing point models in load ranges up to 250 tonnes together with the unique application variety of our ICE and VIP chain systems meet the highest requirements in all areas of application.

Our constant pursuit of innovative product designs, coupled with the highest standards in production technology and quality management, are benchmarks recognized worldwide.

Today, the **RUD Group** is a global player. Its main development and production facility in Aalen, offers future-oriented solutions with chain systems and components for a wide range of applications.

For hoisting, moving, pulling, driving and conveying, our RUD lifting means, are a guarantee of quality, innovation and safety.



## Overview

ICE-LBG-SR

VWBG-V / VWBG

ACP TURNADO

VLBG-PLUS, VLBG

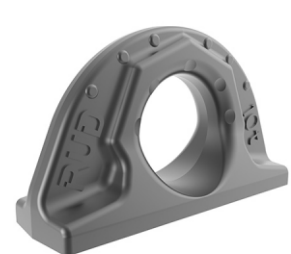


VRS, VRM

RS / RM

VLBS

ABA





## OVERVIEW – LIFTING POINTS FOR BOLTING.

ACP-TURNADO 1.35t-8t				■	■	■		■	■	■		■						■	■	■	■			■
VLBG-PLUS 0.63t-20t				■		■	■	■	■	■		■						■	■	■	■	■		
PP-S / -B / -VIP 0.63t-10t	■	■	■	■		■		■	■	■	■	■						■	■	■	■	■		
VWBG-V / VWBG 0.3t-5t / 6t-50t	■	■		■		■		■	■	■	■	■						■	■	■	■	■		
VRS-STARPOINT 0.1t-20t				■		■		■		■	■	■	■					■	■	■	■	■		
VRM-STARPOINT 0.1t-4.5t				■		■		■		■								■	■					
RS / RM 0.1t-8t				■						■	■	■	■	■	■	■		■	■					
ICE-LBG-SR 0.6 t - 6.7 t	■	■	■	■	■	■	■	■	■	■								■	■	■	■	■		■
WBPG 85t-250t	■	■		■				■	■	■								■	■					
VABH-B / VCGH-G 1.5t-6.7t / 10t-20t				■						■								■	■	■	■			
B-ABA 1.6t-31.5t				■		■				■								■	■	■	■			
RBG / VRBG 3t-50t				■		■	■	■	■	■								■	■					
T-FRB / B-FRB	■			■		■		■	■	■								■	■	■	■			
INOX-STAR 0.5t-2.5t				■		■		■		■								■			■	■		
PSA INOX-STAR / PSA VRS-STARPOINT 1-2 people				■		■		■		■								■				■		

Sling Protection
Web Slings
Round Slings
Synthetic Chain Slings
Wire Rope Slings
Chain Slings
Shackles & Turnbuckles
Hooks & Links
<b>Lifting Points</b>
Hoists & Blocks
Lifting Devices
Pipe & Hose Restraints
Tie Down Assemblies
Tie Down Accessories
Towing & Recovery
Rope & Carriage



# VWBG-V Load ring, metric thread

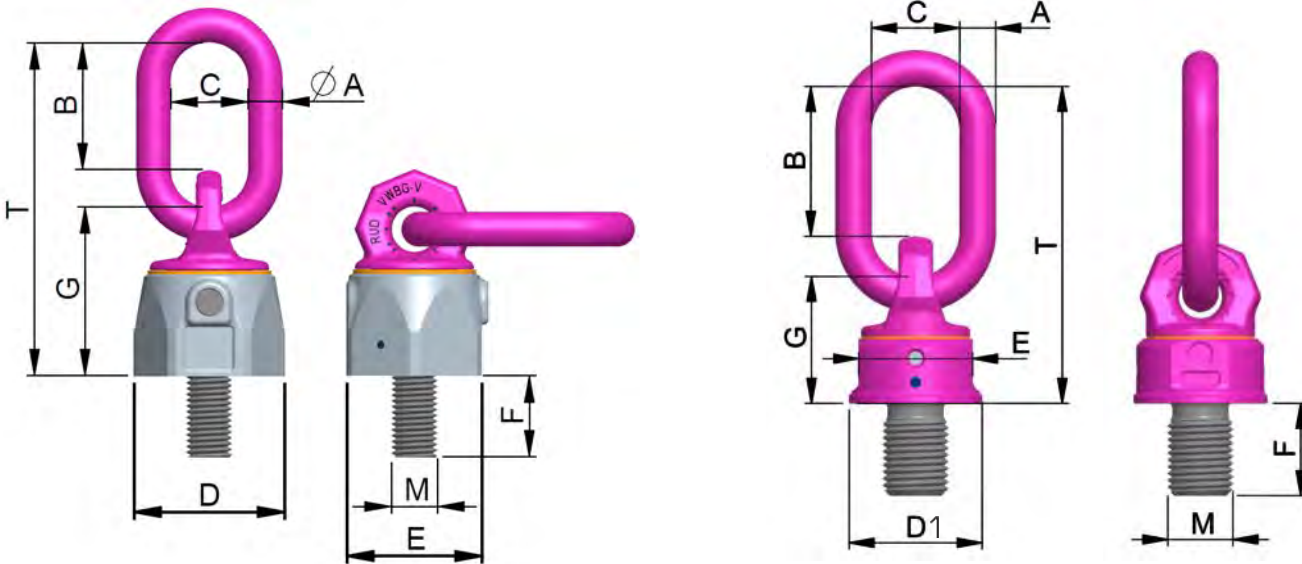
VIP Load ring for bolting - Vario / VIP Load ring for bolting  
Product details

METRIC



### Highlights

- Rotating 360°, pivoting 230°
- Optical markings for easy determination for withdraw from service
- Ball bearing



CAD RFID

Type	Item No.	WLL-X	WLL-Y	WLL-Z	Weight	T	A	B	C	D	E	F	G	M	Torque
		[t]	[t]	[t]	[kg/pc.]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[Nm]
<b>VWBG-V Load Ring - Metric</b>															
0.3t-M8	7103720	0.3	0.4	0.6	0.18	76	8	31	29	30	28	13	36	M8	10
0.45t-M10	7103715	0.45	0.6	0.9	0.29	78	8	31	29	33.5	30	17	38	M10	10
0.6t-M12	7100180	0.6	0.75	1.2	0.41	107	10	49	35	42	36	21	47	M12	10
1.0t-M14(F=21)	8600337	1	1.25	2	0.63	114	13	46	38	48	41	21	56	M14	25
1.3t-M16	7100430	1.3	1.5	2.6	0.59	114	13	46	38	48	41	25	56	M16	30
1.8t-M18(F=27)	8600338	1.8	2	3.6	1.18	137	13	54	35	62	55	27	67	M18	50
2.0t-M20	7100800	2	2.5	4	1.42	137	13	54	35	62	55	33	67	M20	70
2.0t-M22(F=33)	8600334	2	2.5	4	1.45	137	13	54	35	62	55	33	67	M22	100
3.5t-M24	7100640	3.5	4	7	2.63	173	18	66	40	81	70	40	88	M24	150
3.5t-M27(F=41)	8600335	3.5	4	7	2.65	173	18	66	40	81	70	41	88	M27	200
5.0t-M30	7100650	5	6	10	5.09	221	22	90	50	99	85	50	106	M30	225
<b>VWBG Load Ring - Metric</b>															
6(7.5)t-M33(F=50)	8600150	6	7.5	15	5.6	208	22	86	50	90	80	50	96	M33	350
8(10)t-M36	7999059	8	10	15	4.7	208	22	86	50	90	80	54	94	M36	410
12(13)t-M42	7999044	12	13	17	6.1	234	26	111	65	98	85	63	95	M42	550
12(15)t-M45	7900455	12	15	18	6.24	234	26	111	65	98	85	67	95	M45	550
13(16)t-M48	7999045	13	16	18	6.37	234	26	111	65	98	85	68	95	M48	550
14(20)t-M52	7901081	14	20	25	10.55	271	32	119	70	120	95	78	120	M52	750
16(22)t-M56	7999004	16	22	28	10.68	271	32	119	70	120	95	84	120	M56	800
16(22)t-M60(F=90)	8600454	16	22	28	11.37	271	32	119	70	120	95	90	120	M60	800
16(25)t-M64	7999043	16	25	28	11.4	271	32	119	70	120	95	94	120	M64	800
31.5(40)t-M72	7900097	31.5	40	50	29.96	338	46	130	90	170	145	108	159	M72	1200
35(48)t-M80	7900100	35	48	50	31.19	338	46	130	90	170	145	120	159	M80	1500
40(50)t-M90	7903408	40	50	50	34.53	378	46	168	110	170	145	135	159	M90	2000
40(50)t-M100(F=150)	8600458	40	50	50	6.5	378	46	168	110	170	145	150	159	M100	2000

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the warning information found in the hardware section of this catalogue

Lift it up, Tie it down, Pull it around

VWBG-V Load ring, metric thread Vari Length



VIP Vario / VIP Load ring for bolting

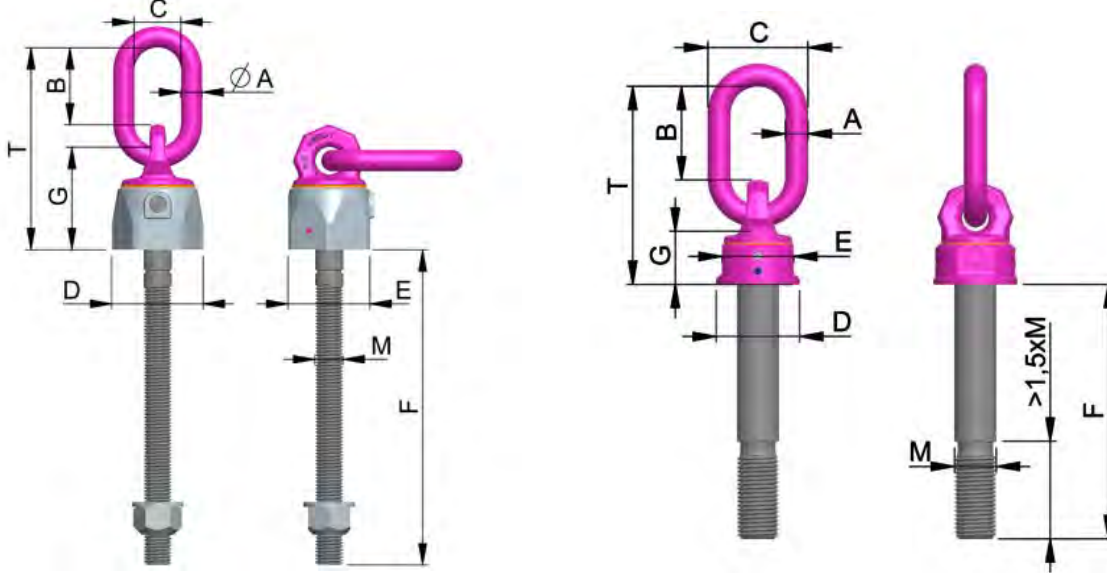
Product details

METRIC



Highlights

- Rotating 360°, pivoting 230°
- Optical markings for easy determination for withdraw from service
- Ball bearing
- Variable Length Bolt



CAD RFID

Type	Item No.	WLL-X	WLL-Y	WLL-Z	Weight	T	A	B	C	D	E	F	G	M	Torque
		[t]	[t]	[t]	[kg/pc.]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[Nm]
<b>VWBG-V Load Ring - Metric</b>															
0.3t-M8	8600330	0.3	0.4	0.6	*	76	8	31	29	30	28	8-102	36	M8	10
0.45t-M10	8600331	0.45	0.6	0.9	*	78	8	31	29	33.5	30	10-122	38	M10	10
0.6t-M12	8600332	0.6	0.75	1.2	*	107	10	49	35	42	36	12-140	47	M12	10
1t-M14	8600337	1	1.25	2	*	114	13	46	38	48	41	14-160	56	M14	25
1.3t-M16	8600333	1.3	1.5	2.6	*	114	13	46	38	48	41	16-180	56	M16	30
1.8t-M18	8600338	1.8	2	3.6	*	137	13	54	35	62	55	18-83	67	M18	50
2t-M20	8600334	2	2.5	4	*	137	13	54	35	62	55	20-223	67	M20	70
2t-M22	8600334	2	2.5	4	*	137	13	54	35	62	55	22-94	67	M22	100
3.5t-M24	8600335	3.5	4	7	*	173	18	66	40	81	70	24-255	88	M24	150
3.5t-M27	8600335	3.5	4	7	*	173	18	66	40	81	70	27-92	88	M27	200
5t-M30	8600336	5	6	10	*	221	22	90	50	99	85	30-330	106	M30	225
<b>VWBG Load Ring - Metric</b>															
6t-M33	8600150	6	7.5	15	*	208	23	86	50	90	80	33-300	94	M33	350
8t-M36-M39	8600451	8	10	15	*	208	23	86	50	90	80	36-300	94	M36-M39	410
12t-M42-M45	8600452	12	13	17	*	234	26	111	65	98	85	42-300	95	M42-M45	550
13t-M48-M52	8600453	13	16	18	*	234	26	111	65	98	85	48-300	95	M48-M52	550
14t-M52	8600158	14	20	25	*	271	32	119	70	120	95	52-300	120	M52	550
16t-M56-M60	8600454	16	22	28	*	271	32	119	70	120	95	56-300	120	M56-M60	750
16t-M64-M76	8600455	16	25	28	*	271	32	119	70	120	95	64-300	120	M64-M76	800
31.5t-M72-M76	8600456	31.5	40	50	*	338	46	130	90	170	145	72-300	159	M72-M76	800
35t-M80-M85	8600457	35	48	50	*	338	46	130	90	170	145	80-300	159	M80-M85	800
40t-M90-M150	8600458	40	50	50	*	378	46	168	110	170	145	90-300	159	M90-M150	1200

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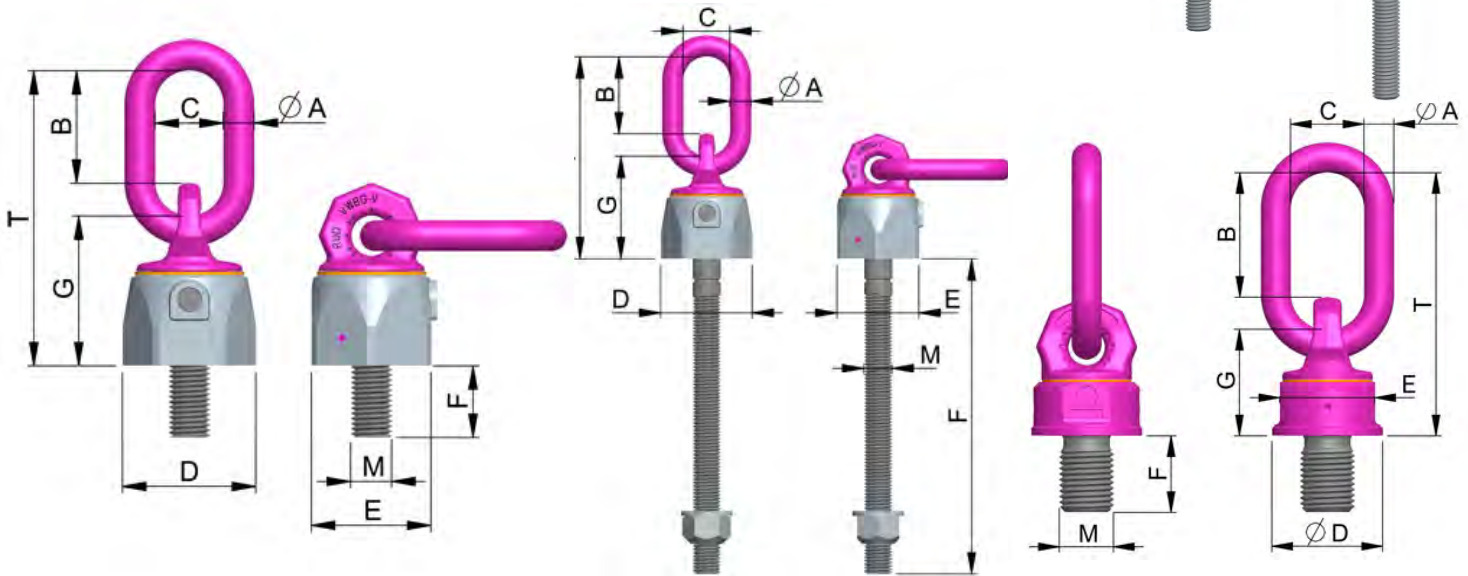
Sling Protection  
Web Slings  
Round Slings  
Synthetic Chain Slings  
Wire Rope Slings  
Chain Slings  
Shackles & Turnbuckles  
Hooks & Links  
Lifting Points  
Hoists & Blocks  
Lifting Devices  
Pipe & Hose Restraints  
Tie Down Assemblies  
Tie Down Accessories  
Towing & Recovery  
Rope & Carriage

# VWBG-V Load ring, UNC inch thread

VIP Load ring for bolting - Vario / VIP Load ring for bolting  
Product details

### Highlights

- Rotating 360°, pivoting 230°
- Optical markings for easy determination for withdraw from service
- Ball bearing



CAD RFID

Type	Item No.	WLL-X	WLL-Y	WLL-Z	Weight	T	A	B	C	D	E	F	G	M	Torque
		[t]	[t]	[t]	[lbs/pc.]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]		[Nm]
<b>VWBG-V Load Ring - UNC inch thread</b>															
0.3t-5/16"	7991090	0.3	0.4	0.6	0.4	2.99	0.31	1.22	1.14	1.18	1.10	0.51	1.42	5/16"	10
0.45t-3/8"	7991091	0.45	0.6	0.9	0.64	3.07	0.31	1.22	1.14	1.32	1.18	0.67	1.50	3/8"	10
0.6t-1/2"	7991092	0.6	0.75	1.2	0.9	4.21	0.39	1.93	1.38	1.65	1.42	0.83	1.85	1/2"	10
1.3t-5/8"	7991093	1.3	1.5	2.6	1.15	4.49	0.51	1.81	1.50	1.89	1.61	1.14	2.20	5/8"	30
2t-3/4"	7991094	2	2.5	4	3.13	5.39	0.51	2.13	1.38	2.44	2.17	1.10	2.64	3/4"	70
3.5t-1"	7991095	3.5	4	7	5.81	6.81	0.71	2.60	1.57	3.19	2.76	1.50	3.46	1"	150
5t-1-1/4"	7991096	5	6	10	1.22	8.70	0.87	3.54	1.97	3.90	3.35	1.85	4.17	1-1/4"	225
<b>VWBG-V Load Ring - UNC inch thread w/ Vario bolt</b>															
0.6t-1/2"	8600332	0.6	0.75	1.2	*	4.21	0.39	1.93	1.38	1.65	1.42	1.6"-5.9"	1.85	1/2"	10
1.3t-5/8"	8600333	1.3	1.5	2.6	*	4.49	0.51	1.81	1.50	1.89	1.61	2.0"-7.1"	2.20	5/8"	30
2t-3/4"	8600334	2	2.5	4	*	5.39	0.51	2.13	1.38	2.44	2.17	2.2"-8.7"	2.64	3/4"	70
3.5t-1"	8600335	3.5	4	7	*	6.81	0.71	2.60	1.57	3.19	2.76	2.5"-9.7"	3.46	1"	150
5t-1-1/4"	8600336	5	6	10	*	8.70	0.87	3.54	1.97	3.90	3.35	3.0"-13"	4.17	1-1/4"	225
<b>VWBG Load Ring - UNC inch thread</b>															
8t-1-1/2"	8600451	8	10	15	10.56	8.19	0.87	3.39	1.97	3.54	3.15	2.24	3.70	1-1/2"	410
12t-1-3/4"	8600452	12	13	17	13.54	9.21	1.02	4.37	2.56	3.86	3.35	2.60	3.74	1-3/4"	550
13t-2"	8600453	13	16	18	13.67	9.21	1.02	4.37	2.56	3.86	3.35	2.99	3.74	2"	550
16t-2-1/4"	8600454	16	22	28	24.25	10.67	1.26	4.69	2.76	4.72	3.74	3.35	4.72	2-1/4"	800
16t-2-1/2"	8600454	16	22	28	25.35	10.67	1.26	4.69	2.76	4.72	3.74	3.74	4.72	2-1/2"	800
16t-2-3/4"	8600455	16	25	28	26.46	10.67	1.26	4.69	2.76	4.72	3.74	4.09	4.72	2-3/4"	800
31.5t-3"	8600456	31.5	40	50	57.98	13.31	1.81	5.12	3.54	6.69	5.71	4.49	6.26	3"	1200
35t-3-1/2"	8600457	35	48	50	61.73	13.31	1.81	5.12	3.54	6.69	5.71	5.24	6.26	3-1/2"	1500
40t-4"	8600458	40	50	50	80.91	14.88	1.81	6.61	4.33	6.69	5.71	5.91	6.26	4"	2000
40t-4-1/2"	8600458	40	50	50	89.51	14.88	1.81	6.61	4.33	6.69	5.71	6.69	6.26	4-1/2"	2000
40t-5"	8600458	40	50	50	100.3	14.88	1.81	6.61	4.33	6.69	5.71	7.48	6.26	5"	2000

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**VLBG-PLUS Load ring, metric thread**

**VIP Load ring for bolting PLUS**

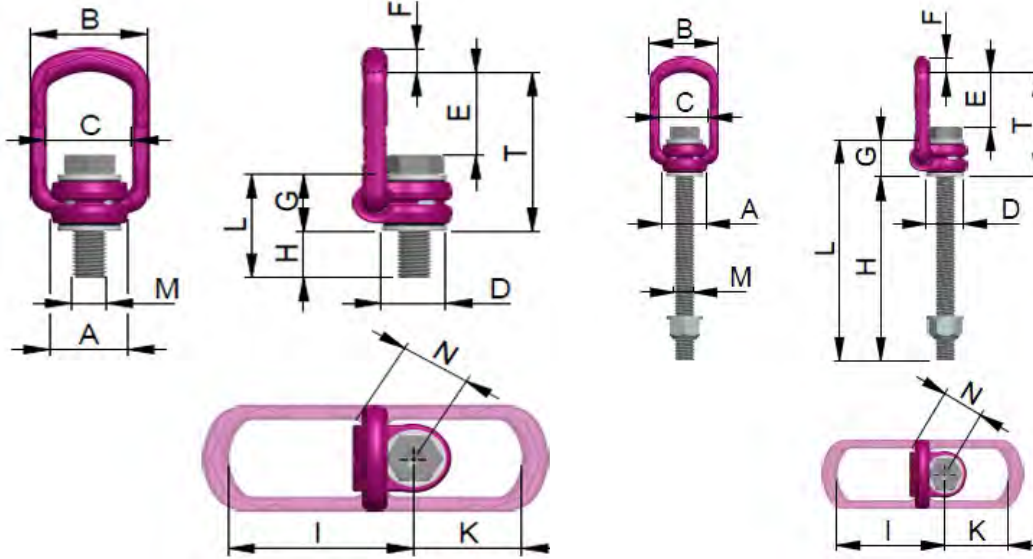
Product details

**Highlights**

- Optimum WLL with captive but exchangeable ICE-Bolt
- Bracket adjustable in force direction
- Comprehensive range of threads



**METRIC**



CAD RFID

Type	Item No.	WLL-X	Wght	T	A	B	C	D	E	F	G	H	J	K	L	M	N	Torque
		[t]	kg/pc.	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[Nm]
<b>VLBG-PLUS VIP Load ring for bolting PLUS – metric</b>																		
0.63t-M8	8504651	0.63	0.3	75	30	54	34	24	40	10	29	11	75	45	40	M8	32	30
0.9t-M10	8504652	0.9	0.3	75	30	54	34	24	39	10	29	15	75	45	44	M10	32	60
1.35t-M12	8504653	1.35	0.3	75	32	54	34	26	38	10	29	18	75	45	47	M12	32	150
2t-M16	8504655	2	0.6	85	33	56	36	30	39	13.5	36	22	86	47	58	M16	38	150
3.5t-M20	8504657	3.5	1.3	110	50	82	54	45	55	16.5	43	32	113	64	75	M20	48	400
4.5t-M24	8504659	4.5	1.5	125	50	82	54	45	67	18	43	37	130	78	80	M24	48	760
6.7t-M30	8504661	6.7	3.3	147	60	103	65	60	67	22.5	61	49	151	80	110	M30	67	1000
8t-M36	7983553	8	6.2	197	77	122	82	70	97	26.5	77	63	205	110	140	M36	87	800
10t-M42	7983554	10	6.7	197	77	122	82	70	94	26.5	77	73	205	110	150	M42	70	1000
15t-M42	7982966	15	10.9	222	95	156	100	85	109	36	87	63	230	130	150	M42	100	1500
20t-M48	7982967	20	11.6	222	95	156	100	95	105	36	87	73	230	130	160	M48	100	2000
<b>VLBG Load ring for bolting – metric intermediate thread sizes with longer Vario bolt</b>																		
1.2t-M14	8600399	1.2	*	85	33	56	36	30	39	13.5	36	14-34	86	47	50-70	M14	38	120
2t-M18	8600384	2	*	110	50	82	54	45	55	16.5	43	18-47	113	64	61-90	M18	48	200
2.5t-M22	8600385	2.5	*	110	50	82	54	45	54	16.5	43	22-57	113	64	65-100	M22	48	250
4t-M27	8600387	4	*	147	60	103	65	60	69	22.5	61	27-239	151	80	88-300	M27	67	400
7t-M36	8500829	7	3.4	146	60	103	65	60	74	22.5	55	52	151	80	107	M36	67	700

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Sling Protection  
Slings  
Slings  
Synthetic Chain Slings  
Wire Rope Slings  
Chain Slings  
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Rope & Cordage

# VLBG-PLUS Load ring, metric , longer Vario bolt / Fine thread Vario

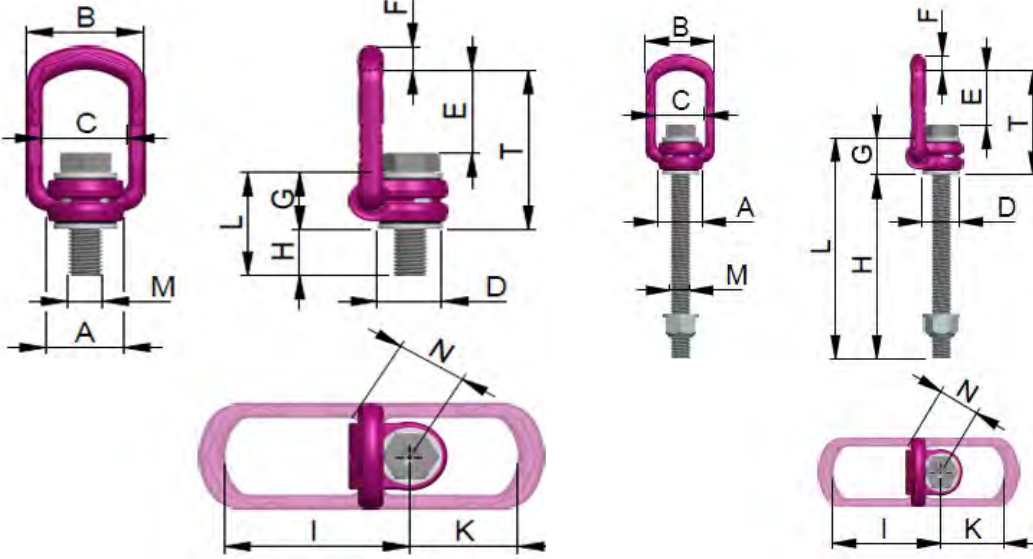
## VIP Load ring for bolting PLUS

Product details

### Highlights

- Optimum WLL with captive but exchangeable ICE-Bolt
- Bracket adjustable in force direction
- Comprehensive range of threads

METRIC



CAD RFID

Type	Item No.	WLL-X	Wght	T	A	B	C	D	E	F	G	H	J	K	L	M	N	Torque
		[t]	kg/pc.	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[Nm]
<b>VLBG-PLUS VIP Load ring for bolting PLUS – metric with longer Vario bolt</b>																		
0.63t-M8	8504651	0.63	*	75	30	54	34	24	40	10	29	8-76	75	45	37-105	M8	32	30
0.9t-M10	8504652	0.9	*	75	30	54	34	24	39	10	29	10-96	75	45	39-125	M10	32	60
1.35t-M12	8504653	1.35	*	75	32	54	34	26	38	10	29	12-116	75	45	41-145	M12	32	150
2t-M16	8504655	2	*	85	33	56	36	30	39	13.5	36	16-149	86	47	52-185	M16	38	150
3.5t-M20	8504657	3.5	*	110	50	82	54	45	55	16.5	43	20-187	113	64	63-230	M20	48	400
4.5t-M24	8504659	4.5	*	125	50	82	54	45	67	18	43	24-222	130	78	67-265	M24	48	760
6.7t-M30	8504661	6.7	*	147	60	103	65	60	67	22.5	61	30-279	151	80	91-340	M30	67	1000
8t-M36	7983553	8	*	197	77	122	82	70	97	26.5	77	36-223	205	110	113-300	M36	87	800
10t-M42	7983554	10	*	197	77	122	82	70	94	26.5	77	42-273	205	110	119-350	M42	70	1000
15t-M42	7982966	15	*	222	95	156	100	85	109	36	87	42-263	230	130	129-350	M42	100	1500
20t-M48	7982967	20	*	222	95	156	100	95	105	36	87	48-303	230	130	135-350	M48	100	2000
<b>VLBG VIP Load ring for bolting PLUS – metric fine thread with longer Vario bolt</b>																		
1.2t-M14	8600399	1.2	*	85	33	56	36	30	39	13.5	36	14-34	86	47	50-70	M14	38	120
2t-M18	8600384	2	*	110	50	82	54	45	55	16.5	43	18-47	113	64	61-90	M18	48	200
2.5t-M22	8600385	2.5	*	110	50	82	54	45	54	16.5	43	22-57	113	64	65-100	M22	48	250
4t-M27	8600387	4	*	147	60	103	65	60	69	22.5	61	27-239	151	80	88-300	M27	67	400
7t-M36	8500829	7	3.4	146	60	103	65	60	74	22.5	55	52	151	80	107	M36	67	700

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

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Sling Protection  
Web Slings  
Round Slings  
Synthetic Chain Slings  
Wire Slings  
Chain Slings  
Shackles & Turnbuckles  
Hooks & Links  
Lifting Points  
Hoists & Blocks  
Lifting Devices  
Pipe & Hose Restraints  
The Down Assemblies  
The Down Accessories  
Towing & Recovery  
Rope & Cordage



**VLBG-Z Load ring, UNC inch thread / UNC with longer Vario bolt**

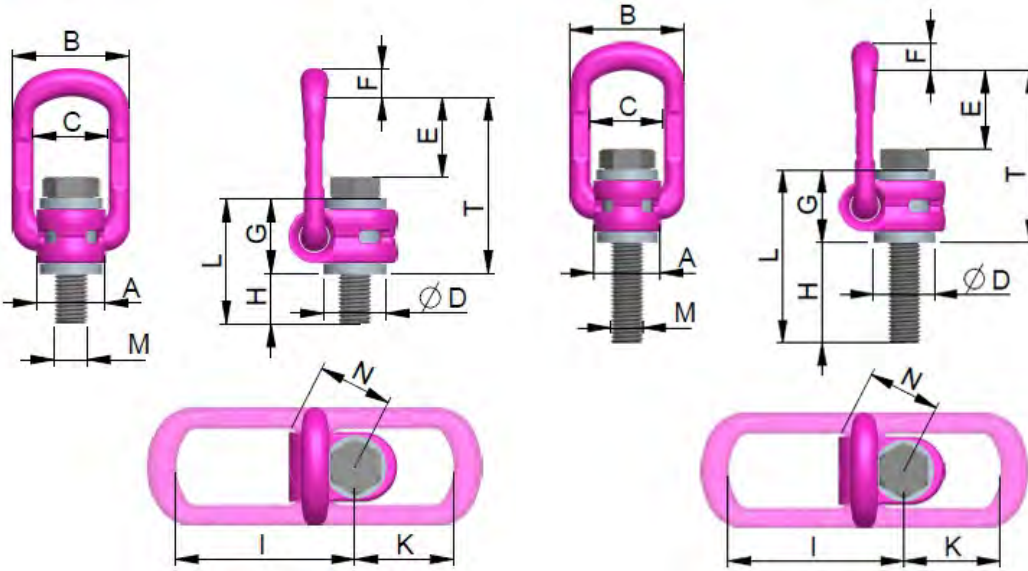
**VIP Load ring for bolting**

Product details

**Highlights**

- Optimum WLL with captive but exchangeable ICE-Bolt
- Bracket adjustable in force direction
- Comprehensive range of threads

**UNC**



CAD RFID

Type	Item No.	WLL-X	Wght	T	A	B	C	D	E	F	G	H	J	K	L	M	N	Torque
		[t]	kg/pc.	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]		[inch]	[ft-lb]
<b>VLBG-Z VIP Load ring for bolting – UNC inch thread</b>																		
0.63t-3/8"	8504256	0.63	0.29	2.95	1.18	2.13	1.34	0.94	1.54	0.39	1.14	0.63	2.95	1.77	1.77	3/8"	1.26	44
1t-1/2"	8502349	1	0.36	2.95	1.26	2.13	1.34	1.02	1.50	0.39	1.14	0.87	2.95	1.77	1.97	1/2"	1.26	74
1.5t-5/8"	8502350	1.5	0.50	3.35	1.3	2.20	1.42	1.18	1.54	0.53	1.42	0.94	3.39	1.85	2.36	5/8"	1.5	111
2.5t-3/4"	8502351	2.5	1.3	4.33	1.97	3.23	2.13	1.77	2.17	0.65	1.69	1.10	4.45	2.52	2.8	3/4"	1.89	184
2.5t-7/8"	8502352	2.5	1.25	4.33	1.97	3.23	2.13	1.77	2.17	0.65	1.69	1.06	4.45	2.52	2.76	7/8"	1.89	184
4t-1"	8502353	4	1.50	4.92	1.97	3.23	2.13	1.77	2.64	0.71	1.69	1.61	5.12	3.07	3.31	1"	1.89	295
5t-1-1/4"	8503187	5	3.33	5.79	2.36	4.06	2.56	2.36	2.52	0.89	2.40	1.61	5.94	3.15	4.02	1-1/4"	2.64	369
5t-1-1/4"	8502354	5	3.33	5.79	2.36	4.06	2.56	2.36	2.52	0.89	2.40	1.61	5.94	3.15	4.02	1-1/4"	2.64	369
8t-1-1/2"	8504257	8	6.2	7.76	3.03	4.80	3.23	2.76	3.82	1.04	3.03	2.44	8.07	4.33	5.51	1-1/2"	3.43	590
20t-2"	8504258	20	11.7	8.74	3.74	6.14	3.94	3.74	4.13	1.42	3.43	2.72	9.06	5.12	6.14	2"	3.94	1,475
<b>VLBG-Z VIP Load ring for bolting – UNC inch thread with longer Vario bolt</b>																		
0.63t-3/8"	8600440	0.63	*	2.95	1.18	2.13	1.34	0.94	1.54	0.39	1.14	0.4-3.9	2.95	1.77	1.5-5	3/8"	1.26	44
1t-1/2"	8600441	1	*	2.95	1.26	2.13	1.34	1.02	1.50	0.39	1.14	0.5-4.8	2.95	1.77	1.7-6	1/2"	1.26	74
1.5t-5/8"	8600442	1.5	*	3.35	1.3	2.20	1.42	1.18	1.54	0.53	1.42	0.6-5.8	3.39	1.85	2-7.2	5/8"	1.5	111
2.5t-3/4"	8600443	2.5	*	4.33	1.97	3.23	2.13	1.77	2.17	0.65	1.69	0.7-7.3	4.45	2.52	2.4-9	3/4"	1.89	184
2.5t-7/8"	8600444	2.5	*	4.33	1.97	3.23	2.13	1.77	2.17	0.65	1.69	0.9-8.3	4.45	2.52	2.6-10	7/8"	1.89	184
4t-1"	8600445	4	*	4.92	1.97	3.23	2.13	1.77	2.64	0.71	1.69	1-8.3	5.12	3.07	2.7-10	1"	1.89	295
5t-1-1/4"	8600446	5	*	5.79	2.36	4.06	2.56	2.36	2.52	0.89	2.40	1.3-10.9	5.94	3.15	3.7-13.3	1-1/4"	2.64	369
8t-1-1/2"	8600447	8	*	7.76	3.03	4.80	3.23	2.76	3.82	1.04	3.03	1.5-10.6	8.07	4.33	0.4-13.7	1-1/2"	3.43	590
20t-2"	8600448	20	*	8.74	3.74	6.14	3.94	3.74	4.13	1.42	3.43	2-11.9	9.06	5.12	0.5-15.3	2"	3.94	1,475

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

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866-787-7544

Sling Protection  
Web Slings  
Round Slings  
Synthetic Chain Slings  
Wire Rope Slings  
Chain Slings  
Shackles & Turnbuckles  
Hooks & Links  
Lifting Points  
Hoists & Blocks  
Lifting Devices  
Pipe & Hose Restraints  
Tie Down Assemblies  
Tie Down Accessories  
Towing & Recovery  
Rope & Cordage

VRS-F metric thread with STAR KEY

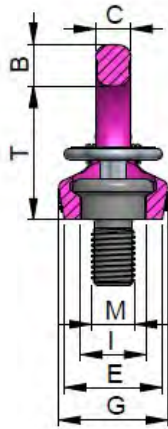
Swivelling Eye Bolt for bolting

Product details

Highlights

- 360° adjustable in force direction
- several times higher WLL than the DIN 580 eye bolt
- Easy-Fit-Key for easy assembly and disassembly

METRIC



CAD RFID

Type	Item No.	WLL-X	Wght	T	B	C	D	E	G	I	K	L	M	N	Torque
		[t]	kg/pc.	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]	[Nm]
<b>VRS-F STARPOINT – metric with (VRS-F) STAR KEY</b>															
0.1t-M6	7900906	0.1	0.07	28	9	7	20	23	28	13	37	9	M6	6	5
0.3t-M8	8500911	0.3	0.12	35	11	9	25	25	30	16.3	47	12	M8	6	10
0.4t-M10	7104029	0.4	0.12	35	11	9	25	25	30	16.3	47	15	M10	6	10
0.75t-M12	7101313	0.75	0.2	42	13	10	30	30	34	19.8	56	18	M12	8	25
0.75t-M14	7999330	0.75	0.21	42	13	10	30	30	34	19.8	56	18	M14	8	30
1.5t-M16	7101314	1.5	0.3	49	15	13	35	36	40	23.5	65	24	M16	10	60
1.5t-M18	7903387	1.5	0.35	49	15	13	35	36	40	23.5	65	24	M18	10	60
2.3t-M20	7101315	2.3	0.5	58	17	16	40	41	50	29.3	76	30	M20	12	115
2.3t-M22	7992197	2.3	0.5	58	17	16	40	41	50	29.3	76	30	M22	12	125
3.2t-M24	7101316	3.2	0.8	70	20	19	49	51	60	35	92	36	M24	14	190
3.2t-M27	7994138	3.2	1	70	20	19	49	51	60	35	92	36	M27	14	250
4.5t-M30	7101317	4.5	1	87	26	24	60	66	75	44	114	45	M30	17	330
4.5t-M33	7993439	4.5	1.8	87	26	24	60	66	75	44	114	45	M33	17	350
7t-M36	7984201	7	3.5	103	32	29	72	76	97	53	135	54	M36	22	590
<b>VRS-F STARPOINT – metric with Longer Vario bolt</b>															
0.4t-M10	8600270	0.4	*	35	11	9	25	25	30	16.3	47	16-70	M10	6	10
0.75t-M12	8600271	0.75	*	42	13	10	30	30	34	19.8	56	19-150	M12	8	25
1.5t-M16	8600272	1.5	*	49	15	13	35	36	40	23.5	65	16-120	M16	10	60
2.3t-M20	8600273	2.3	*	58	17	16	40	41	50	29.3	76	31-160	M20	12	115
3.2t-M24	8600274	3.2	*	70	20	19	49	51	60	35	92	37-140	M24	14	190
4.5t-M30	8600275	4.5	*	87	26	24	60	66	75	44	114	46-190	M30	17	330

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Sling Protection  
Web Slings  
Round Slings  
Synthetic Chain Slings  
Sling Slings  
Wire Slings  
Chain Slings  
Shackles & Turnbuckles  
Hooks & Links  
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Hoists & Blocks  
Lifting Devices  
Pipe & Hose Restraints  
Tie Down Assemblies  
Tie Down Accessories  
Towing & Recovery  
Rope & Cordage

Lift it up, Tie it down, Pull it around

## VRS-F UNC inch thread with STAR KEY

Swivelling Eye Bolt for bolting

Product details

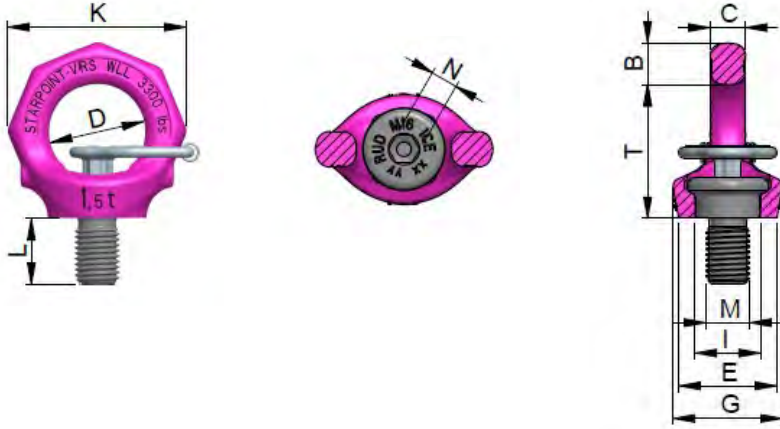


UNC



### Highlights

- 360° adjustable in force direction
- several times higher WLL than the DIN 580 eye bolt
- Easy-Fit-Key for easy assembly and disassembly



CAD RFID

Type	Item No.	WLL-X	Wght	T	B	C	D	E	G	I	K	L	M	N	Torque
		[t]	[lbs/pc]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]	[inch]		[inch]	[ft. lbs]
<b>VRS-F STARPOINT – metric with (VRS-F) STAR KEY</b>															
0.3t-5/16"-18	7999106	0.3	0.29	1.38	0.43	0.35	0.98	0.98	1.18	0.64	1.85	0.47	5/16"-18	1/4"	7.4
0.1t-1/4"-20	7999105	0.1	0.53	1.10	0.35	0.28	0.79	0.91	1.10	0.51	1.46	0.35	1/4"-20	1/4"	3.7
0.4t-3/8"-16	7104480	0.4	0.26	1.38	0.43	0.35	0.98	0.98	1.18	0.64	1.85	0.75	3/8"-16	1/4"	7.4
0.4t-7/16"-14	7904195	0.4	0.26	1.38	0.43	0.35	0.98	0.98	1.18	0.64	1.85	0.75	7/16"-14	1/4"	7.4
0.75t-1/2"-13	7104481	0.75	0.49	1.65	0.51	0.39	1.18	1.18	1.34	0.78	2.20	0.75	1/2"-13	5/16"	18.4
1.5t-5/8"-11	7104482	1.5	0.73	1.93	0.59	0.51	1.38	1.42	1.57	0.93	2.56	0.94	5/8"-11	3/8"	44.3
1.5t-3/4"-10	7104483	1.5	0.99	1.93	0.59	0.51	1.38	1.42	1.57	0.93	2.56	0.94	3/4"-10	1/2"	84.8
2.3t-7/8"-9	7104484	2.3	1.41	2.28	0.67	0.63	1.57	1.61	1.97	1.16	2.99	1.30	7/8"-9	1/2"	84.8
3.2t-1"-8	7104485	3.2	2.16	2.76	0.79	0.75	1.93	2.01	2.36	1.38	3.62	1.50	1"-8	9/16"	140.1
3.2t-1-1/8"-8	7903386	3.2	2.16	2.76	0.79	0.75	1.93	2.01	2.36	1.38	3.62	1.42	1-1/8"-8	9/16"	184.4
3.2t-1-1/8"-7	7903383	3.2	2.16	2.76	0.79	0.75	1.93	2.01	2.36	1.38	3.62	1.42	1-1/8"-7	9/16"	184.4
4.5t-1-1/4"-7	7104486	4.5	4.01	3.43	1.02	0.94	2.36	2.60	2.95	1.73	4.49	1.89	1-1/4"-7	3/4"	243.4
7t-1-1/2"-6	7104487	7	7.94	4.06	1.26	1.14	2.83	2.99	3.82	2.09	5.31	2.13	1-1/2"-6	7/8"	435.2
9t-1-3/4"-5	7104488	9	10.91	4.76	1.46	1.30	3.31	3.39	4.37	2.44	6.22	2.48	1-3/4"-5	1"	682.2
12t-2"-4.5	7104469	12	16.76	5.43	1.65	1.65	3.70	3.94	5.04	2.76	7.09	2.83	2"-4.5	1-1/8"	1032.6

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Sling Protection  
Web Slings  
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Synthetic Chain Slings  
Wire Rope Slings  
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Tie Down Assemblies  
Tie Down Accessories  
Towing & Recovery  
Rope & Cordage





VRS / socket wrench

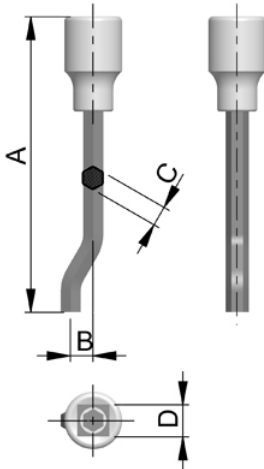
Starpoint Accessories

Product details

Socket Wrench

The safety against the disengaging of the bolt connection of lifting points is mainly influenced by the torque of the bolt. Lifting points, which permanently remain on the point of the force introduction, must be tightened according to the corresponding user manual. For permanent use, the lifting points for bolting must be checked regularly for tightness. The cranked socket wrench for the Starpoint-Vario-eye bolt enables an easy tightening with a suitable torque.

Observe the user manual for Starpoint VRS and socket wrench.  
Socket wrench is nickel-plated - therefore also suitable for INOX-STAR.



Type	Item No.	Wght	A	B	C	D	M
		kg/pc.	[mm]	[mm]	[mm]	[inch]	[mm]
<b>VRS-F Socket Wrench</b>							
VRS SOCKET WRENCH	7997749	0.09	118	7.5	6	1/2"	M6+M8+M10
VRS SOCKET WRENCH	7997750	0.11	118	9	8	1/2"	M12+M14
VRS SOCKET WRENCH	7997751	0.15	138	12	10	1/2"	M16+M18
VRS SOCKET WRENCH	7997752	0.2	137	14	12	1/2"	M20+M22
VRS SOCKET WRENCH	7997753	0.24	140	16.5	14	1/2"	M24+M27
VRS SOCKET WRENCH	7902078	0.47	152	22	17	1/2"	M30+M33
VRS SOCKET WRENCH	7902079	1.0	192	26	22	1"	M36
VRS SOCKET WRENCH	7902080	1.2	276	29.33	24	1"	M42
VRS SOCKET WRENCH	7902081	2.0	304		27	1"	M48

VRS / STAR KEY

Socket Wrench

Replacement Key With Spring

Type	Item No.	Wght	M
		kg/pc.	
<b>VRS STAR KEY - Metric</b>			
STAR KEY	7983986	0.02	M6+M8+M10
STAR KEY	7905453	0.02	M12+M14
STAR KEY	7903254	0.03	M16+M18
STAR KEY	7904282	0.04	M20+M22
STAR KEY	7904283	0.08	M24+M27
STAR KEY	7904284	0.12	M30+M33
STAR KEY	7904285	0.15	M36
STAR KEY	7904286	0.3	M42
STAR KEY	7904287	0.4	M48
<b>VRS STAR KEY - UNC inch thread</b>			
STAR KEY	7983995	0.02	5/16"-18UNC+3/8"-16UNC+7/16"-14UNC
STAR KEY	7983996	0.02	1/2"-13UNC
STAR KEY	7983997	0.03	5/8"-11UNC
STAR KEY	7983998	0.04	3/4"-10UNC+7/8"-9UNC
STAR KEY	7983999	0.08	1"-8UNC+1-1/8"-8UNC+1-1/8"-7UNC
STAR KEY	7984000	0.12	1-1/4"-7UNC
STAR KEY	7984001	0.15	1-1/2"-6UNC
STAR KEY	7984002	0.3	1-3/4"-5UNC
STAR KEY	7984003	0.4	2"-4.5UNC



**VRM metric thread**

**Swivelling Eye Nut for bolting**

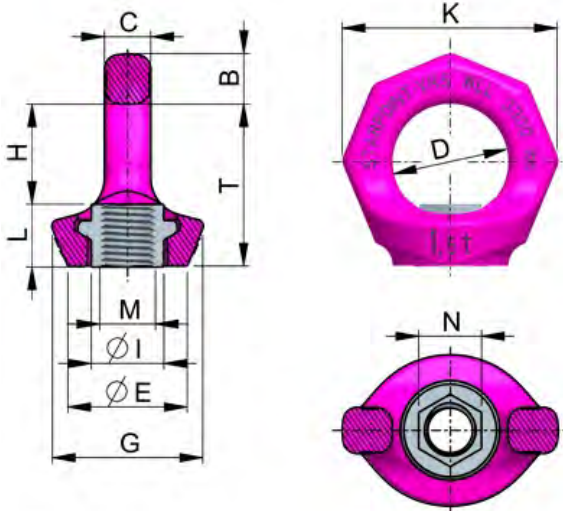
Product details

**Highlights**

- pivots 360° for adjustment in load direction
- clear marking of the minimum WLL
- quick and easy installation



METRIC



CAD RFID

Type	Item No.	WLL-X	Wght	T	B	C	D	E	G	H	I	K	L	M	N
		[t]	kg/pc.	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]
<b>VRS-F STARPOINT – metric with (VRS-F) STAR KEY</b>															
0.1t-M6	7900786	0.1	0.05	28	9	7	20	23	28	17	13	37	11	M6	9
0.3t-M8	7992989	0.3	0.1	35	11	9	25	25	30	21	16	47	14	M8	12
0.4t-M10	7990311	0.4	0.1	35	11	9	25	25	30	21	16	47	14	M10	12
0.75t-M12	7990312	0.75	0.2	42	13	10	30	30	34	25	20	56	17	M12	14
1.5t-M16	7990314	1.5	0.3	49	15	13	35	36	40	31	22	65	21	M16	19
2.3t-M20	7990315	2.3	0.5	58	17	16	40	41	50	35	29	76	23	M20	24
3.2t-M24	7990316	3.2	0.9	70	20	19	49	51	60	41	35	92	29	M24	30
4.5t-M30	7993008	4.5	1.5	87	26	24	60	66	75	51	44	114	36	M30	36

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- Sling Protection
- Web Slings
- Round Slings
- Synthetic Chain Slings
- Wire Rope Slings
- Chain Slings
- Shackles & Turnbuckles
- Hooks & Links
- Lifting Points
- Hoists & Blocks
- Lifting Devices
- Pipe & Hose Restraints
- Tie Down Assemblies
- Tie Down Accessories
- Towing & Recovery
- Rope & Carriage

ACP-Tornado

Automatic-Center Lifting Point

Product details

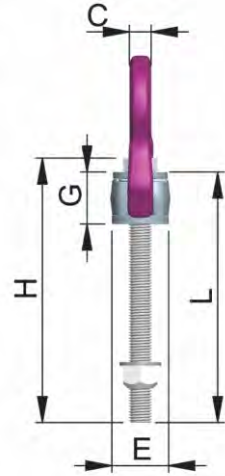
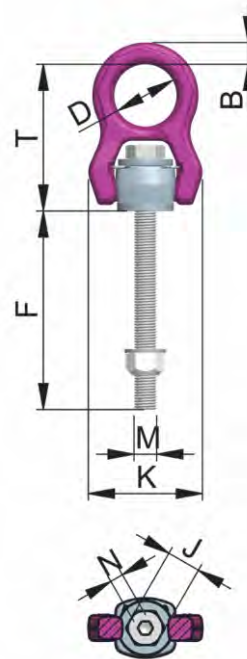
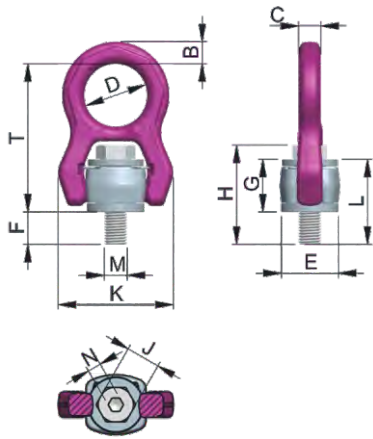
UNC

METRIC



Highlights

- No kinking
- RUD's ingenious spring mechanism
- Higher working load limits (WLL) compared to hoist rings of the same size



\*Special Order\*

CAD	RFID	Type	Item No. w/ Bolt	WLL	Wgt	B	C	D	E	F std	F max	G	H	K	L	L max	M	N	J	T	Trqe	
				[t]	[lbs]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	[in]	ft/lbs
		1.1t - 1/2"	7909417	1.1	0.83	0.43	0.41	1.50	1.18	0.71	4.90	1.10	2.13	2.28	1.81	6.00	1/2"	5/16"	3/4"	3.27	60	
		2t - 5/8"	7909418	2.0	1.80	0.55	0.55	1.97	1.57	0.87	5.85	1.42	2.68	2.99	2.28	7.24	5/8"	3/8"	15/16"	4.21	110	
		3.2t - 3/4"	7909419	3.2	2.96	0.67	0.68	1.97	1.77	1.00	7.28	1.71	3.17	3.50	2.72	9.00	3/4"	1/2"	1-1/8"	4.65	220	
		5t - 1"	7909420	5.0	6.93	0.91	0.91	2.60	2.36	1.42	7.83	2.17	4.19	4.74	3.58	10.00	1"	9/16"	1-1/2"	6.06	370	
		6.4t - 1-1/4"	7909421	6.4	12.70	1.14	1.06	2.95	2.95	1.83	10.67	2.70	5.30	5.83	4.53	13.37	1-1/4"	5/8"	1-7/8"	7.20	590	

CAD	RFID	Type	Item No. w/ Bolt	WLL	Wgt	B	C	D	E	F std	F max	G	H	K	L	L max	M	N	J	T	Trqe	
				[t]	[kg/pc]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[Nm]
		1.1t - M12	7909314	1.1	0.375	11	10.5	38	30	19	117	28	54.5	58	47	145	12	8	19	83	80	
		2t - M16	7909316	2.0	0.815	14	14	50	40	22	149	36	68	76	58	185	16	10	24	107	150	
		3.2t - M20	7909317	3.2	1.342	17	17.3	50	45	26.5	186.5	43.5	82	89	70	230	20	12	30	118	300	
		5t - M24	7909318	5.0	3.03	23	23	66	60	34	210	55	104	120.5	89	265	24	14	36	154	500	
		6.4t - M30	7909319	6.4	5.66	29	27	75	75	41.5	271.5	68.5	128	148	110	340	30	17	46	183	800	

\*

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the warning information found in the hardware section of this catalogue

Sling Protection  
Web Slings  
Round Slings  
Synthetic Chain Slings  
Sling Rods  
Chain Slings  
Shackles & Turnbuckles  
Hooks & Links  
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Hoists & Blocks  
Lifting Devices  
Pipe & Hose Restraints  
Tie Down Assemblies  
Tie Down Accessories  
Towing & Recovery  
Rope & Cordage



## Green Pin® ADA Rotating Hoist Ring

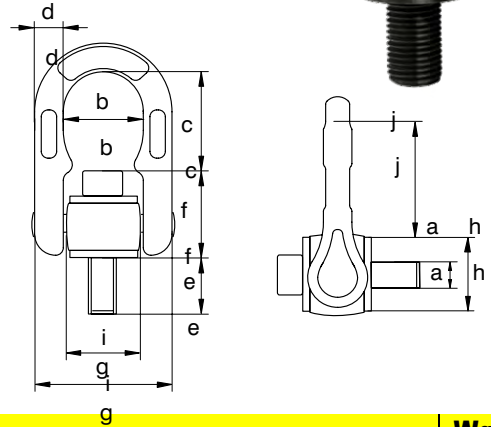
### Description

The Green Pin® Rotating Hoist Ring is a grade 8 rotating hoist ring. The hoist ring can rotate 360° and pivot 180°. It has ISO metric threads as standard. Other special threads such as UNC are also available. The cylindric head of the screw prevents jamming during rotation of the shackle. The WLL indicated hereunder are given in the worst conditions of use, i.e. 90°. It is necessary to check the free moving of the pivoting shackle. The minimum safety factor is 5:1. The Green Pin® Rotating Hoist Ring is available in a range with a working load limit from 0.4 t. up to 12.5 t.



### Product details:

- Product code: ADA
- Material: alloy steel, Grade 8, quenched and tempered
- Safety factor: MBL equals 5 x WLL
- Finish: painted white
- Temp. range: -40°C up to +200°C
- Certification: 2.1, 2.2, 3.1, MPIb, CE
- Note: WLL indicated hereunder are given in the worst conditions of use, i.e. 90°



## Green Pin® ADA UNC Hoist Ring

Item Code	WLL	Torque	Thread UNC	DIMENSIONS (in)									Wgt ea
				B	C	D	E	F	G	H	I	J	
GPADA08UNC	880	10	5/16	1.38	1.63	0.5	0.72	1.38	2.69	1.34	1.5	1.69	0.94
GPADA10UNC	1,320	10	3/8	1.38	1.53	0.5	0.72	1.47	2.69	1.34	1.5	1.69	0.97
GPADA12UNC	2,200	20	1/2	1.38	1.41	0.5	0.94	1.53	2.69	1.34	1.5	1.69	1
GPADA16UNC	3,750	60	5/8	1.38	1.66	0.5	1.22	1.69	2.69	1.34	1.5	2.06	1.22
GPADA20UNC	5,510	110	3/4	1.38	1.5	0.5	1.22	1.84	2.69	1.34	1.5	2.06	1.22
GPADA22UNC	7,720	150	7/8	2.09	2.25	0.78	1.47	2.72	4.13	1.94	2.22	2.78	4.16
GPADA24UNC	9,920	190	1	2.09	2.16	0.78	1.69	2.78	4.13	1.94	2.22	2.78	4.25
GPADA32UNC	14,990	380	1 1/4	2.09	2.47	0.78	2.16	2.53	4.13	1.94	2.22	2.78	4.66
GPADA38UNC	23,810	600	1 1/2	2.88	3.63	1.19	2.94	3.28	5.75	2.69	3.03	3.84	12.25
GPADA50UNC	29,980	1000	2	2.88	3.75	1.19	2.94	3.16	5.75	2.69	3.34	3.84	13.66

## Green Pin® ADA Metric Hoist Ring

Item Code	WLL	Torque	Thread	DIMENSIONS (mm)									Wgt ea
				A	B	C	D	E	F	G	H	I	
GPADA08	0.4	6.5	8	35	41	13	18	35	68	34	38	43	0.43
GPADA10	0.7	13	10	35	39	13	18	37	68	34	38	43	0.44
GPADA12	1	22	12	35	36	13	22	39	68	34	38	43	0.46
GPADA14	1.3	35	14	35	35	13	22	42	68	34	38	43	0.47
GPADA16	1.6	55	16	35	42	13	28	43	68	34	38	52	0.52
GPADA18	2	80	18	35	40	13	28	45	68	34	38	52	0.54
GPADA20	2.5	110	20	35	38	13	32	47	68	34	38	52	0.59
GPADA22	3	150	22	53	57	20	33	69	105	49	56	71	1.88
GPADA24	4	190	24	53	55	20	39	71	105	49	56	71	1.93
GPADA27	5	280	27	53	61	20	45	65	105	49	56	71	1.96
GPADA30	6.3	380	30	53	61	20	45	65	105	49	56	71	2.03
GPADA33	7	520	33	71	87	30	54	83	146	68	77	98	5.28
GPADA36	10	600	36	71	87	30	54	84	146	68	77	98	5.35
GPADA39	10	870	39	71	87	30	63	84	146	68	77	98	5.45
GPADA42	12.5	1000	42	71	87	30	63	84	146	68	77	98	5.56



## Other Available Models from RUD

### PP- PowerPoint®

#### Highlights

Rotating 360°, pivoting 230°  
 Universal hook, ring or chain connection  
 Double ball bearing for turning/rotating operations



### INOX-STAR®, metric thread

#### Highlights

pivots 360° for adjustment in load direction  
 clear marking of the minimum WLL  
 material: duplex steel 1.4462



### RS Eye bolt / RM Eye Nut / IRS-LT ICE Eye Bolt

#### Highlights

considerably higher WLL in comparison to DIN 580  
 clear marking of the minimum WLL  
 comprehensive range of threads



RBG 3

VRBG 10-16

VRBG 31-50

WBPG

B-ABA

VABH-B

For more information please visit [www.rud.com](http://www.rud.com)

Sling Protection  
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 Pipe & Hose Restraints  
 Tie Down Assemblies  
 Tie Down Accessories  
 Towing & Recovery  
 Rope & Cordage

# Lift it up, Tie it down, Pull it around

directions of pull...	...for 1 lifting point		...for 2 lifting point	...for 3/4 lifting point
designations thread size				
ICE-LBG-SR 0.6 t M8	0.6	0.6	0.8	1.2
ICE-LBG-SR 0.9 t M10	0.9	0.9	1.2	1.9
ICE-LBG-SR 1.35 t M12	1.35	1.35	1.9	2.8
ICE-LBG-SR 2.5 t M16	2.5	2.5	3.5	5.3
ICE-LBG-SR 3.5 t M20	3.5	3.5	4.9	7.4
ICE-LBG-SR 4.5 t M24	4.5	4.5	6.3	9.5
ICE-LBG-SR 6.7 t M30	6.7	6.7	9.4	14.2
directions of pull...	...for 1 lifting point		...for 2 lifting point	...for 3/4 lifting point
designations thread size				
VLBG-PLUS-0.63 t-M8	0.63	0.63	0.88	1.32
VLBG-PLUS-0.9 t-M10	0.9	0.9	1.3	1.9
VLBG-PLUS-1.35 t-M12	1.35	1.35	1.9	2.8
VLBG-1.2 t-M14	1.2	1.2	1.68	2.52
VLBG-PLUS-2 t-M16	2	2	2.8	4.2
VLBG-2 t M18	2	2	2.8	4.2
VLBG-PLUS-3.5 t-M20(M22)	3.5 (2.5)	3.5 (2.5)	4.9 (3.5)	7.4 (5.25)
VLBG-PLUS-4,5 t-M24(M27)	4.5 (4)	4.5 (4)	6.3 (5.6)	9.5 (8.4)
VLBG-PLUS-6,7 t-M30	6.7	6.7	9.4	14.2
VLBG-7 t-M36	7	7	9.8	14.7
VLBG-PLUS-8 t-M36	8	8	11.2	16.8
VLBG-PLUS-10 t-M42	10	10	14	21
VLBG-PLUS-15 t-M42	15	15	21	31.5
VLBG-PLUS-20 t-M48	20	20	28	42
directions of pull...	...for 1 lifting point		...for 2 lifting point	...for 3/4 lifting point
designations thread size				
VRS-0.1 t-M6	0.5	0.1	0.14	0.21
VRS-0.3 t-M8	1	0.3	0.42	0.63
VRS-0.4 t-M10	1	0.4	0.56	0.84
VRS-0.75 t-M12/M14	2	0.75	1	1.6
VRS-1.5 t-M16/M18	4	1.5	2.1	3.15
VRS-2.3 t-M20/M22	6	2.3	3.22	4.83
VRS-3.2 t-M24/M27	8	3.2	4.48	6.7
VRS-4.5 t-M30/M33	12	4.5	6.3	9.4
VRS-7 t-M36	16	7	9.8	14.7
VRS-9 t-M42	24	9	12.6	18.9
VRS-12 t-M48	32	12	16.8	25.2
designations thread size				
VWBG-V-0.3 t-M8	0.6	0.3	0.42	0.63
VWBG-V-0.45 t-M10	0.9	0.45	0.63	0.94
VWBG-V-0.6 t-M12	1.2	0.6	0.84	1.26
VWBG-V-1 t-M14	2	1	1.4	2.1
VWBG-V-1.3 t-M16	2.6	1.3	1.81	2.73
VWBG-V-1.8 t-M18	3.6	1.8	2.52	3.78
VWBG-V-2 t-M20/M22	4	2	2.8	4.2
VWBG-V-3.5 t-M24/M27	7	3.5	4.9	7.35
VWBG-V-5 t-M30	10	5	7	10.5
VWBG-6 t-M33	15	6	8.4	12.6
VWBG-8 t-M36-M39	15	8	11.2	16.8
VWBG-12 t-M42-M45	17	12	16.8	25.2
VWBG-12 t-M45	18	12	16.8	25.2
VWBG-13 t-M48-M52	18	13	18.2	27.3
VWBG-14 t-M52	25	14	19.6	29.4
VWBG-16 t-M56-M62	28	16	22.4	33.6
VWBG-16 t-M64-M76	28	16	22.4	33.6
VWBG-31.5 t-M72-M76	50	31.5	44.1	66.15
VWBG-35 t-M80-M85	50	35	49	73.5
VWBG-35 t-M90-M150	50	40	56	84



directions of pull...	...for 1 lifting point		...for 2 lifting point	...for 3/4 lifting point
designations thread size				
PP-0.63 t-M12	0.63	0.63	0.88	1.32
PP-1.5 t-M16	1.5	1.5	2.1	3.15
PP-2.5 t-M20	2.5	2.5	3.5	5.25
PP-4 t-M24	4	4	5.6	8.4
PP-5 t-M30	6.7	5	7	10.5
PP-8 t-M36	10	8	11.2	16.8



directions of pull...	...for 1 lifting point		...for 2 lifting point	...for 3/4 lifting point
designations				
VLBS / VLBS-U-1.5 t	1.5	1.5	2.1	3.15
VLBS / VLBS-U-2.5 t	2.5	2.5	3.5	5.25
VLBS / VLBS-U-4 t	4	4	5.6	8.4
VLBS / VLBS-U-6.7 t	6.7	6.7	9.5	14
VLBS / VLBS-U-10 t	10	10	14	21
VLBS-16 t	16	16	22.4	33.6
LBS-(1)-RS-0.5 t	0.5	0.5	0.7	1.05
LBS-(3)-RS-1 t	1	1	1.4	2.1



directions of pull...	...for 1 lifting point		...for 2 lifting point	...for 3/4 lifting point
designations				
ABA-1.6 t	1.6	1.6	2.2	3.4
ABA-3.2 t	3.2	3.2	4.5	6.8
ABA-5 t	5	5	7.1	10.6
ABA-10 t	10	10	14.1	21.2
ABA-20 t	20	20	28	42
ABA-31.5 t	31.5	31.5	45	67



- Sling Protection
- Web Slings
- Round Slings
- Synthetic Chain Slings
- Wire Rope Slings
- Chain Slings
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- Hooks & Links
- Lifting Points
- Hoists & Blocks
- Lifting Devices
- Pipe & Hose Restraints
- Tie Down Assemblies
- Tie Down Accessories
- Towing & Recovery
- Rope & Carriage



UNC



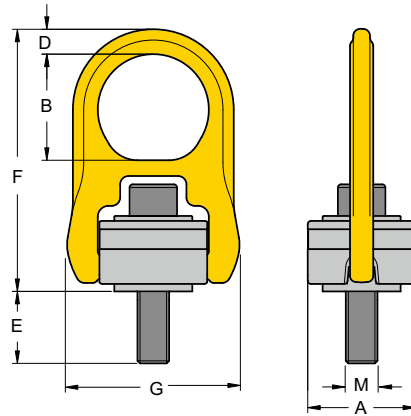
## Yoke® 8-204 UNC Thread / Hoist Ring

### Swivelling Hoist Ring for bolting

Product details

#### Highlights

- Rotates through 360° and pivot 180°, rated at 100% at 90° angle.
- Manufactured from forged alloy steel, quenched and tempered.
- Manufactured and tested in accordance with EN1677-1.
- Load rated parts are 100% magnaflux crack detected.
- Individual forged parts and cap screw are traceable to Test Certification.
- Bolt are UNC thread (ASME/ ANSI B18.31M).
- Proof tested to 2.5 times the WLL.
- Fatigue rated to 1.5 times the WLL.
- All YOKE Lifting points meet or exceed all the requirements of ASME B30.26.
- Quick and simple assembly, just a tapped hole is required.



### 8-204 Hoist Ring

Item NO.	WLL 5:1 lbs	Thread TPI	Dimensions(inch)						Torque in ft. lbs	N.W. lbs
			A	B	D	E	F	G		
8-204-004	800	5/16-18UNC	1.57	1.61	0.35	0.71	4.02	2.56	7	0.9
8-204-005	1,000	3/8-16UNC	1.57	1.61	0.35	0.71	4.02	2.56	12	0.9
8-204-010	2,500	1/2-13UNC	2.56	2.32	0.59	0.75	6.26	4.13	28	3.7
§ 8-204-010L	2,500	1/2-13UNC	2.56	2.32	0.59	1.26	6.26	4.13	28	3.7
8-204-019	4,000	5/8-11UNC	2.56	2.32	0.59	0.74	6.26	4.13	60	4
§ 8-204-019L	4,000	5/8-11UNC	2.56	2.32	0.59	1.75	6.26	4.13	60	4
8-204-021	5,000	3/4-10UNC	2.56	2.87	0.59	1.24	6.26	4.13	100	4
§ 8-204-021L	5,000	3/4-10UNC	2.56	2.87	0.59	1.73	6.26	4.13	100	4.2
8-204-030	7,000	3/4-10UNC	3.35	2.87	0.59	0.87	6.26	5.28	100	8.8
§ 8-204-030L	7,000	3/4-10UNC	3.35	2.87	0.87	1.87	8.03	5.28	100	9.5
8-204-042	8,000	7/8-9UNC	3.35	2.87	0.87	1.43	8.03	5.28	160	9.3
§ 8-204-042L	8,000	7/8-9UNC	3.35	2.87	0.87	2.37	8.03	5.28	160	9.7
8-204-045	10,000	1-8UNC	3.35	2.87	0.87	1.36	8.03	5.28	230	9.5
§ 8-204-045L	10,000	1-8UNC	3.35	2.87	0.87	2.36	8.03	5.28	230	10.1
8-204-070	15,000	1 1/4-7UNC	3.95	3.15	1	2.25	8.58	6.3	470	14.5
8-204-125	24,000	1 1/2-6UNC	4.72	4.29	1.38	2.17	12.09	8.66	800	35.2
8-204-135	30,000	2-4.5UNC	4.72	4.29	1.38	3.01	12.09	8.66	1,100	35.2

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Lifting Devices  
Pipe & Hose Restraints  
The Down Assemblies  
The Down Accessories  
Towing & Recovery  
Rope & Cordage

**Yoke® 8-203 Metric Thread / Hoist Ring**

**Swivelling Hoist Ring for bolting**

Product details



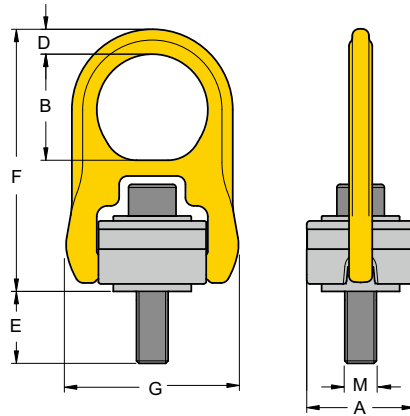
Safety is our first priority™

**METRIC**



**Highlights**

- Rotates through 360° and pivot 180°, rated at 100% at 90° angle.
- Manufactured from forged alloy steel, quenched and tempered.
- Manufactured and tested in accordance with EN1677-1.
- Load rated parts are 100% magnaflux crack detected.
- Individual forged parts and cap screw are traceable to Test Certification.
- Bolt are Metric thread (ASME / ANSI B18.3.1M).
- Proof tested to 2.5 times the WLL.
- Fatigue rated to 1.5 times the WLL.
- All YOKE Lifting points meet or exceed all the requirements of ASME B30.26.
- Quick and simple assembly, just a tapped hole is required

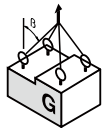
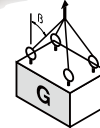
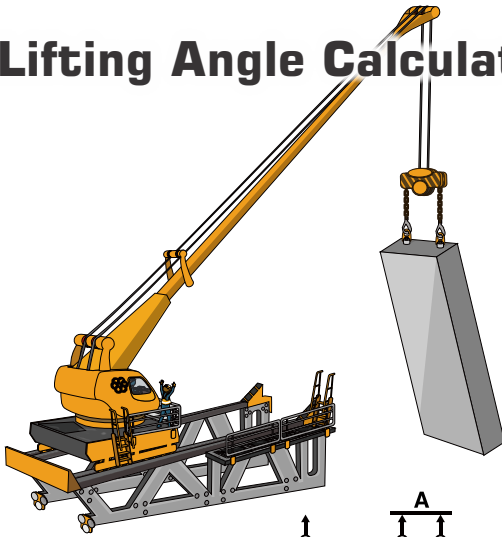


8-203 Hoist Ring

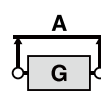
Item NO.	WLL 5:1	Thread	Dimensions (mm)						Torque in Nm	N.W. kg
			A	B	D	E	F	G		
	tonne	mm								
8-203-004	0	M8 x 1.25	40	41	9	17	102	65	10	0.4
8-203-005	0	M10 x 1.5	40	41	9	11	102	65	16	0.5
§ 8-203-005L	0	M10 x 1.5	40	41	9	26	102	65	16	0.5
8-203-010	1	M12 x 1.75	65	64	15	15	158	105	38	1.7
§ 8-203-010L	1	M12 x 1.75	65	64	15	30	158	105	38	1.7
8-203-019	2	M16 x 2	65	64	15	20	158	105	81	1.8
§ 8-203-019L	2	M16 x 2	65	64	15	35	158	105	81	1.8
8-203-021	2	M20 x 2.5	65	64	15	25	158	105	136	1.8
§ 8-203-021L	2	M20 x 2.5	65	64	15	45	158	105	136	1.9
8-203-030	3	M20 x 2.5	85	79	19	25	204	134	136	4
§ 8-203-030L	3	M20 x 2.5	85	79	19	45	204	134	136	5.2
8-203-042	4	M24 x 3	85	79	19	26	204	134	312	4.2
§ 8-203-042L	4	M24 x 3	85	79	19	56	204	134	312	4.3
8-203-070	7	M30 x 3.5	100	100	25	81	241	160	637	6.6
8-203-110	11	M36 x 4	120	111	30	76	286	194	1005	15
8-203-125	13	M42 x 4.5	120	111	30	65	286	220	1005	16
8-203-135	13.5	M48 x 5	120	111	30	70	286	220	1350	16

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# Lifting Angle Calculations

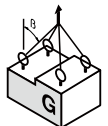
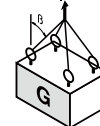
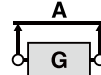


## 8-204 Hoist Ring



Number of Legs		1	2	1	2	2	2	2	3-4	3-4	3-4
Load Direction		0°	0°	90°	90°	0-45°	45°-60°	unsymm	0-45°	45°-	60°
Item No.	Thread	RATED LOAD lbs.									
8-204-004	5/16	800	1,600	800	1,600	1,200	800	800	1,700	1,200	800
8-204-005	3/8	1,000	2,000	1,000	2,000	1,400	1,000	1,000	2,100	1,500	1,000
8-204-010	1/2	2,500	4,900	2,500	4,900	3,400	2,500	2,500	5,100	3,700	2,500
8-204-019	5/8	4,000	8,000	4,000	8,000	5,600	4,000	4,000	8,400	6,000	4,000
8-204-021	3/4	4,900	9,800	4,900	9,800	6,800	4,900	4,900	10,200	7,300	4,900
8-204-030	3/4	6,900	13,700	6,900	13,700	9,600	6,900	6,900	14,400	10,300	6,900
8-204-042	7/8	8,000	15,900	8,000	15,900	11,200	8,000	8,000	16,700	12,000	8,000
8-204-045	1	10,000	19,900	10,000	19,900	13,900	10,000	10,000	20,900	14,900	10,000
8-204-070	1-1/4	15,000	30,000	15,000	30,000	21,000	15,000	15,000	31,500	22,500	15,000
8-204-125	1-1/2	24,100	48,100	24,100	48,100	33,700	24,100	24,100	50,500	36,100	24,100
8-204-135	2	30,000	60,000	30,000	60,000	42,000	30,000	30,000	63,000	45,000	30,000

## 8-203 Hoist Ring



Number of Legs		1	2	1	2	2	2	2	3-4	3-4	3-4
Load Direction		0°	0°	90°	90°	0-45°	45°-60°	unsymm	0-45°	45°-	60°
Item No.	Thread	RATED LOAD kgs.									
8-203-004	M8	1,000	2,300	1,200	2,300	1,600	1,200	1,200	2,400	1,700	1,200
8-203-005	M10	1,300	2,500	1,300	2,500	1,700	1,300	1,300	2,600	1,900	1,300
8-203-010	M12	2,900	5,800	2,900	5,800	4,100	2,900	2,900	6,100	4,300	2,900
8-203-019	M16	5,300	10,600	5,300	10,600	7,500	5,300	5,300	11,200	8,000	5,300
8-203-021	M20	6,000	12,000	6,000	12,000	8,400	6,000	6,000	12,600	9,000	6,000
8-203-030	M20	8,300	16,600	8,300	16,600	11,600	8,300	8,300	17,400	12,500	8,300
8-203-042	M24	11,600	23,200	11,600	23,200	16,300	11,600	11,600	24,400	17,400	11,600
8-203-070	M30	19,300	38,600	19,300	38,600	27,100	19,300	19,300	40,600	29,000	19,300
8-203-110	M36	30,400	60,700	30,400	60,700	42,500	30,400	30,400	63,700	45,500	30,400
8-203-125	M42	34,400	68,800	34,400	68,800	48,200	34,400	34,400	72,300	51,600	34,400
8-203-135	M48	37,300	74,600	37,300	73,900	52,200	37,300	37,300	78,300	55,900	37,300
8-203-155	M56	42,800	85,600	42,800	85,600	59,900	42,800	42,800	89,900	64,200	42,800
8-203-223	M64	61,600	123,100	61,600	123,100	86,200	61,600	61,600	129,200	92,300	61,600



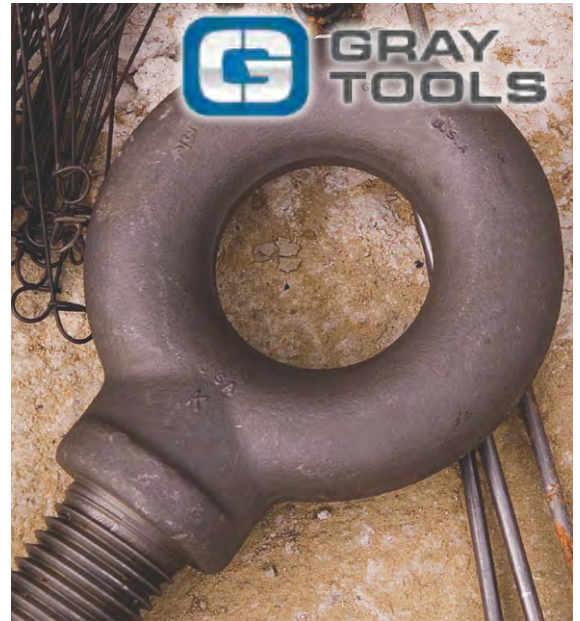
# Lift it up, Tie it down, Pull it around

## Gray Tools Machinery Eye Bolts

Eye Bolts are used to attach a securing eye to a structure, so that slings or other hardware can be attached for lifting. Eye Bolts are load rated and made from forged steel that has been quenched and tempered. Super Slings offers Regular Eyebolts along with Shoulder Eye Bolts, and Shoulder Type Machinery Eye Bolts. All of our eye bolts meet or exceed the requirements of ASME B30.26 including identification, ductility, design factor, proof load, and temperature requirements.

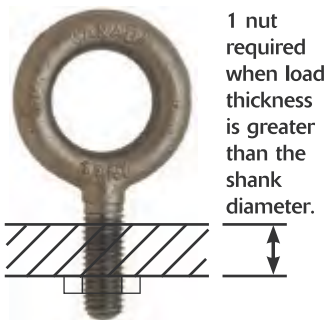
Shouldered- Eye Bolts with a shoulder can be used for angular lifting as long as the shoulder is properly seated. You need to check the manufacturers information to see how much capacity is lost a different angles of loading.

Non-Shouldered- Eye Bolts with no shoulder can only be used for completely vertical or inline lifts. They are not designed for side or angular loading.



# EYE BOLT INSTALLATION GUIDELINES

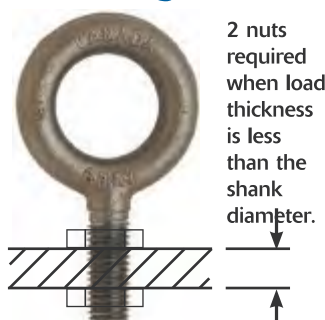
**Right**



1 nut required when load thickness is greater than the shank diameter.

Tighten hex nut securely against load.

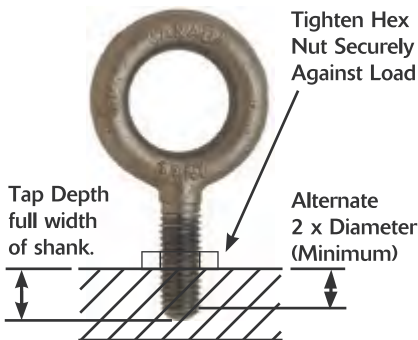
**Right**



2 nuts required when load thickness is less than the shank diameter.

Tighten hex nut securely against load.

**Right**

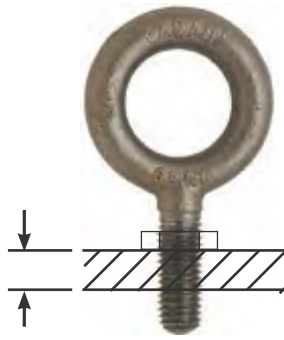


Tighten Hex Nut Securely Against Load

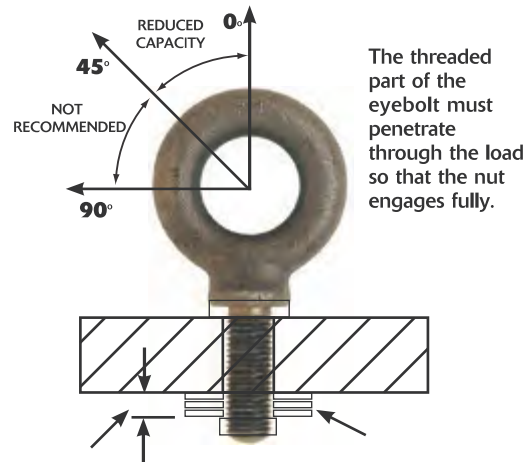
Tap Depth full width of shank.

Alternate 2 x Diameter (Minimum)

**Wrong**

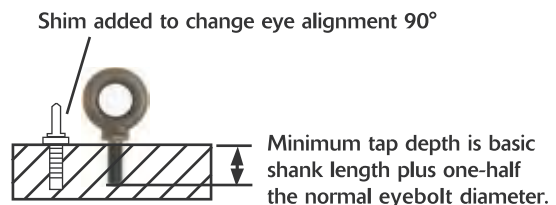


One eye bolt diameter or less.



The threaded part of the eye bolt must penetrate through the load so that the nut engages fully.

- As shown in the diagram, place washer or spacers between the nut and the load.
- When threading eye bolt into non-chambered hole, a washer should be used.

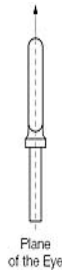


Minimum tap depth is basic shank length plus one-half the normal eye bolt diameter.

- Slings Protection
- Web Slings
- Round Slings
- Synthetic Chain Slings
- Wire Rope Slings
- Chain Slings
- Shackles & Turnbuckles
- Hooks & Links
- Lifting Points
- Hoists & Blocks
- Lifting Devices
- Pipe & Hose Restraints
- Tie Down Assemblies
- Tie Down Accessories
- Towing & Recovery
- Rope & Carriage

## Application / Installation

- The receiving hole should be counter-sunk and be free and clear of any debris to assure proper seating.
- LOADS SHOULD ALWAYS BE ALIGNED TO THE PLANE OF THE EYE, not at an angle to the plane. A steel washer or spacer may be used in conjunction with Shoulder Eyebolts to attain proper load alignment. The thickness of the steel washer or spacer must not exceed one thread pitch.
- Angular lifting should be avoided. Angular lifts significantly reduce rated capacities. See Rated Capacities/Guidelines.
- Check seating after applying an angular lift since the initial lift may cause the bolt to back away from the load. If such occurs, the Eyebolt should be unloaded & properly resealed.
- For applications with untapped through-holes, longer length Shoulder Eyebolts are recommended, using a steel washer and nut for the required thread length of engagement.
- Shoulder Eyebolt tapped holes are to have a threaded length which allows for full length of shank engagement and clearance for the unthreaded portion of shank.
- Shoulder Eyebolts must be firmly seated and flush against the mating surface; otherwise, the rated capacity is reduced significantly. The use of a steel washer or spacer is permissible and may be required; however, the thickness must not exceed one thread pitch.
- Plain Eyebolt tapped holes are to be threaded for full length engagement of the Eyebolt.
- Plain Eyebolts must have full thread shank engagement, allowing for one-half turn for proper eye-alignment to obtain rated capacities.

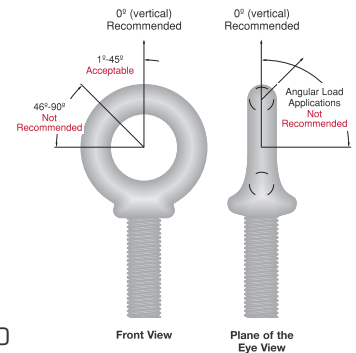


rotate. Safety Swivel Hoist Rings are recommended for such loads.

- DO NOT force hooks or any other fittings into the eye; they must fit freely.
- DO NOT exceed the Rated Capacity.
- DO NOT SHOCK LOAD EYEBOLTS. Gradually increase lifting of the load to minimize load-shock.
- DO NOT weld Eyebolts, or perform any weld-repair on Eyebolts.
- DO NOT machine Eyebolts on the shank or shoulder to achieve proper seating.
- DO NOT expose Eyebolts to extreme environmental conditions, as they may adversely affect the Rated Capacity.

## Rated Capacities

Size	0° Lbs.	45° Lbs.	46° +
1/4	500	125	SWIVEL EYE BOLT/ HOIST RING RECC,
5/16	900	225	
3/8	1,300	325	
7/16	1,800	450	
1/2	2,400	600	
9/16	3,000	800	
5/8	4,000	1,000	
3/4	5,000	1,250	
7/8	7,000	1,750	
1	9,000	2,250	
1 1/8	12,000	3,000	
1 1/4	15,000	3,750	
1 1/2	21,000	5,250	
1 3/4	28,000	7,000	
2	38,000	9,500	
2 1/2	56,000	14,000	



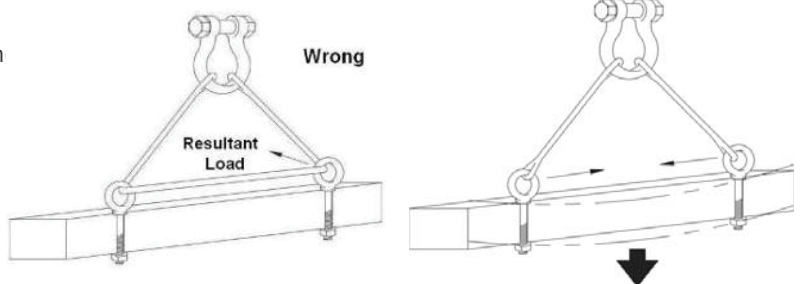
NOTE: Plain Eyebolt angular rated capacities are significantly lower than Shoulder Eyebolt rated capacities; therefore, angular lifting is not recommended.

## Rated Capacity Guidelines

- Eyebolts are designed with a 5:1 Safety Factor.
- The minimum threaded shank length of Eyebolts must be one thread diameter to attain the rated capacity.
- No greater load should be applied to an Eyebolt than the Rated Capacity listed.
- Angular lifts significantly reduce Shoulder Eyebolt Rated Capacities. Shoulder Eyebolts should not be used for angular lifts greater than 45°; Safety Swivel Hoist Rings are recommended for such applications.
- Plain Eyebolts are not recommended for angular load applications. Safety Swivel Hoist Rings are recommended for such applications.

## Reeving Of A Sling Through An Eye Bolt

- Slings should never be reeved through an eye bolt or through a pair of eye bolts. Reeving will alter the angle of the loading on the eye bolts. Only one leg should be attached to each eye bolt.
- After properly attaching the slings to the eye bolts, slowly lift the load. Watch the load carefully and be prepared to stop lifting the load if it starts to buckle.
- Buckling can occur if the load is not stiff enough to resist the compressive forces which result from the annular loading.



## Inspection / Maintenance Safety

- Eyebolts should be inspected and installed by a competent person who is knowledgeable about the application and installation of Eyebolts.
- Each Eyebolt must be completely inspected BEFORE each use for possible defects such as: distortion, bent shank/threads, or incomplete/incorrectly formed threads. Periodic inspection of Eyebolts is highly recommended.
- Eyebolts should not be painted or otherwise coated when used for lifting; such coatings make it difficult to inspect for defects or wear indicators.
- Eyebolts should not be left where they can incur mechanical damage or corrosion.
- Destroy Eyebolts when signs of bend, elongation, wear or damage are visible. Such signs indicate that the Eyebolt has been stressed (overloaded) beyond rated capacity. Never attempt to repair a stressed Eyebolt.
- Destroy Eyebolts when they show any signs of alteration. Signs include: gouging, undercutting, welding, etc.
- Proper Destruction of an Eyebolt: crushing or cutting clear across the eye of the Eyebolt.

## Safety Precautions

- DO NOT work, stand or crawl around the load of the Eyebolt. Ensure a safe distance from the load.
- DO NOT use wrenches, crowbars, etc. to tighten Eyebolts. Hand tightening is recommended.
- DO NOT use a single Eyebolt to lift a load that can

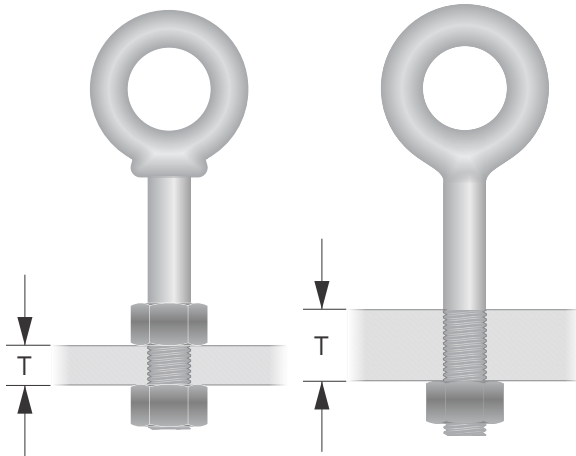
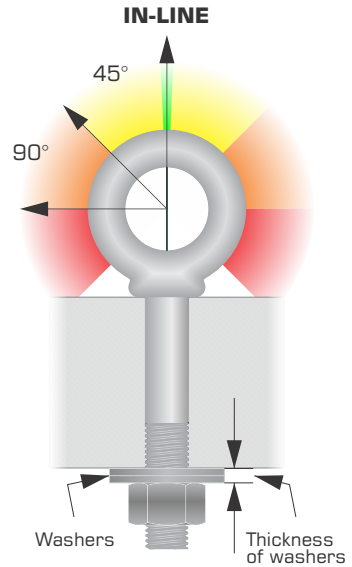


**FORGED EYE BOLT WARNINGS AND INFORMATION**

It is very important to read and understand all information shown before using eye bolts

**CAPACITY ADJUSTMENT FOR ANGULAR LOADING**

Lift Angle in-line pull	Maximum Load
45°	30% of the working load limit (WLL)
90°	25% of the working load limit (WLL)



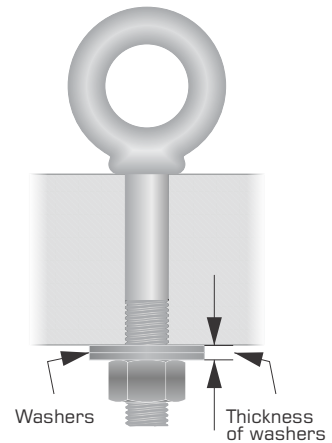
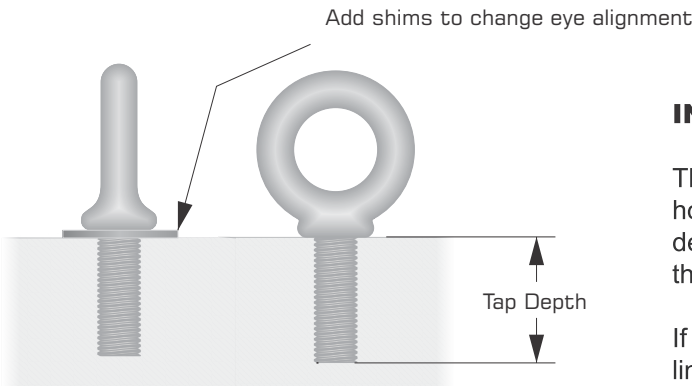
**EYE BOLT INSTALLATION**

Use one nut if the thickness is more than one eye bolt diameter ( $T >$ ). Use two nuts if the thickness is less than or equal to the eye bolt diameter ( $T \leq$ ) as shown.

Always tighten nut securely against the load.

**INSTALLATION FOR ANGULAR LOADING**

Use shoulder nut eye bolts for angular loading. If the eye bolt protrudes so far through the load that the nut cannot be tightened securely against the load, use properly sized washers/spacer to take up the excess space between the nut and the load (as shown). The thickness of the washers/spacer must exceed the distance between the bottom of the load and the last thread of the eye bolt.



**INSTALLATION OF MACHINERY EYE BOLTS**

These eye bolts are primarily intended to be installed in tapped holes. For installation, tap the load (tap depth) to a minimum depth of one-half the eye bolt size beyond the shank length of the machinery eye bolt.

If the plane of the machinery eye bolt is not aligned with the sling line, add shims (washers/spacers) of proper thickness to adjust the angle of the plane of the eye to match the sling line (as shown).

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death!  
For more information please see the eye bolt warning information found in the hardware section of this catalogue

- Sling Protection
- Web Slings
- Round Slings
- Synthetic Chain Slings
- Wire Rope Slings
- Chain Slings
- Shackles & Turnbuckles
- Hooks & Links
- Lifting Points
- Hoists & Blocks
- Lifting Devices
- Pipe & Hose Restraints
- Tie Down Assemblies
- Tie Down Accessories
- Towing & Recovery
- Rope & Carriage



# BS SAE Shoulder Pattern Eyebolt

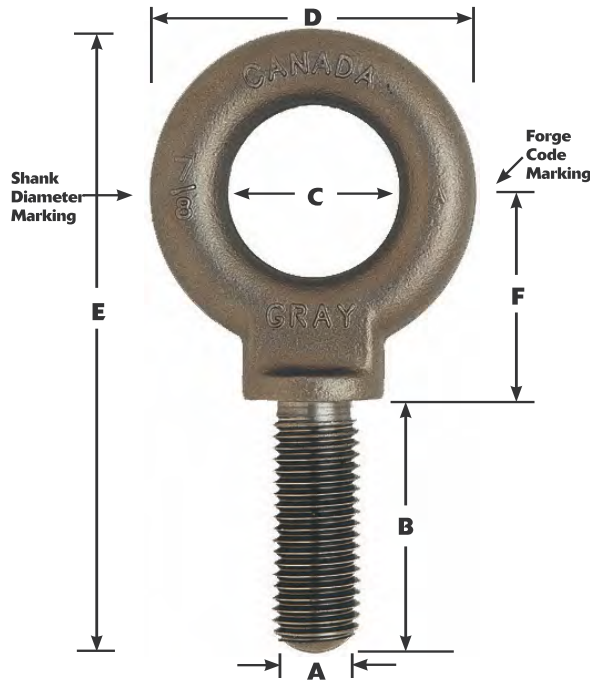
Fixed Eye Bolt for bolting  
Product details

UNC



### Highlights

Grade	C1030
Grain Size	5 or Finer
Tens. Strgth	65,000 psi min
Yield	50,000 psi min
Elongation	30% min
Reduc. Area	60% min
Temp Range:	-1°C - 135°C



Type	Item No.	Thread Size	Wght	B Shank Length	C I.D. Eye	D O.D. Eye	E Overall Length	F Center Of Eye To Shoulder	Rated Capacity
			lb/pc.	[inch]	[inch]	[inch]	[inch]	[inch]	(lbs)
<b>Carbon Steel Eye Bolts inch</b>									
0.33T - 1/4"	BS08	1/4-20	0.04	0.75	0.75	1.19	2.38	0.75	650
0.6T - 5/16"	BS10	5/16-18	0.09	0.88	0.88	1.44	2.81	1.00	1,200
1.078T - 3/8"	BS12	3/8-16	0.17	1.00	1.00	1.69	3.28	1.13	1,550
1.0T - 7/16"	BS14	7/16-14	0.24	1.06	1.06	1.81	3.56	1.25	2,000
1.3T - 1/2"	BS16	1/2-13	0.38	1.19	1.19	2.13	3.97	1.38	2,600
1.6T - 9/16"	BS18	9/16-12	0.51	1.25	1.25	2.31	4.50	1.56	3,200
2.6T - 5/8"	BS20	5/8-11	0.71	1.38	1.38	2.56	4.75	1.66	5,200
3.6T - 3/4"	BS24	3/4-10	0.99	1.50	1.50	2.81	5.25	1.81	7,200
5.3T - 7/8"	BS28	7/8-9	1.48	1.69	1.69	3.19	5.97	2.13	10,600
6.65T - 1"	BS32	1-8	2.20	1.81	1.81	3.56	6.63	2.31	13,300
8.5T - 1 1/8"	BS36	1 1/8-7	3.20	2.00	2.00	4.06	7.53	2.69	17,000
10.5T - 1 1/4"	BS40	1 1/4-7	4.40	2.19	2.19	4.44	8.22	2.94	21,000
12T - 1 1/2"	BS48	1 1/2-6	7.40	2.50	2.50	5.19	9.47	3.31	24,000
16T - 1 3/4"	BS56	1 3/4-5	11.80	2.88	2.88	6.00	1.81	4.00	32,000
20T - 2"	BS64	2-4 1/2	17.20	3.38	3.38	6.88	1.88	4.38	40,000

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the eye bolt warning information found in the hardware section of this catalogue

Slings Protection  
 Web Slings  
 Round Slings  
 Synthetic Chain Slings  
 Rod Slings  
 Chain Slings  
 Shackles & Turnbuckles  
 Hooks & Links  
 Lifting Points  
 Hoists & Blocks  
 Lifting Devices  
 Pipe & Hose Restraints  
 Tie Down Assemblies  
 Tie Down Accessories  
 Towing & Recovery  
 Rope & Cordage



# BS Metric Shoulder Pattern Eyebolt

Fixed Eye Bolt for bolting  
Product details

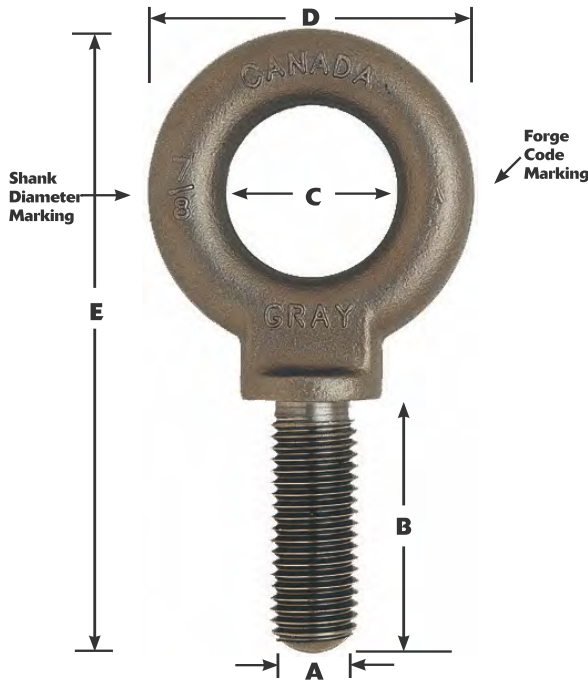


**METRIC**



**Highlights**

- Grade C1030
- Grain Size 5 or Finer
- Tens. Strgth 65,000 psi min
- Yield 50,000 psi min
- Elongation 30% min
- Reduc. Area 60% min
- Temp Range: -1°C - 135°C



Type	Item No.	Thread Size	Wght	B Shank Length	C I.D. Eye	D O.D. Eye	E Overall Length	Rated Capacity
			kgs/pc.	[mm]	[mm]	[mm]	[mm]	(kgs)
<b>Carbon Steel Eye Bolts metric</b>								
0.21T - M6	BS6M	M6 x 1.0	0.06	25.40	19.00	30.00	60.30	210
0.37T - M7	BS7M	M7 x 1.0	0.10	28.50	22.00	36.50	71.40	370
0.5T - M8	BS8M	M8 x 1.25	0.17	31.70	25.00	43.00	82.50	500
0.74T - M10	BS10M	M10 x 1.5	0.24	35.00	27.00	46.00	90.50	740
1.03T - M12	BS12M	M12 x 1.75	0.36	38.00	30.00	54.00	100.80	1,030
1.6T - M14	BS14M	M14 x 2.0	0.48	44.50	35.00	65.00	120.70	1,600
1.6T - M16	BS16M	M16 x 2.0	0.69	44.50	35.00	65.00	120.70	1,600
3.14T - M18	BS18M	M18 x 2.5	1.10	51.00	38.00	71.50	133.30	3,140
2.86T - M20	BS20M	M20 x 2.5	1.51	57.00	41.00	81.00	152.40	2,860
3.85T - M24	BS24M	M24 x 3.0	2.36	63.50	44.00	90.40	168.30	3,850
5.2T - M27	BS27M	M27 x 3.0	3.41	70.00	51.00	103.00	191.30	5,200
6.4T - M30	BS30M	M30 x 3.5	4.68	76.00	55.00	112.70	208.80	6,400
8.97T - M36	BS36M	M36 x 4.0	7.77	89.00	63.00	131.80	240.50	8,970
11.96T - M42	BS42M	M42 x 4.5	11.10	95.00	73.00	152.40	274.70	11,960
12.72T - M45	BS45M	M45 x 4.5	11.35	95.00	73.00	152.40	274.70	12,720
16.4T - M48	BS48M	M48 x 5.0	15.90	101.60	82.00	174.60	301.60	16,400
16.3T - M52	BS52M	M52 x 5.0	16.70	101.60	82.00	174.60	301.60	16,300

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the eye bolt warning information found in the hardware section of this catalogue

- Sling Protection
- Web Slings
- Round Slings
- Synthetic Chain Slings
- Wire Rope Slings
- Chain Slings
- Shackles & Turnbuckles
- Hooks & Links
- Lifting Points**
- Hoists & Blocks
- Lifting Devices
- Pipe & Hose Restraints
- Tie Down Assemblies
- Tie Down Accessories
- Towing & Recovery
- Rope & Carriage



# BS SAE Shoulder Pattern Alloy Eyebolt

Fixed Alloy Eye Bolt for bolting  
Product details

### Highlights

Grade	8260
Grain Size	5 or Finer
Tens. Strgth	95,000 psi min
Yield	70,000-100,000 psi min
Elongation	22% min
Reduc. Area	55% min
Temp Range:	-40°C - 135°C

**ALLOY**  
**-40°C**

**UNC**



Rated capacity is for 0° vertical pulls. Never apply loads greater than Rated Capacity to any eyebolt. Stamped with the letter "A" to identify them as low temperature specific. Proof tested in accordance with ASTM F 541 and Federal Spec. ANSI B18.15. Traceability and Mechanical test values are available with each shipment upon request.



Type	Item No.	Thread Size	Wght	B Shank Length	C I.D. Eye	D O.D. Eye	E Overall Length	F Center Of Eye To Shoulder	Rated Capacity
			lb/pc.	[inch]	[inch]	[inch]	[inch]	[inch]	(lbs)
<b>Alloy Steel Eye Bolts inch</b>									
0.74T - 3/8"	AS12	3/8-16	0.18	1.25	1.00	1.66	3.28	1.13	1,480
1.35T - 1/2"	AS16	1/2-13	0.35	1.50	1.19	2.06	4.00	1.38	2,700
2.15T - 5/8"	AS20	5/8-11	0.70	1.75	1.38	2.50	4.75	1.66	4,300
3.2T - 3/4"	AS24	3/4-10	1.10	2.00	1.50	2.81	5.28	1.82	6,400
4.4T - 7/8"	AS28	7/8-9	1.70	2.25	1.69	3.25	5.97	2.13	8,800
5.8T - 1"	AS32	1-8	2.36	2.50	1.81	3.56	6.66	2.32	11,600
9.2T - 1 1/4"	AS40	1 1/4-7	4.68	3.00	2.19	4.44	8.22	2.94	18,400
13.3T - 1 1/2"	AS48	1 1/2-6	7.77	3.50	2.50	5.19	9.47	3.32	26,600
23.8T - 2"	AS64	2-4 1/2	16.70	4.00	3.25	6.88	11.88	4.38	47,600

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the eye bolt warning information found in the hardware section of this catalogue

Sling Protection  
Web Slings  
Round Slings  
Synthetic Chain Slings  
Rope Slings  
Chain Slings  
Shackles & Turnbuckles  
Hooks & Links  
Lifting Points  
Hoists & Blocks  
Lifting Devices  
Pipe & Hose Restraints  
The Down Assemblies  
The Down Accessories  
Towing & Recovery  
Rope & Cordage

# SAE Shoulder Nut Eyebolt

Shoulder Nut Eye Bolts  
Product details

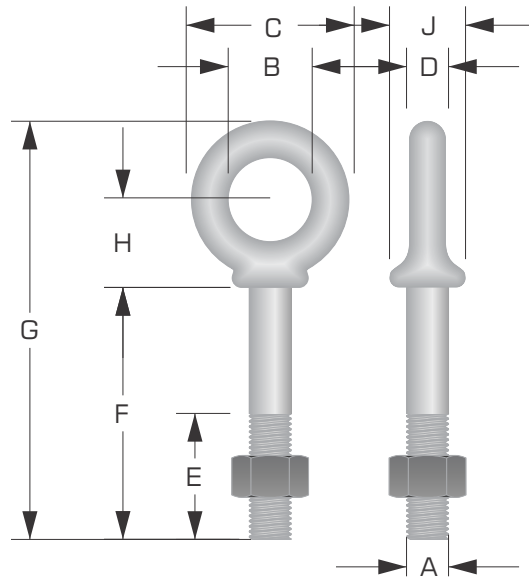
**Highlights**

- Permanently embossed with VGD® and size for traceability to meet ASME B30.26
- Forged carbon steel
- Quenched and tempered
- Hot dipped galvanized with heavy hex nut
- UNC Threads
- Design factor proof load 2:1 WLL, ultimate load 5:1 WLL

Rated capacity is for 0° vertical pulls. Never apply loads greater than Rated Capacity to any eyebolt.

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the eye bolt warning information found in the hardware section of this catalogue



Item Code	Shank Dia & Length (in)	WLL (lbs)	Dimensions (in)									Weight ea. (lbs)
			A	B	C	D	E	F	G	H	J	
75-1045014	1/4 x 2	650	0.25	0.50	0.88	0.19	1.50	2.00	2.94	0.50	0.47	6.5
75-1045032	1/4 x 4	650	0.25	0.50	0.88	0.19	2.50	4.00	4.94	0.50	0.47	6.5
75-1045050	5/16 x 2-1/4	1,200	0.31	0.62	1.12	0.25	1.50	2.25	3.50	0.69	0.56	12.0
75-1045078	5/16 x 4-1/4	1,200	0.31	0.62	1.12	0.25	2.50	4.25	5.50	0.69	0.56	12.0
75-1045096	3/8 x 2-1/2	1,550	0.38	0.75	1.38	0.31	1.50	2.50	3.97	0.78	0.66	15.5
75-1045112	3/8 x 4-1/2	1,550	0.38	0.75	1.38	0.31	2.50	4.50	5.97	0.78	0.66	15.5
75-1045130	1/2 x 3-1/4	2,600	0.50	1.00	1.75	0.38	1.50	3.25	5.12	1.00	0.91	26.0
75-1045158	1/2 x 6	2,600	0.50	1.00	1.75	0.38	3.00	6.00	7.88	1.00	0.91	26.0
75-1045176	5/8 x 4	5,200	0.62	1.25	2.25	0.50	2.00	4.00	6.44	1.31	1.12	52.1
75-1045194	5/8 x 6	5,200	0.62	1.25	2.25	0.50	3.00	6.00	8.44	1.31	1.12	52.1
75-1045210	3/4 x 4-1/2	7,200	0.75	1.50	2.75	0.62	2.00	4.50	7.44	1.56	1.38	72.1
75-1045238	3/4 x 6	7,200	0.75	1.50	2.75	0.62	3.00	6.00	8.94	1.56	1.38	72.1
75-1045256	7/8 x 5	10,600	0.88	1.75	3.25	0.75	2.50	5.00	8.46	1.84	1.56	106.1
75-1045292	1 x 6	13,300	1.00	2.00	3.75	0.88	3.00	6.00	9.97	2.09	1.81	133.1
75-1045318	1 x 9	13,300	1.00	2.00	3.75	0.88	4.00	9.00	12.97	2.09	1.81	133.1
75-1045336	1-1/4 x 8	21,000	1.25	2.50	4.50	1.00	4.00	8.00	12.72	2.47	2.28	210.2
75-1045354	1-1/4 x 12	21,000	1.25	2.50	4.50	1.00	4.00	12.00	16.72	2.47	2.28	210.2
75-1045372	1-1/2 x 15	24,000	1.50	3.00	5.50	1.25	6.00	15.00	20.75	3.00	2.75	240.2

- Sling Protection
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- Wire Rope Slings
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- Hooks & Links
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- Lifting Devices
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- Tie Down Assemblies
- Tie Down Accessories
- Towing & Recovery
- Rope & Carriage



# SAE Regular Nut Eyebolt

## Regular Nut Eye Bolts

Product details

### Highlights

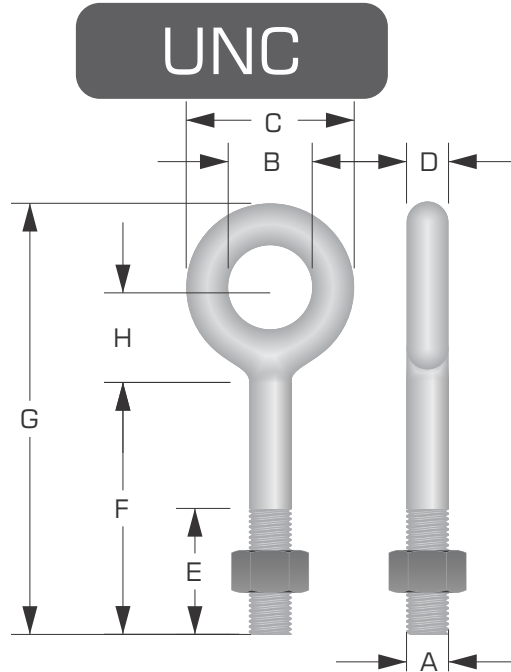
- Permanently embossed with VGD© and size for traceability to meet ASME B30.26
- Forged carbon steel
- Quenched and tempered
- Hot dipped galvanized with heavy hex nut
- UNC Threads
- Design factor proof load 2:1 WLL, ultimate load 5:1 WLL

Rated capacity is for 0° vertical pulls. Never apply loads greater than Rated Capacity to any eyebolt.

### DO NOT SIDE LOAD REGULAR NUT EYE BOLTS

### WARNING: NEVER EXCEED WORKING LOAD LIMIT!

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the eye bolt warning information found in the hardware section of this catalogue



Item Code	Shank Dia & Length (in)	WLL (lbs)	Dimensions (in)								Weight ea. (lbs)
			A	B	C	D	E	F	G	H	
75-1043230	1/4 x 2	8.20	0.25	0.50	1.00	0.25	1.50	2.00	3.06	0.56	6.5
75-1043258	1/4 x 4	11.70	0.25	0.50	1.00	0.25	2.50	4.00	5.06	0.56	6.5
75-1043276	5/16 x 2-1/4	13.30	0.31	0.62	1.25	0.31	1.50	2.25	3.56	0.69	12.0
75-1043294	5/16 x 4-1/4	25.00	0.31	0.62	1.25	0.31	2.50	4.25	5.56	0.69	12.0
75-1043310	3/8 x 2-1/2	23.30	0.38	0.75	1.50	0.38	1.50	2.50	4.12	0.88	15.5
75-1043338	3/8 x 4-1/2	29.50	0.38	0.75	1.50	0.38	2.50	4.50	6.12	0.88	15.5
75-1043356	3/8 x 6	35.20	0.38	0.75	1.50	0.38	2.50	6.00	7.62	0.88	15.5
75-1043374	1/2 x 3-1/4	50.30	0.50	1.00	2.00	0.50	1.50	3.25	5.38	1.12	26.0
75-1043392	1/2 x 6	66.10	0.50	1.00	2.00	0.50	3.00	6.00	8.12	1.12	26.0
75-1043418	1/2 x 8	82.00	0.50	1.00	2.00	0.50	3.00	8.00	10.12	1.12	26.0
75-1043436	1/2 x 10	88.00	0.50	1.00	2.00	0.50	3.00	10.00	12.12	1.12	26.0
75-1043454	1/2 x 12	114.20	0.50	1.00	2.00	0.50	3.00	12.00	14.12	1.12	26.0
75-1043472	5/8 x 4	103.10	0.62	1.25	2.50	0.62	2.00	4.00	6.69	1.44	52.1
75-1043490	5/8 x 6	118.20	0.62	1.25	2.50	0.62	3.00	6.00	8.69	1.44	52.1
75-1043515	5/8 x 8	135.10	0.62	1.25	2.50	0.62	3.00	8.00	10.69	1.44	52.1
75-1043533	5/8 x 10	153.6	0.62	1.25	2.50	0.62	3.00	10.00	12.69	1.44	52.1
75-1043551	5/8 x 12	167.1	0.62	1.25	2.50	0.62	4.00	12.00	14.69	1.44	52.1
75-1043579	3/4 x 4-1/2	168.6	0.75	1.50	3.00	0.75	2.00	4.50	7.69	1.69	72.1
75-1043597	3/4 x 6	184.5	0.75	1.50	3.00	0.75	3.00	6.00	9.19	1.69	72.1
75-1043613	3/4 x 8	207.9	0.75	1.50	3.00	0.75	3.00	8.00	11.19	1.69	72.1
75-1043631	3/4 x 10	235.0	0.75	1.50	3.00	0.75	3.00	10.00	13.19	1.69	72.1
75-1043659	3/4 x 12	257.5	0.75	1.50	3.00	0.75	4.00	12.00	15.19	1.69	72.1
75-1043677	3/4 x 15	298.0	0.75	1.50	3.00	0.75	5.00	15.00	18.19	1.69	72.1
75-1043695	7/8 x 5	270.0	0.88	1.75	3.50	0.88	2.50	5.00	8.75	2.00	106.1
75-1043711	7/8 x 8	308.0	0.88	1.75	3.50	0.88	4.00	8.00	11.75	2.00	106.1
75-1043739	7/8 x 12	400.0	0.88	1.75	3.50	0.88	4.00	12.00	15.75	2.00	106.1
75-1043757	1 x 6	421.0	1.00	2.00	4.00	1.00	3.00	6.00	10.31	2.31	133.1
75-1043775	1 x 9	468.5	1.00	2.00	4.00	1.00	4.00	9.00	13.31	2.31	133.1
75-1043793	1 x 12	540.0	1.00	2.00	4.00	1.00	4.00	12.00	16.31	2.31	133.1
75-1043819	1 x 18	650.0	1.00	2.00	4.00	1.00	7.00	18.00	22.31	2.31	133.1
75-1043837	1-1/4 x 8	750.0	1.25	2.50	5.00	1.25	4.00	8.00	13.38	2.88	210.2
75-1043855	1-1/4 x 12	900.0	1.25	2.50	5.00	1.25	4.00	12.00	17.38	2.88	210.2
75-1043873	1-1/4 x 20	1,210.0	1.25	2.50	5.00	1.25	6.00	20.00	25.38	2.88	210.2



## Forged Eye Nuts

Forged Eye Nuts for lifting  
Product details

### Highlights

- Permanently embossed with trace code, VGD® and size for traceability to meet ASME B30.26
- Forged carbon steel
- Quenched and tempered
- Hot dipped galvanized
- UNC Threads
- Design factor proof load 2:1 WLL, ultimate load 5:1 WLL

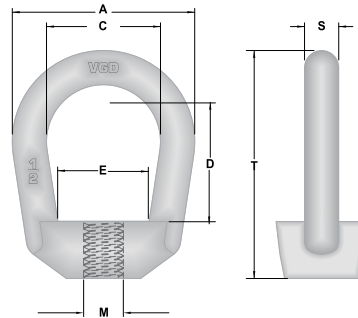


UNC



Rated capacity is for 0° vertical pulls. Never apply loads greater than Rated Capacity to any eye nut.

**DO NOT SIDE LOAD  
REGULAR EYE NUTS**



Item No.	Size#	Nominal (in)	Tap Size (in)	Dimensions (in)							WLL 5:1 (lbs)	Net Weight (lbs)
				A	C	D	E	S	T	M		
75-1090438	2	5/16	3/8	1.60	0.97	1.21	0.75	0.33	2.07	0.31	1,250	0.18
75-1090474	3	3/8	1/2	2.01	1.23	1.48	0.98	0.39	2.51	0.43	2,250	0.28
75-1090517	4	1/2	5/8	2.52	1.49	1.95	1.19	0.52	3.24	0.54	3,600	0.58
75-1090535	5	5/8	3/4	3.00	1.73	2.43	1.33	0.65	3.88	0.67	5,200	1.00
75-1090553	6	3/4	7/8	3.51	1.99	2.64	1.59	0.78	4.33	0.77	7,200	1.70
75-1090571	7	7/8	1	3.89	2.23	3.02	1.80	0.83	4.95	0.89	10,000	2.75
75-1090599	8	1	1-1/4	4.51	2.48	3.50	1.93	1.02	5.76	1.10	15,500	3.90
75-1090633	10	1-1/4	1-1/2	5.62	3.10	4.03	2.37	1.25	6.74	1.36	22,500	6.70
75-1090704	11	1-1/2	2	7.18	3.99	6.13	3.96	1.59	10.25	1.79	40,000	18.70

\*Order by tap size, marking on the eye nut are for the body stock size

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the eye bolt warning information found in the hardware section of this catalogue

- Sling Protection
- Web Slings
- Round Slings
- Synthetic Chain Slings
- Wire Rope Slings
- Chain Slings
- Shackles & Turnbuckles
- Hooks & Links
- Lifting Points
- Hoists & Blocks
- Lifting Devices
- Pipe & Hose Restraints
- Tie Down Assemblies
- Tie Down Accessories
- Towing & Recovery
- Rope & Carriage



UNC



# Forged Eye - Eye Swivels

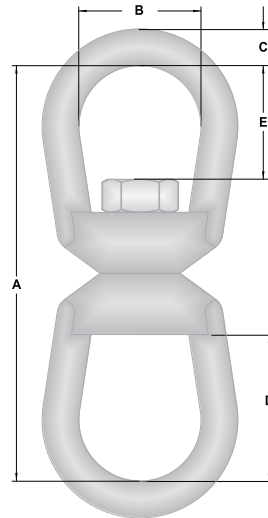
Eye-Eye Swivels for lifting  
Product details

**Highlights**

- Manufactured to U.S. Fed. Spec. RR-C-271D Type VII, Class 2
- Forged steel - quenched and tempered
- Hot dip galvanized
- Swivel size permanently embossed
- Proof Load: 2 Times the Working Load Limit (WLL)
- Ultimate Load: 5 Times the Working Load Limit (WLL)

Rated capacity is for 0° vertical pulls. Never apply loads greater than Rated Capacity to any eyebolt.

**DO NOT SIDE LOAD EYE-EYE SWIVELS**



Item No.	Size#	Dimensions (in)					WLL (lbs)
		A	B	C	D	E	
75-1016019	1/4	2.94	0.75	0.25	1.00	0.69	850
75-1016037	5/16	3.56	1.00	0.32	1.25	0.81	1,250
75-1016055	3/8	4.31	1.25	0.38	1.50	0.94	2,250
75-1016073	1/2	5.44	1.50	0.50	2.00	1.31	3,600
75-1016091	5/8	6.56	1.75	0.63	2.38	1.56	5,200
75-1016117	3/4	7.19	2.00	0.75	2.63	1.75	7,200
75-1016135	7/8	8.38	2.25	0.96	3.06	2.06	10,000
75-1016153	1	9.63	2.50	1.00	3.50	2.31	12,500
75-1016199	1-1/4	11.44	3.13	1.25	3.69	2.69	18,000
75-1016215	1-1/2	17.13	4.00	1.50	4.19	3.88	45,200

**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

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Sling Protection  
Web Slings  
Round Slings  
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Wire Slings  
Chain Slings  
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Lifting Devices  
Pipe & Hose Restraints  
Tie Down Assemblies  
Tie Down Accessories  
Towing & Recovery  
Rope & Cordage

# LIFTING POINTS – READY FOR WELDING.



OVERVIEW –  
LIFTING POINTS  
FOR WELDING.

VLBS / VLBS-U 1.5t–16t				■		■	■		■	■	■			■	■	
VRBS 4t–50t				■		■			■	■	■					
VRBS-FIX 4t–100t				■		■	■		■	■	■			■		
VRBK-FIX 4t–50t				■		■	■		■	■	■			■		
ABA 0.8t–31.5t				■		■				■	■			■	■	
VABH-W / VCGH-S 1.5t–20t				■						■	■					
WPP(H)-S / -B / -VIP 0.63t–50t	■	■		■		■		■	■	■	■					

- Sling Protection
- Web Slings
- Round Slings
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- Hooks & Links
- Lifting Points
- Hoists & Blocks
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- Tie Down Assemblies
- Tie Down Accessories
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- Rope & Carriage



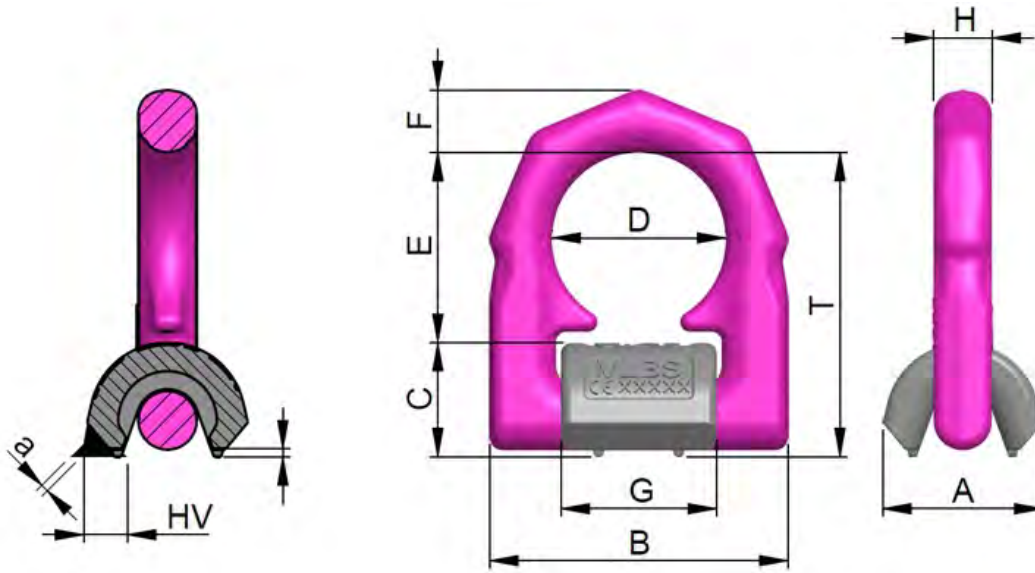
**VLBS**

**Lifting points – ready for welding**

Product details

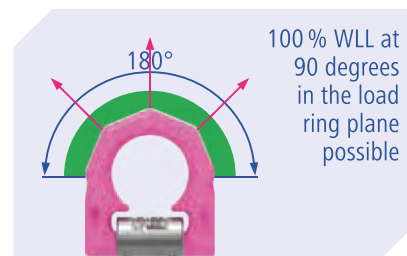
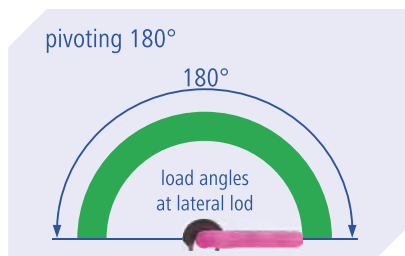
**Highlights**

- Suspension ring pivots 180°
- Suspension ring & weld-on-block of the VLBS-U are undetachable
- Suspension ring can be angled into position (VLBS-U)



CAD RFID

Type	Item No.	WLL	Weld Seam	Weight	T	A	B	C	D	E	F	G	H
		[t]	[t]	[kg/pc.]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
<b>VLBS-U – VIP Load ring for welding undetachable (with clamping spring)</b>													
VLBS-U 1.5t	7993035	1.5	HV5+a3	0.35	65	33	66	25	38	40	14	33	14
VLBS-U 2.5t	7994830	2.5	HV7+a3	0.47	75	36	77	27	45	48	16	40	14
VLBS-U 4t	7993036	4	HV8+a3	0.76	83	42	87	31	51	52	18	46	16
VLBS-U 6.7t	7993037	6.7	HV12+a4	1.9	117	61	115	44	67	73	24	60	22
VLBS-U 10t	7993040	10	HV16+a4	2.9	126	75	129	55	67	71	26.5	60	26
VLBS-U 16t	7906640	16	HV25+a6	6.8	174	96	190	69	100	105	40	90	26
<b>VLBS-U-LT – VIP Load ring for welding for low temperature</b>													
VLBS-U-LT 2.5t	7903522	2.5	HV7+a3	0.47	75	36	77	27	45	48	16	40	14
VLBS-U-LT 4t	7903400	4	HV8+a3	0.76	83	42	87	31	51	52	18	46	16
VLBS-U-LT 6.7t	7903684	6.7	HV12+a4	1.9	117	61	115	44	67	73	24	60	22
VLBS-U-LT 10t	7903135	10	HV16+a4	2.9	126	75	129	55	67	71	26.5	60	26



**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

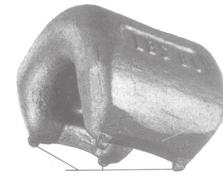
Failure to follow instructions can result in serious property damage, injury or death! For more information please see the warning information found in the hardware section of this catalogue

Sling Protection  
Web Slings  
Round Slings  
Synthetic Chain Slings  
Sling Rods  
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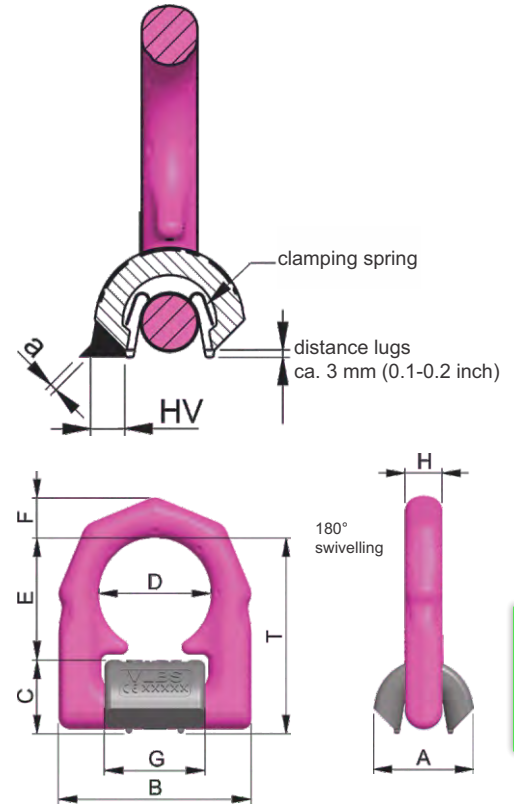
	weld		
	size	length	volume
VLBS 1.5 t	HV 5 + a 3	2 x 33 mm	approx. 1.2 cm <sup>3</sup>
VLBS 2.5 t	HV 7 + a 3	2 x 40 mm	approx. 2.6 cm <sup>3</sup>
VLBS 4 t	HV 8 + a 3	2 x 46 mm	approx. 3.2 cm <sup>3</sup>
VLBS 6.7 t	HV 12 + a 4	2 x 60 mm	approx. 8.7 cm <sup>3</sup>
VLBS 10 t	HV 16 + a 4	2 x 60 mm	approx. 15.5 cm <sup>3</sup>
VLBS 16 t	HV 25 + a 6	2 x 90 mm	approx. 56 cm <sup>3</sup>

chart 2



distance lugs for root welding

## Welding seam definition:



## Welding procedure + Welding filler metals:

Europe, USA, Asia, Australia,  
Africa

Baustähle, niedrig legierte Stähle  
EN 10025  
Mild steels, low alloyed steel

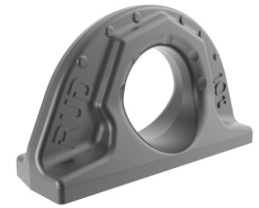
<b>MIG / MAG (135) Gas shielded wire welding (135)</b>	DIN EN ISO 14341: G4Si1 (G3Si1) z.B. PEGO G4Si1
<b>E-Hand Gleichstrom (111, =) Stick Electrode direct current</b>	DIN EN ISO 2560-A: E 42 6 B 3 2 H10 DIN EN ISO 2560-A: E 38 2 B 1 2 H10 z.B. PEGO B Spezial*/ PEGO BR Spezial*
<b>E-Hand (Wechselstrom 111, ~) Stick Electrode alternating current</b>	DIN EN ISO 2560-A: E 38 2 RB 1 2 DIN EN ISO 2560-A: E 42 0 RC 1 1 z.B. PEGO RC 3 / PEGO RR B 7 Alternativ: DIN EN ISO 3581: E 23 12 2 L R 3 2 z.B. PEGO 309 MoL
<b>WIG (141) TIG Tungsten arc welding</b>	DIN EN ISO 636-A: W 3 Si 1 (W2 Si 1) DIN EN ISO 636-A: W 2 Ni 2 z.B. PEGO WSG 2 / PEGO WSG2Ni2

chart 3

\* Stick dry weld

The specific processing informations of the welding fillers have to be attended.

Method of lift										
Number of legs	1	1	2	2	2	2	2	3 / 4	3 / 4	3 / 4
Angle of inclination <math>\beta</math>	0°	90°	0°	90°	0-45°	>45-60°	Un-symm.	0-45°	>45-60°	Un-symm.
Factor	1	1	2	2	1.4	1	1	2.1	1.5	1
Type	<b>max. weight of load</b>									
VLBS 1.5 t	1.5 t 3300 lbs	1.5 t 3300 lbs	3 t 6600 lbs	3 t 6600 lbs	2.12 t 4620 lbs	1.5 t 3300 lbs	1.5 t 3300 lbs	3.15 t 6930 lbs	2.24 t 4950 lbs	1.5 t 3300 lbs
VLBS 2.5 t	2.5 t 5500 lbs	2.5 t 5500 lbs	5 t 11000 lbs	5 t 11000 lbs	3.5 t 7700 lbs	2.5 t 5500 lbs	2.5 t 5500 lbs	5.25 t 11550 lbs	3.75 t 8250 lbs	2.5 t 5500 lbs
VLBS 4 t	4 t 8800 lbs	4 t 8800 lbs	8 t 17600 lbs	8 t 17600 lbs	5.6 t 12320 lbs	4 t 8800 lbs	4 t 8800 lbs	8.4 t 18500 lbs	6 t 13200 lbs	4 t 8800 lbs
VLBS 6.7 t	6.7 t 14750 lbs	6.7 t 14750 lbs	13.4 t 29500 lbs	13.4 t 29500 lbs	9.4 t 20650 lbs	6.7 t 14750 lbs	6.7 t 14750 lbs	14.1 t 30980 lbs	10 t 22100 lbs	6.7 t 14750 lbs
VLBS 10 t	10 t 22000 lbs	10 t 22000 lbs	20 t 44000 lbs	20 t 44000 lbs	14.0 t 30800 lbs	10 t 22000 lbs	10 t 22000 lbs	21.2 t 46200 lbs	15 t 33000 lbs	10 t 22000 lbs
VLBS 16 t	16 t 35200 lbs	16 t 35200 lbs	32 t 70400 lbs	32 t 70400 lbs	22.4 t 49300 lbs	16 t 35200 lbs	16 t 35200 lbs	33.6 t 73920 lbs	24 t 52800 lbs	16 t 35200 lbs



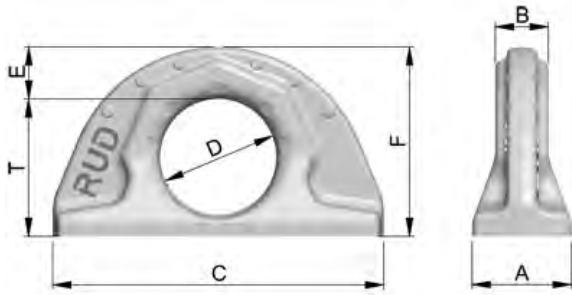
# ABA Lifting point for welding

## Weld-On Lifting Point

Product details

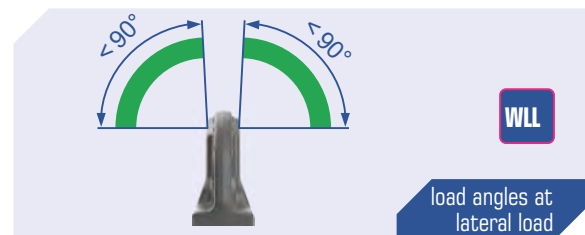
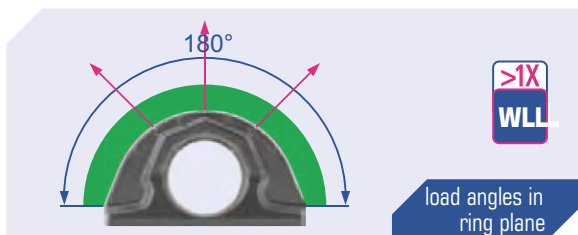
### Highlights

- 4:1 safety against breaking
- Patented markings for easy determination for withdraw of service
- Tempered base body, therefore wear-resistant



CAD RFID

Type	Item No.	WLL-X	Wght	T	A	B	C	D	E	F	Weld Seam
		[t]	kg/pc.	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
<b>ABA Lifting Point - For Welding</b>											
ABA 0.8t	7907698	0.8	0.2	32	22	12	70	32	12	50	a3 ▽
ABA 1.6t	7900352	1.6(4)	0.45	42	30	16	100	35	16	57	a4 ▽
ABA 3.2t	7900353	3.2(9)	1.15	59	41	23	137	50	21	80	a6 ▽
ABA 5t	7900354	5(12)	2.26	72	51	27	172	60	28	99	a7 ▽
ABA 10t	7900355	10(20)	5.37	95	70	38	228	80	35	130	a8 ▽
ABA 20t	7902174	20	10.72	135	90	52	272	115	40	175	a12 ▽
ABA 31.5t	7902175	31.5	18.33	154	108	64	320	130	50	204	a15 ▽



**WARNING: NEVER EXCEED WORKING LOAD LIMIT!**

Failure to follow instructions can result in serious property damage, injury or death! For more information please see the warning information found in the hardware section of this catalogue

Sling Protection  
Web Slings  
Round Slings  
Synthetic Chain Slings  
Wire Ropes  
Chain Slings  
Shackles & Turnbuckles  
Hooks & Links  
Lifting Points  
Hoists & Blocks  
Lifting Devices  
Pipe & Hose Restraints  
The Down Assemblies  
The Down Accessories  
Towing & Recovery  
Rope & Cordage

Europe, USA, Asia, Australia, Africa	
Mild steels, low alloyed steel EN 10025-2	
<b>MIG / MAG (135)</b> Gas shielded wire welding	DIN EN ISO 14341: G4Si1 (G3Si1) e.g. PEGO G4Si1
<b>E-Hand Gleichstrom (111, =)</b> Stick Electrode direct current	DIN EN ISO 2560-A: E 42 6 B 3 2 H10 DIN EN ISO 2560-A: E 38 2 B 1 2 H10 e.g. PEGO B Spezial*/PEGO BR Spezial*
<b>E-Hand Wechselstrom (111, ~)</b> Stick Electrode alternating current	DIN EN ISO 2560-A: E 38 2 RB 1 2 DIN EN ISO 2560-A: E 42 0 RC 1 1 e.g. PEGO RC 3 / PEGO RR B 7 Alternative: DIN EN ISO 3581: E 23 12 2 L R 3 2 e.g. PEGO 309 MoL
<b>WIG (141) (TIG (141))</b> Tungsten arc welding	DIN EN ISO 636-A: W 3 Si 1 (W2 Si 1) DIN EN ISO 636-A: W 2 Ni 2 e.g. PEGO WSG 2 / PEGO WSG2Ni2

Table 3: Welding procedure and Welding filler metals

Type	size fillet weld	length	volume
ABA 0.8 t	a = 3	177 mm	1.593 cm <sup>3</sup>
ABA 1.6 t	a = 4	251 mm	4.016 cm <sup>3</sup>
ABA 3.2 t	a = 6	344 mm	12.38 cm <sup>3</sup>
ABA 5 t	a = 7	431 mm	21.1 cm <sup>3</sup>
ABA 10 t	a = 8	576 mm	36.86 cm <sup>3</sup>
ABA 20 t	a = 12	697 mm	100.3 cm <sup>3</sup>
ABA 31.5 t	a = 15	824 mm	185.4 cm <sup>3</sup>

Table 4: Weld seam

Type	WLL [t]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	weight [kg/pc]	ref-no.
ABA 0.8 t	0.8	22	12	70	32	12	50	38	0.20	7907698
ABA 1.6 t	1.6	30	16	100	35	16	57	41.5	0.44	7900352
ABA 3.2 t	3.2	41	23	137	50	21	80	59	1.1	7900353
ABA 5 t	5	51	27	172	60	27.5	99	71.5	2.3	7900354
ABA 10 t	10	70	38	228	80	35	130	95	5.3	7900355
ABA 20 t	20	90	52	272	115	40	175	135	10.7	7902174
ABA 31.5 t	31.5	108	64	320	130	50	204	154	18.3	7902175

Table 5: Dimensioning

Method of lift	Subject to technical alterations									
Number of legs	1	1	2	2	2	2	2	3 / 4	3 / 4	3 / 4
Angle of inclination	0°	90°	0°	90°	0-45°	>45-60°	Un-symm.	0-45°	>45-60°	Un-symm.
Factor	1	1	2	2	1.4	1	1	2.1	1.5	1
Type	For the max. total load weight >G< in metric tons									
ABA 0.8 t	0.8 (2)	0.8 (2)	1.6 (4)	1.6 (4)	1.12 (2.8)	0.8 (2)	0.8 (2)	1.6 (4.25)	1.18 (3)	0.8 (2)
ABA 1.6 t	1.6 (4)	1.6 (4)	3.2 (8)	3.2 (8)	2.2 (5.6)	1.6 (4)	1.6 (4)	3.4 (8.4)	2.4 (6)	1.6 (4)
ABA 3.2 t	3.2 (9)	3.2 (9)	6.4 (18)	6.4 (18)	4.5 (12.6)	3.2 (9)	3.2 (9)	6.7 (18.9)	4.8 (13.5)	3.2 (9)
ABA 5 t	5 (12)	5 (12)	10 (24)	10 (24)	7 (16.8)	5 (12)	5 (12)	10.5 (25.2)	7.5 (18)	5 (12)
ABA 10 t	10 (20)	10 (20)	20 (40)	20 (40)	14 (28)	10 (20)	10 (20)	21.2 (42)	15 (30)	10 (20)
ABA 20 t	20	20	40	40	28	20	20	42	30	20
ABA 31.5 t	31.5	31.5	63	63	45	31.5	31.5	67	47.5	31.5

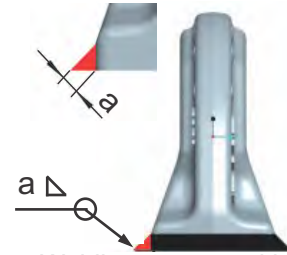
Table 2: WLL overview ( ) = WLL X planar to the ring WLL Y = Nominal Working Load



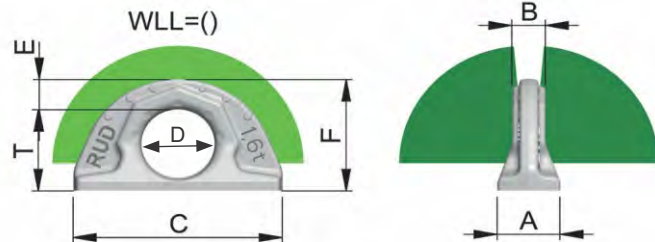
## HINT

Please note the corresponding user hint in regard of the welding filler materials and the drying requirements\*.

For welding the ABA 20 t & ABA 31.5 t the **preheat temperature** has to be between 150° and 170° C.



Picture 5: Welding seam position  
Nominal WLL



Picture 6: Dimensioning

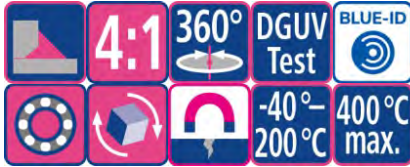


**Other Available Models from RUD**

**PP- PowerPoint®**

**Highlights**

Rotating 360°, pivoting 230°  
 Universal hook, ring or chain connection  
 Double ball bearing for turning/rotating operations



**VRBS-FIX / VRBS 90 / VRBK**

**Highlights**

No complex leveling of the components to each other  
 No crevice corrosion: endless HY weld seam  
 Clamping spring holds all parts together



**VABH-W / VCGH-S**

**Highlights**

As weldable lifting point on cross bars and beams  
 For wire rope slings and round slings  
 For lifting means with loop or oval suspension ring



For more information please visit [www.rud.com](http://www.rud.com)

Sling Protection  
 Web Slings  
 Round Slings  
 Synthetic Chain Slings  
 Round Slings  
 Chain Slings  
 Shackles & Turnbuckles  
 Hooks & Links  
 Hoists & Blocks  
 Lifting Devices  
 Pipe & Hose Restraints  
 Tie Down Assemblies  
 Tie Down Accessories  
 Towing & Recovery  
 Rope & Cordage

Lifting Points



# Yoke® 8-057 Weld-on Lifting Point

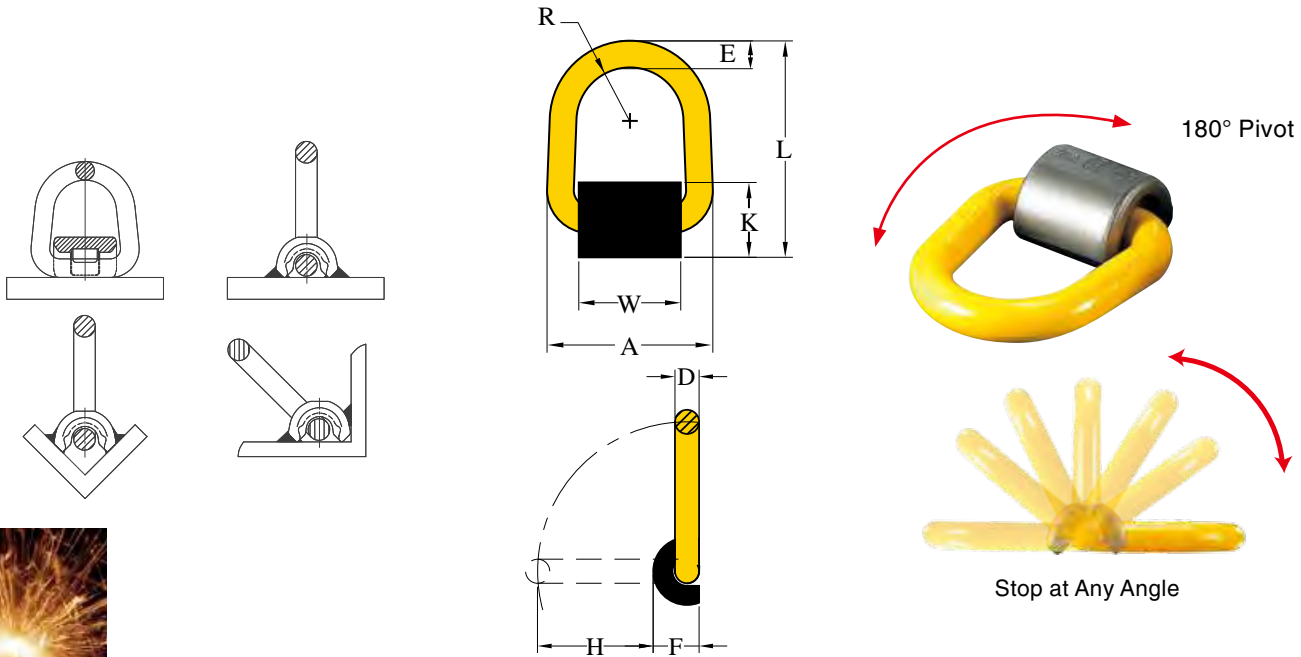


## Weld-on Lifting Point

Product details

### Highlights

- Pivots through 180°.
- Manufactured from forged alloy steel, quenched and tempered.
- Manufactured and tested in accordance with EN1677-1.
- Load rated parts are 100% magnaflux crack detected.
- Individual forged parts are traceable to Test Certification.
- Proof tested to 2.5 times the WLL.
- Fatigue rated to 1.5 times the WLL.
- All YOKE Lifting points meet or exceed all the requirements of ASME B30.26.
- WLL forged onto each product for quick and easy identification.
- Lugs designed to assist the welding process.
- A protected spring keeps the load ring in a required position. The parts are connected in such a way that they remain captive. The spring also reduces noise caused by vibrations



## 8-057 Weld-On Ring "DAA"

Item No.	WLL	Dimensions (mm)											Net Weight	
		lbs*	A	B	C	D	E	F	G	H	L	W		HV
8-057-1T	2,200	3.27	1.46	1.89	0.55	0.55	2.95	1.02	1.93	4.13	1.89	0.2	0.12	1.1
8-057-3T	6,600	3.86	1.89	2.28	0.67	0.67	3.35	1.22	2.13	4.41	2.13	0.24	0.12	2
8-057-5T	11,000	4.72	2.2	2.6	0.87	0.87	3.62	1.46	2.17	6.06	2.2	0.25	0.12	2.9
8-057-8T	17,600	4.76	2.68	2.68	1.02	1.02	4.8	1.85	2.95	6.65	2.17	0.39	0.16	5.7
8-057-10T	22,000	5.75	2.68	3.23	0.79	1.18	4.92	1.85	3.07	7.52	2.76	0.39	0.16	6.2

### WARNING: NEVER EXCEED WORKING LOAD LIMIT!

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- Sling Protection
- Web Slings
- Round Slings
- Synthetic Chain Slings
- Wire Rope Slings
- Chain Slings
- Shackles & Turnbuckles
- Hooks & Links
- Lifting Points
- Hoists & Blocks
- Lifting Devices
- Pipe & Hose Restraints
- Tie Down Assemblies
- Tie Down Accessories
- Towing & Recovery
- Rope & Carriage

## WELDING INSTRUCTIONS

The welding should only be carried out by qualified welder according to Standards, e.g. EN 287 or AWS.

### Support material

Material of the welding block is S355J2+N (1.0577+N, St 52-3N, B.S. 4360.50D, AISI 1019 etc.).

Prior to welding, the contact areas must be free from impurities, oil, paint, rust, scale, etc., for example by grinding. If the surface is at all corroded, all rust must be completely removed from the weld area. Painted surface must be prepared in the same way.

The steel support member must have a carbon content of no more than 0.40%.

In ambient temperature of 10°C and below, pre-heating of the weld area prior to welding must be carried out.

### Seam welding

The welds must be sufficiently strong to take the required loads.

Before starting the final weld pass, clean well the root pass to avoid inclusions.

The complete welding operation must be carried out continuously so that the parts do not have time to cool.

### Effects of temperature

- The complete construction can be annealed stress release at <600°C without reduction of WLL.
- Do not rapidly cool the weld.

A thorough inspection of the weld should be performed. No cracks, pitting, inclusions, notches or undercuts are allowed. If doubt exists, use a suitable NDT method, such as magnetic particle or liquid penetrant to verify.

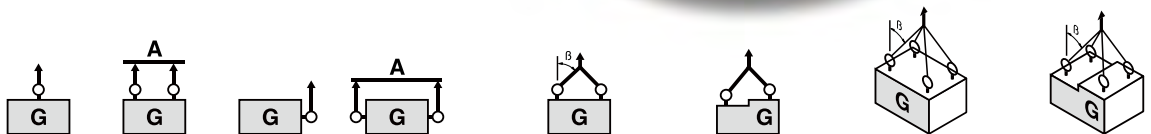
If repair is required, grind out the defect and re-weld using the original qualified procedure.

### Welding materials

Weld materials must have a minimum tensile strength of 70,000 PSI (such as AWS A5.1 E-7018), following the electrode manufacturer's recommendations. Reference information as below:

MIG arc welding:

- Wire diameter 0.8 - 1.2 as per DIN 8559-SG 3, AWS A 5.18.
- Important: do not weld in the open air during bad weather



Number of Legs		1	2	1	2	2	2	2	3-4	3-4	3-4
Load Direction		0°	0°	90°	90°	0-45°	45°-60°	unsymm	0-45°	45°-	60°
Item No.	Size	RATED LOAD kgs.									
8-057	1T	2,300	4,500	2,300	4,500	3,100	2,300	2,300	4,700	3,400	2,300
8-057	3T	6,700	13,300	6,700	13,300	9,300	6,700	6,700	13,900	10,000	6,700
8-057	5T	11,100	22,100	11,100	22,100	15,500	11,100	11,100	23,200	16,600	11,100
8-057	8T	17,700	35,300	17,700	35,300	24,700	17,700	17,700	37,100	26,500	17,700
8-057	10T	22,100	44,100	22,100	44,100	30,900	22,100	22,100	46,300	33,100	22,100