






















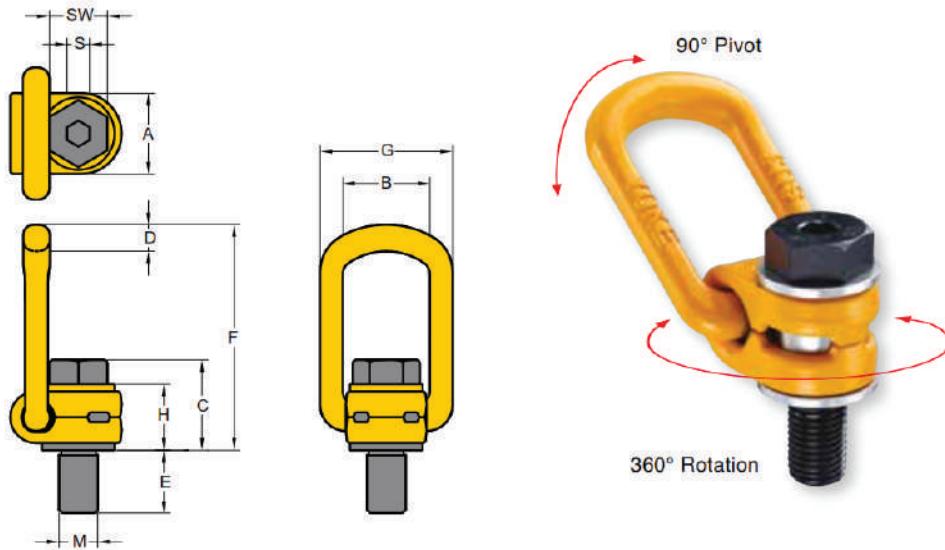


HOIST RINGS & LIFTING POINT

			8-271 Swivel Point																
																			
	Number of legs	Load direction	Item No.	8-271-003	8-271-004	8-271-006	8-271-013	8-271-020	8-271-035	8-271-060	8-271-080	8-271-120	8-271-130	8-271-140	8-271-160	8-271-161	8-271-310	8-271-350	8-271-400
			Thread Size	M 8	M 10	M 12	M 16	M 20	M 24	M 30	M 36	M 42	M 48	M 52	M 56	M 64	M 72	M 80	M 90
	1	0°		0.6	0.9	1.2	2.6	4	7	10	15	17	18	25	28	28	50	50	50
	2	0°		1.2	1.8	2.4	5.2	8	14	20	30	34	36	50	56	56	100	100	100
	1	90°		0.3 (0.4)	0.45 (0.6)	0.6 (0.7)	1.3 (1.5)	2 (2.5)	3.5 (4)	5 (6)	8 (10)	13 (13)	14 (16)	20 (20)	20 (22)	20 (22)	40 (40)	40 (48)	40 (48)
	2	90°		0.6 (0.8)	0.9 (1.2)	1.2 (1.5)	2.6 (3)	4 (5)	7 (8)	10 (12)	16 (20)	26 (26)	28 (32)	40 (40)	40 (44)	40 (44)	80 (80)	80 (96)	80 (96)
	2	0-45°		0.4	0.6	0.8	1.8	2.8	4.9	7	11.2 (14)	18.2 (18.2)	19.6 (22.4)	28 (28)	28 (30.8)	28 (30.8)	56 (56)	56 (67.2)	56 (67.2)
	2	45-60°		0.3	0.4	0.6	1.3	2	3.5	5	8 (10)	13 (13)	14 (16)	20 (20)	20 (22)	20 (22)	40 (40)	40 (48)	40 (48)
	2	unsymm.		0.3	0.4	0.6	1.3	2	3.5	5	8 (10)	13 (13)	14 (16)	20 (20)	20 (22)	20 (22)	40 (40)	40 (48)	40 (48)
	3-4	0-45°		0.6	0.9	1.2	2.7	4.2	7.3	10.5	16.8 (21)	27.3 (27.3)	29.4 (33.6)	42 (42)	42 (46.2)	42 (46.2)	84 (84)	84 (100)	84 (100)
	3-4	45-60°		0.4	0.6	0.9	1.9	3	5.2	7.5	12 (15)	19.5 (19.5)	21 (24)	30 (30)	30 (33)	30 (33)	60 (60)	60 (72)	60 (72)
	3-4	unsymm.		0.3	0.4	0.6	1.3	2	3.5	5	8 (10)	13 (13)	14 (16)	20 (20)	20 (22)	20 (22)	40 (40)	40 (48)	40 (48)
			Thread Size	M 8	M 10	M 12	M 16	M 20	M 24	M 30	M 36	M 42	M 48	M 52	M 56	M 64	M 72	M 80	M 90

8-231 Anchor Point															8-203 Hoist Ring														
																													
8-231-005	8-231-007	8-231-010	8-231-015	8-231-020	8-231-025	8-231-030	8-231-050	8-231-056	8-231-078	8-231-125	8-231-156	8-231-200	8-231-220	8-231-225	8-203-004	8-203-005	8-203-010	8-203-019	8-203-021	8-203-030	8-203-042	8-203-070	8-203-110	8-203-125	8-203-135				
M 8	M 10	M 12	M 14	M 16	M 18	M 20	M 24	M 27	M 30	M 36	M 42	M 48	M 56	M 64	M 8	M 10	M 12	M 16	M 20	M 20	M 24	M 30	M 36	M 42	M 48				
0.5	0.7	1	1.5	2	2.5	3	5	5.6	7.8	12.5	15.6	20	22	22.5	0.5	0.55	1.3	2.4	2.7	3.75	5.25	8.75	13.75	15.6	16.9				
1	1.4	2	3	4	5	6	10	11.2	15.6	25	31.2	40	44	45	1	1.1	2.6	4.8	5.4	7.5	10.5	17.5	27.5	31.2	33.8				
0.5	0.7	1	1.5	2	2.5	3	5	5.6	7.8	12.5	15.6	20	22	22.5	0.5	0.55	1.3	2.4	2.7	3.75	5.25	8.75	13.75	15.6	16.9				
1	1.4	2	3	4	5	6	10	11.2	15.6	25	31.2	40	44	45	1	1.1	2.6	4.8	5.4	7.5	10.5	17.5	27.5	31.2	33.5				
0.7	1	1.4	2.1	2.8	3.5	4.2	7	7.8	10.9	17.5	21.8	28	30.8	31.5	0.7	0.77	1.82	3.36	3.78	5.25	7.35	12.25	19.25	21.84	23.66				
0.5	0.7	1	1.5	2	2.5	3	5	5.6	7.8	12.5	15.6	20	22	22.5	0.5	0.55	1.3	2.4	2.7	3.75	5.25	8.75	13.75	15.6	16.9				
0.5	0.7	1	1.5	2	2.5	3	5	5.6	7.8	12.5	15.6	20	22	22.5	0.5	0.55	1.3	2.4	2.7	3.75	5.25	8.75	13.75	15.6	16.9				
1.1	1.5	2.1	3.2	4.2	5.3	6.3	10.5	11.8	16.4	26.3	32.8	42	46.2	47.3	1.05	1.16	2.73	5.04	5.67	7.88	11.03	18.38	28.88	32.76	35.49				
0.8	1.1	1.5	2.3	3	3.8	4.5	7.5	8.4	11.7	18.8	23.4	30	33	33.8	0.75	0.83	1.95	3.6	4.05	5.63	7.88	13.13	20.63	23.4	25.35				
0.5	0.7	1	1.5	2	2.5	3	5	5.6	7.8	12.5	15.6	20	22	22.5	0.5	0.55	1.3	2.4	2.7	3.75	5.25	8.75	13.75	15.6	16.9				
M 8	M 10	M 12	M 14	M 16	M 18	M 20	M 24	M 27	M 30	M 36	M 42	M 48	M 56	M 64	M 8	M 10	M 12	M 16	M 20	M 20	M 24	M 30	M 36	M 42	M 48				

			8-211 Lifting Point																8-291K / 8-291 Eye Point																
																																			
	Number of legs	Load direction	Item No.																																
			Thread Size	8-211-003	8-211-006	8-211-010	8-211-012	8-211-015	8-211-020	8-211-025	8-211-040	8-211-042	8-211-050	8-211-070	8-211-080	8-211-100	8-211-150	8-211-200	8-291K-003	8-291K-004	8-291K-007	8-291K-015	8-291K-023	8-291K-032	8-291K-045	8-291K-070	8-291K-090	8-291K-120	8-291K-140	8-291K-150					
	1	0°		0.3	0.63	1	1.2	1.5	2	2.5	4	4	5	7	8	10	15	20	1	1	2	4	6	8	12	16	24	32	32	32					
	2	0°		0.6	1.26	2	2.4	3	4	5	8	8	10	14	16	20	30	40	2	2	4	8	12	16	24	32	48	64	64	64					
	1	90°		0.3	0.63	1	1.2	1.5	2	2.5	4	4	5	7	8	10	15	20	0.3	0.4	0.75	1.5	2.3	3.2	4.5	7	9	12	12	12					
	2	90°		0.6	1.26	2	2.4	3	4	5	8	8	10	14	16	20	30	40	0.6	0.8	1.5	3	4.6	6.4	9	14	18	24	24	24					
	2	0-45°		0.42	0.88	1.4	1.7	2.1	2.8	3.5	5.6	5.6	7	9.8	11.2	14	21	28	0.42	0.56	1	2.1	3.2	4.5	6.3	9.8	12.6	16.8	16.8	16.8					
	2	45-60°		0.3	0.63	1	1.2	1.5	2	2.5	4	4	5	7	8	10	15	20	0.3	0.4	0.75	1.5	2.3	3.2	4.5	7	9	12	12	12					
	2	unsymm.		0.3	0.63	1	1.2	1.5	2	2.5	4	4	5	7	8	10	15	20	0.3	0.4	0.75	1.5	2.3	3.2	4.5	7	9	12	12	12					
	3-4	0-45°		0.63	1.32	2.1	2.5	3.1	4.2	5.2	8.4	8.4	10.5	14.7	16.8	21	31.5	42	0.63	0.8	1.5	3.1	4.8	6.7	9.4	14.7	18.9	25	25	25					
	3-4	45-60°		0.45	0.95	1.5	1.8	2.2	3	3.7	6	6	7.5	10.5	12	15	22.5	30	0.45	0.6	1.1	2.2	3.4	4.8	6.7	10.5	13.5	18	18	18					
	3-4	unsymm.		0.3	0.63	1	1.2	1.5	2	2.5	4	4	5	7	8	10	15	20	0.3	0.4	0.75	1.5	2.3	3.2	4.5	7	9	12	12	12					
			Thread Size	M 8	M 10	M 12	M 14	M 16	M 18	M 20	M 24	M 27	M 30	M 36	M 36	M 42	M 42	M 48	M 8	M 10	M 12	M 16	M 20	M 24	M 30	M 36	M 42	M 48	M 56	M 64					



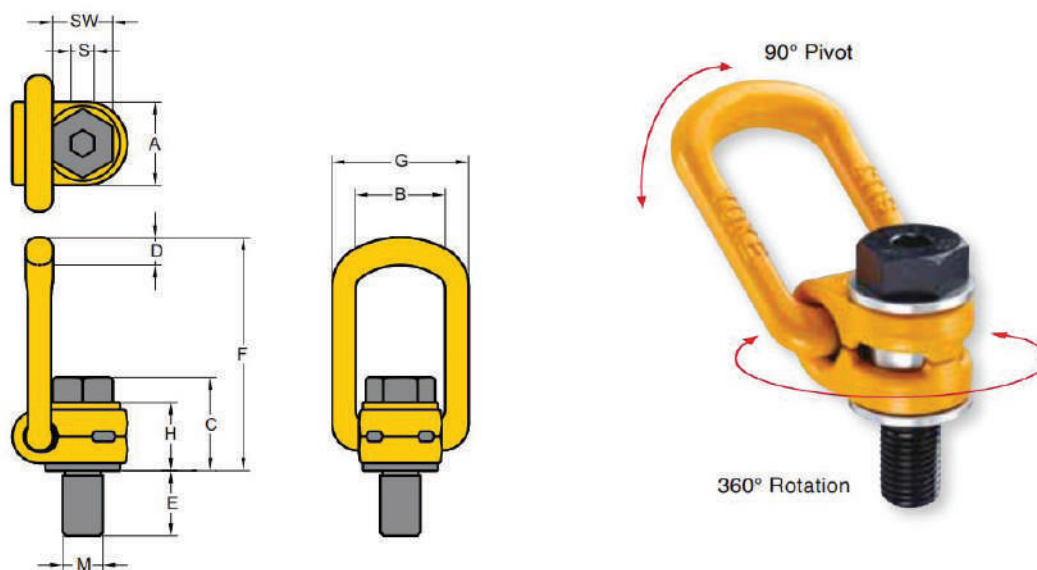
Lifting Point

Metric Thread (8-211)

Item No.	Working Load Limit tonnes*	Thread M	Dimensions (mm)										Torque in Nm	N.W. kg	Repair Kits
			A	B	C	D	E	F	G	H	S	SW			
8-211-003	0.3	M 8 x 1.25	30	35	35	10	11	85	55	29	6	13	30	0.2	8-P211-003
8-211-006	0.63	M10 x 1.5	30	35	36	10	16	85	55	29	6	17	60	0.3	8-P211-006
8-211-010	1	M12 x 1.75	33	37	44	14	18	98	57	36	8	19	100	0.5	8-P211-010
8-211-012	1.2	M14 x 2	33	37	45	14	21	98	57	36	10	22	120	0.5	8-P211-012
8-211-015	1.5	M16 x 2	33	37	46	14	24	98	57	36	10	24	150	0.5	8-P211-015
8-211-020	2	M18 x 2	50	54	57	17	26	140	82	44	12	30	200	1.3	8-P211-020
8-211-025	2.5	M20 x 2.5	50	54	57	17	30	140	82	44	12	30	250	1.3	8-P211-025
8-211-040	4	M24 x 3	50	54	59	17	36	140	82	44	14	36	400	1.4	8-P211-040
8-211-042	4	M27 x 3	60	65	79	23	38	170	99	62	17	41	400	2.8	8-P211-042
8-211-050	5	M30 x 3.5	60	65	81	23	48	170	99	62	17	46	500	3.1	8-P211-050
8-211-070	7	M36 x 4	60	65	74	23	54	170	99	65	22	55	700	3.3	8-P211-070
8-211-080	8	M36 x 4	77	85	101	27	62	225	124	78	22	55	800	5.8	8-P211-080
8-211-100	10	M42 x 4.5	77	85	104	27	72	225	124	78	24	65	1000	6.3	8-P211-100
8-211-150	15	M42 x 4.5	95	104	112	36	63	256	158	86	24	65	1500	10.8	8-P211-150
8-211-200	20	M48 x 5	95	104	120	36	72	259	158	90	27	75	2000	11.6	8-P211-200

★ Design Factor 4:1

** Bolt in GEOMET® finished on request



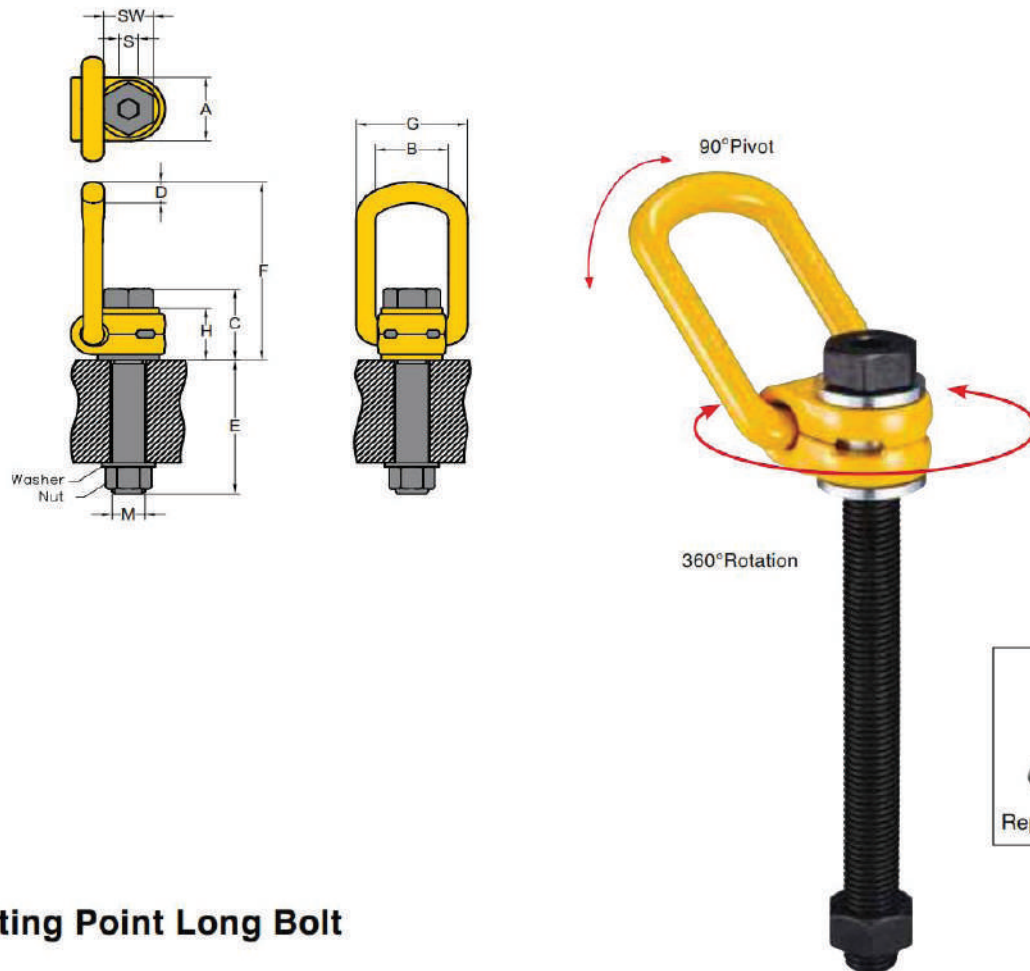
Lifting Point

UNC Thread (8-212)

Item No.	Working Load Limit	Thread	Dimensions (inch)										Torque in ft. lbs	N.W. lbs	Repair Kits
	lbs*		A	B	C	D	E	F	G	H	S	SW			
8-212-010	2200	1/2 - 13UNC	1.30	1.46	1.73	0.53	0.75	3.86	2.24	1.42	5/16	3/4	73	1.1	8-P212-010
8-212-015	3300	5/8 - 11UNC	1.30	1.46	1.81	0.53	0.94	3.86	2.24	1.42	3/8	15/16	110	1.1	8-P212-015
8-212-020	5500	3/4 - 10UNC	1.97	2.13	2.2	0.65	1.10	5.51	3.23	1.73	1/2	1 1/8	185	2.9	8-P212-020
8-212-025	5500	7/8 - 9UNC	1.97	2.13	2.28	0.65	1.10	5.51	3.23	1.73	5/8	1 5/16	221	2.9	8-P212-025
8-212-040	8800	1 - 8UNC	1.97	2.13	2.34	0.65	1.61	5.51	3.23	1.73	5/8	1 1/2	295	3.1	8-P212-040
8-212-050	11000	1 1/4 - 7UNC	2.36	2.56	3.23	0.89	1.61	6.69	3.9	2.44	7/8	1 7/8	368	6.8	8-P212-050
8-212-080	17000	1 1/2 - 6UNC	3.03	3.35	4.01	1.04	2.25	8.86	4.88	3.07	1	2 1/4	585	12.8	8-P212-080
8-212-150	33000	1 3/4 - 5UNC	3.74	4.09	4.48	1.42	2.63	10.08	6.22	3.39	1	2 5/8	1107	24.0	8-P212-150
8-212-200	44000	2 - 4.5UNC	3.74	4.09	4.76	1.42	3.00	10.2	6.22	3.54	1 1/4	3	1476	25.5	8-P212-200

★ Design Factor 4:1

** Bolt in GEOMET® finished on request



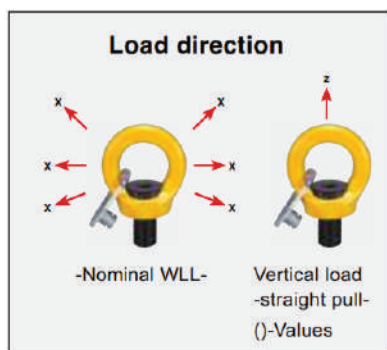
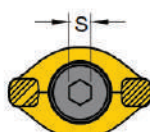
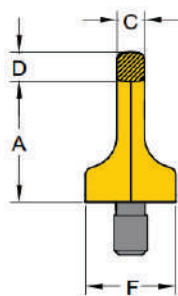
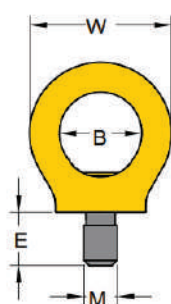
Lifting Point Long Bolt

Metric Thread

Item No.	Working Load Limit tonnes*	Thread M	Dimensions (mm)										Torque in Nm	N.W. kg	Repair Kits
			A	B	C	D	E	F	G	H	S	SW			
8-211-003/105L	0.3	M 8 x 1.25	30	35	35	10	76	85	55	29	6	13	30	0.3	8-P211-003/105L
8-211-006/125L	0.63	M10 x 1.5	30	35	36	10	96	85	55	29	6	17	60	0.4	8-P211-006/125L
8-211-010/150L	1	M12 x 1.75	33	37	44	14	114	98	57	36	8	19	100	0.6	8-P211-010/150L
8-211-015/185L	1.5	M16 x 2	33	37	46	14	149	98	57	36	10	24	150	0.7	8-P211-015/185L
8-211-025/230L	2.5	M20 x 2.5	50	54	57	17	186	140	82	44	12	30	250	1.7	8-P211-025/230L
8-211-040/265L	4	M24 x 3	50	54	59	17	221	140	82	44	14	36	400	2.1	8-P211-040/265L
8-211-050/340L	5	M30 x 3.5	60	65	81	23	278	170	99	62	17	46	500	4.3	8-P211-050/340L
8-211-080/300L	8	M36 x 4	77	85	101	27	222	225	124	78	22	55	800	7.3	8-P211-080/300L
8-211-100/350L	10	M42 x 4.5	77	85	104	27	272	225	124	78	24	65	1000	8.7	8-P211-100/350L
8-211-150/350L	15	M42 x 4.5	95	104	112	36	264	256	158	86	24	65	1500	13.1	8-P211-150/350L
8-211-200/385L	20	M48 x 5	95	104	120	36	295	259	158	90	27	75	2000	15.2	8-P211-200/385L

★ Design Factor 4:1

** Bolt in GEOMET[®] finished on request



360° Rotation



Key Eye Point

Metric Thread (8-291K)

Item No.	Working Load Limit	Thread	Dimensions (mm)								Torque in	N.W.	Key	
	tonnes*		M	A	B	C	D	E	F	S	W	Nm		kg
	x (z)													
8-291K-003	0.3 (1)	M 8 x 1.25	36	25	8	9	12	25	6	44	10	0.1	8-P291K-004	
8-291K-004	0.4 (1)	M10 x 1.5	36	25	8	9	15	25	6	44	10	0.1	8-P291K-004	
8-291K-007	0.75 (2)	M12 x 1.75	45	30	10	11	18	33	8	52	10	0.2	8-P291K-007	
8-291K-015	1.5 (4)	M16 x 2	52	35	14	13	24	35	10	61	30	0.3	8-P291K-015	
8-291K-023	2.3 (6)	M20 x 2.5	60	40	16	15	30	44	12	70	70	0.6	8-P291K-023	
8-291K-032	3.2 (8)	M24 x 3	72	48	19	18	36	52	14	84	150	1.0	8-P291K-032	
8-291K-045	4.5 (12)	M30 x 3.5	90	60	24	22	45	60	17	105	350	1.8	8-P291K-045	
8-291K-070	7.0 (16)	M36 x 4	109	72	29	27	54	76	22	126	410	3.2	8-P291K-070	
8-291K-090	9.0 (24)	M42 x 4.5	123	82	34	32	63	88	24	147	550	5.0	8-P291K-090	
8-291K-120	12.0 (32)	M48 x 5	144	94	38	37	72	104	27	168	550	7.6	8-P291K-120	
8-291K-140	12.0 (32)	M56 x 5.5	147	102	40	43	84	124	27	178	800	9.2	8-P291K-150	
8-291K-150	12.0 (32)	M64 x 6	147	102	40	43	95	124	27	178	800	10.0	8-P291K-150	

★ Design Factor 4:1

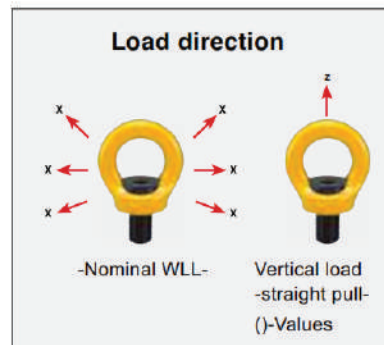
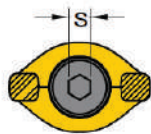
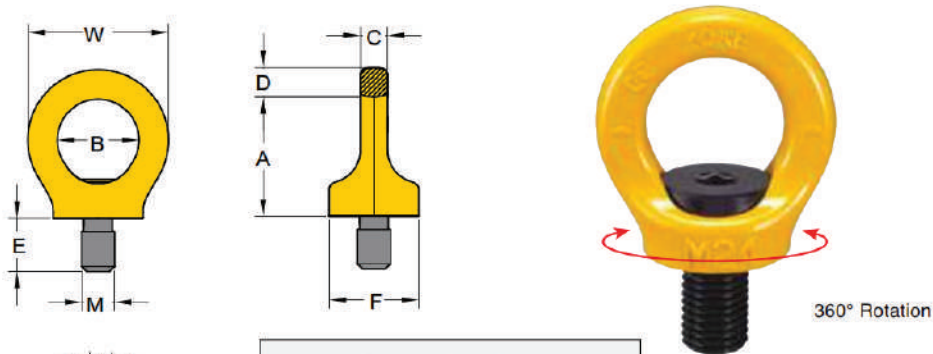
** Bolt in GEOMET® finished on request

UNC Thread (8-292K)

Item No.	Working Load Limit	Thread	Dimensions (inch)								Torque in	N.W.	Key
	lbs*		TPI	A	B	C	D	E	F	S	W	ft. lbs	
	x (z)												
8-292K-003	660 (2200)	5/16 - 18UNC	1.42	0.98	0.31	0.35	0.47	0.98	0.25	1.73	7	0.2	8-P292K-004
8-292K-004	880 (2200)	3/8 - 16UNC	1.42	0.98	0.31	0.35	0.57	0.98	0.25	1.73	7	0.2	8-P292K-004
8-292K-007	1650 (4400)	1/2 - 13UNC	1.77	1.18	0.39	0.43	0.75	1.30	0.31	2.05	7	0.4	8-P292K-007
8-292K-015	3300 (8800)	5/8 - 11UNC	2.05	1.38	0.55	0.51	0.94	1.38	0.37	2.40	20	0.7	8-P292K-015
8-292K-023	5060 (13200)	3/4 - 10UNC	2.36	1.57	0.63	0.59	1.13	1.73	0.50	2.76	50	1.3	8-P292K-023
8-292K-025	5060 (13200)	7/ 8 - 9UNC	2.36	1.57	0.63	0.59	1.31	1.73	0.50	2.76	50	1.3	8-P292K-025
8-292K-032	7040 (17600)	1 - 8UNC	2.83	1.89	0.75	0.71	1.50	2.05	0.56	3.31	110	2.2	8-P292K-032
8-292K-045	9900 (26400)	1 1/4 - 7UNC	3.54	2.36	0.94	0.87	1.88	2.36	0.63	4.13	250	4.0	8-P292K-045
8-292K-070	15400 (35200)	1 1/2 - 6UNC	4.29	2.83	1.14	1.06	2.25	2.99	0.87	4.96	300	7.0	8-P292K-070
8-292K-090	19800 (52800)	1 3/4 - 5UNC	4.84	3.23	1.34	1.26	2.63	3.46	1.00	5.79	400	11.0	8-P292K-090
8-292K-120	26400 (70400)	2 - 4.5UNC	5.67	3.70	1.50	1.46	3.00	4.09	1.00	6.61	400	16.7	8-P292K-120

★ Design Factor 4:1

** Bolt in GEOMET® finished on request



Eye Point

Metric Thread (8-291)

Item No.	Working Load Limit	Thread	Dimensions (mm)								Torque in Nm	N.W. kg	Repair Kits	
	tonnes*		M	A	B	C	D	E	F	S				W
	x (z)													
8-291-003	0.3 (1)	M 8 x 1.25	36	25	8	9	12	25	6	44	10	0.1	8-P291-003	
8-291-004	0.4 (1)	M10 x 1.5	37	25	8	9	15	25	6	44	10	0.1	8-P291-004	
8-291-007	0.75 (2)	M12 x 1.75	45	30	10	11	18	33	8	52	10	0.2	8-P291-007	
8-291-015	1.5 (4)	M16 x 2	52	35	14	13	24	35	10	61	30	0.3	8-P291-015	
8-291-023	2.3 (6)	M20 x 2.5	60	40	16	15	30	44	12	70	70	0.6	8-P291-023	
8-291-032	3.2 (8)	M24 x 3	72	48	19	18	36	52	14	84	150	1.0	8-P291-032	
8-291-045	4.5 (12)	M30 x 3.5	90	60	24	22	45	60	17	105	350	1.8	8-P291-045	
8-291-070	7.0 (16)	M36 x 4	109	72	29	27	54	76	22	126	410	3.2	8-P291-070	
8-291-090	9.0 (24)	M42 x 4.5	123	82	34	32	63	88	24	147	550	5.0	8-P291-090	
8-291-120	12.0 (32)	M48 x 5	144	94	38	37	72	104	27	168	550	7.6	8-P291-120	
8-291-140	12.0 (32)	M56 x 5.5	147	102	40	43	84	124	27	178	800	9.2	8-P291-140	
8-291-150	12.0 (32)	M64 x 6	147	102	40	43	95	124	27	178	800	10.0	8-P291-150	

★ Design Factor 4:1

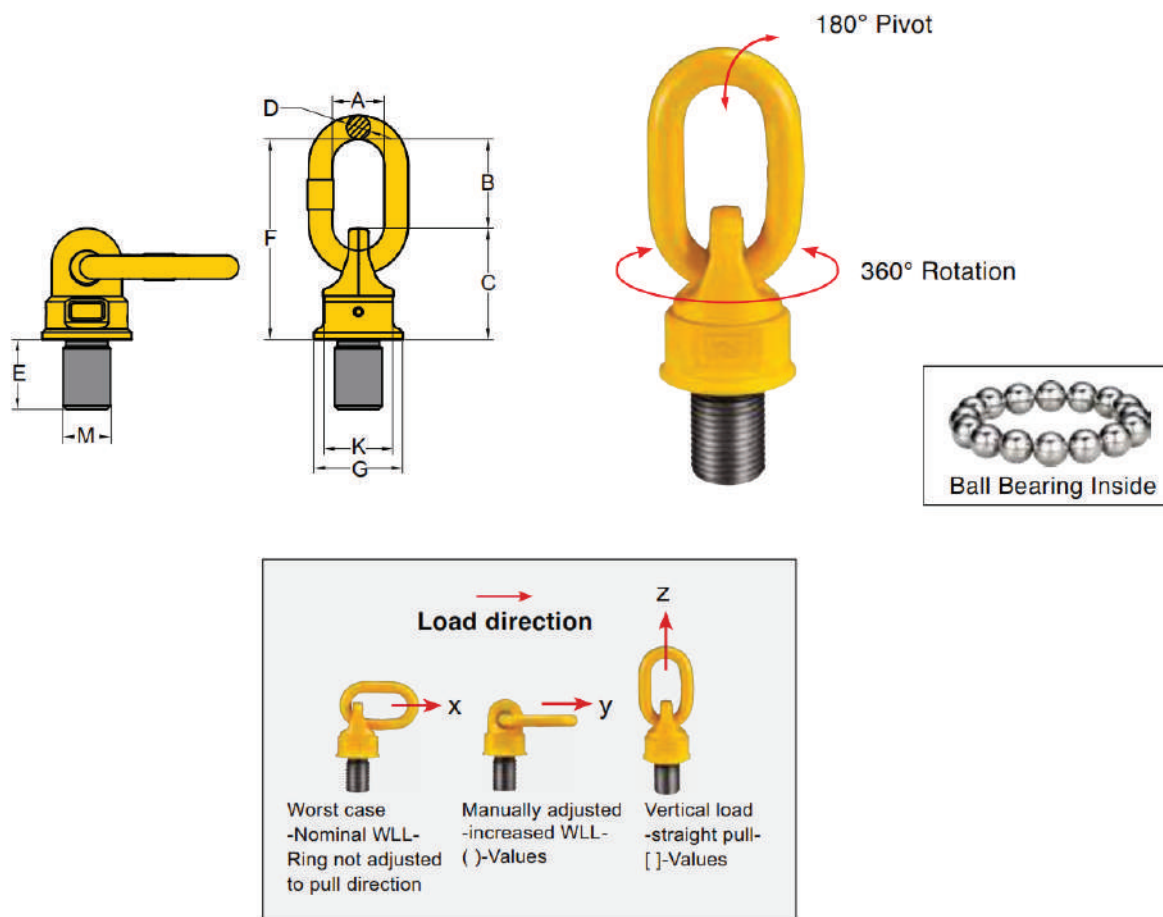
** Bolt in GEOMET® finished on request

UNC Thread (8-292)

Item No.	Working Load Limit	Thread	Dimensions (inch)								Torque in ft. lbs	N.W. lbs	Repair Kits	
	lbs*		TPI	A	B	C	D	E	F	S				W
	x (z)													
8-292-003	660 (2200)	5/16 - 18UNC	1.42	0.98	0.31	0.35	0.47	0.98	0.25	1.73	7	0.2	8-P292-003	
8-292-004	880 (2200)	3/8 - 16UNC	1.46	0.98	0.31	0.35	0.57	0.98	0.25	1.73	7	0.2	8-P292-004	
8-292-007	1650 (4400)	1/2 - 13UNC	1.77	1.18	0.39	0.43	0.75	1.30	0.31	2.05	7	0.4	8-P292-007	
8-292-015	3300 (8800)	5/8 - 11UNC	2.05	1.38	0.55	0.51	0.94	1.38	0.37	2.40	20	0.7	8-P292-015	
8-292-023	5060 (13200)	3/4 - 10UNC	2.36	1.57	0.63	0.59	1.13	1.73	0.50	2.76	50	1.3	8-P292-023	
8-292-025	5060 (13200)	7/8 - 9UNC	2.36	1.57	0.63	0.59	1.31	1.73	0.50	2.76	50	1.3	8-P292-025	
8-292-032	7040 (17600)	1 - 8UNC	2.83	1.89	0.75	0.71	1.50	2.05	0.56	3.31	110	2.2	8-P292-032	
8-292-045	9900 (26400)	1 1/4 - 7UNC	3.54	2.36	0.94	0.87	1.88	2.36	0.63	4.13	250	4.0	8-P292-045	
8-292-070	15400 (35200)	1 1/2 - 6UNC	4.29	2.83	1.14	1.06	2.25	2.99	0.87	4.96	300	7.0	8-P292-070	
8-292-090	19800 (52800)	1 3/4 - 5UNC	4.84	3.23	1.34	1.26	2.63	3.46	1.00	5.79	400	11.0	8-P292-090	
8-292-120	26400 (70400)	2 - 4.5UNC	5.67	3.70	1.50	1.46	3.00	4.09	1.00	6.61	400	16.7	8-P292-120	

★ Design Factor 4:1

** Bolt in GEOMET® finished on request



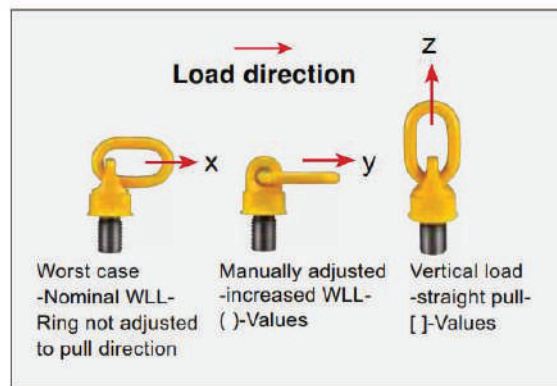
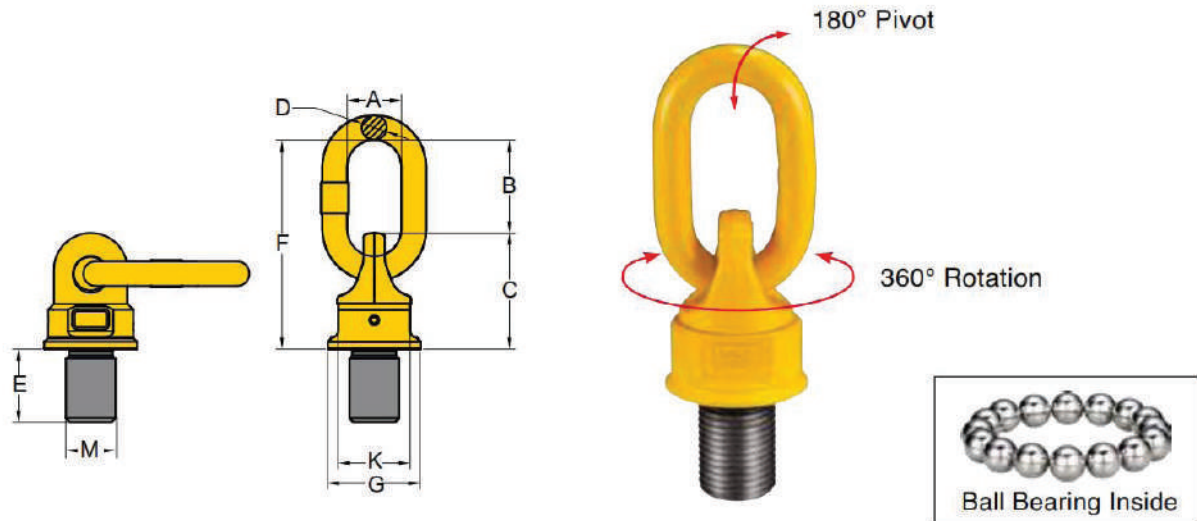
Swivel Point

Metric Thread (8-271)

Item No.	Working Load Limit	Thread	Dimensions (mm)								Torque in Nm	N.W. kg	
	tonnes*		M	A	B	C	D	E	F	G			K
	x (y) [z]												
8-271-003	0.3 (0.4) [0.6]	M 8 x 1.25	29	32	40	8	12	72	35	30	10	0.2	
8-271-004	0.45 (0.6) [0.9]	M10 x 1.5	29	32	40	8	15	72	35	30	10	0.2	
8-271-006	0.6 (0.7) [1.2]	M12 x 1.75	35	50	45	10	18	95	40	36	10	0.3	
8-271-013	1.3 (1.5) [2.6]	M16 x 2	38	50	54	13	24	104	46	41	30	0.5	
8-271-020	2 (2.5) [4]	M20 x 2.5	38	54	68	13	30	122	62	55	70	1.0	
8-271-035	3.5 (4) [7]	M24 x 3	40	66	88	19	36	154	78	70	150	2.2	
8-271-060	5 (6) [10]	M30 x 3.5	50	86	120	22	46	206	90	80	350	4.5	
8-271-080	8 (10) [15]	M36 x 4	50	86	120	22	55	206	90	80	410	4.6	
8-271-120	13 (13) [17]	M42 x 4.5	65	110	122	25	64	235	98	84	550	5.5	
8-271-130	14 (16) [18]	M48 x 5	65	110	122	25	73	235	98	84	550	6.1	
8-271-140	20 (20) [25]	M52 x 5	70	120	150	32	79	270	120	94	750	10.5	
8-271-160	20 (22) [28]	M56 x 5.5	70	120	150	32	85	270	120	94	800	10.7	
8-271-161	20 (22) [28]	M64 x 6	70	120	150	32	95	270	120	94	800	11.6	
8-271-310	40 (40) [50]	M72 x 6	90	130	210	45	108	340	170	145	1200	30.6	
8-271-350	40 (48) [50]	M80 x 6	90	130	210	45	120	340	170	145	1500	31.9	
8-271-400	40 (48) [50]	M90 x 6	90	130	210	45	135	340	170	145	2000	33.9	

★ Design Factor 4:1

※ Thread M33, M39, M45, up to M150 are available upon request



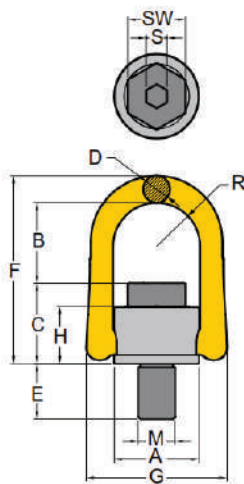
Swivel Point

UNC Thread (8-272)

Item No.	Working Load Limit	Thread	Dimensions (inch)									Torque in ft. lbs	N.W. lbs
	lbs*		TPI	A	B	C	D	E	F	G	K		
	x (y) [z]												
8-272-006	1320 (1550) [2650]	1/2 - 13UNC	1.38	1.97	1.77	0.39	0.75	3.74	1.57	1.42	7	0.7	
8-272-013	2860 (3300) [5720]	5/8 - 11UNC	1.50	1.97	2.13	0.51	0.94	4.09	1.81	1.61	20	1.2	
8-272-018	3960 (4400) [7900]	3/4 - 10UNC	1.50	1.97	2.68	0.51	1.13	4.09	1.81	1.61	20	1.2	
8-272-020	4400 (5500) [8800]	7/8 - 9UNC	1.50	2.13	2.68	0.51	1.31	4.80	2.44	2.17	50	2.2	
8-272-035	7700 (8800) [15400]	1 - 8UNC	1.57	2.60	3.46	0.75	1.50	6.06	3.07	2.76	110	4.8	
8-272-060	11000 (13200) [22000]	1 1/4 - 7UNC	1.97	3.39	4.72	0.87	1.88	8.11	3.54	3.15	250	9.9	
8-272-080	17600 (22000) [33000]	1 1/2 - 6UNC	1.97	3.39	4.72	0.87	2.25	8.11	3.54	3.15	300	10.0	
8-272-120	28600 (28600) [37400]	1 3/4 - 5UNC	2.56	4.33	4.80	0.98	2.63	9.25	3.86	3.31	400	12.1	
8-272-130	30800 (35200) [39600]	2 - 4.5UNC	2.56	4.33	4.80	0.98	3.00	9.25	3.86	3.31	400	13.5	
8-272-140	44000 (44000) [55000]	2 1/4 - 4.5UNC	2.76	4.72	5.91	1.26	3.38	10.63	4.72	3.70	550	23.1	
8-272-160	44000 (48400) [61600]	2 1/2 - 4UNC	2.76	4.72	5.91	1.26	3.75	10.63	4.72	3.70	590	23.5	
8-272-310	88000 (88000) [110000]	3 - 4UNC	3.54	5.12	8.27	1.77	4.50	13.39	6.69	5.71	880	67.3	
8-272-350	92400 (105600) [110000]	3 1/2 - 4UNC	3.54	5.12	8.27	1.77	5.25	13.39	6.69	5.71	1100	70.2	
8-272-400	92400 (105600) [110000]	4 - 4UNC	3.54	5.12	8.27	1.77	6.00	13.39	6.69	5.71	1470	74.6	

★ Design Factor 4:1

※ Thread up to 6" are available upon request



Patent Pending



Anchor Point

Metric Thread (8-231)

Item No.	Working Load Limit		Thread	Dimensions (mm)												Torque in Nm	N.W. kg	Repair Kits
	tonnes*			M	A	B	C	D	E	F	G	H	R	S	SW			
	5:1	4:1																
8-231-005	0.4	0.5	M 8 x 1.25	33	42	28	11	12	80	58	23	17	6	13	30	0.3	8-P231-005	
8-231-007	0.56	0.7	M10 x 1.5	33	41	29	11	15	80	58	23	17	6	17	60	0.3	8-P231-007	
8-231-010	0.8	1.0	M12 x 1.75	33	40	31	11	20	80	58	23	17	8	19	100	0.3	8-P231-010	
8-231-015	1.2	1.5	M14 x 2	50	56	45	17	21	117	90	36	27	10	22	120	0.9	8-P231-015	
8-231-020	1.6	2.0	M16 x 2	50	54	46	17	24	117	90	36	27	10	24	150	0.9	8-P231-020	
8-231-025	2.0	2.5	M18 x 2.5	65	78	57	20	26	153	108	44	34	12	30	200	1.9	8-P231-025	
8-231-030	2.4	3.0	M20 x 2.5	50	52	49	17	30	117	90	36	27	12	30	250	1.0	8-P231-030	
8-231-050	4.0	5.0	M24 x 3	72	81	59	25	36	163	125	44	37	14	36	400	2.6	8-P231-050	
8-231-056	4.5	5.6	M27 x 3	87	96	79	30	38	204	148	62	46	17	41	400	4.9	8-P231-056	
8-231-078	6.25	7.8	M30 x 3.5	87	94	81	30	48	204	148	62	46	17	46	500	5.0	8-P231-078	
8-231-125	10.0	12.5	M36 x 4	110	112	98	36	54	247	188	75	57	22	55	1000	9.6	8-P231-125	
8-231-156	12.5	15.6	M42 x 4.5	110	101	108	36	63	247	188	83	57	24	65	1500	10.9	8-P231-156	
8-231-200	16.0	20.0	M48 x 5	110	97	113	36	72	248	188	83	57	27	75	2000	11.6	8-P231-200	
8-231-220	17.6	22.0	M56 x 5.5	123	116	121	36	84	274	202	91	64	27	85	2100	15.0	8-P231-220	
8-231-225	18.0	22.5	M64 x 6	123	111	126	36	100	274	202	91	64	32	95	2200	16.3	8-P231-225	

* Proof Load is 2.5 times the Working Load Limit on the 4:1 design factor.

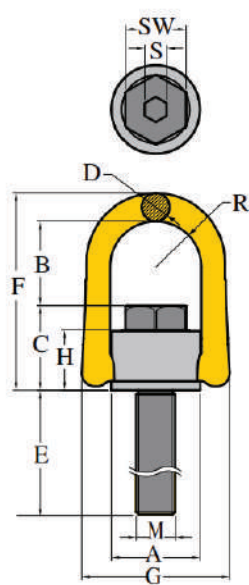
** Bolt in GEOMET® finished on request

UNC Thread (8-232)

Item No.	Working Load Limit	Thread	Dimensions (inch)												Torque in ft. lbs		Repair Kits
	lbs*		TPI	A	B	C	D	E	F	G	H	R	S	SW	lbs		
8-232-010	1700	1/2 - 13 UNC	1.3	1.57	1.2	0.41	0.81	3.17	2.28	0.9	0.67	5/16	3/4	73	1.8	8-P232-010	
8-232-020	3500	5/8 - 11 UNC	1.97	2.13	1.81	0.65	1.13	4.61	3.54	1.42	1.06	3/8	15/16	110	2.0	8-P232-020	
8-232-030	5300	3/4 - 10 UNC	1.97	2.07	1.89	0.65	1.54	4.61	3.54	1.42	1.06	1/2	1 1/8	185	2.2	8-P232-030	
8-232-038	6700	7/8 - 9 UNC	2.56	2.99	2.28	0.79	1.42	6.02	4.25	1.73	1.34	5/8	1 5/16	221	4.3	8-P232-038	
8-232-050	8800	1 - 8 UNC	2.81	3.17	2.34	0.98	1.61	6.38	4.92	1.73	1.46	5/8	1 1/2	295	5.7	8-P232-050	
8-232-078	13700	1 1/4 - 7 UNC	3.43	3.66	3.23	1.18	2.09	8.07	5.83	2.44	1.79	7/8	1 7/8	368	11.0	8-P232-078	
8-232-125	22000	1 1/2 - 6 UNC	4.29	4.38	3.87	1.42	2.4	9.92	7.40	3.07	2.22	1	2 1/4	585	21.2	8-P232-125	
8-232-200	35200	2 - 4.5 UNC	4.61	3.80	4.46	1.42	3.00	9.93	7.71	3.35	2.38	1 1/4	3	1476	25.6	8-P232-200	

★ Design Factor 5:1

** Bolt in GEOMET® finished on request



Patent Pending



Anchor Point Long Bolt

Metric Thread

Item No.	Working Load Limit		Thread	Dimensions (mm)											Torque in Nm	N.W. kg	Repair Kits	
	tonnes*			M	A	B	C	D	E	F	G	H	R	S				SW
	5:1	4:1																
8-231-005/105L	0.4	0.5	M 8 x 1.25	33	42	28	11	83	80	58	23	17	6	13	30	0.3	8-P231-005/105L	
8-231-007/125L	0.56	0.7	M10 x 1.5	33	41	29	11	103	80	58	23	17	6	17	60	0.4	8-P231-007/125L	
8-231-010/150L	0.80	1	M12 x 1.75	33	40	31	11	128	80	58	23	17	8	19	100	0.4	8-P231-010/150L	
8-231-020/185L	1.6	2	M16 x 2	50	54	46	17	149	117	90	36	27	10	24	150	1.1	8-P231-020/185L	
8-231-030/230L	2.4	3	M20 x 2.5	50	52	49	17	194	117	90	36	27	12	30	250	1.4	8-P231-030/230L	
8-231-050/265L	4	5	M24 x 3	72	81	59	25	221	163	125	44	37	14	36	400	3.2	8-P231-050/265L	
8-231-078/340L	6.25	7.8	M30 x 3.5	87	94	81	30	278	204	148	62	46	17	46	500	6.3	8-P231-078/340L	
8-231-125/300L	10	12.5	M36 x 4	110	112	98	36	225	247	188	75	57	22	55	1000	10.9	8-P231-125/300L	
8-231-156/350L	12.5	15.6	M42 x 4.5	110	101	108	36	268	247	188	83	57	24	65	1500	13.9	8-P231-156/350L	
8-231-200/385L	16	20	M48 x 5	110	97	113	36	303	248	188	83	57	27	75	2000	14.7	8-P231-200/385L	

* Proof Load is 2.5 times the Working Load Limit on the 4:1 design factor.

** Bolt in GEOMET® finished on request



YOKE HOIST RINGS



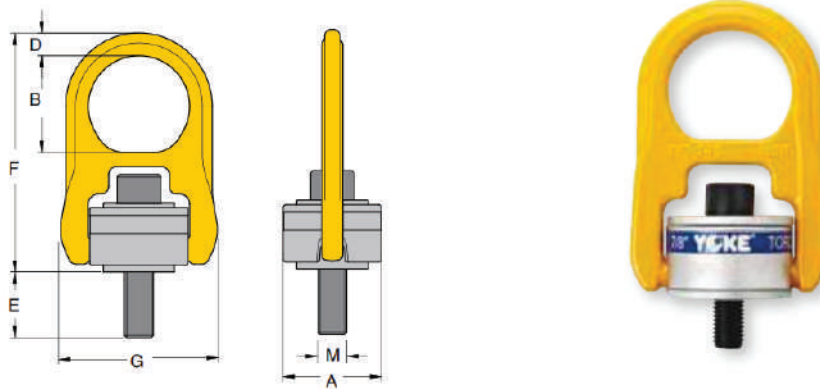
Introduction:

- Designed for lifting heavy loads, Yoke Hoist Ring is innovative and meets all requirements of occupational health and safety.
- Modern design and construction provide the most dependable lifting and lashing mean with the easiest fitting for heavy loads of different material and shape.
- Due to its ball bearing construction, Yoke Hoist Ring rotates freely through 360°. This free movement makes it easy to handle and turns it automatically in direction of load.



Main Features:

- Easy to install – needs only one tap hole.
- Supplying both Bushing type and Ball bearing inside.
- Rotates thru 360° Pivots thru 180°
- Designed safety factor 5:1.
- 100% rated at 90° angle.
- 100% magnaflux crack detection.
- Proof load tested to 2.5 times W.L.L. and certified.
- 20,000 cycle fatigue rated to 1.5 times W.L.L.
- Each product has a batch code for material traceability and links to Test Certificate.
- Drop forged Suspension Ring.
- The Bolt has a result of Charpy-V-test according to EN 10045, part 1 of at least 27 Joules at -20° C.
- Bolt are both UNC grade 8 per ASTM A 574 and Metric Grade 12.9 per DIN EN ISO 4762.
- Multi directional loading.
- Self aligns in direction of load.
- Avoids torsion forces to the suspension ring - more safety.
- No friction transferred to the bolt as it turns - longer lifetime.
- The Bolt with galvanized alternative Phosphate treatment for increased corrosion protection.



Hoist Ring

with Alloy Steel Washer

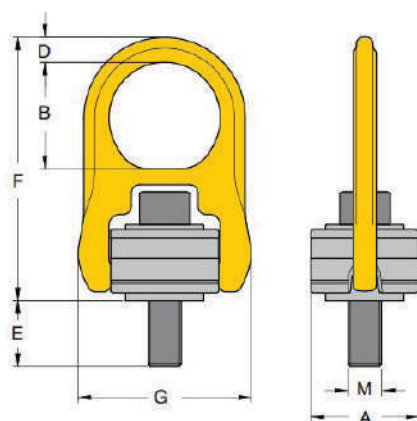
UNC Thread (8-204)

Item No.	Working Load Limit	Thread	Dimensions (inch)						Torque in ft. lbs	N.W. lbs
	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	1000	3/8 - 16UNC	1.57	1.61	0.35	0.71	4.02	2.56	12	0.9
8-204-010	2500	1/2 - 13UNC	2.56	2.32	0.59	0.75	6.26	4.13	28	3.7
§ 8-204-010L	2500	1/2 - 13UNC	2.56	2.32	0.59	1.26	6.26	4.13	28	3.7
8-204-019	4000	5/8 - 11UNC	2.56	2.32	0.59	0.74	6.26	4.13	60	4.0
§ 8-204-019L	4000	5/8 - 11UNC	2.56	2.32	0.59	1.75	6.26	4.13	60	4.0
8-204-021	5000	3/4 - 10UNC	2.56	2.87	0.59	1.24	6.26	4.13	100	4.0
§ 8-204-021L	5000	3/4 - 10UNC	2.56	2.87	0.59	1.73	6.26	4.13	100	4.2
8-204-030	7000	3/4 - 10UNC	3.35	2.87	0.59	0.87	6.26	5.28	100	8.8
§ 8-204-030L	7000	3/4 - 10UNC	3.35	2.87	0.87	1.87	8.03	5.28	100	9.5
8-204-042	8000	7/8 - 9UNC	3.35	2.87	0.87	1.43	8.03	5.28	160	9.3
§ 8-204-042L	8000	7/8 - 9UNC	3.35	2.87	0.87	2.37	8.03	5.28	160	9.7
8-204-045	10000	1 - 8UNC	3.35	2.87	0.87	1.36	8.03	5.28	230	9.5
§ 8-204-045L	10000	1 - 8UNC	3.35	2.87	0.87	2.36	8.03	5.28	230	10.1
8-204-070	15000	1 1/4 - 7UNC	3.95	3.15	1.00	2.25	8.58	6.30	470	14.5
8-204-125	24000	1 1/2 - 6UNC	4.72	4.29	1.38	2.17	12.09	8.66	800	35.2
8-204-135	30000	2 - 4.5UNC	4.72	4.29	1.38	3.01	12.09	8.66	1100	35.2

★ Safety Factor 5:1

§ Long Bolts are designed for soft metal work piece.

** Bolts in GEOMET® finished on request.



Hoist Ring

with Ball Bearing

Ball Bearing Inside
Patent

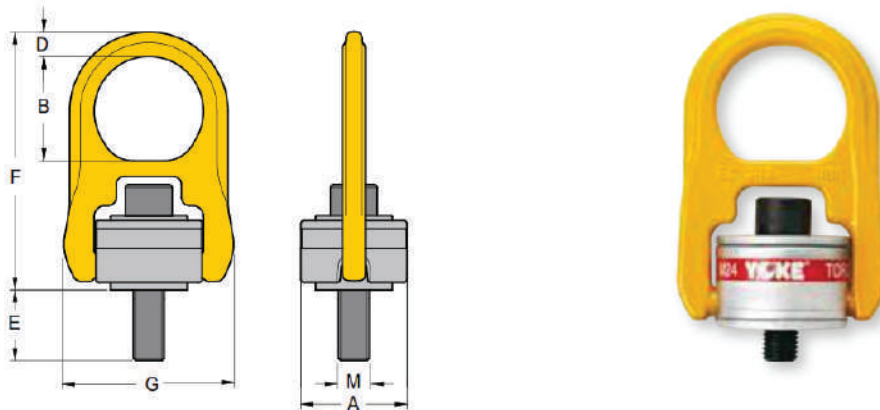
UNC Thread (8-202)

Item No.	Working Load Limit	Thread	Dimensions (inch)						Torque in ft. lbs	N.W. lbs
	lbs*		A	B	D	E	F	G		
8-202-004	800	5/16 - 18UNC	1.57	1.61	0.35	0.71	4.02	2.56	7	0.9
8-202-005	1000	3/8 - 16UNC	1.57	1.61	0.35	0.71	4.02	2.56	12	0.9
8-202-010	2500	1/2 - 13UNC	2.56	2.32	0.59	1.07	6.26	4.13	28	3.7
§ 8-202-010L	2500	1/2 - 13UNC	2.56	2.32	0.59	1.26	6.26	4.13	28	4.1
§ 8-202-019	4000	5/8 - 11UNC	2.56	2.32	0.59	0.74	6.26	4.13	60	3.7
§ 8-202-019L	4000	5/8 - 11UNC	2.56	2.32	0.59	1.75	6.26	4.13	60	4.0
8-202-021	5000	3/4 - 10UNC	2.56	2.87	0.59	1.24	6.26	4.13	100	4.0
§ 8-202-021L	5000	3/4 - 10UNC	2.56	2.87	0.59	1.73	6.26	4.13	100	4.0
8-202-030	7000	3/4 - 10UNC	3.35	2.87	0.59	0.87	6.26	5.28	100	9.0
§ 8-202-030L	7000	3/4 - 10UNC	3.35	2.87	0.87	1.87	8.03	5.28	100	9.0
8-202-042	8000	7/8 - 9UNC	3.35	2.87	0.87	1.43	8.03	5.28	160	9.2
§ 8-202-042L	8000	7/8 - 9UNC	3.35	2.87	0.87	2.37	8.03	5.28	160	9.5
8-202-045	10000	1 - 8UNC	3.35	2.87	0.87	1.36	8.03	5.28	230	9.3
§ 8-202-045L	10000	1 - 8UNC	3.35	2.87	0.87	2.36	8.03	5.28	230	9.7

★ Safety Factor 5:1

§ Long Bolts are designed for soft metal work piece.

** Bolts in GEOMET® finished on request.



Hoist Ring

with Alloy Steel Washer

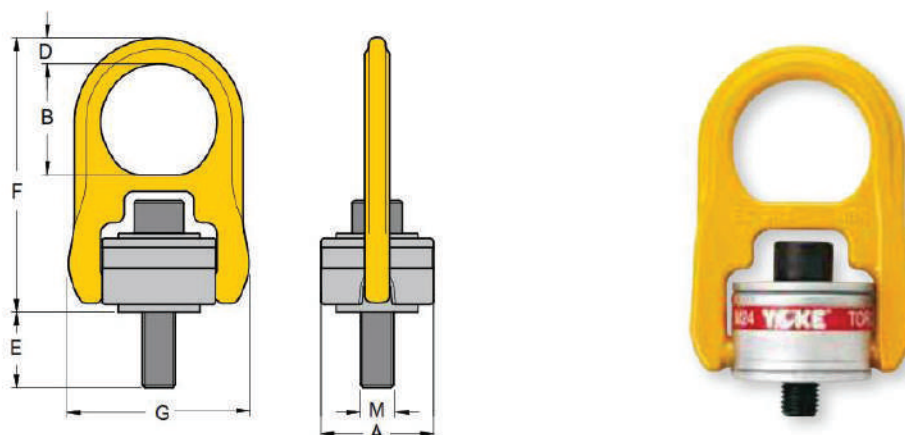
Metric Thread (8-203)

	Item No.	Working Load Limit		Thread	Dimensions (mm)						Torque in Nm	N.W. kg	
		tonnes*			M	A	B	D	E	F			G
		5 : 1	4 : 1										
	8-203-004	0.40	0.50	M 8 x 1.25	40	41	9	17	102	65	10	0.4	
	8-203-005	0.45	0.55	M10 x 1.5	40	41	9	11	102	65	16	0.5	
\$	8-203-005L	0.45	0.55	M10 x 1.5	40	41	9	26	102	65	16	0.5	
	8-203-010	1.05	1.30	M12 x 1.75	65	64	15	15	158	105	38	1.7	
\$	8-203-010L	1.05	1.30	M12 x 1.75	65	64	15	30	158	105	38	1.7	
	8-203-019	1.90	2.40	M16 x 2	65	64	15	20	158	105	81	1.8	
\$	8-203-019L	1.90	2.40	M16 x 2	65	64	15	35	158	105	81	1.8	
	8-203-021	2.15	2.70	M20 x 2.5	65	64	15	25	158	105	136	1.8	
\$	8-203-021L	2.15	2.70	M20 x 2.5	65	64	15	45	158	105	136	1.9	
	8-203-030	3.00	3.75	M20 x 2.5	85	79	19	25	204	134	136	4.0	
\$	8-203-030L	3.00	3.75	M20 x 2.5	85	79	19	45	204	134	136	5.2	
	8-203-042	4.20	5.25	M24 x 3	85	79	19	26	204	134	312	4.2	
\$	8-203-042L	4.20	5.25	M24 x 3	85	79	19	56	204	134	312	4.3	
	8-203-070	7.00	8.75	M30 x 3.5	100	100	25	81	241	160	637	6.6	
	8-203-110	11.00	13.75	M36 x 4	120	111	30	76	286	194	1005	15.0	
	8-203-125	12.50	15.60	M42 x 4.5	120	111	30	65	286	220	1005	16.0	
	8-203-135	13.50	16.90	M48 x 5	120	111	30	70	286	220	1350	16.0	
	8-203-155	15.50	19.40	M56 x 5.5	138	109	34	79	308	241	1350	19.1	
	8-203-223	22.30	27.90	M64 x 6	138	100	38	98	312	241	2847	23.0	

* Proof Load is 2.5 times the Working Load Limit on the 4:1 design factor.

** Bolt in GEOMET® finished on request

§ Long Bolts are designed for soft metal work piece.



Hoist Ring

with Ball Bearing

Ball Bearing Inside
Patent

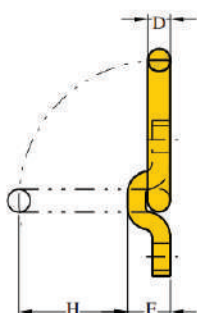
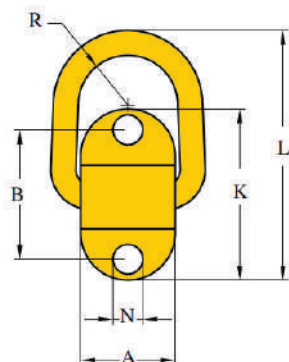
Metric Thread (8-201)

Item No.	Working Load Limit		Thread	Dimensions (mm)						Torque in Nm	N.W. kg	
	tonnes*			M	A	B	D	E	F			G
	5 : 1	4 : 1										
8-201-004	0.40	0.50	M 8 x 1.25	40	41	9	16.5	102	65	10	0.4	
8-201-005	0.45	0.55	M10 x 1.5	40	41	9	11.5	102	65	16	0.4	
\$ 8-201-005L	0.45	0.55	M10 x 1.5	40	41	9	26.5	102	65	16	0.5	
8-201-010	1.05	1.30	M12 x 1.75	65	64	15	14.0	158	105	38	1.7	
\$ 8-201-010L	1.05	1.30	M12 x 1.75	65	64	15	29.0	158	105	38	2.1	
8-201-019	1.90	2.40	M16 x 2	65	64	15	19.0	158	105	81	1.7	
\$ 8-201-019L	1.90	2.40	M16 x 2	65	64	15	34.0	158	105	81	1.8	
8-201-021	2.15	2.70	M20 x 2.5	65	64	15	24.0	158	105	136	1.8	
\$ 8-201-021L	2.15	2.70	M20 x 2.5	65	64	15	44.0	158	105	136	1.8	
8-201-030	3.00	3.75	M20 x 2.5	85	79	19	25.0	204	134	136	4.1	
\$ 8-201-030L	3.00	3.75	M20 x 2.5	85	79	19	45.0	204	134	136	4.2	
8-201-042	4.20	5.25	M24 x 3	85	79	19	25.0	204	134	312	4.2	
\$ 8-201-042L	4.20	5.25	M24 x 3	85	79	19	50.0	204	134	312	4.3	

* Proof Load is 2.5 times the Working Load Limit on the 4:1 design factor.

** Bolt in GEOMET® finished on request

§ Long Bolts are designed for soft metal work piece.



Bolt-on Tie Down. Code “DAB” .

Designed with spring, stop at any angle
supplied without bolt

Item No.	Working Load Limit	Dimensions (inch)									N.W.
	lbs*	A	B	D	F	H	K	L	N	R	lbs
8-058-1T	2,200	1.97	2.83	0.55	1.06	2.17	3.86	5.47	0.55	0.94	1.5
8-058-3T	6,600	2.28	3.31	0.67	1.30	2.36	4.49	5.67	0.63	1.14	2.4
8-058-5T	11,000	2.52	4.57	0.87	1.69	2.91	6.30	7.99	0.79	1.30	5.5

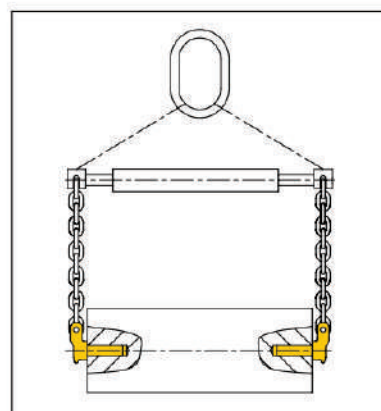
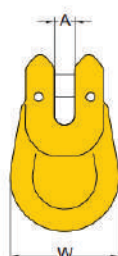
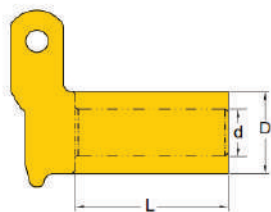
★ Design factor 5:1

Bolts of grade 10.9 & 12.9 are recommended

Item No.	Working Load Limit	Dimensions (mm)									N.W.
	tonnes*	A	B	D	F	H	K	L	N	R	kg
8-058-1T	1.0	50	72	14	27	55	98	139	14	24	0.7
8-058-3T	3.0	58	84	17	33	50	114	144	18	29	1.1
8-058-5T	5.0	64	116	22	43	74	160	203	23	33	2.5

★ Design factor 5:1

Bolts of grade 10.9 & 12.9 are recommended



Plug-in Connector

Item No.	Working Load Limit	For Grade 80 Chain	Dimensions (inch)					N.W.
	lbs*		A	W	D	d min**	L	
8-098-06	2100	7/32	0.24	1.46	1.10	0.67	L min=2xd min	0.9
8-098-07	4500	1/4~5/16	0.35	1.97	1.18	0.87		1.3
8-098-10	7100	3/8	0.43	2.36	1.36	1.10		2.0

★ Minimum Ultimate Load is 4 times the Working Load Limit.

★ Proof Load is 2.5 times the Working Load Limit.

Item No.	Working Load Limit	For Grade 80 Chain	Dimensions (mm)					N.W.
	tonnes*		A	W	D	d min**	L	
8-098-06	1.12	6	6	37	28	17	L min=2xd min	0.4
8-098-07	2.0	7,8	9	50	30	22		0.6
8-098-10	3.15	10	11	60	34.5	28		0.9

★ Minimum Ultimate Load is 4 times the Working Load Limit.

★ Proof Load is 2.5 times the Working Load Limit.