

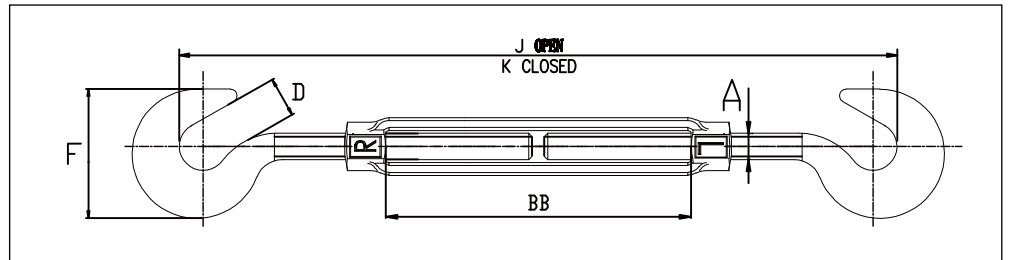
TURNBUCKLES

Leading The Way Of Precision Manufacturing



**HG-223
Hook & Hook**

- End fittings are quenched and tempered or normalized, bodies heat treated by normalizing.
- Hot dip galvanized steel.
- Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- Turnbuckles recommended for straight or in-line pull only.



1. US Type HG-223 Hook & Hook Turnbuckle

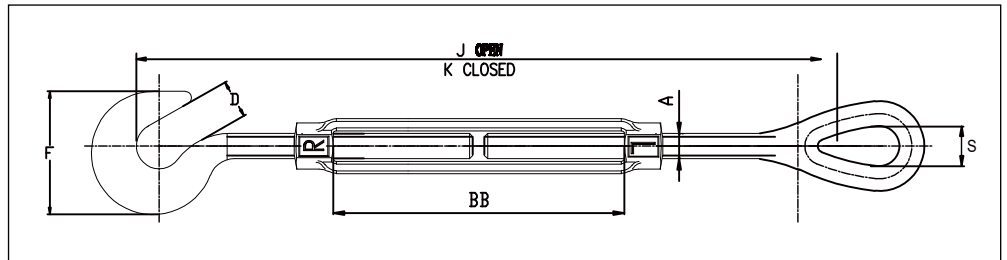
Part No.	Thread Diameter & Take up (in.)	Working Load Limit (lbs.)	Weight (lbs.)	Dimension (in.)					
				A	D	F	J Open	K Closed	BB
TKR0396	1/4 x 4	400	0.33	0.25	0.44	1.27	9.79	7.38	4.07
TKR0397	5/16 x 4-1/2	700	0.52	0.31	0.5	1.50	11.58	8.58	4.58
TKR0398	3/8 x 6	1000	0.83	0.38	0.56	1.77	15.23	10.62	6.1
TKR0399	1/2 x 6	1500	1.88	0.50	0.65	2.28	17.98	13.2	6.03
TKR0400	1/2 x 12	1500	2.77	0.50	0.65	3.53	30.27	19.49	12.36
TKR0401	5/8 x 6	2250	3.21	0.63	0.9	3.51	19.5	14.5	6.03
TKR0402	5/8 x 12	2250	4.58	0.63	0.9	4.24	31.84	20.84	12.39
TKR0403	3/4 x 6	3000	4.20	0.75	0.98	5.07	21.19	15.98	6.13
TKR0404	3/4 x 12	3000	6.92	0.75	0.98	5.04	33.59	22.38	12.59
TKR0405	3/4 x 18	3000	8.65	0.75	0.98	5.07	45.59	28.38	18.53
TKR0406	7/8 x 12	4000	9.85	0.88	1.13	5.82	34.89	23.52	12.16
TKR0407	1 x 12	5000	14.80	1.00	1.25	6.56	36.59	25.06	12.18

Turnbuckle



**HG-225
Hook & Eye**

- End fittings are quenched and tempered or normalized, bodies heat treated by normalizing.
- Hot dip galvanized steel.
- Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- Turnbuckles recommended for straight or in-line pull only.

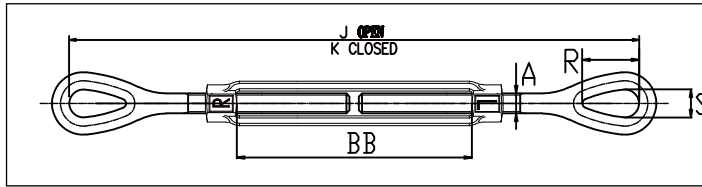


2.US Type HG-225 Hook & Eye Turnbuckle

Part No.	Thread Diameter & Take up (in.)	Working Load Limit (lbs.)	Weight (lbs.)	Dimensions(in.)							
				A	D	F	J Open	K Closed	R	S	BB
TKR0408	1/4 x 4	400	0.31	0.25	0.44	1.27	11.66	7.66	0.81	0.34	4.07
TKR0409	5/16 x 4-1/2	700	0.5	0.31	0.50	1.50	13.50	9.00	0.95	0.44	4.58
TKR0410	3/8 x 6	1000	0.79	0.38	0.56	1.76	17.09	11.09	1.13	0.53	6.10
TKR0411	1/2 x 6	1500	1.8	0.50	0.65	2.28	19.57	13.57	1.41	0.71	6.03
TKR0412	1/2 x 12	1500	2.7	0.50	0.65	2.28	31.86	19.86	1.41	0.71	12.36
TKR0413	5/8 x 6	2250	2.98	0.63	0.90	2.81	21.11	15.11	1.80	0.88	6.03
TKR0414	5/8 x 12	2250	4.35	0.63	0.90	2.81	33.45	21.45	1.80	0.88	12.39
TKR0415	3/4 x 6	3000	4.21	0.75	0.98	3.33	22.61	16.61	2.09	1.00	6.13
TKR0416	3/4 x 12	3000	6.52	0.75	0.98	3.33	35.01	23.01	2.09	1.00	12.59
TKR0417	3/4 x 18	3000	8.24	0.75	0.98	3.33	47.01	29.01	2.09	1.00	18.53
TKR0418	7/8 x 12	4000	9.34	0.88	1.13	3.78	36.11	24.11	2.38	1.26	12.16
TKR0419	1 x 12	5000	13.9	1.00	1.25	4.25	37.65	26.65	3.00	1.25	12.18



**HG-226
Eye & Eye**

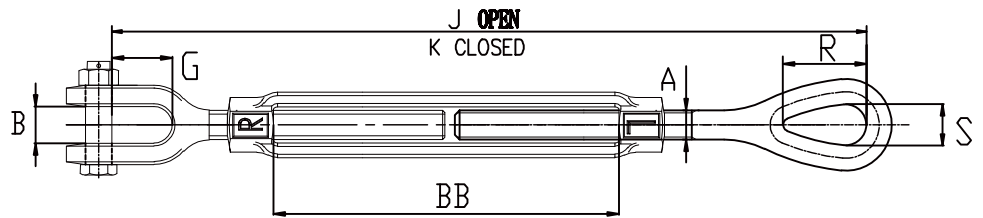


- End fittings are quenched and tempered or normalized, bodies heat treated by normalizing.
- Hot dip galvanized steel.
- Turnbuckle eyes are forged elongated, by design, to maximize easy attachment in system and minimize

3.US Type HG-226 Eye & Eye Turnbuckle

Part No.	Thread Diameter & Take up (in.)	Working Load Limit (lbs.)	Weight (lbs.)	Dimensions(in.)					
				A	J Open	K Closed	R	S	BB
TKR0420	1/4 x 4	500	0.29	0.25	11.94	7.94	0.81	0.34	4.07
TKR0421	5/16 x 4-1/2	800	0.48	0.31	13.92	9.42	0.95	0.44	4.58
TKR0422	3/8 x 6	1200	0.75	0.38	17.56	11.56	1.13	0.52	6.1
TKR0423	1/2 x 6	2200	1.72	0.50	19.94	13.94	1.41	0.71	6.03
TKR0424	1/2 x 12	2200	2.63	0.50	32.23	20.23	1.41	0.71	12.36
TKR0425	5/8 x 6	3500	2.75	0.63	21.72	15.72	1.8	0.88	6.03
TKR0426	5/8 x 12	3500	4.12	0.63	34.06	22.06	1.8	0.88	12.39
TKR0427	3/4 x 6	5200	4.22	0.75	23.24	17.24	2.09	1.00	6.13
TKR0428	3/4 x 12	5200	6.12	0.75	35.64	23.64	2.09	1.00	12.59
TKR0429	3/4 x 18	5200	7.83	0.75	47.64	29.64	2.09	1.00	18.53
TKR0430	7/8 x 12	7200	8.83	0.88	36.7	24.7	2.38	1.25	12.16
TKR0431	7/8 x 18	7200	11.50	0.88	49.17	31.17	2.38	1.25	18.63
TKR0432	1 x 6	10000	9.62	1.00	26.24	20.24	3	1.43	6.18
TKR0433	1 x 12	10000	13.0	1.00	38.24	26.24	3	1.43	12.18
TKR0434	1 x 18	10000	16.3	1.00	50.24	32.24	3	1.43	18.18
TKR0435	1 x 24	10000	20.2	1.00	62.84	38.84	3	1.43	24.84
TKR0436	1-1/4 x 12	15200	19.9	1.25	42.14	30.14	3.59	1.82	12.06
TKR0437	1-1/4 x 18	15200	23.8	1.25	54.14	36.14	3.59	1.82	18.06
TKR0438	1-1/4 x 24	15200	27.8	1.25	66.7	42.7	3.59	1.82	24.62
TKR0439	1-1/2 x 12	21400	28.7	1.50	44.24	32.24	4.09	2.12	12.32
TKR0440	1-1/2 x 18	21400	34.1	1.50	56.24	38.24	4.09	2.12	18.32
TKR0441	1-1/2 x 24	21400	39.6	1.50	68.86	44.86	4.09	2.12	24.94
TKR0442	1-3/4 x 18	28000	50.7	1.75	57.38	39.38	4.65	2.38	18.37
TKR0443	1-3/4 x 24	28000	58.2	1.75	69.38	45.38	4.65	2.38	24.37
TKR0444	2 x 24	37000	83.5	2.00	75.68	51.68	5.81	2.69	24.48
TKR0445	2-1/2 x 24	60000	149.0	2.50	79.18	55.18	6.49	3.12	24.6
TKR0446	2-3/4 x 24	75000	174.0	2.75	81.34	57.34	7	3.25	24.65

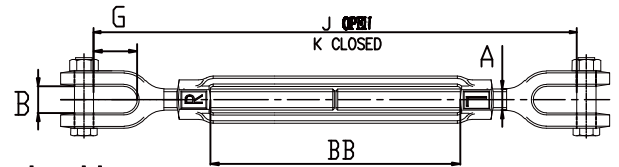
Turnbuckle



4.US Type HG-227 Jaw & Eye Turnbuckle

- End fittings are quenched and tempered or normalized, bodies heat treated by normalizing.
- Hot dip galvanized steel.
- Turnbuckles eyes are forged and elongated, by design, to maximize easy attachment in system and minimize stress in the eye.

Part No.	Thread Diameter & Take up (in.)	Working Load Limit (lbs.)	Weight (lbs.)	Dimension(in.)							
				A	B	G	J Open	K Closed	R	S	BB
TKR0447	1/4 x 4	500	0.33	0.25	11.4	0.64	11.57	7.57	0.81	0.34	4.07
TKR0448	5/16 x 4-1/2	800	0.52	0.31	12.7	0.87	13.5	9	0.95	0.44	4.58
TKR0449	3/8 x 6	1200	0.80	0.38	13.5	0.85	16.91	10.91	1.13	0.53	6.1
TKR0450	1/2 x 6	2200	1.77	0.5	16.3	1.07	19.3	13.3	1.41	0.71	6.03
TKR0451	1/2 x 9	2200	2.25	0.5	16.3	1.07	25.59	16.59	1.41	0.71	9.36
TKR0452	1/2 x 12	2200	2.67	0.5	16.3	1.07	31.59	19.59	1.41	0.71	12.36
TKR0453	5/8 x 6	3500	2.98	0.63	20.1	1.32	20.73	14.73	1.8	0.88	6.03
TKR0454	5/8 x 9	3500	3.72	0.63	20.1	1.32	27.07	18.07	1.8	0.88	9.39
TKR0455	5/8 x 12	3500	4.35	0.63	20.1	1.32	33.07	21.07	1.8	0.88	12.39
TKR0456	3/4 x 6	5200	4.51	0.75	24.6	1.52	22.17	16.17	2.09	1.00	6.13
TKR0457	3/4 x 9	5200	5.56	0.75	24.6	1.52	28.57	19.57	2.09	1.00	9.59
TKR0458	3/4 x 12	5200	6.42	0.75	24.6	1.52	34.57	22.57	2.09	1.00	12.59
TKR0459	3/4 x 18	5200	8.14	0.75	24.6	1.52	46.57	28.57	2.09	1.00	18.53
TKR0460	7/8 x 12	7200	9.1	0.88	29.5	1.77	35.68	23.68	2.38	1.25	12.16
TKR0461	7/8 x 18	7200	11.6	0.88	29.5	1.77	48.15	30.15	2.38	1.25	18.63
TKR0462	1 x 6	10000	10.0	1	34	2.05	25.03	19.03	3	1.43	6.18
TKR0463	1 x 12	10000	13.4	1	34	2.05	37.03	25.06	3	1.43	12.18
TKR0464	1 x 18	10000	16.7	1	34	2.05	49.03	31.03	3	1.43	18.18
TKR0465	1 x 24	10000	20.6	1	34	2.05	61.63	37.63	3	1.43	24.84
TKR0466	1-1/4 x 12	15200	20.9	1.25	46.7	2.82	40.76	28.76	3.59	1.82	12.06
TKR0467	1-1/4 x 18	15200	24.8	1.25	46.7	2.82	52.76	34.76	3.59	1.82	18.06
TKR0468	1-1/4 x 24	15200	28.8	1.25	46.7	2.82	65.32	41.32	3.59	1.82	24.62
TKR0469	1-1/2 x 12	21400	60.6	1.5	52.3	2.81	42.5	30.5	4.09	2.12	12.32
TKR0470	1-1/2 x 18	21400	36.0	1.5	52.3	2.81	54.5	36.5	4.09	2.12	18.32
TKR0471	1-1/2 x 24	21400	41.5	1.5	52.3	2.81	67.12	43.12	4.09	2.12	24.94
TKR0472	1-3/4 x 18	28000	52.1	1.75	66	3.35	55.37	37.37	4.65	2.38	18.37
TKR0473	1-3/4 x 24	28000	59.7	1.75	66	3.35	67.37	43.37	4.65	2.38	24.37
TKR0474	2 x 24	37000	89.9	2	66.5	3.74	72.66	48.66	5.81	2.69	34.48
TKR0475	2-1/2 x 24	60000	158.0	2.5	77.7	4.44	76.08	52.08	6.49	3.12	24.6
TKR0476	2-3/4 x 24	75000	187.0	2.75	93.7	4.19	78.05	54.05	7.00	3.25	24.65



5. US Type HG-228 Jaw & Jaw Turnbuckle

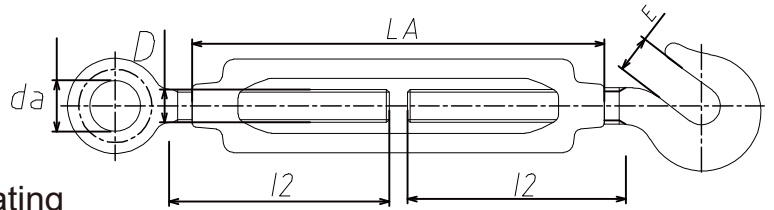
- End fittings are quenched and tempered or normalized, bodies heat treated by normalizing.
- Hot dip galvanized steel.
- Turnbuckles recommended for straight or in-line pull only.

Part No.	Thread Diameter & Take up (in.)	Working Load Limit (lbs.)	Weight (lbs.)	Dimension(in.)					
				A	B	G	J	K	BB
TKR0477	1/4 x 4	500	0.37	0.25	0.45	0.64	11.19	7.19	4.07
TKR0478	5/16 x 4-1/2	800	0.56	0.31	0.50	0.87	13.07	8.57	4.58
TKR0479	3/8 x 6	1200	0.85	0.38	0.53	0.85	16.25	10.25	6.10
TKR0480	1/2 x 6	2200	1.82	0.50	0.64	1.07	18.65	12.65	6.03
TKR0481	1/2 x 9	2200	2.29	0.50	0.64	1.07	24.94	15.94	9.36
TKR0482	1/2 x 12	2200	2.71	0.50	0.64	1.07	30.94	18.94	12.36
TKR0483	5/8 x 6	3500	3.21	0.63	0.79	1.32	19.74	13.74	6.03
TKR0484	5/8 x 9	3500	3.95	0.63	0.79	1.32	26.08	17.08	9.39
TKR0485	5/8 x 12	3500	4.58	0.63	0.79	1.32	32.08	20.08	12.39
TKR0486	3/4 x 6	5200	4.80	0.75	0.97	1.52	21.09	15.09	6.13
TKR0487	3/4 x 9	5200	5.85	0.75	0.97	1.52	27.49	18.49	9.59
TKR0488	3/4 x 12	5200	6.72	0.75	0.97	1.52	33.49	21.49	12.59
TKR0489	3/4 x 18	5200	8.45	0.75	0.97	1.52	45.49	27.49	18.53
TKR0490	7/8 x 12	7200	9.37	0.88	1.16	1.77	34.65	22.65	12.16
TKR0491	7/8 x 18	7200	11.8	0.88	1.16	1.77	47.12	29.12	18.63
TKR0492	1 x 6	10000	10.4	1.00	1.34	2.05	23.82	17.82	6.18
TKR0493	1 x 12	10000	13.8	1.00	1.34	2.05	35.82	23.82	12.18
TKR0494	1 x 18	10000	17.1	1.00	1.34	2.05	47.82	29.82	18.18
TKR0495	1 x 24	10000	21.0	1.00	1.34	2.05	60.42	36.42	24.84
TKR0496	1-1/4 x 12	15200	21.9	1.25	1.84	2.82	39.37	27.37	12.06
TKR0497	1-1/4 x 18	15200	25.9	1.25	1.84	2.82	51.37	33.37	18.06
TKR0498	1-1/4 x 24	15200	29.8	1.25	1.84	2.82	63.93	39.93	24.62
TKR0499	1-1/2 x 12	21400	32.6	1.50	2.06	2.81	40.76	28.76	12.32
TKR0500	1-1/2 x 18	21400	38.0	1.50	2.06	2.81	52.76	34.76	18.32
TKR0501	1-1/2 x 24	21400	43.5	1.50	2.06	2.81	65.38	41.38	24.94
TKR0502	1-3/4 x 18	28000	53.5	1.75	2.60	3.35	53.35	35.35	18.37
TKR0503	1-3/4 x 24	28000	61.1	1.75	2.60	3.35	65.30	41.35	24.37
TKR0504	2 x 24	37000	96.3	2.00	2.62	3.74	69.64	45.64	24.48
TKR0505	2-1/2 x 24	60000	167.0	2.50	3.06	4.44	72.97	48.97	24.60
TKR0506	2-3/4 x 24	75000	199.0	2.75	3.69	4.19	74.75	50.75	24.65

Turnbuckle

6. Din1480 Hook & Eye Turnbuckle

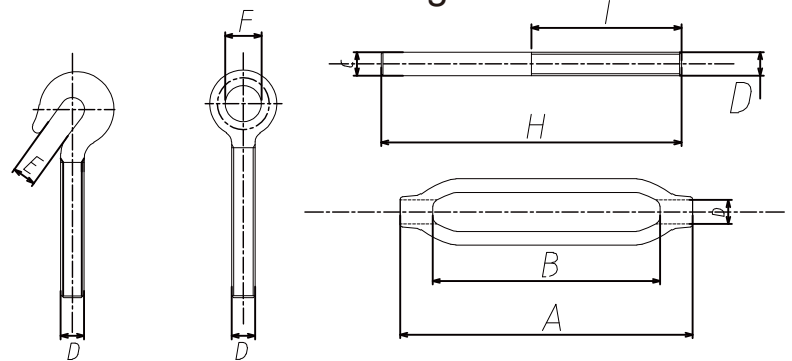
- Process: Forging
- Material: Carbon Steel
- Surface: Hot Dip Galvanized or Zinc Plating



Part No.	Size (mm)	Weight 100pcs (lbs.)	Dimension(mm)				
			D	da	E	LA	I2
TKR0507	M6	7.8	6	20	4.5	110	60
TKR0508	M8	14.8	8	26	6.5	110	60
TKR0509	M10	29.4	10	30.5	8	125	65
TKR0510	M12	36.3	12	37.5	10.5	125	75
TKR0511	M16	91	16	48	13	170	100
TKR0512	M20	156	20	51	20	200	115
TKR0513	M22	325	24	66	27	255	140
TKR0514	M24	415	30	83	31	255	145
TKR0515	M30	595	32	88	33	295	160
TKR0516	M36	745	36	104	40	295	160

7. JIS Frame Type Turnbuckle

- Process: Forging
- Material: Carbon Steel
- Surface: Hot Dip Galvanized or Zinc Plating

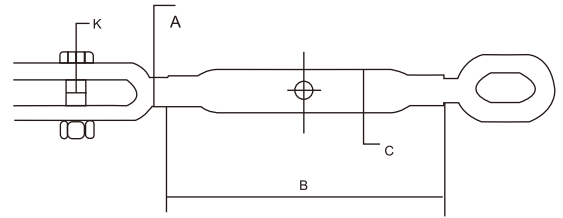


Part No.	Size(mm)	Body Only					Eye & Eye			Hook & Hook			Hook & Eye		With Stubs			
		A	B	C	Working Load Limit (t)	Weight (kg)	F	Working Load Limit (t)	Weight (kg)	E	Working Load Limit (t)	Weight (kg)	Working Load Limit (t)	Weight (kg)	H	I	G	Weight (kg)
TKR0517	6	100	78	11	1	0.08	10	0.04	0.25	9	0.04	0.112	0.04	0.114	80	50	5.3	0.112
TKR0518	8	125	100	12.5	1.2	0.15	12	0.08	0.47	9	0.08	0.215	0.08	0.218	100	63	6.9	0.22
TKR0519	9	150	120	12.5	1.5	0.17	16	0.15	0.64	11	0.15	0.29	0.15	0.293	130	75	8.3	0.273
TKR0520	12	200	164	18	2	0.29	20	0.35	1.26	16	0.35	0.57	0.35	0.585	150	100	11.2	0.51
TKR0521	16	250	202	21.5	3	0.52	22	0.70	2.27	19	0.70	1.03	0.70	1.05	180	125	14.2	0.95
TKR0522	19	300	250	25	4	0.85	28	1.00	3.91	20	1.00	1.77	1.00	1.78	220	150	17	1.62
TKR0523	22	325	269	28	5	1.17	33	1.50	5.74	21	1.50	2.6	1.50	2.58	250	165	20.3	2.34
TKR0524	25	350	285	32.5	6	1.69	35	2.00	8.21	26	2.00	3.73	2.00	3.7	270	175	23.3	3.27
TKR0525	32	400	310	45	8	3.51	36	3.00	16.40	34	3.00	7.44	3.00	7.52	300	200	29	6.52



8.Closed Body Turnbuckle Jaw & Oval Eye

The following types are available
 Jaw both ends
 Eye both ends
 Jaw-Eye
 Options, locknuts
 Finish: selfcoloured or galvanized



Part No.	SWL (t)	Dia Screw	Length of Body	Dia of Body	Jaw			Oval Eye			Weight (kg)
		A (mm)	B (mm)	C (mm)	K	Inside Length	Inside Width	H	Inside Length	Inside Width	
TKT001	0.1	6	102	12	5	15	7	6	15	8	0.11
TKT002	0.15	8.8	110	15	6	16	9	7	19	10	0.23
TKT003	0.375	10	152	21	8	21	11	8	25	11	0.28
TKT004	0.5	12	175	27	10	25	13	11	30	14	0.8
TKT005	0.75	16	229	27	12	40	18	14	41	16	1.4
TKT006	1.125	20	229	33	16	45	20	16	51	22	2
TKT007	1.6	22	305	33	18	48	24	16	51	22	3.5
TKT008	2	24	325	42	22	55	28	19	57	25	4
TKT009	2.75	28	356	48	22	59	30	19	57	28	4.5
TKT010	3.75	33	381	48	27	62	34	22	65	35	6.5
TKT011	4.25	35	381	60	28	68	38	22	65	36	8
TKT012	5	39	406	60	33	74	42	25	74	38	11