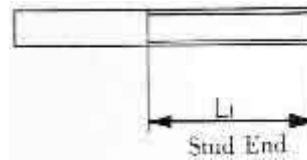
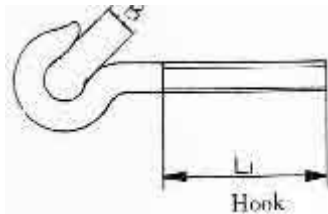
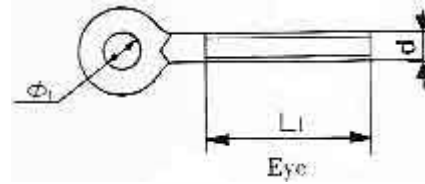
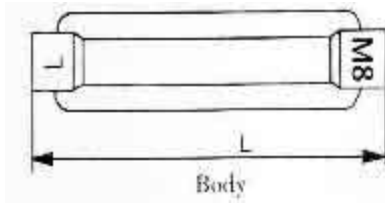
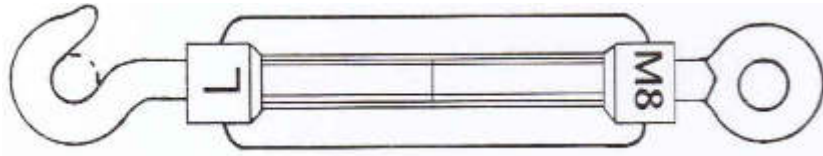


TURNBUCKLE DIN 1480



SIZE	L	L1	φ1	B	GW/BAG	PCS/BAG
M5	70	35	8	7	26	500
M6	110	53	8	8	27	300
M8	110	55	10	11	31	200
M10	125	60	13	13	44	150
M12	125	63	15	16	46	100
M14	140	70	17	18	53	80
M16	170	90	19	20	38	40
M20	200	100	23	21	51	30
M22	220	110	25	26	48	20
M24	255	130	27	26	46	15
M30	255	130	32	33	51	10
M32	295	150	34	33	33	5

Turnbuckles to U.S. Federal Specification (FF-T-791b)



EYE & HOOK



EYE & EYE



EYE & JAW



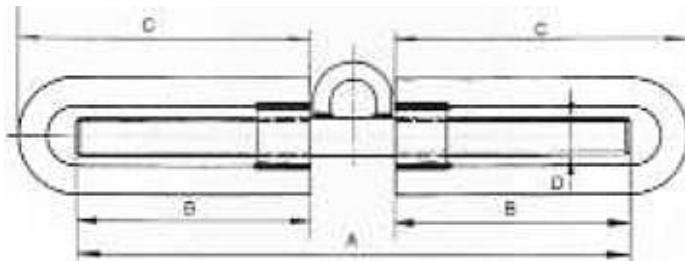
JAW & JAW

ITEM NO	Size (Diameter x Take-Up)	Average Overall Length with Ends in Closed Position	Approx. Weight Each (lbs)					Work Load Limit (lbs)	
			Eyes and/or Hooks	Jaw & Eye	Jaw & Jaw	Stub End	Bodies Only	Hook & Hook & Eye	Eye & Eye Jaw & Eye Jaw & Jaw Stub End
024001	1/4"x4"	8-1/4	0.30	0.30	0.40	0.29	0.17	0.400	.500
024002	5/16"x4-1/2"	9-9/16	0.50	0.35	0.58	0.46	0.25	0.700	.800
024003	3/8"x6"	11-7/8	0.75	0.82	0.93	0.75	0.30	1.000	1.200
024004	1/2"x6"	13-5/16	1.50	1.62	1.68	1.36	0.55	1.500	2.200
024005	1/2"x9"	16-5/16	1.75	1.82	1.85	1.69	0.74	1.500	2.200
024006	1/2"x12"	19-5/16	2.18	2.19	2.20	2.0	0.93	1.500	2.200
024007	5/8"x6"	15-1/2	2.63	2.59	2.82	2.15	0.91	2.250	3.500
024008	5/8"x9"	18-1/2	3.00	3.01	3.25	2.70	1.20	2.250	3.500
024009	5/8"x12"	21-1/2	3.25	3.50	3.75	3.22	1.50	2.250	3.500
024010	3/4"x6"	17	3.75	4.25	4.68	3.25	1.30	3.000	5.200
024011	3/4"x9"	20	4.50	5.00	5.38	4.00	1.70	3.000	5.200
024012	3/4"x12"	23	5.75	5.75	6.12	4.65	2.12	3.000	5.200
024013	3/4"x18"	29	7.00	7.25	7.25	6.12	2.93	3.000	5.200
024014	7/8"x6"	18	-	-	-	4.75	2.00	-	7.200
024015	7/8"x12"	24-5/8	8.38	8.88	9.36	6.67	3.00	4.000	7.200
024016	7/8"x18"	30-5/8	10.25	10.60	11.44	8.75	4.12	4.000	7.200
024017	1"x6"	20-5/8	-	-	-	6.41	2.50	-	10.000
024018	1"x12"	26-5/8	11.25	12.00	12.88	8.90	3.86	5.000	10.000
024019	1"x18"	32-5/8	14.00	14.75	16.10	11.70	5.50	5.000	10.000
024020	1"x24"	38-5/8	17.00	17.75	18.60	14.30	7.00	5.000	10.000
024021	1-1/4"x6"	20	-	-	-	10.40	4.00	-	15.200
024022	1-1/4"x12"	29-7/8	19.00	21.20	23.60	14.20	5.93	-	15.200
024023	1-1/4"x18"	35-7/8	24.10	26.00	26.60	18.00	8.00	-	15.200
024024	1-1/4"x24"	41-7/8	25.00	28.70	31.20	21.80	10.00	-	15.200
024025	1-1/2"x6"	22-1/8	-	-	-	15.40	5.80	-	21.400

024026	1-1/2"x12"	32-3/8	27.00	31.10	35.50	20.50	8.40	-	21.400
024027	1-1/2"x18"	38-3/8	31.20	36.40	40.70	26.20	11.50	-	21.400
024028	1-1/2"x24"	44-3/8	38.20	44.20	47.60	31.40	14.10	-	21.400
024029	1-3/4"x6"	-	-	-	-	22.70	8.75	-	28.000
024030	1-3/4"x18"	41-3/4	45.00	48.80	52.40	-	-	-	28.000
024031	1-3/4"x24"	47-3/4	58.00	60.00	64.00	43.90	19.50	-	28.000
024032	2"x6"	-	-	-	-	31.50	12.50	-	37.000
024033	2"x24"	51-3/4	90.00	102.00	115.00	60.30	27.50	-	37.000
024034	2-1/2"x6"	-	-	-	-	60.80	27.00	-	60.000
024035	2-1/2"x24"	51-1/2	183.00	180.00	200.00	110.00	54.00	-	60.000
024036	2-3/4"x24"	61-1/2	180.00	214.00	248.00	-	54.00	-	75.000



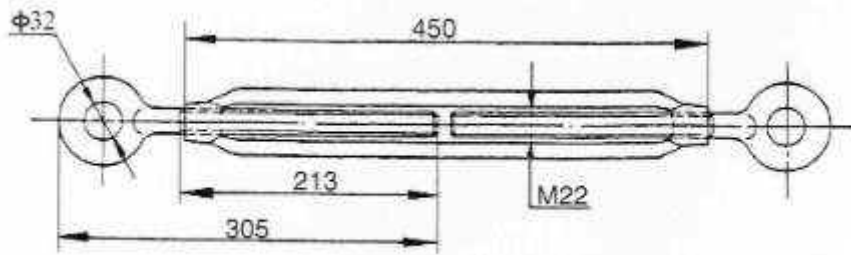
HAMBURG TURNBUCKLES



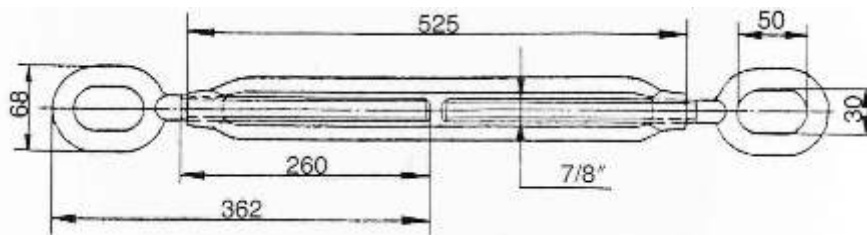
SIZE	B	C	Breaking Load	Weight
D x A			Tons	kgs
20 x 450	200	230	9.5	2.30
20 x 500	220	250	9.5	2.50
24 x 400	170	210	13.5	3.50
24 x 500	220	250	13.5	4.00
27 x 400	170	210	18	4.40
27 x 500	220	250	18	5.00

28 x 400	170	215	19	4.50
30 x 400	170	220	21	5.00
30 x 500	220	250	21	5.50

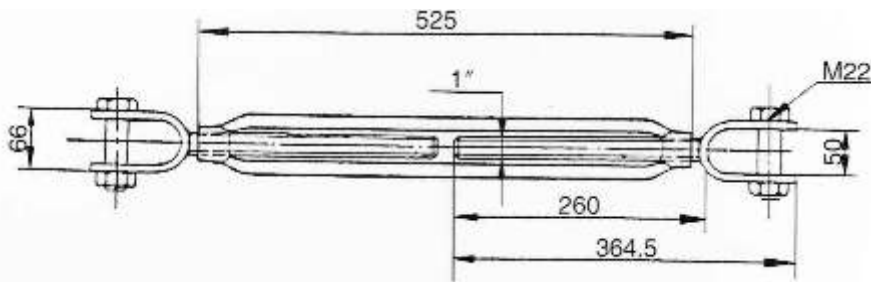
LONG FRAME TURNBUCKLES



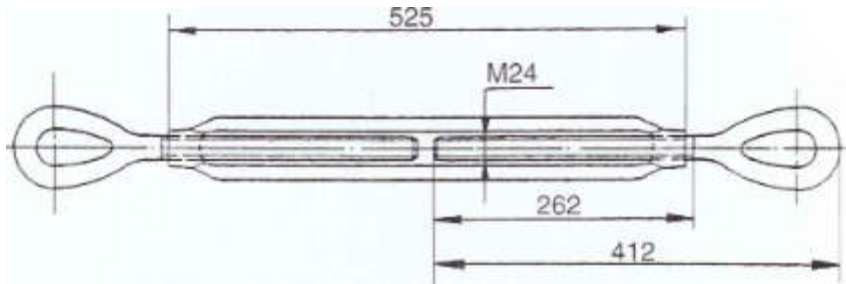
① Eye and Eye (TB-E/E)



② Water-drop Eye and Eye (TB-E/E)

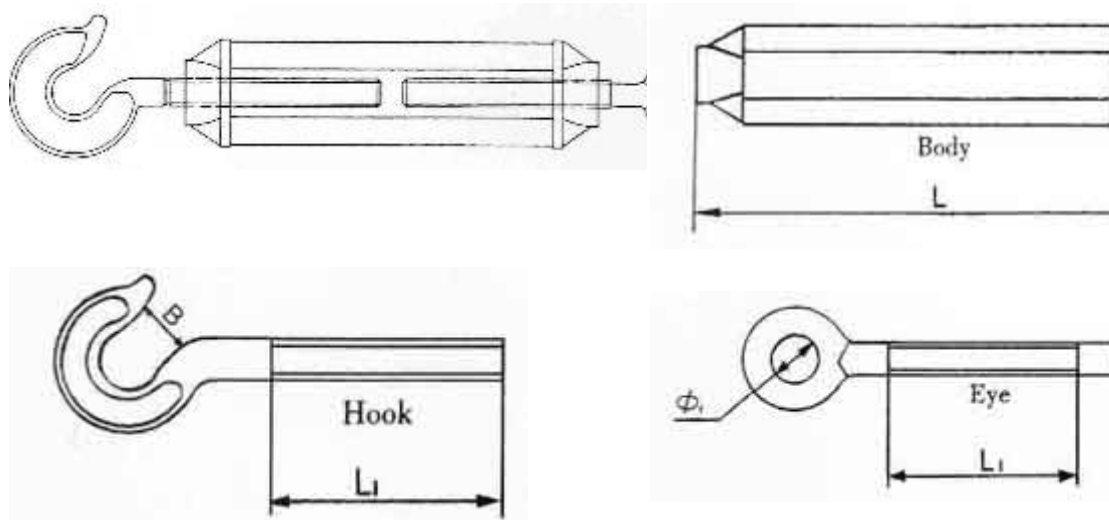


③ Jaw and Jaw (TB-J/J)



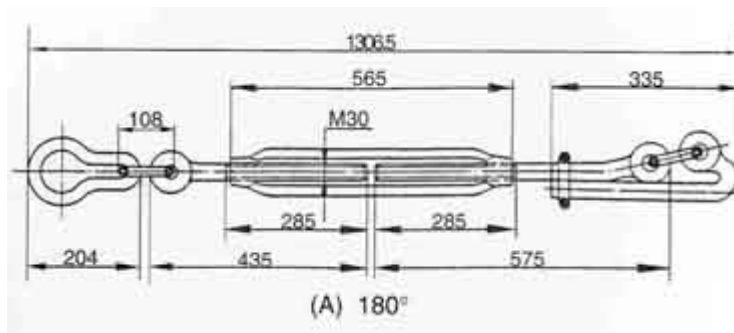
④Oval and Oval (TB-O/O)

SEPARATED TYPE TURNBUCKLE

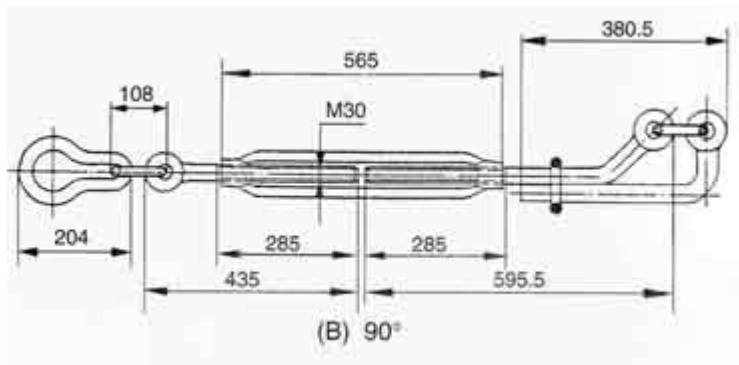


SIZE	L	L1	φ1	B	GW/BAG	PCS/BAG
M6	100	46	11	8	34	300
M8	125	58	12	10	42	200
M10	150	70	14	12	38	100
M12	200	94	18	14	39	50
M16	250	119	22	18	41	30
M20	300	144	25	22	47	20
M22	350	168	27	24	51	15
M24	400	192	28	26	50	10

DECK LASHING TURNBUCKLES

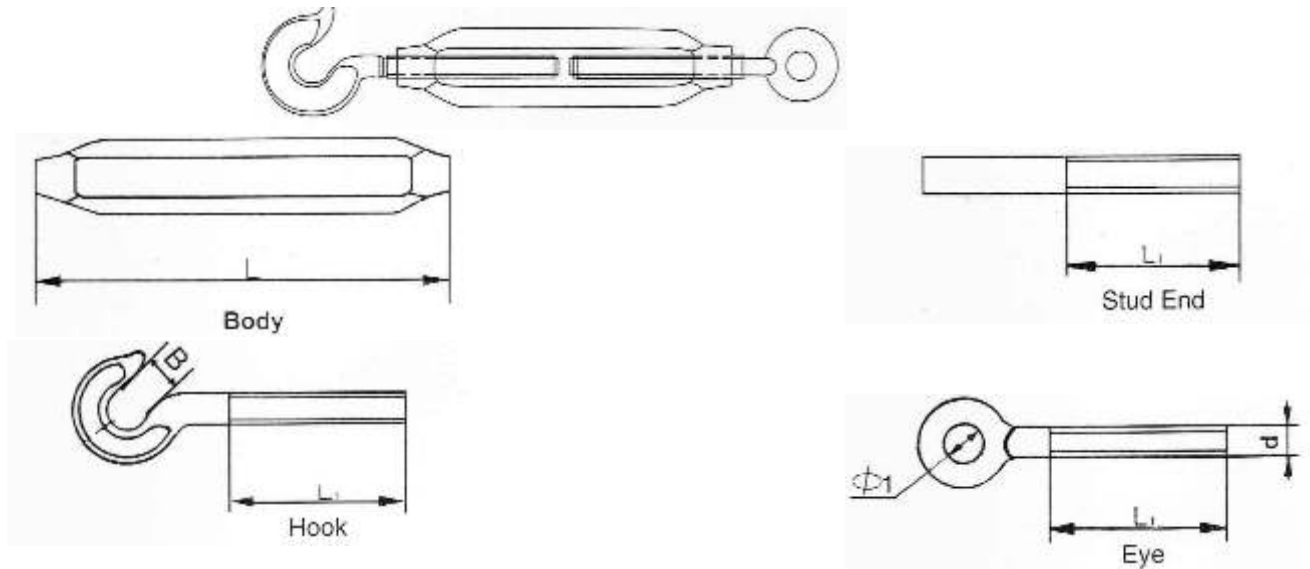


(A)180 °



(B)90 °

JIS FRAME TYPE TURNBUCKLE



SIZE	L	L1	φ1	B	GW/BAG	PCS/BAG
M6 1/4"	100	46	11	8	31	300
M8 5/16"	125	58	12	10	37	200
M10 3/8"	150	70	14	12	33	100
M12 1/2"	200	94	18	14	32	50
M16 5/8"	250	120	22	18	36	30
M20 3/4"	300	140	25	22	43	20
M22 7/8"	325	156	27	24	47	15
M24 1"	350	167	28	26	43	10