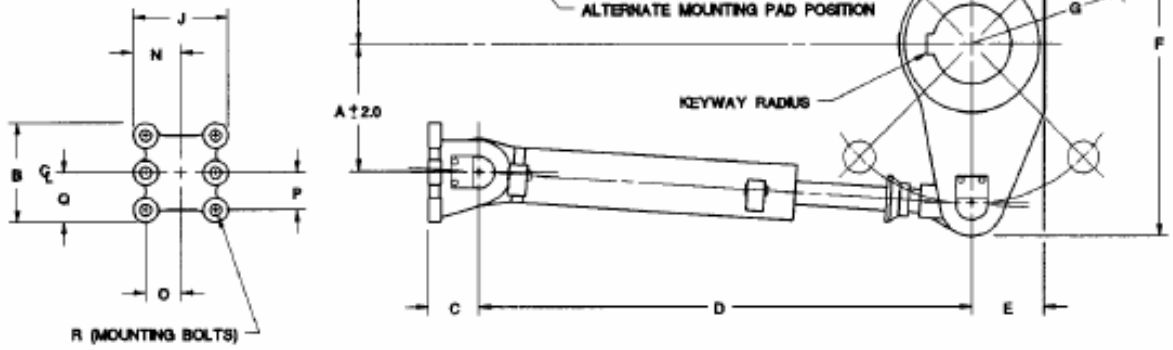
STEERING GEAR MODEL	CYLINDER MODEL	TORQUE (T.M.)	RUDDER ANGLE (2 X ∝)	A	B	C	D	E	F	G	H	J	K	L (MIN) (MAX)	M	N	O	P	Q	R	S (kpa)	T (kgs)	U (SAE O-RING)
LA2-1.6-35	L80-262	1.6	35	170	165	89	780	120	544	218	54	169	75.5	115 - 130	151	84	62	60.4	83	M20	21,632	4,497	3/4"-16
LA2-1.75-45	L80-409	1.75	45	191	165	89	1000	127	668	280	54	169	75.5	115 - 130	151	84	62	60.4	83	M20	19,696	4,497	3/4"-16
LA2-2.5-35	L80-409	2.5	35	272	165	89	1000	137	778	340	54	169	74	130 - 150	174	84	62	60.4	83	M20	21,196	4,497	3/4"-16
LA2-2.8-45	L100-419	2.8	45	195	216	111	1082	147	712	286	70	206	87	130 - 150	174	103	79.5	81	108	M24	29,000	7,020	1-1/16"-12
LA2-4.0-35	L100-419	4.0	35	278	216	111	1082	160	836	348	70	206	102	150 - 175	203	103	79.5	81	108	M24	33,014	7,020	1-1/16"-12
LA2-4.4-45	L100-650	4.4	45	303	216	111	1429	170	1028	444	70	206	102	150 - 175	203	103	79.5	81	108	M24	30,231	7,020	1-1/16"-12
LA2-6.3-35	L125-424	6.3	35	280	267	142	1174	178	864	352	80	241	116	175 - 200	232	121	92	102	133	M30	49,335	10,963	1-1/16"-12
LA2-7.0-45	L125-674	7.0	45	314	267	142	1549	200	1062	461	80	241	116	175 - 200	232	121	92	102	133	M30	43,560	10,963	1-1/16"-12
LA2-10-35	L125-674	10.0	35	447	267	142	1549	260	1280	560	80	241	137	200 - 235	273	121	92	102	133	M30	49,878	10,963	1-1/16"-12

RUDDER STOCK DIAMETER RANGE (MM)	KEYSIZE	KEYWAY RADIUS
115 - 128	32 X 22	1.6
129 - 144	36 X 25	1.8
145 - 160	40 X 28	2.0
161 - 180	45 X 32	2.3
181 - 200	50 X 36	2.5
201 - 224	56 X 40	2.8
225 - 255	63 X 45	3.0

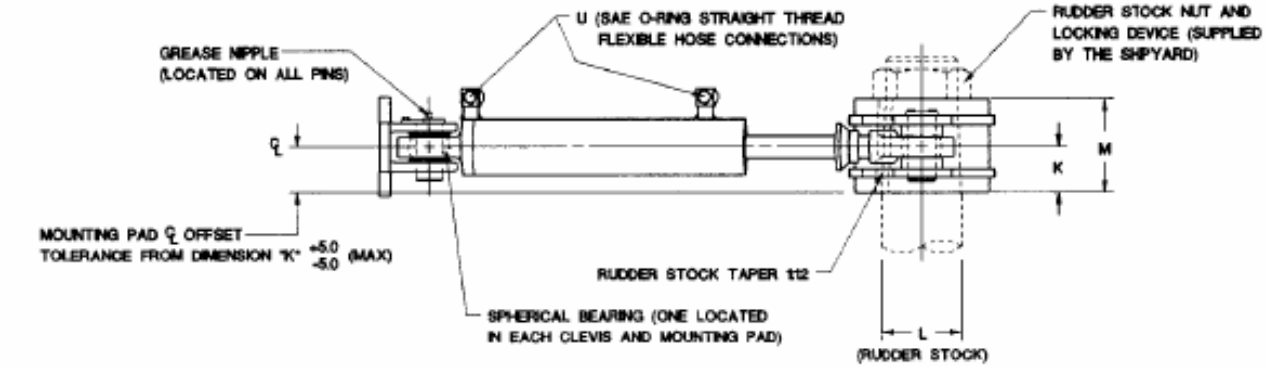
CYLINDER MODEL	MIDSTROKE
L80-262	780
L80-409	1000.5
L100-419	1082.5
L100-650	1429
L125-424	1170
L125-674	1545



NOTES

1. AS THE STEERING GEAR MUST BE EQUIVALENT IN STRENGTH TO THE UPPER RUDDER STOCK, EACH CYLINDER MOUNTING SEAT STRUCTURE MUST BE CAPABLE OF SUPPORTING A MAXIMUM LOAD OF "S" kgs. THIS LOAD WILL CAUSE THE RUDDER STOCK TO FAIL IN TORSIONAL SHEAR. THE NORMAL LOAD DUE TO WORKING PRESSURE IS "T" kgs.
2. IN THE HARDOVER POSITION ONE CYLINDER WILL STOP AGAINST THE PISTON HEAD AND THE OTHER STOPS AGAINST THE ADJUSTABLE MECHANICAL STOP THEREBY PROVIDING A BALANCED TORQUE.
3. SYSTEM HYDRAULIC WORKING PRESSURE 10,000 kpa (1450 psi)
4. ALL DIMENSIONS ARE IN MILLIMETERS.
5. MOUNTING BOLT GRADE: ISO 5.8 OR U.S. GRADE 2 OR BETTER.
6. TOLERANCES SHOWN ARE FOR SHIPYARD SEATINGS.
7. METRIC TO U.S. CUSTOMARY CONVERSIONS:

25.4mm = 1 inch
1 Tonne Meter = 7233 lbs-ft
1 kg = 2.2 lbs



L-MODEL OVERALL DIMENSIONS FOR LA2-1.6-35 THRU LA2-10-35 STEERING

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DRAWN BY: M.L.G. CHECKED BY: F.J.P.
SCALE: N.T.S.
DATE: MAY, 1994
REF NO.:

DRAWING NO. C-8-636

REV.