



Model B Steering Gear Code

Example: B2 - 76 - 300 - 1 - 35

No. of Actuators

Cylinder Bore

Cylinder Stroke

Rudder Angle

No. of Rudders

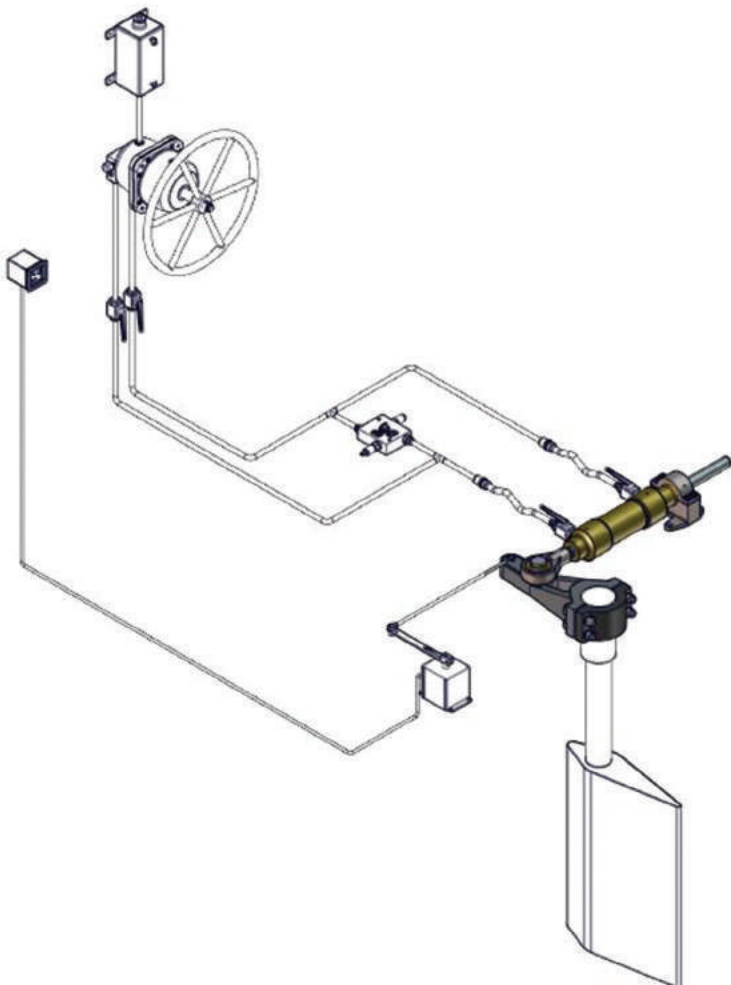


Photo Courtesy of Oceanline Shipyard

## Jastram Model B Steering Gear

Jastram B Model Actuators are exceptionally durable and extremely reliable. They provide virtually maintenance-free performance. B Model Actuators are double-acting balanced displacement cylinders, which are directly connected to the tiller.

Jastram steering gear features:

- Strong and compact design
- Simple Installation
- U-cups used as dynamic seals
- Rod wiper and bearing
- Fewer machined parts
- Corrosion free construction

The actuator sizing is primarily dependent on the maximum rudder torque required. Torque calculations should be confirmed by a naval architect or designer. For more information on actuator sizing please contact your local Jastram distributor.

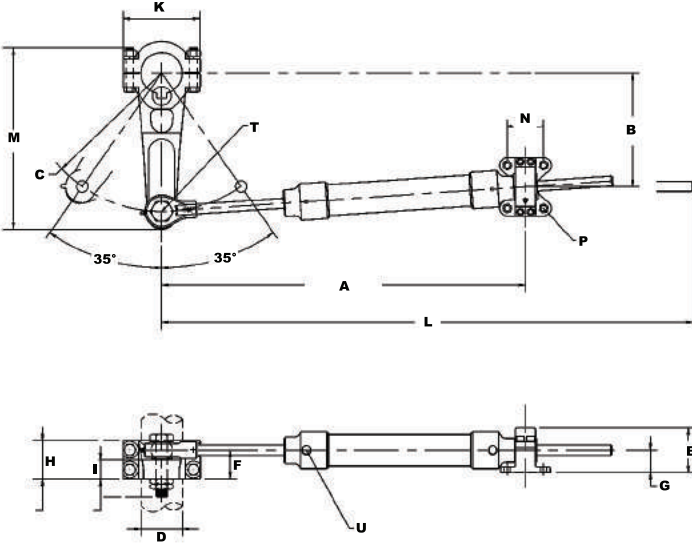


# Steering Gear Arrangements

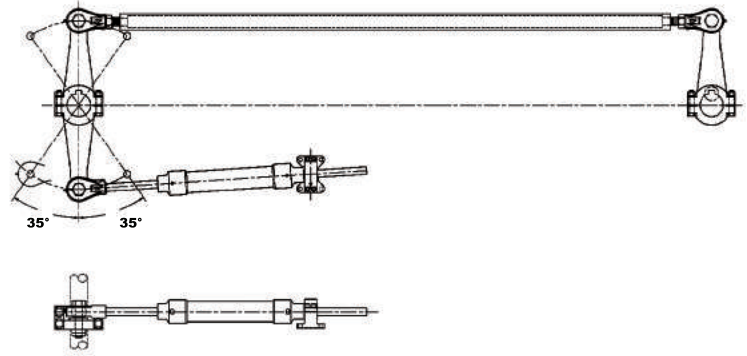
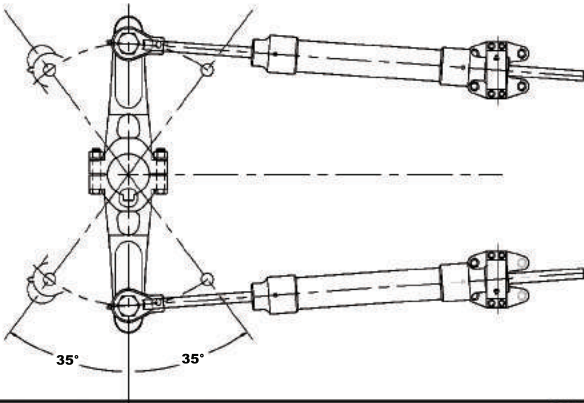
## Single Rudder

## Twin Rudder

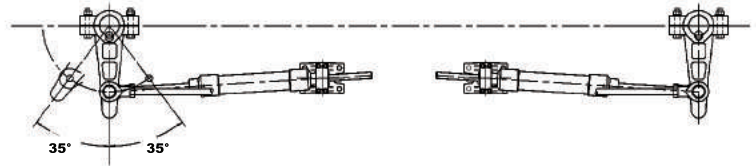
### Single Actuator



### Two Actuators



### Arrangement Option 2



STEERING SYSTEM SPECIFICATIONS (Metric)

STEERING GEAR MODEL	RATED TORQUE				DISPLACEMENT cm <sup>3</sup>	CYLINDER MODEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	T	U
	1 CYLINDER N.m	1 CYLINDER Kgf.m	2 CYLINDERS N.m	2 CYLINDERS Kgf.m																				
Bx-38-120-x-37	530	54	1062	108	113	B-38-120	404	80	100	545	75	32	46	37	21	17	140	48	257	82	50	10	16	SAE
Bx-38-190-x-37	841	86	1680	171	179	B-38-190	509	126	158	723	75	32	46	37	21	17	140	48	257	82	50	10	16	-4
Bx-50-190-x-37	1552	158	3106	317	331	B-50-190	541	126	158	746	86	55	47.5	76	37	25.4	148	79	360	90	62	13	22.2	SAE
Bx-50-300-x-37	2451	250	4904	500	523	B-50-300	699	199	249	1020	86	55	47.5	76	37	25.4	148	79	360	90	62	13	22.2	-6
Bx-76-190-x-37	3360	343	6719	685	716	B-76-190	644	126	158	878	126	75	72	76	37	38.1	148	79	360	115	95	16.3	31.8	SAE
Bx-76-230-x-37	4069	415	8139	830	867	B-76-230	695	154	191	972	126	75	72	76	37	38.1	148	79	360	115	95	16.3	31.8	-8
Bx-76-300-x-37	5305	541	10611	1082	1129	B-76-300	806	199	249	1160	126	75	72	76	37	38.1	148	79	360	115	95	16.3	31.8	
Bx-76-300-x-37*	5305	541	10611	1082	1129	B-76-300	806	199	249	1160	126	75	72	102	49	38.1	198	105	475	115	95	16.3	31.8	
Bx-76-400-x-37	7187	733	14373	1466	1531	B-76-400	961	270	338	1416	126	75	72	102	49	38.1	198	105	475	115	95	16.3	31.8	

Dimensions A - U are all in Millimeter.

TORQUE RATING IS DETERMINED AT 1000 PSI (69 BAR) AND 35°, MAXIMUM R-ANGLE 37°

\* ACHIEVABLE UP TO A RUDDER STOCK DIAMETER OF 4-1/8" (105mm)

Items to note on small steering systems:

- Double Acting Relief and Bypass (DARBs) valves are suggested to protect the steering gear
- Header tanks or autofill valves are suggested to prevent the introduction of air or the loss of steering due to low oil levels
- A system pressure of around 500 PSI (35 BAR) is suggested for manual steering systems
- Shut off valves are suggested at each component in the hydraulic circuit
- Tube or pipe sizing is based on the helm pump information, see Jastram H Model Helm Pump Cutsheet for details

Jastram Actuators require the following items for installation:

- Tiller bolts
- Hoses

Jastram Actuators are serviceable. Standard seal kits are available and should be changed regularly:

- JA-950002-1, B-38 seal kit
- JA-950003-1, B-50 seal kit
- JA-950004-1, B-76 seal kit

Data is subject to change without notice\* 07SEP2016 BRC00202M