



3-LINE (PRESSURIZED) INBOARD SYSTEMS

3-LINE (PRESSURIZED) COMPACT STEERING FOR INBOARDS

For Boats Up To 38 ft.

3-Line (Pressurized) Systems

3-Line Systems offer distinct advantages over 2-Line Systems. The reserve allows single-location monitoring of system pressure and fluid levels, plus the helms required for 3-Line multi-station applications are more economical than 2-Line helms. Compact pressurized inboard systems are generally specified for boats under 38 feet. As with larger inboard systems, the application depends upon many factors including size and boat usage.

These systems utilize a balanced aluminum cylinder. Other cylinders may be substituted, but care must be taken that overall system output will match the rudder forces.

IB 251 System

This system incorporates the K-19 cylinder and is usually recommended for small recreational boats with planing hulls. Nylon tubing is used throughout. Included in the system is a helm unit, reserve, cylinder, fittings, 50 ft. of tubing and two quarts of liquid.



K-19 Cylinder

IB 511 System

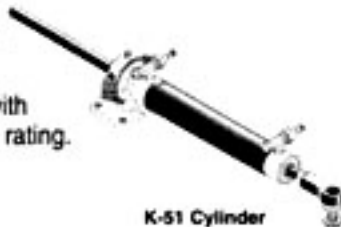
Using the same components as the IB 251 System, this high-pressure system is supplied with fittings for SAE-100R hose on the supply lines and nylon tubing on the make-up line. Uses K-19 cylinder.

IB 231 System

The K-51 universal mount aluminum cylinder is the backbone of this system. Nylon tubing is utilized throughout and the system includes a helm unit, reserve, cylinder, fittings, 50 feet of tubing and two quarts of fluid.

IB 531 System

Utilizes similar components to the IB 231, except this system uses SAE 100R rated hose with its higher pressure rating.



K-51 Cylinder

3-Line (Pressurized) Inboard System Selection

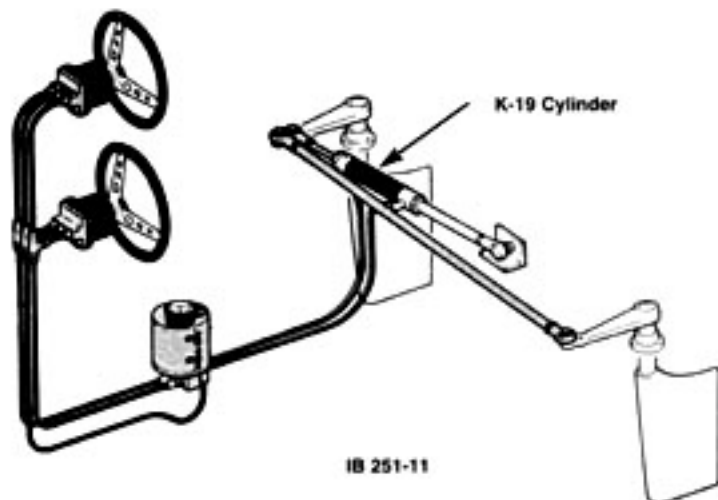
APPLICATION	PLANING HULL		DISPLACEMENT HULL	
	Pleasure Boat	Work Boat	Pleasure Boat	Work Boat
Boats To 30 ft.	IB 251-11 or IB 231-11	IB 511-11 or IB 531-11	IB 251-11 or IB-231-11 or IB 511-11 or IB 531-11	IB 511-11 or IB 531-11
Boats 30-38 ft.				

Note: Systems are single station. For dual station add extra helm & fittings.

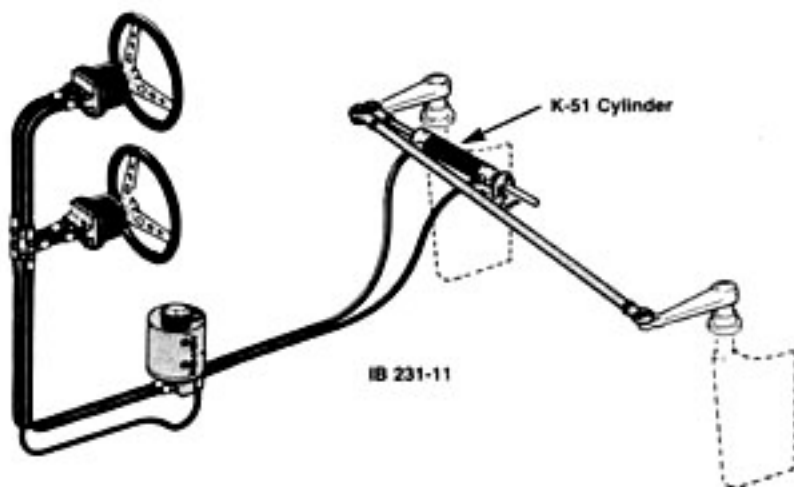
3-Line (Pressurized) Inboard Steering System Performance Data

System	Helm Displacement		Number Steering Cylinders	Wheel Turns	Max. Torque*
	(cu. in.)	(cu. cm.)			(in./lbs)
IB 251-11	2.0	33	1 /K-19	4.5	3,310
IB 511-11	2.0	33	1 /K-19	4.5	6,290
IB 231-11	2.0	33	1 /K-51	5.1	6,290
IB 531-11	2.0	33	1 /K-51	5.1	6,290

*Torque @ 70=



IB 251-11



IB 231-11