



KOBELT MECHANICAL TIE BAR

On multi-outboard motor installations, it is recommended to have a mechanical tie bar interconnected between each outboard motor in order to synchronize them. Kobelt can provide an all stainless steel and bronze tie bar of the most rugged and corrosion-free construction.

(It is recommended not to use the tie bar as a stepping device.)

These tie bars are available in 4" increments starting at 30", but can also be provided with lines up to 46", at the request of the customer. The threaded portion at each end of the tie bar is 4" long, and can be cut by the installer, 2" at each end to suit individual preferences.

KOBELT QUALITY

Since 1962, Kobelt has built a global reputation for the design and manufacture of marine steering and propulsion system controls and related accessories. Our international leadership is based not just on a relentless search for design and engineering improvements, or beautifully machined components of enduring die-cast bronze and stainless steel, or deliveries and prices that are competitive world-wide. Behind it is a simple guiding principle: we believe that if we help to get you where you're going, you'll help to get us where we're going, as we continue to provide the very best quality and value unrivalled by our competitors.

(Kobelt Products either carry a patent or the patent is pending.)

**Kobelt Steering and Controls –
Experience the dramatic difference!**



8238 129th Street, Surrey
British Columbia, Canada V3W 0A6
Sales: 604.590.7313 Fax: 604.590.8313
E-mail: sales@kobelt.com Website: www.kobelt.com



PUSH/PULL
CONTROL HEADS

RUDDER ANGLE
INDICATOR

AUTO PILOT
PUMP

HYDRAULIC
CABLE KITS

RUDDER ANGLE
FEED BACK

Quality Control

*Illustrated are a just a few
of the items that can be
adapted to small pleasure
craft. Contact us for a
more complete list.*

5M/04/04

YOU HAVE THE POWER.



NOW CONTROL IT.

KOBELT
OUTBOARD MOTOR STEERING SYSTEMS

KOBELT HYDRAULIC STEERING CONTROLS FOR OUTBOARDS

Kobel is an established leader in the international arena, providing superior marine controls and steering systems to over 60 countries and backed by over 40 years of experience. Our commitment to manufacture products with maximum durability and a longer lifespan propelled us to be the only company to use die-cast bronze components and stainless steel hardware, wherever possible, making us unique among our competitors.

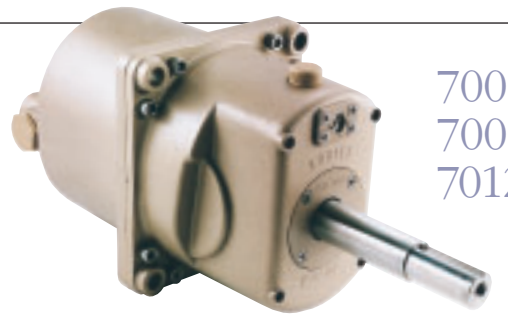
There are no shortcuts taken in the design, manufacturing, or assembly process, giving our customers the highest quality marine systems – systems that not only perform brilliantly, but are reliable as well.

Kobel's global reputation for excellence knows no boundaries. We understand the needs of our customers, and respond by delivering dependable products to boat owners with vessels both large and small.

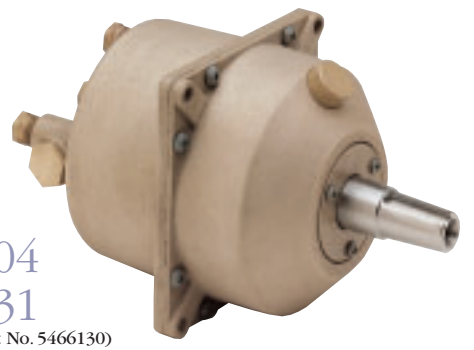
KOBELT HELM PUMPS



7035
(Patent No. 5676081)



7003
7005
7012



7004
7031
(Patent No. 5466130)

Kobel manufactures sturdy pumps, carefully crafted in bronze with stainless steel hardware and hardened steel pistons and pintol. Models 7003, 7005 and 7012 are adjustable displacement types whereas models 7004, 7031 and 7035 are all fixed displacement types. The 7003, 7005 and 7012 are best installed with the shaft on a horizontal plane. The 7004 and 7031 are also available in a convenient tilt version, and can be installed at any angle.

Pump Model	Width (in.)	Height (in.)	Depth (in.)	Displ. (cu.in.)	Tilt Model
7003	4-1/4"	4-7/8"	7-7/8"	1.0 - 3.0	–
7004	4-9/16"	4-9/16"	6-11/16"	3.5	7035-O
7004-X	4-9/16"	4-9/16"	6-11/16"	4.2	7035-OX
7005	5"	5-3/8"	9-1/4"	2.0 - 6.0	–
7012	6-1/4"	7"	11-1/8"	4.0 - 12.0	–
7031	4-17/32"	4-17/32"	6-1/16"	2.0	7035
7031-X	4-17/32"	4-17/32"	6-1/16"	2.6	7035-X

KOBELT STEERING CYLINDERS

All Kobelt cylinders are produced entirely in bronze and stainless steel, with piston rods that are hard chromed, ground and polished. Combined with a Kobelt Helm Pump, the result is smooth, silky control with built-in corrosion resistance, giving years of trouble-free service, in even the heaviest of salt conditions.

The 7033, 7032 and 7030 outboard steering cylinders were designed to be installed on outboard motors from 20 up to 300 hp.

The main advantage of the 7033 (intended for later model outboards) is that the weight of the cylinder is supported by the outboard motor itself, leaving the drag link to control the steering of the motor, eliminating binding and premature wear.

The 7032 cylinder can be installed on outboards motors up to 300 hp without encountering any difficulty, at any speed. The cylinder has a 3/4" hard-chromed stainless steel rod and an 1 1/2" i.d tube. Its attachment to the outboard motor allows it to be tilted up or down to suit the tiller arm height.

The 7030 side mount model was designed for engines up to 250 hp and is an effective replacement model for similar existing setups. Its advantage over the competition: The fact that it's made by Kobelt!



7033
(Patent No. 5601463)

7032

7030

Cylinder Model	Width (in.)	Height (in.)	Stroke (in.)	Max HP
7033	20-7/8"	3-1/4"	7-1/2"	300
7032	23-1/2"	4"	8-1/2"	300
7030	33-15/32"	2"	8"	250



All Kobelt equipment comes with a 5-year conditional warranty that is the best in the industry. Strict quality control manufacturing and sturdy corrosion resistant materials ensure trouble-free service above and beyond the warranty period.