

 M. Knöpfli AG  
Wiesackerstr. 128  
8105 Regensdorf  
Tel: ++41 44 840 62 21  
info@marine-gear.com

 Liberty  
series

**Velvet Drive**<sup>TM</sup>  
TRANSMISSIONS  
A REGAL-BELOIT COMPANY

**“Velvet Smooth . . . Velvet Quiet”**








**NEW!**

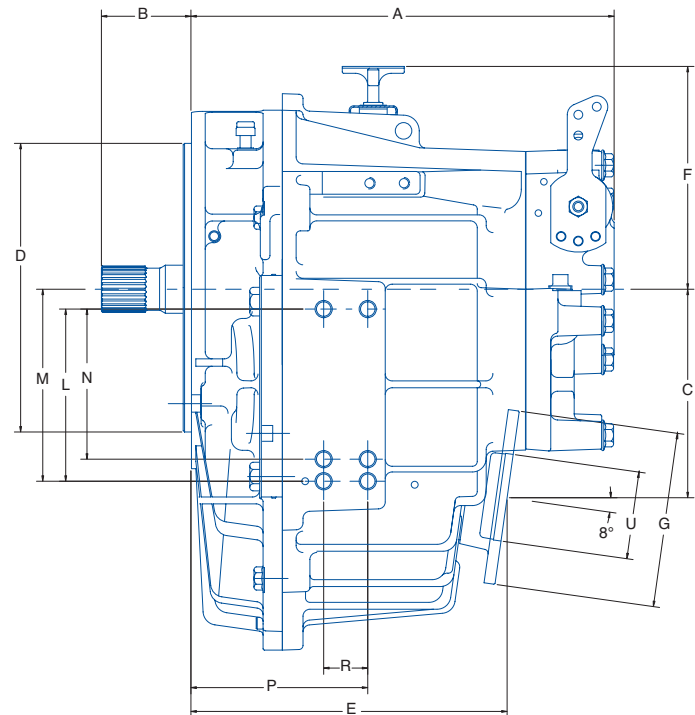
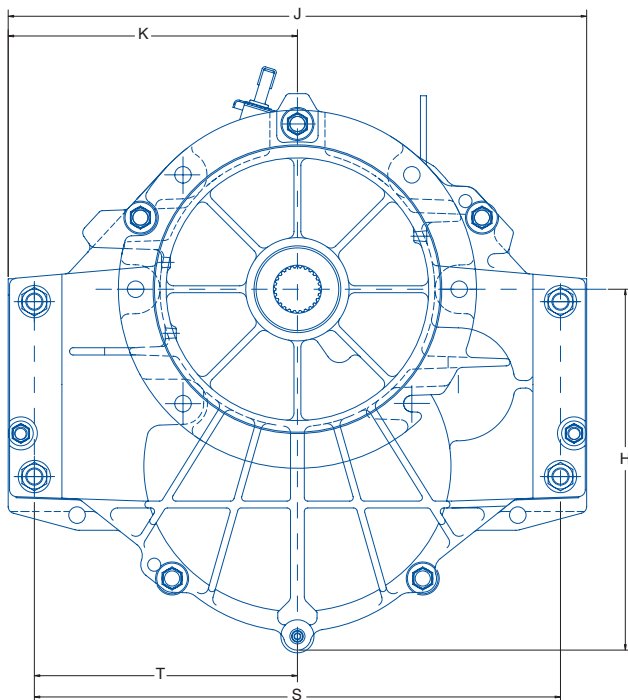
**Liberty Series**<sup>TM</sup>  
**Marine Transmissions**

## Features and Benefits

From first sight you will notice a robust ribbed aluminum housing specifically designed for both strength and light weight. Every part is manufactured to the highest standards in the industry to give you “Freedom on the Water” confidence.

Power packed with 505 ft./lbs. of torque and available in 6 ratios from 1.00:1 to 2.8:1, the Liberty Series gives you the most torque AND the widest range of ratios available size-for-size in the industry.

-  Robust ribbed aluminum housing → “Bullet proof” design
-  Ground gearing throughout → Whisper quiet operation
-  Various mounting options → Easy interchangeability with existing Velvet Drive and competitive models
-  Exact ratio in forward and reverse → Means zero torque steer
-  Smaller drive package → More usable boat space where it counts



## Dimensions Inches (millimeters)

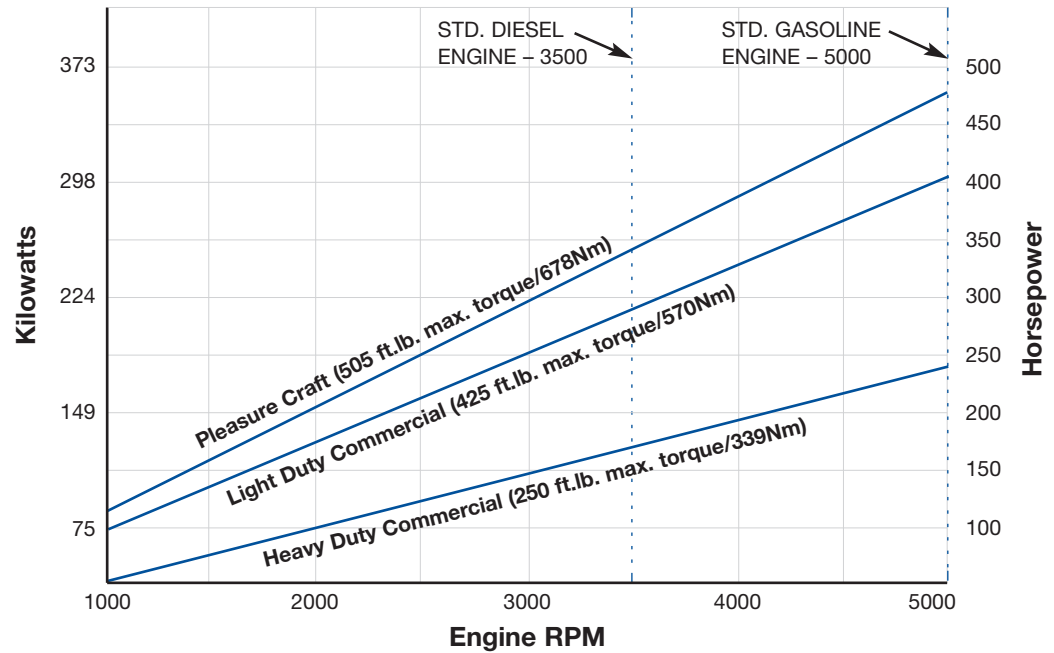
A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U
12.09	2.56	5.95	8.25	8.98	6.38	5.00	10.31	16.53	8.26	4.92	5.49	4.29	5.05	1.26	15.04	7.52	2.50
(307.0)	(65.0)	(151.2)	(209.5)	(228.1)	(162.0)	(127.0)	(262.0)	(420.0)	(210.0)	(125.0)	(139.4)	(109.0)	(128.4)	(32.0)	(382.0)	(191.0)	(63.5)

## General Information

- Available Ratios → 1.00:1, 1.25, 1.50, 2.00, 2.50:1, 2.80:1
- Input Shaft Spline Teeth → 26
- Input Shaft Rotation → Standard automotive rotation
- Output Shaft Rotation → Either direction
- Approximate Dry Weight → 114 lbs. (51.7 kg)

## Classifications/Ratings

### Gasoline & Diesel Engines (All Ratios)



**Example:** For a pleasure craft boat with a gasoline engine, the Liberty Series delivers 480 HP at 5000 RPM.

### Service Classifications

**Pleasure craft:** Full throttle used approximately 5% of total running time. Typical cruising is at 80% or less of maximum rated engine speed. Engine running time is 400 or less hours per year. Applications in boats designed as pleasure craft and used for commercial use, such as charter boats or party fishing boats, are considered light duty commercial applications.

**Light duty commercial:** Full throttle used approximately 5% of total running time. Longer running periods with throttle setting at 75% or less of maximum rated engine speed. Engine running time is up to 1500 hours per year. Light duty commercial applications include sport fisherman boats, party fishing boats, crew boats, search and rescue boats and patrol boats.



**Heavy duty commercial:** Full throttle used up to approximately 5% of total running time. Longer running periods up to 80% of maximum rated engine speed. Engine running time is up to 2500 hours per year. Heavy duty applications include towboats, heavy supply boats, ferries and offshore fishing trawlers.

### Important Notes

**Lubrication:** Dexron IIE, Dexron III, or any transmission fluid which meets Detroit

Diesel Allison C-4 specification are recommended for use in all Velvet Drive™ transmissions.

**Applications:** Matching of engine, transmission model, transmission ratio and propeller size is important. The combination must allow the engine to obtain maximum rated engine RPM. Specific applications should be referred to Velvet Drive™ transmission distributors for assistance.

**Additional Notes:** System torsionals: System related noises or vibrations can occur at low engine speeds. They can cause gear rattle and result in damage to the boat engine as well as the transmission. Velvet Drive™, a division of REGAL-BELOIT CORPORATION, is not responsible for total system-related torsionals of this type.

Specifications: All specifications and descriptive data shown are nominal and subject to change without notice.

## American Innovation

Velvet Drive™ Transmissions (VDT) has been a leader in the marine industry for over 50 years. Founded in 1948, VDT has been a REGAL-BELOIT company since its purchase from Borg Warner in 1995. VDT products feature quiet, smooth operation and are manufactured using the highest quality industry standards. Typical applications include tournament ski boats, inboard cruisers, sport fishing boats, sailboats, trawlers, center console, run-abouts and yachts.

VDT is now located in Liberty, South Carolina, at Richmond Gear's state-of-the-art facility. Richmond Gear is a leading

manufacturer of hi-performance automotive ring and pinions, transmissions and other driveline products for NASCAR, NHRA, IHRA and the automotive enthusiast.

VDT and Richmond Gear will continue to draw upon their combined 134 year history to develop new, higher-performing products. The Liberty Series transmission provides the marine enthusiast the most power density transmission available, offering more horsepower per cubic inch of space, freeing up more usable boat space where it counts.

## Complete Line of Marine Transmissions

Series	Model	Description	Ratios Available
<b>71C</b>	1017	In-Line	1.00
<b>71C</b>	1017W	In-Line Wakeboard	1.00
<b>72C</b>	1018	High Capacity	1.00, 1.52, 1.88, 2.10, 2.57, 2.91
<b>72V</b>	1005	15 Degree V-Drive Cast Iron	1.21, 1.51, 1.99, 2.50
<b>Liberty A</b>	3001	8 Degree Down Angle Aluminum	1.00, 1.25, 1.50, 2.00, 2.50, 2.80
<b>Liberty V*</b>	3002	12 Degree V-Drive Aluminum	1.25, 1.51, 2.00, 2.50

\* Coming soon in 2006



### Velvet Drive Transmissions

1208 Old Norris Road  
Liberty, SC 29657  
Phone: 864-843-9234  
Fax: 864-843-1276  
Email: sales@velvetdrive.com  
[www.velvetdrive.com](http://www.velvetdrive.com)

**Providing Quality Marine Transmissions for 50 Years**