

New 249 "V" Series Option

Chelsea's NEW 249 "V" output options feature the same patent pending Noise Suppression System as the standard 249 Series Power Take-Off (P.T.O.) and an integrated Parker T6C Vane Pump cartridge for higher flows/pressures than standard gear pump options. The 249 "V" option has been designed to fit the Ford Super Duty both 4 x 2 and 4 x 4 chassis with the Ford TorqShift™ 6 automatic transmission.

The combination of the Chelsea 249 Series and the Parker T6C vane pump provides higher flows and pressures than were previously available from any P.T.O. supplier for the Ford Super Duty, as one integral P.T.O./Vane Pump unit.

Truck Applications

- Service Trucks
- Tow and Recovery
- Initial Response Vehicles
- Truck Mounted Cranes

Product Features

- Two Year Warranty
- Pump Flows up to 30+ gpm continuous at 2000 psi
- No special installation tools
- Noise Suppression System
- Four Cartridge Sizes

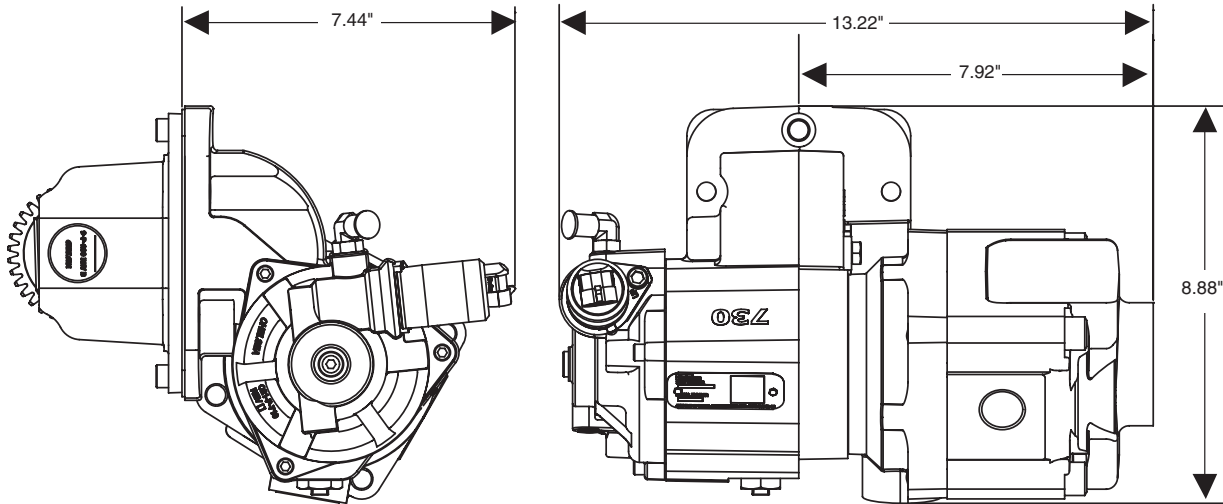
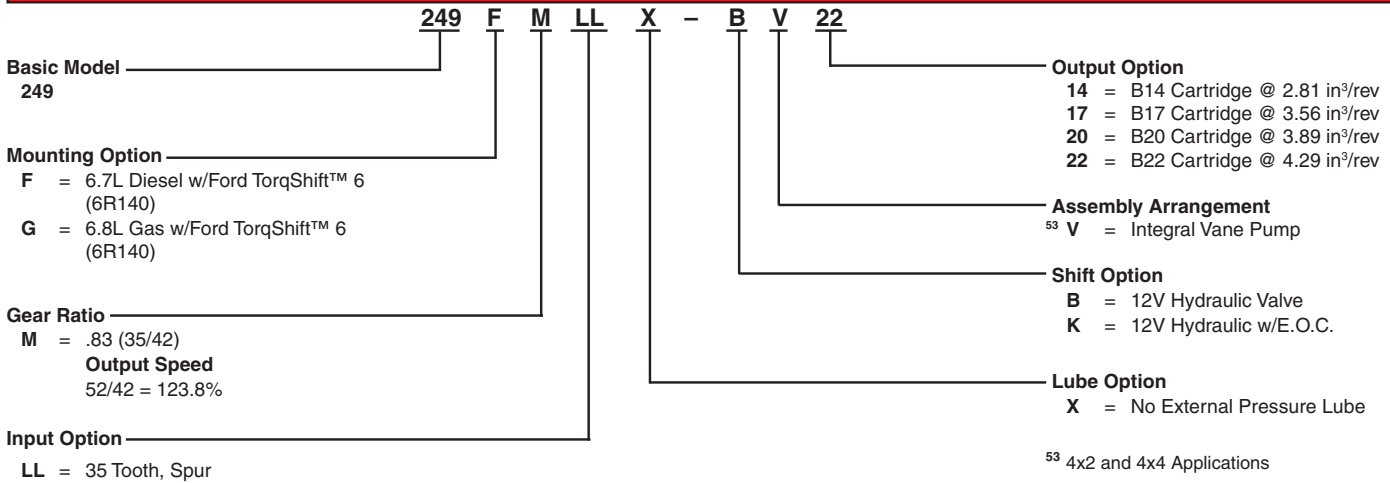


Application Specifications

- The Ford TorqShift™ 6 transmission P.T.O. drive gear delivers up to 250 Lbs.ft torque to the P.T.O. and can manage the heat of 40 hp continuously. Higher horsepower can be delivered, but for a shorter duration depending on the amount of power required. Contact Ford Body Builders Advisory Board for complete application information.
- The 249 "V" option is rated the same as the standard 249 Series at 200 Ft.lbs Intermittent and 140 Ft.lbs Continuous Torque.
- For this application one must calculate Horse Power (HP) and Torque (Tq) not to exceed the stated P.T.O. torque ratings and the Ford 40 HP transmission heat limit for continuous duty cycles.
- To find Horse Power – $HP \text{ (Horse Power)} = \frac{GPM \text{ (Gallons per Minute)} \times P \text{ (System Pressure)}}{1714} \div E \text{ (Pump Efficiency)}$
- To find Intermittent Torque – $Tq \text{ (Torque)} = \frac{HP \text{ (Driven Equipment Horse Power)} \times 5252}{RPM \text{ (P.T.O. output speed)}}$
- Continuous Torque - Multiply Intermittent Torque by 0.7

OVER

249 "V" SERIES POWER TAKE-OFF SPECIFICATIONS AND TECHNICAL DATA



Chelsea 249 "V" Integral Vane Pump Data for 4 x 2 or 4 x 4 Vehicles

Option Code w/ PTO	Chelsea Pump Cartridge Number	Displacement in ³ /rev	GPM (D)	Pump (D) HP	Torque (D) ft-lbs	Pressure PSI		Pump Speed RPM		Max Speed RPM Engine (B)
						Intermittent	Continuous	Min.	Max	
14	380418-14	2.81	15.08	19.6	83.02	4000	3500	400	2800	2258
17	380418-17	3.56	19.11	24.8	105.4	4000	3500	400	2800	2258
20	380418-20	3.89	20.88	27.1	114.8	4000	3500	400	2800	2258
22	380418-22	4.29	23.03	29.9	126.4	4000	3500	400	2800	2258

(D) GPM & Pump Input HP @ 1000 Engine RPM & 1240 P.T.O. Output Shaft RPM & 2000 PSI

CAUTION: 249 "V" Pump Options: "The P.T.O. drive gear delivers up to 250 Lbs. ft. torque to the aftermarket P.T.O., and can manage the heat of 40 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required." Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.

NOTE: Refer to Chelsea Owner's Manual HY25-1249-M1/US for complete vane pump information.