

Chelsea® 210 Series

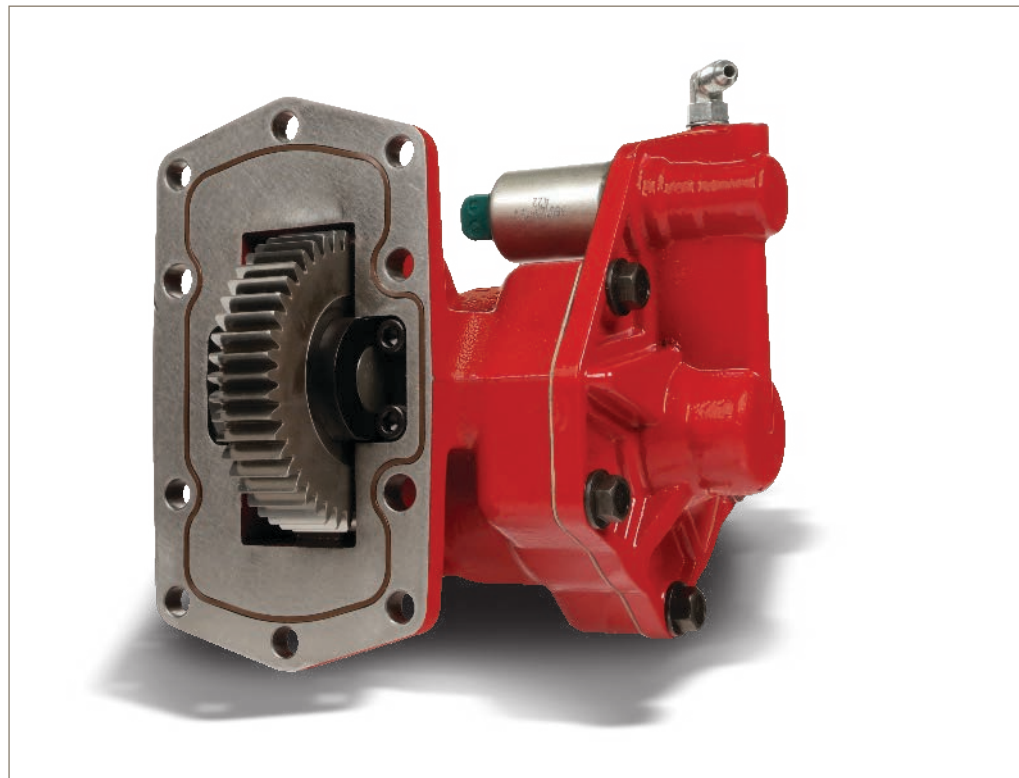
For Ford 10R140 Super Duty Transmission



Overview:

Parker Chelsea's 210 Series PTO was engineered for Ford's 10R140 Super Duty transmission, making it an ideal choice for a range of applications. The 10-bolt housing design of the 210 Series enables the use of larger pump options when compared to our 249 Series (for Ford 6R140 transmissions). Ford's 10R140 transmission features Live-Drive which allows operators to engage the PTO while the truck is in motion, increasing productivity and reducing downtime. To make ordering easy, kitting options have been streamlined so pumps, wiring harnesses, and shift kits are available in the same package as the PTO.

- Aerial
- Tow & Recovery
- Fire & Rescue
- Water Drilling



Contact Information:

Parker Hannifin Corporation
Chelsea Products Division
8225 Hacks Cross Road
Olive Branch, MS 38654 USA

Phone: 1-888-PH4-TRUK
(1-888-744-8785)

Fax: 1-662-895-1069
chd_service@support.parker.com

www.parker.com/chelsea

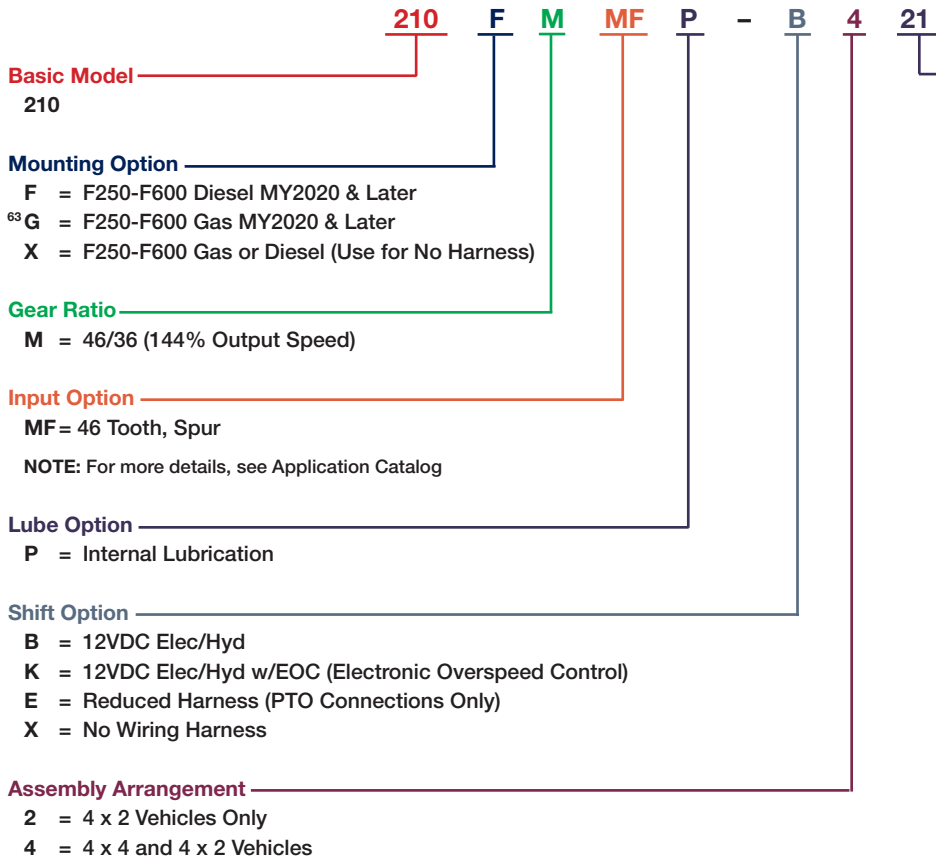


Product Features and Benefits:

- **Patented Noise Suppression System** – Dampens gear rattle between transmission and PTO.
- **Standard Smart Start Drive Line Output** – Shock load dampening feature to protect driven equipment.
- **Simplification** – Same housing can be used for 2WD and 4WD installations.
- **Intermittent Torque Rating** – Up to 235 lb-ft for driven equipment based on 144% PTO output speed.
- **Ease of Ordering** – PTO, pump, wiring harness, and shift kits available under one part number and package.
- **Standard SAE Output Flange and Shafts** – Allowing for wider variety of flows and pressures.

ENGINEERING YOUR SUCCESS.

210 SERIES POWER TAKE-OFF SPECIFICATIONS AND TECHNICAL DATA



Output Option

Driveline Output

³⁸ SD = SmartStart - Rd Standard Shaft (1-1/4" - 5/16" Key)

Pump Mount

AD = SAE A 2-Bolt Flange (3/4" - 11T)

XP = Special SAE A Pilot 2-Bolt Flange, SAE B Shaft (7/8" - 13T)

PGP511 Series (AD Output)

- 21 = CGP-P11A21-5AC (0.49 in³/rev, .0021 GPR)
- 26 = CGP-P11A26-5AC (0.61 in³/rev, .0026 GPR)
- 32 = CGP-P11A32-5AC (0.73 in³/rev, .0032 GPR)
- 37 = CGP-P11A37-5AC (0.85 in³/rev, .0037 GPR)
- 42 = CGP-P11A42-5AC (0.98 in³/rev, .0042 GPR)
- 50 = CGP-P11A50-5AC (1.16 in³/rev, .0050 GPR)
- 55 = CGP-P11A55-5AP (1.28 in³/rev, .0055 GPR)
- 61 = CGP-P11A61-5AP (1.40 in³/rev, .0061 GPR)
- 71 = CGP-P11A71-5AP (1.65 in³/rev, .0071 GPR)
- 82 = CGP-P11A82-5AP (1.89 in³/rev, .0082 GPR)
- 87 = CGP-P11A87-5AP (2.01 in³/rev, .0087 GPR)

PGP315 Series (AD Output)

- 08 = CGP-P31B081-5AG (1.86 in³/rev, .0081 GPR)
- 09 = CGP-P31B094-5AG (2.17 in³/rev, .0094 GPR)
- 11 = CGP-P31B107-5AG (2.48 in³/rev, .0107 GPR)

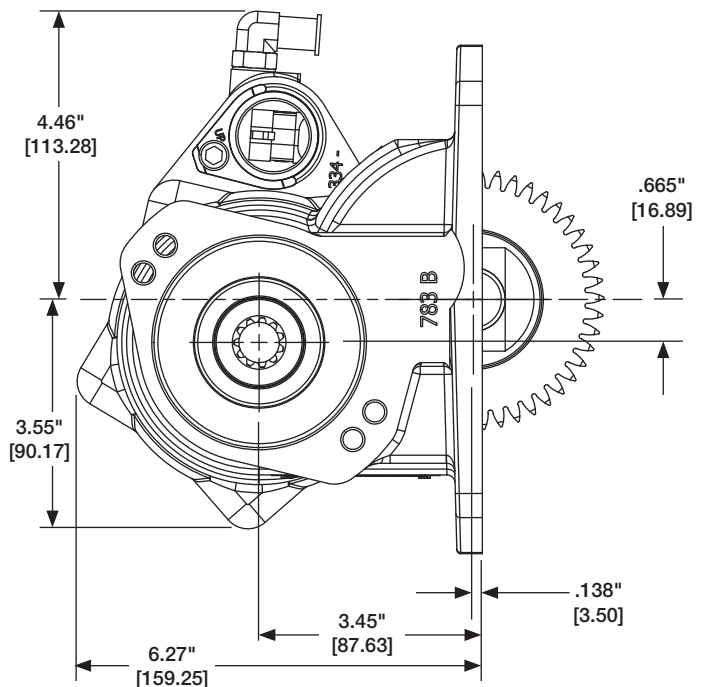
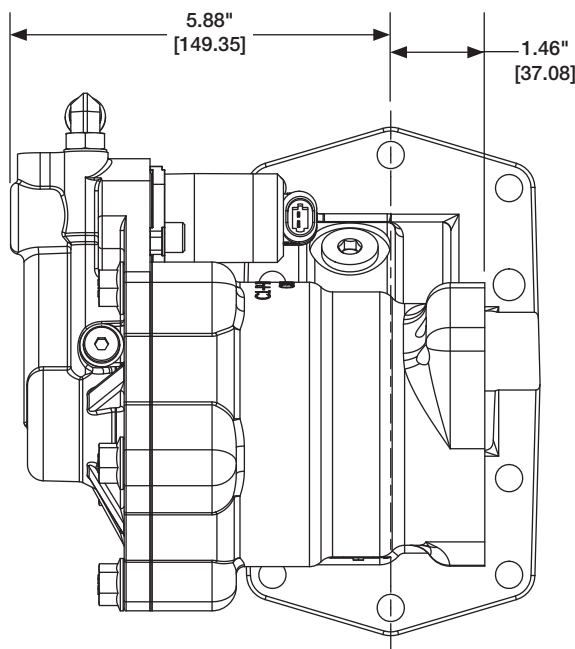
P16 Series (XP Output)

- 15 = CGP16-150A-2D1 (2.93 in³/rev, .0127 GPR)
- ³⁸ 18 = CGP16-180A-2D1 (3.51 in³/rev, .0152 GPR)
- ³⁸ 20 = CGP16-200A-2D1 (3.90 in³/rev, .0169 GPR)

³⁸ 4 x 2 Vehicles only

⁶³ Includes wiring harness with high temperature loom and heat shield

PTO Housing Dimensions



210 SERIES POWER TAKE-OFF SPECIFICATIONS AND TECHNICAL DATA

Chelsea CGP-P11 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in ³ /rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
21	CGP-P11A021-5AC	0.49	3.30	7.0	24.6	3988	3625	4000	1728	4.8	SAE 12	SAE 10
26	CGP-P11A026-5AC	0.61	4.11	8.7	30.7	3988	3625	3600	1728	5.9	SAE 12	SAE 10
32	CGP-P11A032-5AC	0.73	4.91	10.4	36.7	3988	3625	3500	1728	7.1	SAE 12	SAE 10
37	CGP-P11A037-5AC	0.85	5.72	12.1	42.7	3988	3625	3300	1728	8.3	SAE 12	SAE 10
42	CGP-P11A042-5AC	0.98	6.60	14.0	49.3	3988	3625	3000	1728	9.5	SAE 12	SAE 10
50	CGP-P11A050-5AC	1.16	7.81	16.5	58.3	3770	3625	3000	1728	11.3	SAE 12	SAE 10
55	CGP-P11A055-5AP	1.28	8.62	17.1	60.5	3480	3410	2800	1728	12.5	SAE 16	SAE 12
61	CGP-P11A061-5AP	1.40	9.43	18.0	63.4	3408	3265	2800	1728	13.6	SAE 16	SAE 12
71	CGP-P11A071-5AP	1.65	11.11	17.9	63.0	2900	2755	2300	1597	14.8	SAE 16	SAE 12
82	CGP-P11A082-5AP	1.89	12.72	17.8	62.8	2465	2395	2300	1597	16.9	SAE 16	SAE 12
87	CGP-P11A087-5AP	2.01	13.53	17.8	62.7	2320	2250	2000	1389	15.7	SAE 16	SAE 12

Chelsea PGP-315 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in ³ /rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
8	CGP-P31B081-5AG	1.86	12.52	24.1	85.1	3300	3300	3000	1728	18.1	SAE 16	SAE 16
9	CGP-P31B094-5AG	2.17	14.61	24.7	87.2	2900	2900	3000	1728	21.1	SAE 16	SAE 16
11	CGP-P31B107-5AG	2.48	16.70	24.4	86.0	2500	2500	3000	1728	24.2	SAE 16	SAE 16

(A) GPM & Pump Input HP @ 1200 Engine RPM (1728 PTO Output RPM - 144% Ratio) & Continuous Pressure Rating with 90% efficiency rating considered.

(B) Max Engine Speed = Minimum of (1) (Max Pump Speed)/1.44 PTO Ratio and (2) 2500 RPM maximum PTO output speed. PTO output speeds above 2500 RPM requires application approval from Parker Chelsea.

NOTE: Minimum ideal engine speed for Ford Super Duty in stationary mode is 900 RPM (Diesel) and 700 RPM (Gas). Consult fordbbas.com

NOTE: Ford's 10R140 transmission delivers up to 300 lb-ft to PTO. Consult fordbbas.com for power and torque limitations based on vehicle configuration.

FORMULAS:

GPM = Cu. In. x .004329 = G/Rev x 1728 RPMs x .90 efficiency

HP = (GPM x Max PSI)/1714

Torque = (HP x 5252)/1728 RPMs

