

The FR Series 10-Speed ("B" ratio, "C" ratio and High Torque Models)



A standard in transmission performance, reliability and durability.

- Improved tolerance to driver abuse with larger diameter mainshaft and new mainshaft washer design.
- Patented SynchroSaver™ feature protects against range synchronizer damage caused by improper operation.
- Integrated air module improves reliability by eliminating separate components and external air hoses.
- Exclusive output seal design improves seal life and eliminates potential for seal damage during yoke removal.
- Better rail definition, more precise shifting and improved durability with patented single-rod shift controls.
- Increased payload capacity with up to 32 lb. weight reduction compared to RT Series.
- Enhanced PTO options, with relocated side opening and option for two through-shaft PTOs.
- Roadranger warranties are available for a wide variety of applications. To find the coverage that applies to your specific vocation, please see the Warranty Guide (TCWY0900) at www.eaton.com/roadranger.



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Fuller® 10-Speed Transmissions

MODEL	CAPACITY	WEIGHT*	LENGTH**	SPEEDS
FR-9210B	950 lbs.ft. [1288 Nm]	592 lbs. [268.53 kg]	29.9 in. [760.22 mm]	10 forward, 2 reverse
FR-14210B	1450 lbs.ft. [1965 Nm]	592 lbs. [268.53 kg]	29.9 in. [760.22 mm]	10 forward, 2 reverse
FR/FRM/FRW-15210B	1550 lbs.ft. [2101 Nm]	592 lbs. [268.53 kg]	29.9 in. [760.22 mm]	10 forward, 2 reverse
FRO-14210C	1450 lbs.ft. [1965 Nm]	592 lbs. [268.53 kg]	29.9 in. [760.22 mm]	10 forward, 2 reverse
FRO-15210C	1550 lbs.ft. [2101 Nm]	602 lbs. [273.10 kg]	29.9 in. [760.22 mm]	10 forward, 2 reverse
FRO-16210C	1650 lbs.ft. [2237 Nm]	602 lbs. [273.10 kg]	29.9 in. [760.22 mm]	10 forward, 2 reverse
FRO-17210C	1750 lbs.ft. [2373 Nm]	602 lbs. [273.10 kg]	29.9 in. [760.22 mm]	10 forward, 2 reverse
FRO-18210C	1850 lbs.ft. [2508 Nm]	602 lbs. [273.10 kg]	29.9 in. [760.22 mm]	10 forward, 2 reverse

* Less clutch housing, lubricant and end yoke.

** Lengths listed are from face of clutch housing to front bottoming surface of companion flange or yoke.

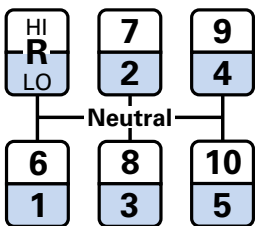
Ratios and Steps:

Models	Reverse		Overall Ratio	Forward Gears										
	L	H		LL	L	1	2	3	4	5	6	7	8	9
FR-9210B*	16.21	3.63	14.80		14.80	10.95	8.09	5.97	4.46	3.32	2.45	1.81	1.34	1.00
FR-14210B*			% Step											
FR-15210B*			35											
FRM-15210B**			35											
FRW-15210B			34											
FRO-14210C*	13.75	2.81	17.15		12.69	9.29	6.75	4.90	3.62	2.59	1.90	1.38	1.00	.74
FRO-15210C*			% Step											
FRO-16210C*			37											
FRO-17210C*	13.75	2.80	17.49		12.94	9.29	6.75	4.90	3.62	2.64	1.90	1.38	1.00	.74
FRO-18210C			% Step											

* These (950 lb-ft. - 1750 lb-ft.) transmissions can be rated at 100 additional lb-ft. torque above the stated limit in the top two gears only.

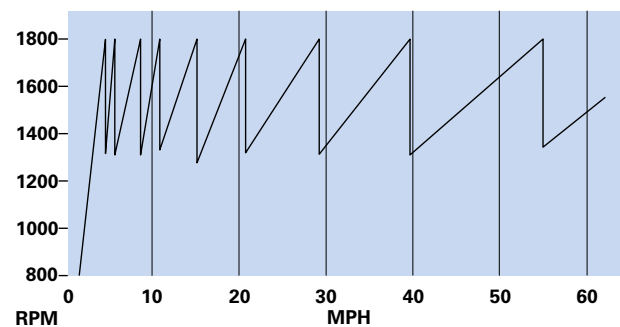
** This transmission can be rated at 200 additional lb-ft. torque above the stated limit in the top two gears only.

Shift Pattern:



FRO Series models feature an "X" style shift pattern as standard. No "U" style shift pattern is available.

Performance Chart:



Based on 1800 RPM engine operating at 1550 RPM/62 MPH.

Specifications:

Clutch Housing Size:

- SAE #1 and #2. Grey iron or aluminum available.

Power Take-Offs:

- 2 SAE standard openings.
- Right side, regular duty, 6-bolt. Bottom, heavy-duty, 8-bolt. Thru-shaft PTO upper right and/or lower left available.

PTO Drive Gears:

- Right: 6 bolt; 45-tooth; 6/8 pitch gear. Left: 8 bolt; 47-tooth; 6/8 pitch gear turn at .65 engine speed -direct, .87 for overdrive.

Oil Capacity:

- Approx. 23.5 pints [11.1 liters].
- Integral oil pump, internal and external oil coolers are available.

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For spec'ing or service assistance, call 1-800-826-HELP (4357) or visit www.eaton.com/roadranger. In Mexico, call 001-800-826-4357.

Roadranger: Eaton and trusted partners providing the best products and services in the industry, ensuring more time on the road.

Eaton

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