



**TT/TRT 2000 SERIES
POWERSHIFT CYCLING
TRANSMISSION**

TT/TRT Specifications

General Rating +

Input power max net	175 hp (130 kw)
Input torque max net	310 lb ft (420Nm)
Input speed max	3000 rpm

Rotation

Input (viewed from Input)	Right hand
Double Output (-1 model) (viewed from Input)	Right hand (forward ranges)
Single Output (-3 model) (viewed from Input)	Left hand (forward ranges)

Speeds

	(-1 model) TT 2221/2421	(-3 model) TT 2221/2421	(-3 model) TRT 2211/2421
Forward	4	4	2
Reverse	2	4	2

Mounting

Direct ■	SAE # 3 dry converter housing with flex plate drive, 2 sides mounting pads and cradle mounting recommended
Remote ■	Input flange and 2 side mounting pads

Torque Converter

Type	2-phase, 4-element, twin turbine with automatic phase transition
Stall Torque Ratios	Standard 0.826:1 T ₂ Ratio TT 240-5.44:1 TT 260-5.11:1 TT 445-4.92:1 TT 465-4.67:1

Gearing

Type	Constant mesh, spur type, planetary				
Range gears	Constant mesh, spur type, in-line				
Transfer gears	0.826:1 T ₂ Ratio*				
	Forward		Reverse		
Transmission	Low	High	Low	High	
Model					
TT - 2221 - 1; 2421 - 1	2.66:1	0.69:1	1.96:1	-	
TRT - 2221 - 1; 2421 - 1	2.02:1	0.73:1	1.96:1	0.71:1	
TRT - 2221 - 3; 2421 - 3	6.61:1	2.39:1	6.39:1	2.32:1	
TRT - 2211 - 3; 2411 - 3	2.39:1	-	2.32:1	-	
TRT - 2221-3; 2421 - 3	2.39:1	0.82:1	2.32:1	0.79:1	

* Does not include torque converter ratio

Clutches

Hydraulically-actuated, spring released, oil-cooled, multidisc and automatically wear compensating

Parking brake (Optional) ■

(-1 models)	Internal expandable shoe
Type	10 in x 1.5 in (254 mm x 38mm), Brake supplied unburnished.
Size	
(-3 models)	Drum
Type	13.4 in x 2 in (340 mm x 51 mm), Brake supplied unburnished.
Size	

Power takeoff provision (optional)

Implement pump drive ■	Rating	110 hp (82 kw) max.intermittent power @ 2000 to 3000 rpm 90 hp (67 kw) max.continuous power @ 2000 to 3000 rpm
Mounting pads	SAE C 2/4 bolt; SAE B 2 bolt	
Spline size	SAE C, B (reducer), SAE BB (1:1 ratio only)	
Ratio	0.91 x engine speed (std); 1.00 x engine speed (optional)	
Accessory drive ■	Rating	30 hp (22kw) max.continuous power @ 2000 to 3000 rpm
Mounting pad	SAE A 2 bolt	
Spline size	SAE A or B	
Ratio	0.91 x engine speed (std); 1.00 x engine speed (optional)	

Control valve body ■

Types	Mechanically actuated Hydraulic control or Electro Hydraulic
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Oil System

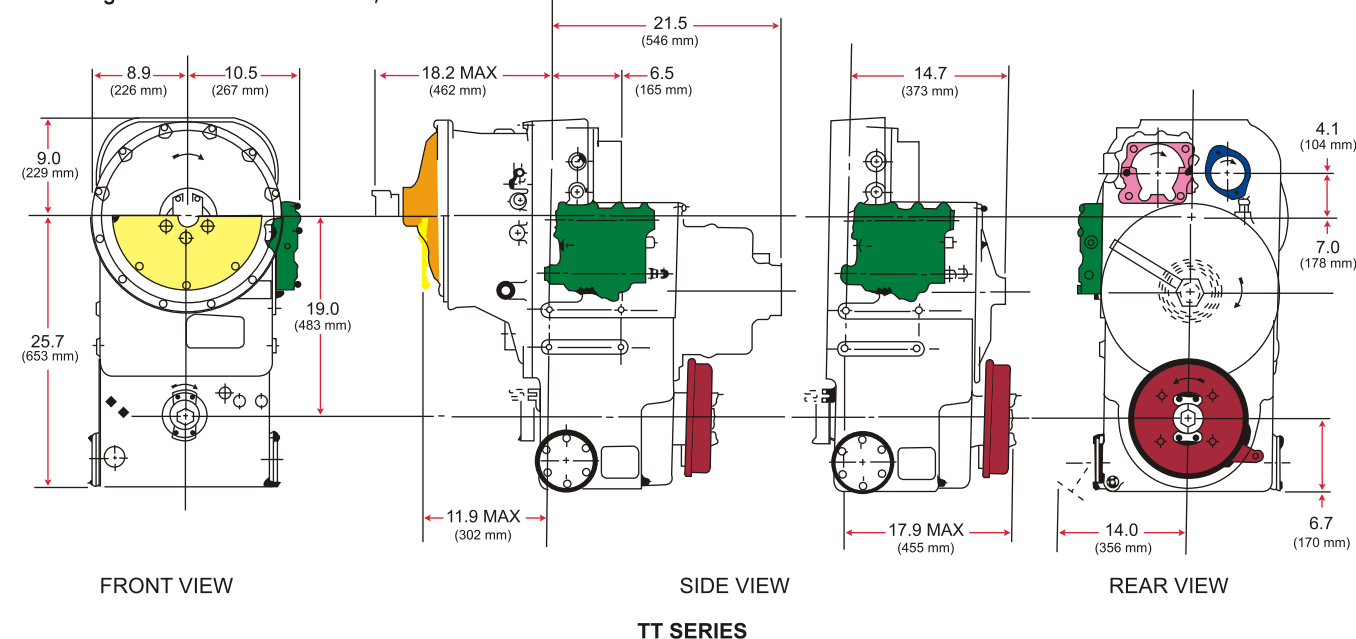
Oil type	Hydraulic Transmission fluid; type C-4
Capacity (less external circuits)	-1 model: 32 litres (8.5 U.S. gal); -3 model: 25 litres (6.5 U.S. gal)
Filter	Customer or AVTEC-PPD furnished remote mounted

Size

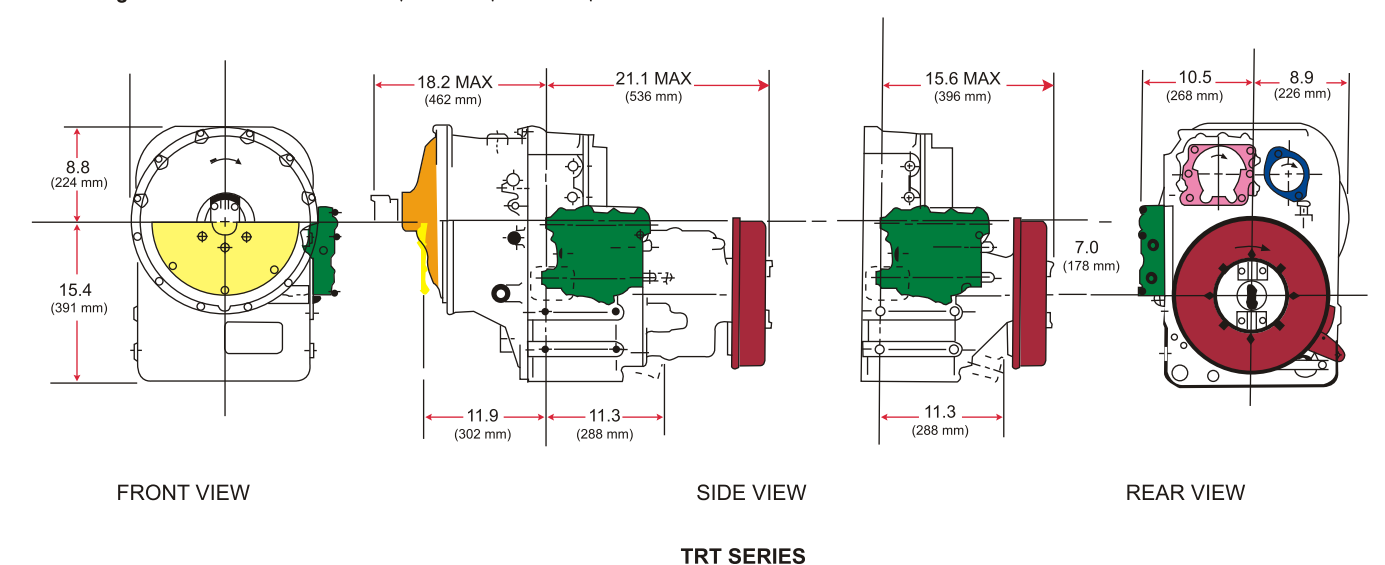
	Basic -1 Model	Basic -3 Model
Length, max. approx		
TT Series	36.06 in (916 mm)	-
TRT Series	39.69 in (1008 mm)	39.26 in (997 mm)
Width, max. approx	19.36 in (492 mm)	19.36 in (492 mm)
Height, max. approx	34.70 in (881 mm)	24.23 in (615 mm)
Weight, max. approx	760 to 935 lb (345 to 424 kg)	660 to 755 lb (299 to 342 kg)

+ Ratings may vary by vocation. Consult Avtec Limited-Power Products Division (AVTEC-PPD), Marketing Department for specific information.

Mounting Dimensions - TT 2221-1, 2421-1



Mounting Dimensions - TRT 2211-3, 2411-3, 2221-3, 2421-3



CUSTOMER BENEFITS

- ♦ Design Adaptability
- ♦ Smooth, Fast, Easy Operation
- ♦ High Productivity
- ♦ Lower Operating Cost
- ♦ Reduced Maintenance Cost
- ♦ Increased Availability
- ♦ Improved Operator Efficiency

DESIGN FEATURES AND OPTIONS

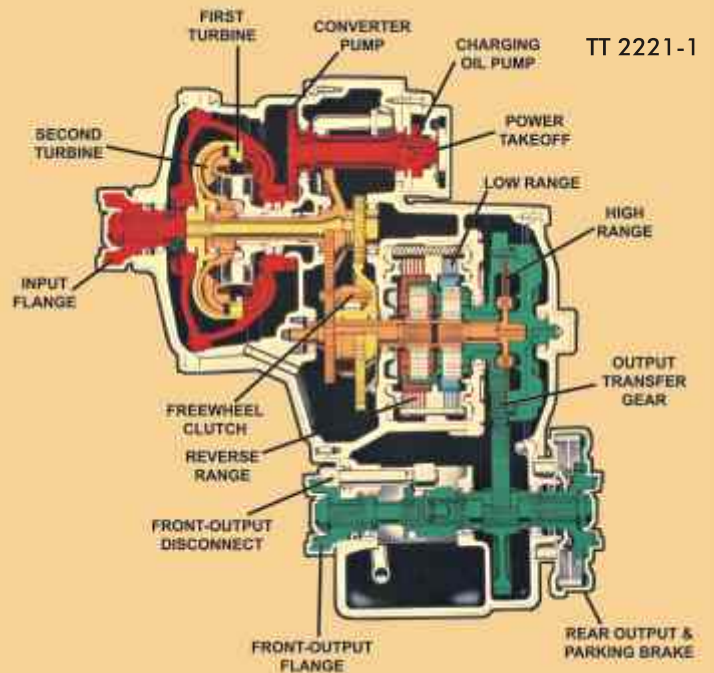
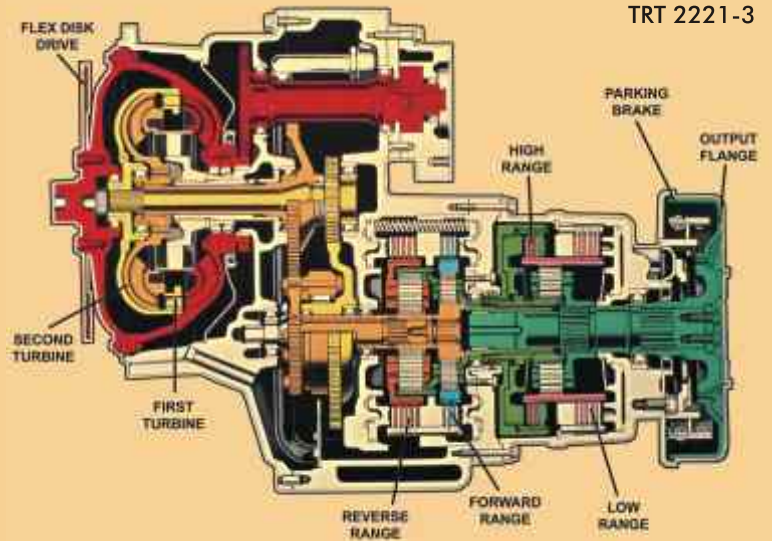
- ♦ Transmission direct or remote mounted
- ♦ Torqmatic® coupling
- ♦ Wet or dry direct engine mounting adaptations
- ♦ Choice of input and output flanges
- ♦ Parking brake
- ♦ Wet or dry implement pump drive splines
- ♦ Choice of accessory drive splines
- ♦ Magnetic speed pickup provision
- ♦ Neutral start provision
- ♦ Forward and reverse pressure taps
- ♦ Output disconnect arrangement
- ♦ Clutch cut-off-actuation: hydraulic or pneumatic

APPLICATIONS

- ♦ Front End Loaders
- ♦ Aircraft Towing Tractors
- ♦ Underground Tunneling Equipment - Low Profile Loaders
- ♦ Forklifts
- ♦ Mobile Cranes / Pick & Carry Cranes
- ♦ Winches
- ♦ Locomotives/Rail Bus/Track Inspection Car
- ♦ Empty Container Handling Reach Stacker / Tyre Handler

SCAAN Specification Assistance

To be sure that you get the most efficient engine transmission matching for your operation, with your preferred vehicle, Power Products Division offers SCAAN. SCAAN stands for System for Computerized Application ANalysis and helps eliminate guesswork from vehicle buying decisions. It can compute a wide variety of vehicle performance parameters. SCAAN will also check your powertrain specifications against Hindustan Transmission vocational experience to ensure satisfactory vehicle performance. SCAAN is user friendly. Interactive operation allows vehicle configurations to be quickly evaluated to ensure optimized powertrain selection.



PARTS AND SERVICE SUPPORT

- ♦ Prompt Professional Service
- ♦ Complementing parts availability is Avtec Limited, Power Products Division's (AVTEC-PPD) firm commitment to provide fast economical service



AVTEC Limited
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