

DRIVE PRODUCTS CATALOG



Transfer Cases • Split-Shaft PTO • Fwd/Rev • Hi -Lo • Auxiliary



The products in this catalog appear in the following table sorted decending by nominal HP capacity. Use this table for an initial selection. Contact Cotta with any questions or for assistance with product selection. For assistance to comprise appropriate design information navigate to the interactive Cotta Application Data Design Form. Click here

Note: The Nominal Power rating is application based and subject to change with application, service factor, duty cycle, and many other criteria.

Model	Nominal Power (hp)	Torque Capacity (lb-ft)	Center Distance Input to Output	No. of Shafts	Application (see below)
TR2248	725	1900	33.44	5	1
TR1397100	600	1500	19 in.	3	1
TR2205	600	2200	17	3	1
TR2217	600	2200	25.5	4	1
TR2090	600	1475	8.5	2	2
TR2237	500	1200	17	3	2
TR2238	500	1200	17	3	2
TR2273	450	1250	9	2	3
TS2083	450	1100	Concentric	N/A	4

- 1. Transfer case / drop box
- 2. Split Shaft PTO
- 3. Creep Drive
- 4. Reversing Gearbox

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



Cotta Drive Products Catalog

Click anywhere in the line to navigate to page

Table of Contents	
MODEL TR2248	
TR2248 DRW	5
MODEL TR1397100	
TR1397100 DRW	7
MODEL TR2205	
TR2205 DRW	9
MODEL TR2217	
TR2217 DRW	11
MODEL TR2090	
TR2090 DRW	13
MODEL TR2237	
TR2237 DRW	15
MODEL TR2238	
TR2238 DRW	17
MODEL TR2273	
TR2273 DRW	19
MODEL TS2083	
TS2083 DRW	21

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



MODEL TR2248 TRANSFER CASE

Product Description:

Model TR2248 is a 5 shaft transfer case designed to provide vehicle motive power to road to the work site and then shift to PTO to re-direct engine power to deck and ancillary equipment. A combination of internal and external disconnects (de-clutches) serve to shift from road-to-PTO as well as clutching and de-clutching the deck equipment. A variety of optional pump pads, disconnects, yokes, etc are available to power a wide range of ancillary equipment. The spec drawing on reverse side shows a typical configuration.

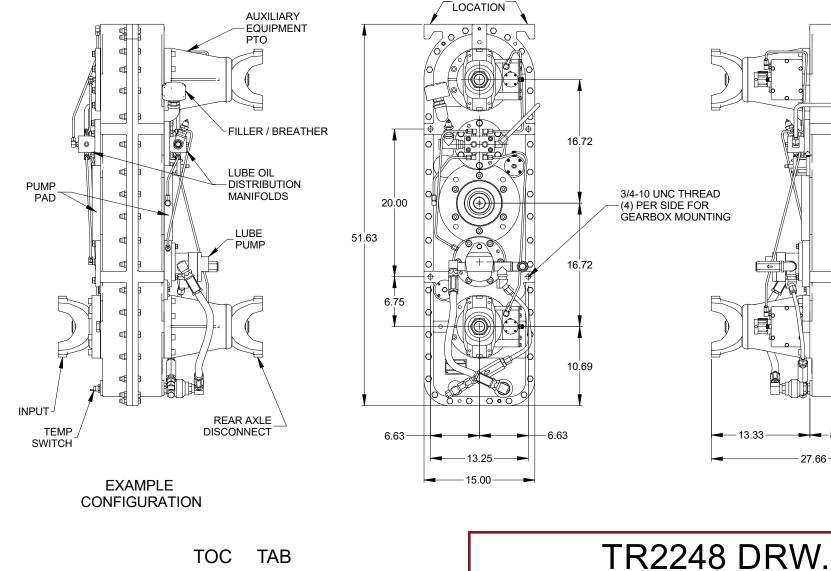
NOMINAL APPLICATION POWER:	725 HP
TORQUE CAPACITY:	1900 lb-ft. continuous through gears 12500 lb-ft. continuous through PTO shaft 17000 lb-ft. momentary through PTO shaft
MAX SPEED:	3000 RPM
RATIO:	1:1 input to output 1.2 overspeed input to pump-pad
CENTER DISTANCE:	33.44 inches input to output
ROTATION:	Output stations rotate same direction as input
LUBRICATION:	Internal reservoir. Lube pump furnished.
SHIFTING:	Air shift
OUTPUT SHAFT SIZE:	2.75-10 straight side spline
COMMON OPTIONS:	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, stub shaft
WEIGHT:	Approximately 1200 lbs.

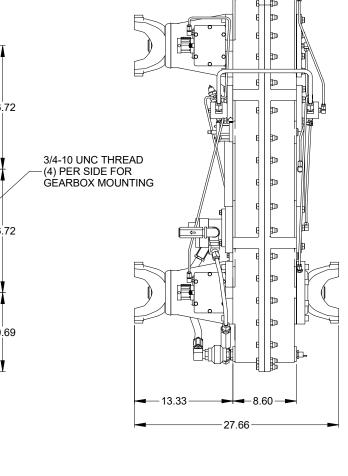
TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.





Cotta Drive Products Catalog Page 5

LIFTING

Cotta. MODEL TR1397100 DIRECT MOUNT TRANSFER CASE

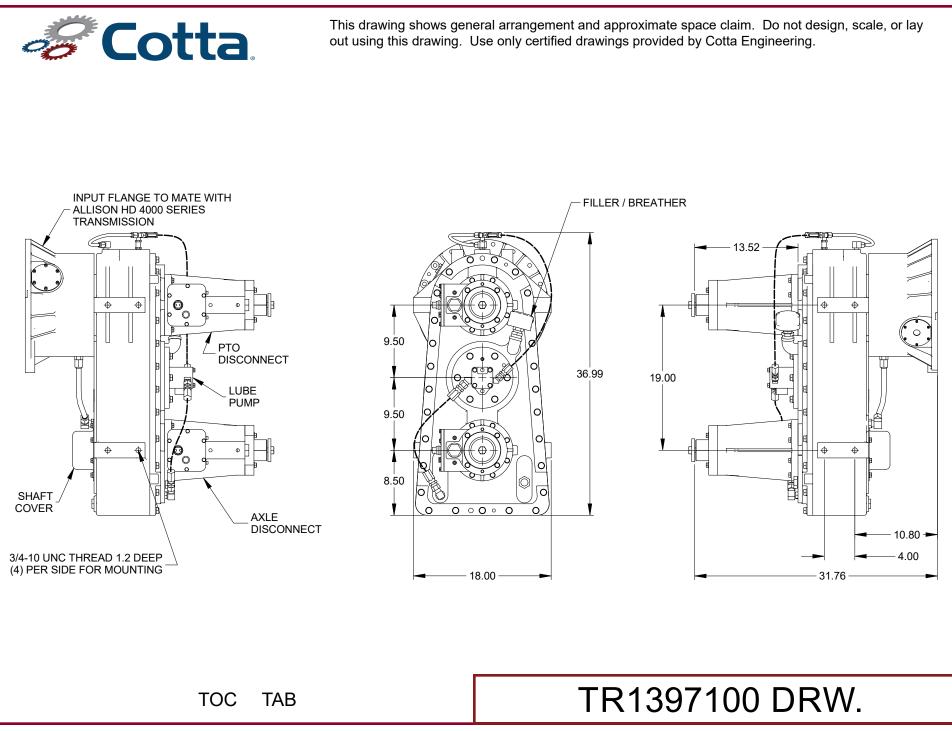
Product Description:

Model TR1397100 is a three shaft transfer case designed to direct mount via flange to Allison HD4000 Series transmissions. Three output stations are available for fitment with various options such as drive-line yokes, companion flanges, drive shafts, PTO disconnects, axle disconnects, pump pads, clutches, and similar ancillary equipment.

NOMINAL APPLICATION POWER:	600 HP
INPUT TORQUE CAPACITY:	1500 lb-ft. continuous through gears 12500 lb-ft continuous through PTO shaft 17500 lb-ft. momentary through PTO shaft
MAX INPUT SPEED:	3000 RPM
RATIO:	1:1 input to output
CENTER DISTANCE:	19 inches input to output
ROTATION:	Outputs rotate same direction as input
LUBRICATION:	Internal reservoir. Lube pump furnished.
SHIFTING:	Disconnects are air shift. Mechanical shift op- tion available
OUTPUT SHAFT SIZE:	2.75-10 straight side spline
COMMON OPTIONS:	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, stub shaft
WEIGHT:	Approximately1400 lbs.

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



Cotta Drive Products Catalog Page 7



MODEL TR2205 TRANSFER CASE

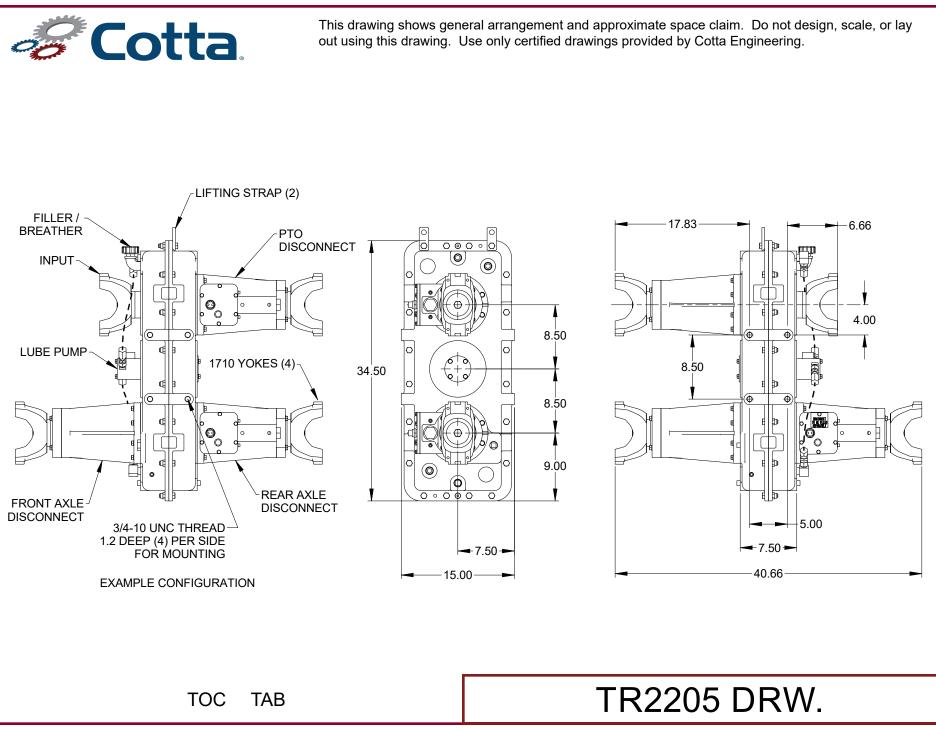
Product Description:

The TR2205 is a 3 shaft transfer case is designed for maximum application flexibility. The T-case has mirror symmetry and provides four identical Input/output stations. Each station has a 2.75 X 10 splined shaft and can be fitted with yokes or flanges. A disconnect (de-clutch) can be fitted to the I/O stations to provide power interruption. An optional line of disconnects feature SAE pump pad outputs. A special version of TR2205 can be mounted horizontally. Depending upon option type and placement the TR2205 can be configured as a transfer case, drop box, PTO, or pump drive. Most options are available for field retrofit without having to return, remove, or disassemble the gearbox.

NOMINAL APPLICATION POWER:	600 HP
TORQUE CAPACITY:	2200 lb-ft. continuous through gears 6800 lb-ft. continuous through shaft 17000 lb-ft. momentary through shaft
MAX SPEED:	2800 RPM
RATIO:	1:1 input to output
CENTER DISTANCE:	17 inches input to output
ROTATION:	Outputs rotate same direction as input
LUBRICATION:	Internal reservoir. Lube pump furnished.
SHIFTING:	Disconnects are air shift. Mechanical shift op- tion available
OUTPUT SHAFT SIZE:	2.75-10 straight side spline
COMMON OPTIONS:	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, stub shaft
WEIGHT:	Approximately 600 lbs. w/o options

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



Cotta Drive Products Catalog Page 9



MODEL TR2217 TRANSFER CASE

Product Description:

Model TR2217 is a 4 shaft transfer case is designed for maximum application flexibility and provides up to six identical Input/output stations. Each station can be provided with 2.75 X 10 splined shaft for fitment to with yokes or flanges. A disconnect (declutch) can also be fitted to the I/O stations to provide power interruption. An optional line of disconnects feature SAE pump pad outputs. Depending upon option type and placement the TR2217 can be configured as a transfer case, drop box, PTO, or pump drive. Most options are available for field retrofit without having to return, remove, or disassemble the gearbox.

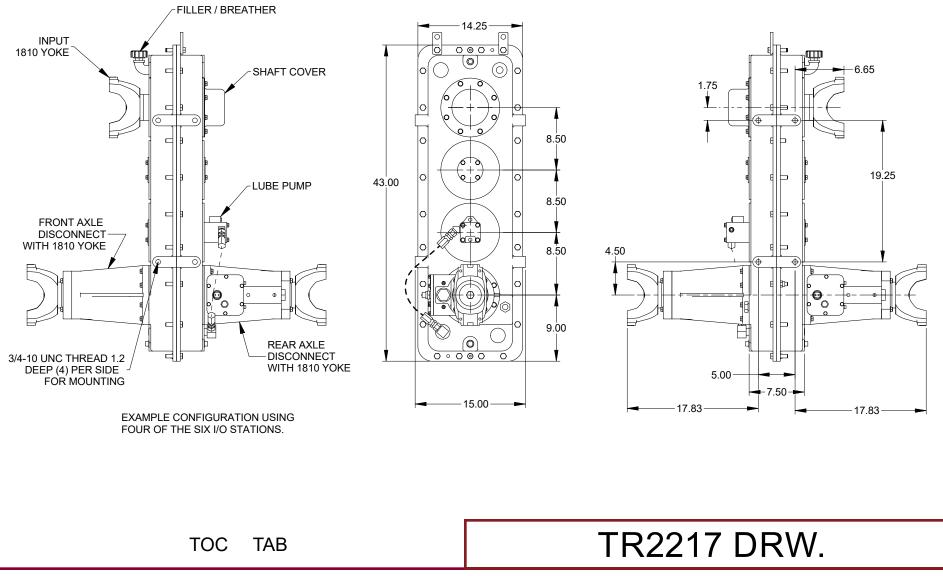
NOMINAL APPLICATION POWER:	600 HP
TORQUE CAPACITY:	2200 lb-ft. continuous through gears 6800 lb-ft. continuous through shaft 17000 lb-ft. momentary through shaft
MAX SPEED:	2800 RPM
RATIO:	1.15 overspeed, 1.15 reduction, 1.0, depending upon input location.
CENTER DISTANCE:	25.5 inches
ROTATION:	Two shafts rotate same as input, and two same as output.
LUBRICATION:	Internal reservoir. Lube pump furnished.
SHIFTING:	Disconnects are air shift. Mechanical shift op- tion available
OUTPUT SHAFT SIZE:	2.75-10 straight side spline
COMMON OPTIONS:	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, stub shaft
WEIGHT:	Approximately 715 lbs. w/o options

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



Cotta Drive Products Catalog Page 11

Cotta. MODEL TR2090 SPLIT-SHAFT TRANSFER CASE

Product Description:

Model TR2090 is a 2 stage split-shaft transfer case designed to selectively route vehicle engine power to either the drive-axle (road mode), or to the deck/ancillary equipment (PTO mode). The term split-shaft owes to the through-drive shaft consisting of two separate shafts (split) even though outwardly appearing to be a single shaft. In operation the drive shafts are coupled together by an integral splined clutch for roading and then de-coupled by shifting to PTO at the work site. The integral clutch design provides that shifting to or from either mode simultaneously and fully disengages the other mode.

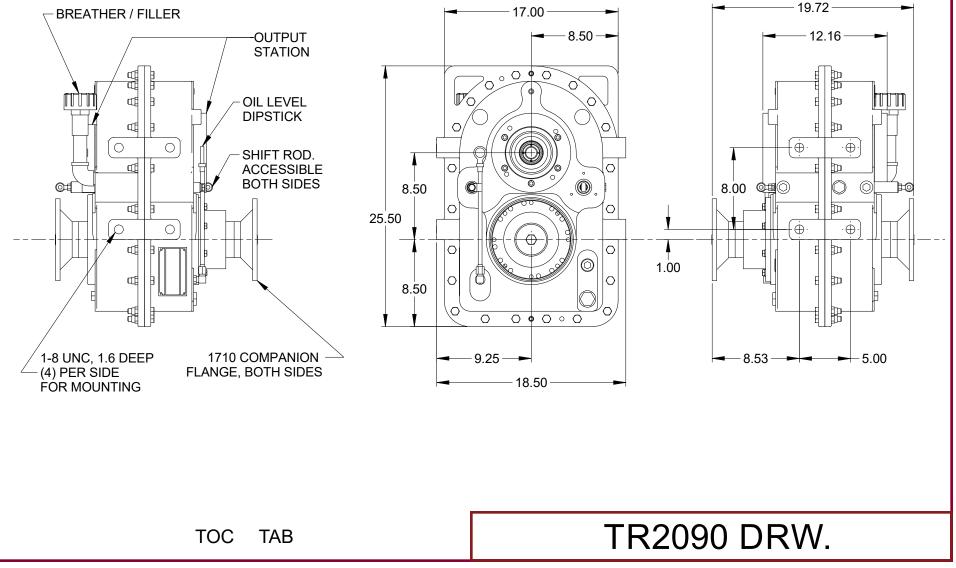
NOMINAL APPLICATION POWER:	600 HP
TORQUE CAPACITY:	1475 lb-ft. continuous at PTO 12500 lb-ft. continuous through drive shaft 17500 lb-ft. momentary through drive shaft
MAX SPEED:	3000 RPM through shaft 2300 RPM through PTO
RATIO:	1:1 input to output 1.08 input to PTO
CENTER DISTANCE:	8.5 inches input to PTO
ROTATION:	PTO rotates opposite direction as input
LUBRICATION:	Internal reservoir.
SHIFTING:	Air shift. Mechanical shift option available.
OUTPUT SHAFT SIZE:	2.75-10 straight side spline
COMMON OPTIONS:	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, splined and stub shaft
WEIGHT:	Approximately 475 lbs.

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



Cotta Drive Products Catalog Page 13

Cotta. MODEL TR2237 SPLIT-SHAFT TRANSFER CASE

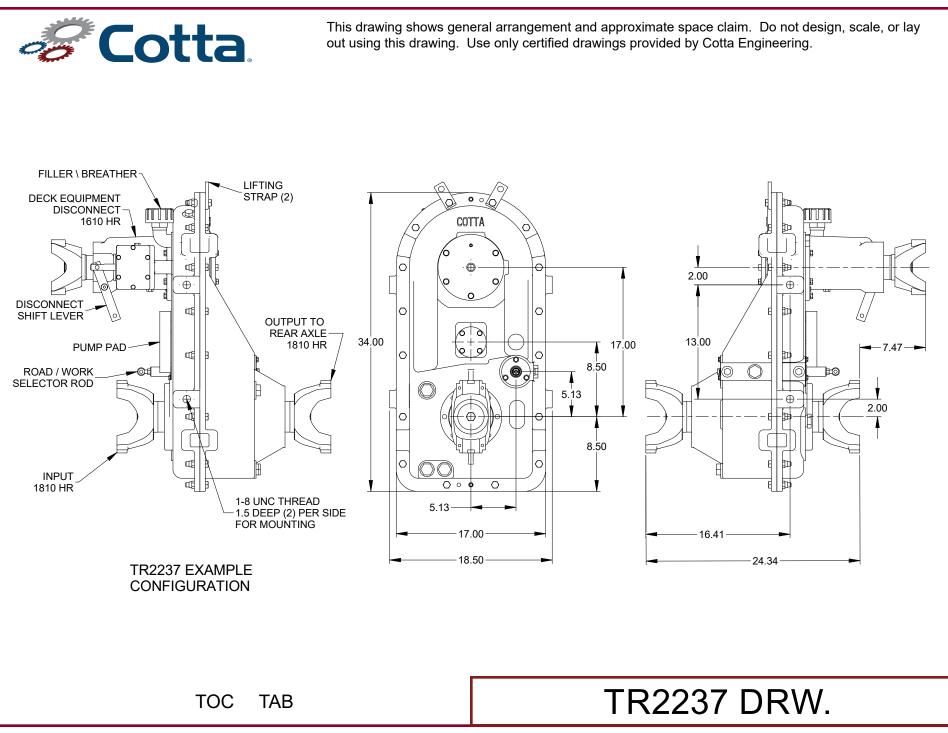
Product Description:

Model TR2237 is a 3 stage split-shaft transfer case designed to selectively route vehicle engine power to either the drive-axle (road mode), or to the deck/ancillary equipment (PTO mode). The term split-shaft owes to the through-drive shaft consisting of two separate shafts (split) even though outwardly appearing to be a single shaft. In operation the drive shafts are coupled together by an integral splined clutch for roading and then de-coupled by shifting to PTO at the work site. The integral clutch design provides that shifting to or from either mode simultaneously and fully disengages the other mode.

NOMINAL APPLICATION POWER:	500 HP
TORQUE CAPACITY:	1200 lb-ft. continuous through gears 12500 lb-ft. continuous through drive shaft 17500 lb-ft. momentary through drive shaft
MAX SPEED:	3000 RPM input
RATIO:	1:1 input to top PTO 1.075 input to center PTO
CENTER DISTANCE:	17 inches input to top PTO8.5 inches input to center PTO
ROTATION:	Top PTO rotates same direction as input Center PTO rotates opposite input
LUBRICATION:	Internal reservoir.
SHIFTING:	Air shift. Mechanical shift option available.
OUTPUT SHAFT SIZE:	2.75-10 straight side spline
COMMON OPTIONS:	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, splined and stub shafts, lube pump.
WEIGHT:	Approximately 600 lbs.

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



Cotta Drive Products Catalog Page 15

Cotta MODEL TR2238 SPLIT-SHAFT TRANSFER CASE

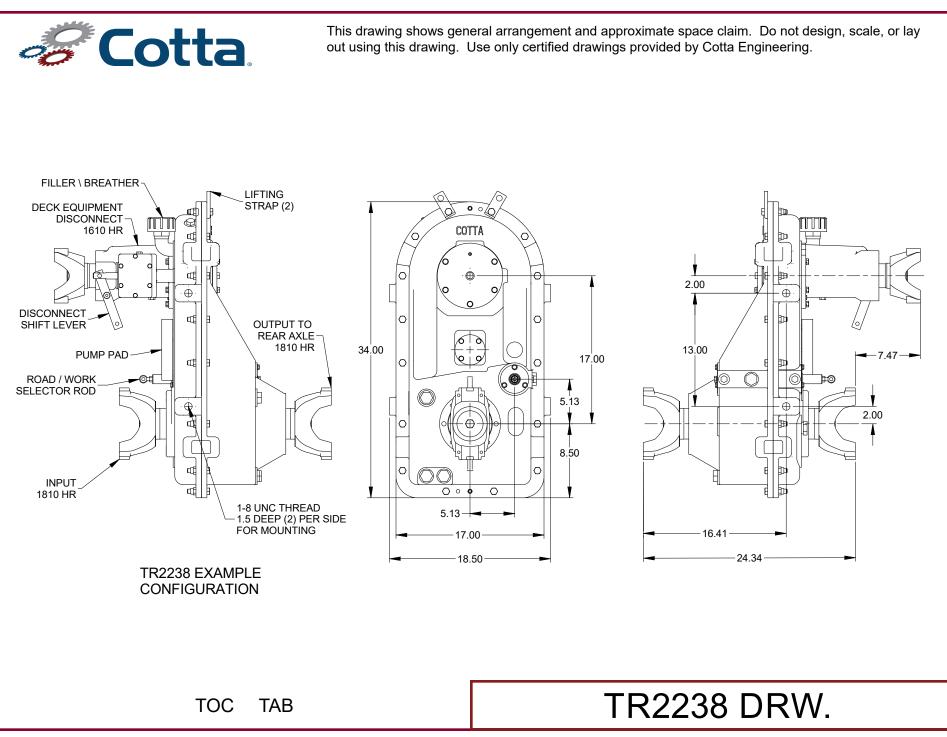
Product Description:

Model TR2238 is a 3 stage over-speed split-shaft transfer case designed to selectively route vehicle engine power to either the drive-axle (road mode), or to the deck/ancillary equipment (PTO mode). The term split-shaft owes to the through-drive shaft consisting of two separate shafts (split) even though outwardly appearing to be a single through shaft. In operation the drive shafts are coupled together by an integral splined clutch for roading and then de-coupled by shifting to PTO at the work site. The integral clutch design provides that shifting to or from either mode simultaneously and fully disengages the other mode.

NOMINAL APPLICATION POWER:	500 HP
TORQUE CAPACITY:	1200 lb-ft. continuous at PTO 12500 lb-ft. continuous through drive shaft 17500 lb-ft. momentary through drive shaft
MAX SPEED:	3000 RPM input
RATIO:	1.2, 1.4 overspeed input to top PTO1.17 overspeed input to center PTO (1.2 ratio)1.32 reduction input to center PTO (1.4 ratio)
CENTER DISTANCE:	17 inches input to top PTO CD to center varies with ratio
ROTATION:	Top PTO rotates same direction as input Center PTO rotates opposite to input
LUBRICATION:	Internal reservoir.
SHIFTING:	Air shift. Mechanical shift option available.
OUTPUT SHAFT SIZE:	2.75-10 straight side spline
COMMON OPTIONS:	SAE and ISO yokes and flanges, disconnects, pump pads, clutches, splined and stub shaft
WEIGHT:	Approximately 600 lbs.

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



Cotta Drive Products Catalog Page 17



MODEL TR2273 CREEP DRIVE GEARBOX

Product Description:

Model TR2273 is an auxiliary gearbox designed to provide precision vehicle speed control by using a hydraulic motor to rotate the vehicle drive shaft. The Creep Drive gearbox is installed in the drive-line between the main transmission and rear axle. In road mode power is transmitted normally via a through shaft in the gearbox. In creep mode the main transmission is shifted to neutral and the hydraulic motor and reduction gear-set in the gearbox are engaged to rotate the drive-line. Applications include paint-striper, feeders, spreaders, lifts, road/rail, and similar uses requiring precise speed control, inching, or remote operation.

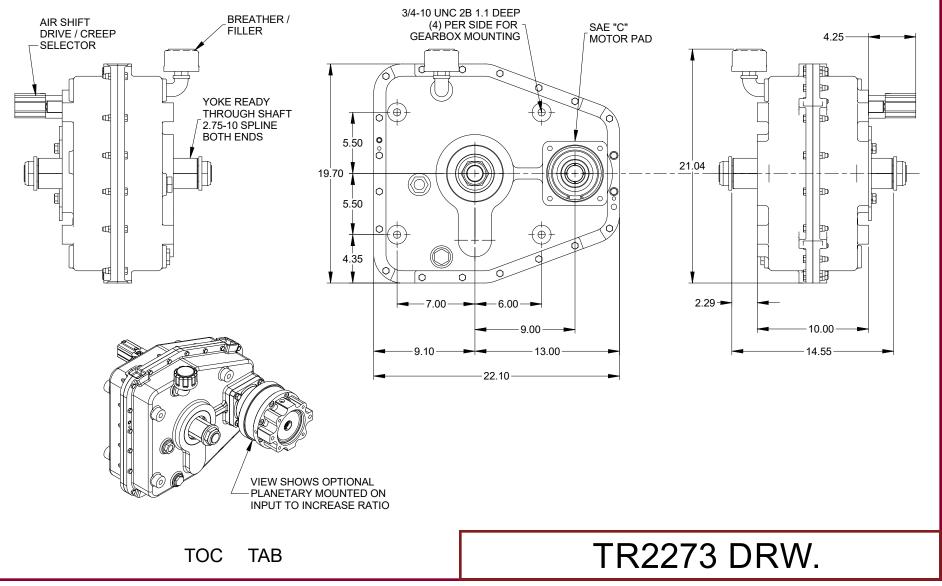
NOMINAL APPLICATION POWER:	450 HP
MAX INPUT SPEED:	3000 RPM Drive shaft 500 RPM Motor pad.
TORQUE CAPACITY:	Drive shaft - 12,500 lb-ft. Motor pad - 1250 lb-ft
REDUCTION RATIO:	3:1 gearbox 13.5:1 using optional 4.5:1 input planetary
MOTOR/PUMP PAD:	SAE "C" SAE "D" with optional planetary gearbox
THROUGH SHAFT SPLINE SIZE:	2.75 X 10 Straight side
MOUNTING:	(4) 3/4"-10 tapped holes on 11"X13" rectangu- lar pattern
LUBRICATION:	Internal reservoir. Splash delivery
SHIFTING:	Dual acting air cylinder
WEIGHT:	Approximately 400 lbs.

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



This drawing shows general arrangement and approximate space claim. Do not design, scale, or lay out using this drawing. Use only certified drawings provided by Cotta Engineering.



Cotta Drive Products Catalog Page 19



MODEL TS2083 REVERSING GEARBOX

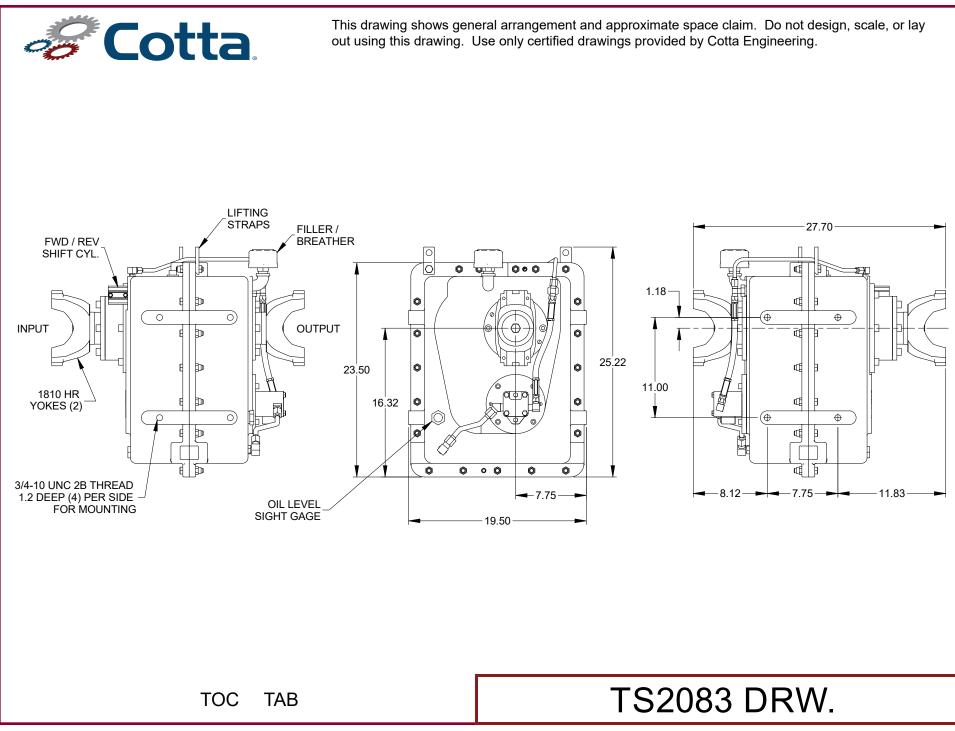
Product Description:

Model TS2083 is a forward/reverse gearbox designed for road/rail vehicles. The gearbox is installed between the main transmission and drive axle and when shifted to reverse uses the main transmission to provide vehicle travel backward on rail at the same speeds as forward. In forward mode power is transmitted to the axle normally via the through shaft.

NOMINAL APPLICATION POWER:	450 HP
TORQUE	Input: 1100 lb-ft.
CAPACITY:	Fwd mode momentary torque 17000 lb-ft.
MAX SPEED:	2500 RPM input
RATIO:	1:1 fwd
KATIO:	1:1 rev
LUBRICATION:	Internal reservoir.
SHIFTING:	Air shift. Mechanical shift option available.
OUTPUT SHAFT SIZE:	2.75-10 straight side spline
COMMON OPTIONS:	SAE and ISO yokes and flanges
WEIGHT:	Approximately 700 lbs.

TOC TAB

www.cotta.com • 608-368-5600 • sales@cotta.com



Cotta Drive Products Catalog Page 21



ISO 9001 Quality Management



Global Supplier of Power Transmission Systems and Components

Cotta Transmission Company, LLC 1301 Prince Hall Drive Beloit, WI 53511

608-368-5600 www.cotta.com Member American Gear Manufacturers Association

