# Chelsea<sup>®</sup> 272/282 Series

PowerShift PTO – Air or Hydraulic for Mechanical or Automatic Transmissions



# Overview:

Power density is what you will find in the New Chelsea 272 Series PTO. This series is designed with a compact housing that helps eliminate clearance issues. High capacity bearings and superior gear designs support torque ratings up to 300 lbs-ft for ultimate performance. There is no need to de-rate the PTO for continuous duty applications. The robust design of this PTO transmits all the power you will need. It features eighteen shift options, twelve of which are integrated into the PTO housing. The hoses are included with the PTO for simplified ordering. Our popular Electronic Overspeed Control (EOC) is also available to protect your driven equipment. Nine internal gear ratios offer a wide variety of speeds to meet your application requirements. The direct mount pump flange options are available with our Wet Spline design that provides you with the confidence of increased PTO and pump shaft life.

**NOTE:** The 272 replaces the 230/231, 236 and 270/271. The 282 replaces the 238.

- LP Gas Trucks
- Water Trucks
- Service TrucksDump Trucks
- Tow and Recovery
   Aerial Trucks

# **Contact Information:**

#### Transdiesel Australia Pty Ltd

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# **Product Features and Benefits:**

- SAE 6-Bolt housing 272
- Low profile SAE 6-Bolt housing 272M
- SAE 8-Bolt housing 282
- Air or Hydraulic Shift Options
- Integrated Air Valve No remote valve (patent pending)
- Shaft Brake Internal self-adjusting (patent 7159701)
- Wet Spline Option Extends PTO and pump shaft life

- Pressure lubrication Extends PTO service life
- Electronic Overspeed Control Protects driven equipment
- Single Duty Torque Rating Continuous duty
- Smart Start Option Reduces high inertia startup
- Two Year Warranty



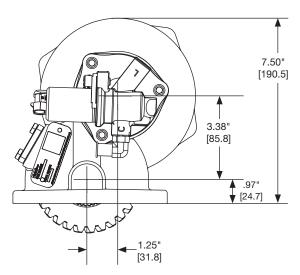
## 272/282 SERIES POWER TAKE-OFF SPECIFICATIONS AND TECHNICAL DATA

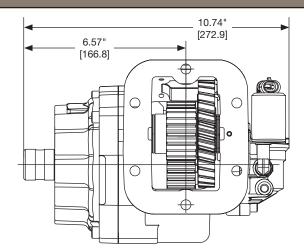
<u>272</u> <u>X</u> <u>B</u> <u>FN</u>	$\underline{P} - \underline{B} \underbrace{5} \underline{X} \underline{D}$
Basic Model	Output Option
272	Driveline Output
282	XD = Rd Standard Shaft (1-1/4" - 5/16" Key)
Mounting Option	<b>XV</b> = 1410 Series Companion Flange <b>BD</b> = Drag Brake - Rd Standard Shaft (1-1/4" - 5/16" Key)
272/282	
$\mathbf{X} = \text{Standard Mount}$	<b>BV</b> = Drag Brake - 1410 Series Companion Flange
Z = Deep Mount	<sup>64</sup> SD = Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)
$\mathbf{G}$ = Metric Stud Kit	<sup>64</sup> SV = Smart Start - 1410 Series Companion Flange
$\mathbf{K}$ = Standard Mount w/o Stud Kit	AB = DIN 120 Flange
272 Only	AC = DIN 100 Flange
L = Deep Mount w/o Stud Kit	Pump Mount
$\mathbf{M}$ = Low-Profile w/ Standard Stud Kit	<b>RE</b> = Rotatable SAE "A" 2-Bolt Flange,
N = Low-Profile w/ Metric Stud Kit	SAE "A" Shaft (5/8" - 9T)
$\mathbf{A}$ = Aisin Only (Non-Dodge/Ram)	RB = Rotatable SAE "B" 4-Bolt Flange,
	SAE "B" Shaft (7/8" - 13T)
	<b>RK</b> = Rotatable SAE "B" 2 or 4-Bolt Flange,
R = RAM/Aisin 282 Only	SAE "B" Shaft (7/8" - 13T)
<b>E</b> = EATON Fuller Mount (Brazil)	<b>RF</b> = Rotatable SAE "B" 2 or 4-Bolt Flange,
	SAE "BB" Shaft (1" - 15T)
Gear Ratio	<b>RZ</b> = Rotatable SAE "B" 2 or 4-Bolt Flange,
272 Only	SAE "C" Shaft (1-1/4" - 14T)
A = 19/53	<b>RS</b> = Rotatable SAE "C" 2 or 4-Bolt Flange,
272/282	SAE "C" Shaft (1-1/4" - 14T)
B = 22/50	$\mathbf{RY} = \mathbf{Rotatable}  \mathbf{ISO}  7653  \mathbf{Flange},$
$\mathbf{C} = 25/47$	DIN 5462 Shaft
D = 28/44	XR = Chelsea Special (Cloverleaf),
G = 31/41	SAE "B" Shaft (7/8" - 13T)
K = 33/39	
M = 35/37	Assembly Arrangement
P = 37/35	<b>3</b> = Right side - bulge down
S = 39/33	Left side - bulge up
282 Only	5 = Left side - bulge down
T = 41/31	Right side - bulge up
1 = 4001	
Input Gear Designator ————————————————————————————————————	Shift Option
Aisin	Hydraulic
Allison	<b>B</b> = 12V Elec/Hyd - Integral
EATON Fuller	D = 24V  Elec/Hyd -  Integral
Mack	E = 12V Elec/Hyd w/o Installation Kit - Integral
	N = 24V Elec/Hyd w/o Installation Kit - Integral
NOTE: For more details, see Application Catalog.	K = 12V Elec/Hyd w/ EOC
(Transmission Model Number required.)	L = 24V  Elec/Hyd w/ EOC
Luke Onting	<b>G</b> = 12V Elec/Hyd Remote Valve w/o EOC
Lube Option —	H = 24V  Elec/Hyd Remote Valve w/o EOC
X = No Pressure Lube	Air Annual Air Chitt
Pressure	A = Manual Air Shift
$\mathbf{P}$ = Pressure Lube	V = Manual Air Shift w/o Installation Kit
<ul> <li><sup>5</sup> R = Valve Cap Rotated 120°</li> <li><sup>5</sup> S = Valve Cap Rotated 240°</li> </ul>	1 = 12V  Elec/Air - Integral
	2 = 24V  Elec/Air - Integral
5 W - Wet Spline	J = 12V  Elec/Air w/ EOC - Integral
${}^{5}$ W = Wet Spline	3 = 24V Elec/Air w/ EOC - Integral
${}^{5}$ V = Valve Cap Rotated 120° w/Wet Spline	$\mathbf{P} = 12V \text{ Elec/Air Remote}$
${}^{5}$ Y = Valve Cap Rotated 240° w/ Wet Spline	$\mathbf{Q} = 24 \text{V} \text{Elec/Air Remote}$
<sup>5</sup> Automatically pressure lubed	R = 12V Elec/Air Remote w/ EOC
<sup>64</sup> Hyd shift PTOs only	4 = 24V Elec/Air Remote w/ EOC

	Approximate Weight: 49 lbs. [22 kg]										
Specifications Chart	272*A	272*B 282*B	272*C 282*C	272*D 282*D	272*G 282*G	272*K 282*K	272*M 282*M	272*P 282*P	272*S 282*S	282*T	
Intermittent & Continuous Torque Rating lbs-ft [Nm]	300 [407]	300 [407]	300 [407]	300 [407]	300 [407]	300 [407]	300 [407]	300 [407]	300 [407]	300 [407]	
HP Rating for Intermittent & Continuous Service											
At 500 RPM of Output Shaft HP [Kw]	29 [21]	29 [21]	29 [21]	29 [21]	29 [21]	29 [21]	29 [21]	29 [21]	29 [21]	29 [21]	
At 1000 RPM of Output Shaft HP [Kw]	57 [43]	57 [43]	57 [43]	57 [43]	57 [43]	57 [43]	57 [43]	57 [43]	57 [43]	57 [43]	

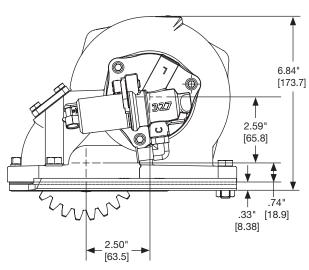
### 272/272M/282 SERIES HOUSING DIMENSIONS

#### 272 Series

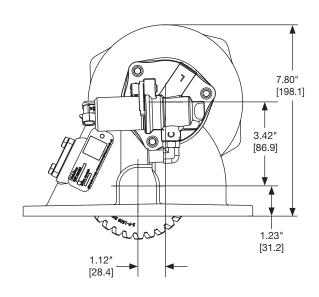


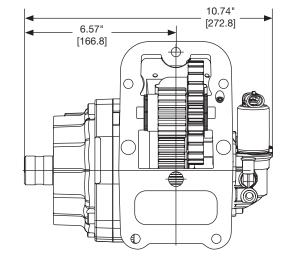


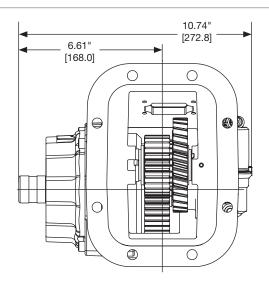
#### 272M Series







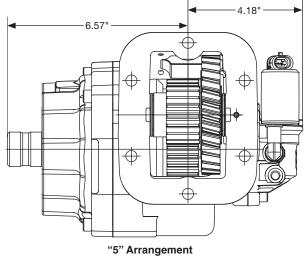




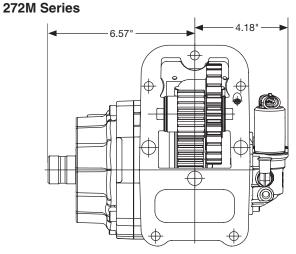
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# **ASSEMBLY ARRANGEMENTS**

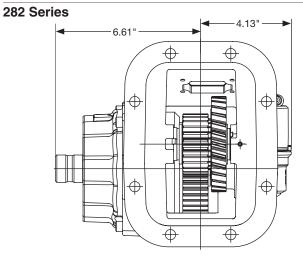
#### 272 Series







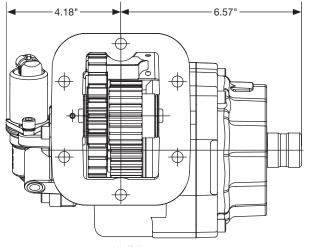
"5" Arrangement



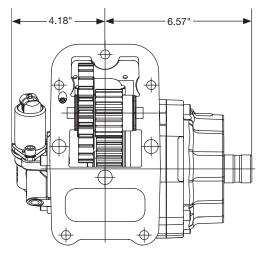
"5" Arrangement

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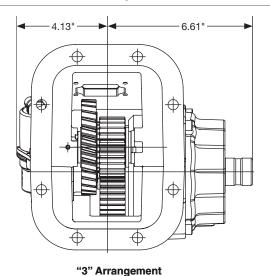




"3" Arrangement



"3" Arrangement



Supersedes HY25-0190-B1/US February 2017

HY25-0190-B1/US June 2017

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