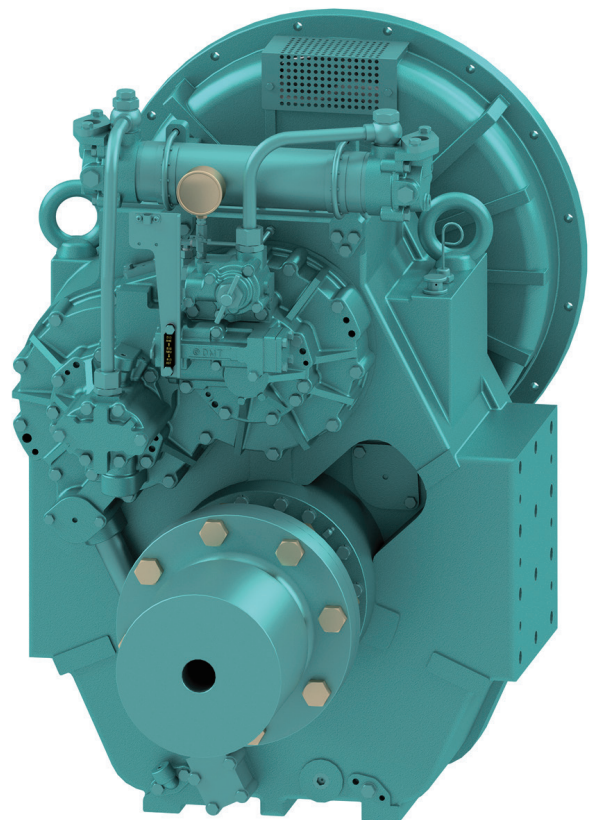


# MARINE TRANSMISSION

74HP - 1549HP



**D-I**  
INDUSTRIAL CO., LTD.

MARINE TRANSMISSION  
STEERING SYSTEM  
POWER TAKE OFF

**MARINE TRANSMISSION**  
**HYDRAULIC STEERING SYSTEM**  
**ELECTRIC STEERING SYSTEM**  
**POWER TAKE OFF**  
**SIDE THRUSTER**  
**ELECTRONIC CONTROL SYSTEM**  
**FLEXIBLE COUPLING\_CENTA**  
**HYDRAULIC PUMP, MOTOR**  
**WATER MAKER**

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## D-I Industrial Co.,Ltd. Introduction

D-I Industrial Co.,Ltd., a leading manufacturer of marine gear in Korea, has been providing Hydraulic Marine Transmissions, Power Take Offs and Steering Systems since 1990.

Growing together with customers by providing optimized specifications and ease of use grounded in original technology, D-I has been realizing customers satisfaction through outstanding quality and short lead time under ISO 9001.

## D-I Business Field

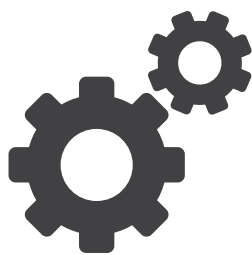


Marine transmission, Steering system, Power take off, Side Thruster, Flexible coupling, Electronic control system, Integral shaft supporter, Hydraulic pump.

D-I(Dong-I) has been fulfilling its mission with endless self innovation and challenges to ensure user's safety and convenient maritime activities in any ocean beyond Korea.



# Marine Transmission



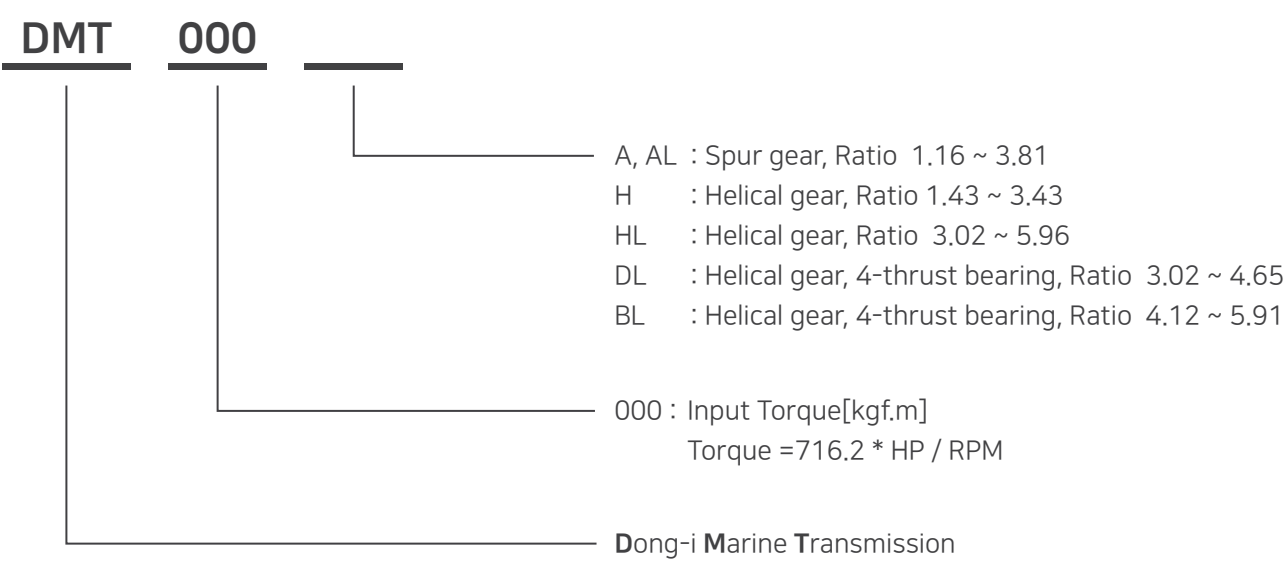
The D-I marine transmission described in this manual is the power-transmitting unit which transmits the power generated from Engine to Propeller. The main functions are the ahead, neutral, astern and reduction of speed at fixed rate. The marine transmission has the structure which can safely endure the power generated by propeller’s propulsion.

## Features

- Smaller and lighter than competitors' same level gearboxes
- No consumables except Corrosion-Resistant Zinc
- An easy-to-replaceable structure for bell housing
- Ease of maintenance



## Structure Of The Model Name



# How to choose the Marine Transmission

1. By referring to an Engine's performance graph, you check Maximum output torque of your Engine  
※ Engine's Torque unit should be kilogram-force meter (kgf.m). If your measure unit is different, you should convert your engine torque into kilogram-force meter (kgf.m) by referring to the torque conversion below.
2. After you check your Engine's Torque, you should select the model having higher or same input torque of a gearbox than an engine's output torque by referring to gearbox's catalogue or D-I website.  
That means gearbox input torque (kgf.m) ≥ Engine output torque (kgf.m).
3. By referring to the gearbox's catalogue, you should check the ratio of gearbox.
4. Please check fly wheel standard to attach your gearbox to the engine. Then, you select the bell housing of gearbox which is satisfying with your engine's fly wheel standard.
5. Lastly, please check your option.  
Ex) Electric valve, Trolling valve, D-Trolling valve, Flexible coupling, L-Bracket etc.

# Torque Conversion

1N.m (Newton Meter) = 0.102kgf.m(kilogram force)  
1lbf.ft (Pound-force feet) = 0.138kgf.m(kilogram force)  
1lbf.ft (Pound-force feet) = 1.365N.m (Newton Meter)

Ex1) Converting 1,234N.m into kilogram-force meter ▶  $1,234\text{N.m} \times 0.102 = 125.9\text{kgf.m}$   
Ex2) Converting 1,234lbf.ft into kilogram-force meter ▶  $1,234\text{lbf.ft} \times 0.138 = 170.2\text{kgf.m}$   
Ex3) Converting 1,234lbf.ft into Newton Meter ▶  $1,234\text{lbf.ft} \times 1.365 = 1684.41\text{N.m}$

Engine rated torque calculation  
(Calculate with engine kW)

$$\text{Rated Torque(kgf.m)} = 974 \times \frac{\text{Engine rated kW}}{\text{Engine rated RPM}}$$

Engine rated torque calculation  
(Calculate with engine HP)

$$\text{Rated Torque(kgf.m)} = 726.1 \times \frac{\text{Engine rated HP}}{\text{Engine rated RPM}}$$

## D-I Marine Transmission Line-Up

| Model    | Ratio                               | Max Input Torque |       | Max Input RPM | Capacity/RPM |       | Capacity / RPM |     |         |     |         |     | Standard Bell Housing (SAE) | Dry Weight (kg) |
|----------|-------------------------------------|------------------|-------|---------------|--------------|-------|----------------|-----|---------|-----|---------|-----|-----------------------------|-----------------|
|          |                                     | (kgf.m)          | (N.m) |               | kW           | HP    | 1800RPM        |     | 2100RPM |     | 2300RPM |     |                             |                 |
|          |                                     |                  |       |               |              |       | kW             | HP  | kW      | HP  | kW      | HP  |                             |                 |
| DMT25AL  | 1.64*, 2.07, 2.52, 2.96, 3.32       | 30               | 294   | 3500          | 0.030        | 0.041 | 55             | 74  | 64      | 86  | 71      | 95  | 3, 4, 5                     | 68              |
| DMT50A   | 1.61*, 2.06, 2.45, 2.82, 3.12, 3.46 | 55               | 539   | 3000          | 0.056        | 0.075 | 101            | 136 | 118     | 159 | 129     | 174 | 1, 2, 3, 4                  | 126             |
| DMT90A   | 1.61*, 2.06, 2.45, 2.82, 3.12, 3.46 | 87               | 857   | 3000          | 0.089        | 0.120 | 161            | 216 | 188     | 253 | 206     | 276 | 1, 2, 3, 4                  | 135             |
| DMT100HL | 4.07, 4.50, 4.95                    | 89               | 873   | 3000          | 0.091        | 0.122 | 164            | 219 | 191     | 256 | 209     | 281 | 1, 2, 3                     | 251             |
|          | 5.29                                | 86               | 843   | 3000          | 0.088        | 0.118 | 158            | 213 | 185     | 248 | 202     | 272 |                             |                 |
|          | 5.95                                | 75               | 735   | 3000          | 0.076        | 0.103 | 138            | 185 | 161     | 216 | 176     | 236 |                             |                 |
| DMT100IV | 1.21*, 1.54, 1.84, 2.12, 2.52       | 103              | 1011  | 4000          | 0.105        | 0.141 | 190            | 255 | 222     | 297 | 243     | 326 | 2, 3                        | 148             |
| DMT110A  | 1.77*, 2.09, 2.42, 2.82, 3.19, 3.81 | 110              | 1079  | 2800          | 0.112        | 0.151 | 202            | 272 | 236     | 317 | 259     | 348 | 1, 2, 3                     | 179             |
| DMT140H  | 1.97, 2.57, 3.03, 3.46              | 130              | 1275  | 2800          | 0.133        | 0.178 | 239            | 322 | 280     | 376 | 306     | 411 | 1, 2, 3                     | 185             |
| DMT135HL | 4.07                                | 131              | 1288  | 2800          | 0.134        | 0.180 | 241            | 325 | 282     | 379 | 309     | 415 | 1, 2, 3                     | 269             |
|          | 4.50                                | 125              | 1229  | 2800          | 0.128        | 0.172 | 231            | 310 | 270     | 362 | 296     | 397 |                             |                 |
|          | 4.95                                | 115              | 1128  | 2800          | 0.117        | 0.157 | 213            | 285 | 248     | 332 | 271     | 364 |                             |                 |
| DMTP5100 | 1.47*, 1.76*, 1.93*                 | 168              | 1648  | 2500          | 0.172        | 0.231 | 310            | 416 | 361     | 485 | 396     | 532 | 1, 2, 3                     | 215             |
|          | 2.48, 3.08                          | 150              | 1471  | 2500          | 0.153        | 0.206 | 276            | 370 | 322     | 433 | 353     | 474 |                             |                 |
|          | 3.46                                | 130              | 1275  | 2500          | 0.133        | 0.178 | 240            | 322 | 280     | 376 | 307     | 411 |                             |                 |
| DMT150H  | 1.83*, 2.09, 2.51, 3.08, 3.43       | 168              | 1648  | 2500          | 0.172        | 0.231 | 310            | 416 | 361     | 485 | 396     | 532 | 1, 2                        | 267             |
| DMT170HL | 4.04, 4.48                          | 168              | 1648  | 2500          | 0.172        | 0.231 | 310            | 416 | 362     | 485 | 396     | 532 | 1, 2                        | 326             |
| DMT180HL | 5.15, 5.96                          | 168              | 1648  | 2500          | 0.172        | 0.231 | 310            | 416 | 361     | 485 | 396     | 532 | 1, 2                        | 463             |
| DMT190H  | 1.83*, 2.09, 2.51, 3.08, 3.43       | 180              | 1765  | 2500          | 0.184        | 0.247 | 332            | 446 | 387     | 520 | 425     | 570 | 1, 2                        | 278             |
| DMT190HL | 4.04, 4.48                          | 180              | 1765  | 2500          | 0.184        | 0.247 | 332            | 446 | 388     | 520 | 425     | 570 | 1, 2                        | 334             |
| DMT220DL | 3.50*, 4.04                         | 210              | 2059  | 2500          | 0.216        | 0.289 | 389            | 520 | 454     | 606 | 497     | 664 | 1, 2                        | 403             |
|          | 4.47                                | 198              | 1942  | 2500          | 0.203        | 0.273 | 365            | 491 | 426     | 573 | 467     | 627 |                             |                 |
|          | 4.72                                | 177              | 1735  | 2500          | 0.182        | 0.243 | 327            | 437 | 382     | 510 | 418     | 558 |                             |                 |
| DMT240H  | 1.50*, 1.97*, 2.44, 2.93, 3.40      | 218              | 2138  | 2500          | 0.223        | 0.299 | 402            | 540 | 469     | 630 | 514     | 690 | 0, 1                        | 346             |
| DMT260H  | 2.06, 2.50, 2.92, 3.26              | 258              | 2530  | 2500          | 0.264        | 0.354 | 476            | 639 | 556     | 746 | 608     | 817 | 0, 1                        | 368             |
| DMT260HL | 3.53, 4.08, 4.52                    | 258              | 2530  | 2500          | 0.264        | 0.354 | 476            | 639 | 556     | 746 | 608     | 817 | 0, 1                        | 512             |
|          | 5.04                                | 239              | 2344  | 2500          | 0.245        | 0.328 | 441            | 592 | 515     | 690 | 564     | 757 |                             |                 |
| DMTP6500 | 5.11, 5.62*, 5.91                   | 258              | 2530  | 2300          | 0.264        | 0.355 | 476            | 639 | 556     | 746 | 608     | 817 | 0, 1                        | 834             |
|          | 6.57*, 6.95                         | 238              | 2334  | 2300          | 0.244        | 0.328 | 440            | 590 | 513     | 687 | 562     | 754 |                             |                 |
| DMT280H  | 2.06, 2.50, 2.92, 3.26              | 298              | 2927  | 2500          | 0.306        | 0.410 | 550            | 739 | 642     | 862 | 704     | 945 | 0, 1                        | 383             |

\* Special Order Ratio

※ The dry weight is the weight that excludes bell housing, coupling (rubber block, dual stage, Centa flexible) and propeller coupling from the standard scope of supply

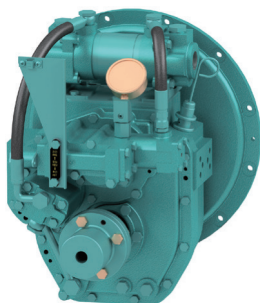
## D-I Marine Transmission Line-Up

| Model    | Ratio                     | Max Input Torque |       | Max Input RPM | Capacity/RPM |       | Capacity / RPM |      |         |      |         |      | Standard Bell Housing (SAE) | Dry Weight (kg) |
|----------|---------------------------|------------------|-------|---------------|--------------|-------|----------------|------|---------|------|---------|------|-----------------------------|-----------------|
|          |                           | (kgf.m)          | (N.m) |               | kW           | HP    | 1800RPM        |      | 2100RPM |      | 2300RPM |      |                             |                 |
|          |                           |                  |       |               |              |       | kW             | HP   | kW      | HP   | kW      | HP   |                             |                 |
| DMT300HL | 3.56                      | 298              | 2926  | 2300          | 0.305        | 0.410 | 550            | 739  | 642     | 862  | 703     | 944  | 0, 1                        | 622             |
|          | 4.13                      | 292              | 2868  | 2300          | 0.300        | 0.402 | 540            | 724  | 630     | 845  | 691     | 926  |                             |                 |
|          | 4.59                      | 286              | 2805  | 2300          | 0.293        | 0.393 | 528            | 708  | 616     | 827  | 675     | 905  |                             |                 |
| DMT330DL | 3.56                      | 298              | 2926  | 2400          | 0.305        | 0.410 | 550            | 739  | 642     | 862  | 703     | 944  | 0, 1                        | 724             |
|          | 4.13                      | 292              | 2868  | 2400          | 0.300        | 0.402 | 540            | 724  | 630     | 845  | 691     | 926  |                             |                 |
|          | 4.59                      | 286              | 2805  | 2400          | 0.293        | 0.393 | 528            | 708  | 616     | 827  | 675     | 905  |                             |                 |
| DMT400H  | 1.43*, 1.72*, 2.03        | 453              | 4443  | 2300          | 0.464        | 0.623 | 836            | 1122 | 976     | 1310 | 1069    | 1434 | 0, 1                        | 515             |
|          | 2.46                      | 403              | 3953  | 2300          | 0.413        | 0.554 | 744            | 998  | 869     | 1165 | 952     | 1276 |                             |                 |
|          | 2.75                      | 391              | 3835  | 2300          | 0.401        | 0.537 | 722            | 969  | 843     | 1130 | 923     | 1238 |                             |                 |
| DMT430H  | 2.05, 2.43, 2.93          | 453              | 4443  | 2300          | 0.464        | 0.623 | 836            | 1122 | 976     | 1310 | 1069    | 1434 | 0, 1                        | 664             |
|          | 3.23                      | 430              | 4218  | 2300          | 0.440        | 0.591 | 794            | 1065 | 927     | 1243 | 1015    | 1361 |                             |                 |
|          | 3.40                      | 408              | 4002  | 2300          | 0.418        | 0.418 | 754            | 1011 | 880     | 1180 | 964     | 1292 |                             |                 |
| DMT460HL | 3.02*, 3.28*, 3.56, 4.07  | 453              | 4445  | 2300          | 0.465        | 0.623 | 837            | 1123 | 976     | 1310 | 1070    | 1435 | 0, 1                        | 763             |
|          | 4.48                      | 409              | 4014  | 2300          | 0.420        | 0.563 | 756            | 1013 | 882     | 1183 | 966     | 1296 |                             |                 |
|          | 4.95                      | 374              | 3668  | 2300          | 0.383        | 0.514 | 691            | 926  | 806     | 1081 | 883     | 1185 |                             |                 |
| DMT450DL | 3.02*, 3.28*, 3.56, 4.07  | 453              | 4445  | 2400          | 0.465        | 0.623 | 837            | 1123 | 976     | 1310 | 1070    | 1435 | 0, 1                        | 964             |
|          | 4.48                      | 409              | 4014  | 2400          | 0.420        | 0.563 | 756            | 1014 | 882     | 1183 | 966     | 1296 |                             |                 |
|          | 4.95                      | 374              | 3668  | 2400          | 0.383        | 0.514 | 691            | 926  | 806     | 1081 | 883     | 1185 |                             |                 |
| DMT550H  | 1.43*, 1.64*, 1.81*, 2.03 | 551              | 5407  | 2300          | 0.565        | 0.758 | 1018           | 1366 | 1188    | 1594 | 1301    | 1746 | 0, 1                        | 630             |
|          | 2.33                      | 537              | 5269  | 2300          | 0.551        | 0.739 | 993            | 1332 | 1158    | 1554 | 1269    | 1701 |                             |                 |
|          | 2.60                      | 485              | 4757  | 2300          | 0.497        | 0.667 | 896            | 1201 | 1046    | 1403 | 1145    | 1536 |                             |                 |
|          | 2.91                      | 404              | 3963  | 2300          | 0.415        | 0.556 | 747            | 1001 | 871     | 1168 | 954     | 1279 |                             |                 |
| DMT561HL | 3.02*, 3.28*, 3.56, 4.07  | 550              | 5395  | 2300          | 0.564        | 0.756 | 1016           | 1363 | 1185    | 1590 | 1298    | 1742 | 0                           | 898             |
|          | 4.48                      | 526              | 5160  | 2300          | 0.540        | 0.723 | 972            | 1303 | 1134    | 1521 | 1242    | 1666 |                             |                 |
|          | 4.95                      | 435              | 4267  | 2300          | 0.446        | 0.598 | 804            | 1078 | 938     | 1258 | 1027    | 1377 |                             |                 |
| DMT600DL | 3.02*, 3.28*, 3.56, 4.07  | 625              | 6131  | 2200          | 0.641        | 0.860 | 1154           | 1549 | 1347    | 1807 | -       | -    | 0                           | 1138            |
|          | 4.48                      | 614              | 6023  | 2200          | 0.630        | 0.845 | 1135           | 1522 | 1324    | 1775 | -       | -    |                             |                 |
|          | 4.95                      | 558              | 5473  | 2200          | 0.572        | 0.768 | 1031           | 1383 | 1203    | 1614 | -       | -    |                             |                 |
| DMT600BL | 4.12, 4.48                | 625              | 6131  | 2300          | 0.641        | 0.860 | 1155           | 1549 | 1347    | 1807 | 1476    | 1980 | 0                           | 1489            |
|          | 5.11                      | 587              | 5758  | 2300          | 0.602        | 0.808 | 1085           | 1455 | 1266    | 1698 | 1386    | 1859 |                             |                 |
|          | 5.62                      | 545              | 5346  | 2300          | 0.559        | 0.750 | 1007           | 1350 | 1175    | 1576 | 1287    | 1726 |                             |                 |
|          | 5.91                      | 499              | 4895  | 2300          | 0.512        | 0.686 | 922            | 1237 | 1076    | 1443 | 1178    | 1580 |                             |                 |

\* Special Order Ratio

※ The dry weight is the weight that excludes bell housing, coupling (rubber block, dual stage, Centa flexible) and propeller coupling from the standard scope of supply

# DMT25AL

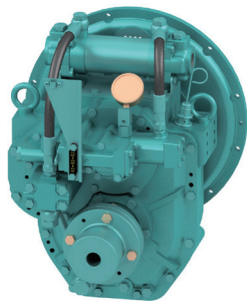


|                                |                                                                                                             |
|--------------------------------|-------------------------------------------------------------------------------------------------------------|
| Ratio                          | 1.64*, 2.07, 2.52, 2.96, 3.32                                                                               |
| Max Input Torque (kgf.m / N.m) | 30 / 294                                                                                                    |
| Capacity / RPM (kW / HP)       | 0.030 / 0.041                                                                                               |
| Capacity / 1800RPM (kW / HP)   | 55 / 75                                                                                                     |
| Max Input RPM                  | 3500                                                                                                        |
| Standard Bell Housing (SAE)    | 3, 4, 5                                                                                                     |
| Dry Weight (kg)                | 68                                                                                                          |
| Standard Scope Of Supply       | Bell Housing, Rubber Block Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                               |

※ SAE4 bell housing comes standard with A rubber block coupling.

\* Special Order Ratio

# DMT50A

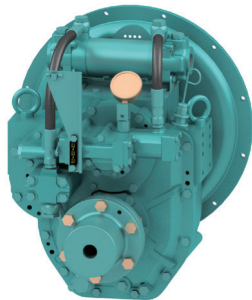


|                                |                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| Ratio                          | 1.61*, 2.06, 2.45 2.82, 3.12, 3.46                                                                        |
| Max Input Torque (kgf.m / N.m) | 55 / 539                                                                                                  |
| Capacity / RPM (kW / HP)       | 0.056 / 0.076                                                                                             |
| Capacity / 1800RPM (kW / HP)   | 101 / 138                                                                                                 |
| Max Input RPM                  | 3000                                                                                                      |
| Standard Bell Housing (SAE)    | 1, 2, 3, 4                                                                                                |
| Dry Weight (kg)                | 126                                                                                                       |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                             |

※ SAE4 bell housing comes standard with A rubber block coupling.

\* Special Order Ratio

# DMT90A

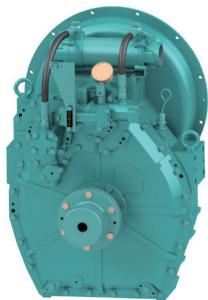


|                                |                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| Ratio                          | 1.61*, 2.06, 2.45 2.82, 3.12, 3.46                                                                        |
| Max Input Torque (kgf.m / N.m) | 87 / 857                                                                                                  |
| Capacity / RPM (kW / HP)       | 0.089 / 0.122                                                                                             |
| Capacity / 1800RPM (kW / HP)   | 161 / 219                                                                                                 |
| Max Input RPM                  | 3000                                                                                                      |
| Standard Bell Housing (SAE)    | 1, 2, 3, 4                                                                                                |
| Dry Weight (kg)                | 135                                                                                                       |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                             |

※ SAE4 bell housing comes standard with A rubber block coupling.

\* Special Order Ratio

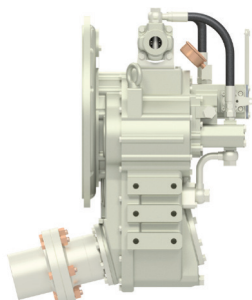
# DMT100HL



| Ratio                          | 4.07, 4.50, 4.95                                                                                          | 5.29          | 5.95          |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 89 / 873                                                                                                  | 86 / 843      | 75 / 735      |
| Capacity / RPM (kW / HP)       | 0.091 / 0.124                                                                                             | 0.088 / 0.120 | 0.076 / 0.104 |
| Capacity / 1800RPM (kW / HP)   | 164 / 223                                                                                                 | 158 / 216     | 138 / 188     |
| Max Input RPM                  | 3000                                                                                                      |               |               |
| Standard Bell Housing (SAE)    | 1, 2, 3                                                                                                   |               |               |
| Dry Weight (kg)                | 251                                                                                                       |               |               |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                             |               |               |

# DMT100IV

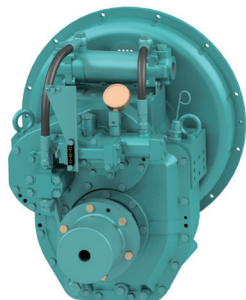
V Drive



| Ratio                          | 1.21*, 1.54, 1.84 2.12, 2.52                                                                              |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| Max Input Torque (kgf.m / N.m) | 103 / 1011                                                                                                |
| Capacity / RPM (kW / HP)       | 0.105 / 0.143                                                                                             |
| Capacity / 1800RPM (kW / HP)   | 190 / 259                                                                                                 |
| Max Input RPM                  | 4000                                                                                                      |
| Standard Bell Housing (SAE)    | 2, 3                                                                                                      |
| Dry Weight (kg)                | 148                                                                                                       |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                             |

\* Special Order Ratio

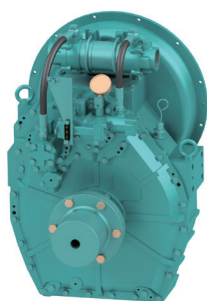
# DMT110A



| Ratio                          | 1.77*, 2.09, 2.42 2.82, 3.19, 3.81                                                                        |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| Max Input Torque (kgf.m / N.m) | 110 / 1079                                                                                                |
| Capacity / RPM (kW / HP)       | 0.112 / 0.153                                                                                             |
| Capacity / 1800RPM (kW / HP)   | 202 / 276                                                                                                 |
| Max Input RPM                  | 2800                                                                                                      |
| Standard Bell Housing (SAE)    | 1, 2, 3                                                                                                   |
| Dry Weight (kg)                | 179                                                                                                       |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                             |

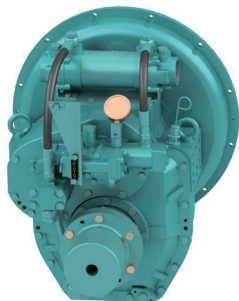
\* Special Order Ratio

# DMT135HL



| Ratio                          | 4.07                                                                                                      | 4.50          | 4.95          |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 131 / 1288                                                                                                | 125 / 1229    | 115 / 1128    |
| Capacity / RPM (kW / HP)       | 0.134 / 0.183                                                                                             | 0.128 / 0.174 | 0.117 / 0.160 |
| Capacity / 1800RPM (kW / HP)   | 241 / 329                                                                                                 | 231 / 314     | 213 / 289     |
| Max Input RPM                  | 3000                                                                                                      |               |               |
| Standard Bell Housing (SAE)    | 1, 2, 3                                                                                                   |               |               |
| Dry Weight (kg)                | 269                                                                                                       |               |               |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                             |               |               |

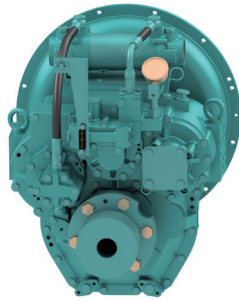
# DMT140H



| Ratio                          | 1.97, 2.57, 3.03 3.46                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| Max Input Torque (kgf.m / N.m) | 130 / 1275                                                                                                |
| Capacity / RPM (kW / HP)       | 0.133 / 0.181                                                                                             |
| Capacity / 1800RPM (kW / HP)   | 239 / 326                                                                                                 |
| Max Input RPM                  | 2800                                                                                                      |
| Standard Bell Housing (SAE)    | 1, 2, 3                                                                                                   |
| Dry Weight (kg)                | 185                                                                                                       |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, D-Trolling Valve Mounting Bracket            |

# DMTP5100

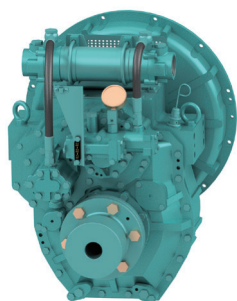
Live PTO



| Ratio                          | 1.47*, 1.76*, 1.93*                                                                                       | 2.48, 3.08    | 3.46          |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 168 / 1648                                                                                                | 150 / 1471    | 130 / 1275    |
| Capacity / RPM (kW / HP)       | 0.172 / 0.234                                                                                             | 0.153 / 0.209 | 0.133 / 0.181 |
| Capacity / 1800RPM (kW / HP)   | 310 / 422                                                                                                 | 276 / 376     | 240 / 326     |
| Max Input RPM                  | 2500                                                                                                      |               |               |
| Standard Bell Housing (SAE)    | 1, 2, 3                                                                                                   |               |               |
| Dry Weight (kg)                | 215                                                                                                       |               |               |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                             |               |               |

\* Special Order Ratio

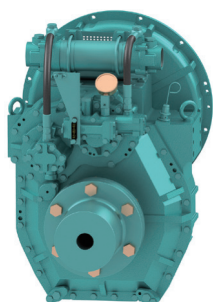
# DMT150H



|                                |                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Ratio                          | 1.83*, 2.09, 2.51 3.08, 3.43                                                                                             |
| Max Input Torque (kgf.m / N.m) | 168 / 1648                                                                                                               |
| Capacity / RPM (kW / HP)       | 0.172 / 0.234                                                                                                            |
| Capacity / 1800RPM (kW / HP)   | 310 / 422                                                                                                                |
| Max Input RPM                  | 2500                                                                                                                     |
| Standard Bell Housing (SAE)    | 1, 2                                                                                                                     |
| Dry Weight (kg)                | 267                                                                                                                      |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler                |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, D-Trolling Valve, Mounting Bracket, Centa Flexible Coupling |

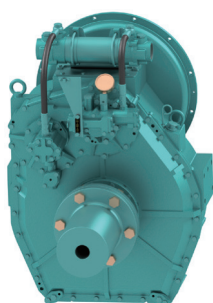
\* Special Order Ratio

# DMT170HL



|                                |                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| Ratio                          | 4.04, 4.48                                                                                                |
| Max Input Torque (kgf.m / N.m) | 168 / 1648                                                                                                |
| Capacity / RPM (kW / HP)       | 0.172 / 0.234                                                                                             |
| Capacity / 1800RPM (kW / HP)   | 310 / 422                                                                                                 |
| Max Input RPM                  | 2500                                                                                                      |
| Standard Bell Housing (SAE)    | 1, 2                                                                                                      |
| Dry Weight (kg)                | 326                                                                                                       |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket, Centa Flexible Coupling    |

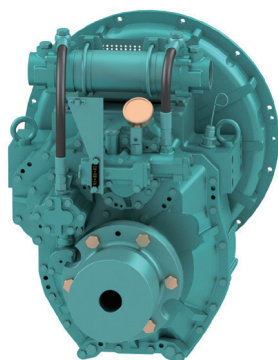
# DMT180HL



|                                |                                                                                                           |
|--------------------------------|-----------------------------------------------------------------------------------------------------------|
| Ratio                          | 5.15, 5.96                                                                                                |
| Max Input Torque (kgf.m / N.m) | 168 / 1648                                                                                                |
| Capacity / RPM (kW / HP)       | 0.172 / 0.234                                                                                             |
| Capacity / 1800RPM (kW / HP)   | 310 / 422                                                                                                 |
| Max Input RPM                  | 2500                                                                                                      |
| Standard Bell Housing (SAE)    | 1, 2                                                                                                      |
| Dry Weight (kg)                | 463                                                                                                       |
| Standard Scope Of Supply       | Bell Housing, Dual Stage Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket, Centa Flexible Coupling    |



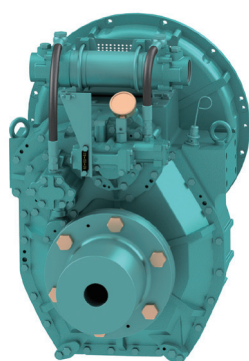
# DMT190H



|                                |                                                                                                               |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|
| Ratio                          | 1.83*, 2.09, 2.51 3.08, 3.43                                                                                  |
| Max Input Torque (kgf.m / N.m) | 180 / 1765                                                                                                    |
| Capacity / RPM (kW / HP)       | 0.184 / 0.251                                                                                                 |
| Capacity / 1800RPM (kW / HP)   | 332 / 452                                                                                                     |
| Max Input RPM                  | 2500                                                                                                          |
| Standard Bell Housing (SAE)    | 1, 2                                                                                                          |
| Dry Weight (kg)                | 278                                                                                                           |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, D-Trolling Valve, Mounting Bracket               |

\* Special Order Ratio

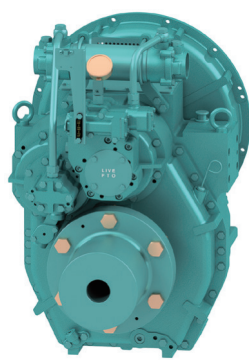
# DMT190HL



|                                |                                                                                                               |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|
| Ratio                          | 4.04, 4.48                                                                                                    |
| Max Input Torque (kgf.m / N.m) | 180 / 1765                                                                                                    |
| Capacity / RPM (kW / HP)       | 0.184 / 0.251                                                                                                 |
| Capacity / 1800RPM (kW / HP)   | 332 / 452                                                                                                     |
| Max Input RPM                  | 2500                                                                                                          |
| Standard Bell Housing (SAE)    | 1, 2                                                                                                          |
| Dry Weight (kg)                | 334                                                                                                           |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |

# DMT220DL

4 Thrust Bearing Type, Live PTO



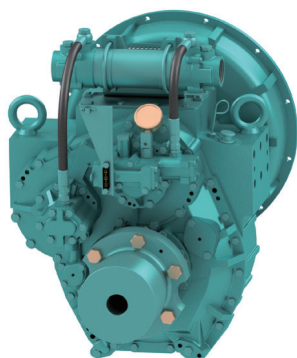
|                                |                                                                                                                         |               |               |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Ratio                          | 3.50*, 4.04                                                                                                             | 4.47          | 4.72          |
| Max Input Torque (kgf.m / N.m) | 210 / 2059                                                                                                              | 198 / 1942    | 177 / 1735    |
| Capacity / RPM (kW / HP)       | 0.216 / 0.293                                                                                                           | 0.203 / 0.277 | 0.182 / 0.243 |
| Capacity / 1800RPM (kW / HP)   | 389 / 527                                                                                                               | 365 / 499     | 327 / 437     |
| Max Input RPM                  | 2500                                                                                                                    |               |               |
| Standard Bell Housing (SAE)    | 1, 2                                                                                                                    |               |               |
| Dry Weight (kg)                | 403                                                                                                                     |               |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler, Live PTO |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                           |               |               |

※ SAE2 bell housing comes standard with a dual stage coupling.

※ Please refer to the page 20 for a description of the DL/BL type model.

\*Special Order Ratio

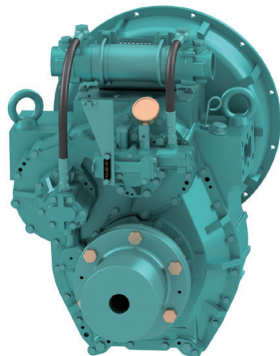
# DMT240H



|                                |                                                                                                               |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|
| Ratio                          | 1.50*, 1.97*, 2.44 2.93, 3.40                                                                                 |
| Max Input Torque (kgf.m / N.m) | 218 / 2138                                                                                                    |
| Capacity / RPM (kW / HP)       | 0.223 / 0.304                                                                                                 |
| Capacity / 1800RPM (kW / HP)   | 402 / 547                                                                                                     |
| Max Input RPM                  | 2500                                                                                                          |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                          |
| Dry Weight (kg)                | 346                                                                                                           |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, D-Trolling Valve, Mounting Bracket               |

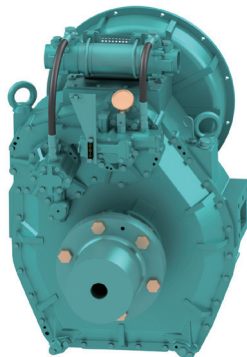
\* Special Order Ratio

# DMT260H



|                                |                                                                                                               |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|
| Ratio                          | 2.06, 2.50, 2.92 3.26                                                                                         |
| Max Input Torque (kgf.m / N.m) | 258 / 2530                                                                                                    |
| Capacity / RPM (kW / HP)       | 0.264 / 0.360                                                                                                 |
| Capacity / 1800RPM (kW / HP)   | 476 / 648                                                                                                     |
| Max Input RPM                  | 2500                                                                                                          |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                          |
| Dry Weight (kg)                | 368                                                                                                           |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |

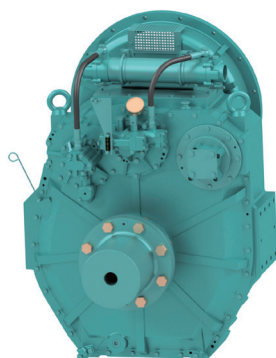
# DMT260HL



|                                |                                                                                                               |               |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|---------------|
| Ratio                          | 3.53, 4.08, 4.52                                                                                              | 5.04          |
| Max Input Torque (kgf.m / N.m) | 258 / 2530                                                                                                    | 239 / 2344    |
| Capacity / RPM (kW / HP)       | 0.264 / 0.360                                                                                                 | 0.245 / 0.333 |
| Capacity / 1800RPM (kW / HP)   | 476 / 648                                                                                                     | 441 / 600     |
| Max Input RPM                  | 2500                                                                                                          |               |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                          |               |
| Dry Weight (kg)                | 512                                                                                                           |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |               |

# DMTP6500

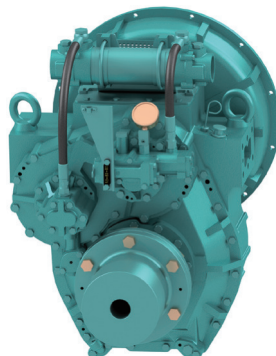
Live PTO



|                                |                                                                                                                         |               |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------|
| Ratio                          | 5.11, 5.62*, 5.91                                                                                                       | 6.57*, 6.95   |
| Max Input Torque (kgf.m / N.m) | 258 / 2530                                                                                                              | 238 / 2334    |
| Capacity / RPM (kW / HP)       | 0.264 / 0.360                                                                                                           | 0.244 / 0.332 |
| Capacity / 1800RPM (kW / HP)   | 476 / 648                                                                                                               | 440 / 598     |
| Max Input RPM                  | 2300                                                                                                                    |               |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                                    |               |
| Dry Weight (kg)                | 834                                                                                                                     |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler, Live PTO |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                           |               |

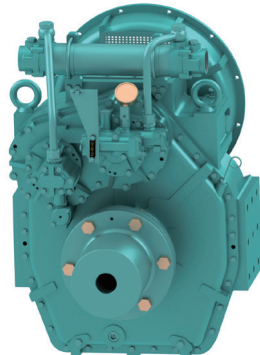
\* Special Order Ratio

# DMT280H



|                                |                                                                                                                          |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Ratio                          | 2.06, 2.50, 2.92 3.26                                                                                                    |
| Max Input Torque (kgf.m / N.m) | 298 / 2927                                                                                                               |
| Capacity / RPM (kW / HP)       | 0.306 / 0.416                                                                                                            |
| Capacity / 1800RPM (kW / HP)   | 550 / 749                                                                                                                |
| Max Input RPM                  | 2500                                                                                                                     |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                                     |
| Dry Weight (kg)                | 383                                                                                                                      |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler            |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, D-Trolling Valve, Mounting Bracket, Centa Flexible Coupling |

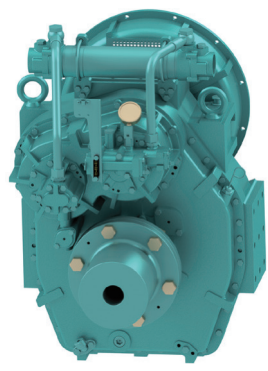
# DMT300HL



|                                |                                                                                                               |               |               |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Ratio                          | 3.56                                                                                                          | 4.13          | 4.59          |
| Max Input Torque (kgf.m / N.m) | 298 / 2926                                                                                                    | 292 / 2868    | 286 / 2805    |
| Capacity / RPM (kW / HP)       | 0.305 / 0.416                                                                                                 | 0.300 / 0.408 | 0.293 / 0.399 |
| Capacity / 1800RPM (kW / HP)   | 550 / 749                                                                                                     | 540 / 734     | 528 / 718     |
| Max Input RPM                  | 2300                                                                                                          |               |               |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                          |               |               |
| Dry Weight (kg)                | 622                                                                                                           |               |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |               |               |

# DMT330DL

# 4 Thrust Bearing Type

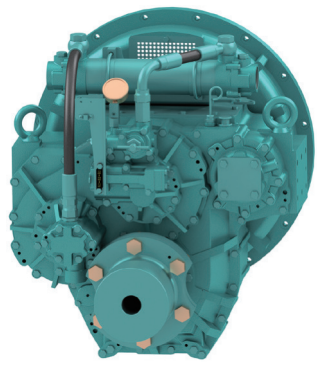


| Ratio                          | 3.56                                                                                                          | 4.13          | 4.59          |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 298 / 2926                                                                                                    | 292 / 2868    | 286 / 2805    |
| Capacity / RPM (kW / HP)       | 0.305 / 0.416                                                                                                 | 0.300 / 0.408 | 0.293 / 0.399 |
| Capacity / 1800RPM (kW / HP)   | 550 / 749                                                                                                     | 540 / 734     | 528 / 718     |
| Max Input RPM                  | 2400                                                                                                          |               |               |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                          |               |               |
| Dry Weight (kg)                | 724                                                                                                           |               |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |               |               |

※ Please refer to the page 20 for a description of the DL/BL type model.

# DMT400H

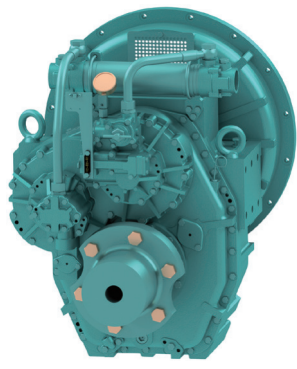
# Live PTO



| Ratio                          | 1.43*, 1.72*, 2.03                                                                                                      | 2.46          | 2.75          |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 453 / 4443                                                                                                              | 403 / 3953    | 391 / 3835    |
| Capacity / RPM (kW / HP)       | 0.464 / 0.632                                                                                                           | 0.413 / 0.562 | 0.401 / 0.545 |
| Capacity / 1800RPM (kW / HP)   | 836 / 1138                                                                                                              | 744 / 1012    | 722 / 982     |
| Max Input RPM                  | 2300                                                                                                                    |               |               |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                                    |               |               |
| Dry Weight (kg)                | 515                                                                                                                     |               |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler, Live PTO |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                           |               |               |

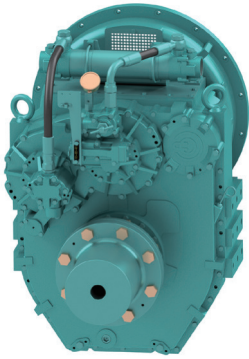
\* Special Order Ratio

# DMT430H



| Ratio                          | 2.05, 2.43, 2.93                                                                                              | 3.23         | 3.40          |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|--------------|---------------|
| Max Input Torque (kgf.m / N.m) | 453 / 4443                                                                                                    | 430 / 4218   | 408 / 4002    |
| Capacity / RPM (kW / HP)       | 0.464 / 0.632                                                                                                 | 0.44 / 0.600 | 0.418 / 0.569 |
| Capacity / 1800RPM (kW / HP)   | 836 / 1138                                                                                                    | 794 / 1080   | 754 / 1025    |
| Max Input RPM                  | 2300                                                                                                          |              |               |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                          |              |               |
| Dry Weight (kg)                | 664                                                                                                           |              |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |              |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, D-trolling Valve, Mounting Bracket               |              |               |

# DMT460HL

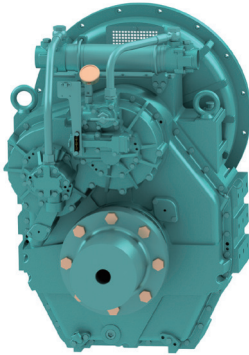


| Ratio                          | 3.02*, 3.28*, 3.56, 4.07                                                                                      | 4.48          | 4.95          |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 453 / 4445                                                                                                    | 409 / 4014    | 374 / 3668    |
| Capacity / RPM (kW / HP)       | 0.465 / 0.632                                                                                                 | 0.420 / 0.571 | 0.383 / 0.522 |
| Capacity / 1800RPM (kW / HP)   | 837 / 1139                                                                                                    | 756 / 1028    | 691 / 939     |
| Max Input RPM                  | 2300                                                                                                          |               |               |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                          |               |               |
| Dry Weight (kg)                | 763                                                                                                           |               |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |               |               |

\* Special Order Ratio

# DMT450DL

4 Thrust Bearing Type

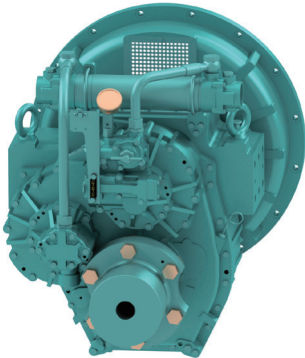


| Ratio                          | 3.02*, 3.28*, 3.56, 4.07                                                                                      | 4.48          | 4.95          |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 453 / 4445                                                                                                    | 409 / 4014    | 374 / 3668    |
| Capacity / RPM (kW / HP)       | 0.465 / 0.632                                                                                                 | 0.420 / 0.571 | 0.383 / 0.522 |
| Capacity / 1800RPM (kW / HP)   | 837 / 1139                                                                                                    | 756 / 1028    | 691 / 939     |
| Max Input RPM                  | 2400                                                                                                          |               |               |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                          |               |               |
| Dry Weight (kg)                | 964                                                                                                           |               |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |               |               |

※ Please refer to the page 20 for a description of the DL/BL type model.

\*Special Order Ratio

# DMT550H

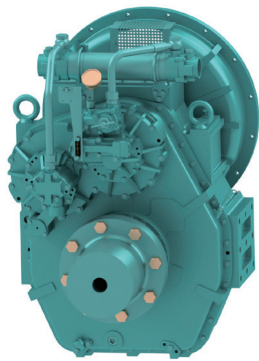


| Ratio                          | 1.43*, 1.64*1.81*, 2.03                                                                                       | 2.33          | 2.60          | 2.91          |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 551 / 5407                                                                                                    | 537 / 5269    | 485 / 4757    | 404 / 3963    |
| Capacity / RPM (kW / HP)       | 0.565 / 0.769                                                                                                 | 0.551 / 0.750 | 0.497 / 0.676 | 0.415 / 0.565 |
| Capacity / 1800RPM (kW / HP)   | 1018 / 1385                                                                                                   | 993 / 1350    | 896 / 1218    | 747 / 1015    |
| Max Input RPM                  | 2300                                                                                                          |               |               |               |
| Standard Bell Housing (SAE)    | 0, 1                                                                                                          |               |               |               |
| Dry Weight (kg)                | 630                                                                                                           |               |               |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |               |               |               |

\* Special Order Ratio



# DMT561HL



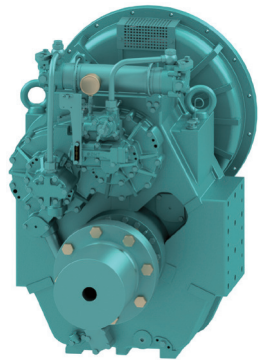
| Ratio                          | 3.02*, 3.28*, 3.56, 4.07                                                                                      | 4.48         | 4.95          |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|--------------|---------------|
| Max Input Torque (kgf.m / N.m) | 550 / 5395                                                                                                    | 526 / 5160   | 435 / 4267    |
| Capacity / RPM (kW / HP)       | 0.564 / 0.767                                                                                                 | 0.54 / 0.734 | 0.446 / 0.606 |
| Capacity / 1800RPM (kW / HP)   | 1016 / 1382                                                                                                   | 972 / 1321   | 804 / 1093    |
| Max Input RPM                  | 2300                                                                                                          |              |               |
| Standard Bell Housing (SAE)    | 0                                                                                                             |              |               |
| Dry Weight (kg)                | 898                                                                                                           |              |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |              |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |              |               |

※ Please refer to the page 20 for a description of the DL/BL type model.

\* Special Order Ratio

# DMT600DL

## 4 Thrust Bearing Type



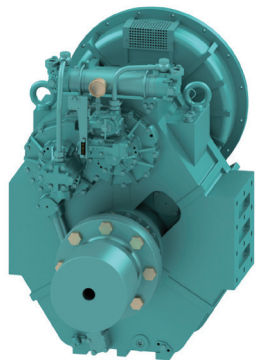
| Ratio                          | 3.02*, 3.28*, 3.56, 4.07                                                                                      | 4.48          | 4.95          |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 625 / 6131                                                                                                    | 614 / 6023    | 558 / 5473    |
| Capacity / RPM (kW / HP)       | 0.641 / 0.872                                                                                                 | 0.630 / 0.857 | 0.572 / 0.779 |
| Capacity / 1800RPM (kW / HP)   | 1154 / 1570                                                                                                   | 1135 / 1543   | 1031 / 1402   |
| Max Input RPM                  | 2200                                                                                                          |               |               |
| Standard Bell Housing (SAE)    | 0                                                                                                             |               |               |
| Dry Weight (kg)                | 1138                                                                                                          |               |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |               |               |

※ Please refer to the page 20 for a description of the DL/BL type model.

\* Special Order Ratio

# DMT600BL

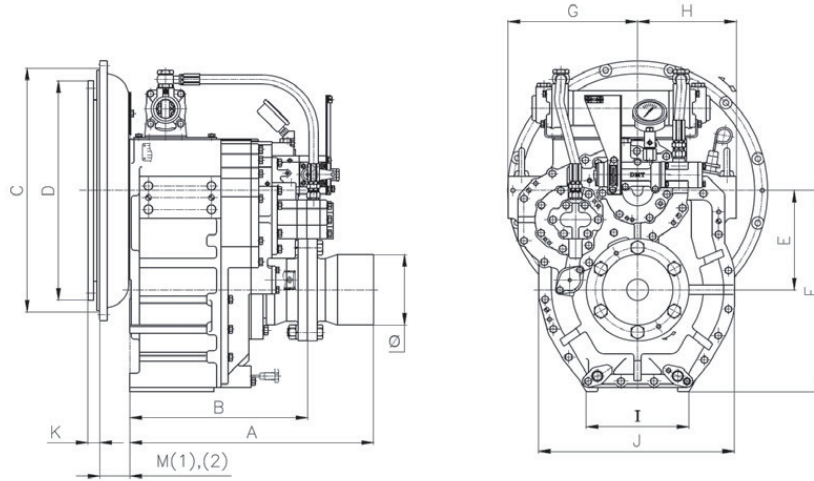
## 4 Thrust Bearing Type



| Ratio                          | 4.12, 4.48                                                                                                    | 5.11          | 5.62          | 5.91          |
|--------------------------------|---------------------------------------------------------------------------------------------------------------|---------------|---------------|---------------|
| Max Input Torque (kgf.m / N.m) | 625 / 6131                                                                                                    | 587 / 5758    | 545 / 5346    | 499 / 4895    |
| Capacity / RPM (kW / HP)       | 0.641 / 0.872                                                                                                 | 0.602 / 0.819 | 0.559 / 0.760 | 0.512 / 0.696 |
| Capacity / 1800RPM (kW / HP)   | 1155 / 1570                                                                                                   | 1085 / 1475   | 1007 / 1369   | 922 / 1254    |
| Max Input RPM                  | 2300                                                                                                          |               |               |               |
| Standard Bell Housing (SAE)    | 0                                                                                                             |               |               |               |
| Dry Weight (kg)                | 1489                                                                                                          |               |               |               |
| Standard Scope Of Supply       | Bell Housing, Centa Flexible Coupling, Propeller Coupling, Manual Conversion Valve, Cable Bracket, Oil Cooler |               |               |               |
| Options                        | Electronic Conversion Valve(12V,24V), Manual Trolling Valve, Mounting Bracket                                 |               |               |               |

※ Please refer to the page 20 for a description of the DL/BL type model.

## Dimensions : A, AL, H Model



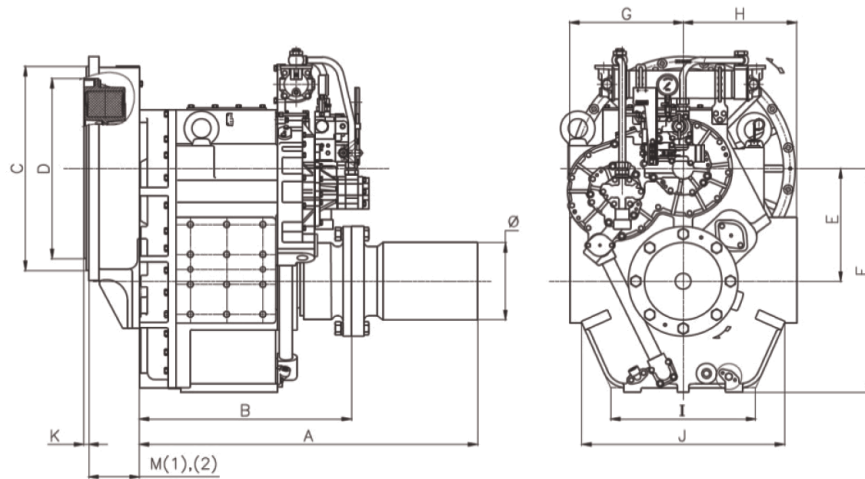
mm

| Model    | A   | B   | E   | F   | G   | H   | I   | J   | Ø   |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| DMT25AL  | 355 | 255 | 118 | 244 | 177 | 135 | 157 | 260 | 72  |
| DMT50A   | 403 | 286 | 160 | 323 | 217 | 175 | 170 | 326 | 100 |
| DMT90A   | 471 | 325 | 160 | 323 | 228 | 175 | 170 | 326 | 120 |
| DMT110A  | 487 | 335 | 195 | 388 | 249 | 197 | 224 | 386 | 140 |
| DMT140H  | 496 | 344 | 195 | 388 | 249 | 197 | 224 | 386 | 140 |
| DMTP5100 | 531 | 391 | 195 | 390 | 270 | 250 | 206 | 383 | 150 |
| DMT150H  | 518 | 378 | 211 | 428 | 275 | 210 | 218 | 415 | 150 |
| DMT190H  | 590 | 390 | 211 | 428 | 275 | 210 | 218 | 415 | 185 |
| DMT240H  | 639 | 439 | 227 | 458 | 330 | 240 | 254 | 447 | 185 |
| DMT260H  | 653 | 453 | 254 | 484 | 330 | 235 | 276 | 458 | 190 |
| DMT280H  | 653 | 453 | 254 | 484 | 330 | 235 | 276 | 458 | 190 |
| DMT400H  | 705 | 505 | 236 | 450 | 360 | 360 | 266 | 436 | 190 |
| DMT430H  | 720 | 520 | 285 | 563 | 375 | 282 | 333 | 525 | 185 |
| DMT550H  | 771 | 551 | 236 | 464 | 360 | 275 | 282 | 449 | 190 |

| Model              | Bell Housing Standard | Driving Ring | C   | D   | M(1) | M(2) | K  |
|--------------------|-----------------------|--------------|-----|-----|------|------|----|
| DMT25AL            | SAE#3                 | 11.5"        | 409 | 352 | 34   | -    | 39 |
|                    |                       | 10"          | 361 | 314 | 30   | -    | 53 |
|                    | SAE#4                 | 7.5"         | 361 | 241 | 30   | -    | 30 |
|                    |                       | 7.5"         | 314 | 241 | 24   | -    | 30 |
| DMT50A<br>DMT90A   | SAE#1                 | 14"          | 511 | 466 | 75   | -    | 25 |
|                    | SAE#2                 | 11.5"        | 447 | 352 | 35   | -    | 39 |
|                    | SAE#3                 | 11.5"        | 409 | 352 | 35   | -    | 39 |
|                    | SAE#4                 | 10"          | 361 | 314 | 50   | -    | 53 |
| DMT110A<br>DMT140H | SAE#1                 | 14"          | 511 | 466 | 75   | -    | 25 |
|                    | SAE#2                 | 11.5"        | 447 | 352 | 35   | -    | 39 |
|                    | SAE#3                 | 11.5"        | 409 | 352 | 35   | -    | 39 |
| DMT100IV           | SAE#2                 | 11.5"        | 447 | 352 | 35   | -    | 39 |
|                    | SAE#3                 | 11.5"        | 409 | 352 | 35   | -    | 39 |
| DMTP5100           | SAE#1                 | 14"          | 511 | 466 | 64   | -    | 25 |
|                    | SAE#2                 | 11.5"        | 447 | 352 | 46   | -    | 39 |
|                    | SAE#3                 | 11.5"        | 409 | 352 | 69   | -    | 39 |
| DMT150H            | SAE#1                 | 14"          | 511 | 466 | 64   | 88   | 25 |
| DMT190H            | SAE#2                 | 11.5"        | 447 | 352 | 46   | -    | 39 |
| DMT240H            | SAE#0                 | 18"          | 647 | 571 | -    | 130  | 15 |
| DMT260H            | SAE#0                 | 14"          | 647 | 466 | -    | 130  | 25 |
| DMT280H            | SAE#1                 | 14"          | 511 | 466 | -    | 122  | 25 |
| DMT400H            | SAE#0                 | 18"          | 647 | 571 | -    | 130  | 15 |
|                    | SAE#0                 | 14"          | 647 | 466 | -    | 130  | 25 |
|                    | SAE#1                 | 14"          | 511 | 466 | -    | 122  | 25 |
| DMT430H            | SAE#0                 | 18"          | 647 | 571 | -    | 130  | 15 |
|                    | SAE#1                 | 14"          | 511 | 466 | -    | 122  | 25 |
| DMT550H            | SAE#0                 | 18"          | 647 | 571 | -    | 160  | 15 |

• M(1) : Dual Stage, Rubber Block Coupling • M(2) : Centa Flexible Coupling

## Dimensions : HL, DL, BL Model



mm

| Model    | A    | B   | E   | F   | G   | H   | I   | J   | Ø   |
|----------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| DMT100HL | 501  | 351 | 274 | 563 | 284 | 284 | 370 | 552 | 134 |
| DMT135HL | 503  | 351 | 274 | 563 | 284 | 284 | 370 | 552 | 148 |
| DMT170HL | 580  | 390 | 261 | 521 | 280 | 258 | 316 | 510 | 180 |
| DMT180HL | 617  | 427 | 331 | 667 | 337 | 337 | 425 | 654 | 180 |
| DMT190HL | 625  | 405 | 261 | 530 | 280 | 258 | 307 | 510 | 200 |
| DMT220DL | 609  | 419 | 261 | 529 | 280 | 258 | 334 | 510 | 180 |
| DMT260HL | 673  | 453 | 331 | 662 | 337 | 337 | 432 | 654 | 200 |
| DMTP6500 | 777  | 527 | 415 | 842 | 440 | 440 | 448 | 756 | 220 |
| DMT300HL | 673  | 453 | 319 | 647 | 330 | 330 | 438 | 660 | 200 |
| DMT330DL | 689  | 469 | 319 | 647 | 330 | 330 | 428 | 660 | 200 |
| DMT460HL | 781  | 531 | 357 | 698 | 360 | 360 | 377 | 659 | 220 |
| DMT450DL | 782  | 532 | 357 | 713 | 360 | 360 | 416 | 659 | 245 |
| DMT561HL | 902  | 552 | 357 | 710 | 360 | 360 | 460 | 681 | 220 |
| DMT600DL | 1021 | 671 | 357 | 710 | 360 | 360 | 460 | 642 | 245 |
| DMT600BL | 1037 | 687 | 415 | 843 | 440 | 440 | 460 | 811 | 300 |

| Model                            | Bell Housing Standard | Driving Ring | C   | D   | M(1) | M(2) | K  |
|----------------------------------|-----------------------|--------------|-----|-----|------|------|----|
| DMT100HL<br>DMT135HL             | SAE #1                | 14"          | 511 | 466 | 81   | -    | 25 |
|                                  | SAE #2                | 11.5"        | 447 | 352 | 44   | -    | 39 |
|                                  | SAE #3                | 11.5"        | 409 | 352 | 44   | -    | 39 |
| DMT170HL<br>DMT180HL<br>DMT190HL | SAE #1                | 14"          | 511 | 466 | 64   | 88   | 25 |
|                                  | SAE #2                | 11.5"        | 447 | 352 | 46   | -    | 39 |
|                                  | SAE #3                | 11.5"        | 409 | 352 | 44   | -    | 39 |
| DMT220DL                         | SAE #1                | 14"          | 511 | 466 | -    | 88   | 25 |
|                                  | SAE #2                | 11.5"        | 447 | 352 | 46   | -    | 39 |
|                                  | SAE #3                | 11.5"        | 409 | 352 | 44   | -    | 39 |
| DMT260HL<br>DMTP6500             | SAE #0                | 18"          | 647 | 571 | -    | 130  | 15 |
|                                  | SAE #1                | 14"          | 511 | 466 | -    | 122  | 25 |
|                                  | SAE #2                | 11.5"        | 447 | 352 | 46   | -    | 39 |
| DMT300HL<br>DMT330DL             | SAE #0                | 18"          | 647 | 571 | -    | 130  | 15 |
|                                  | SAE #1                | 14"          | 511 | 466 | -    | 122  | 25 |
|                                  | SAE #2                | 11.5"        | 447 | 352 | 46   | -    | 39 |
| DMT460HL<br>DMT450DL             | SAE #0                | 18"          | 647 | 571 | -    | 130  | 15 |
|                                  | SAE #1                | 14"          | 511 | 466 | -    | 122  | 25 |
|                                  | SAE #2                | 11.5"        | 447 | 352 | 46   | -    | 39 |
| DMT561HL                         | SAE #0                | 18"          | 647 | 571 | -    | 160  | 15 |
| DMT600DL                         | SAE #0                | 18"          | 647 | 571 | -    | 160  | 15 |
| DMT600BL                         | SAE #0                | 18"          | 647 | 571 | -    | 160  | 15 |

• M(1) : Dual Stage, Rubber Block Coupling • M(2) : Centa Flexible Coupling

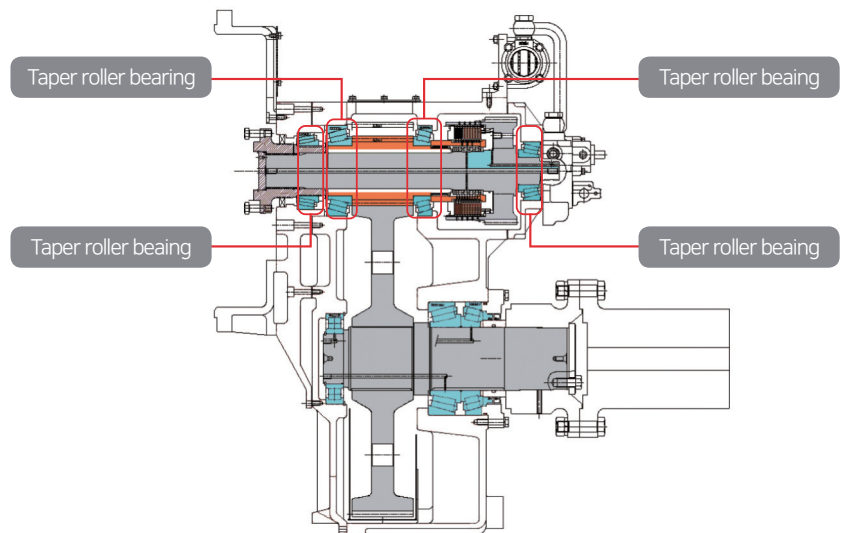
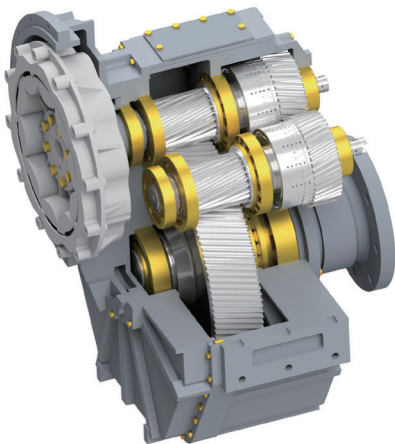


## DL/BL Model

**4 thrust bearings** supporting drive shaft.

**Minimizing the variations on the power train at any moment**

Additional 2 thrust bearings assembled to the drive gear itself keep always correct gear contact areas restraining shaft bending and enduring thrust power even in extraordinary cases of overloaded.



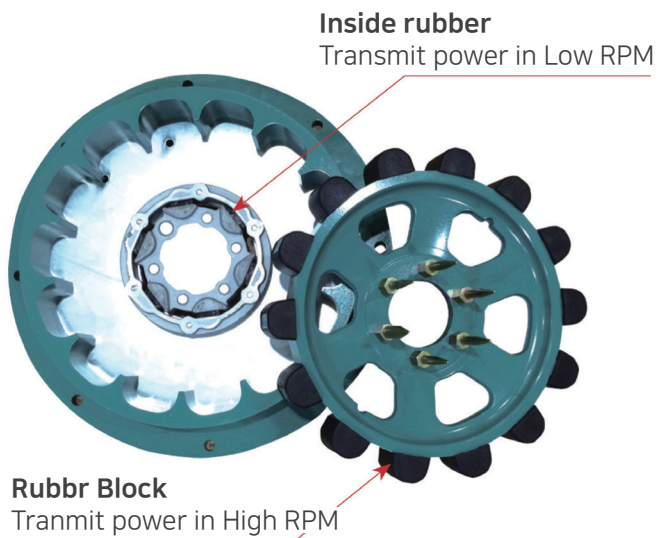
### DL /BL Model Features

- Designed in accordance with DNV GL certification rule.
- Applying the core technology tolerating severe working conditions.
- Highly elastic coupling of Centa applied.
- Easy maintenance structure.
- Compact & light weight.

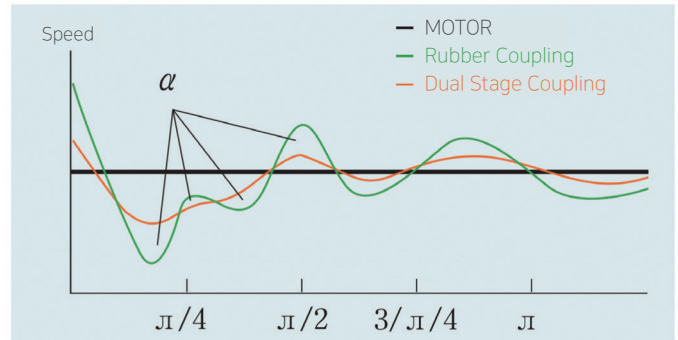
| Model    | Ratio                    | Max Input Torque |       | Max Input RPM | Capacity/RPM |       | Capacity/1800RPM |      | Standard Bell Housing (SAE) |
|----------|--------------------------|------------------|-------|---------------|--------------|-------|------------------|------|-----------------------------|
|          |                          | (kgf.m)          | (N.m) |               | kW           | HP    | kW               | HP   |                             |
| DMT220DL | 3.50*, 4.04              | 210              | 2059  | 2500          | 0.216        | 0.289 | 389              | 520  | 1, 2                        |
|          | 4.47                     | 198              | 1942  | 2500          | 0.203        | 0.273 | 365              | 491  |                             |
|          | 4.72                     | 177              | 1735  | 2500          | 0.182        | 0.243 | 327              | 437  |                             |
| DMT330DL | 3.56                     | 298              | 2926  | 2400          | 0.305        | 0.410 | 550              | 739  | 0, 1                        |
|          | 4.13                     | 292              | 2868  | 2400          | 0.300        | 0.402 | 540              | 724  |                             |
|          | 4.59                     | 286              | 2805  | 2400          | 0.293        | 0.393 | 528              | 708  |                             |
| DMT450DL | 3.02*, 3.28*, 3.56, 4.07 | 453              | 4445  | 2400          | 0.465        | 0.623 | 837              | 1123 | 0, 1                        |
|          | 4.48                     | 409              | 4014  | 2400          | 0.420        | 0.563 | 756              | 1014 |                             |
|          | 4.95                     | 374              | 3668  | 2400          | 0.383        | 0.514 | 691              | 926  |                             |
| DMT600DL | 3.02*, 3.28*, 3.56, 4.07 | 625              | 6131  | 2200          | 0.641        | 0.860 | 1154             | 1549 | 0                           |
|          | 4.48                     | 614              | 6023  | 2200          | 0.630        | 0.845 | 1135             | 1522 |                             |
|          | 4.95                     | 558              | 5473  | 2200          | 0.572        | 0.768 | 1031             | 1383 |                             |
| DMT600BL | 4.12, 4.48               | 625              | 6131  | 2300          | 0.641        | 0.860 | 1155             | 1549 | 0                           |
|          | 5.11                     | 587              | 5758  | 2300          | 0.602        | 0.808 | 1085             | 1455 |                             |
|          | 5.62                     | 545              | 5346  | 2300          | 0.559        | 0.750 | 1007             | 1350 |                             |
|          | 5.91                     | 499              | 4895  | 2300          | 0.512        | 0.686 | 922              | 1237 |                             |

\*Special Order Ratio

## Dual Stage Coupling



### Factors of Angle Speed



- ※ DUAL STAGE RUBBER BLOCKS aborb the impacts & noise occurred from connecting parts.
- ※ And they also decrease the vibrations following the engine explosion timing.

The Dual Stage Coupling has 2 kinds of rubber blocks to reduce noise and vibration in different RPM section. Inner blocks transmit power in low RPM section and outer blocks transmit power in high RPM (over 1,000RPM) section

## Centa Flexible Coupling



CENTAFLEX-R TYPE



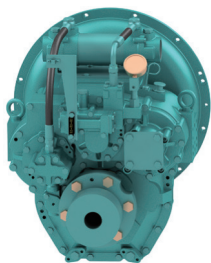
FREE STANDING TYPE

The Flexible Coupling protects propulsion shaft system by reducing and absorbing vibration torques from engine operation and impact torque in clutch shifting.

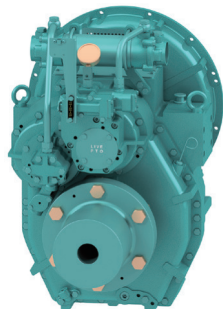
With Torque Limit application, even when the rubber parts are damaged, emergency power transmissions are available.

## Marine Transmission with Live PTO

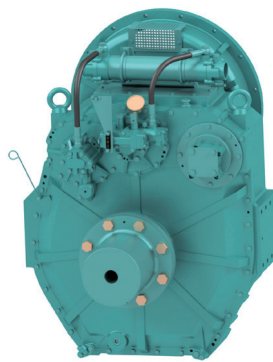
- Live PTO is always running when the engine is running
- A hydraulic pump that needs to be driven at all times can be attached



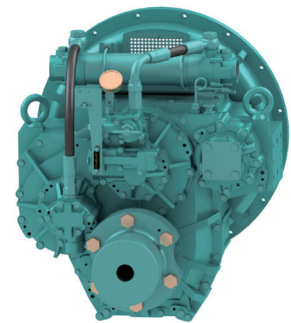
DMTP5100



DMT220DL



DMTP6500



DMT400H

### Live PTO Specification

| No | Model    | Output HP /1800rpm | Output Torque /1800rpm | Rotation Direction                          | Pump plate Standard |
|----|----------|--------------------|------------------------|---------------------------------------------|---------------------|
| 1  | DMTP5100 | 150hp              | 59kfg.m                | Opposite direction with gearbox input shaft | SAE B<br>SAE C      |
| 2  | DMT220DL |                    |                        | Same direction with gearbox input shaft     |                     |
| 3  | DMTP6500 |                    |                        | Same direction with gearbox input shaft     |                     |
| 4  | DMT400H  |                    |                        | Same direction with gearbox input shaft     |                     |
| 5  | DMT400HL |                    |                        | Same direction with gearbox input shaft     |                     |

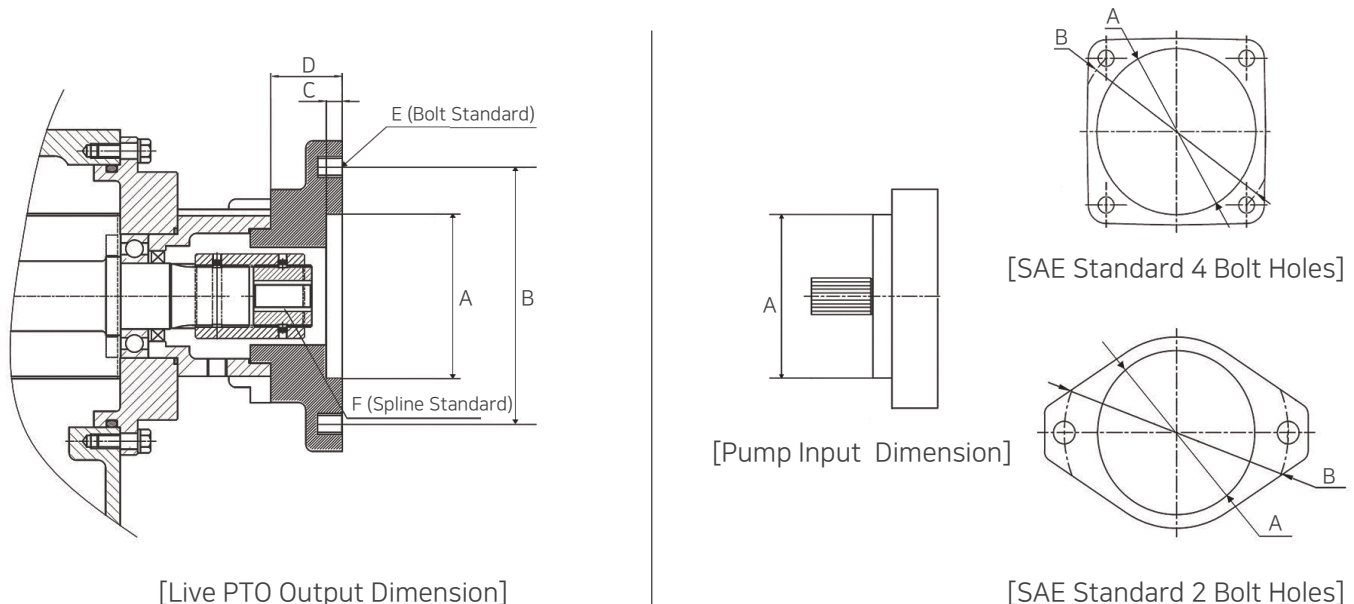
### Marine Transmission with Live PTO Capacity Table

| Model    | Ratio                    | Max Input Torque |       | Max Input RPM | Capacity/RPM |       | Capacity/1800RPM |      | Standard Bell Housing (SAE) |
|----------|--------------------------|------------------|-------|---------------|--------------|-------|------------------|------|-----------------------------|
|          |                          | (kgf.m)          | (N.m) |               | kW           | HP    | kW               | HP   |                             |
| DMTP5100 | 1.47*, 1.76*, 1.93*      | 168              | 1648  | 2500          | 0.172        | 0.231 | 310              | 416  | 1, 2, 3                     |
|          | 2.48, 3.08               | 150              | 1471  | 2500          | 0.153        | 0.206 | 276              | 370  |                             |
|          | 3.46                     | 130              | 1275  | 2500          | 0.133        | 0.178 | 240              | 322  |                             |
| DMT220DL | 3.50*, 4.04              | 210              | 2059  | 2500          | 0.216        | 0.289 | 389              | 520  | 1, 2                        |
|          | 4.47                     | 198              | 1942  | 2500          | 0.203        | 0.273 | 365              | 491  |                             |
|          | 4.72                     | 177              | 1735  | 2500          | 0.182        | 0.243 | 327              | 437  |                             |
| DMTP6500 | 5.11, 5.62*, 5.91        | 258              | 2530  | 2300          | 0.264        | 0.355 | 476              | 639  | 0, 1                        |
|          | 6.57*, 6.95              | 238              | 2334  | 2300          | 0.244        | 0.328 | 440              | 590  |                             |
| DMT400H  | 1.43*, 1.72*, 2.03       | 453              | 4443  | 2300          | 0.464        | 0.623 | 836              | 1122 | 0, 1                        |
|          | 2.46                     | 403              | 3953  | 2300          | 0.413        | 0.554 | 744              | 998  |                             |
|          | 2.75                     | 391              | 3835  | 2300          | 0.401        | 0.537 | 722              | 969  |                             |
| DMT400HL | 3.02*, 3.28*, 3.56, 4.07 | 453              | 4445  | 2300          | 0.465        | 0.623 | 837              | 1123 | 0, 1                        |
|          | 4.48                     | 409              | 4014  | 2300          | 0.420        | 0.563 | 756              | 1013 |                             |
|          | 4.95                     | 374              | 3668  | 2300          | 0.383        | 0.514 | 691              | 926  |                             |

\*Special Order Ratio

## Option\_Live PTO Pump Mounting Kit

When attaching a hydraulic pump to the Live PTO, please order the pump mounting kit by referring to the figure and [Table 1, 2] below.



**[Table 1] Pump Mounting Kit Dimension** DMTP5100, 6500, DMT400H, 400HL

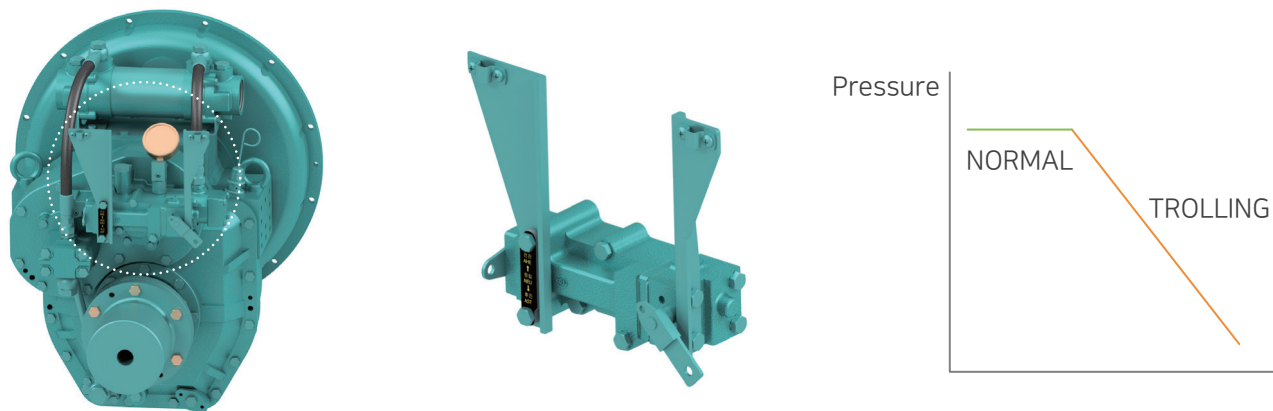
| No | Part Number | Pump Plate | Pinion Coupling | A       | B    | C    | D    | E (Bolt Standard) | F (Spline Standard) | Remark       |
|----|-------------|------------|-----------------|---------|------|------|------|-------------------|---------------------|--------------|
| 1  | AS_510616   | SAE A      | SAE B           | Ø82.55  | Ø106 | 5mm  | 34mm | 2-M10P1.5         | DP16/32 13T         | 2 Bolt holes |
| 2  | AS_510617   | SAE B      | SAE B           | Ø101.65 | Ø146 | 10mm | 53mm | 2-M12P1.75        | DP16/32 13T         | 2 Bolt holes |
| 3  | AS_510619   | SAE C      | SAE C           | Ø127.10 | Ø181 | 13mm | 50mm | 2-M16P2.0         | DP12/24 14T         | 2 Bolt holes |
| 4  | AS_510620   | SAE C      | SAE C           | Ø127.10 | Ø162 | 13mm | 50mm | 4-M14P2.0         | DP12/24 14T         | 4 Bolt holes |

**[Table 2] Pump Mounting Kit Dimension** DMT220DL

| No | Part Number | Pump Plate | Pinion Coupling | A       | B      | C    | D      | E (Bolt Standard) | F (Spline Standard) | Remark       |
|----|-------------|------------|-----------------|---------|--------|------|--------|-------------------|---------------------|--------------|
| 1  | AS_220621   | SAE A      | SAE B           | Ø82.55  | Ø106   | 8mm  | 54mm   | 2-M10P1.5         | DP16/32 13T         | 2 Bolt holes |
| 2  | AS_220622   | SAE B      | SAE B           | Ø101.65 | Ø146   | 11mm | 54mm   | 2-M12P1.75        | DP16/32 13T         | 2 Bolt holes |
|    |             |            |                 | Ø101.65 | Ø127   | 11mm | 54mm   | 4-M12P1.75        | DP16/32 13T         | 4 Bolt holes |
| 3  | AS_220623   | SAE C      | SAE C           | Ø127.10 | Ø181   | 15mm | 54.5mm | 2-M16P2.0         | DP12/24 14T         | 2 Bolt holes |
| 4  | AS_220624   | SAE C      | SAE C           | Ø127.10 | Ø161.9 | 15mm | 54.5mm | 4-M14P2.0         | DP12/24 14T         | 4 Bolt holes |

# Option\_Trolling Valve

## Slow Speed Operation Or Maneuvering



- The TROLLING VALVE is designed to allow very low speed operation by precisely controlling clutch slippage.
- The trolling valve is fitted directly on the selector valve. Trolling operation can be applied both ahead and astern direction.

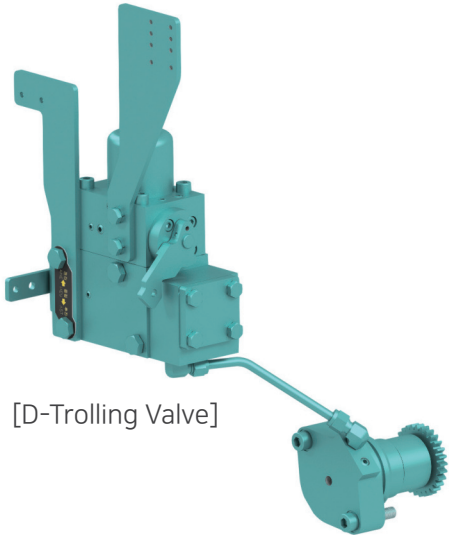
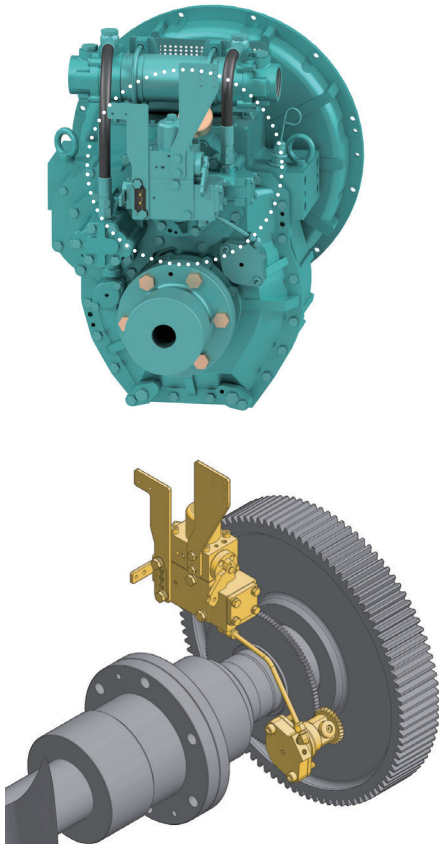
※ Trolling valve operation must be limited to a maximum of 900 engine RPM.

# Option\_Trolling Valve Part Number

| No | Part Number | Part Name            | Applicable Model                                                 |
|----|-------------|----------------------|------------------------------------------------------------------|
| 1  | ST_140500T  | TROLLING VALVE GROUP | DMT18A, 25AL, 50A, 70T, 90A, 100IV, 110A, 135HL, 140H            |
| 2  | ST_200500T  | TROLLING VALVE GROUP | DMT150H, 170HL, 180HL, 190H, 190HL, 200H, 200HL, 220DL, DMTP5100 |
| 3  | ST_240500T  | TROLLING VALVE GROUP | DMT240H, 260H, 260HL, 280H, 280HL, DMTP6500                      |
| 4  | ST_400500T  | TROLLING VALVE GROUP | DMT400H, 400HL, 430H, 460HL, 550H, 561HL, 600DL, 600BL           |
| 5  | ST_750500T  | TROLLING VALVE GROUP | DMT300HL, 330DL, DMTP7500                                        |

# Marine Transmission with D-Trolling Valve

A device that maintains the set output rotation while increasing or decreasing the clutch hydraulic pressure in accordance with the rotation on the shaft in the trolling state.



[D-Trolling Valve]

- The D trolling valve consists of D trolling group, governor group, and pipe ass'y.  
A gear is attached to the output shaft group connected to the propeller shaft to detect the propeller rotation speed.
- The clutch pressure is determined by the balance between the pressure by the lever switching position of the D control valve and the governor pressure, stabilizes the propeller speed according to the load variation.

※Trolling valve operation must be limited to a maximum of 900 engine RPM.

※ D-rolling valve is only available for the models below. Please purchase a new one with D-Trolling specification. Below models which can be applied to D-rolling valves have a different structure than previous models, so it cannot be applied to previous models.

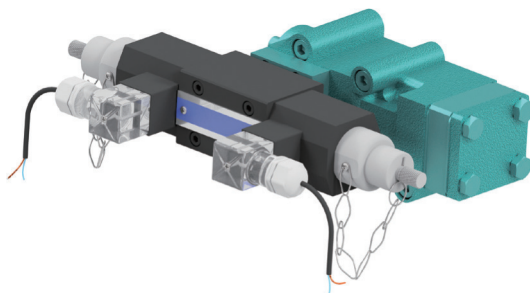
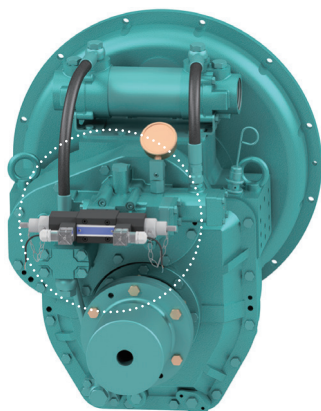
| Model   | Ratio                              | Max Input Torque |       | Max Input RPM | Capacity/RPM |       | Capacity/1800RPM |      | Remark |
|---------|------------------------------------|------------------|-------|---------------|--------------|-------|------------------|------|--------|
|         |                                    | (kgf.m)          | (N.m) |               | kW           | HP    | kW               | HP   |        |
| DMT90A  | 1.61*, 2.06, 2.45 2.82, 3.12, 3.46 | 87               | 857   | 3000          | 0.089        | 0.120 | 161              | 216  |        |
| DMT140H | 1.97, 2.57, 3.03 3.46              | 130              | 1275  | 2800          | 0.133        | 0.178 | 239              | 322  |        |
| DMT150H | 1.83*, 2.09, 2.51 3.08, 3.43       | 168              | 1648  | 2500          | 0.172        | 0.231 | 310              | 416  |        |
| DMT190H | 1.83*, 2.09, 2.51 3.08, 3.43       | 180              | 1765  | 2500          | 0.184        | 0.247 | 332              | 446  |        |
| DMT240H | 1.50*, 1.97*, 2.44 2.93, 3.40      | 218              | 2138  | 2500          | 0.223        | 0.299 | 402              | 540  |        |
| DMT280H | 2.06, 2.50, 2.92 3.26              | 298              | 2927  | 2500          | 0.306        | 0.410 | 550              | 739  |        |
| DMT430H | 2.05, 2.43, 2.93                   | 453              | 4443  | 2300          | 0.464        | 0.623 | 836              | 1122 |        |
|         | 3.23                               | 430              | 4218  | 2300          | 0.440        | 0.591 | 794              | 1065 |        |
|         | 3.40                               | 408              | 4002  | 2300          | 0.418        | 0.418 | 754              | 1011 |        |

\*Special Order Ratio



# Option\_Electric Control Valve

Suitable For Electrical Control Engine



- Sustainable sailing by adopting urgency operating valve
- Compatible to all electrical engine control makers
- Safety with solenoid valve by global makers

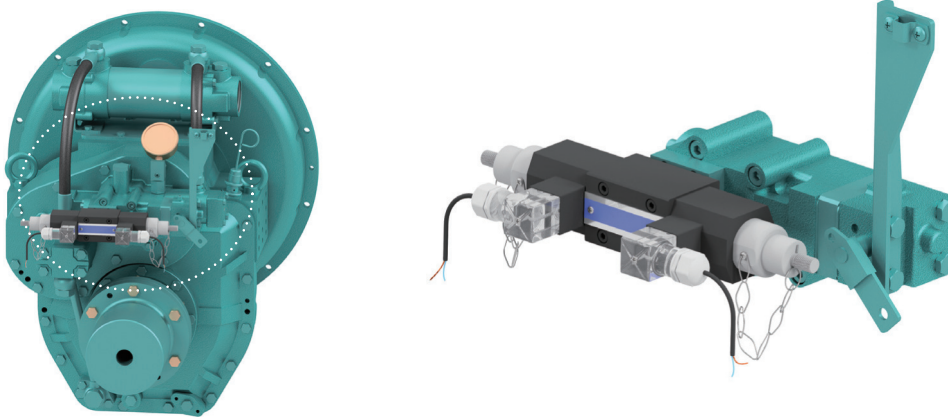
## Electric Control Valve Order Table

| No | Part Number | Part Name                    | Volt | Applicable Model                                                                                                     |
|----|-------------|------------------------------|------|----------------------------------------------------------------------------------------------------------------------|
| 1  | ST_200560   | ST_ELECTRIC VALVE GROUP(24V) | 24V  | DMT18A, 25AL, 50A, 70T, 90A, 100IV, 110A, 135HL, 140H, 150H, 170HL, 180HL, 190H, 190HL, 200H, 200HL, 220DL, DMTP5100 |
| 2  | ST_280560   | ST_ELECTRIC VALVE GROUP(24V) | 24V  | DMT240H, 260H, 260HL, 280H, 280HL, DMTP6500                                                                          |
| 3  | ST_450560   | ST_ELECTRIC VALVE GROUP(24V) | 24V  | DMT400H, 400HL, 430H, 460HL, 550H, 561HL, 600DL, 600BL                                                               |
| 4  | ST_750560   | ST_ELECTRIC VALVE GROUP(24V) | 24V  | DMT300HL, 330DL, DMTP7500                                                                                            |
| 5  | ST_200570   | ST_ELECTRIC VALVE GROUP(12V) | 12V  | DMT18A, 25AL, 50A, 70T, 90A, 100IV, 110A, 135HL, 140H, 150H, 170HL, 180HL, 190H, 190HL, 200H, 200HL, 220DL, DMTP5100 |
| 6  | ST_280570   | ST_ELECTRIC VALVE GROUP(12V) | 12V  | DMT240H, 260H, 260HL, 280H, 280HL, DMTP6500                                                                          |
| 7  | ST_450570   | ST_ELECTRIC VALVE GROUP(12V) | 12V  | DMT400H, 400HL, 430H, 460HL, 550H, 561HL, 600DL, 600BL                                                               |
| 8  | ST_750570   | ST_ELECTRIC VALVE GROUP(12V) | 12V  | DMT300HL, 330DL, DMTP7500                                                                                            |



## Option\_Electric Control Valve + Trolling Valve

Electric Control Valve and Trolling Valve can be used together



## Electric Control Valve + Trolling Valve Order Table

| No | Part Number | Part Name                              | Volt | Applicable Model                                                 |
|----|-------------|----------------------------------------|------|------------------------------------------------------------------|
| 1  | ST_140580   | ST_ELECTRIC VALVE GROUP, TROLLING(24V) | 24V  | DMT18A, 25AL, 50A, 70T, 90A, 100IV, 110A, 135HL, 140H            |
| 2  | ST_200580   | ST_ELECTRIC VALVE GROUP, TROLLING(24V) | 24V  | DMT150H, 170HL, 180HL, 190H, 190HL, 200H, 200HL, 220DL, DMTP5100 |
| 3  | ST_280580   | ST_ELECTRIC VALVE GROUP, TROLLING(24V) | 24V  | DMT240H, 260H, 260HL, 280H, 280HL, DMTP6500                      |
| 4  | ST_450580   | ST_ELECTRIC VALVE GROUP, TROLLING(24V) | 24V  | DMT400H, 400HL, 430H, 460HL, 550H, 561HL, 600DL, 600BL           |
| 5  | ST_750580   | ST_ELECTRIC VALVE GROUP, TROLLING(24V) | 24V  | DMT300HL, 330DL, DMTP7500                                        |
| 6  | ST_140590   | ST_ELECTRIC VALVE GROUP, TROLLING(12V) | 12V  | DMT18A, 25AL, 50A, 70T, 90A, 100IV, 110A, 135HL, 140H            |
| 7  | ST_200590   | ST_ELECTRIC VALVE GROUP, TROLLING(12V) | 12V  | DMT150H, 170HL, 180HL, 190H, 190HL, 200H, 200HL, 220DL, DMTP5100 |
| 8  | ST_280590   | ST_ELECTRIC VALVE GROUP, TROLLING(12V) | 12V  | DMT240H, 260H, 260HL, 280H, 280HL, DMTP6500                      |
| 9  | ST_450590   | ST_ELECTRIC VALVE GROUP, TROLLING(12V) | 12V  | DMT400H, 400HL, 430H, 460HL, 550H, 561HL, 600DL, 600BL           |
| 10 | ST_750590   | ST_ELECTRIC VALVE GROUP, TROLLING(12V) | 12V  | DMT300HL, 330DL, DMTP7500                                        |

# Mechanical Single Engine Electronic Lever

One lever controls both engine and Gearbox

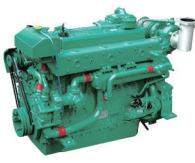


Single Engine Electronic Lever



Monitoring Kit

+



Mechanical Control Single Engine

+



Mechanical Control Single Gearbox

| Part Number | Model    | Part Name                            |
|-------------|----------|--------------------------------------|
| 45010000SM  | DEL100SM | SINGLE ENGINE ELECTRONIC LEVER GROUP |

- Components
- Single Engine Electronic Lever
  - Supply plug
  - Monitoring Kit

- Mechanical Actuator
  - Data Cable(1m \* 1, 20m \* 1, Y-type \* 1)
  - Handle Scale



# Mechanical Single Engine Electronic Lever(Separated type)

Left lever controls the gearbox, right lever controls the engine throttle



Single Engine Electronic Lever (Separated Type)



Monitoring Kit

+



Mechanical Control Single Engine

+



Mechanical Control Single Gearbox

| Part Number | Model    | Part Name                                     |
|-------------|----------|-----------------------------------------------|
| 45010000TM  | DEL100TM | SINGLE ENGINE ELECTRONIC LEVER GROUP(4500TLC) |

- Components
- Single Engine Electronic Lever
  - Supply plug
  - Monitoring Kit

- Mechanical Actuator
  - Data Cable(1m \* 1, 20m \* 2, Y-type \* 1)
  - Handle Scale



# Mechanical Twin Engine Electronic Lever

Left lever controls the gearbox, right lever controls the engine throttle



Twin Engines  
Electronic Lever



Monitoring Kit

+



Mechanical Control  
Twin Engines

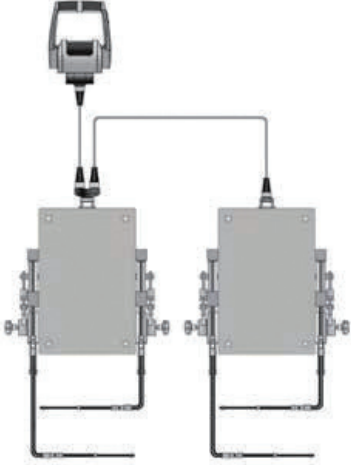
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Mechanical Control  
Twin Gearboxes

port  
engine  
gearbox  
control

starboard  
engine  
gearbox  
control

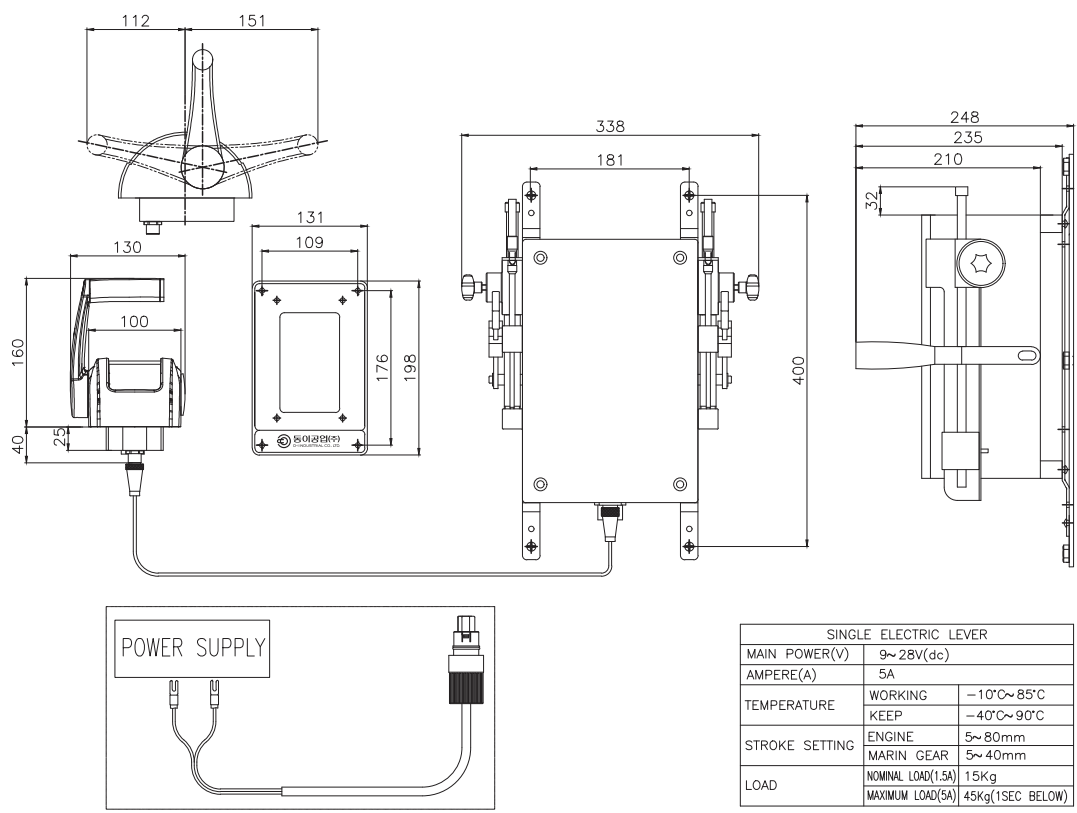


| Part Number | Model    | Part Name                          |
|-------------|----------|------------------------------------|
| 45020000SM  | DEL200TM | TWIN ENGINE ELECTRONIC LEVER GROUP |

**Components**

- Twin Engine Electronic Lever
- Supply plug
- Monitoring Kit
- Mechanical Actuator \* 2
- Data Cable(1m \* 1, 80m \* 1, Y-type \* 2)
- Handle Scale

# Mechanical Single Electronic Lever Dimension



# Electronical Single Engine Electronic Lever(Hyundai)

One lever controls both engine and Gearbox

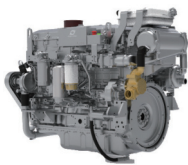


Single Engine Electronic Lever



Monitoring Kit

+



Hyundai Electronical Control Single Engine

+



Electronical Control Single Gearbox

engine and gearbox control



| Part Number | Model    | Part Name                            |
|-------------|----------|--------------------------------------|
| 45011000SE  | DEL101SE | SINGLE ENGINE ELECTRONIC LEVER GROUP |

■ Components

- Single Engine Electronic Lever
- Supply plug
- Monitoring Kit
- Engine Throttle Voltage Cable(3m)
- Electronical Actuator
- Data Cable(1m \* 1, 20m \* 1, Y-type \* 1)
- Gearbox Solenoid Driven Cable(7m)

# Electronical Single Engine Electronic Lever(John Deere)

One lever controls both engine and Gearbox



Single Engine Electronic Lever



Monitoring Kit

+



John Deere Electronical Control Single Engine

+



Mechanical Control Single Gearbox

engine and gearbox control



| Part Number | Model    | Part Name                            |
|-------------|----------|--------------------------------------|
| 45012000SE  | DEL102SE | SINGLE ENGINE ELECTRONIC LEVER GROUP |

■ Components

- Single Engine Electronic Lever
- Supply plug
- Monitoring Kit
- Engine Throttle Voltage Cable(3m)
- Electronical Actuator
- Data Cable(1m \* 1, 20m \* 1, Y-type \* 1)
- Gearbox Solenoid Driven Cable(7m)

# Electronical Single Engine Electronic Lever(Scania)

One lever controls both engine and Gearbox



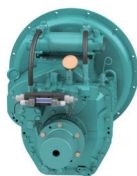
Single Engines  
Electronic Lever



Monitoring Kit



Scania Electronical  
Control Single Engine



Electronical Control  
Single Gearbox

engine and gearbox  
control



| Part Number | Model    | Part Name                            |
|-------------|----------|--------------------------------------|
| 45013000SE  | DEL103SE | SINGLE ENGINE ELECTRONIC LEVER GROUP |

## Components

- Single Engine Electronic Lever
- Supply plug
- Monitoring Kit
- Engine Throttle Voltage Cable(3m)
- Electronical Actuator
- Data Cable(1m \* 1, 20m \* 1, Y-type \* 1)
- Gearbox Solenoid Driven Cable(7m)

# Electronical Single Electronic Lever Dimension

