



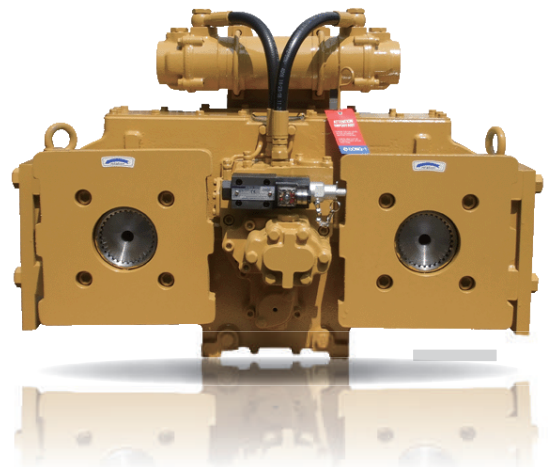
D-I
INDUSTRIAL CO., LTD.

**MARINE TRANSMISSION
STEERING SYSTEM
POWER TAKE OFF**

POWER TAKE OFF



Hydraulic DPO Series





Summary

1. **Address** : 13, Namgangro1367, Jinju, Gyeongnam, Republic of Korea (52781)
2. **Home page** : www.d-i.co.kr
3. **Foundation of the company** : 14th May. 1990
4. **Foundation of R&D department** : 2005.May.10
5. **Product** : Marine transmission, Marine steering systems, PTO(Power take off), Integral shaft supporter.
6. **Capacity of production** : 6,000 units /year
7. **The number of staffs** : 90





Business Fields

Marine Transmissions, PTOs(Power Take Offs), Hydraulic Steering Systems, Integral Shaft Supporters, Flexible Couplings, etc.

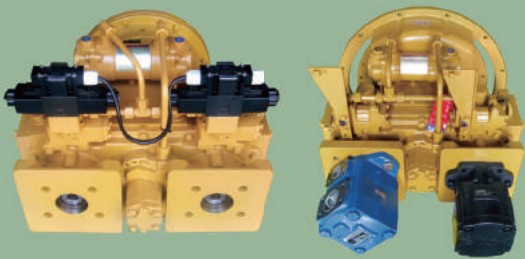
D-I INDUSTRIAL CO., LTD supports safe and convenient marine activities with the quality products through Maritime Total Solutions which can meet customized requirements.



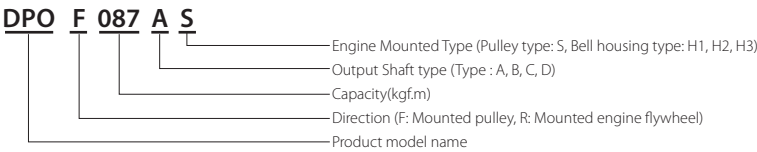
DPO 087

Main Use

It is attached to the pulley of engine or bell housing and gets 2 output shafts each to drive an independent clutch. There are two types of connection methods. One is pump mount type and the other is shaft type.



TYPE DESCRIPTION

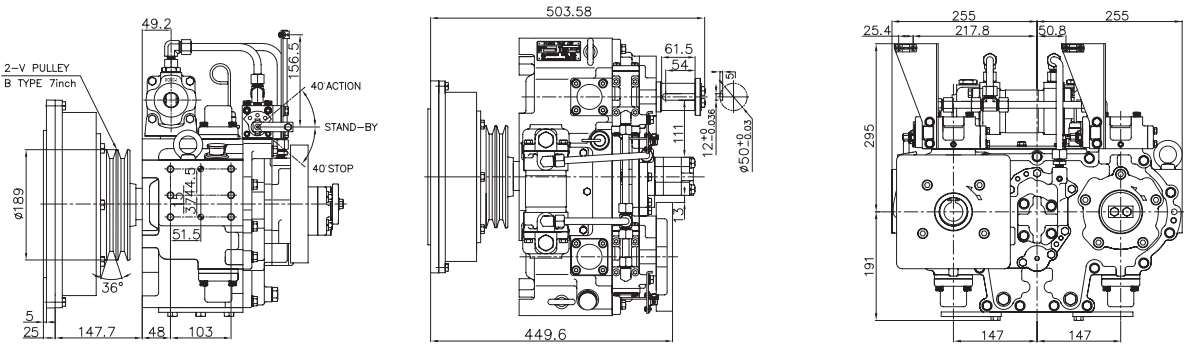


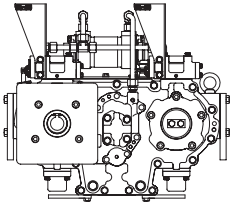
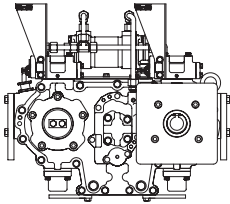
CAPACITY TABLE

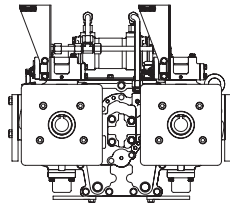
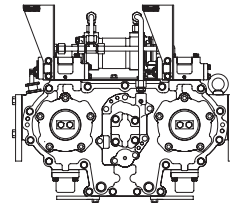
Model	Ratio	Permissible Max (rpm)	Output Torque Left/Right(kg. m)	Input (rpm)	Output (rpm)	Weight (kg)	Housing (SAE)
DPO-※087★	0.8490:1	3000	51/51	1800	2117	150	1, 2, 3
	1:1	3000	55/55	1800	1800	150	1, 2, 3

※F:Mounted engine pulley, R:Mounted engine flywheel *Output shaft type: A, B, C, D ★Mounted engine Type: S, H1, H2, H3
●Applicable pump standard: SAE A, B, C, D and E Output rotation is input direction.

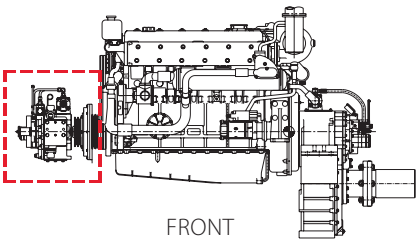
CAPACITY TABLE



Output Type		
	Type A L: PUMP, R: PULLEY	Type B L: PULLEY R: PUMP
Front	DPO-F087A	DPO-F087B
Rear	DPO-R087A	DPO-R087B

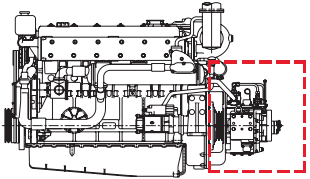
Output Type		
	Type C L: PUMP, R: PUMP	Type D L: PULLEY R: PULLEY
Front	DPO-F087C	DPO-F087D
Rear	DPO-R087C	DPO-R087D

MAIN PROPULSION ENGINE



FRONT

AUXILIARY ENGINE



REAR

Main Use

As PTO attached to either engine pulley or bell housing, the output shaft drives to the same rotation as one of shaft of driven engine.



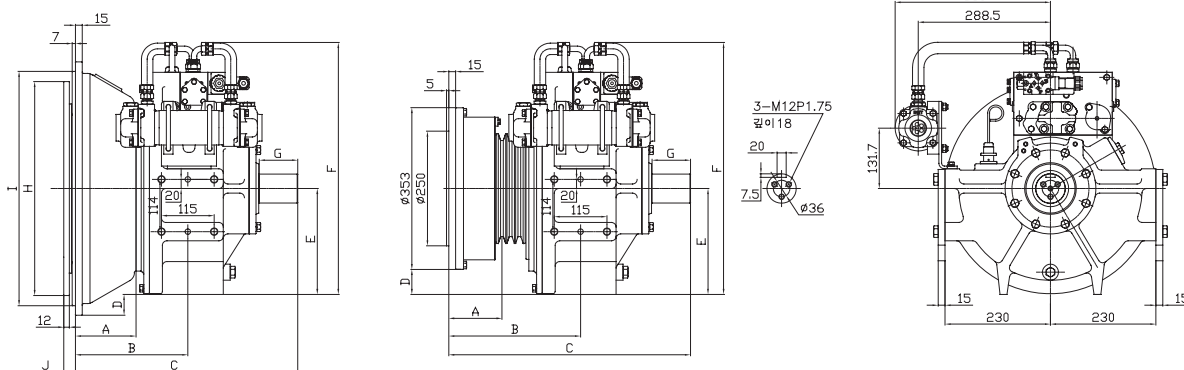
TYPE DESCRIPTION

DPO F 160 S H2

Engine Mounted Type (Pulley type: S, Bell housing type: H1, H2)
Output type (Shaft Type : S, Pump Type: P)
Capacity(kg.f.m)
Direction (F: Mounted pulley, R: Mounted engine flywheel)
Product model name

Model	Ratio	Promissible Max (rpm)	Input Power Capacity/ rpm		Clutch Type	Output Shaft Type	Output Torque (kg.m)	Output Max (rpm)	Weight (kg)	Housing (SAE)
			HP	kw						
DPO 160	1	3000	0.233	0.166	1Clutch	1Shaft	160	3000	125	1.2

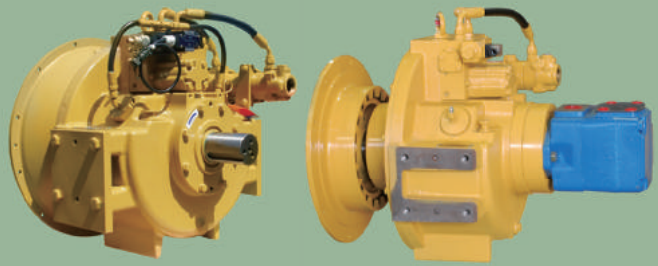
SHAFT OUT PUT TYPE

[illegible]

Model	A	B	C	D	E	F	G	H	I	J
DPO160SS	116.1	287.7	527.4	54.5	231	551.4	83.8	-	-	-
DPO160SH1	132	245.2	485	45.2	231	551.4	83.8	466.7	511.1	25.4
DPO160SH2	118	231.1	470.8	13.5	231	551.4	83.8	352.3	447.6	39.6
DPO160PS	116.1	287.7	491.8	54.5	231	551.4	40	-	-	-
DPO160PH1	132	245.2	449.4	45.2	231	551.4	40	466.7	511.1	25.4
DPO160PH2	118	231.1	435.2	13.5	231	551.4	40	352.3	447.6	39.6

Main Use

As PTO attached to either engine pulley or bell housing, the output shaft drives to the same rotation as one of input shaft of driven engine.



TYPE DESCRIPTION	DPO	F	210	S	H1
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- Engine Mounted Type (Pulley type: S, Bell housing type: H1, H2, H3)
- Output Shaft type (S:Shaft, P: Pump)
- Capacity(kgf.m)
- Direction (F: Mounted pulley, R: Mounted engine flywheel)
- Product model name

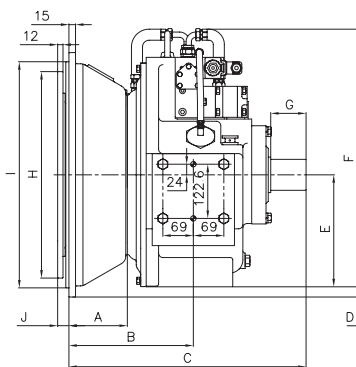
CAPACITY TABLE

Model	Ratio	Promissible Max (rpm)	Input Power Capacity/ rpm		Clutch Type	Output Shaft Type	Output Torque (kg.m)	Output Max (rpm)	Weight (kg)	Housing (SAE)
			HP	kw						
DPO 210	1:1	2300	0.2794	0.2085	1 Clutch	1 Shaft	200	2300	250	1, 2, 3
DPO 310	1:1	2300	0.4163	0.2316	1 Clutch	1 Shaft	300	2300	250	1, 2, 3

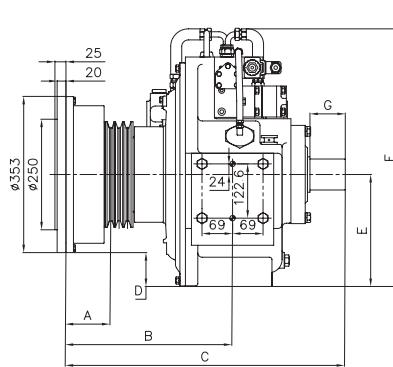
※F:Mounted engine pulley, R:Mounted engine flywheel *Output shaft type: S(Shaft), P(Pump)

★Mounted engine Type: S, H1, H2, H3, SL, H1L, H2L, H3L

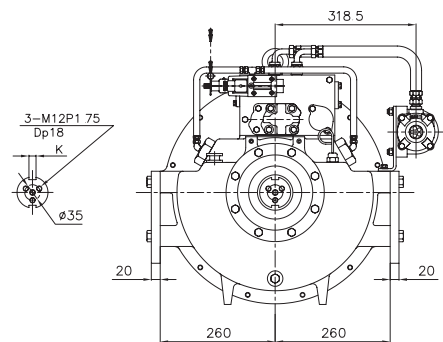
PRODUCT DIMENSIONAL DATA



H Type Bell Housing



S Type Directly Mount

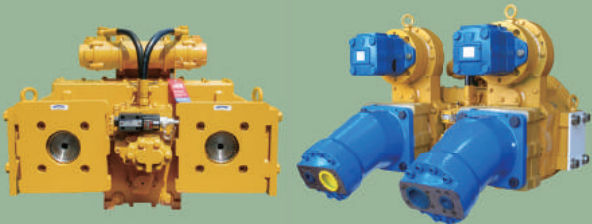


Model	A	B	C	D	E	F	G	H	I	J	K
DP0210S	86.3	376.7	632.4	76.5	253	582.2	100	-	-	-	20
DP0310S	86.3	376.7	631.6	76.5	253	582.2	80	-	-	-	2-16
DP0310SL	86.3	376.7	698.4	76.5	253	582.2	150	-	-	-	20
DP0210H1	132.2	281.4	537.1	23.2	253	582.2	100	466.7	511.1	25.4	20
DP0210H2	118	267.2	522.9	8.5	253	582.2	100	352.3	447.6	39.6	20
DP0310H1	132.2	281.4	536.3	23.2	253	582.2	80	466.7	511.1	25.4	2-16
DP0310H2	118	267.2	522.1	8.5	253	582.2	80	352.3	447.6	39.6	2-16
DPO310H1L	132.2	281.4	603.1	23.2	253	582.2	150	466.7	511.1	25.4	20
DPO310H2L	118	267.2	588.9	8.5	253	582.2	150	352.3	447.6	39.6	20

DPO 410

Main Use

It gets 2 output shafts to drive to the same rotation with one input clutch. There are two types of connection methods. One is pump mount type and the other is shaft type.



TYPE DESCRIPTION DPO F 410 S H1

- Engine Mounted Type (Pulley type: S, Bell housing type: H0, H1, H2)
- Output Shaft type (S: Shaft, P: Pump)
- Capacity(kgf.m)
- Direction (F: Mounted pulley, R: Mounted engine flywheel)
- Product model name

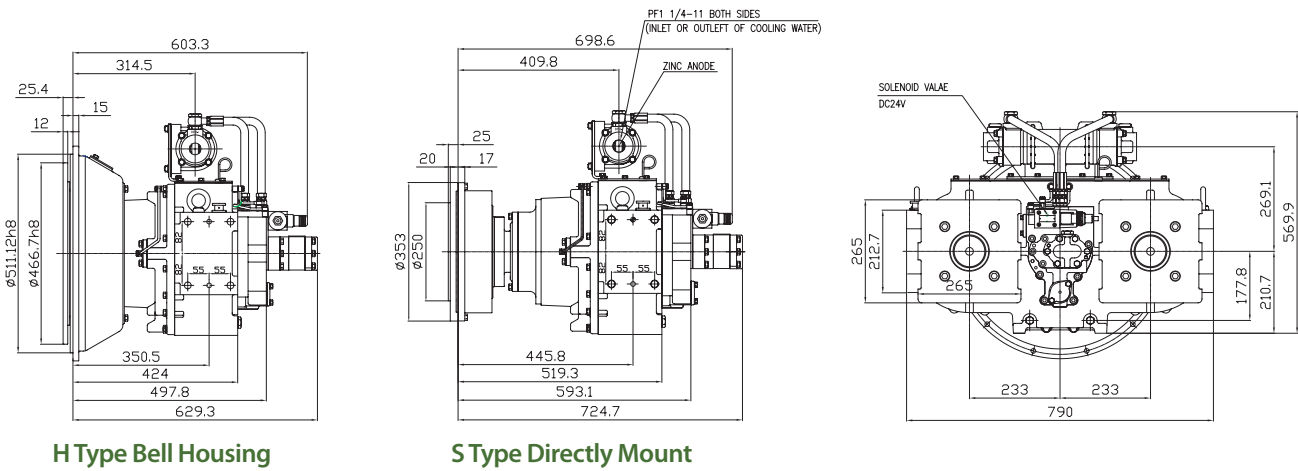
CAPACITY TABLE

Model	Ratio	Permissible Max (rpm)	Output Torque Left/Right (kg.m)		Input (rpm)	Output (rpm)	Weight (kg)	Housing (SAE)
DPO-※410★	0.6607:1	1782	400 200 0	0 200 400	1320	2000	430	0, 1, 2
	0.7692:1	2052			1520	2000	430	0, 1, 2
	0.9787:1	2646			1960	2000	430	0, 1, 2
	1.2439:1	3200			1800	1451	430	0, 1, 2

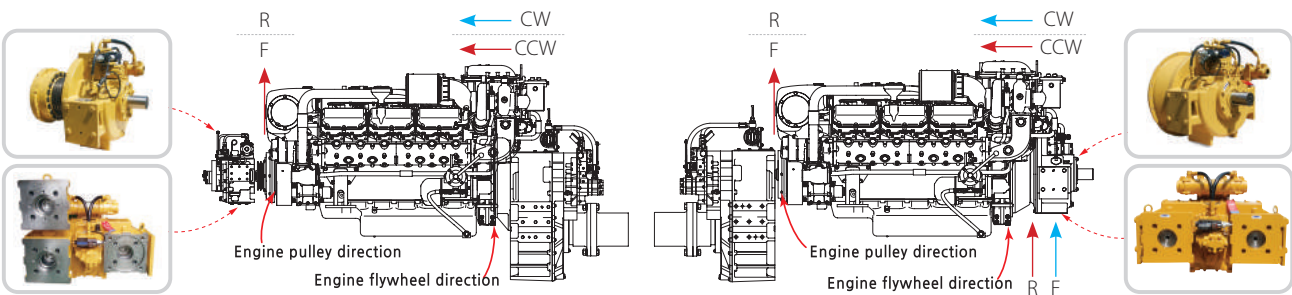
※F:Mounted engine pulley, R:Mounted engine flywheel *Output shaft type: A, B, C, D(DPO 087 Reference ★Mounted engine Type: S, H0, H1, H2
● Applicable pump standard: SAE A, B, C, D and E Output rotation is reverse of input direction.

※It is possible to make customized gearbox

PRODUCT DIMENSIONAL DATA



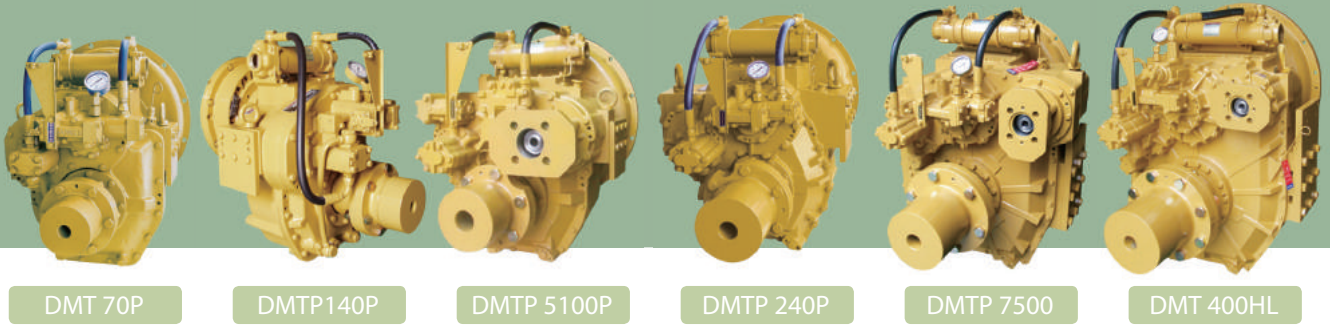
PTO APPLICATION



● Application: Water Jet, Hydraulic pump, Send pump, Water pump, Fire pump, Others

※It is possible to make customized gearbox

REDUCTION PTO



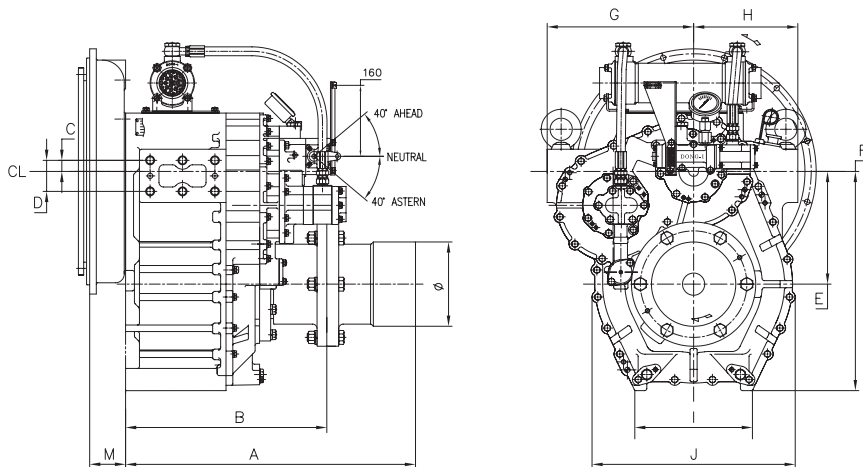
CAPACITY TABLE

Model	Ratio	Torque (kg.m)	Permissible Max(rpm)	HP@1800	HP@2100	Housing (SAE)
DMT70P	1.61, 2.06, 2.45, 2.82, 3.12, 3.46	87.5	3000	220	257	1, 2, 3
DMT140P	※ 1.47, 1.97, 2.57, 3.03, 3.46	130	2800	327	381	1, 2, 3
DMTP5100P	※ 1.25, 1.47, 1.76, 1.93	168	2500	422	493	1, 2, 3
	2.48, 3.08	150	2500	377	440	1, 2, 3
	3.48	130	2500	326	381	1, 2, 3
DMT240P	※ 1.25, 1.97, 2.44, 2.92, 3.40	219	2500	550	642	0, 1
DMTP7500	3.56	298	2300	750	875	0, 1
	4.13	292	2300	735	857	0, 1
	4.59	286	2300	720	840	0, 1
DMT400HL	3.02, 3.28, 3.56, 4.07	453	2300	1140	1329	0, 1
	4.48, 4.95	374	2300	940	1096	0, 1

※ Ahead output torque:100%, 30% ※ Astern output torque:30%, 100%

✧ It is possible to make customized gearbox

PRODUCT DIMENSIONAL DATA



MODEL	A	B	C	D	E	F	G	H	I	J	K	Ø
DMT 70P	436	325	+20	40	160.5	323.5	228	175	170	326	70	110
DMT 140P	455	344	-15	50	195	388	249	197	224	386	100	140
DMTP 5100P	531.3	391.3	-15	50	195	390	270	250	206	383	100	150
DMT 240P	639	439	+25	70	227	448	330	240	254	447	146	185
DMTP 7500P	683	463	-219	200	3193	634	317.8	368.8	435.8	516.5	160	200
DMT 400HL	781.6	531.6	-207.5	200	57.5	698	360	360	368	658.9	170	220

INTEGRAL **SHAFT SUPPORTER**

Main Use

It is used for transferring the power through the use of engine and for protecting the engine and driven equipment with applying a flexible coupling.

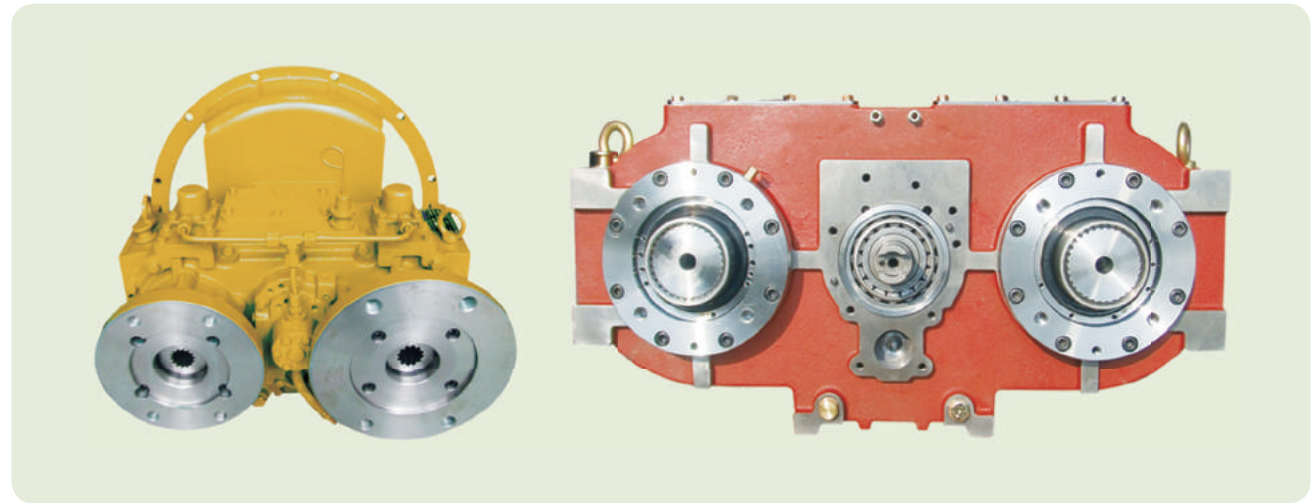
Flexible coupling : Lowering the own vibration of engine thereby and blocking or reducing the vibration torque transferring which can be occurred on the engine to driven equipment.



CAPACITY TABLE

MODEL	Ratio	Permissible Max(rpm)	Power/rpm		1800 rpm		2100 rpm		2300 rpm		Weight (kg)	Housing (SAE)
			HP	kw	HP	kw	HP	kw	HP	kw		
DIS 100A	1:1	3600	0.1394	0.1041	280	187	292	218	320	239	21	2,3
DIS 120A	1:1	2700	0.1672	0.1248	300	224	350	262	384	287	50	2
DIS 300A	1:1	2700	0.3769	0.2810	678	505	791	590	867	646	56	1

CLUTCH **PTO**



Main Use

This PTO is attached to the engine pulley or bell housing. It is a power transfer device equipped with clutch.

CAPACITY TABLE

MODEL	Ratio	Permissible Max(rpm)	Output Toque(kg.m) Left/Right		Input (rpm)	Output (rpm)	Housing (SAE)
★DP0087G	0.85:1	3000	51	51	1700	2000	1, 2, 3
	1:1	3000	60	60	1800	1800	1, 2, 3
★DP0410G	0.66:1	1782	450 225 0	0 225 450	1320	2000	0, 1, 2
	0.76:1	2052			1520	2000	0, 1, 2
	0.98:1	2646			1960	2000	0, 1, 2
	1.24:1	3200			1800	1451	0, 1, 2

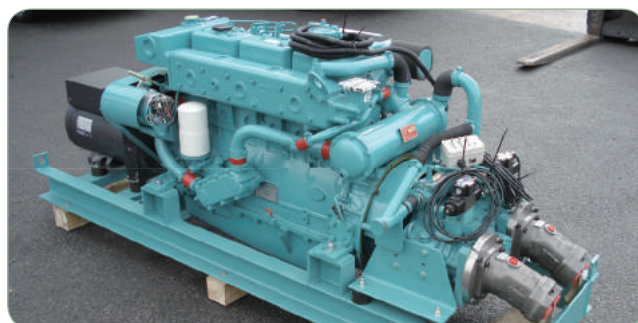
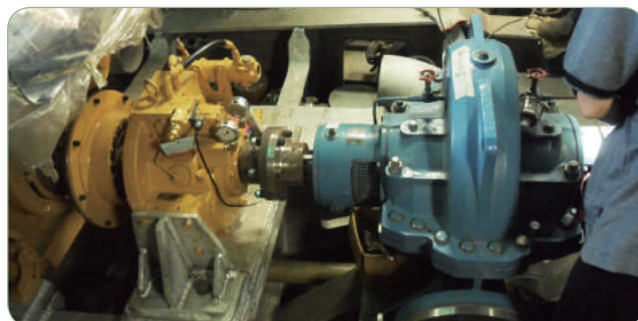
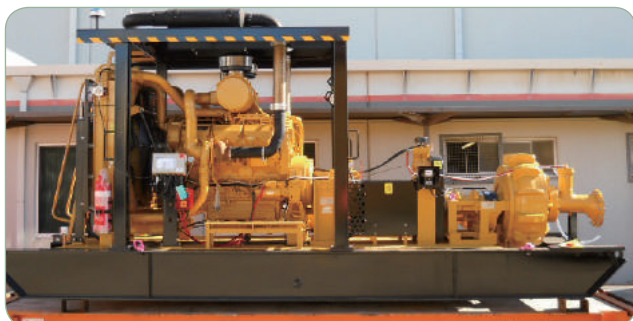
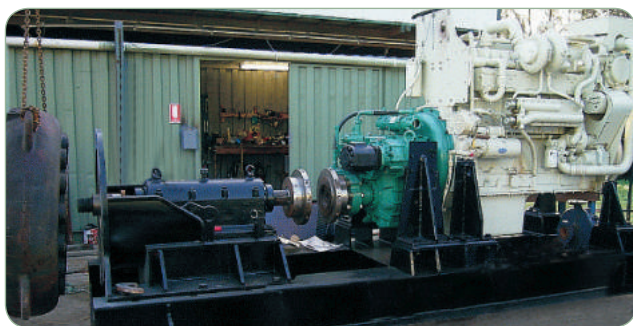
* Applicable pump standard : SAE A, B, C, D and E Output rotation is reverse of input direction

★Order production

※It is possible to make customized gearbox

PTO APPLICATION

We D-I Industrial Co, Ltd, Support the safety and convenience of marine activity as we supply the best products with unceasing self-renovation and challenge around the world.





www.d-i.co.kr

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