

8DT/8RT Dimensions

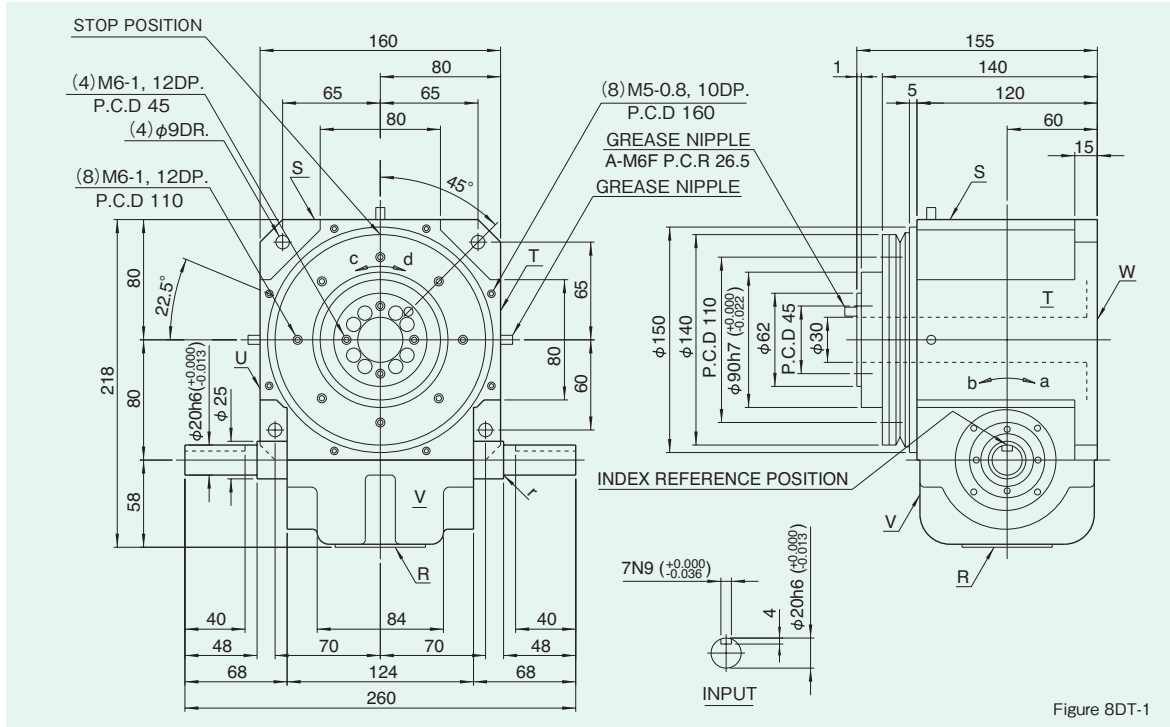


Figure 8DT-1

Locations of oil plug, etc., and oil capacity

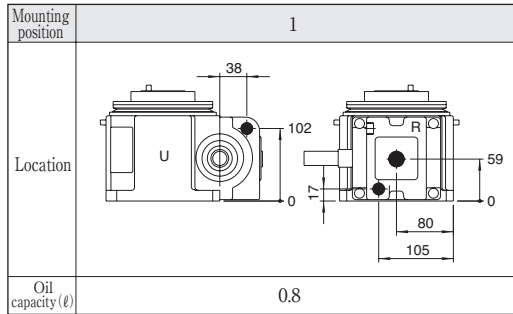


Figure 8DT-2

Precautions

- Each point indicated in the mounting positions shown in Figure 8DT-2 represents (starting at top) the oil plug (PT3/8), oil level (VA-01), and drain (PT3/8).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 8DT-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Table 8DT-1

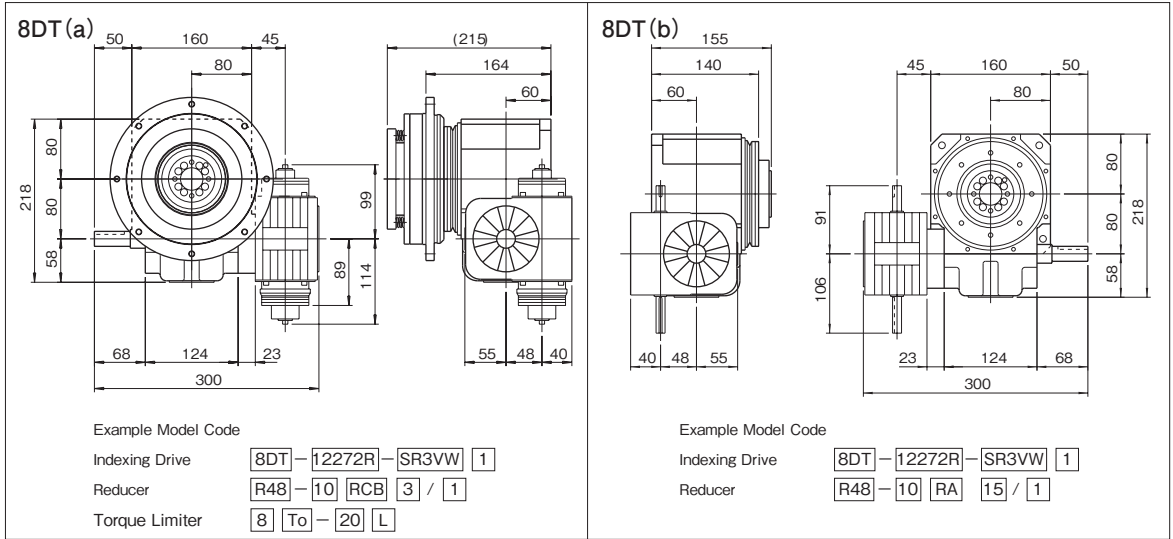
Specifications

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	4704	Input allowable axial load	P ₄	N	1666	Indexing accuracy (1 DWELL)		sec	±30
Output allowable radial load	P ₂	N	2548	Input maximum repetitious bending force	P ₅	N	1470	Indexing accuracy (2 DWELL)		sec	±60
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	93.1	Indexing accuracy (3 DWELL)		sec	±90
Output torsional rigidity	K ₁	N·m/rad	1.76×10 ⁵	Input torsional rigidity	K ₂	N·m/rad	843×10 ³	Indexing accuracy (4 DWELL)		sec	±120
Output inertia	J ₀	kg·m ²	8.68×10 ⁻³	Input inertia	J ₁	kg·m ²	7.25×10 ⁻⁴	Repetitive accuracy		sec	30
Output allowable bending moment	P ₃	N·m	61.7					Product weight		kg	20
								Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)

Mounted accessories



Precautions

- Models 8DT and 8RT can be equipped with reducer R48.
- The reducer can be mounted in 16 different positions as shown on page of Reducer.
- Models 8DT and 8RT can be equipped with torque limiters 8To.

[illegible]

Figure 11 DT-1

11DT(a)

Technical drawing of the 11DT(a) gearbox. The front view shows a circular housing with a central flange. The side view shows the profile of the gearbox with a mounting bracket. The rear view shows the input shaft and coupling. Dimensions are provided in millimeters.

Dimensions (mm):

- Front View: 218 (total width), 80 (flange width), 45 (base width), 65 (base width), 70 (base width).
- Side View: 132 (total height), 143 (mounting bracket height), 114 (mounting bracket height), 50 (flange width), 220 (flange width), 60 (flange width), 110 (flange width), 110 (flange width), 296 (total height), 76 (flange width), 30 (base width), 170 (base width), 85 (base width), 380 (total width).
- Rear View: 110 (flange width), 110 (flange width), 296 (total height), 76 (flange width), 30 (base width), 170 (base width), 85 (base width), 380 (total width).

11DT(b)

Technical drawing of the 11DT(b) gearbox. The front view shows a circular housing with a central flange. The side view shows the profile of the gearbox with a mounting bracket. The rear view shows the input shaft and coupling. Dimensions are provided in millimeters.

Dimensions (mm):

- Front View: 220 (total width), 60 (flange width), 50 (flange width), 110 (flange width), 110 (flange width), 296 (total height), 76 (flange width), 85 (base width), 170 (base width), 30 (base width), 380 (total width).
- Side View: 110 (flange width), 110 (flange width), 296 (total height), 76 (flange width), 85 (base width), 170 (base width), 30 (base width), 380 (total width).
- Rear View: 200 (total width), 185 (flange width), 80 (flange width), 70 (base width), 65 (base width), 45 (base width).

Example Model Code

Indexing Drive: 11DT-12272R-LR3VW 1

Reducer: R65-20 RCB 15 / 1

Torque Limiter: 11 To-30 L

Example Model Code

Indexing Drive: 11DT-16122R-SR3VW 1

Reducer: R65-40 RA 3 / 1

- Models 11DT and 11RT can be equipped with reducer R48.
- The reducer can be mounted in 16 different positions as shown on page of Reducer.
- Models 11DT and 11RT can be equipped with torque limiters 11To.

Mounting position	1
Location	
Oil capacity (ℓ)	1.4

Figure 11DT-2

- Each point indicated in the mounting positions shown in Figure 11DT-2 represents (starting at top) the oil plug (PT3/8), oil level (VA-01), and drain (PT3/8).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 11DT-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Table 11DT-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	8428	Input allowable axial load	P ₄	N	2940	Indexing accuracy (1 DWELL)		sec	±30
Output allowable radial load	P ₂	N	4116	Input maximum repetitious bending force	P ₅	N	2450	Indexing accuracy (2 DWELL)		sec	±60
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	245	Indexing accuracy (3 DWELL)		sec	±90
Output torsional rigidity	K ₁	N·m /rad	3.92×10 ⁵	Input torsional rigidity	K ₂	N·m /rad	1.57×10 ⁴	Indexing accuracy (4 DWELL)		sec	±120
Output inertia	J ₀	kg·m ²	3.75×10 ⁻²	Input inertia	J ₁	kg·m ²	2.5×10 ⁻³	Repetitive accuracy		sec	30
Output allowable bending moment	P ₃	N·m	117.6					Product weight		kg	50
								Housing color	Gray		

 $(1\text{ N} \doteq 0.102\text{ kgf})$

14DT/14RT Dimensions

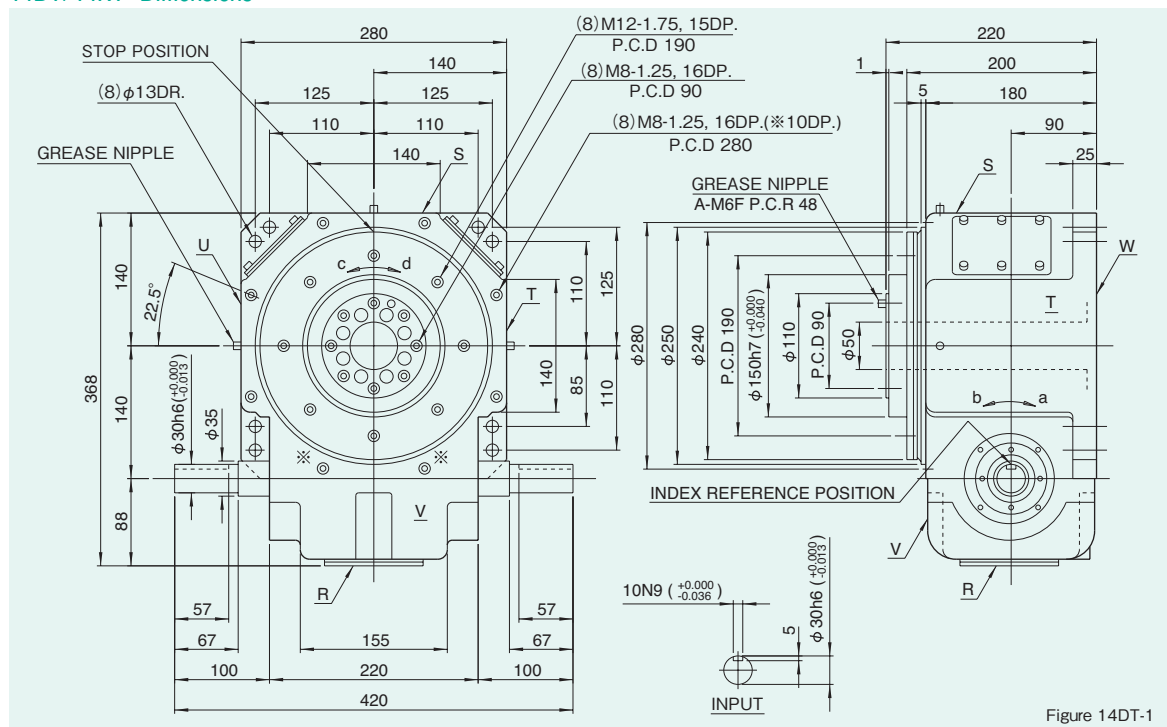


Figure 14DT-1

Locations of oil plug, etc., and oil capacity

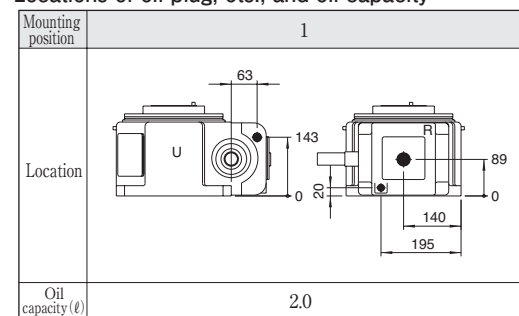


Figure 14DT-2

Precautions

- Each point indicated in the mounting positions shown in Figure 14DT-2 represents (starting at top) the oil plug (PT1/2), oil level (VA), and drain (PT3/8).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 14DT-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

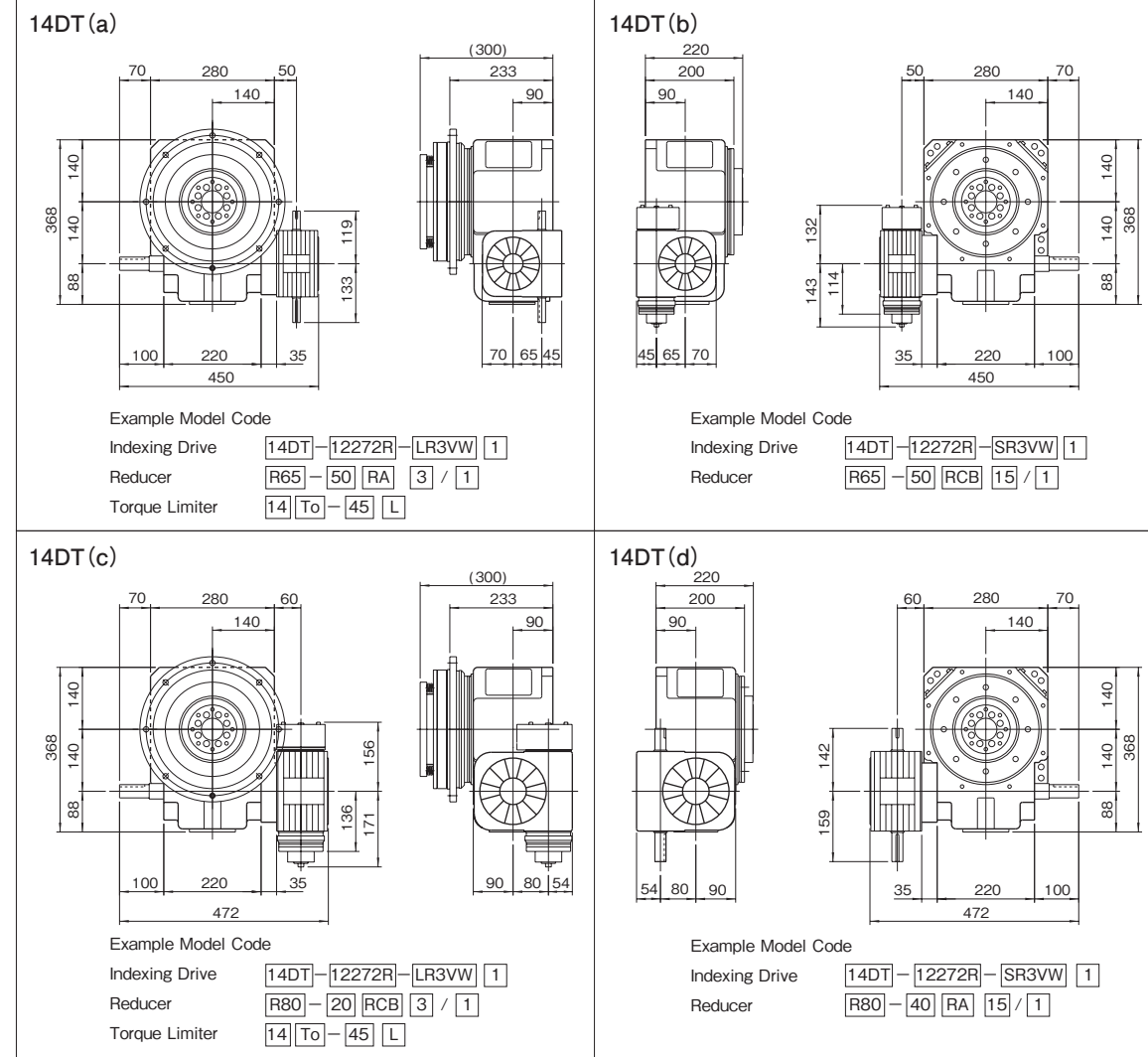
Specifications

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	10290	Input allowable axial load	P ₄	N	4900	Indexing accuracy (1 DWELL)		sec	±30
Output allowable radial load	P ₂	N	7056	Input maximum repetitious bending force	P ₅	N	3430	Indexing accuracy (2 DWELL)		sec	±60
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	519.4	Indexing accuracy (3 DWELL)		sec	±90
Output torsional rigidity	K ₁	N·m/rad	7.64×10 ⁵	Input torsional rigidity	K ₂	N·m/rad	2.25×10 ⁴	Indexing accuracy (4 DWELL)		sec	±120
Output inertia	J ₀	kg·m ²	0.125	Input inertia	J ₁	kg·m ²	1.75×10 ⁻²	Repetitive accuracy		sec	30
Output allowable bending moment	P ₃	N·m	235.2					Product weight		kg	80
								Housing color			Gray

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)

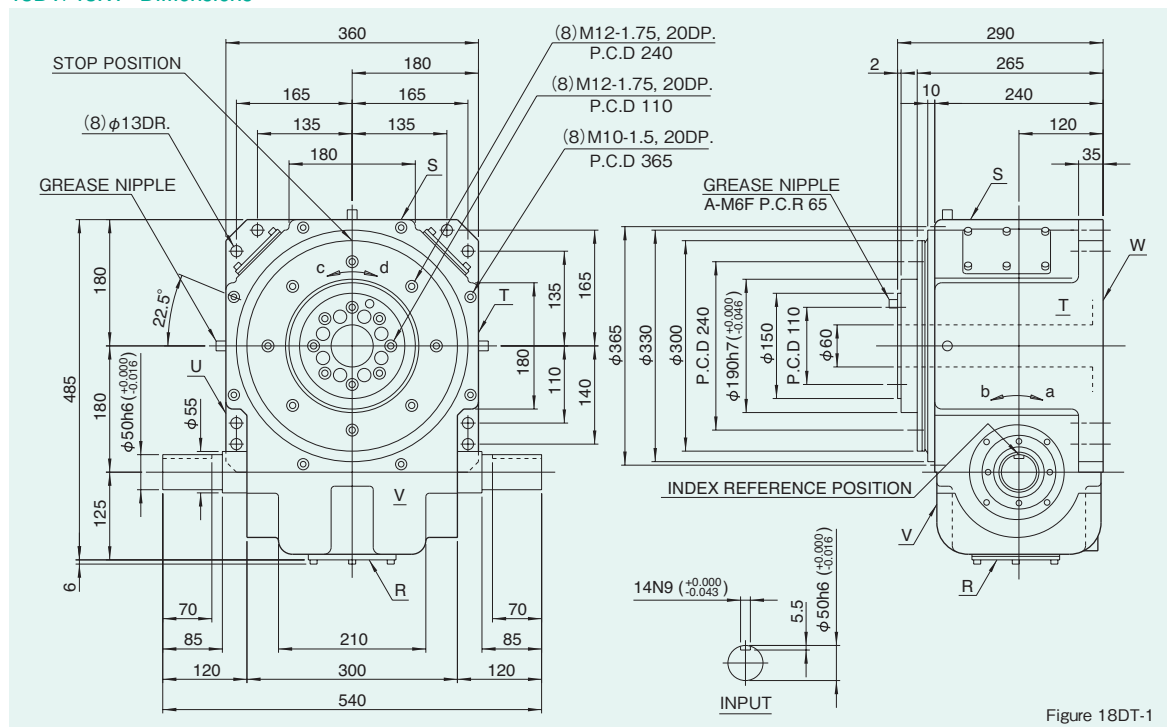
Mounted accessories



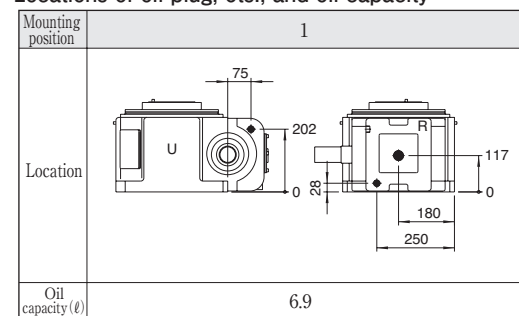
Precautions

- Models 14DT and 14RT can be equipped with reducers R65 and R80.
- The reducer can be mounted in 16 different positions as shown on page of Reducer.
- Models 14DT and 14RT can be equipped with torque limiters 14To.
- Reducers require a collar for mounting.

18DT/18RT Dimensions



Locations of oil plug, etc., and oil capacity



Precautions

- Each point indicated in the mounting positions shown in Figure 18DT-2 represents (starting at top) the oil plug (PT1/2), oil level (VA), and drain (PT1/2).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 18DT-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

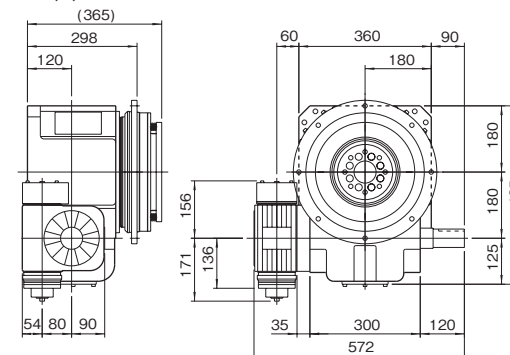
Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	14700	Input allowable axial load	P ₄	N	11760	Indexing accuracy (1 DWELL)		sec	±30
Output allowable radial load	P ₂	N	10780	Input maximum repetitious bending force	P ₅	N	9408	Indexing accuracy (2 DWELL)		sec	±60
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	2156	Indexing accuracy (3 DWELL)		sec	±90
Output torsional rigidity	K ₁	N·m/rad	1.96×10 ⁶	Input torsional rigidity	K ₂	N·m/rad	1.37×10 ⁵	Indexing accuracy (4 DWELL)		sec	±120
Output inertia	J ₀	kg·m ²	0.38	Input inertia	J ₁	kg·m ²	5.75×10 ⁻²	Repetitive accuracy		sec	30
Output allowable bending moment	P ₃	N·m	529.2					Product weight		kg	180
								Housing color			Gray

Note : Input inertia : J is calculated in dwell.

(1N≐0.102kgf)

Mounted accessories

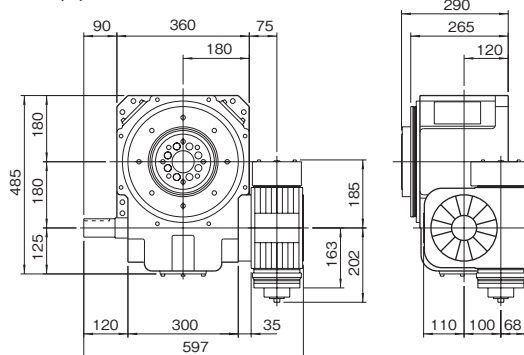
18DT (a)



Example Model Code

Indexing Drive 18DT-12272R-LR3VW 1
 Reducer R80-50 RCB 15/1
 Torque Limiter 20 To-70 M

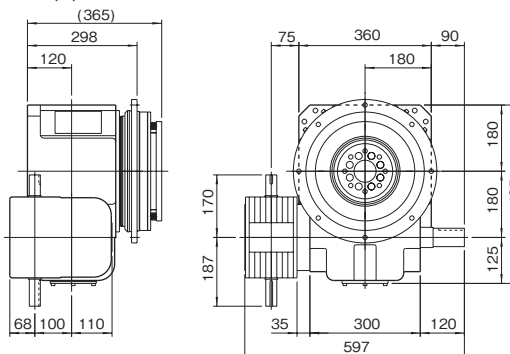
18DT (b)



Example Model Code

Indexing Drive 18DT-12272R-SR3VW 1
 Reducer R100-50 RCB 3/1

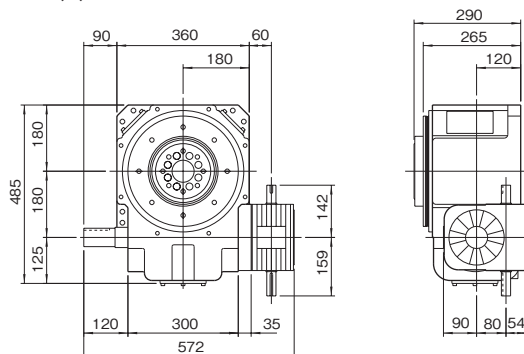
18DT (c)



Example Model Code

Indexing Drive 18DT-12272R-LR3VW 1
 Reducer R100-50 RA 15/1
 Torque Limiter 20 To-70 M

18DT (d)



Example Model Code

Indexing Drive 18DT-12272R-SR3VW 1
 Reducer R80-50 RA 3/1

Precautions

- Models 18DT and 18RT can be equipped with reducers R80 and R100.
- The reducer can be mounted in 16 different positions as shown on page of Reducer.
- Models 18DT and 18RT can be equipped with torque limiters 20To.

25DT/25RT Dimensions

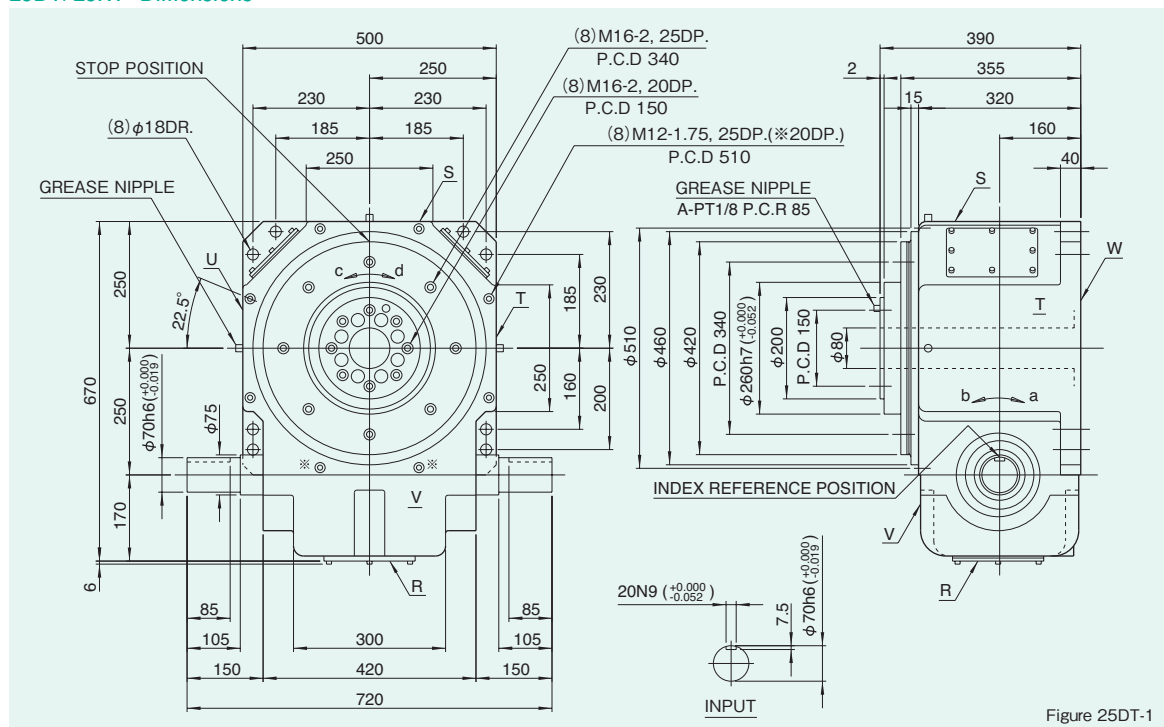


Figure 25DT-1

Locations of oil plug, etc., and oil capacity

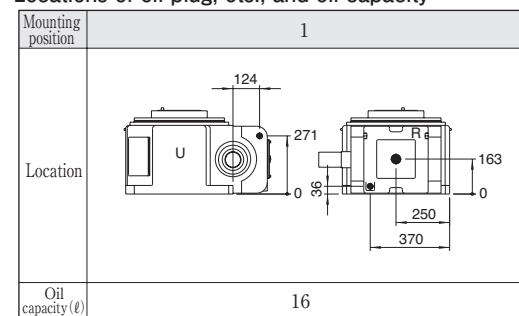


Figure 25DT-2

Precautions

- Each point indicated in the mounting positions shown in Figure 25DT-2 represents (starting at top) the oil plug (PT3/4), oil level (VB), and drain (PT3/4).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 25DT-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

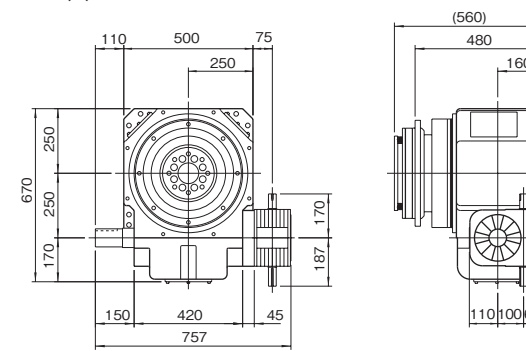
Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	24500	Input allowable axial load	P ₄	N	18620	Indexing accuracy (1 DWELL)		sec	±30
Output allowable radial load	P ₂	N	17640	Input maximum repetitious bending force	P ₅	N	22050	Indexing accuracy (2 DWELL)		sec	±60
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	6566	Indexing accuracy (3 DWELL)		sec	±90
Output torsional rigidity	K ₁	N·m/rad	4.9×10 ⁶	Input torsional rigidity	K ₂	N·m/rad	4.02×10 ⁵	Indexing accuracy (4 DWELL)		sec	±120
Output inertia	J ₀	kg·m ²	1.95	Input inertia	J ₁	kg·m ²	0.215	Repetitive accuracy		sec	30
Output allowable bending moment	P ₃	N·m	980					Product weight		kg	450
								Housing color			Gray

Note : Input inertia : J is calculated in dwell.

(1N≐0.102kgf)

Mounted accessories

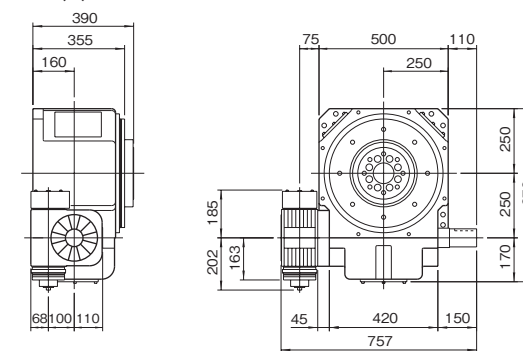
25DT (a)



Example Model Code

Indexing Drive 25DT-12272R-LR3VW 1
 Reducer R100-50 RA 3 / 1
 Torque Limiter 25 To-70 L

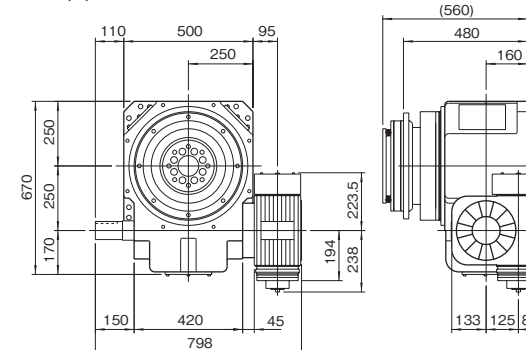
25DT (b)



Example Model Code

Indexing Drive 25DT-12272R-SR3VW 1
 Reducer R100-50 RCB 15 / 1
 Torque Limiter

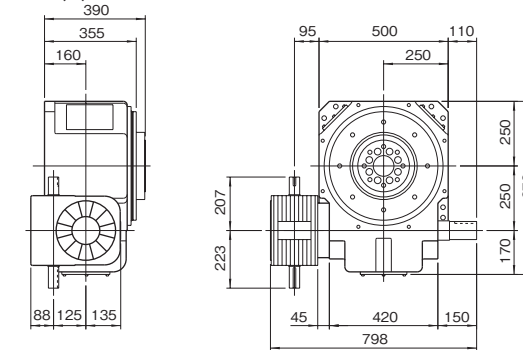
25DT (c)



Example Model Code

Indexing Drive 25DT-12272R-LR3VW 1
 Reducer R125-40 RCB 3 / 1
 Torque Limiter 25 To-70 L

25DT (d)



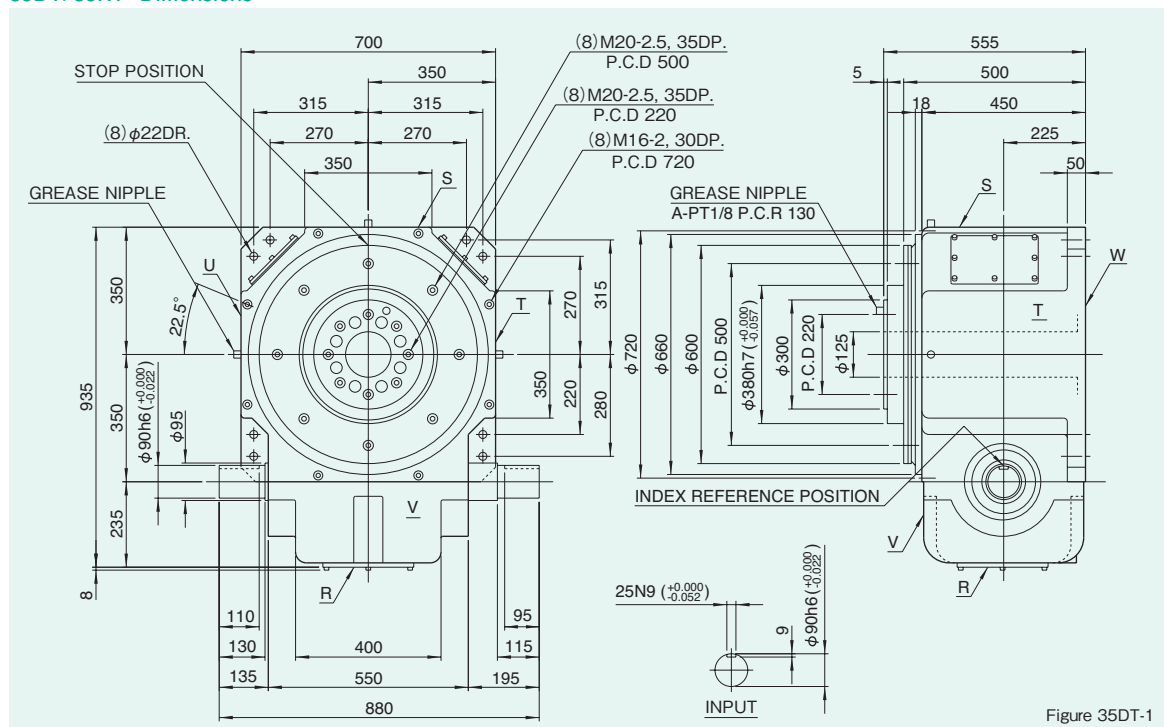
Example Model Code

Indexing Drive 25DT-12272R-SR3VW 1
 Reducer R125-50 RA 15 / 1

Precautions

- Models 25DT and 25RT can be equipped with reducers R100 and R125.
- The reducer can be mounted in 16 different positions as shown on page of Reducer.
- Models 25DT and 25RT can be equipped with torque limiters 25To.

35DT/35RT Dimensions



Locations of oil plug, etc., and oil capacity

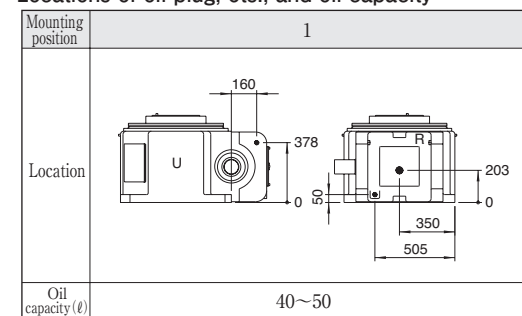


Figure 35DT-2

Precautions

- Each point indicated in the mounting positions shown in Figure 35DT-2 represents (starting at top) the oil plug (PT3/4), oil level (VB), and drain (PT3/4).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 35DT-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

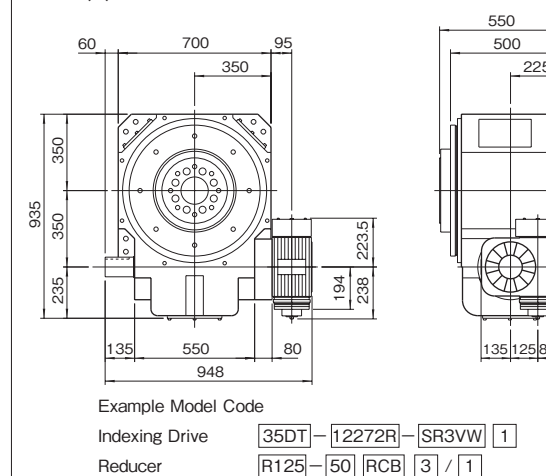
Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	44100	Input allowable axial load	P ₄	N	27440	Indexing accuracy (1 DWELL)		sec	±20
Output allowable radial load	P ₂	N	32340	Input maximum repetitious bending force	P ₅	N	37240	Indexing accuracy (2 DWELL)		sec	±40
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	9800	Indexing accuracy (3 DWELL)		sec	±60
Output torsional rigidity	K ₁	N·m/rad	1.18×10 ⁷	Input torsional rigidity	K ₂	N·m/rad	9.02×10 ⁵	Indexing accuracy (4 DWELL)		sec	±80
Output inertia	J ₀	kg·m ²	9.83	Input inertia	J ₁	kg·m ²	0.675	Repetitive accuracy		sec	20
Output allowable bending moment	P ₃	N·m	1960					Product weight		kg	1000
								Housing color			Gray

Note : Input inertia : J is calculated in dwell.

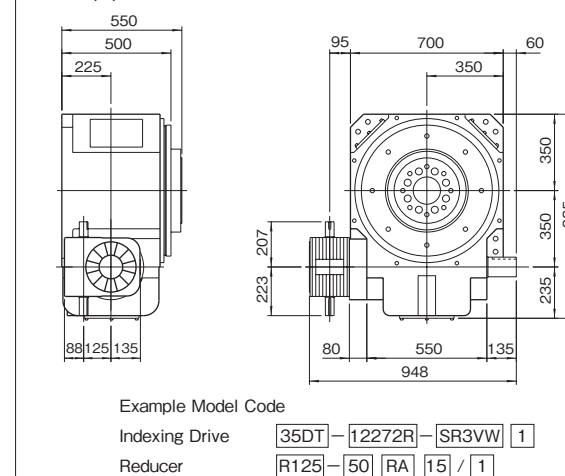
(1N=0.102kgf)

Mounted accessories

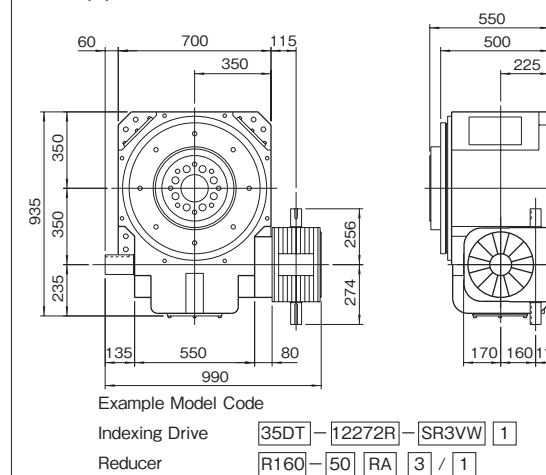
35DT (a)



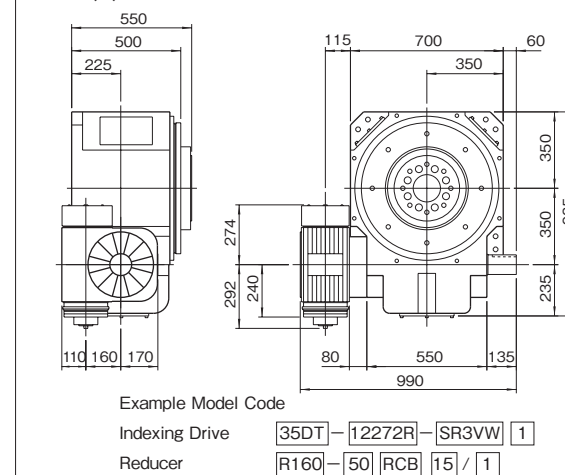
35DT (b)



35DT (c)



35DT (d)



Precautions

- Models 35DT and 35RT can be equipped with reducers R125 and R160.
- The reducer can be mounted in 16 different positions as shown on page of Reducer.

45DT/45RT Dimensions

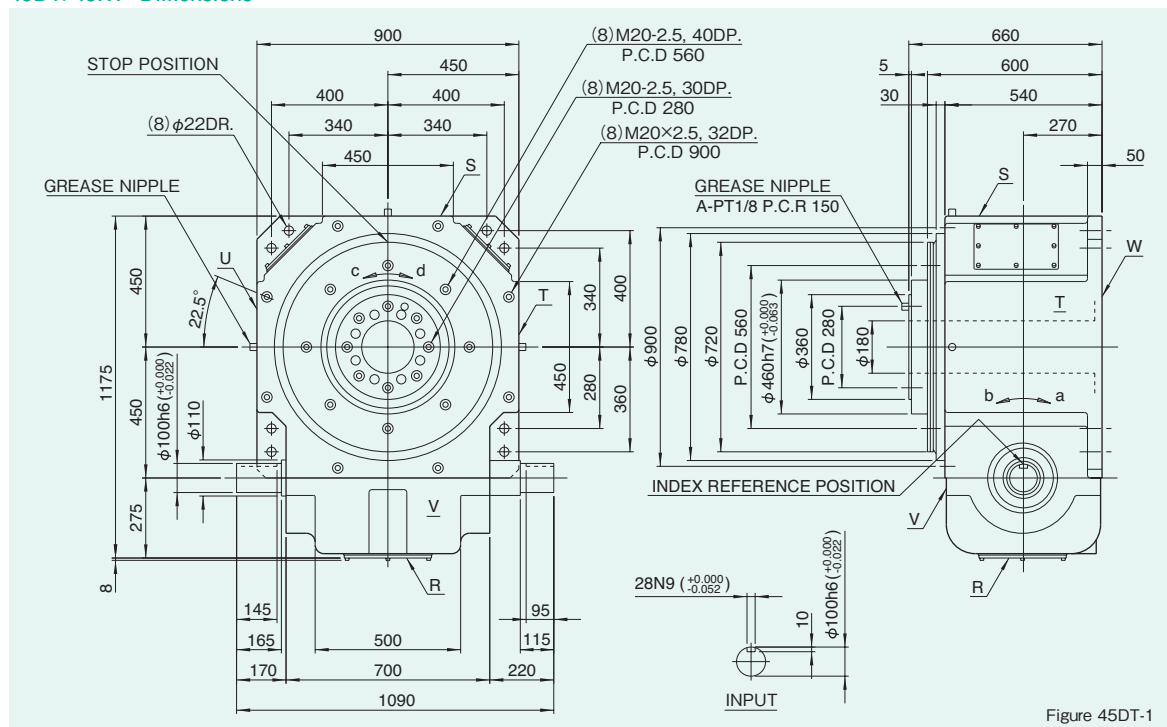


Figure 45DT-1

Locations of oil plug, etc., and oil capacity

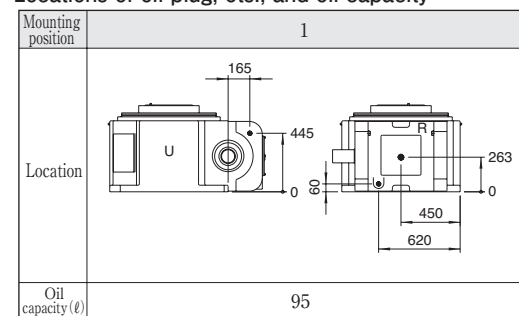


Figure 45DT-2

Precautions

- Each point indicated in the mounting positions shown in Figure 45DT-2 represents (starting at top) the oil plug (PT1), oil level (VB), and drain (PT1).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 45DT-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

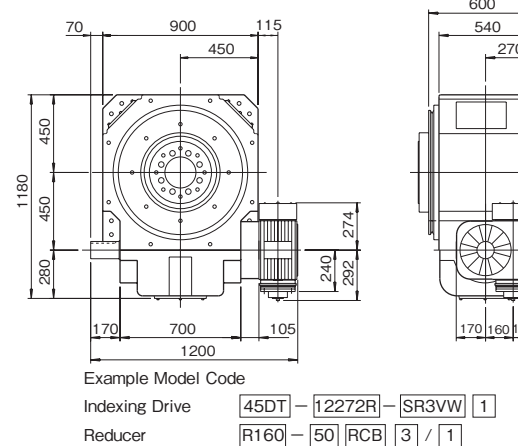
Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	63700	Input allowable axial load	P ₄	N	32340	Indexing accuracy (1 DWELL)		sec	±20
Output allowable radial load	P ₂	N	45080	Input maximum repetitious bending force	P ₅	N	44100	Indexing accuracy (2 DWELL)		sec	±40
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	12740	Indexing accuracy (3 DWELL)		sec	±60
Output torsional rigidity	K ₁	N·m/rad	3.14×10 ⁷	Input torsional rigidity	K ₂	N·m/rad	1.47×10 ⁶	Indexing accuracy (4 DWELL)		sec	±80
Output inertia	J ₀	kg·m ²	30.65	Input inertia	J ₁	kg·m ²	2.57	Repetitive accuracy		sec	20
Output allowable bending moment	P ₃	N·m	3430					Product weight		kg	1500
								Housing color			Gray

Note : Input inertia : J is calculated in dwell.

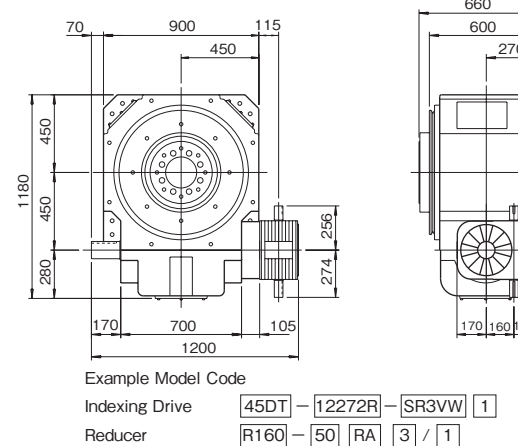
(1N=0.102kgf)

Mounted accessories

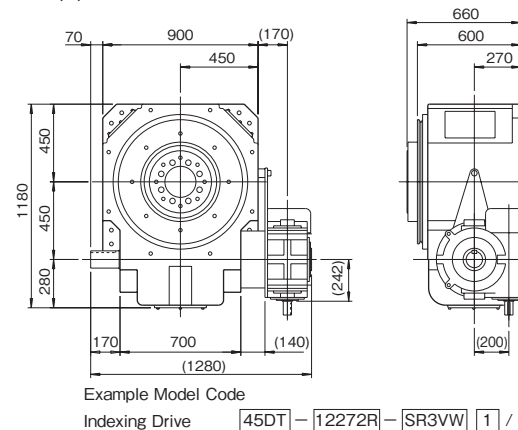
45DT (a)



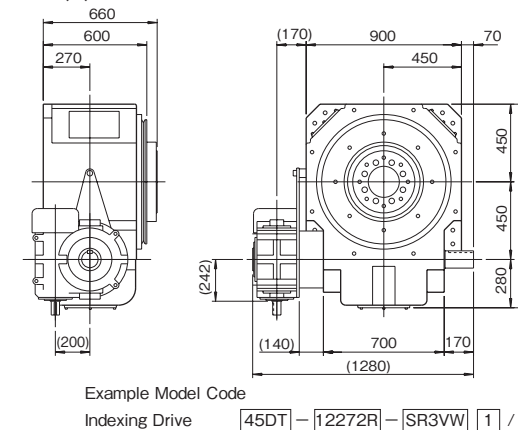
45DT (b)



45DT (c)



45DT (d)



Precautions

- Models 45DT and 45RT can be equipped with reducer R160.
- The reducer can be mounted in 16 different positions as shown on page of Reducer.

45DTR Dimensions

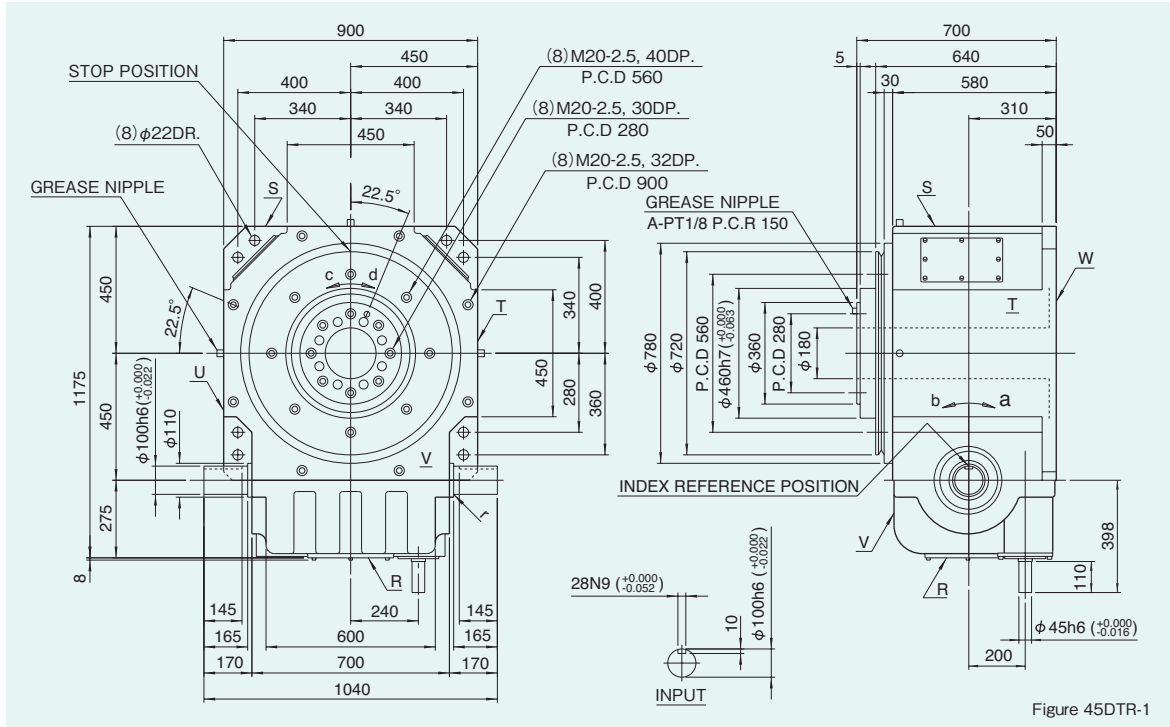


Figure 45DTR-1

Locations of oil plug, etc., and oil capacity

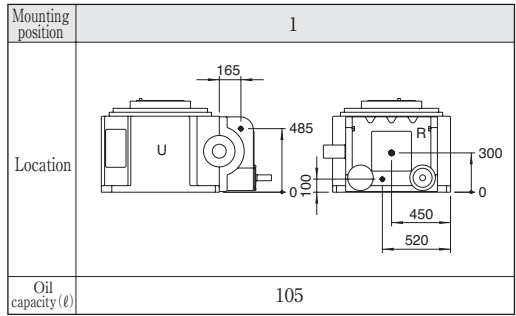


Figure 45DTR-2

Precautions

- Each point indicated in the mounting positions shown in Figure 45DTR-2 represents (starting at top) the oil plug (PT1), oil level (VB), and drain (PT1).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 45DTR-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

Table 45DTR-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	63700	Input allowable axial load	P ₄	N	32340	Indexing accuracy (1 DWELL)		sec	±20
Output allowable radial load	P ₂	N	45080	Input maximum repetitious bending force	P ₅	N	44100	Indexing accuracy (2 DWELL)		sec	±40
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	12740	Indexing accuracy (3 DWELL)		sec	±60
Output torsional rigidity	K ₁	N·m/rad	3.14×10 ⁷	Input torsional rigidity	K ₂	N·m/rad	1.18×10 ⁶	Indexing accuracy (4 DWELL)		sec	±80
Output inertia	J ₀	kg·m ²	30.65	Input inertia	J ₁	kg·m ²	3.03	Repetitive accuracy		sec	20
Output allowable bending moment	P ₃	N·m	3430					Product weight		kg	1800
								Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)

55DTR Dimensions

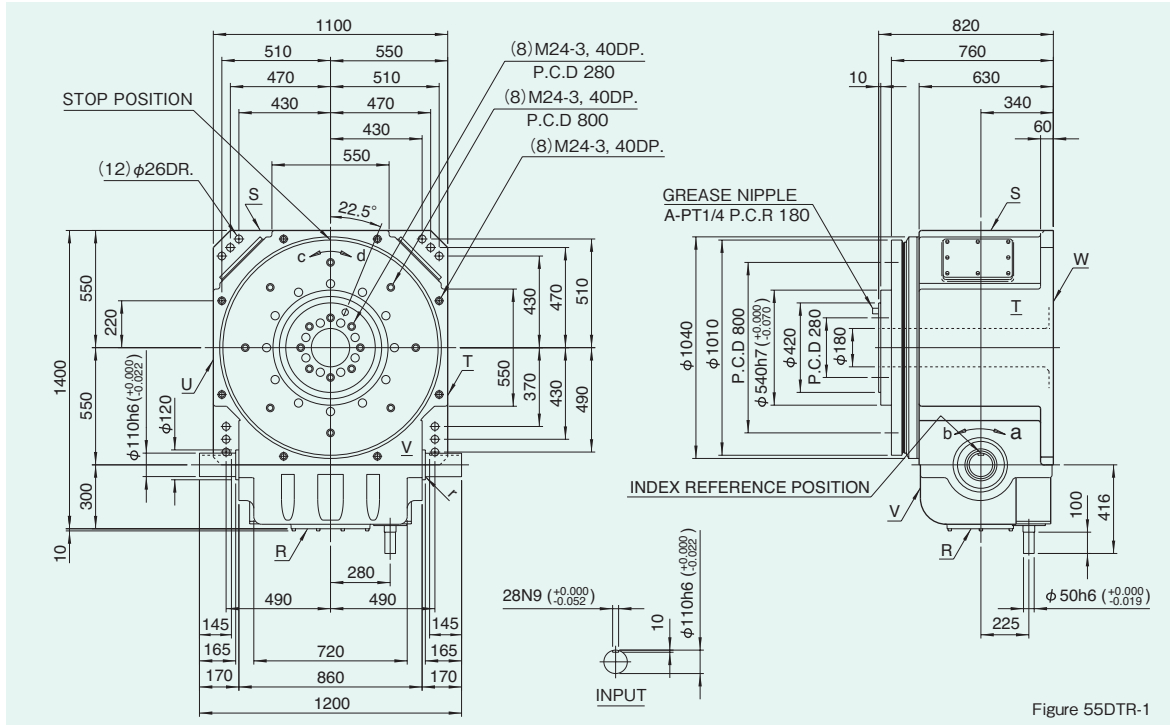


Figure 55DTR-1

Locations of oil plug, etc., and oil capacity

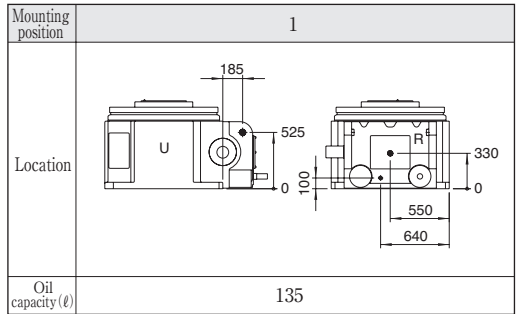


Figure 55DTR-2

Precautions

- Each point indicated in the mounting positions shown in Figure 55DTR-2 represents (starting at top) the oil plug (PT2), oil level (VC), and drain (PT1).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 55DTR-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

Table 55DTR-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	92120	Input allowable axial load	P ₄	N	34300	Indexing accuracy (1 DWELL)		sec	±20
Output allowable radial load	P ₂	N	48020	Input maximum repetitious bending force	P ₅	N	49000	Indexing accuracy (2 DWELL)		sec	±40
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	13720	Indexing accuracy (3 DWELL)		sec	±60
Output torsional rigidity	K ₁	N·m/rad	4.41×10 ⁷	Input torsional rigidity	K ₂	N·m/rad	1.47×10 ⁶	Indexing accuracy (4 DWELL)		sec	±80
Output inertia	J ₀	kg·m ²	118.8	Input inertia	J ₁	kg·m ²	8.13	Repetitive accuracy		sec	20
Output allowable bending moment	P ₃	N·m	4900					Product weight		kg	4000
								Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)

65DTR Dimensions

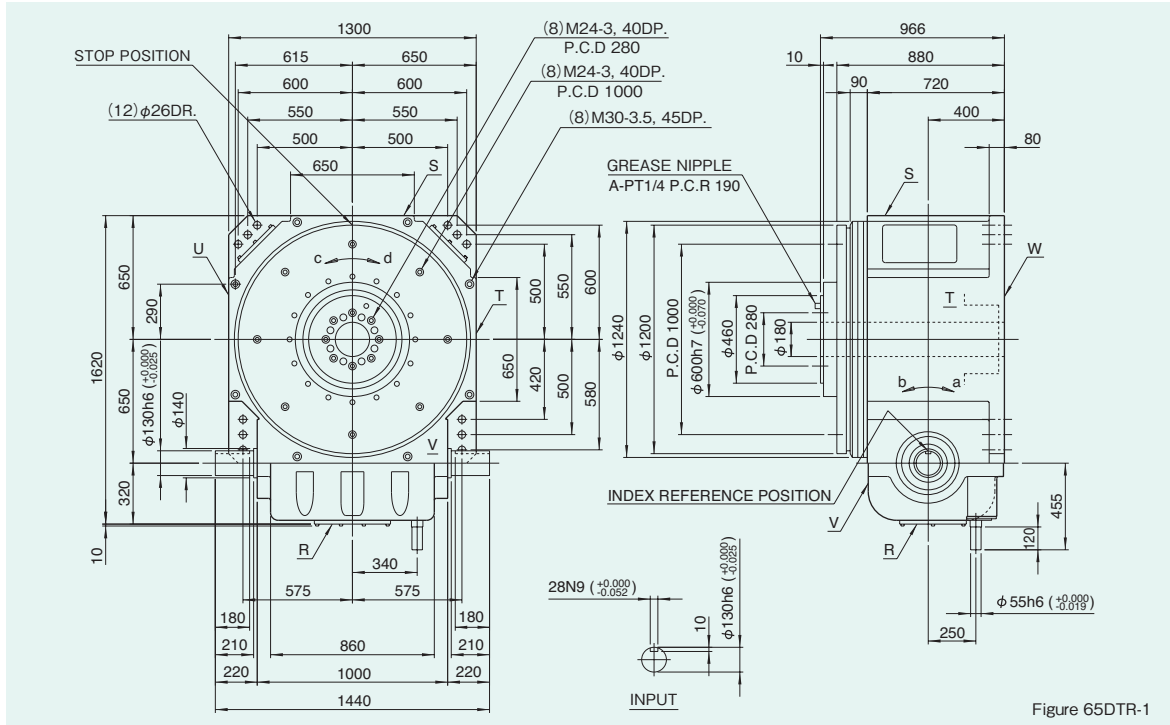


Figure 65DTR-1

Locations of oil plug, etc., and oil capacity

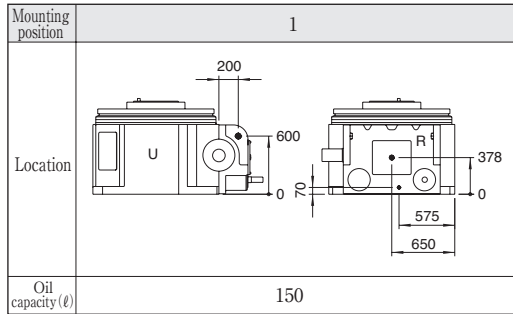


Figure 65DTR-2

Precautions

- Each point indicated in the mounting positions shown in Figure 65DTR-2 represents (starting at top) the oil plug (PT2), oil level (VC), and drain (PT1).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 65DTR-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

Table 65DTR-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	147000	Input allowable axial load	P ₄	N	37240	Indexing accuracy (1 DWELL)		sec	±20
Output allowable radial load	P ₂	N	57820	Input maximum repetitious bending force	P ₅	N	55860	Indexing accuracy (2 DWELL)		sec	±40
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	14700	Indexing accuracy (3 DWELL)		sec	±60
Output torsional rigidity	K ₁	N·m/rad	9.02×10 ⁷	Input torsional rigidity	K ₂	N·m/rad	1.86×10 ⁶	Indexing accuracy (4 DWELL)		sec	±80
Output inertia	J ₀	kg·m ²	224.0	Input inertia	J ₁	kg·m ²	9.0	Repetitive accuracy		sec	20
Output allowable bending moment	P ₃	N·m	6076					Product weight		kg	6500
								Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)

80DTR Dimensions

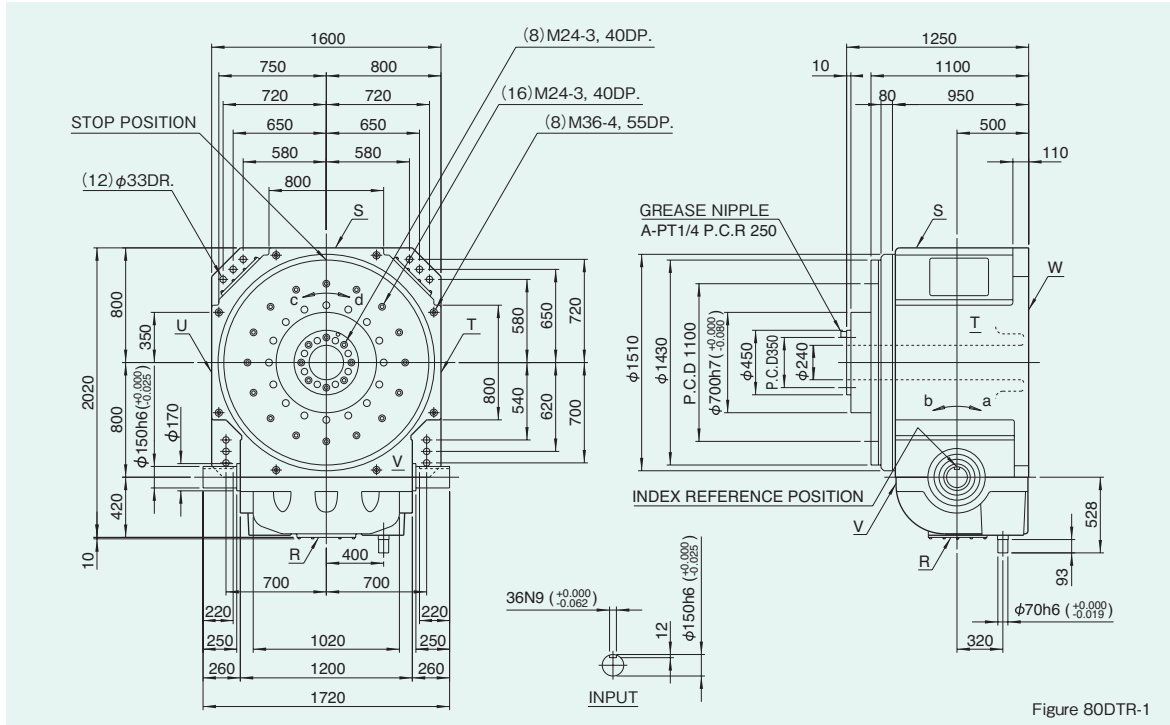


Figure 80DTR-1

Locations of oil plug, etc., and oil capacity

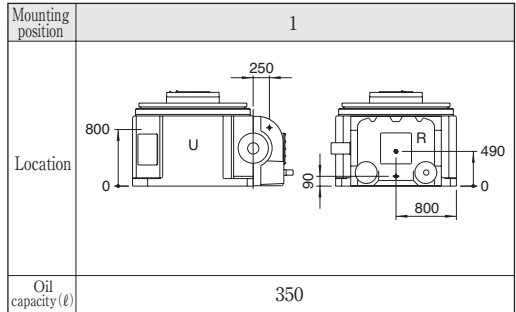


Figure 80DTR-2

Precautions

- Each point indicated in the mounting positions shown in Figure 80DTR-2 represents (starting at top) the oil plug (PT2), oil level (VC), and drain (PT2).
- The mounting positions correspond to code i for the indexing, oscillating, and rotary drives.
- The oil levels indicated in Figure 80DTR-2 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

Table 80DTR-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P ₁	N	196000	Input allowable axial load	P ₄	N	57820	Indexing accuracy (1 DWELL)		sec	±20
Output allowable radial load	P ₂	N	62720	Input maximum repetitious bending force	P ₅	N	68600	Indexing accuracy (2 DWELL)		sec	±40
Output static torque	T _s	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P ₆	N·m	38220	Indexing accuracy (3 DWELL)		sec	±60
Output torsional rigidity	K ₁	N·m/rad	4.12×10 ⁸	Input torsional rigidity	K ₂	N·m/rad	5.29×10 ⁶	Indexing accuracy (4 DWELL)		sec	±80
Output inertia	J ₀	kg·m ²	625.0	Input inertia	J ₁	kg·m ²	29.3	Repetitive accuracy		sec	20
Output allowable bending moment	P ₃	N·m	8330					Product weight		kg	12000
								Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N≒0.102kgf)