

P40/E40 Dimensions

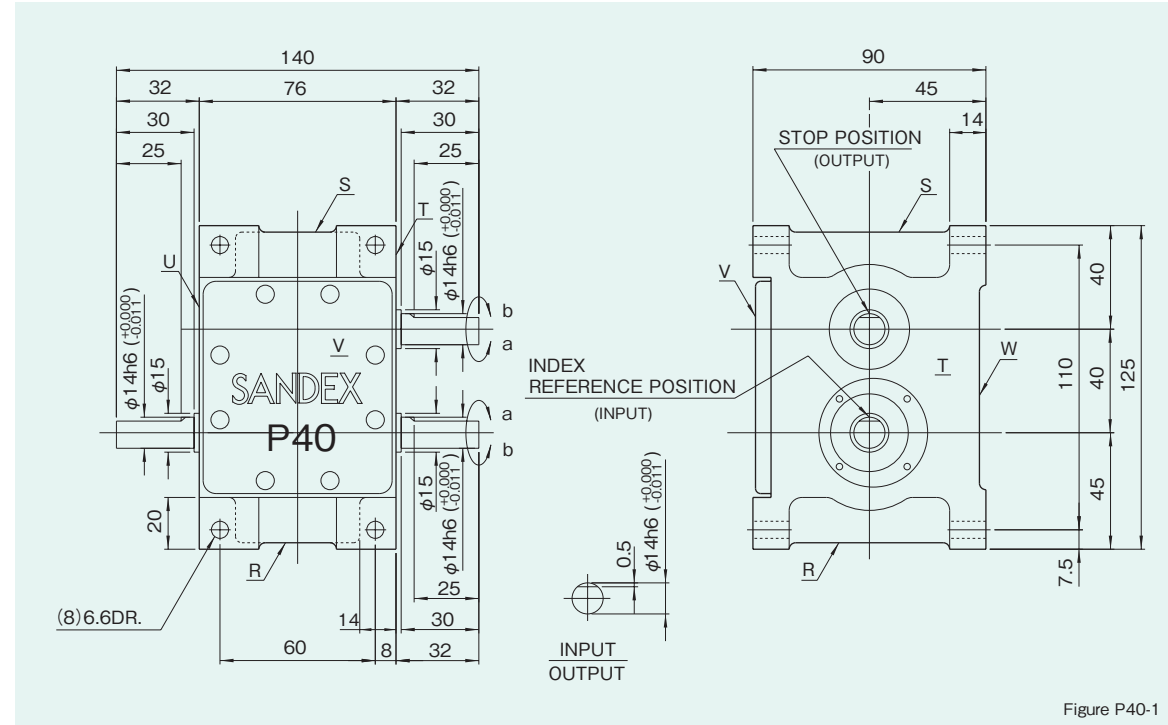
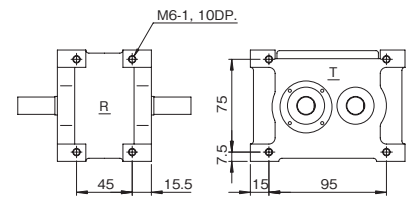


Figure P40-1

Mounting hole locations

Figure P40-2

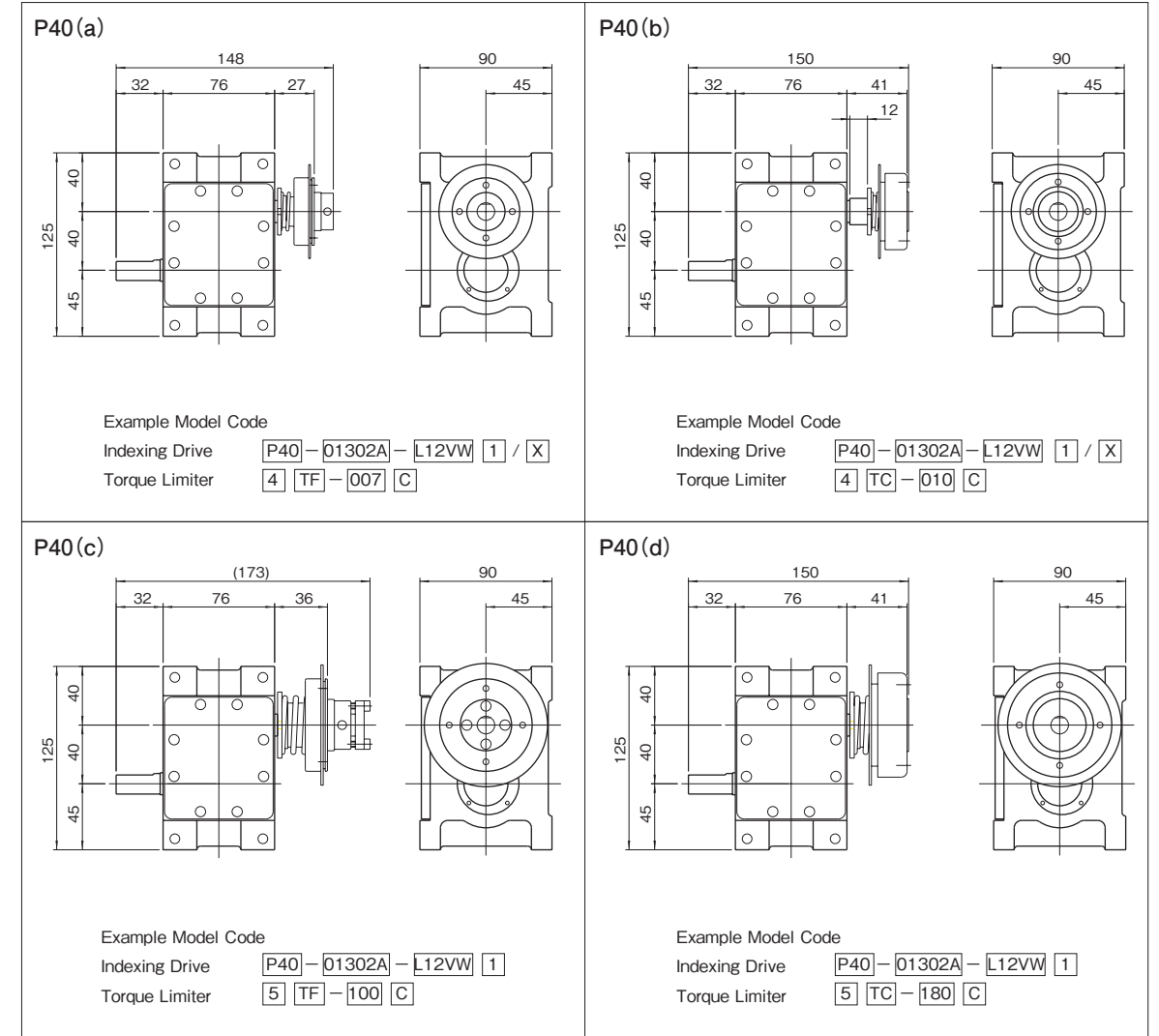


Dimension of R,S,T, and U surface

Precautions

- This indexing drive relies on grease lubrication.

Mounted accessories



Precautions

- Models P40 and E40 can be equipped with torque limiters 5TF and 5TC.
- Use of torque limiter models 4TF or 4TC requires a special order for a smaller output shaft (size  $\phi 12$ ).

Specifications

Table P40-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	637	Input allowable axial load	P <sub>4</sub>	N	637	Indexing accuracy (1 DWELL)		sec	±90
Output allowable radial load	P <sub>2</sub>	N	490	Input maximum repetitious bending force	P <sub>5</sub>	N	490	Indexing accuracy (2 DWELL)		sec	±180
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P <sub>6</sub>	N·m	29.4	Repetitive accuracy		sec	90
Output torsional rigidity	K <sub>1</sub>	N·m /rad	2.0×10 <sup>3</sup>	Input torsional rigidity	K <sub>2</sub>	N·m /rad	2.0×10 <sup>3</sup>	Product weight		kg	3.5
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	1.5×10 <sup>-4</sup>	Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

P50/E50 Dimensions

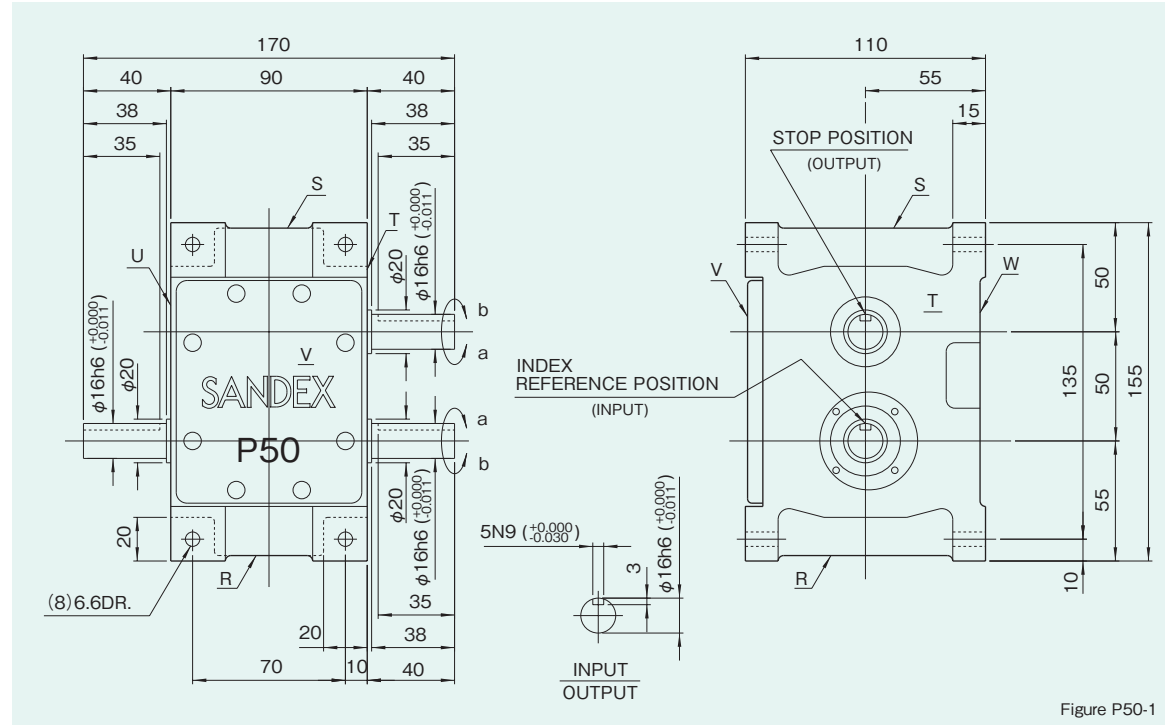
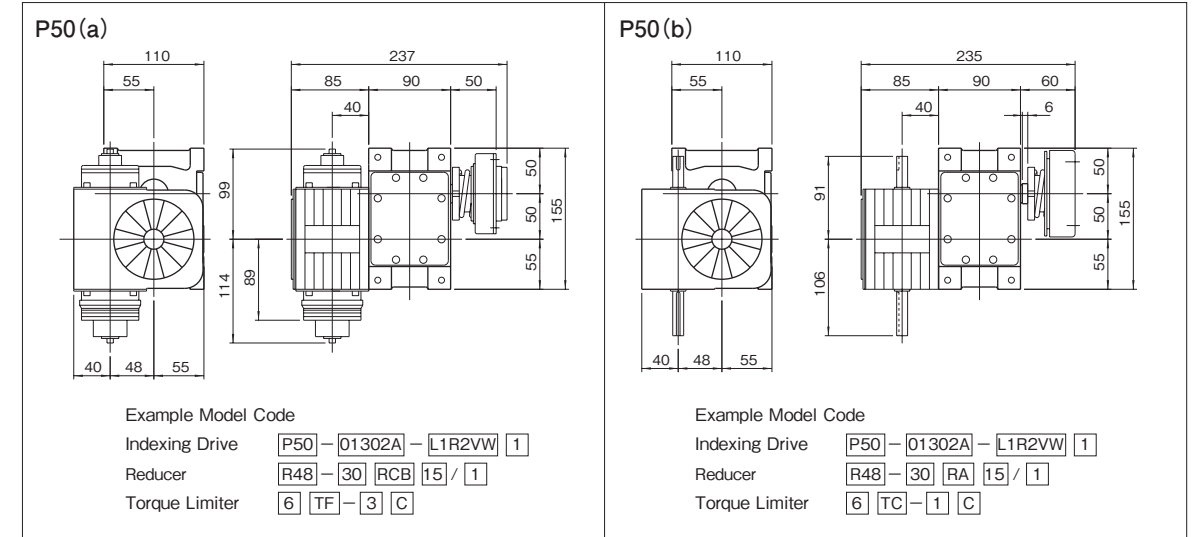


Figure P50-1

Mounted accessories

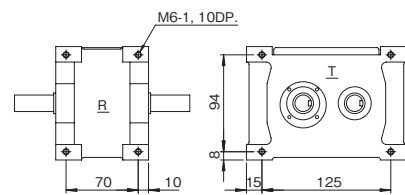


Precautions

- Models P50 and E50 can be equipped with reducer R48.
- The reducer can be mounted in 16 different positions as shown on page B448.
- Models P50 and E50 can be equipped with torque limiters 6TF and 6TC.
- Torque limiters 6TC requires a shaft collar for mounting.

Mounting hole locations

Figure P50-2



Precautions

- This indexing drive relies on grease lubrication.

Dimension of R,S,T, and U surface

Specifications

Table P50-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	1274	Input allowable axial load	P <sub>4</sub>	N	1274	Indexing accuracy (1 DWELL)		sec	±72
Output allowable radial load	P <sub>2</sub>	N	980	Input maximum repetitious bending force	P <sub>5</sub>	N	980	Indexing accuracy (2 DWELL)		sec	±144
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P <sub>6</sub>	N·m	58.8	Repetitive accuracy		sec	72
Output torsional rigidity	K <sub>1</sub>	N·m/rad	4.3×10 <sup>3</sup>	Input torsional rigidity	K <sub>2</sub>	N·m/rad	4.3×10 <sup>3</sup>	Product weight		kg	7.5
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	2.75×10 <sup>-4</sup>	Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)



## P80/E80 Dimensions

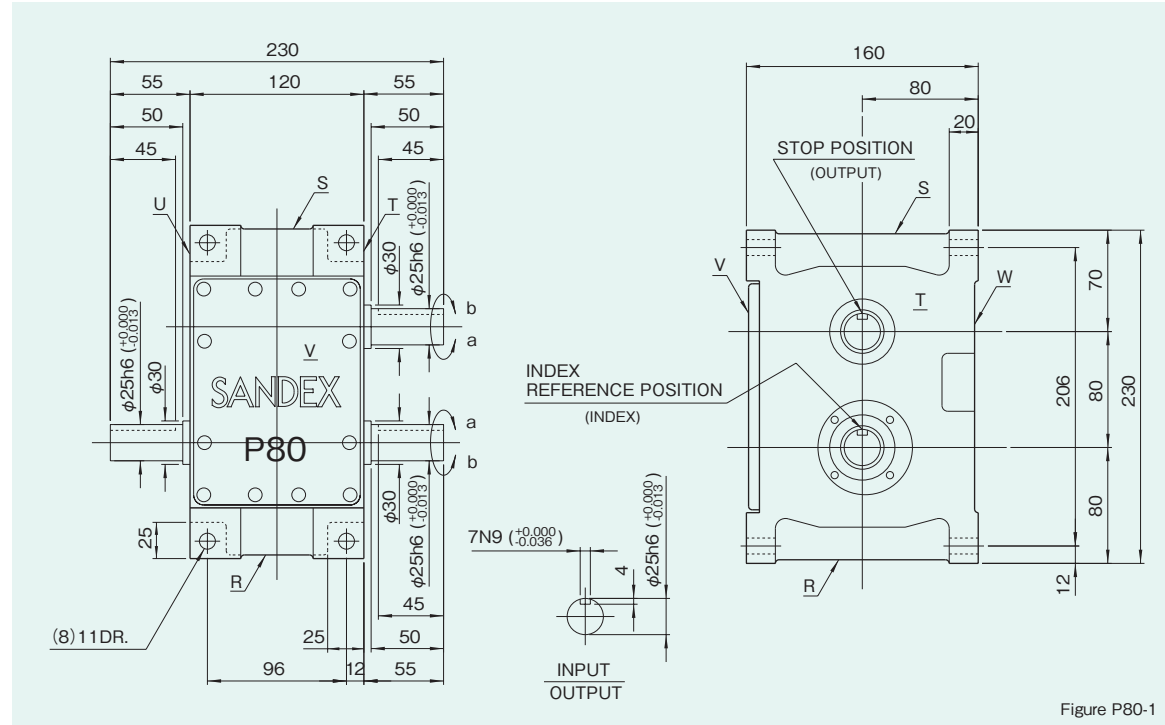


Figure P80-1

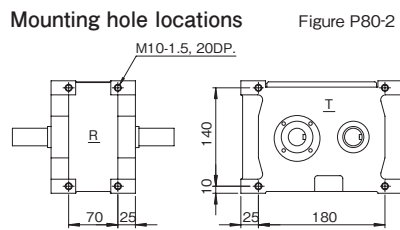


Figure P80-2

Dimension of R,S,T, and U surface

## Locations of oil plug, etc., and oil capacity

Figure P80-3

Mounting position	1	3	4	5	6
Location					
Oil capacity (ℓ)	0.8	0.8	0.8	0.8	0.8

## Precautions

- Each point indicated in the mounting positions shown in Figure P80-3 represents (starting at top) the oil plug (PT3/8), oil level (PF3/8), and drain (PT3/8).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure P80-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

## Specifications

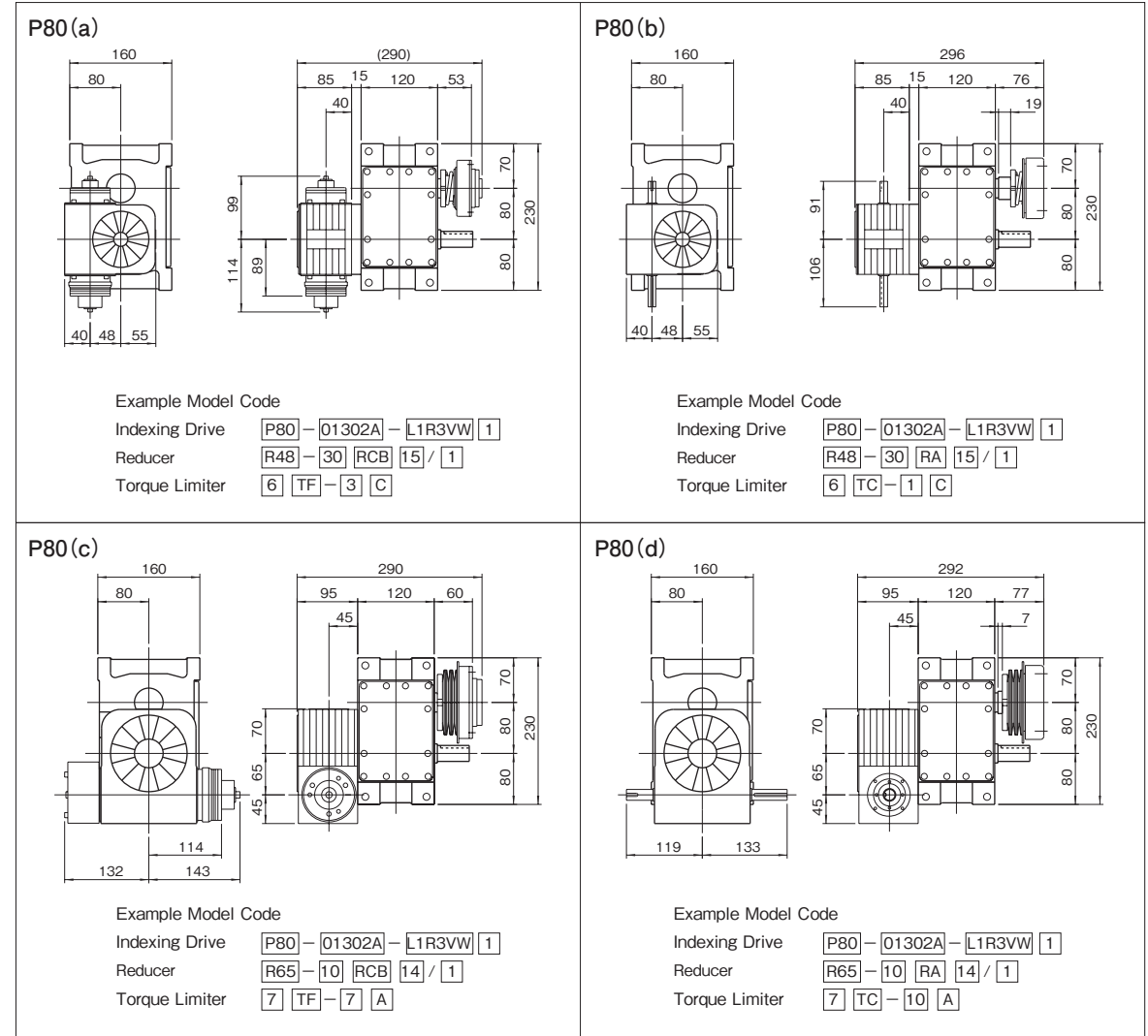
Table P80-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	3528	Input allowable axial load	P <sub>4</sub>	N	3528	Indexing accuracy (1 DWELL)		sec	±60
Output allowable radial load	P <sub>2</sub>	N	2450	Input maximum repetitive bending force	P <sub>5</sub>	N	2450	Indexing accuracy (2 DWELL)		sec	±120
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitive allowable torque	P <sub>6</sub>	N·m	245	Repetitive accuracy		sec	60
Output torsional rigidity	K <sub>1</sub>	N·m / rad	1.81×10 <sup>4</sup>	Input torsional rigidity	K <sub>2</sub>	N·m / rad	1.81×10 <sup>4</sup>	Product weight		kg	20
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	2.45×10 <sup>-3</sup>	Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

## Mounted accessories



## Precautions

- Models P80 and E80 can be equipped with reducers R48 and R65.
- The reducer can be mounted in 16 different positions as shown on page B448.
- Models P80 and E80 can be equipped with torque limiters 6TF, 6TC, 7TF and 7TC.
- TC type torque limiters require a shaft collar for mounting.

P100/E100 Dimensions

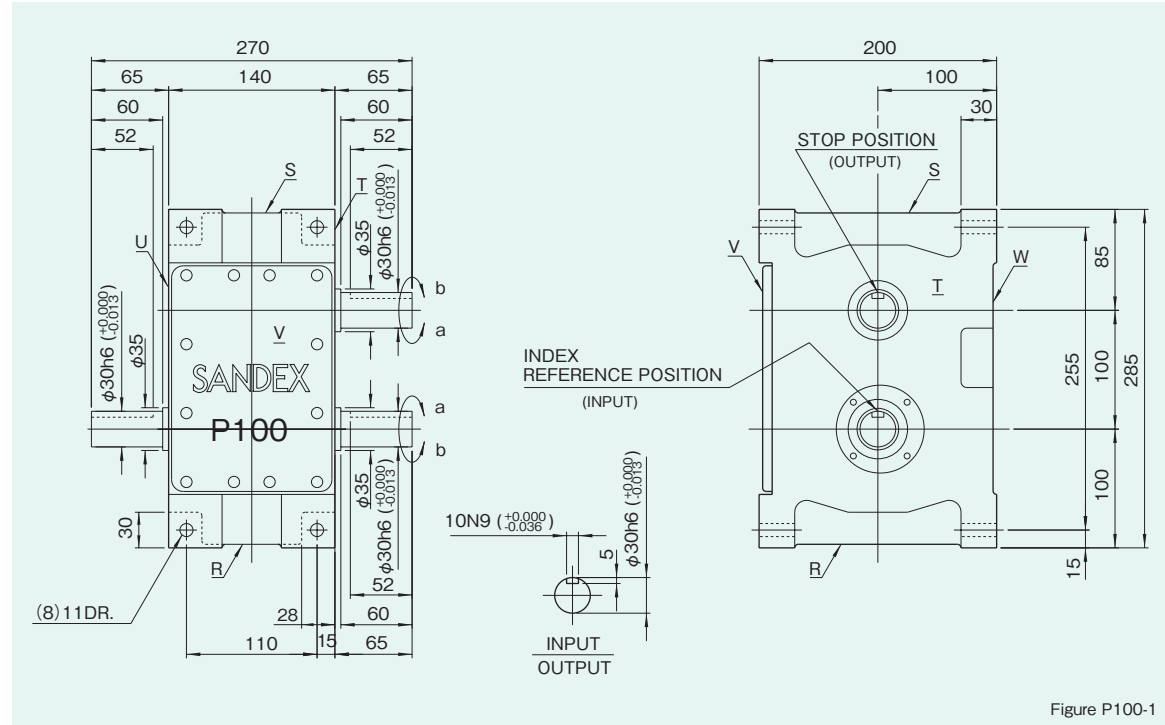
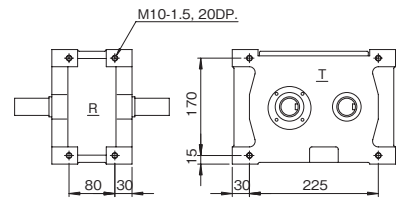


Figure P100-1

Mounting hole locations



Dimension of R,S,T, and U surface

Locations of oil plug, etc., and oil capacity

Figure P100-3

Mounting position	1	3	4	5	6
Location					
Oil capacity (ℓ)	1.5	1.5	1.5	1.5	1.5

Precautions

- Each point indicated in the mounting positions shown in Figure P100-3 represents (starting at top) the oil plug (PT3/8), oil level (PF3/8), and drain (PT3/8).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure P100-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

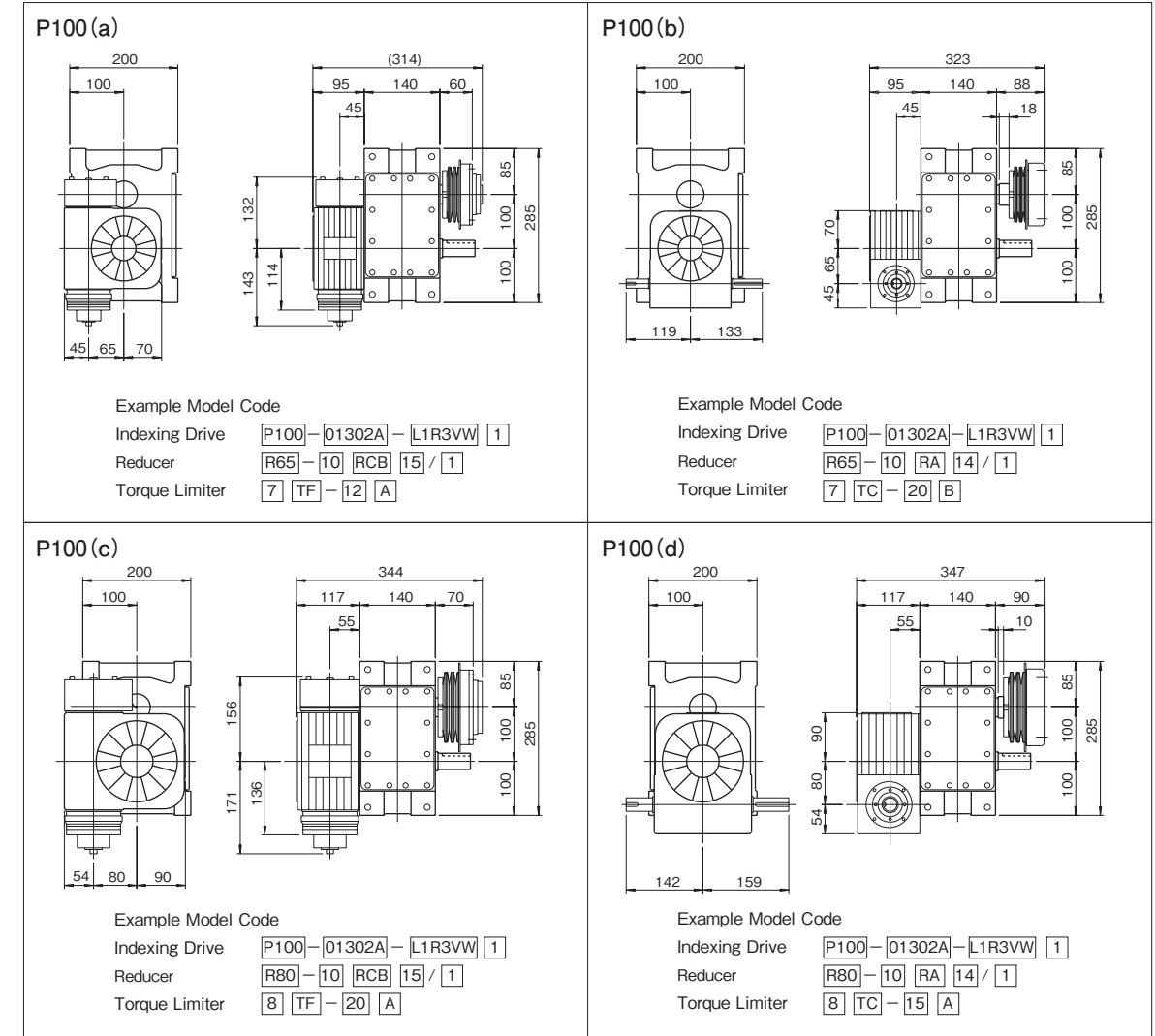
Table P100-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	4704	Input allowable axial load	P <sub>4</sub>	N	4704	Indexing accuracy (1 DWELL)		sec	±60
Output allowable radial load	P <sub>2</sub>	N	3920	Input maximum repetitive bending force	P <sub>5</sub>	N	3920	Indexing accuracy (2 DWELL)		sec	±120
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitive allowable torque	P <sub>6</sub>	N·m	392	Repetitive accuracy		sec	60
Output torsional rigidity	K <sub>1</sub>	N·m/rad	3.19×10 <sup>4</sup>	Input torsional rigidity	K <sub>2</sub>	N·m/rad	3.19×10 <sup>4</sup>	Product weight		kg	約36
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	6.0×10 <sup>-3</sup>	Housing color			Gray

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

Mounted accessories



Precautions

- Models P100 and E100 can be equipped with reducers R65 and R80.
- The reducer can be mounted in 16 different positions as shown on page B448.
- Models P100 and E100 can be equipped with torque limiters 7TF, 7TC, 8TF and 8TC.
- TC type torque limiters require a shaft collar for mounting.

P125/E125 Dimensions

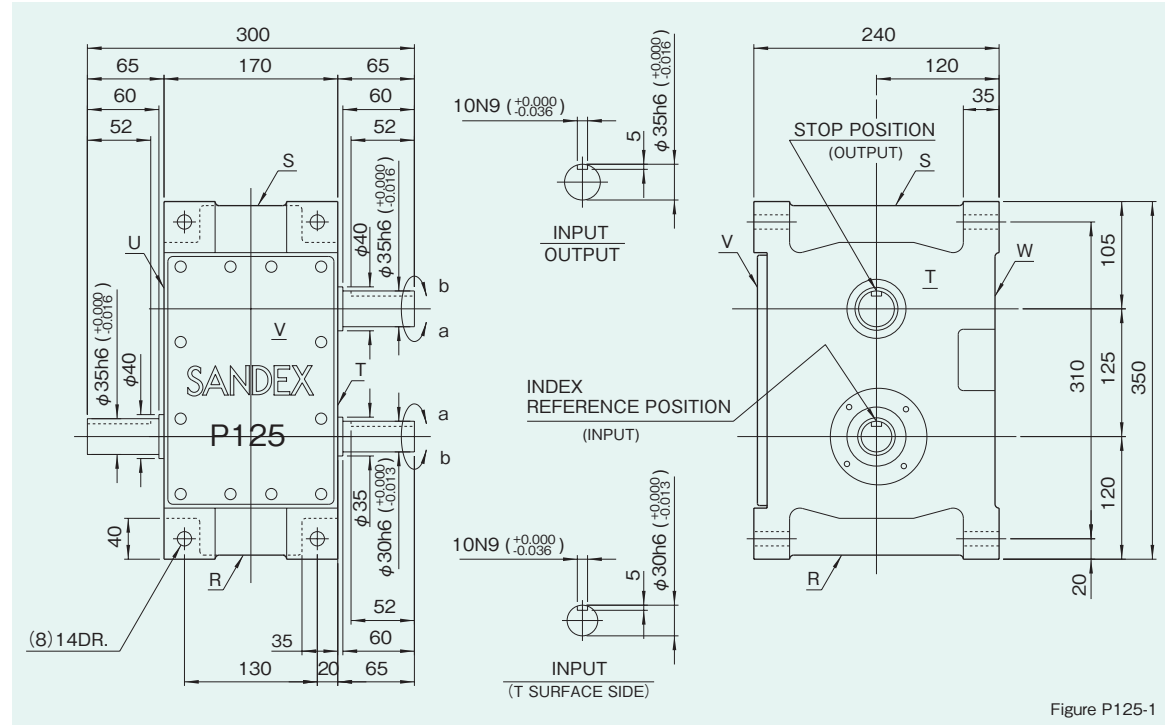
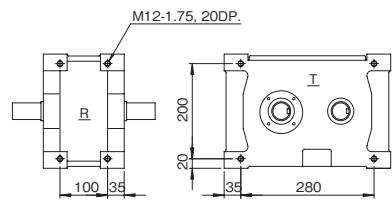


Figure P125-1

Mounting hole locations Figure P125-2



Dimension of R,S,T, and U surface

Locations of oil plug, etc., and oil capacity Figure P125-3

Mounting position	1	3	4	5	6
Location					
Oil capacity (ℓ)	3.2	3.2	3.2	3.2	3.2

Precautions

- Each point indicated in the mounting positions shown in Figure P125-3 represents (starting at top) the oil plug (PT3/8), oil level (PF3/8), and drain (PT3/8).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure P125-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

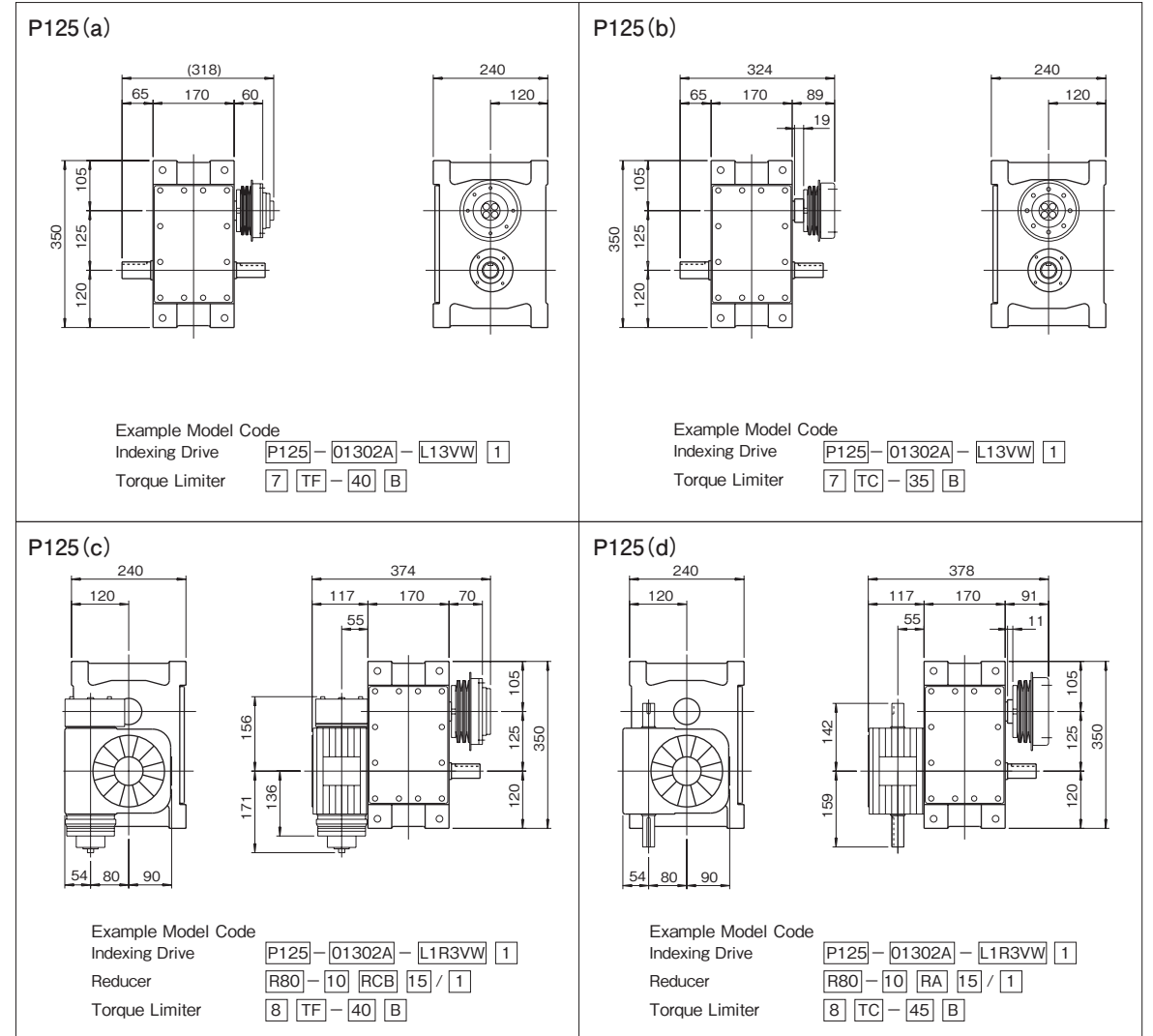
Table P125-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	5096	Input allowable axial load	P <sub>4</sub>	N	5096	Indexing accuracy (1 DWELL)		sec	±60
Output allowable radial load	P <sub>2</sub>	N	6174	Input maximum repetitious bending force	P <sub>5</sub>	N	6174	Indexing accuracy (2 DWELL)		sec	±120
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P <sub>6</sub>	N·m	637	Repetitive accuracy		sec	60
Output torsional rigidity	K <sub>1</sub>	N·m / rad	4.93×10 <sup>4</sup>	Input torsional rigidity	K <sub>2</sub>	N·m / rad	4.93×10 <sup>4</sup>	Product weight		kg	65
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	1.63×10 <sup>-2</sup>	Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

Mounted accessories



Precautions

- Models P125 and E125 can be equipped with reducer R80.
- The reducer can be mounted in 16 different positions as shown on page B448.
- Models P125 and E125 can be equipped with torque limiters 7TF, 7TC, 8TF and 8TC.
- TC type torque limiters require a shaft collar for mounting.



P150/E150 Dimensions

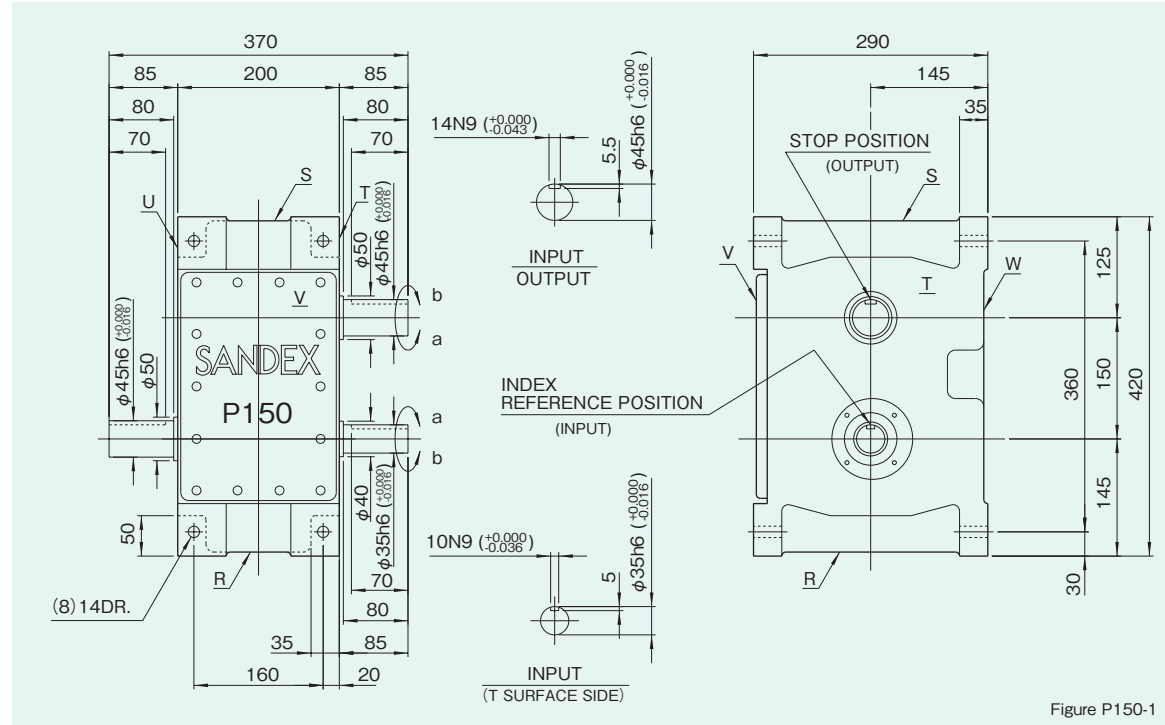


Figure P150-1

Mounting hole locations

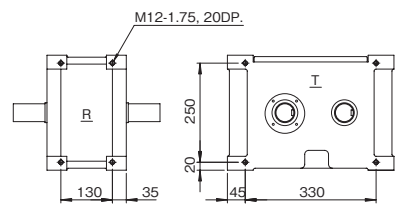


Figure P150-2

Dimension of R,S,T, and U surface

Locations of oil plug, etc., and oil capacity

Figure P150-3

Mounting position	1	3	4	5	6
Location					
Oil capacity(ℓ)	5.5	5.5	5.5	5.5	5.5

Precautions

- Each point indicated in the mounting positions shown in Figure P150-3 represents (starting at top) the oil plug (PT1/2), oil level (PF1/2), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure P150-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

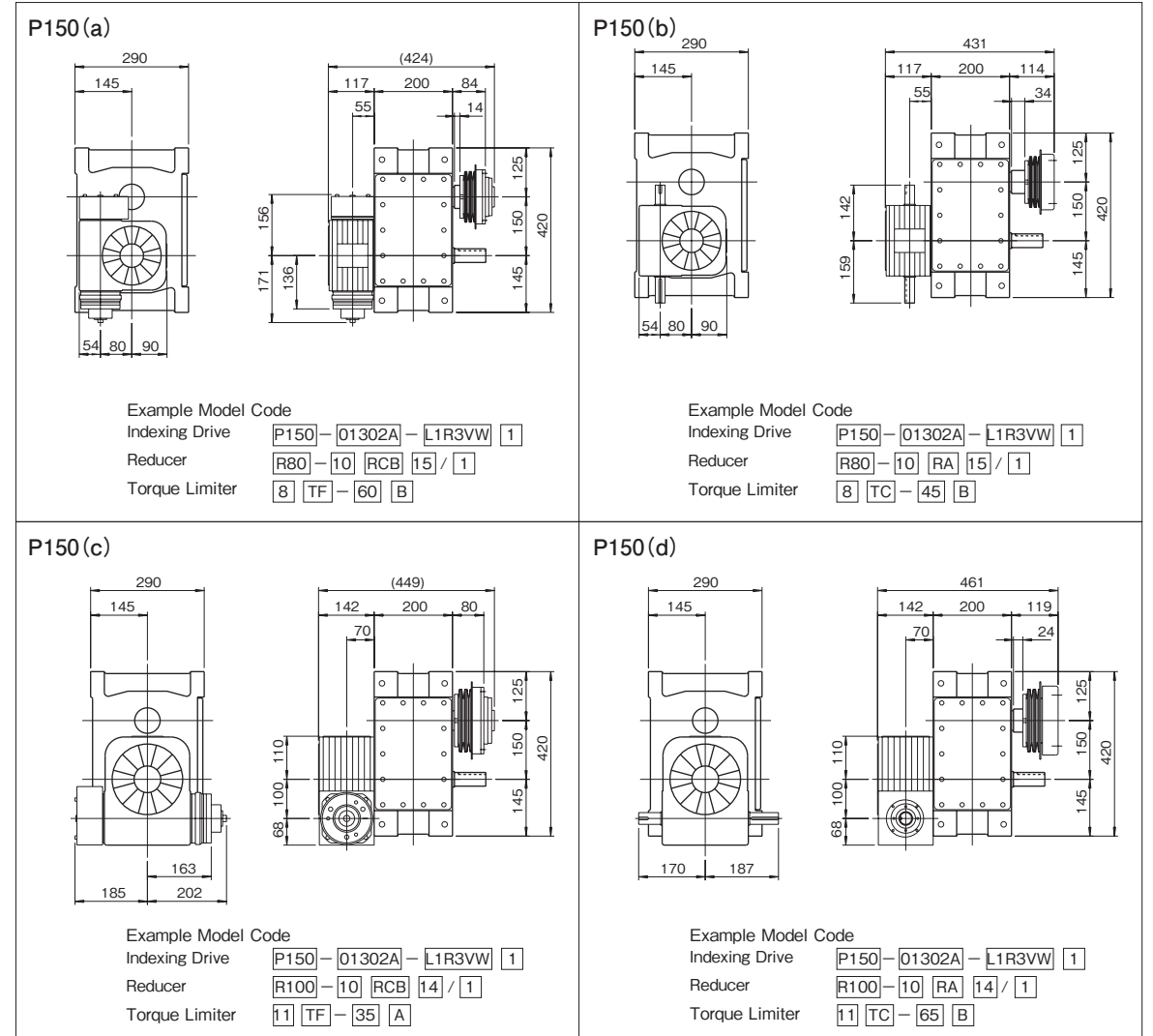
Tbale P150-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	7350	Input allowable axial load	P <sub>4</sub>	N	7350	Indexing accuracy (1 DWELL)		sec	±60
Output allowable radial load	P <sub>2</sub>	N	8428	Input maximum repetitious bending force	P <sub>5</sub>	N	8624	Indexing accuracy (2 DWELL)		sec	±120
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P <sub>6</sub>	N·m	1323	Repetitive accuracy		sec	60
Output torsional rigidity	K <sub>1</sub>	N·m /rad	1.23×10 <sup>5</sup>	Input torsional rigidity	K <sub>2</sub>	N·m /rad	1.76×10 <sup>5</sup>	Product weight		kg	100
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	4.0×10 <sup>-2</sup>	Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

Mounted accessories



Precautions

- Models P150 and E150 can be equipped with reducer R80 and R100.
- The reducer can be mounted in 16 different positions as shown on page B448.
- Models P150 and E150 can be equipped with torque limiters 8TF, 8TC, 11TF and 11TC.
- Torque limiters 8TF, 8TC and 11TC require a shaft collar for mounting.

P175/E175 Dimensions

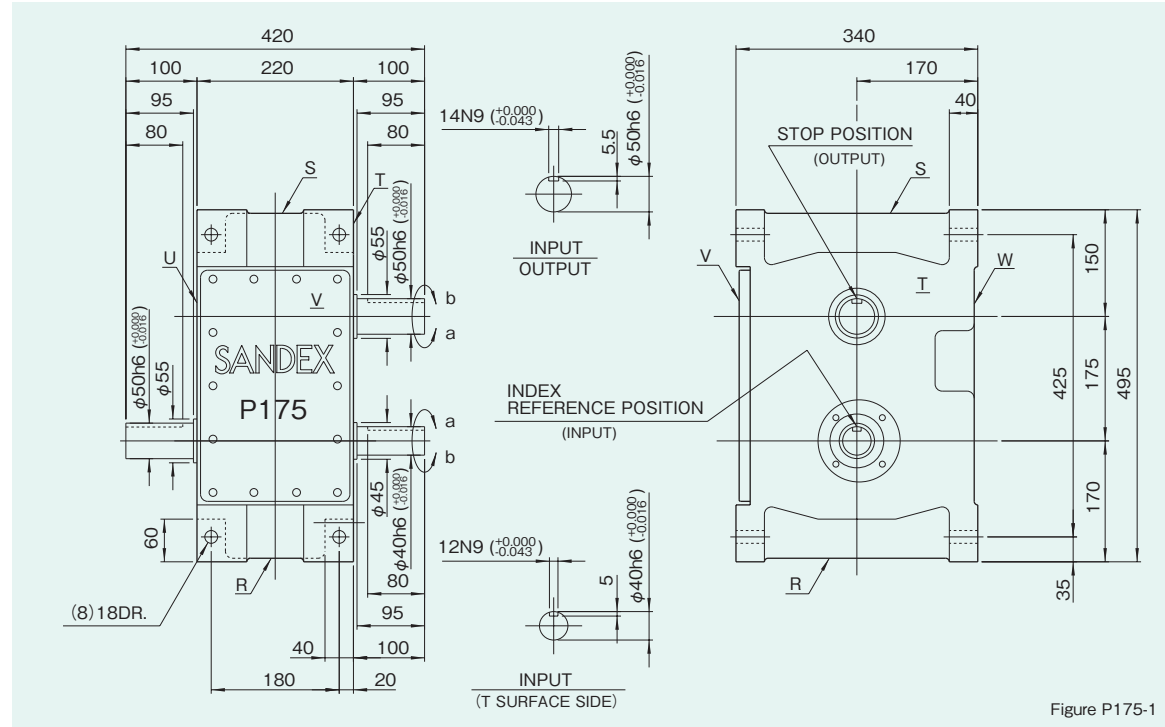
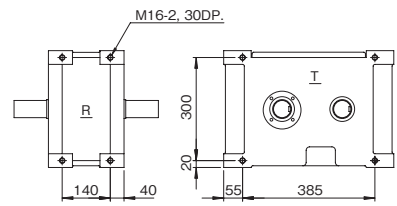


Figure P175-1

Mounting hole locations Figure P175-2



Dimension of R,S,T, and U surface

Locations of oil plug, etc., and oil capacity Figure P175-3

Mounting position	1	3	4	5	6
Location					
Oil capacity (ℓ)	8	8	8	8	8

Precautions

- Each point indicated in the mounting positions shown in Figure P175-3 represents (starting at top) the oil plug (PT1/2), oil level (PF3/4), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure P175-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

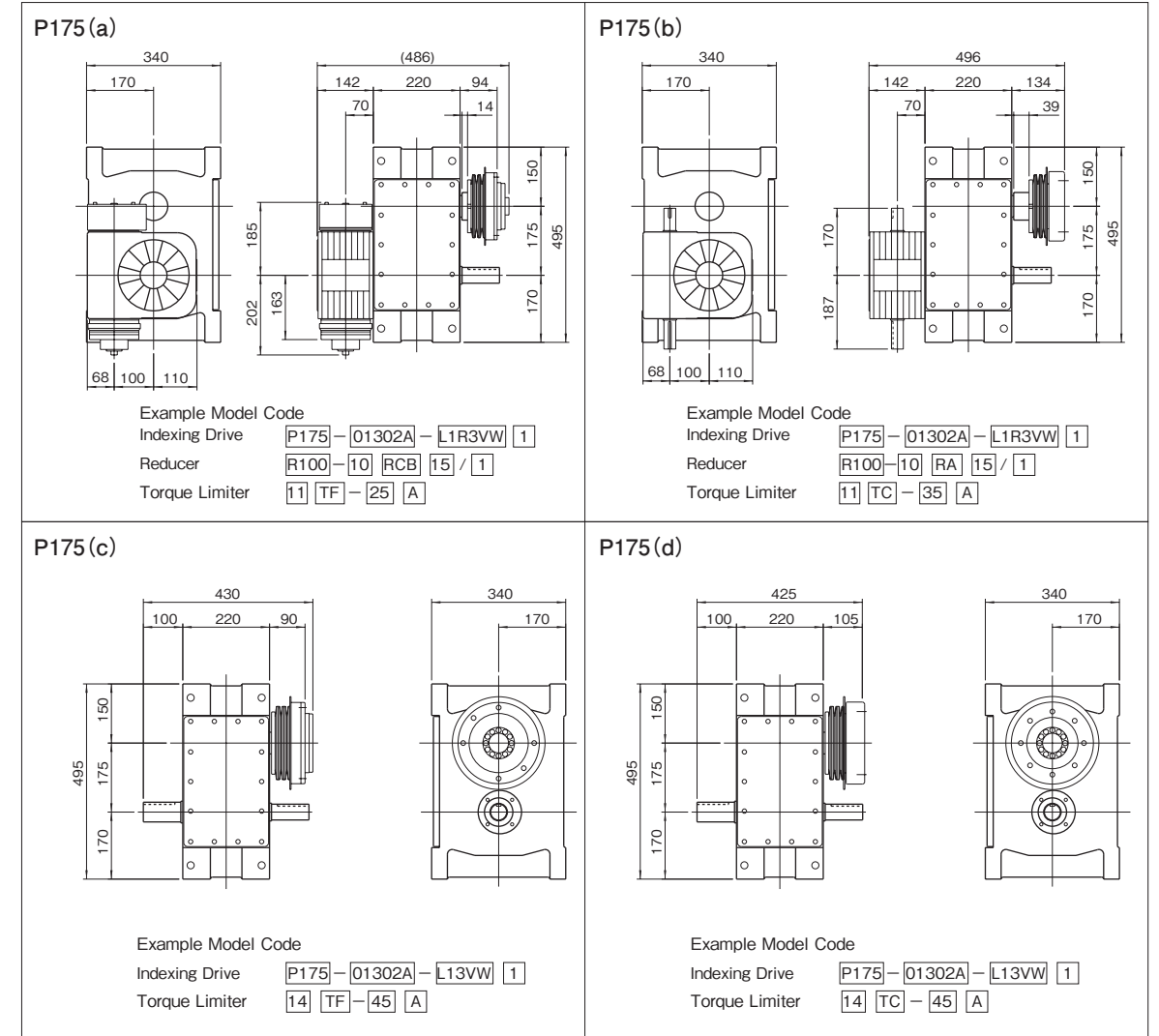
Table P175-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	9016	Input allowable axial load	P <sub>4</sub>	N	9016	Indexing accuracy (1 DWELL)		sec	±60
Output allowable radial load	P <sub>2</sub>	N	9800	Input maximum repetitious bending force	P <sub>5</sub>	N	9800	Indexing accuracy (2 DWELL)		sec	±120
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitious allowable torque	P <sub>6</sub>	N·m	1813	Repetitive accuracy		sec	60
Output torsional rigidity	K <sub>1</sub>	N·m / rad	1.65×10 <sup>5</sup>	Input torsional rigidity	K <sub>2</sub>	N·m / rad	1.65×10 <sup>5</sup>	Product weight		kg	160
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	7.5×10 <sup>-2</sup>	Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

Mounted accessories



Precautions

- Models P175 and E175 can be equipped with reducer R100.
- The reducer can be mounted in 16 different positions as shown on page B448.
- Models P175 and E175 can be equipped with torque limiters 11TF, 11TC, 14TF and 14TC.
- Torque limiters 11TF and 11TC require a shaft collar for mounting.



P200/E200 Dimensions

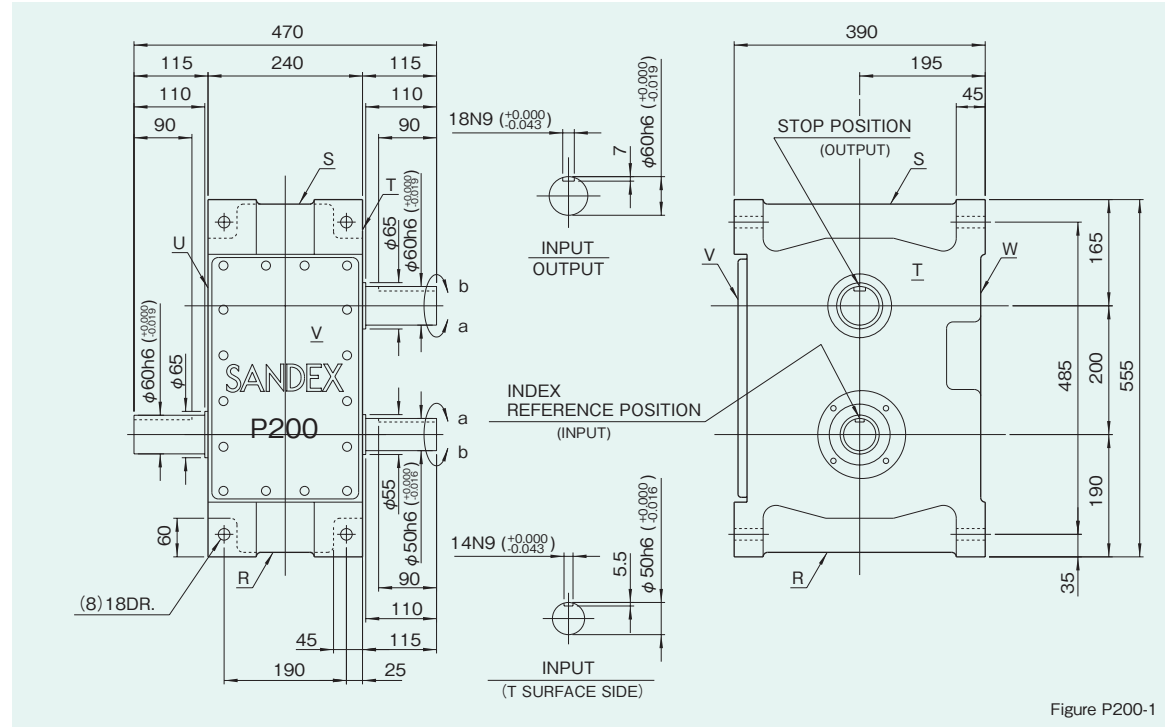
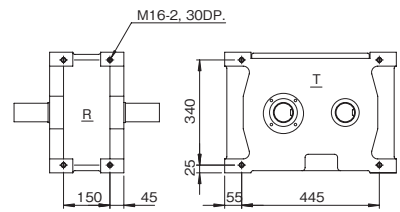


Figure P200-1

Mounting hole locations Figure P200-2



Dimension of R,S,T, and U surface

Locations of oil plug, etc., and oil capacity Figure P200-3

Mounting position	1	3	4	5	6
Location					
Oil capacity (ℓ)	12	12	12	12	12

Precautions

- Each point indicated in the mounting positions shown in Figure P200-3 represents (starting at top) the oil plug (PT1/2), oil level (PF3/4), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure P200-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

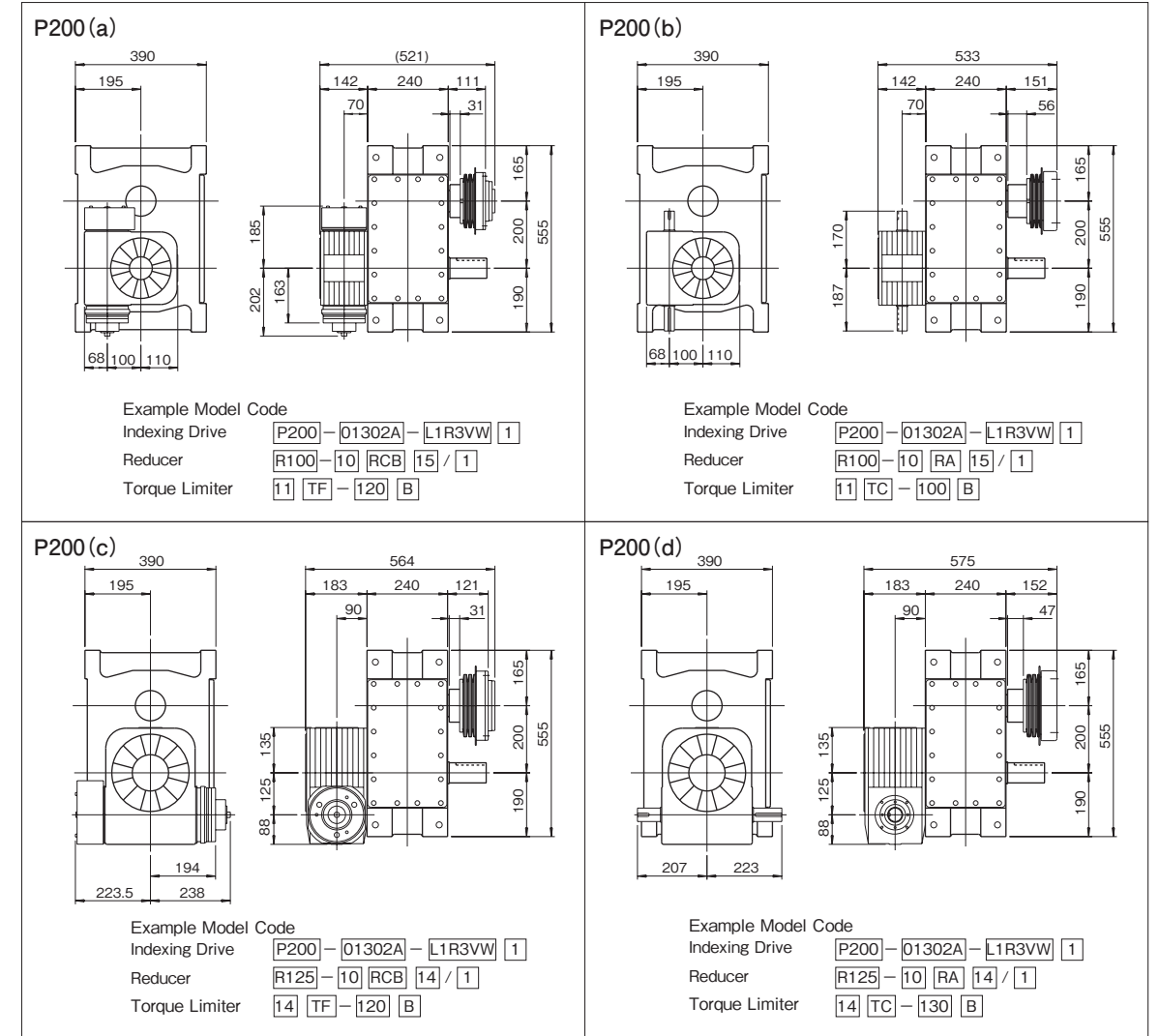
Table P200-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	12936	Input allowable axial load	P <sub>4</sub>	N	12936	Indexing accuracy (1 DWELL)		sec	±60
Output allowable radial load	P <sub>2</sub>	N	13524	Input maximum repetitive bending force	P <sub>5</sub>	N	18620	Indexing accuracy (2 DWELL)		sec	±120
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitive allowable torque	P <sub>6</sub>	N·m	3136	Repetitive accuracy		sec	60
Output torsional rigidity	K <sub>1</sub>	N·m / rad	3.19×10 <sup>5</sup>	Input torsional rigidity	K <sub>2</sub>	N·m / rad	3.19×10 <sup>5</sup>	Product weight		kg	220
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	0.148	Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

Mounted accessories



Precautions

- Models P200 and E200 can be equipped with reducers R100 and R125.
- The reducer can be mounted in 16 different positions as shown on page B448.
- Models P200 and E200 can be equipped with torque limiters 11TF, 11TC, 14TF and 14TC.
- Torque limiters require a shaft collar for mounting.

P250/E250 Dimensions

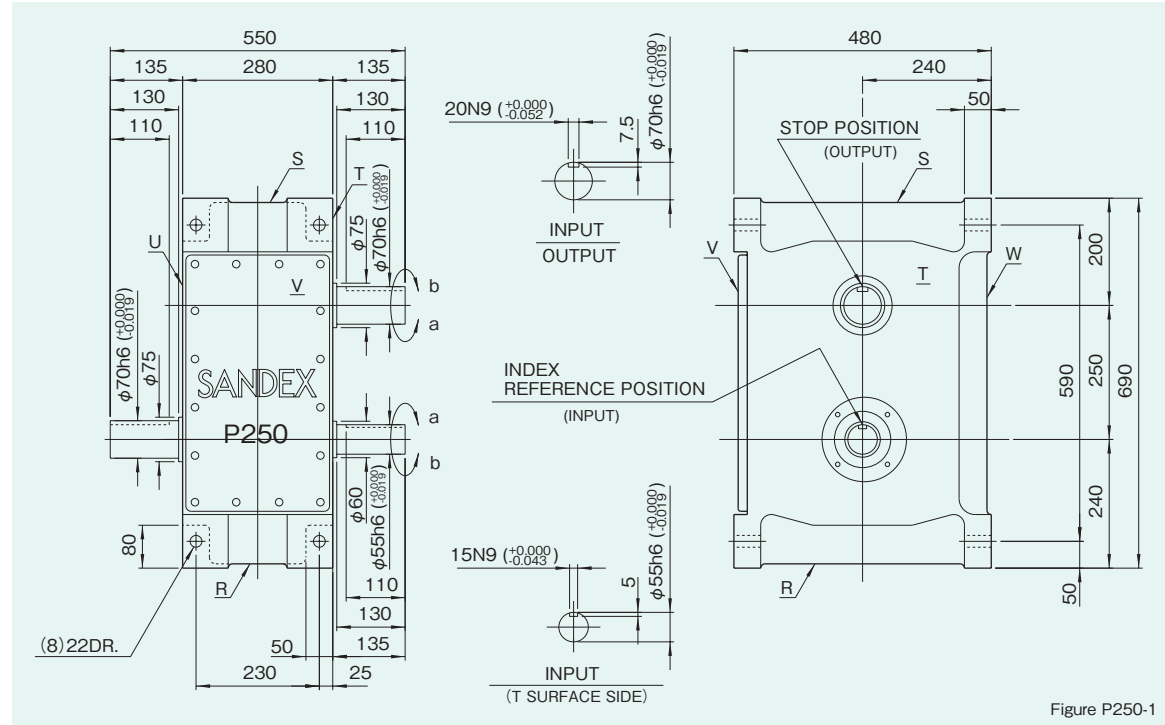
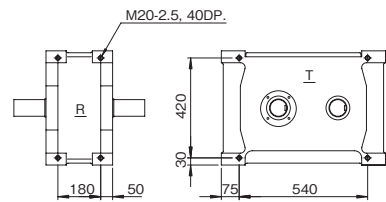


Figure P250-1

Mounting hole locations Figure P250-2



Dimension of R,S,T, and U surface

Locations of oil plug, etc., and oil capacity Figure P250-3

Mounting position	1	3	4	5	6
Location					
Oil capacity (ℓ)	20	20	20	20	20

Precautions

- Each point indicated in the mounting positions shown in Figure P250-3 represents (starting at top) the oil plug (PT1/2), oil level (PF3/4), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure P250-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.

Specifications

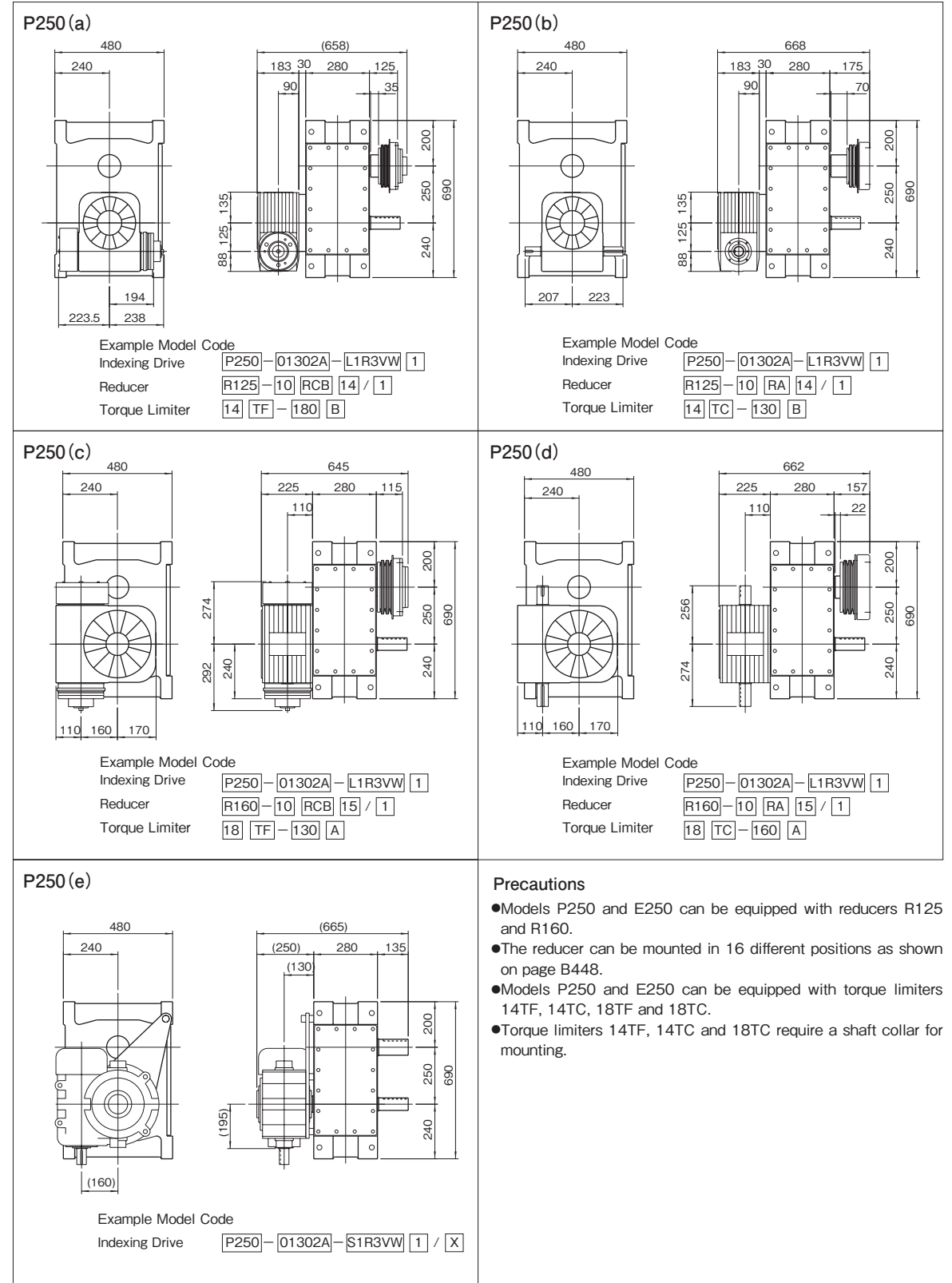
Table P250-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	15190	Input allowable axial load	P <sub>4</sub>	N	15190	Indexing accuracy (1 DWELL)		sec	±60
Output allowable radial load	P <sub>2</sub>	N	15288	Input maximum repetitive bending force	P <sub>5</sub>	N	23520	Indexing accuracy (2 DWELL)		sec	±120
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitive allowable torque	P <sub>6</sub>	N·m	4900	Repetitive accuracy		sec	60
Output torsional rigidity	K <sub>1</sub>	N·m /rad	5.26×10 <sup>5</sup>	Input torsional rigidity	K <sub>2</sub>	N·m /rad	5.26×10 <sup>5</sup>	Product weight		kg	350
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	0.495	Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

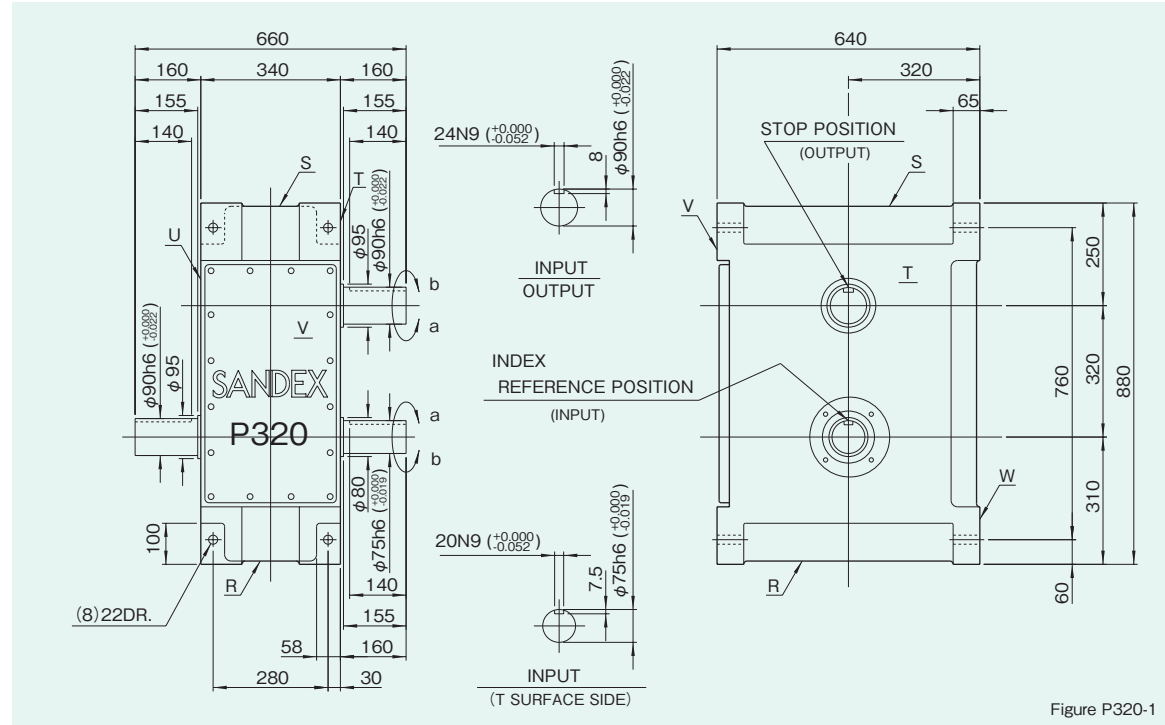
Mounted accessories



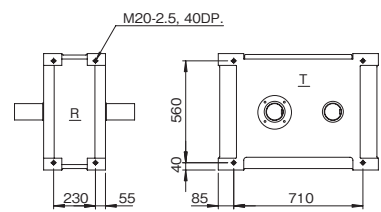
Precautions

- Models P250 and E250 can be equipped with reducers R125 and R160.
- The reducer can be mounted in 16 different positions as shown on page B448.
- Models P250 and E250 can be equipped with torque limiters 14TF, 14TC, 18TF and 18TC.
- Torque limiters 14TF, 14TC and 18TC require a shaft collar for mounting.

## P320/E320 Dimensions



Mounting hole locations Figure P320-2



Dimension of R,S,T, and U surface

Locations of oil plug, etc., and oil capacity Figure P320-3

Mounting position	1	5
Location		
Oil capacity (ℓ)	45	45

### Precautions

- Each point indicated in the mounting positions shown in Figure P320-3 represents (starting at top) the oil plug (PT1/2), oil level (PF3/4), and drain (PT1/2).
- The mounting positions correspond to code j for the indexing, oscillating drives.
- The oil levels indicated in Figure P320-3 are given in general figures and will differ according to the profile of the cam and the number of cam followers.
- When specifying mounting positions 3, 4, 5, or 6, consult us for positioning the oil plug, oil level, and drain.

## Specifications

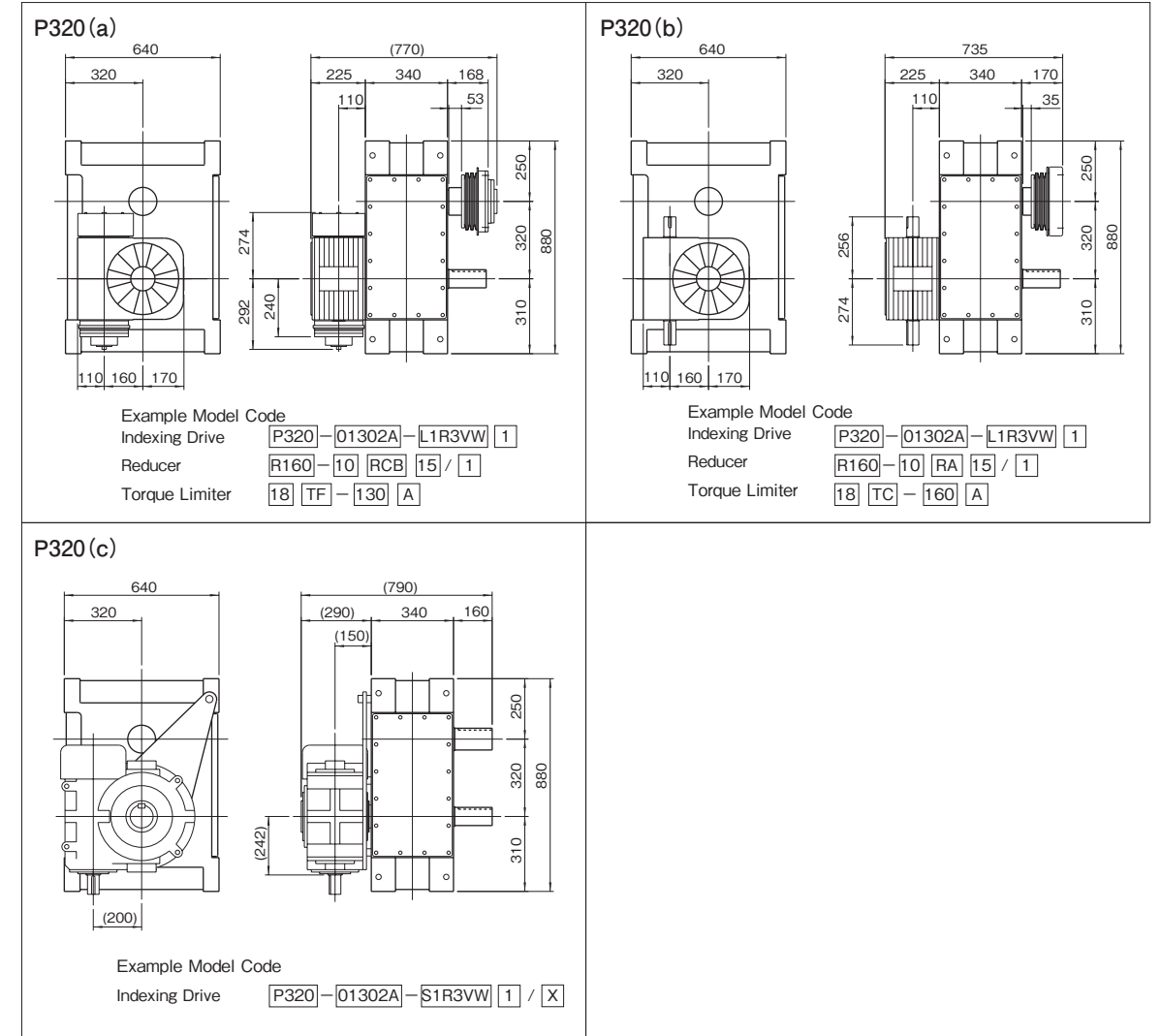
Table P320-1

Item	Symbol	Unit	Value	Item	Symbol	Unit	Value	Item	Symbol	Unit	Value
Output allowable axial load	P <sub>1</sub>	N	22540	Input allowable axial load	P <sub>4</sub>	N	22540	Indexing accuracy (1 DWELL)		sec	±60
Output allowable radial load	P <sub>2</sub>	N	23520	Input maximum repetitive bending force	P <sub>5</sub>	N	41160	Indexing accuracy (2 DWELL)		sec	±120
Output static torque	T <sub>s</sub>	N·m	Refer to Torque Capacity Table	Input maximum repetitive allowable torque	P <sub>6</sub>	N·m	10780	Repetitive accuracy		sec	60
Output torsional rigidity	K <sub>1</sub>	N·m / rad	1.08×10 <sup>6</sup>	Input torsional rigidity	K <sub>2</sub>	N·m / rad	1.08×10 <sup>6</sup>	Product weight		kg	750
Output inertia	J <sub>o</sub>	kg·m <sup>2</sup>	Refer to Torque Capacity Table	Input inertia	J <sub>1</sub>	kg·m <sup>2</sup>	1.7	Housing color		Gray	

Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

## Mounted accessories



### Precautions

- Models P320 and E320 can be equipped with reducer R160.
- The reducer can be mounted in 16 different positions as shown on page B448.
- Models P320 and E320 can be equipped with torque limiters 18TF and 18TC.
- Torque limiters require a shaft collar for mounting.