



4.5D/4.5E/4.5R

SANDEX

4.5D/4.5E/4.5R Dimensions

(Unit : mm)

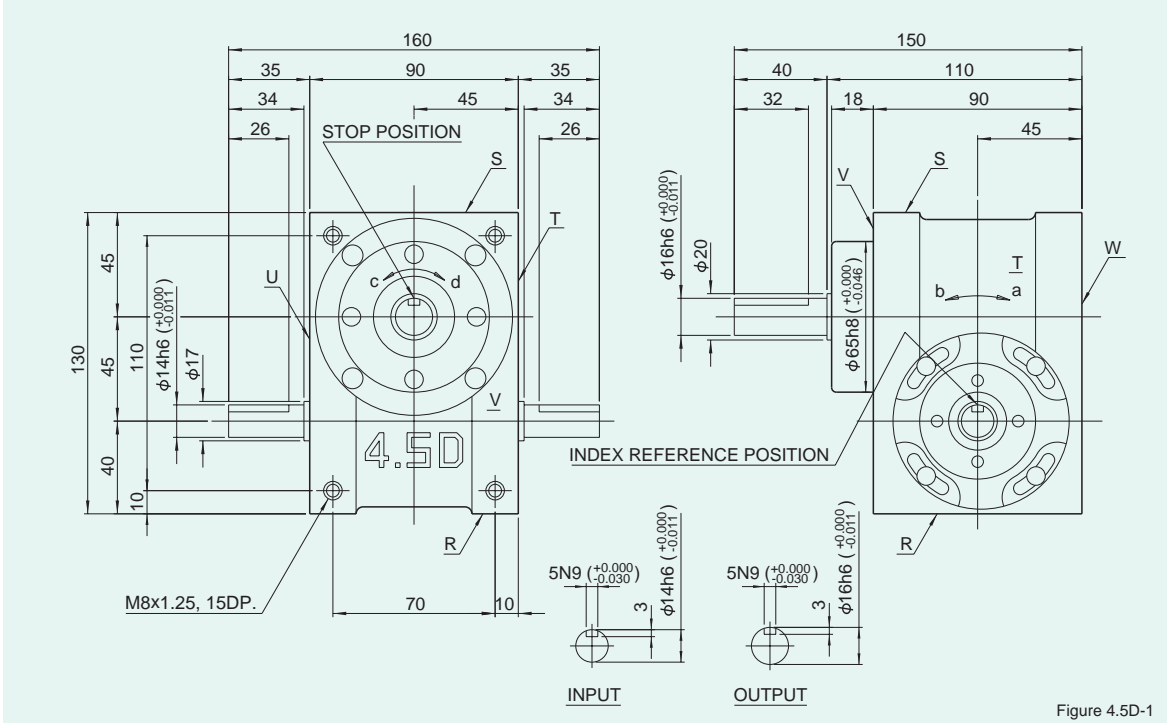
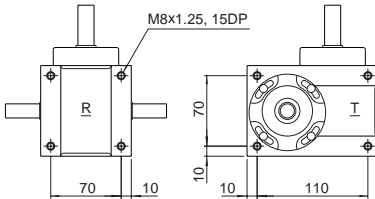


Figure 4.5D-1

Mounting hole locations

Figure 4.5D-2



Precautions

- The 4.5D is permanently grease lubricated.
- No service is necessary.

Dimension of R, S, T, and U surface

Specifications

Table 4.5D-1

| Item | Symbol | Unit | Value | Item | Symbol | Unit | Value | Item | Symbol | Unit | Value |
|---------------------------------|----------------|-------------------|--------------------------------|---|----------------|-------------------|----------------------|-----------------------------|--------|------|-------|
| Output allowable axial load | P ₁ | N | 784 | Input allowable axial load | P ₄ | N | 833 | Indexing accuracy (1 DWELL) | | sec | ±60 |
| Output allowable radial load | P ₂ | N | 711 | Input maximum repetitive bending force | P ₅ | N | 735 | Indexing accuracy (2 DWELL) | | sec | ±120 |
| Output static torque | T _s | N·m | Refer to Torque Capacity Table | Input maximum repetitive allowable torque | P ₆ | N·m | 39.2 | Indexing accuracy (3 DWELL) | | sec | ±180 |
| Output torsional rigidity | K ₁ | N·m/rad | 6.08×10 ³ | Input torsional rigidity | K ₂ | N·m/rad | 2.74×10 ³ | Indexing accuracy (4 DWELL) | | sec | ±240 |
| Output inertia | J _o | kg·m ² | 1.5×10 ⁻⁴ | Input inertia | J ₁ | kg·m ² | 8.0×10 ⁻⁵ | Repetitive accuracy | | sec | 30 |
| Output allowable bending moment | P ₃ | N·m | 24.5 | | | | | Product weight | | kg | 60 |
| | | | | | | | | Housing color | | Gray | |

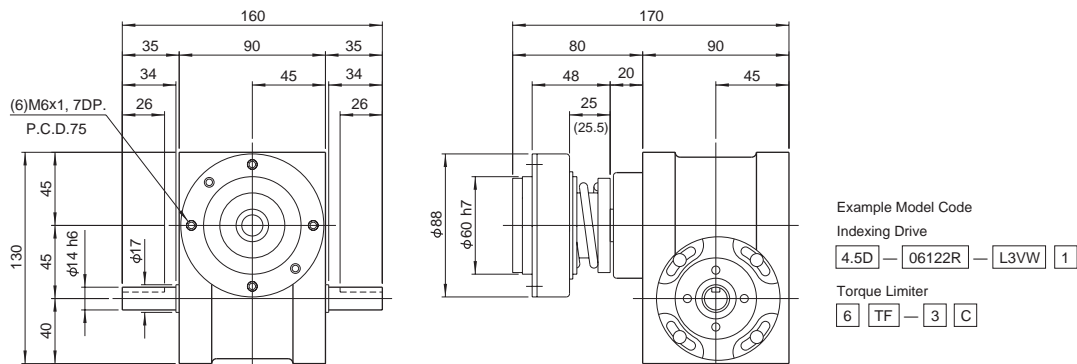
Note : Input inertia : J is calculated in dwell.

(1N=0.102kgf)

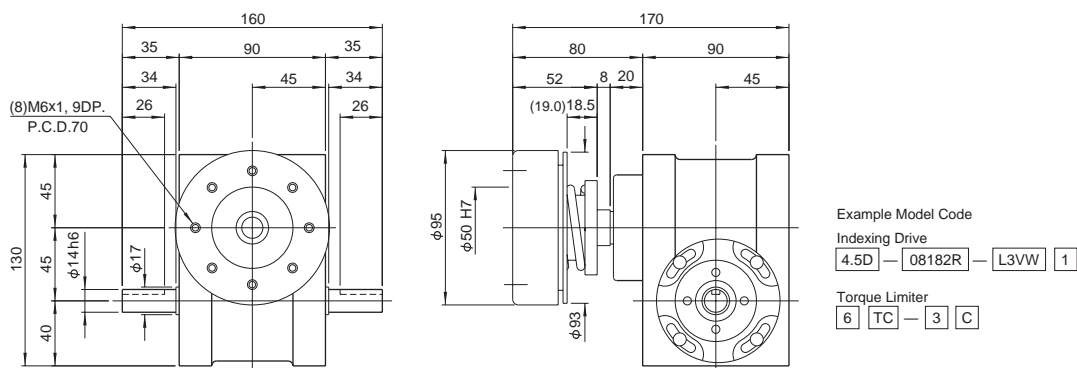
Mounted accessories

Figure 4.5D-3

4.5D(a)



4.5D(b)

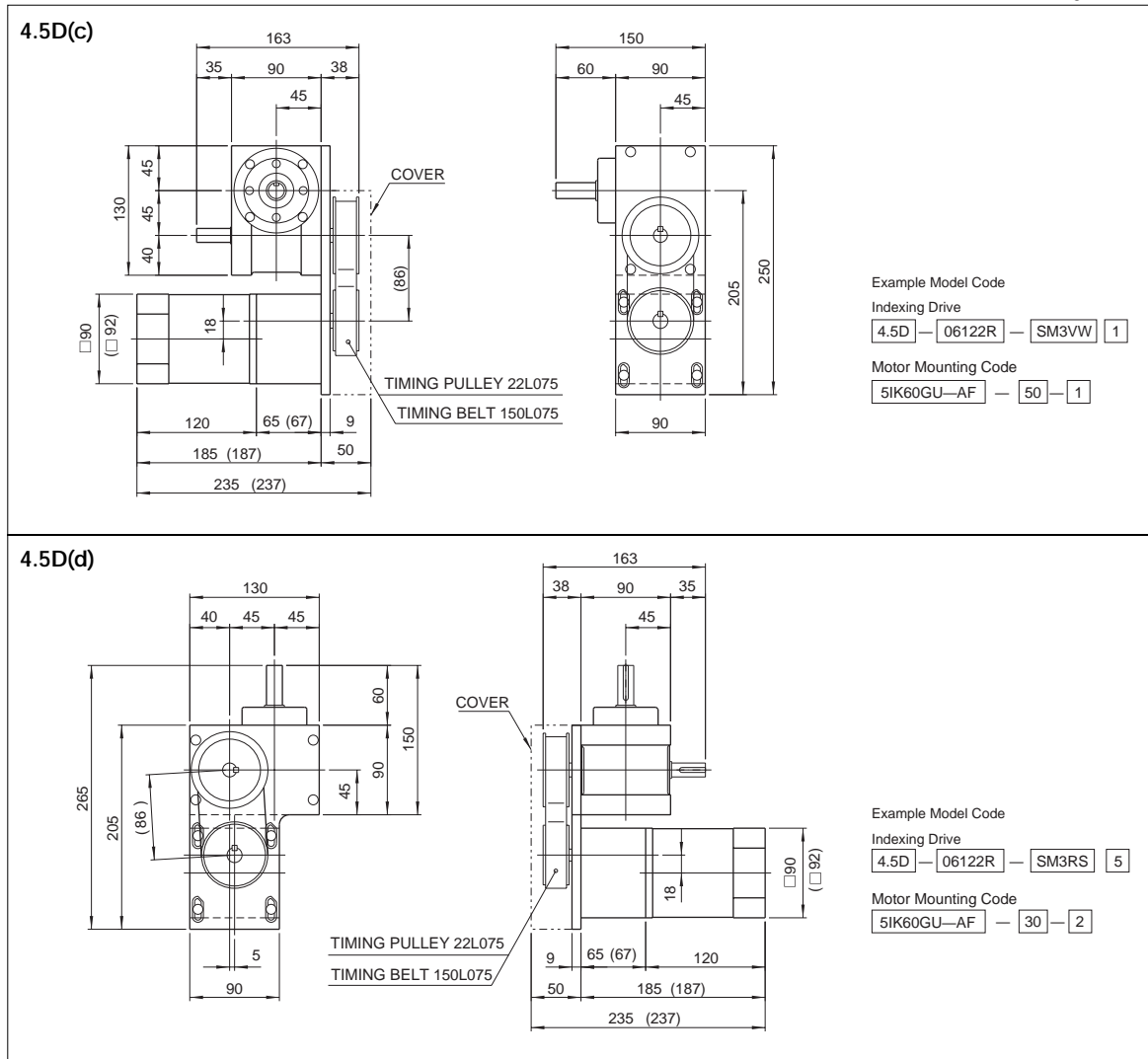


Precautions

- Models 4.5D,4.5E and 4.5R can be equipped with Torque limiters 6TF and 6TC.
- Torque limiter TC-type require a collar for mounting.

Mounted accessories

Figure 4.5D-4



Induction motor specifications

Table 4.5D-2

| Motor model | Output power (W) | Frequency (Hz) | Voltage (V) | Current (A) | Starting torque (N·m) | Rated torque (N·m) | Rotating speed (rpm) | Capacitor (μ F) | Gear head model | |
|----------------|------------------|----------------|-------------|-------------|-----------------------|--------------------|----------------------|-----------------|-------------------|----|
| | | | | | | | | | Ball bearing type | |
| Oriental Motor | 5IK60GU-AF | 60 | 50 60 | 100 | 1.4 | 0.32 0.30 | 1300 1550 | 15.0 | 5GU | KB |
| Panasonic | M9IC60G4L | 60 | 50 60 | 100 | 1.3 1.2 | 0.451 0.363 | 1275 1575 | 15.0 | M9GD | B |

Precautions

- The mounting base of the motor mounts on the sides T or U of the indexing drive as shown in Figure 4.5D-(c),(d).
- Figure 4.5D-(c),(d) shows the opposite of when mounted on side U.
- Dimensions in parenthesis Panasonic motor.
- When ordering, always specify the gear reduction ratio along with the indexing drive code number.
- Note:For details on the induction motor, refer to the brochure for Oriental Motors(or Panasonic).

Allowable torque with gear head

Table 4.5D-3

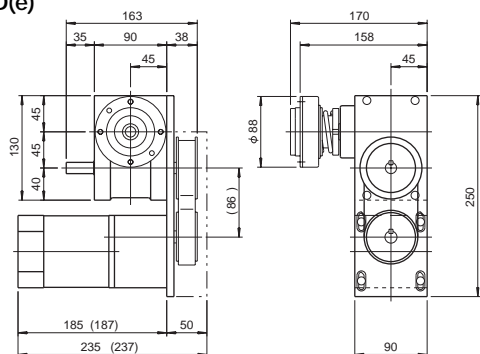
| Rotating speed (rpm) | 200 | 120 | 100 | 60 | 50 | 30 | 20 | 15 | 10 |
|-----------------------|------------|------|------|------|------|------|-------|-------|-------|
| 50Hz Gear ratio | 7.5 | 12.5 | 15 | 25 | 30 | 50 | 75 | 100 | 150 |
| 60Hz Gear ratio | 9 | 15 | 18 | 30 | 36 | 60 | 90 | 120 | 180 |
| Allowable torque(N·m) | 5IK60GU-AF | 2.7 | 4.1 | 4.9 | 7.4 | 8.9 | 14.9 | 19.9 | 20 |
| | M9IC60G4L | 2.35 | 3.92 | 4.70 | 7.55 | 9.11 | 15.19 | 19.60 | 19.60 |

(1N·m≒0.102kgf·m)

Mounted accessories

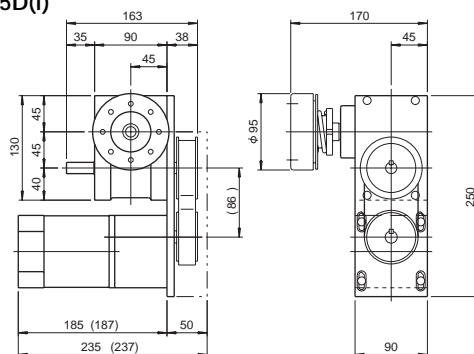
Figure 4.5D-5

4.5D(e)



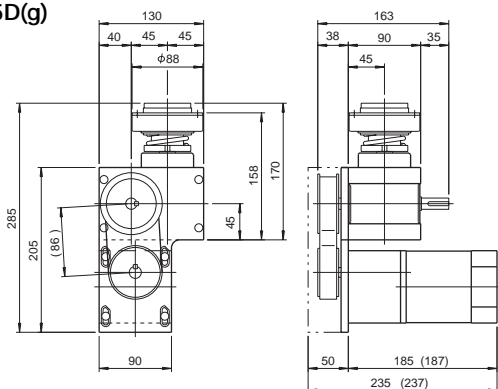
Example Model Code
 Indexing Drive 4.5D — 06122R — LM3VV 1
 Torque Limiter 6 TF — 3 C
 Motor Mounting Code 5IK60GU—AF — 50 — 1

4.5D(f)



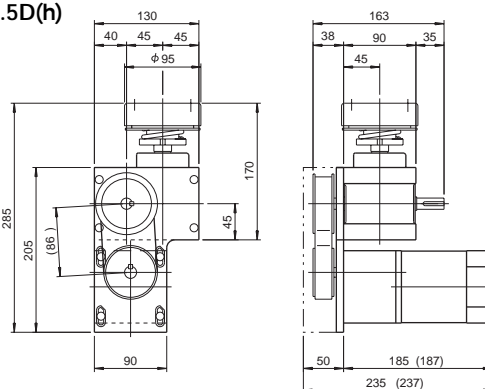
Example Model Code
 Indexing Drive 4.5D — 06122R — LM3VV 1
 Torque Limiter 6 TC — 3 C
 Motor Mounting Code 5IK60GU—AF — 50 — 1

4.5D(g)



Example Model Code
 Indexing Drive 4.5D — 06122R — LM3RS 5
 Torque Limiter 6 TF — 3 C
 Motor Mounting Code 5IK60GU—AF — 50 — 2

4.5D(h)



Example Model Code
 Indexing Drive 4.5D — 06122R — LM3RS 5
 Torque Limiter 6 TC — 3 C
 Motor Mounting Code 5IK60GU—AF — 50 — 2

Precautions

- Models 4.5D, 4.5E and 4.5R can be equipped with Torque limiters 6TF and 6TC.
- Torque limiter TC-type require a collar for mounting.