

SANDEX

ECO series

- *High Quality*
- *Reliable*
- *Economic*



High performance index drive unit from cam technology that is gentle

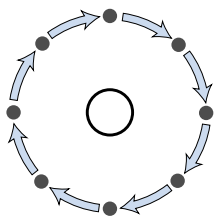
SANDEX Index-drive Unit ED



ED4.5

Basic Movement

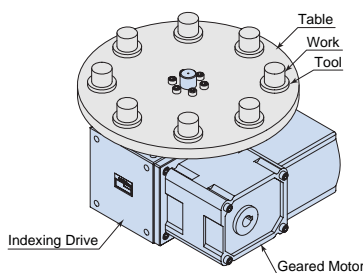
Indexing drives



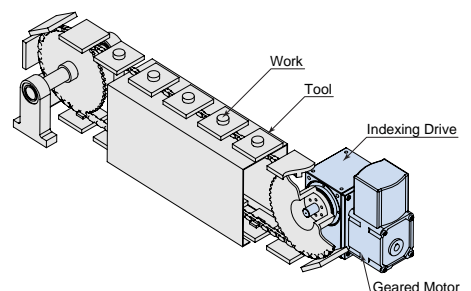
Indexing drives stop and move or "index" intermittently according to the following pattern : dwell, index, dwell, index. One cycle, that is one index and one dwell, usually requires one full turn of the input shaft.

Applications

Index Dial Application



Conveyor Application



that was born to humans and the earth

SANDEX ECO series is designed to be an economical and ecological index drive while surpassing all the advantageous features from current SANDEX range. While ECO series keeps its reliability, high-speed performance, and rigid structure, it also achieves a cleaner and easier to use interface.

In detail, the nickel-plated housing has a flat and smooth shape which contributes to its clean surface. The output shaft is a flange with integrated shaft that many accessories, e.g. table, arm, or sprocket, can be easily mounted on. Grease lubrication allows ECO series maintenance-free operation. Furthermore, a revised design gives economic advantage to the ECO series.

Features

- No need for lubrication - it has sealed joints.
- Integral flange is used for the output shaft (in the 4.5ED to 11ED models).
- An optional torque limiter can be installed on the output shaft.
- An optional timing cam and sensor can be installed on the input shaft.
- Optional clean types are available for use in clean environments.
- Models fitted with geared motors are also available.



Geared motor model ED4.5G

[Clean option]

An optional clean package is available in our ECO series. The package consists of dust seals on the flanges around shafts, sealed installation of a drip proof panel, special instructions on tapping holes to secure the housing, and corrosion prevention processing applied to the input and output shafts. This package is available in a "C package": rust proof and dust proof specifications for extreme environments such as clean rooms, and an "R package": rust proof and water proof specification.



ED4.5(Clean option)

[Overload protection system/torque limiter]

Sankyo's torque limiter uses a mechanical torque shutout mechanism that has a roller (ball) and a roller pocket. This system offers accurate shut off at a preset torque, and the torque level is easy to adjust. Also, this system meets all the requirements for safety devices on cam units. Many, many units have been sold, which is a testament to the highly reliable overload protection system. Like the cam unit, a clean option is available. With this option, the surfaces of bosses, springs, and flanges are specially treated. Then the treated surfaces are coated with a corrosion preventive layer. Therefore, the system will maintain its excellent corrosion proof characteristics.



Torque Limiter(Clean option)

PRODUCT SPECIFICATION

Product Specifications

Table 3-1

Item	Unit	ED3.꠫ G)	ED4.꠫ G)	ED꠫ G)	ED7 G)	ED꠫ G)	ED1꠫ G)
Number of stops		2 ~ 12	2 ~ 24	2 ~ 24	2 ~ 48	2 ~ 48	2 ~ 48
Number of dwells		1	1, 2, 3	1, 2	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4
Shape		Shaft		Flange with shaft			
Indexing accuracy (one-dwell)	sec	±72	±60	±45	±30	±30	±30
Indexing accuracy (two-dwell)	sec		±120	±90	±60	±60	±60
Repetitive accuracy	sec	36	30	20	15	15	15
Input shaft speed	rpm	max.200					
Housing surface		Electrolytically plated nickel					
Mount position		All position available(1 ~ 6)					
Lubrication		Grease					

Specifications

Table 3-2

Item	Unit	ED3.꠫ G)	ED4.꠫ G)	ED꠫ G)	ED7 G)	ED꠫ G)	ED1꠫ G)
Output allowable axial load	N	490	1274	1372	2156	3234	5488
Output allowable radial load	N	490	1372	1392	2940	4116	6860
Output torsional rigidity	N·m /rad	2.90×10 ³	6.08×10 ³	1.37×10 ⁴	2.84×10 ⁴	5.29×10 ⁴	8.82×10 ⁴
Output inertia	kg·m ²	1.2×10 ⁻⁴	3.45×10 ⁻⁴	8.22×10 ⁻⁴	2.33×10 ⁻³	5.60×10 ⁻³	1.97×10 ⁻²
Output allowable bending moment	N·m	16	33	34.3	63.7	80.8	220
Input allowable axial load	N	343	833	980	1470	3430	4704
Input maximum repetitious bending force	N	343	1078	1070	1078	2548	4067
Input maximum repetitious allowable torque	N·m	24.5	39.2	58.8	93.1	245	392
Input torsional rigidity	N·m /rad	1.60×10 ³	2.74×10 ³	4.12×10 ³	8.34×10 ³	1.67×10 ⁴	2.74×10 ⁴
Input inertia *1	kg·m ²	1.65×10 ⁻⁴	8.0×10 ⁻⁵	4.75×10 ⁻⁴	1.5×10 ⁻³	2.25×10 ⁻³	7.0×10 ⁻³
Product weight (without a motor)	kg	About 3.꠫ (7.6)	About 7.꠫ (11)	About 1꠫ (19)	About 1꠫ (28)	About 3꠫ (47)	About 6꠫ (86)

Specifications and dimensions are subject to change without notice. Always double check before ordering.

(1N = 0.102kgf)

*1: Input inertia is calculated in dwell.

Option

Table 3-3

		ED3.꠫ G)	ED4.꠫ G)	ED꠫ G)	ED7 G)	ED꠫ G)	ED1꠫ G)
Reamed holes(W surface)		(Contact us)	Available				(Contact us)
Input shaft with key-way							
Torque limiter installation	Flange type	5TF	6TF	6TF	6, 7TF	7, 8TF	7, 8, 11TF
	Coupling type	5TC	6TC	6TC	6, 7TC	7, 8TC	7, 8, 11TC
Overload detective sensor		(Contact us)	Available				(Contact us)
Timing cam+sensor installation		Maximum of two sets	Maximum of two sets	Maximum of two sets	Maximum of two sets	Maximum of two sets	Maximum of two sets
Waterproof motor		Standard					
Clean option	(Refer to the table below.)	C, R	C, R	C, R	C, R	C, R	C, R

Clean option

Table 3-4

Clean option	Standard	C package	R package
Specified processing for retaining holes			
Shaft processing	Raydent		
	Coated with corrosion inhibitor		
Flange cover panel			
Reamed holes(W surface)			
Input shaft with key-way			
Torque limiter installation	Flange type	(Standard)	(C package)
	Coupling type		
Overload detective sensor			
Timing cam + sensor installation	(A type)	(B type)	(B type)

:standard :optional

C package

An optional version that has excellent rust-proof and dust-proof features, for use in clean rooms.

R package

An optional version that has excellent drip and corrosion resistant features for use in high humidity locations.

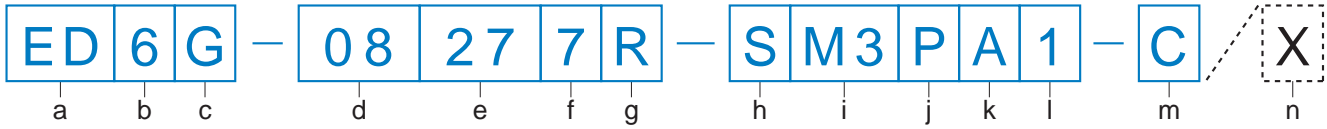
<Raydent processing>

Raydent processing is an electroplating method using special surface processing technology to create metal surfaces similar to alloys. The Raydent layer and metal layer are completed integrated with each other and cannot be separated. The metal layer develops stainless steel characteristics after a period of stabilization. It also forms a superior rust-prevention layer together with an external oxidized ceramic layer (approx. 1µm thick).

Raydent is a registered trademark of Raydent Industrial Co., Ltd.

MODEL CODE

Model code example



a Model	b Size	c Motor	d Number of Stops (S)	e Index Period ()	f Cam curve	g Hand of Cam
ED Indexing Drive	6 Center distance 60mm	G Geared Motor	08 8 Stop	27 270°	7 SMS-3 Curve	R 1 Dwell Right Hand Cam
ED ECO series	Shaft-to-shaft distance	G Geared motor <input type="checkbox"/> No motor (No symbol)	Number of stops of the Indexing Drive.	Cam rotation period during which the output moves (Total angle for two dwell cam.)	7 SMS-3 Curve (SANKYO Modified Sine) 9 Custom-made Cam Curve (Special order)	Indicates rotating direction of input and output shafts and number of dwells. 1 Dwell 2 Dwell Right Hand Cam R R2 Left Hand Cam L L2

h Output	i Input Shaft Projection	j Reamed Holes	k Mounting Holes	l Mounting Position	m Clean Option	n Special Instruction
S Standard	M3 Both T and U surface input extension and motor mounted	P Reamed Holes	A All surface	1 W side GL	C C package	X Special Order
S Standard F Shorten shaft L Torque limiter mounted	M3 Both T and U surface input extension and motor mounted 1 Only T surface side 2 Only U surface side 3 Both T and U surface sides If need key-way, include the symbol K MK3 , K1 , K2 , K3	<input type="checkbox"/> No hole (No symbol) P Reamed holes	A All surface(standard) (RSVW :ED3.8) 	Mounting position as shown below. 1 W side GL 2 V side GL 3 U side GL 4 T side GL 5 R side GL 6 S side GL GL(Ground Level)	C C package R R package <input type="checkbox"/> Standard (No Symbol)	Include the symbol X in case of special orders. <input type="checkbox"/> Standard (No Symbol) X Special Order

Timing cam Photo switch(option)

Example **TC** - **A1** - **ED6G**

a Model	b Type	c Number	d Model size
TC Timing cam + Photo switch	A Photo microsensor B Proximity sensor	1 1 set 2 2 set	Indicates the size and model of ECO series mounting timing cam.

Note:

Please let us know the product code of the geared motor together with product code of the main housing.
To find product the code of a geared motor, see each product specification page for each product.
If you want an optional torque limiter, timing cam, or sensor to be mounted on the main housing, please let us know product code for these items, together with the product code of the main housing.

Torque limiter(option)

Example **7** **TF** - **40** **B** - **C** - **LS**

a Torque limiter size	b Model	c Maximum tripping torque	d Type of spring	e Clean option	f Overload detective sensor
7	TF Flange type	40 Tmax 400N·m(40kgf·m)	B Heavy-duty coil springs	C C package	LS Sensor
Indicates the size of the torque limiter	TF Flange type TC Coupling type	Indicates the maximum tripping torque	A Light-duty coil springs B Heavy-duty coil springs C Coil springs	C C package R R package <input type="checkbox"/> Standard (No symbol)	LS With sensor <input type="checkbox"/> Standard (No symbol)

ED3.8/ED3.8G

ED3.8 Dimensions

(Unit : mm)

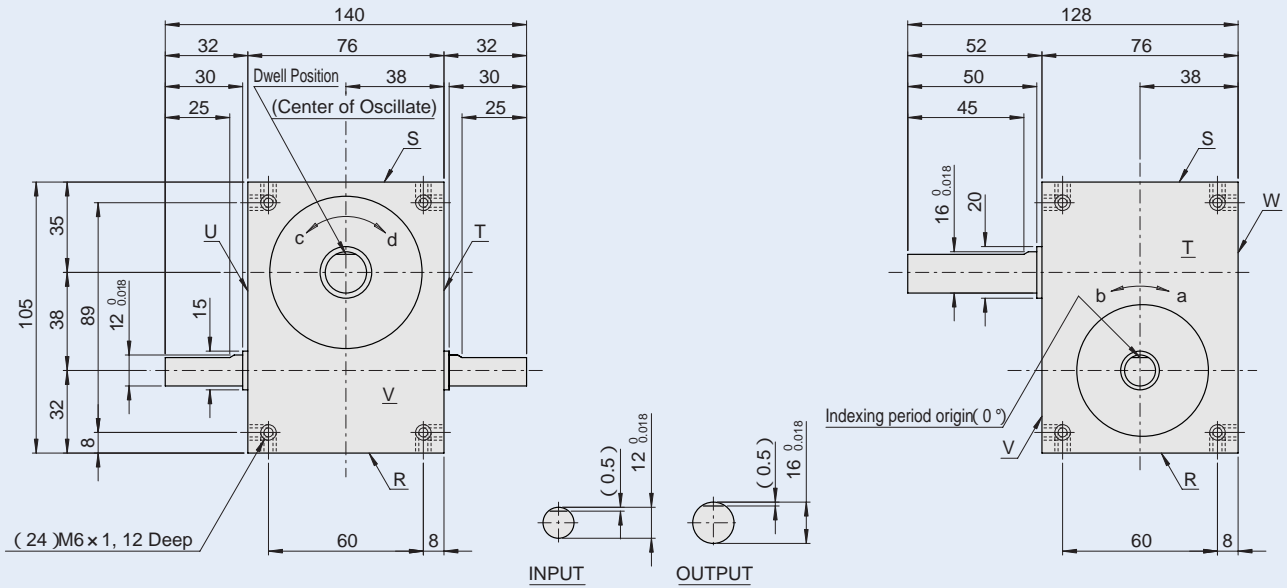
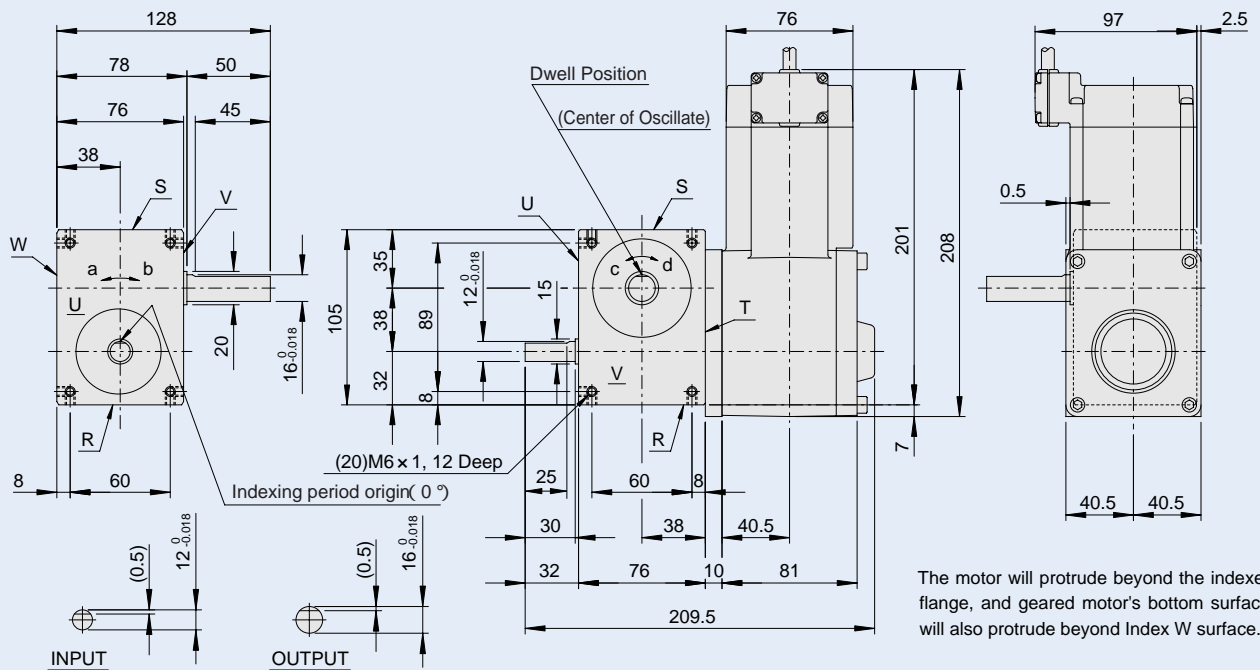


Figure ED3.8-1

Note:Tapped mounting holes on surfaces R, S, V and W come automatically.

ED3.8G Dimensions



The motor will protrude beyond the indexer flange, and geared motor's bottom surface will also protrude beyond Index W surface.

Figure ED3.8-2

Note:Tapped mounting holes on surfaces R, S, V and W come automatically.

Dynamic-rated output torque (Top) at 60ipm(N•m)

Table ED3.8-1

S	90 °	120 °	150 °	180 °	210 °	240 °	270 °	300 °	330 °
2							2.2	2.2	2.2
3				2.6	2.6	5.3	5.3	5.3	5.3
4				3.2	3.2	3.2	3.1	3.1	3.0
5				4.2	4.2	4.1	4.1	4.0	4.0
6	3.6	7.3	7.3	8.5	8.3	8.2	8.0	7.9	7.7
8	4.4	4.3	4.2	8.8	8.6	8.4	8.2	8.0	7.9
10	5.7	5.7	5.5	5.4	5.2	5.1	4.9	4.8	4.7
12	2.8	6.7	6.5	6.3	6.1	6.0	5.8	5.7	5.5

Note:

- Torque limiter 5TF or 5TC available for ED3.8.
- Spacer required to mount torque limiter.
- Output shaft available to shorten to 10mm height.
- Geared motor (25W) is available for ED3.8.
- Rated output torque (Top) is a maximum continuous torque allowed based upon 12,000 hours of endurance life.

:Index period S: Number of Stops Note: Cam curve is SMS-3 curve.

Details about the number of stops and indexing period, not described in the table above, can be obtained by contacting us.

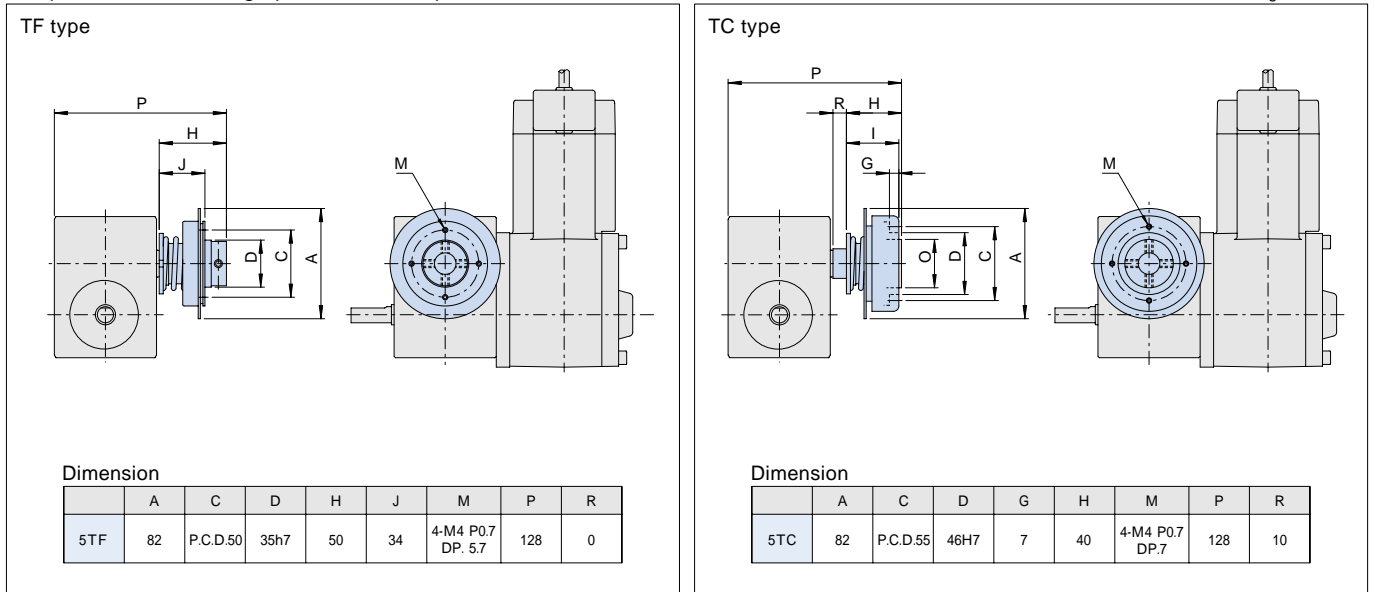
Specifications of geared motor

Table ED3.8-2

Code	Motor Power (W)	Voltage (V)	Actual Gear Ratio (i)	Output Shaft Speed N _M (rpm)		Output Allowable Torque T _R (N·m)		Moment of inertia J _M (kg·m ²)	Weight (kg)
				50Hz	60Hz	50Hz	60Hz		
GM25-10AS-ED3.8G-R	25	200	10	150	180	1.08		0.6×10 ⁻⁴	3.5
GM25-15AS-ED3.8G-R			15	100	120	1.67			
GM25-20AS-ED3.8G-R			20	75	90	2.25			
GM25-25AS-ED3.8G-R			25	60	72	2.74			
GM25-30AS-ED3.8G-R			30	50	60	3.33			
GM25-40AS-ED3.8G-R			40	37.5	45	4.41			
GM25-50AS-ED3.8G-R			50	30	36	5.49			
GM25-60AS-ED3.8G-R			60	25	30	6.66			

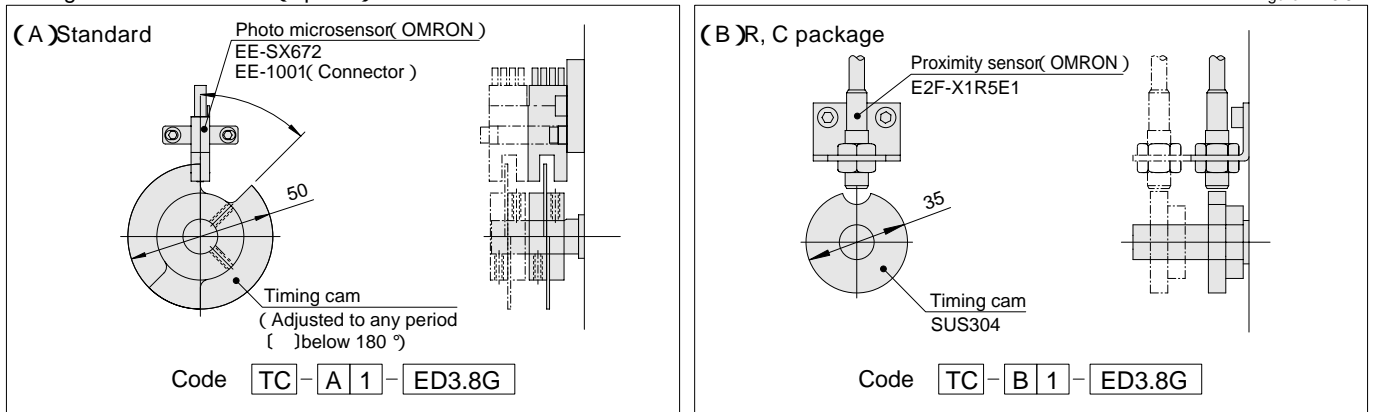
Torque limiter mounting specifications(option)

Figure ED3.8-3



Timing cam Photo switch(option)

Figure ED3.8-4



ED4.5/ED4.5G

ED4.5 Dimensions

(Unit : mm)

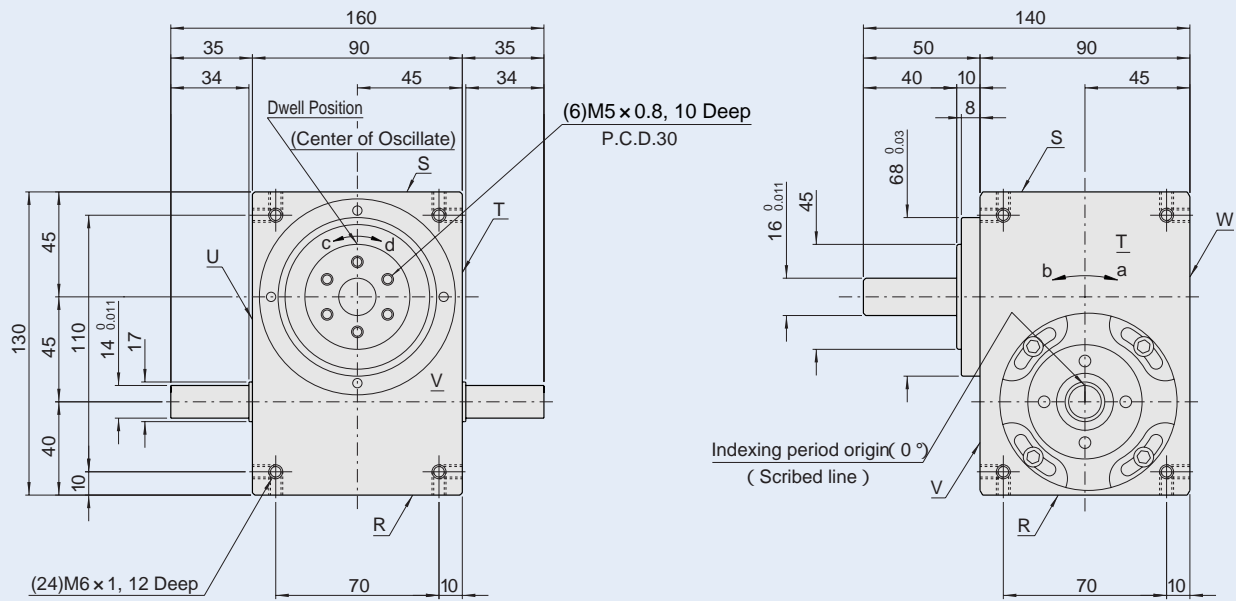


Figure ED4.5-1

ED4.5G Dimensions

Note:Tapped mounting holes on all surfaces come automatically.

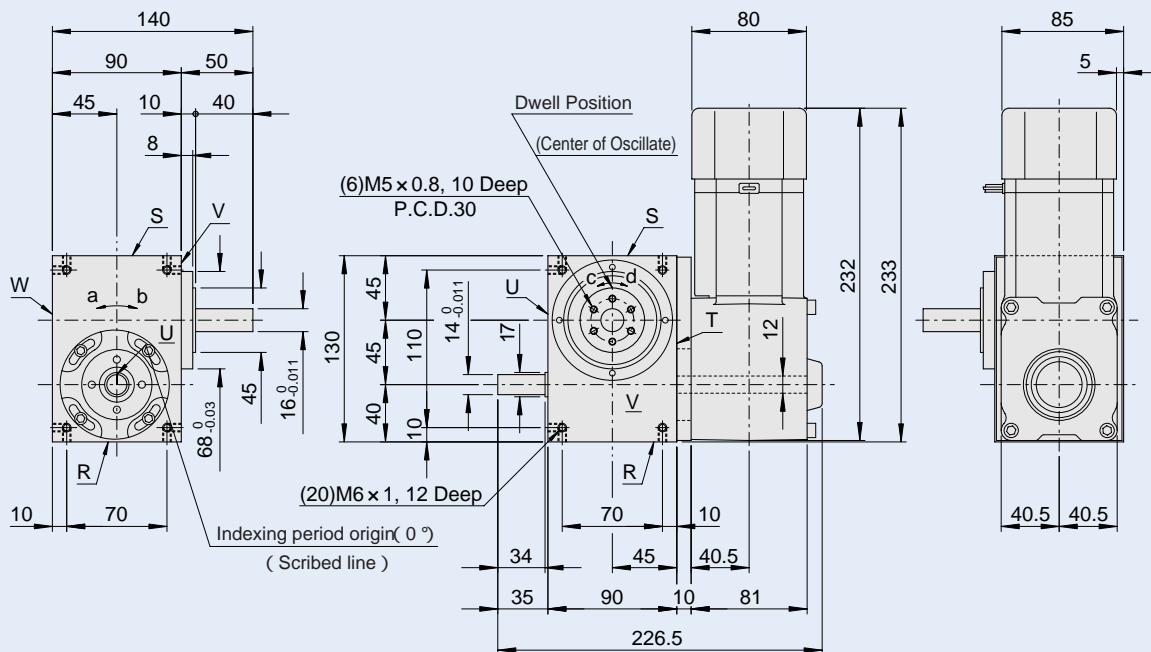


Figure ED4.5-2

Note:Tapped mounting holes on all surfaces come automatically.

Dynamic-rated output torque (Top) at 60ipm(N•m)

Table ED4.5-1

S	90 °	120 °	150 °	180 °	210 °	240 °	270 °	300 °	330 °
2							4.4	4.4	4.4
3				5.2	5.3	11.1	11.0	10.9	10.8
4				4.8	6.5	6.4	6.3	6.2	6.1
5				4.2	4.2	4.1	4.0	3.9	3.8
6	7.2	15.1	14.9	14.6	14.3	13.9	13.6	13.3	13.0
8	8.5	11.2	10.9	10.5	10.2	9.9	9.6	9.4	9.1
10	5.8	10.4	10.0	9.6	9.2	8.9	8.6	8.4	8.2

Note:

- Torque limiter 6TF or 6TC available for ED4.5.
- Spacer required to mount torque limiter.
- Output shaft available to shorten to 10mm height.
- Geared motor (60W) is available for ED4.5.
- Rated output torque (Top) is a maximum continuous torque allowed based upon 12,000 hours of endurance life.

: Index period S: Number of Stops Note: Cam curve is SMS-3 curve.

Details about the number of stops and indexing period, not described in the table above, can be obtained by contacting us.

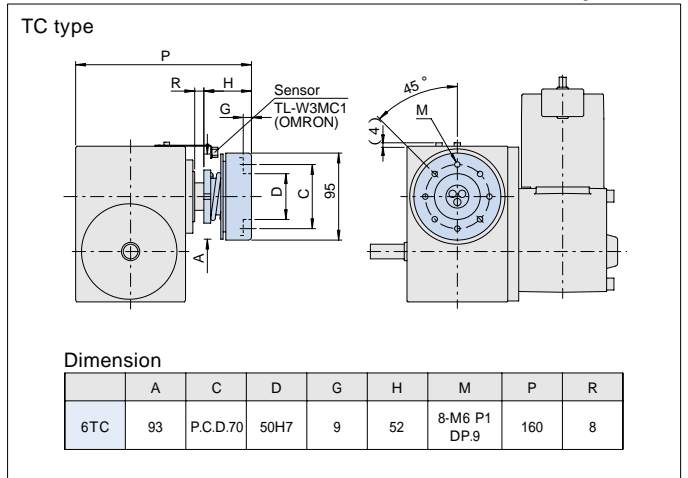
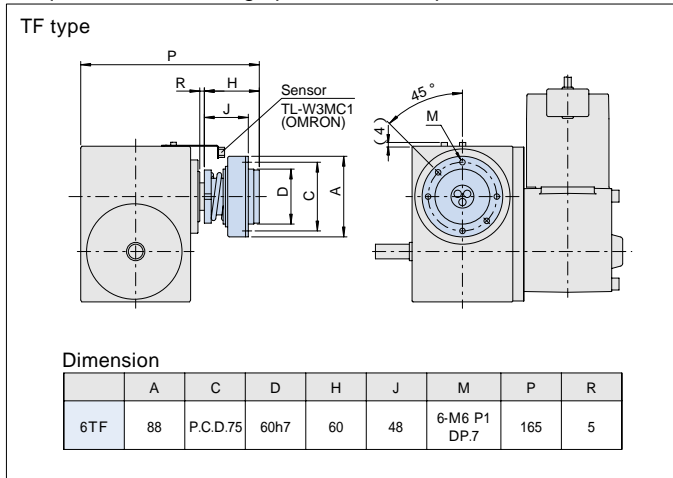
Specifications of geared motor

Table ED4.5G-2

Code	Motor Power (W)	Voltage (V)	Actual Gear Ratio (i)	Output Shaft Speed N _M (rpm)		Output Allowable Torque T _R (N·m)		Moment of inertia J _M (kg·m ²)	Weight (kg)
				50Hz	60Hz	50Hz	60Hz		
GM60-10AS-ED4.5G	60	200	10	150	180	2.74		0.8×10 ⁻⁴	3
GM60-15AS-ED4.5G			15	100	120	4.12			
GM60-20AS-ED4.5G			20	75	90	5.49			
GM60-25AS-ED4.5G			25	60	72	6.96			
GM60-30AS-ED4.5G			30	50	60	8.33			
GM60-40AS-ED4.5G			40	37.5	45	10.8			
GM60-50AS-ED4.5G			50	30	36	13.7			
GM60-60AS-ED4.5G			60	25	30	16.7			

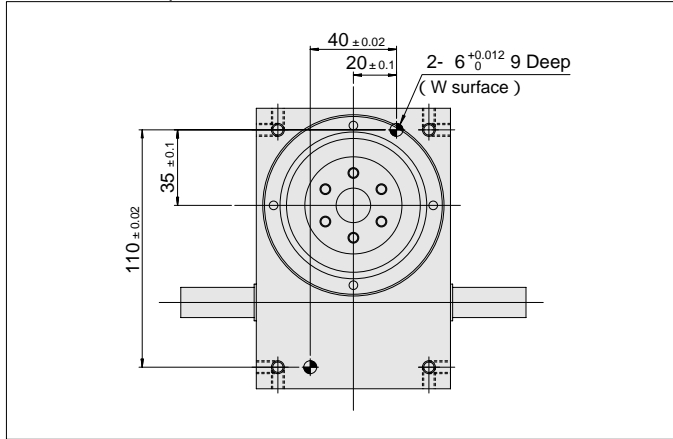
Torque limiter mounting specifications(option)

Figure ED4.5-3



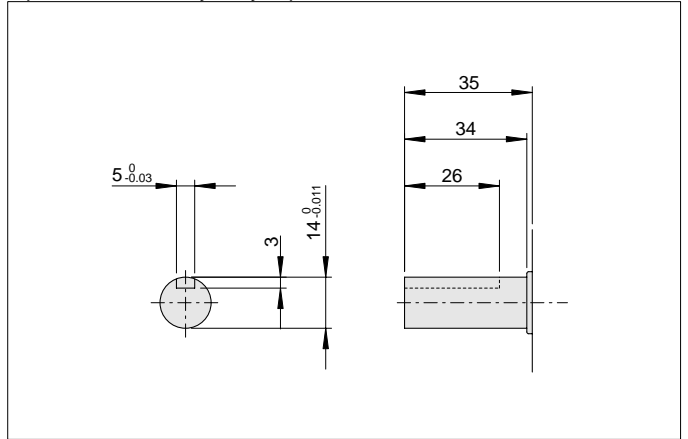
Reamed hole(option)

Figure ED4.5-4



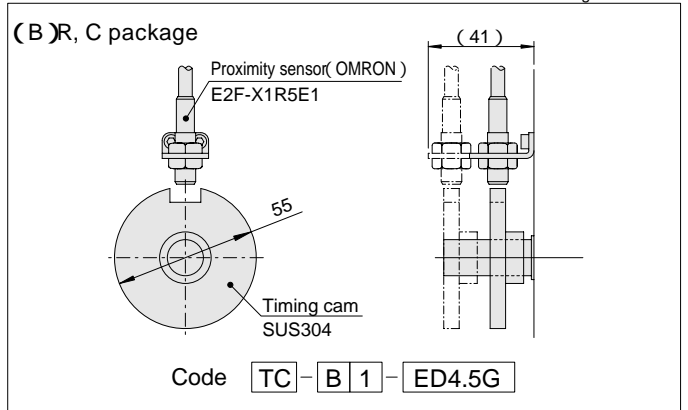
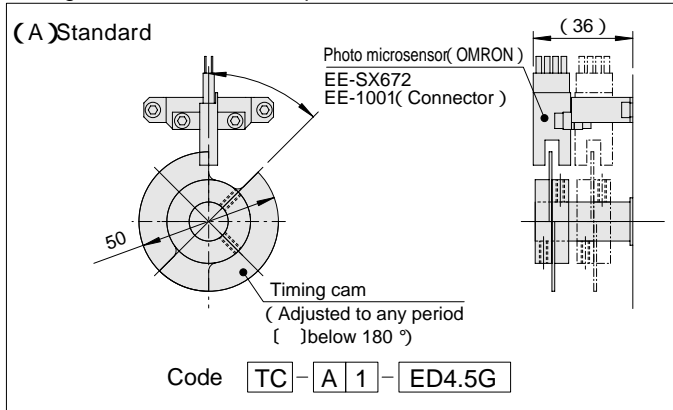
Input shaft with key-way(option)

Figure ED4.5-5



Timing cam Photo switch(option)

Figure ED4.5-6



ED6/ED6G

ED6 Dimensions

(Unit : mm)

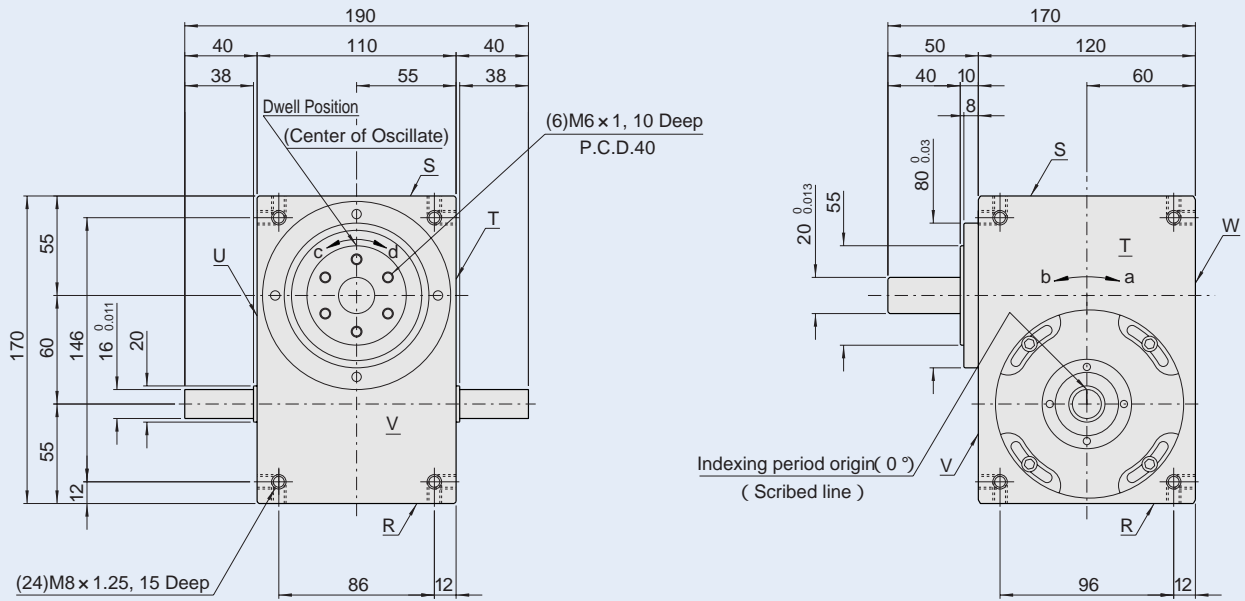


Figure ED6-1

ED6G Dimensions

Note:Tapped mounting holes on all surfaces come automatically.

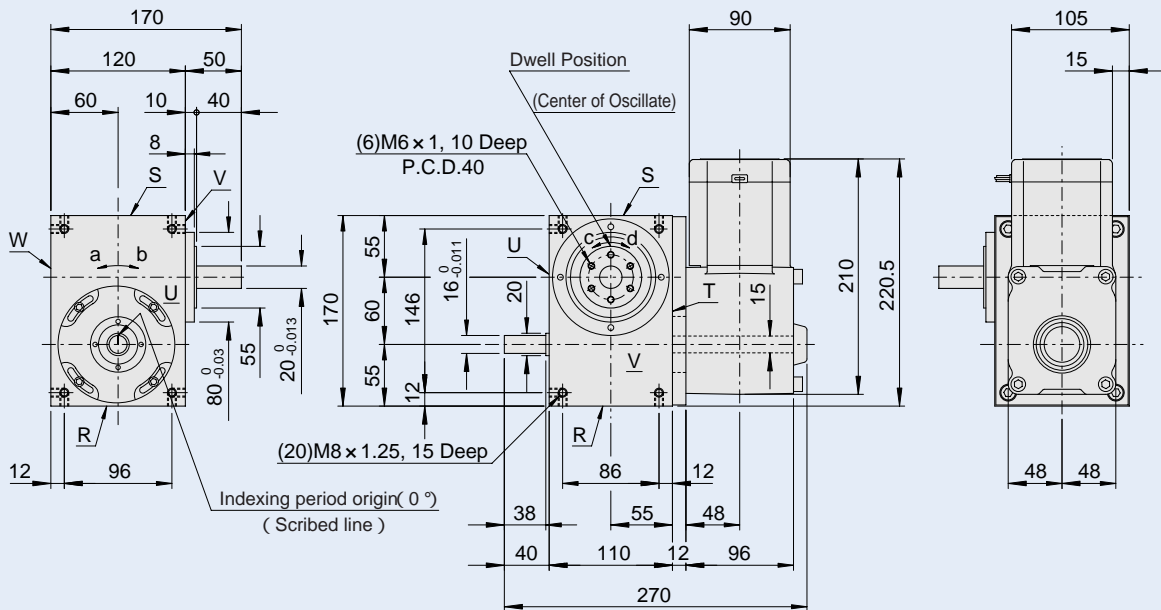


Figure ED6-2

Note:Tapped mounting holes on all surfaces come automatically.

Dynamic-rated output torque (Top) at 60ipm(N·m)

Table ED6-1

S	90 °	120 °	150 °	180 °	210 °	240 °	270 °	300 °	330 °
2							13.0	12.9	12.8
3				15.6	15.4	15.2	36.6	36.0	35.4
4			7.7	7.5	7.4	17.9	17.5	17.2	16.8
5				6.4	8.2	8.0	7.8	7.6	7.4
6	21.3	54.8	53.6	52.2	50.7	49.4	48.1	46.9	45.8
8	10.3	24.5	23.4	22.5	21.6	20.9	20.3	19.7	19.2
10	8.7	10.9	10.4	9.9	9.5	9.2	8.9	8.6	8.4
12	4.5	8.9	8.4	8.0	7.7	7.4	7.1	6.9	6.7

Note:

- Torque limiter 6TF or 6TC available for ED6.
- Spacer required to mount torque limiter.
- Output shaft available to shorten to 10mm height.
- Geared motor (90W) is available for ED6.
- Rated output torque (Top) is a maximum continuous torque allowed based upon 12,000 hours of endurance life.

:Index period S:Number of Stops Note:Cam curve is SMS-3 curve.

Details about the number of stops and indexing period, not described in the table above, can be obtained by contacting us.

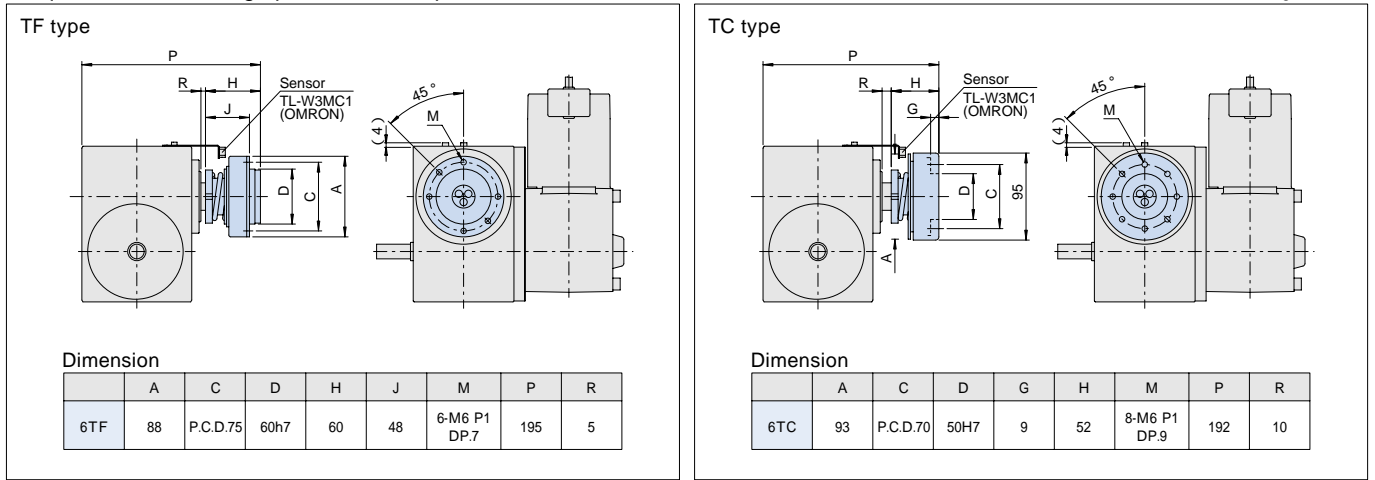
Specifications of geared motor

Table ED6-2

Code	Motor Power (W)	Voltage (V)	Actual Gear Ratio (i)	Output Shaft Speed N _m (rpm)		Output Allowable Torque T _R (N·m)		Moment of inertia J _m (kg·m ²)	Weight (kg)
				50Hz	60Hz	50Hz	60Hz		
GM90-10AS-ED6G	90	200	10	150	180	4.12		1.2×10 ⁻⁴	4
GM90-15AS-ED6G			15	100	120	6.17			
GM90-20AS-ED6G			20	75	90	8.33			
GM90-25AS-ED6G			25	60	72	10.8			
GM90-30AS-ED6G			30	50	60	12.7			
GM90-40AS-ED6G			40	37.5	45	16.7			
GM90-50AS-ED6G			50	30	36	20.6			
GM90-60AS-ED6G			60	25	30	24.5			

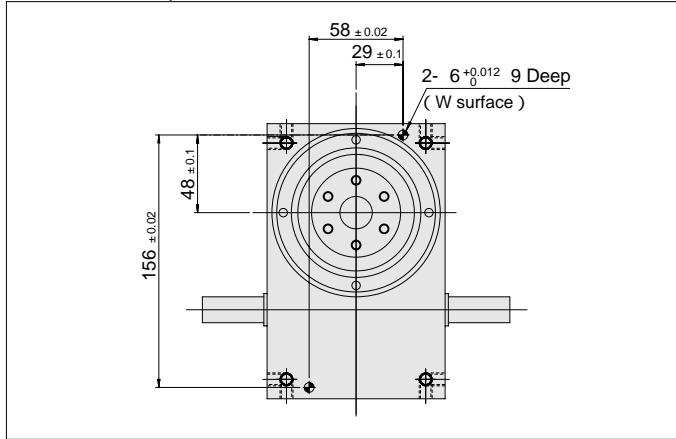
Torque limiter mounting specifications(option)

Figure ED6-3



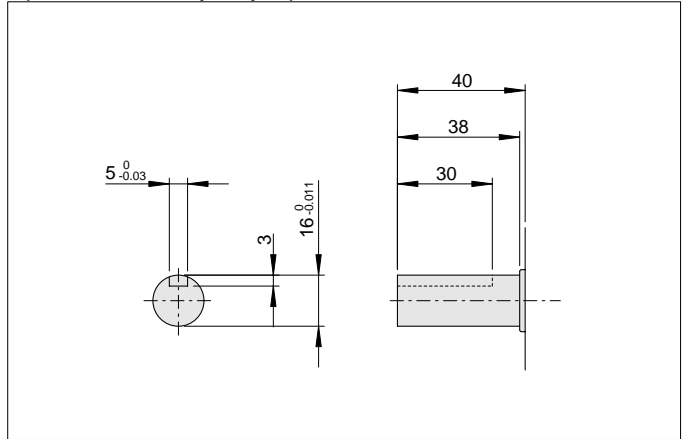
Reamed hole(option)

Figure ED6-4



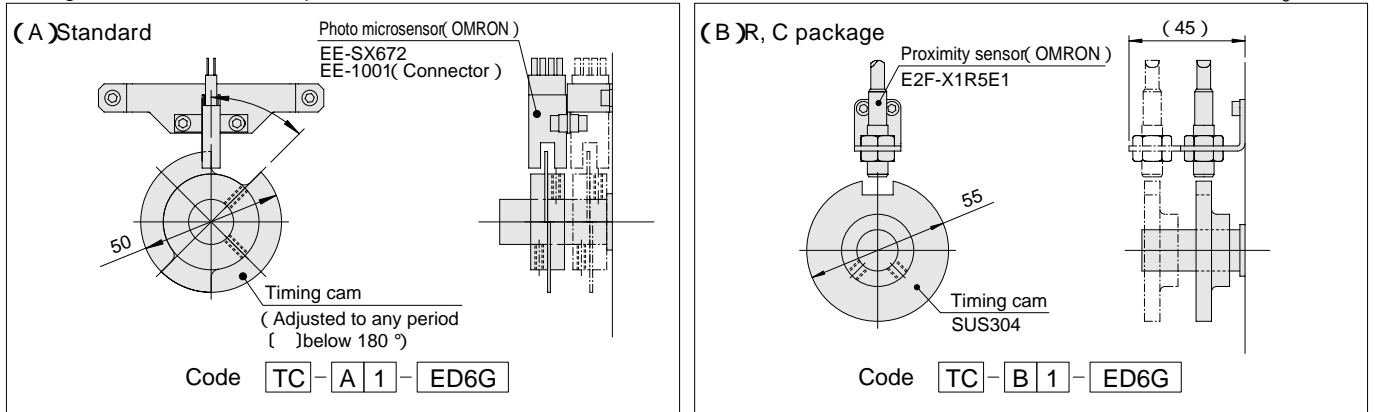
Input shaft with key-way(option)

Figure ED6-5



Timing cam Photo switch(option)

Figure ED6-6



ED7/ED7G

ED7 Dimensions

(Unit : mm)

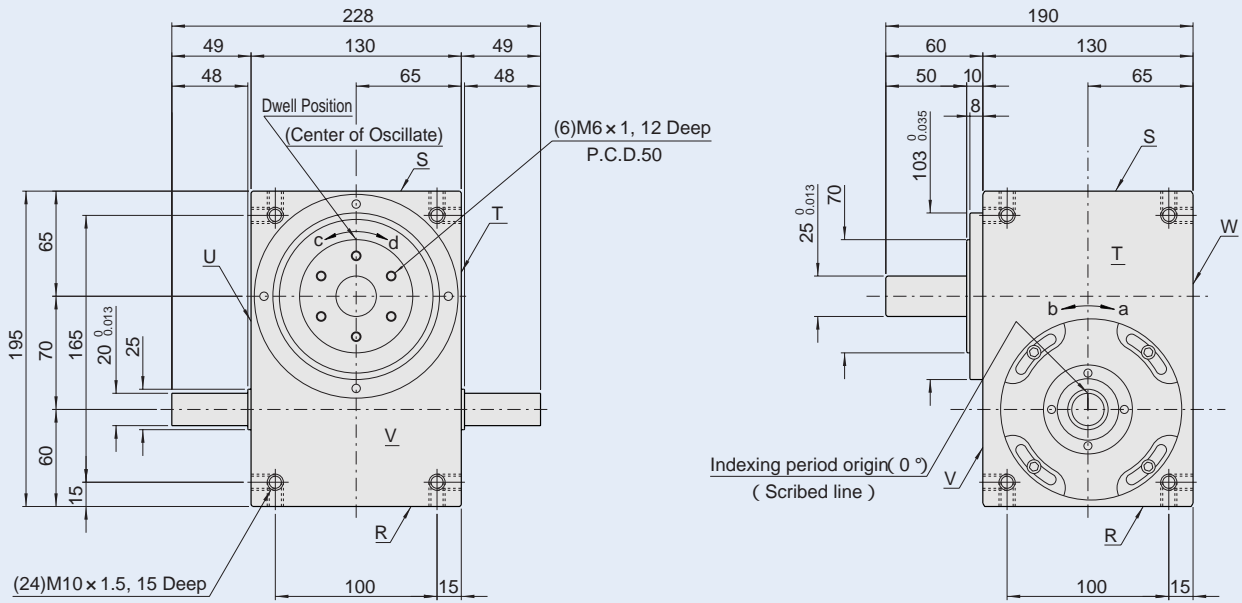


Figure ED7-1

ED7G Dimensions

Note: Tapped mounting holes on all surfaces come automatically.

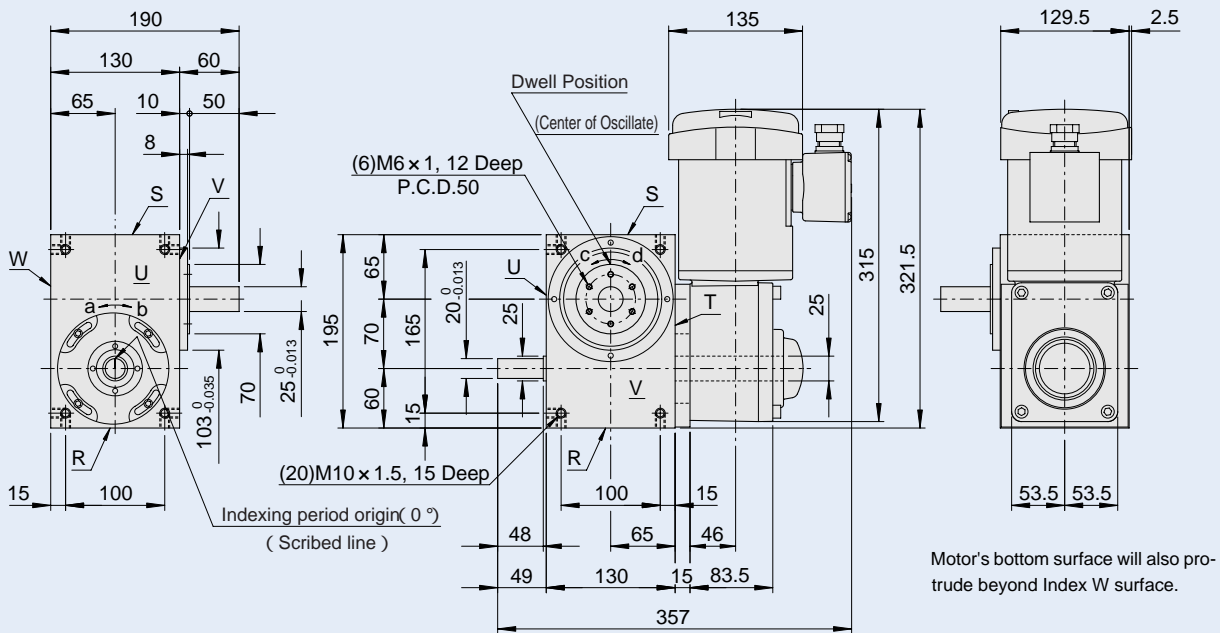


Figure ED7-2

Note: Tapped mounting holes on all surfaces come automatically.

Dynamic-rated output torque (Top) at 60ipm(N•m)

Table ED7-1

S	90°	120°	150°	180°	210°	240°	270°	300°	330°
2							39.8	39.8	39.8
3				47.7	55.7	55.5	55.2	54.7	54.2
4		17.6	17.6	53.1	52.7	52.0	51.3	50.5	49.7
5				19.8	19.4	18.9	18.5	18.0	17.7
6	65.2	75.9	74.8	73.2	71.5	69.8	68.2	66.6	65.2
8	67.8	71.1	69.0	74.1	71.8	69.6	67.6	65.9	64.2
10	27.1	25.8	24.7	23.6	22.7	21.9	21.3	20.6	20.1
12	14.1	13.3	12.7	12.1	11.6	11.2	10.8	10.5	10.2

Note:

- Torque limiter 6TF,6TC,7TF or 7TC available for ED7.
- Spacer required to mount torque limiter.
- Output shaft available to shorten to 10mm height.
- Geared motor (0.2kW) is available for ED7.
- Rated output torque (Top) is a maximum continuous torque allowed based upon 12,000 hours of endurance life.

:Index period S: Number of Stops Note: Cam curve is SMS-3 curve.

Details about the number of stops and indexing period, not described in the table above, can be obtained by contacting us.

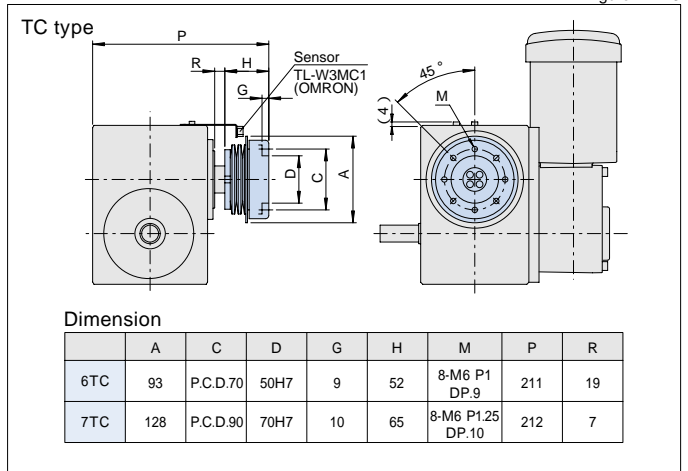
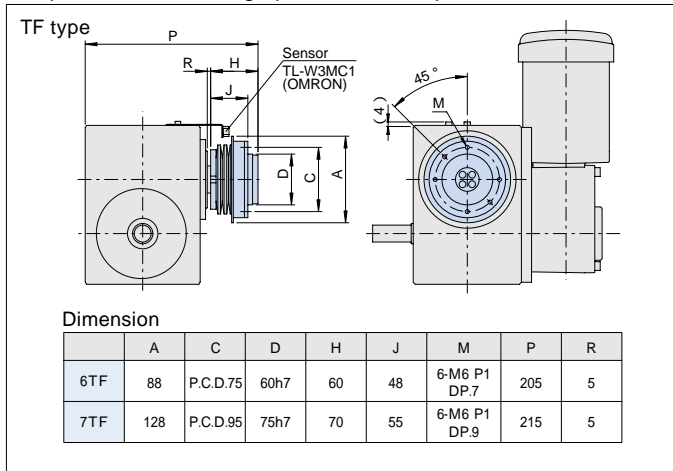
Specifications of geared motor

Table ED7-2

Code	Motor Power (W)	Voltage (V)	Actual Gear Ratio (i)	Output Shaft Speed N _m (rpm)		Output Allowable Torque T _R (N·m)		Moment of inertia J _m (kg·m ²)	Weight (kg)
				50Hz	60Hz	50Hz	60Hz		
GM200-10AS-ED7G	200	200/220	10	150	180	11	9.2	7.3×10 ⁻⁴	7.5
GM200-12.5AS-ED7G			12.5	120	144	14	12		
GM200-15AS-ED7G			15	100	120	17	14		
GM200-20AS-ED7G			20	75	90	23	19		
GM200-25AS-ED7G			25	60	72	27	24		
GM200-30AS-ED7G			30	50	60	33	27		
GM200-40AS-ED7G			40	37.5	45	44	37		
GM200-50AS-ED7G			50	30	36	55	46		
GM200-60AS-ED7G			60	25	30	67	55		

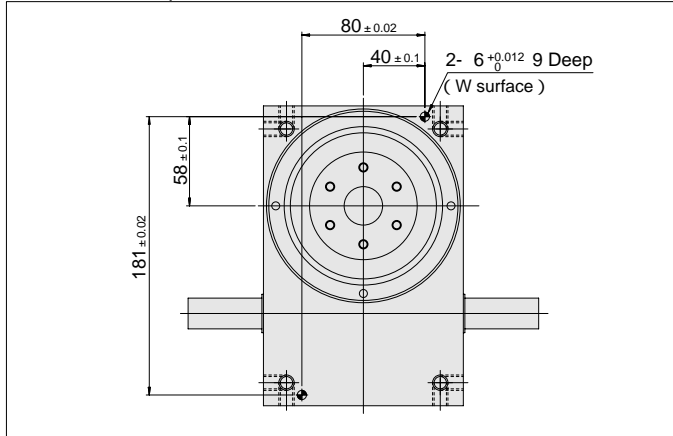
Torque limiter mounting specifications(option)

Figure ED7-3



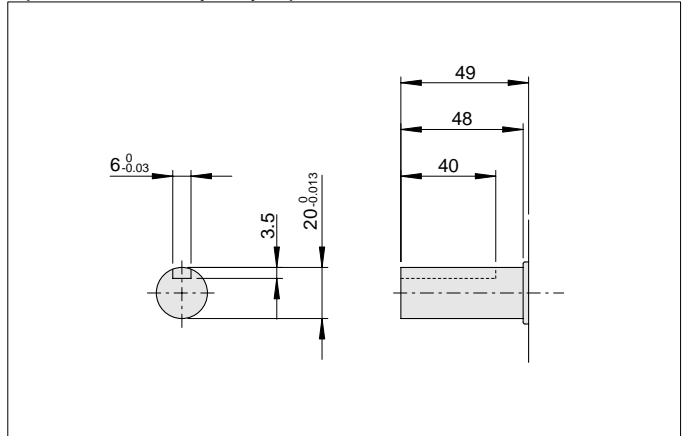
Reamed hole(option)

Figure ED7-4



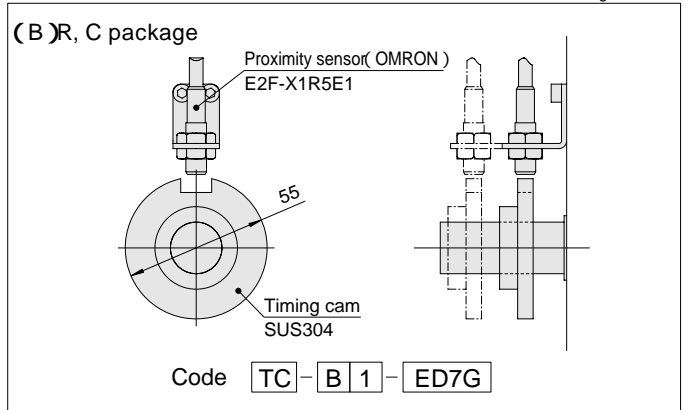
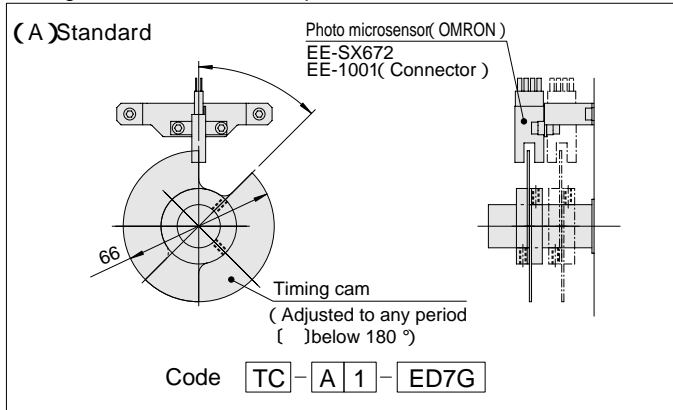
Input shaft with key-way(option)

Figure ED7-5



Timing cam Photo switch(option)

Figure ED7-6



ED8/ED8G

ED8 Dimensions

(Unit : mm)

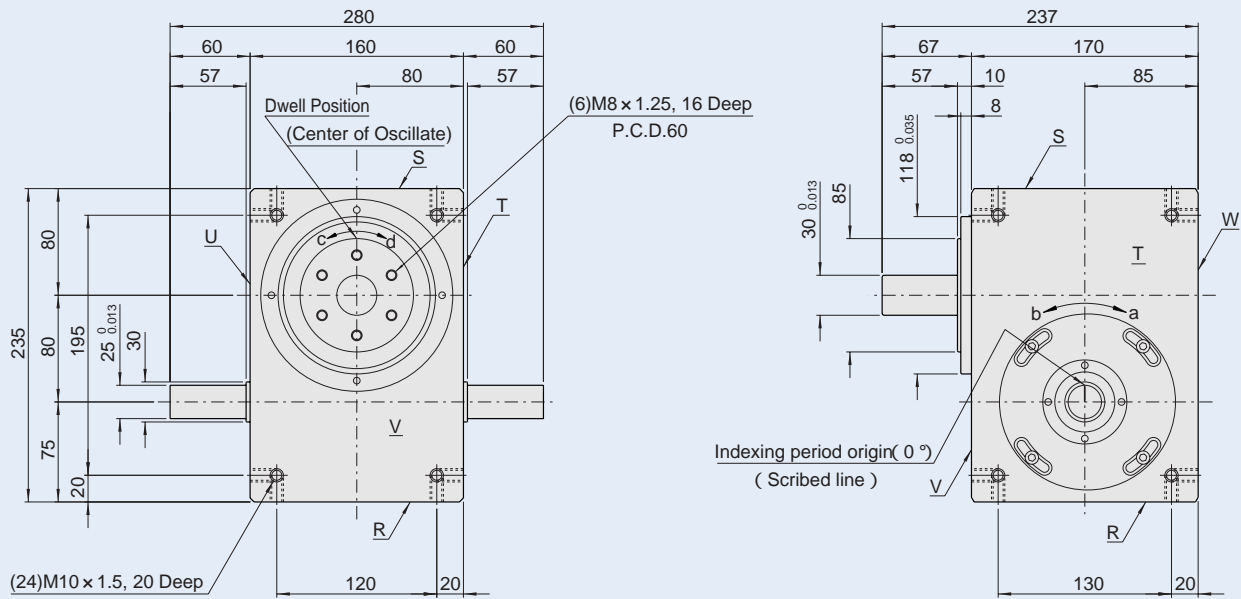


Figure ED8-1

ED8G Dimensions

Note: Tapped mounting holes on all surfaces come automatically.

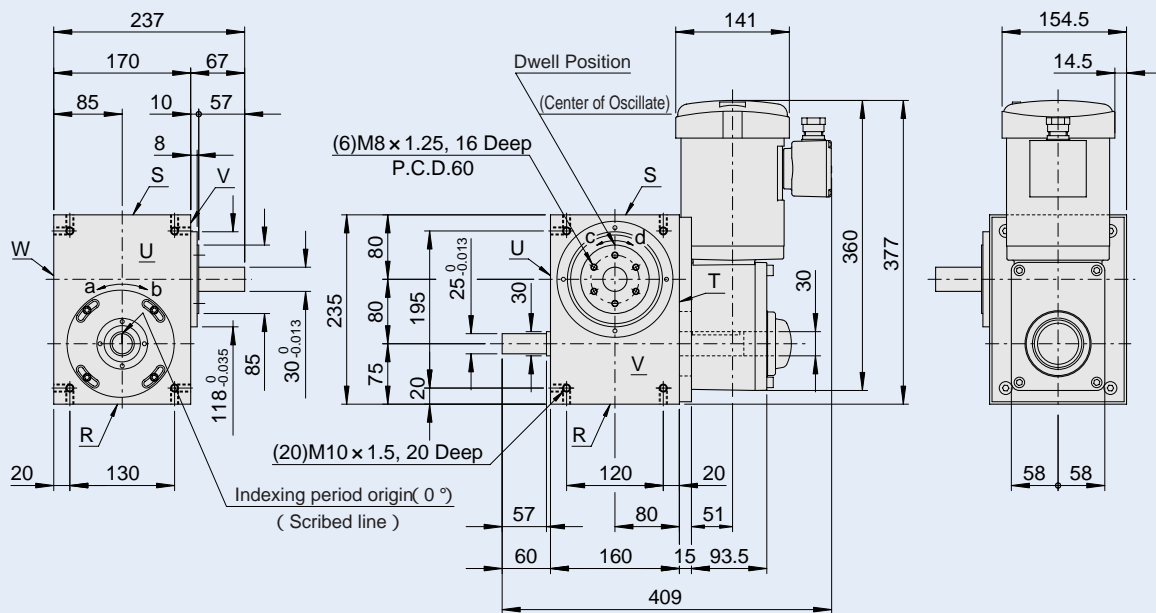


Figure ED8-2

Note: Tapped mounting holes on all surfaces come automatically.

Dynamic-rated output torque (Top) at 60ipm(N•m)

Table ED8-1

S	90°	120°	150°	180°	210°	240°	270°	300°	330°
2							71.7	71.9	71.8
3				86.1	86.2	85.9	85.3	84.6	83.7
4		28.4	74.6	95.8	95.4	94.5	93.5	92.3	91.0
5				83.7	86.5	88.6	90.3	91.5	91.5
6	100.5	185.6	183.2	179.7	175.7	171.7	167.7	164.0	160.5
8	110.3	118.6	123.8	134.1	129.9	126.0	122.5	119.3	116.3
10	83.7	88.6	91.5	93.2	94.4	95.2	95.7	96.1	96.4
12	87.0	91.0	93.2	94.6	95.4	96.0	96.4	96.7	96.9
16	27.2	25.6		23.1		21.3	20.6	20.0	19.4

Note:

- Torque limiter 7TF, 7TC, 8TF or 8TC available for ED8.
- Spacer required to mount torque limiter.
- Output shaft available to shorten to 10mm height.
- Geared motor (0.4kW) is available for ED8.
- Rated output torque (Top) is a maximum continuous torque allowed based upon 12,000 hours of endurance life.

: Index period S: Number of Stops Note: Cam curve is SMS-3 curve.

Details about the number of stops and indexing period, not described in the table above, can be obtained by contacting us.

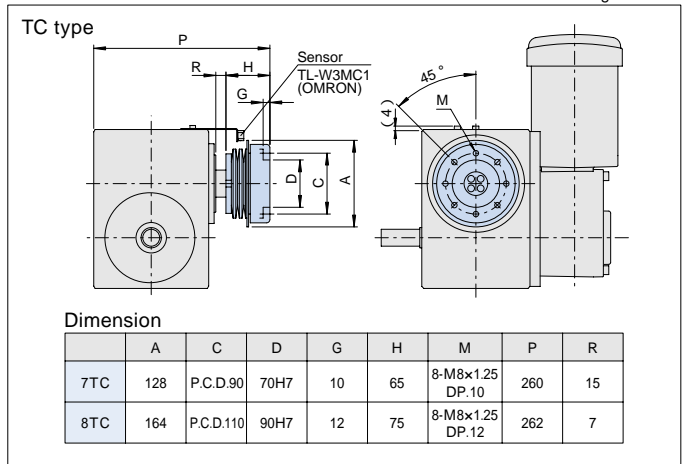
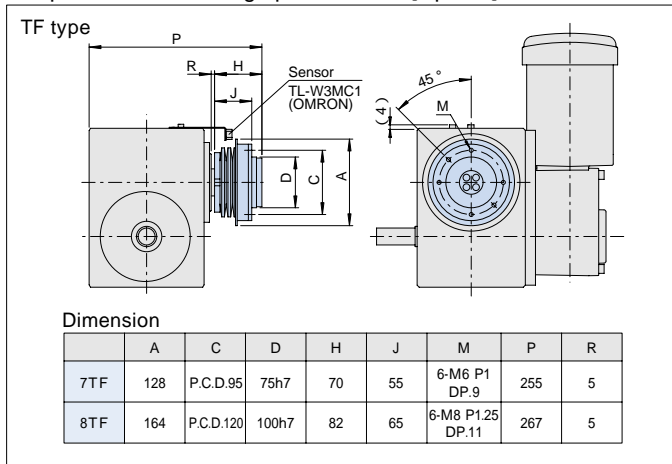
Specifications of geared motor

Table ED8-2

Code	Motor Power (W)	Voltage (V)	Actual Gear Ratio (i)	Output Shaft Speed N _m (rpm)		Output Allowable Torque T _R (N·m)		Moment of inertia J _m (kg·m ²)	Weight (kg)
				50Hz	60Hz	50Hz	60Hz		
GM400-10AS-ED8G	400	200/220	10	150	180	23	19	12.0×10 ⁻⁴	10.5
GM400-12.5AS-ED8G			12.5	120	144	27	24		
GM400-15AS-ED8G			15	100	120	33	27		
GM400-20AS-ED8G			20	75	90	44	37		
GM400-25AS-ED8G			25	60	72	55	46		
GM400-30AS-ED8G			30	50	60	67	55		
GM400-40AS-ED8G			40	37.5	45	88	74		
GM400-50AS-ED8G			50	30	36	111	92		
GM400-60AS-ED8G			60	25	30	133	111		

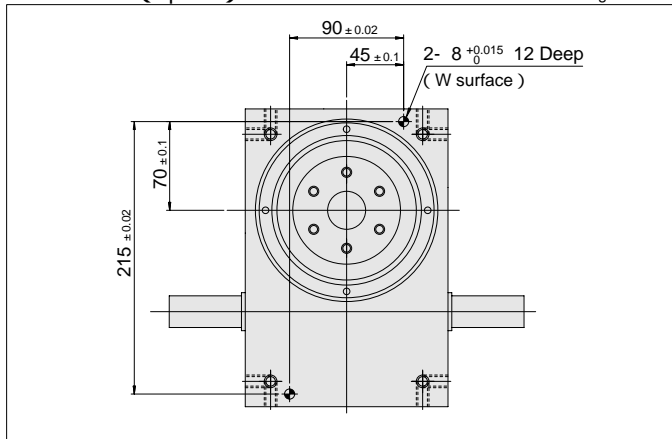
Torque limiter mounting specifications(option)

Figure ED8-3



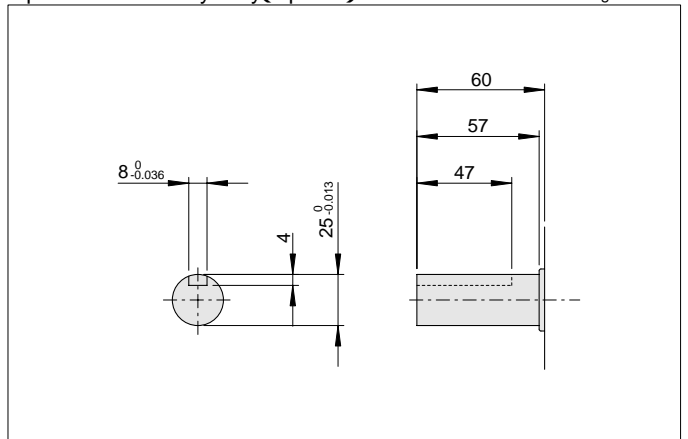
Reamed hole(option)

Figure ED8-4



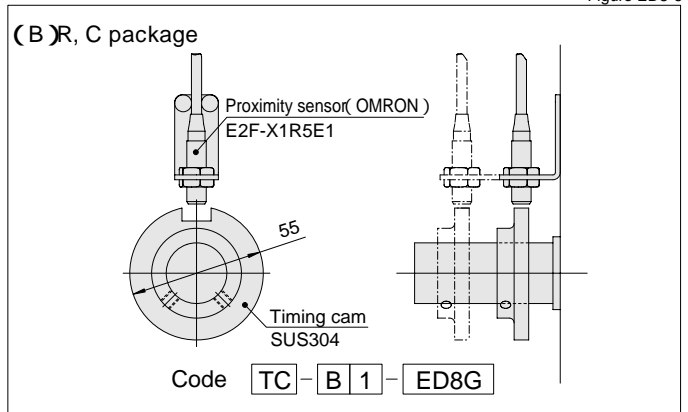
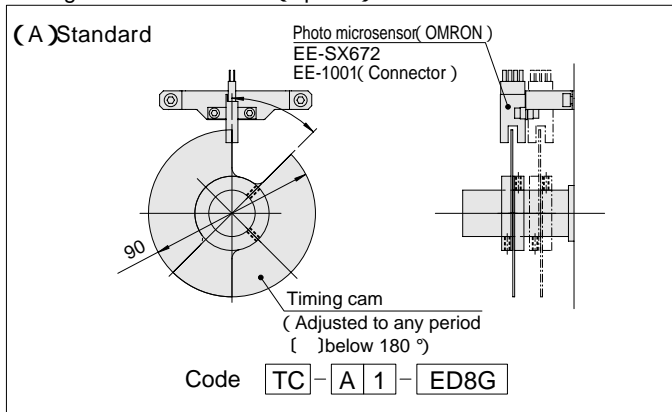
Input shaft with key-way(option)

Figure ED8-5



Timing cam Photo switch(option)

Figure ED8-6



ED11/ED11G

ED11 Dimensions

(Unit : mm)

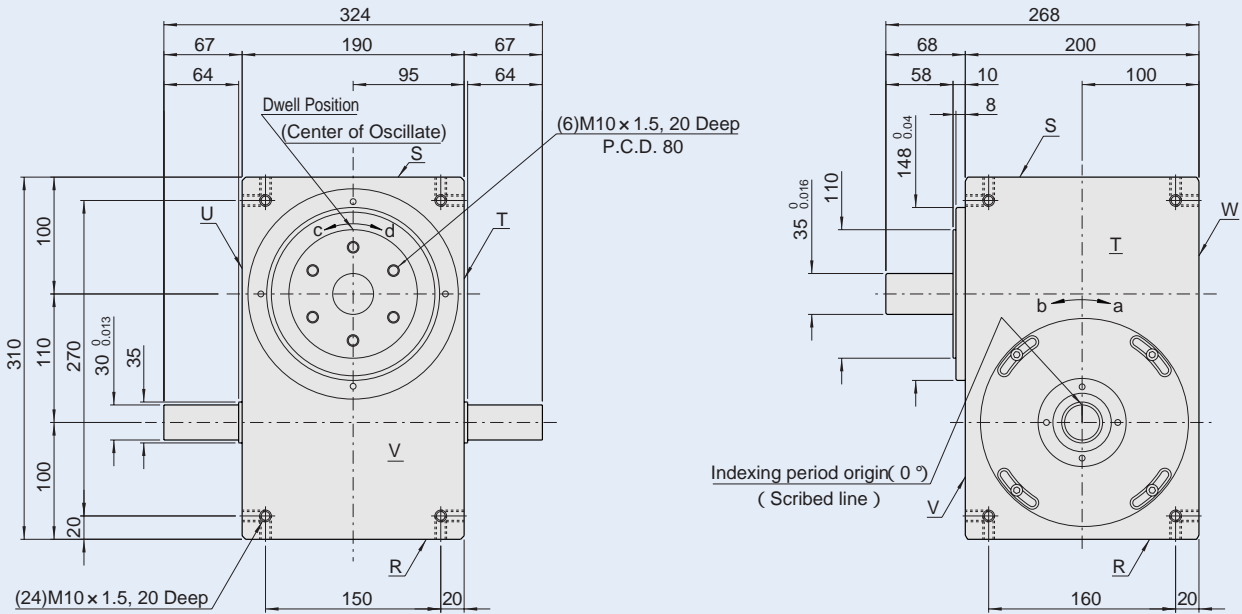


Figure ED11-1

ED11G Dimensions

Note: Tapped mounting holes on all surfaces come automatically.

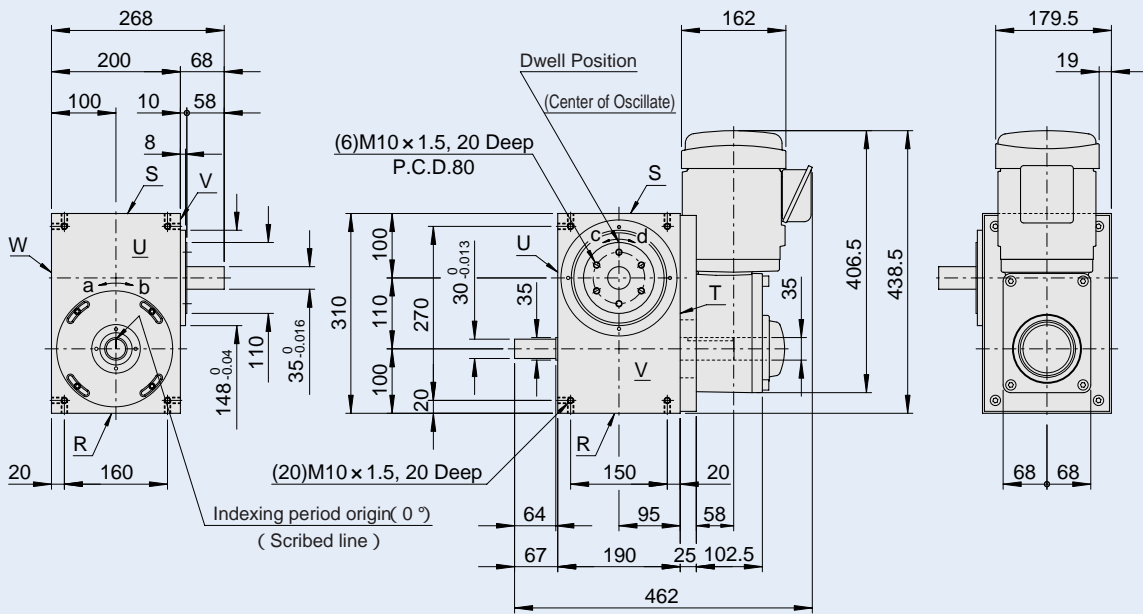


Figure ED11-2

Note: Tapped mounting holes on all surfaces come automatically.

Dynamic-rated output torque (Top) at 60ipm(N·m)

Table ED11-1

S	90°	120°	150°	180°	210°	240°	270°	300°	330°
2							174.6	174.8	174.6
3				209.5	209.7	208.9	207.4	205.4	203.2
4		112.6	131.0	205.0	203.0	200.4	197.5	194.4	191.2
5				156.1	153.7	151.1	148.3	145.5	142.8
6	286.2	303.0	298.0	375.3	367.3	359.1	351.1	343.4	336.1
8	280.0	273.8	265.5	324.9	314.6	305.1	296.5	288.7	281.6
10	213.2	206.4	198.8	191.5	184.9	179.0	173.7	168.9	164.7
12	164.0	170.9	174.6	176.8	171.8	166.0	187.2	181.9	177.1
16	122.4	125.7		128.3		129.3	129.6	129.8	129.9

Note:

- Torque limiter 7TF,7TC,8TF,8TC,11TF or 11TC available for ED11.
- Spacer required to mount torque limiter.
- Output shaft available to shorten to 10mm height.
- Geared motor (0.75kW) is available for ED11.
- Rated output torque(Top) is a maximum continuous torque allowed based upon 12,000 hours of endurance life.

:Index period S: Number of Stops Note: Cam curve is SMS-3 curve.

Details about the number of stops and indexing period, not described in the table above, can be obtained by contacting us.

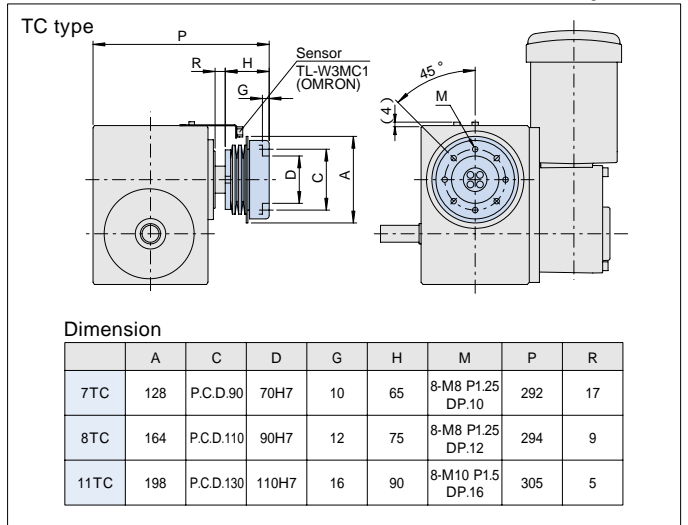
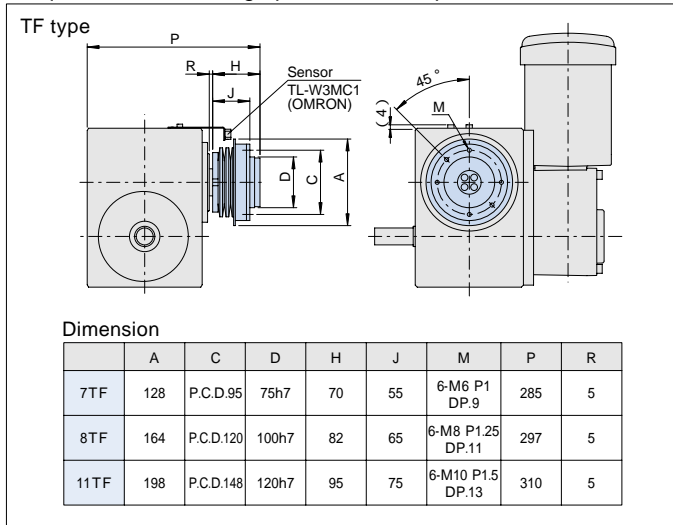
Specifications of geared motor

Table ED11-2

Code	Motor Power (W)	Voltage (V)	Actual Gear Ratio (i)	Output Shaft Speed N _M (rpm)		Output Allowable Torque T _R (N·m)		Moment of inertia J _M (kg·m ²)	Weight (kg)
				50Hz	60Hz	50Hz	60Hz		
GM750-10AS-ED11G	750	200/220	10	150	180	41	34	25.0×10 ⁻⁴	17
GM750-12.5AS-ED11G			12.5	120	144	52	43		
GM750-15AS-ED11G			15	100	120	63	52		
GM750-20AS-ED11G			20	75	90	83	70		
GM750-25AS-ED11G			25	60	72	104	86		
GM750-30AS-ED11G			30	50	60	124	104		
GM750-40AS-ED11G			40	37.5	45	166	138		
GM750-50AS-ED11G			50	30	36	208	173		
GM750-60AS-ED11G			60	25	30	249	208		

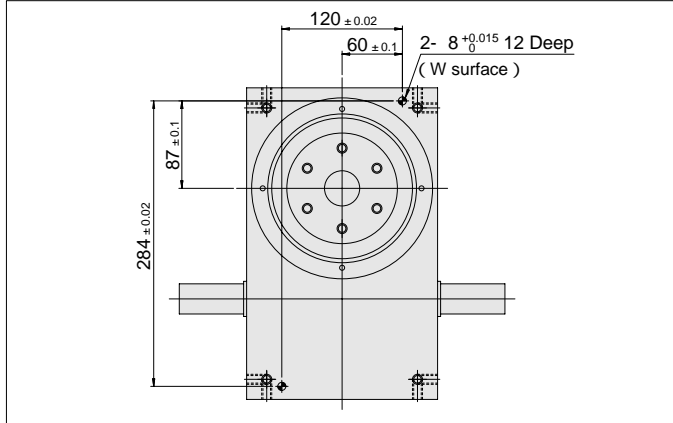
Torque limiter mounting specifications(option)

Figure ED11-3



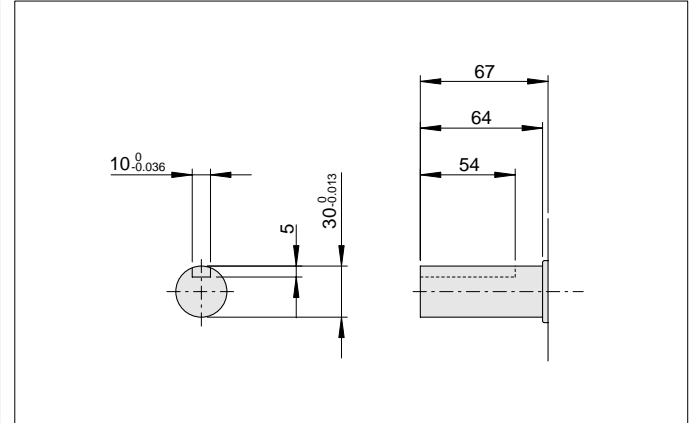
Reamed hole(option)

Figure ED11-4



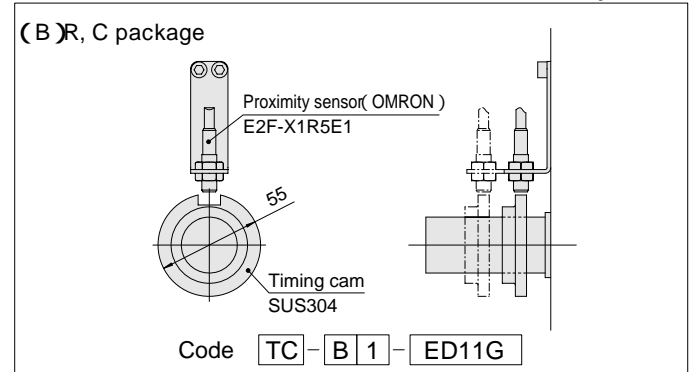
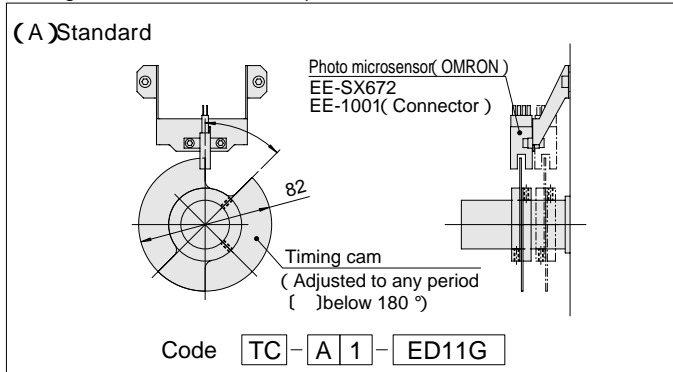
Input shaft with key-way(option)

Figure ED11-5



Timing cam Photo switch(option)

Figure ED11-6



TORQUE LIMITER

TF series

(Unit : mm)

TF series Dimensions

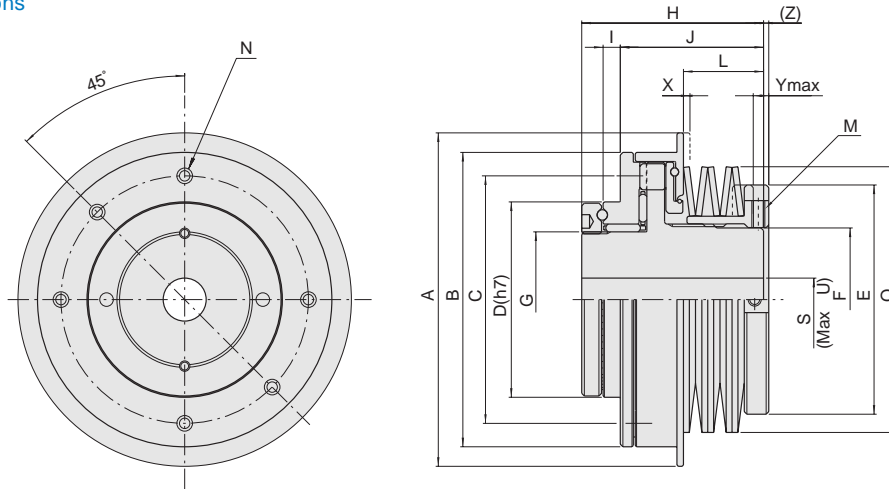


Figure TF-1

Table of TF series Dimension

Table TF-1

Model	A	B	C	D	E	F	G	H	I	J	M	N	Q	S	U
4TF	64	46	P.C.D.36	26h7	32	M20 P1	46	38	4.7	25		4-M4 P0.7 DP.4.7		7	12
5TF	82	63	P.C.D.50	35h7	45	M30 P1.5	63	50	4.7	34		4-M4 P0.7 DP.5.7		9	20
6TF	88	88	P.C.D.75	60h7	58	M40 P1.5	M40 P1.5	60	5	48	2-M5 P0.8	6-M6 P1 DP.7		12.5	30
7TF	128	113	P.C.D.95	75h7	88	55	M52 P1.5	70	6.6	55	2-M5 P0.8	6-M6 P1 DP.9	102	16.5	40
8TF	164	138	P.C.D.120	100h7	108	75	M72 P1.5	82	7.6	65	2-M5 P0.8	6-M8 P1.25 DP.11	130	16.5	52
11TF	198	170	P.C.D.148	120h7	134	96	M90 P1.5	95	9.6	75	2-M5 P0.8	6-M10 P1.5 DP.13	160	27	68

*Specifications and dimensions are subject to change without notice. Always double check before ordering.

TC series

(Unit : mm)

TC series Dimensions

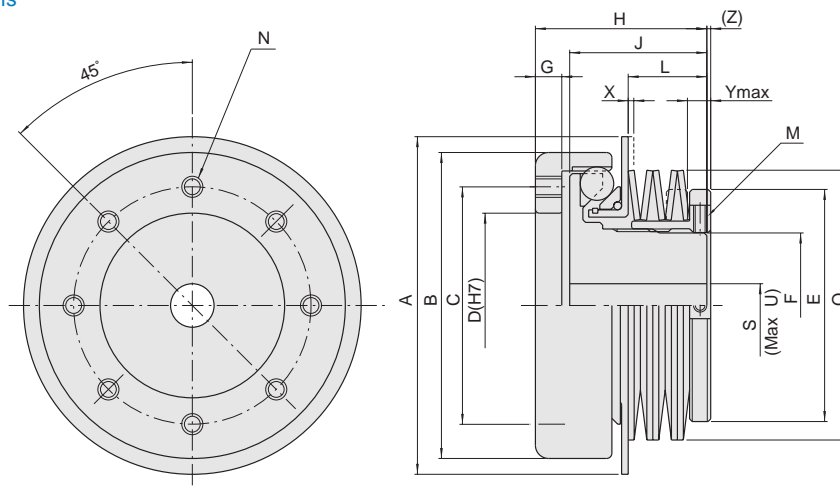


Figure TC-1

Table of TC series Dimension

Table TC-1

Model	A	B	C	D	E	F	G	H	J	M	N	Q	S	U
4TC	64	52	P.C.D.40	34H7	32	M20 P1	5	28	20.5		4-M4 P0.7 DP.5		7	15
5TC	82	71	P.C.D.55	46H7	45	M30 P1.5	7	40	30		4-M4 P0.7 DP.7		9	22
6TC	93	95	P.C.D.70	50H7	58	M40 P1.5	9	52	40	2-M5 P0.8	8-M6 P1 DP.9		12.5	30
7TC	128	116	P.C.D.90	70H7	88	55	10	65	52	2-M5 P0.8	8-M8 P1.25 DP.10	102	16.5	40
8TC	164	142	P.C.D.110	90H7	108	75	12	75	60	2-M5 P0.8	8-M8 P1.25 DP.12	130	16.5	52
11TC	198	176	P.C.D.130	110H7	134	96	16	90	70	2-M5 P0.8	8-M10 P1.5 DP.16	160	27	68

*Specifications and dimensions are subject to change without notice. Always double check before ordering.

MODEL SELECTION

SANKYO SEISAKUSHO CO.

Fax Sheet

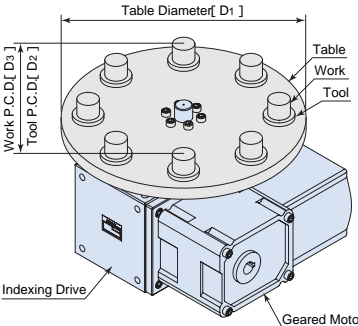
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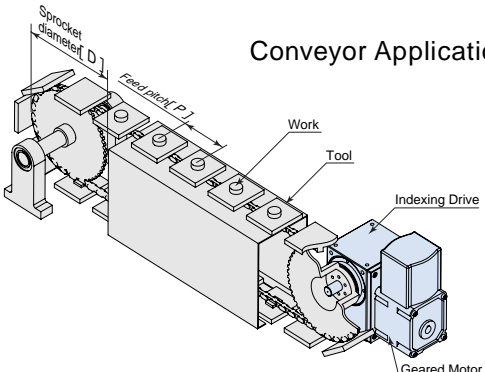
SANDEX ECO series Model Selection data

Company			
Department			
Name			
Phone		Fax	
E-mail			

Sankyo will select a model based on your loads and requirements.
Please fill out this form and fax it to us.

Number of stops..... S	<input type="text"/>
Dwell time..... t_1	<input type="text"/> sec
Index time..... t_2	<input type="text"/> sec

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	Table weight..... W1	<input type="text"/> kg
	Tool P.C.D. D2	<input type="text"/> mm
	Weight per tool..... W2	<input type="text"/> kg
	Number of tools..... n2	<input type="text"/>
	Work P.C.D..... D3	<input type="text"/> mm
	Weight per work..... W3	<input type="text"/> kg
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Feed pitch..... P	<input type="text"/> mm	<p>Conveyor Application</p> 
Weight of chain with attachment... W1	<input type="text"/> kg	
Weight of tool..... W2	<input type="text"/> kg	
Weight of work..... W3	<input type="text"/> kg	
Sprocket diameter..... D	<input type="text"/> mm	
Weight per sprocket..... W4	<input type="text"/> kg	
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Coefficient of friction..... μ	<input type="text"/>	

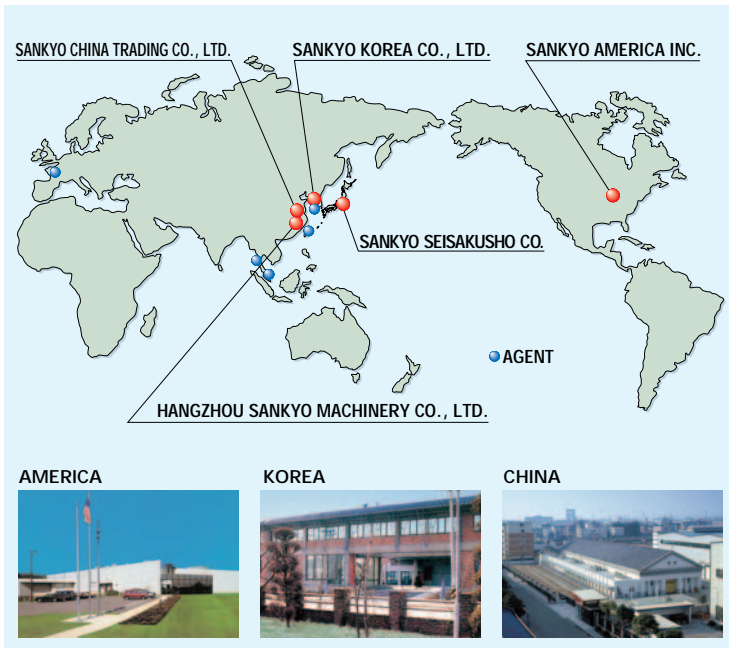
Torque Limiter	Yes • No	Geared Motor	Yes • No	Timing Cam-Sensor	Yes • No
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MEMO

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 <<http://www.sandex.jp/english/network.html>>

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For further information, questions, or inquires, please contact us by e-mail or visit our website.

*Specifications and dimensions are subject to change without notice. Consult Sankyo sales before ordering.