

## Model Configuration with Servo Driver Controller TLC/THC

Model	Lead, reduction ratio	Stroke	Design symbol	Options	Control device	Motor cable orientation
PC30	06A	0200	A	R	TH	R
(1)	(2)	(3)	(4)	(5)	(6)	(7)
PCT20	04N	0050 : 50mm	No symbol : PCT only	N : Direct coupling	TL: TLC	U : Up
PCT25	06N	0100 : 100mm	A : PC only	D : Down	TH: THC	D : Down
PCT20R	06A	0150 : 150mm		L : Left		L : Left
PCT25R	06B	0200 : 200mm		R : Right		R : Right
PC30		0250 : 250mm				
PC40		0300 : 300mm				

R for PCT represents motor wrap.	These symbols represent lead and reduction ratio. For PCT, motor wrap configuration is limited to reduction ratio 1/1. Select from the table below.	Select options from the table below. PCT: Select either direct motor coupling or motor wrap. PC: Select greasing position.	Select cable orientation from the table on page 4-012.
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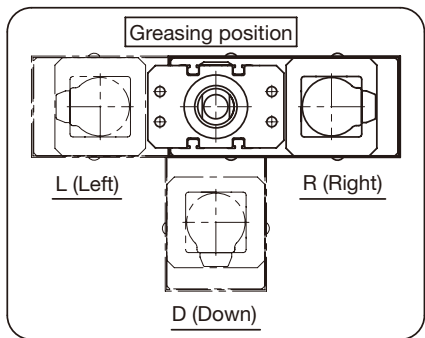
### Combinations

Model (1)	Lead, reduction ratio (2)	Stroke (3)	Design symbol (4)	Control device (6)	Motor rated output (8)		Home position method (9)	Power supply voltage (10)
PCT20 PCT20R	06N	0050 to 0200	No symbol	TL: TLC	M05 M05B	50W	D00: Motor side or R00: Reverse motor side	DC: 24VDC
PCT25 PCT25R	06N or 04N	0050 to 0300	No symbol	TH: THC	M10 M10B	100W		D1: 100V or D2: 200V
PC30	06A	0050 to 0250	A	TH: THC	M40 M40B	400W	D00: Motor side	D1: 100V or D2: 200V
PC40	06B				M75 M75B	750W		D2: 200V

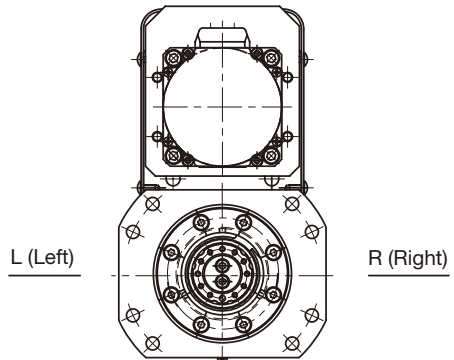
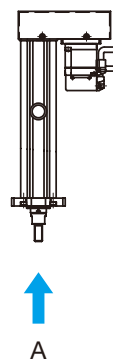
### Options: Motor wrap direction or greasing position

PCT: Select wrap direction

PC: Select greasing position



(Seen from side A)



D (Down)

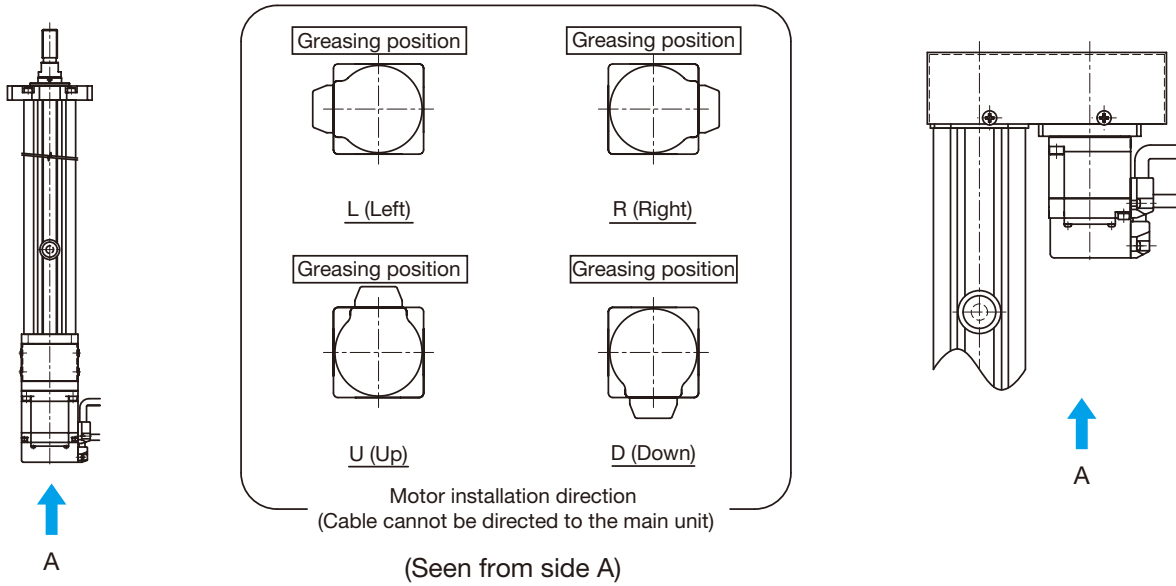
Motor rated output M40 (8)	Home position method D00 (9)	Power supply voltage D2 (10)	Cable type and length F3 (11)
M05 : 50W	D00: Motor side	DC: 24VDC	F3 : Standard 3m
M10 : 100W	R00: Reverse motor side	D1 : 100V	F5 : Standard 5m
M20 : 200W		D2 : 200V	FA : Standard 10m
M40 : 400W			H3 : High flex 3m
M75 : 750W			H5 : High flex 5m
M05B : 50W with brake			HA: High flex 10m
M10B : 100W with brake			
M20B : 200W with brake			
M40B : 400W with brake			
M75B : 750W with brake			

Select motor rated output, home position method, and power supply voltage from the Combinations table.

Select a type and length of motor, encoder, and brake cable.

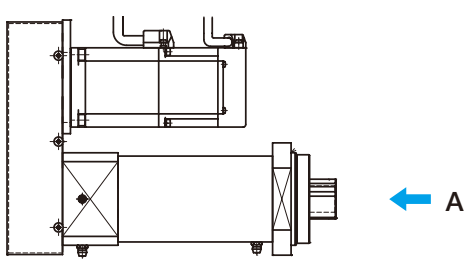
Motor cable orientation when directly coupled (PCT)

Motor cable orientation when wrapped (PCT)



Motor cable orientation (PC)

Motor cable orientation	Up	Left	Right
Symbol	U	L	R
Motor cable orientation (Seen from side A)			



ES/EC

KRF/KSF

US/USW

PCT/PC

Controller

# PCT20

Press series

Rod diameter: 20mm, Direct motor coupling, 50W type



## Specifications

Motor rated output [W]	50		
Ball screw lead [mm]	6		
Rated thrust *1 [N]	133		
Instantaneous maximum thrust *2 [N]	402		
Brake retention [N]	133		
Rated speed *3 [mm/s]	300		
Positioning repeatability [mm]	±0.010		
Lost motion [mm]	0.1		
Rod non-rotational accuracy [°]	±1		
Maximum load capacity *4 [kg]	Horizontal mount	0.3G	20
	Vertical mount	0.3G	5
Running life *5 [km]	5,000		

\*1 At rated motor torque.

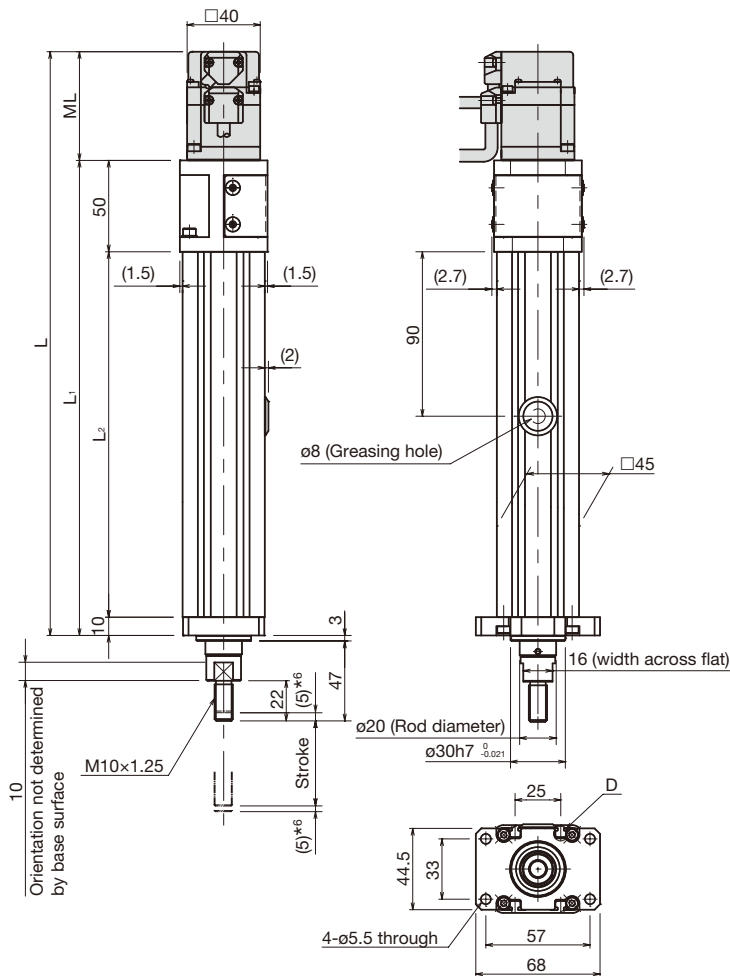
\*2 Dependent on permissible axial load.

\*3 At rated motor speed.

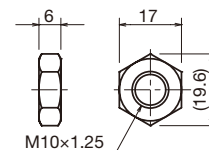
\*4 At rated speed.

\*5 Conditions: Under maximum load capacity (with LM guide), at rated speed, 0.3G acceleration and deceleration rate.

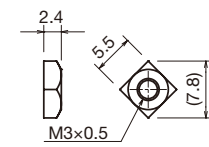
## Dimensions



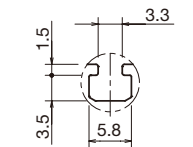
Direct motor coupling type with motor cable orientation right (R).



Hexagonal Nut (x1)



Square Nut (x8)



Section D (detail)

\*6 Stroke up to mechanical stopper.

Stroke [mm]		50 (60)	100 (110)	150 (160)	200 (210)
(Stroke between mechanical stoppers)					
Maximum speed *7 [mm/s]	Ball screw lead: 6mm		300		230
Dimensions *8 [mm]	L	319.5 (355.1)	369.5 (405.1)	419.5 (455.1)	469.5 (505.1)
	L <sub>1</sub>	260	310	360	410
	L <sub>2</sub>	200	250	300	350
	ML	59.5 (95.1)			
Weight *8 [kg]	With motor	1.9 (2.1)	2.1 (2.3)	2.3 (2.5)	2.5 (2.7)

\*7 Dependent on motor speed (at 3,000min<sup>-1</sup>) and permissible rotational speed of the ball screw.

\*8 Values when brake is installed are shown in parentheses.

# PCT20R

Press series

Rod diameter: 20mm, Motor wrap, 50W type

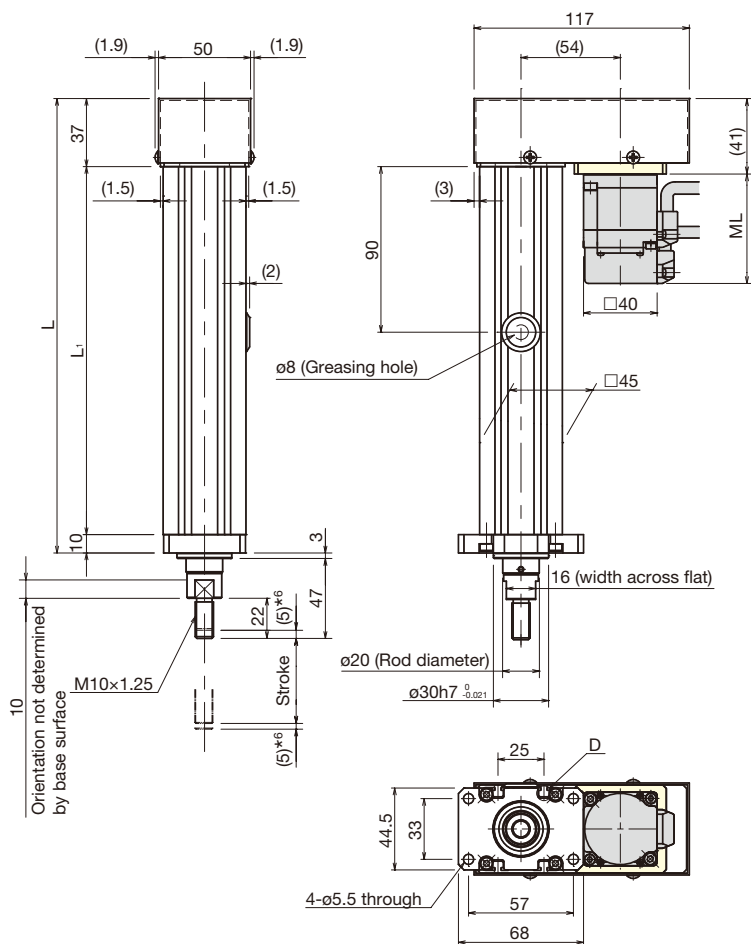


## Specifications

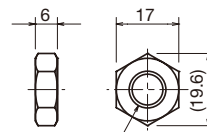
Motor rated output [W]	50	
Ball screw lead [mm]	6	
Rated thrust *1 [N]	133	
Instantaneous maximum thrust *2 [N]	402	
Brake retention [N]	133	
Rated speed *3 [mm/s]	300	
Positioning repeatability [mm]	±0.010	
Lost motion [mm]	0.1	
Rod non-rotational accuracy [°]	±1	
Maximum load capacity *4 [kg]	Acceleration and deceleration rate	Horizontal mount
		Vertical mount
Running life *5 [km]		

- \*1 At rated motor torque.
- \*2 Dependent on permissible axial load.
- \*3 At rated motor speed.
- \*4 At rated speed.
- \*5 Conditions: Under maximum load capacity (with LM guide), at rated speed, 0.3G acceleration and deceleration rate.

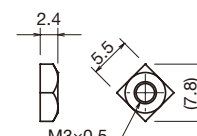
## Dimensions



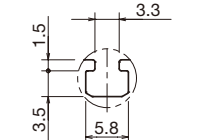
Motor wrap type with motor cable orientation right (R).



Hexagonal Nut (x1)



Square Nut (x8)



Section D (detail)

\*6 Stroke up to mechanical stopper.

Stroke [mm]		50 (60)	100 (110)	150 (160)	200 (210)
(Stroke between mechanical stoppers)					
Maximum speed *7 [mm/s]	Ball screw lead: 6mm	300			230
Dimensions *8 [mm]	L	247	297	347	397
	L <sub>1</sub>	200	250	300	350
	ML	59.5 (95.1)			
Weight *8 [kg]	With motor	2.0 (2.2)	2.2 (2.4)	2.4 (2.6)	2.6 (2.8)

\*7 Dependent on motor speed (at 3,000min<sup>-1</sup>) and permissible rotational speed of the ball screw.  
\*8 Values when brake is installed are shown in parentheses.

ES/EC

KRF/KSF

US/USW

PCT/PC

Controller

# PCT25

Press series

Rod diameter: 25mm, Direct motor coupling, 100W type



## Specifications

Motor rated output [W]	100	
Ball screw lead [mm]	6	4
Rated thrust *1 [N]	266	400
Instantaneous maximum thrust *2 [N]	796	1,194
Brake retention [N]	266	400
Rated speed *3 [mm/s]	300	200
Positioning repeatability [mm]	±0.010	
Lost motion [mm]	0.1	
Rod non-rotational accuracy [°]	±1	
Maximum load capacity *4 [kg]	Horizontal mount	0.3G 35 40
	Vertical mount	0.3G 10 10
Running life *5 [km]	5,000	

\*1 At rated motor torque.

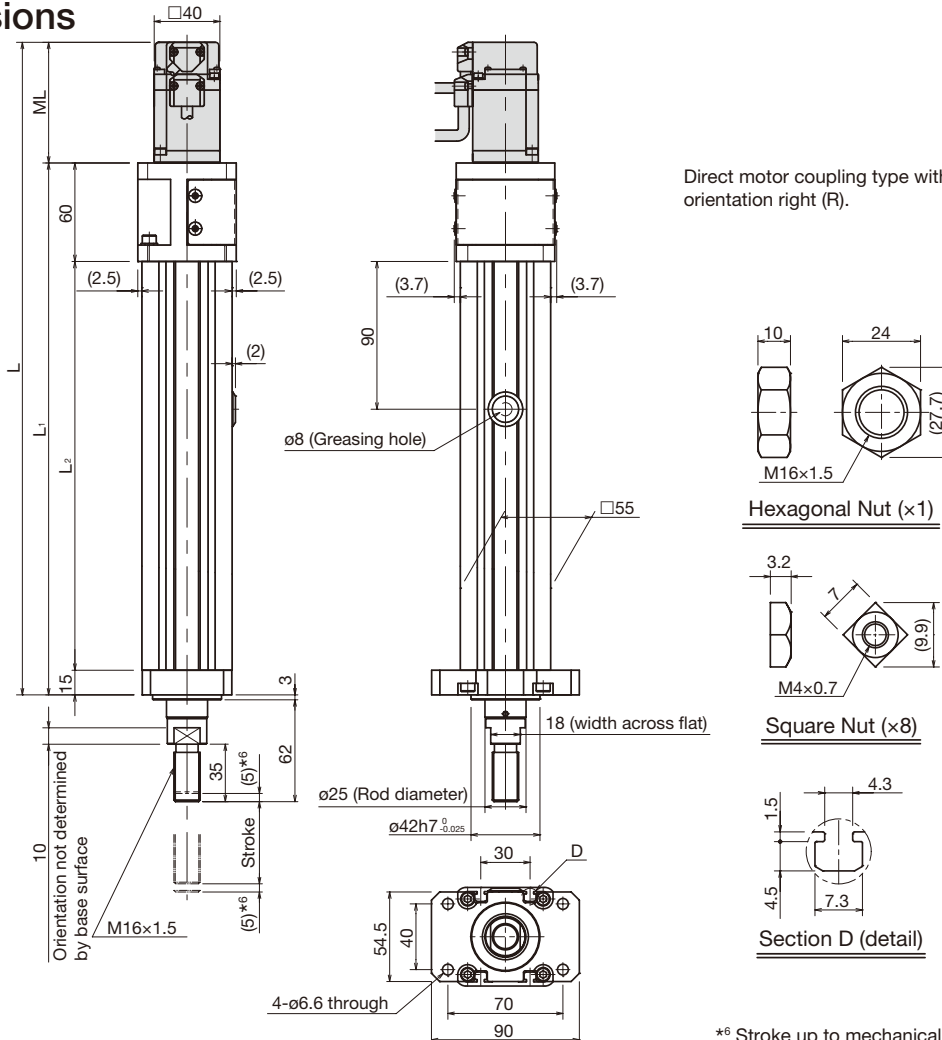
\*2 Dependent on permissible axial load.

\*3 At rated motor speed.

\*4 At rated speed.

\*5 Conditions: Under maximum load capacity (with LM guide), at rated speed, 0.3G acceleration and deceleration rate.

## Dimensions



Stroke [mm] (Stroke between mechanical stoppers)		50 (60)	100 (110)	150 (160)	200 (210)	250 (260)	300 (310)
Maximum speed *7 [mm/s]	Ball screw lead: 6mm	300		260		160	
	Ball screw lead: 4mm	200		160		130	
Dimensions *8 [mm]	L	397.5 (433.1)	447.5 (483.1)	497.5 (533.1)	547.5 (583.1)	597.5 (633.1)	647.5 (683.1)
	L <sub>1</sub>	324	374	424	474	524	574
	L <sub>2</sub>	249	299	349	399	449	499
	ML	73.5 (109.1)					
Weight *8 [kg]	With motor	3.4 (3.6)	3.7 (3.9)	4.0 (4.2)	4.4 (4.6)	4.7 (4.9)	5.0 (5.2)

\*7 Dependent on motor speed (at 3,000min<sup>-1</sup>) and permissible rotational speed of the ball screw.

\*8 Values when brake is installed are shown in parentheses.

# PCT25R

Press series

Rod diameter: 25mm, Motor wrap, 100W type

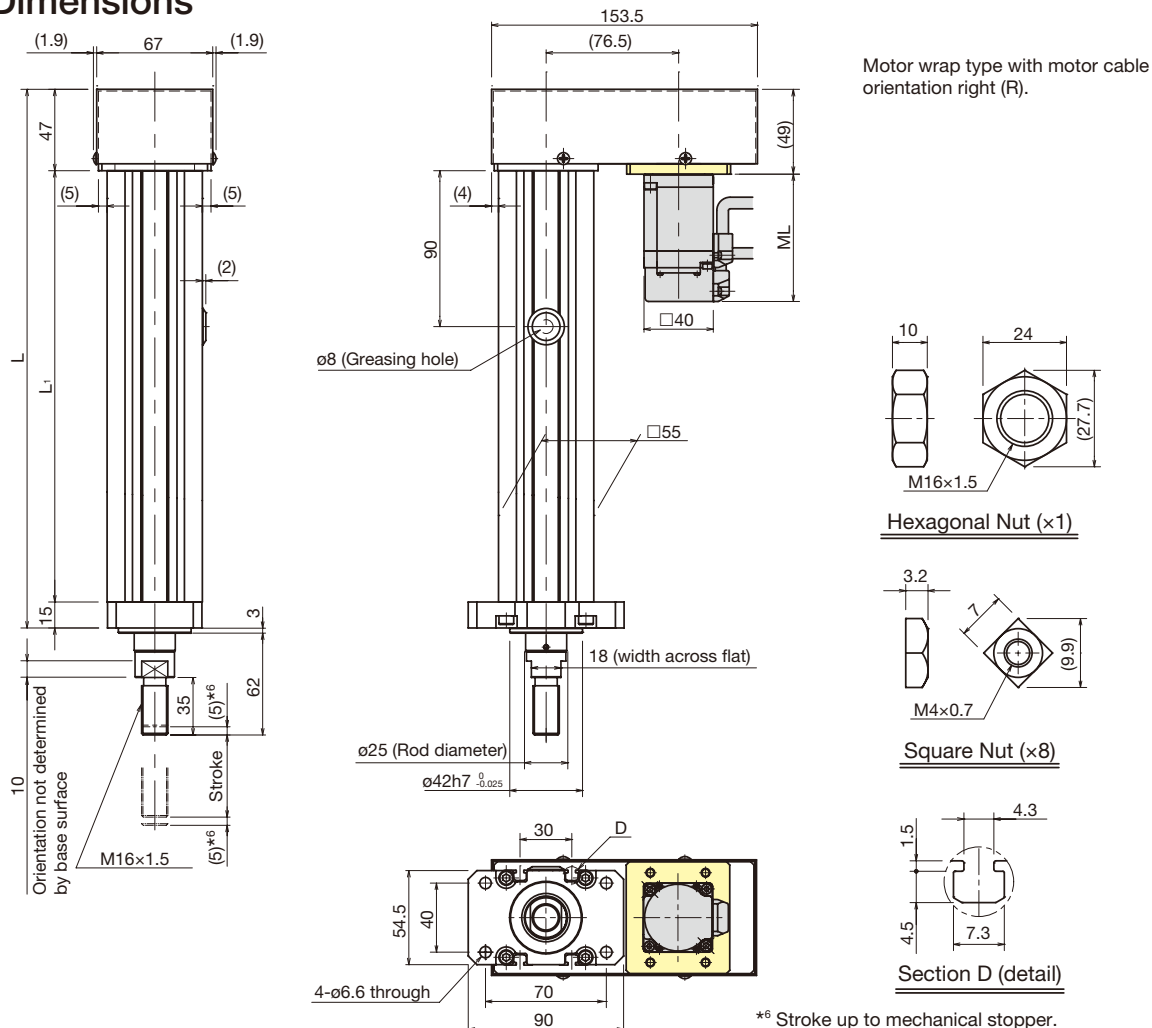


## Specifications

Motor rated output [W]	100				
Ball screw lead [mm]	6	4			
Rated thrust *1 [N]	266	400			
Instantaneous maximum thrust *2 [N]	796	1,194			
Brake retention [N]	266	400			
Rated speed *3 [mm/s]	300	200			
Positioning repeatability [mm]	±0.010				
Lost motion [mm]	0.1				
Rod non-rotational accuracy [°]	±1				
Maximum load capacity *4 [kg]	Acceleration and deceleration rate	Horizontal mount	0.3G	35	40
	Vertical mount	0.3G	10	10	
Running life *5 [km]	5,000				

- \*1 At rated motor torque.
- \*2 Dependent on permissible axial load.
- \*3 At rated motor speed.
- \*4 At rated speed.
- \*5 Conditions: Under maximum load capacity (with LM guide), at rated speed, 0.3G acceleration and deceleration rate.

## Dimensions



Stroke [mm] (Stroke between mechanical stoppers)		50 (60)	100 (110)	150 (160)	200 (210)	250 (260)	300 (310)
Maximum speed *7 [mm/s]	Ball screw lead: 6mm	300			260	200	160
	Ball screw lead: 4mm	200				160	130
Dimensions *8 [mm]	L	311	361	411	461	511	561
	L <sub>1</sub>	249	299	349	399	449	499
	ML	73.5 (109.1)					
Weight *8 [kg]	With motor	3.6 (3.8)	3.9 (4.1)	4.3 (4.5)	4.6 (4.8)	4.9 (5.1)	5.2 (5.4)

\*7 Dependent on motor speed (at 3,000min<sup>-1</sup>) and permissible rotational speed of the ball screw.  
 \*8 Values when brake is installed are shown in parentheses.

ES/EC

KRF/KSF

US/USW

PCT/PC

Controller

# PCT25

Press series

Rod diameter: 25mm, Direct motor coupling, 200W type



## Specifications

Motor rated output [W]	200				
Ball screw lead [mm]	6	4			
Rated thrust *1 [N]	536	804			
Instantaneous maximum thrust *2 [N]	1,600	2,400			
Brake retention [N]	536	804			
Rated speed *3 [mm/s]	300	200			
Positioning repeatability [mm]	±0.010				
Lost motion [mm]	0.1				
Rod non-rotational accuracy [°]	±1				
Maximum load capacity *4 [kg]	Acceleration and deceleration rate	Horizontal mount	0.3G	50	55
	Vertical mount	0.3G	20	20	
Running life *5 [km]	5,000				

\*1 At rated motor torque.

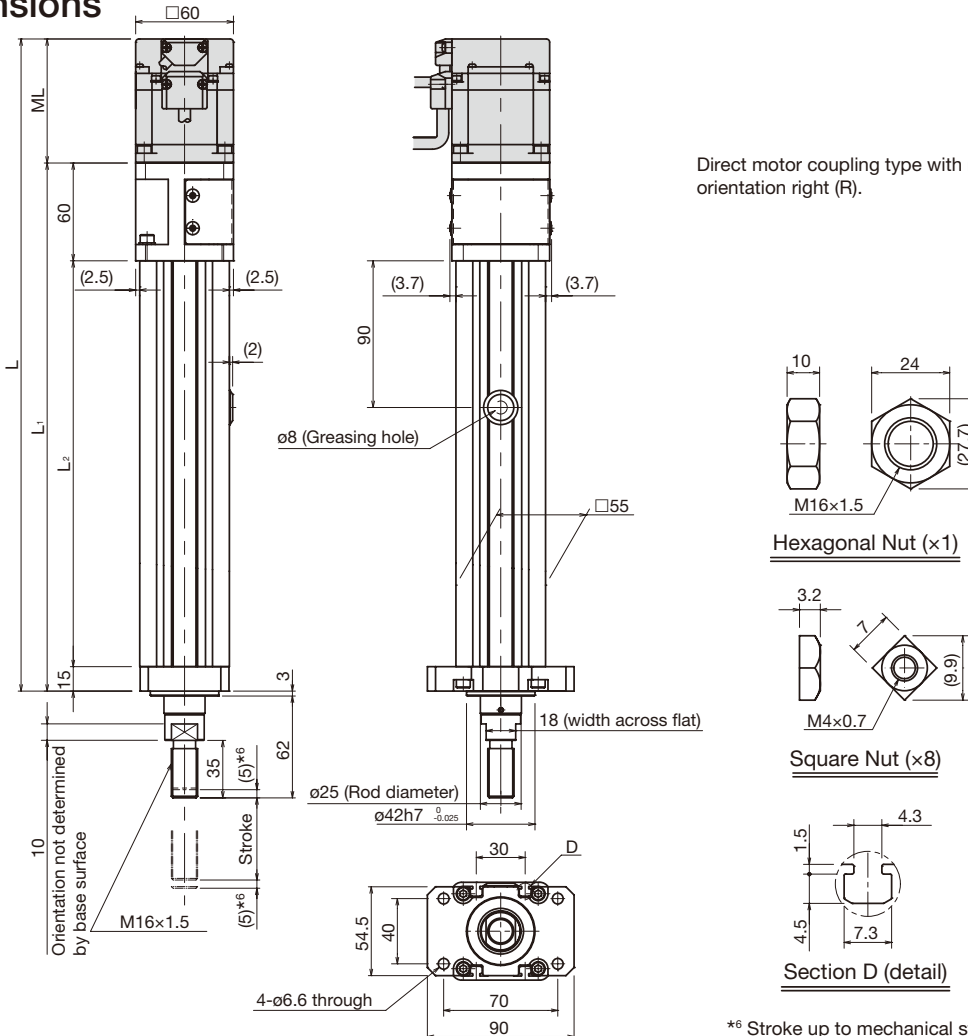
\*2 Dependent on permissible axial load.

\*3 At rated motor speed.

\*4 At rated speed.

\*5 Conditions: Under maximum load capacity (with LM guide), at rated speed, 0.3G acceleration and deceleration rate.

## Dimensions



\*6 Stroke up to mechanical stopper.

Stroke [mm]		50 (60)	100 (110)	150 (160)	200 (210)	250 (260)	300 (310)
(Stroke between mechanical stoppers)							
Maximum speed *7 [mm/s]	Ball screw lead: 6mm	300			260	200	160
	Ball screw lead: 4mm	200				160	130
Dimensions *8 [mm]	L	400.1 (434.7)	450.1 (484.7)	500.1 (534.7)	550.1 (584.7)	600.1 (634.7)	650.1 (684.7)
	L <sub>1</sub>	324	374	424	474	524	574
	L <sub>2</sub>	249	299	349	399	449	499
	ML	76.1 (110.7)					
Weight *8 [kg]	With motor	3.8 (4.3)	4.1 (4.6)	4.5 (5.0)	4.8 (5.3)	5.1 (5.6)	5.4 (5.9)

\*7 Dependent on motor speed (at 3,000min<sup>-1</sup>) and permissible rotational speed of the ball screw.

\*8 Values when brake is installed are shown in parentheses.

# PCT25R

Press series

Rod diameter: 25mm, Motor wrap, 200W type



## Specifications

Motor rated output [W]	200	
Ball screw lead [mm]	6	4
Rated thrust *1 [N]	536	804
Instantaneous maximum thrust *2 [N]	1,600	2,400
Brake retention [N]	536	804
Rated speed *3 [mm/s]	300	200
Positioning repeatability [mm]	±0.010	
Lost motion [mm]	0.1	
Rod non-rotational accuracy [°]	±1	
Maximum load capacity *4 [kg]	Acceleration and deceleration rate	Horizontal mount
		Vertical mount
Running life *5 [km]	0.3G	50
	0.3G	20
	5,000	

\*1 At rated motor torque.

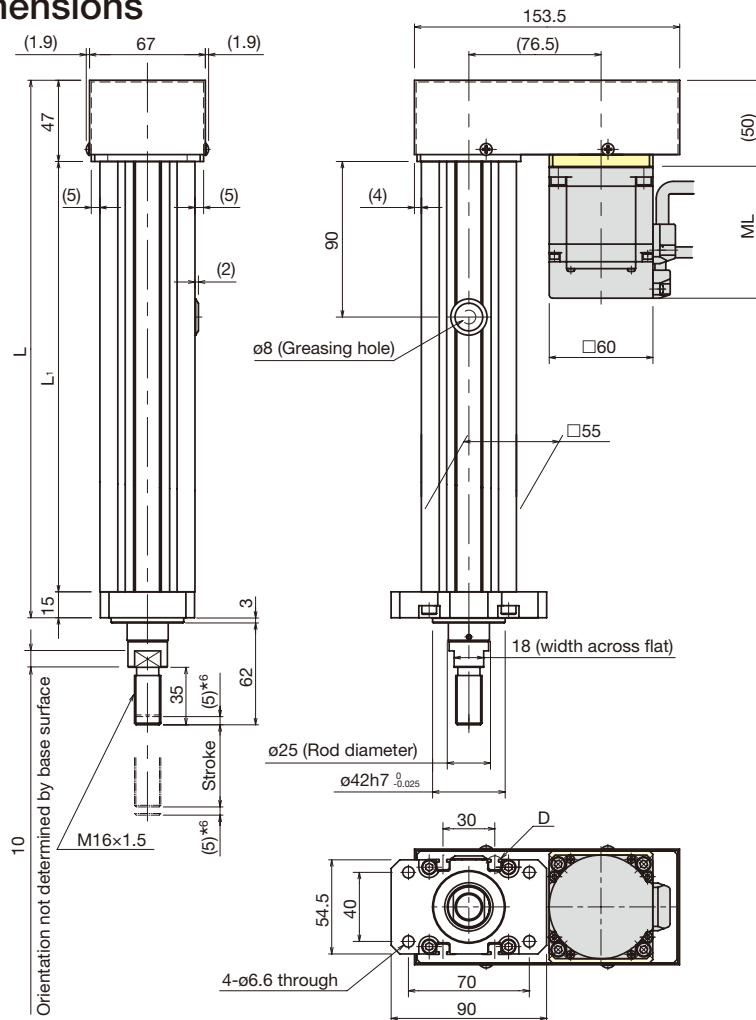
\*2 Dependent on permissible axial load.

\*3 At rated motor speed.

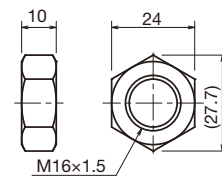
\*4 At rated speed.

\*5 Conditions: Under maximum load capacity (with LM guide), at rated speed, 0.3G acceleration and deceleration rate.

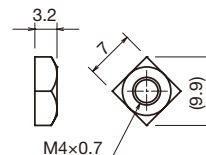
## Dimensions



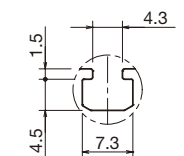
Motor wrap type with motor cable orientation right (R).



Hexagonal Nut (x1)



Square Nut (x8)



Section D (detail)

\*6 Stroke up to mechanical stopper.

Stroke [mm]		50 (60)	100 (110)	150 (160)	200 (210)	250 (260)	300 (310)
(Stroke between mechanical stoppers)							
Maximum speed *7 [mm/s]	Ball screw lead: 6mm	300			260	200	160
	Ball screw lead: 4mm	200				160	130
Dimensions *8 [mm]	L	311	361	411	461	511	561
	L <sub>1</sub>	249	299	349	399	449	499
	ML	76.1 (110.7)					
Weight *8 [kg]	With motor	4.0 (4.5)	4.3 (4.8)	4.7 (5.2)	5.0 (5.5)	5.3 (5.8)	5.7 (6.2)

\*7 Dependent on motor speed (at 3,000min<sup>-1</sup>) and permissible rotational speed of the ball screw.

\*8 Values when brake is installed are shown in parentheses.

ES/EC

KRF/KSF

US/USW

PCT/PC

Controller