PC Model Configuration

Model	Lead, reduction ratio		Stroke	Design symbol
PC30 -	- 06A	-	0050	Α
(1)	(2)		(3)	(4)
PC30 PC40 PC40H PC50 PC60 PC60H PC80L PC80 PC80H	06A 06B 08C 06D 10E 10F		0050: 50mm 0100:100mm 0150:150mm 0200:200mm 0250:250mm	A
	These symbols rep Select from the ap list by model (-> P.	pli	cable motor (co	

Motor cable Applicable motor (control device) position orientation M040BM (6)OM: Without motor D : Down U:Up L: Left R: Right OY: Without motor L: Left OS: Without motor R: Right

M040M: With motor to M750BS: With motor and driver (with brake) (7)

These symbols represent applicable motors.
"M", "Y" or "S" at the end of the symbol.

"M", "Y" or "S" at the end of the symbol represents the motor manufacturer.

M: Mitsubishi Electric Corporation

Y: Yaskawa Electric Corporation

S: Sanyo Denki Co., Ltd.

D

(5)

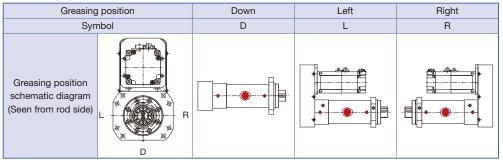
When motor and driver are required

When mixed and univer aller lequilled. Select from the applicable motor (control device) list symbols by model (→P.4-020). A driver and cables (5m each) are shipped with the PC main unit.

When motor is not required Select a symbol from "0M", "0Y", and "0S". Parts for mounting the applicable motor (motor mounting plate, mechanical lock, pulley) are included by model.

Note) If you want a network-supported servo amp/servo pack, contact THK.

Greasing position orientation



Motor cable orientation

* With motor and driver

Motor cable orientation	Upper	Left	Right
Symbol	U	L	R
Motor cable orientation schematic diagram (Seen from side A)			

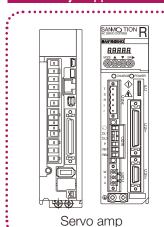
or

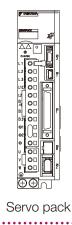


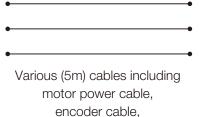
Motor cable orientation

Accessory Shipped with the Main Unit

* With motor and driver







brake cable, motor power/ brake cable



PC main unit

Features

Applicable motor (control device) list by model

Model, lead, reduction ratio	Symbol *1	Servo motor	Servo amp/servo pack	Encoder cable (5m)	Motor cable (5m)	Brake cable (5m)	External regeneration resistor
	M040M	HG-KR43	MD 14 40A	MD JOENODI EM A4 I	MD DWG10DLEM A1 I	-	-
	M040BM	HG-KR43B	MR-J4-40A	MK-J3ENOBLSM-AT-L	MR-PWS1CBL5M-A1-L	MR-BKS1CBL5M-A1-L	-
B000 004	M040Y	SGM7J-04AFA21	00070 0004004	1700 070100 05 5	JZSP-C7M20F-05-E	-	-
PC30-06A	M040BY	SGM7J-04AFA2C	SGD/S-2R8AUUA	JZSP-C7PI0D-05-E	JZSP-C7M	23F-05-E *2	-
	M040S	R2AA06040FXHC0	D041.004.0	DO 040 05 D	DO 0140 05 D	-	-
	M040BS	R2AA06040FCHC0	RS1L03AC	RS-CA3-05-R	RS-CM3-05-R	RS-CB3-05-R	-
	M075M	HG-KR73				-	-
	M075BM	HG-KR73B	MR-J4-70A	MR-J3ENCBL5M-A1-L	MR-PWS1CBL5M-A1-L	MR-BKS1CBL5M-A1-L	-
	M075Y	SGM7J-08AFA21			JZSP-C7M30F-05-E	-	-
PC40-06B	M075BY	SGM7J-08AFA2C	SGD7S-5R5A00A	JZSP-C7PI0D-05-E	JZSP-C7M	33F-05-E *2	-
	M075S	R2AA08075FXHC0				-	-
	M075BS	R2AA08075FCHC0	RS1L03AC	RS-CA3-05-R	RS-CM3-05-R	RS-CB3-05-R	-
	M100M	HG-SR102				-	-
	M100BM	HG-SR102B	MR-J4-100A	MR-J3ENSCBL5M-L	SVPM-J3HF3-A-5 *3	SVPM-J3HF2B-A-5 *3	-
	M085Y	SGM7G-09AFA21			JZSP-UVA101-05-E *4	-	-
PC40H-08C	M085BY	SGM7G-09AFA2C	SGD7S-7R6A00A	JZSP-CVP01-05-E	JZSP-UVA	131-05-E *5	-
	M120S	R2AA13120BXHC0			AL-00918631-05	-	-
	M120BS	R2AA13120BCHC0	RS1L03AC	AL-00918637-05	AL-0091	8632-05	-
	M150M	HG-SR152				-	-
	M150BM	HG-SR152B	MR-J4-200A	MR-J3ENSCBL5M-L	SVPM-J3HF3-A-5 *3	SVPM-J3HF2B-A-5 *3	-
	M130Y	SGM7G-13AFA21			JZSP-UVA101-05-E *4	-	-
PC50-06D	M130BY	SGM7G-13AFA2C	SGD7S-120A00A	JZSP-CVP01-05-E		131-05-E *5	-
	M180S	R2AA13180HXHC0			AL-00918633-05	-	-
	M180BS	R2AA13180HCHC0	RS1A05AC	AL-00918637-05	AL-0091	8634-05	-
	M200M	HG-SR202				_	-
	M200BM	HG-SR202B	MR-J4-200A	A MR-J3ENSCBL5M-L S\	SVPM-J3HF5-A-5 *3	SVPM-J3HF2B-A-5 *3	-
	M180Y	SGM7G-20AFA21		JZS	JZSP-UVA301-05-E *4	-	-
PC60-10E	M180BY	SGM7G-20AFA2C	SGD7S-180A00A	JZSP-CVP01-05-E	JZSP-UVA	l .	-
	M200S	R2AA13200LXHC0			AL-00918633-05	-	-
	M200BS	R2AA13200LCHC0	RS1A05AC	AL-00918637-05	AL-00918634-05		-
	M350M	HG-SR352			AL-00310034-03		-
	M350BM	HG-SR352B	MR-J4-350A	MR-J3ENSCBL5M-L	SVPM-J3HF6-A-5 *3	SVPM-J3HF2B-A-5 *3	-
	M290Y	SGM7G-30AFA21					-
PC60H-10F	M290BY	SGM7G-30AFA2C	SGD7S-330A00A	JZSP-CVP01-05-E	JZSP-UVA701-05-E *4 JZSP-UVA		-
	M350S	R2AA18350LXHC0 *6			AL-00918635-05	-	-
	M350BS	R2AA18350LCHC0 *6	RS1A10AC	AL-00918637-05	AL-0091	8636-05	-
	M500M	HG-SR502				_	-
	M500BM	HG-SR502B	MR-J4-500A	MR-J3ENSCBL5M-L	SVPM-J3HF6-A-5 *3	SVPM-J3HF2B-A-5 *3	
	M440Y	SGM7G-44AFA21			JZSP-UVA701-05-E *4		-
PC80L-12G	M440BY	SGM7G-44AFA2C	SGD7S-330A00A	JZSP-CVP01-05-E			-
	M450S	R2AA18450HXHC0			AL-00918635-05	_	-
	M450BS	R2AA18450HCHC0	RS1A15AC	AL-00918637-05		1	_
	M700M	HG-SR702			712 00010	-	-
	M700BM	HG-SR702B	MR-J4-700A	MR-J3ENSCBL5M-L	SVPM-J3HF8-A-5 *3	SVPM-J3HF2B-A-5 *3	_
	M550Y	SGM7G-55AFA21			JZSP-UVAA01-05-E *4	-	
PC80-12G	M550BY	SGM7G-55AFA2C	SGD7S-470A00A	JZSP-CVP01-05-E		A31-05-E *5	JUSP-RA04-E *7
	M550S	R2AA18550HXHC0			0201 OVA		REGIST-
	M550BS	R2AA18550HCHC0	RS1A30AC	AL-00918637-05	AL-00918629-05	AL-00918630-05	1000W6R7B *7
	M420M	HG-SR421				-	-
	M420BM	HG-SR421B	MR-J4-500A	MR-J3ENSCBL5M-L	SVPM-J3HF8-A-5 *3	SVPM-J3HF2B-A-5 *3	<u>-</u>
	M750Y	SGM7G-75AFA21			.I7SP-I IVAAN1-05-E *4		-
PC80H-12G	M750BY	SGM7G-75AFA2T	SGD7S-550A00A	JZSP-CVP01-05-E	JZSP-UVAA01-05-E *4 - JZSP-UVAA31-05-E *5		JUSP-RA05-E *7
	M750S	R2AA18750HXHC0			JZSF-UVAV	-01-00-L	DECICT
	M750BS	R2AA18750HCHC0	RS1A30AC	AL-00918637-05	AL-00918629-05	- AL-00918630-05	REGIST- 1000W6R7B *7
	IVI7 SUDS	112/10/30/10/10/10	<u> </u>	<u> </u>		AL-009 10030-03	10000001111

^{*1 &}quot;M", "Y" or "S" at the end of the symbol represents the motor manufacturer. M: Mitsubishi Electric Corporation, Y: Yaskawa Electric Corporation, S: Sanyo Denki Co., Ltd.

^{*2} Motor cable and brake cable are integrated together

^{*3} Manufactured by Misumi Corporation

^{*4} Manufactured by Yaskawa Controls Co., LTD.

^{*5} Each model for a set of a motor cable and brake cable: Manufactured by Yaskawa Controls Co., LTD.

 $^{^{\}star 6}$ PC specification special product (output shaft length differs from the manufacturer's catalog.)

^{*7} Servo amps and servo packs require an external regeneration resistor as they do not have a built-in regeneration resistor.

PC30-06A

Press series

Rod outer diameter: 30mm, Rated thrust: 1.6kN

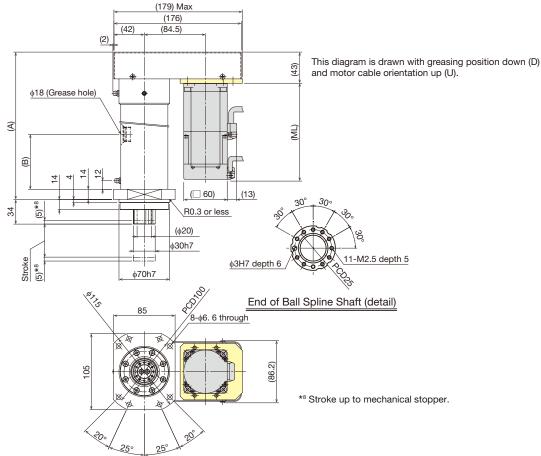


Specifications

	Motor symbol	TH	M040 (B)M	M040 (B)Y	M040 (B)S		
Servo motor	Manufacturer	-	Mitsubishi Electric Corporation	Yaskawa Electric Corporation	Sanyo Denki Co., Ltd.		
Servo motor	Model	THC: M40	HG-KR43	SGM7J-04	R2AA06040F		
	Rated output [kW]	0.4	0.4	0.4	0.4		
Ball screw lead [mm]		(6			
Reduction rat	io		28	/40			
Rated thrust *1	[kN]		1	.6			
Instantaneous maximum	thrust *2 [kN]	3.3					
Maximum speed *3	[mm/s]	210					
Acceleration and decelera	tion rate *4 [G]	0.3					
Deveniesible sviellend #5 [kN]	Pressing direction	3.3					
Permissible axial load *5 [kN]	Tensile direction	1.6					
Positioning repeatab	ility [mm]	±0.005					
Backlash [mm]		0.020					
Permissible input torque *6 [N·m]		2.6					
Maximum load capac	ity *7 [kg]	15					

- *1 At rated motor torque.
- *2 Dependent on permissible axial load.
- *3 At rated motor revolution.
- *4 When maximum load capacity is applied.
- \star^5 Load that can be applied to the actuator when static.
- *6 To prevent mechanical damage, motor must be operated within this limit.
- $\ensuremath{^{\star^7}}$ When actuator is positioned vertically with rod reaching lower end.

Dimensions



Stroke (mm) (Stroke between mechanical stoppers)			50 (60)	100 (110)	150 (160)	200 (210)	250 (260)		
		A	203.5	253.5	303.5	353.5	403.5		
		В	67	80	130	180	230		
Dimensions [mm]		THC: M40 (M40B) *9			98.1 (132.7)				
Dimensions [mm]	nj ML	M040M (M040BM) *9 *10			98.3 (135.1)				
	IVIL	M040Y (M040BY) *9 *10		85.5 (126)					
		M040S (M040BS) *9 *10	95.5 (123.5)						
		THC: M40 (M40B) *9	8.1 (8.6)	9.2 (9.7)	10.3 (10.8)	11.4 (11.9)	12.6 (13.1)		
Weight [kg]		M040M (M040BM) *9 *10	8.2 (8.6)	9.3 (9.7)	10.4 (10.8)	11.5 (11.9)	12.7 (13.1)		
weight [kg]		M040Y (M040BY) *9 *10	7.9 (8.5)	9.0 (9.6)	10.1 (10.7)	11.2 (11.8)	12.4 (13.0)		
		M040S (M040BS) *9 *10	8.1 (8.5)	9.2 (9.6)	10.3 (10.7)	11.4 (11.8)	12.6 (13.0)		

^{*9} Values when a brake is installed are shown in parentheses.

 $^{^{\}star10}$ "M", "Y" or "S" at the end of the model number represents the motor manufacturer.

M: Mitsubishi Electric Corporation, Y: Yaskawa Electric Corporation, S: Sanyo Denki Co., Ltd.

PC40-06B

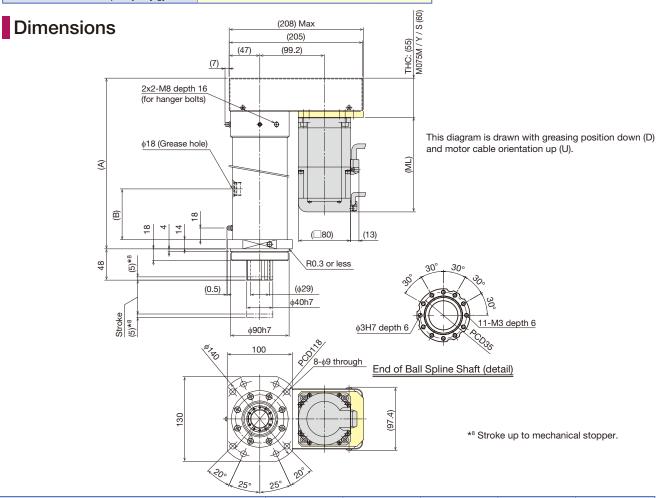
Press series

Rod outer diameter: 40mm, Rated thrust: 3.2kN



	Motor symbol	TH	M075 (B)M	M075 (B)Y	M075 (B)S		
Servo motor	Manufacturer	-	Mitsubishi Electric Corporation	Yaskawa Electric Corporation	Sanyo Denki Co., Ltd.		
Servo motor	Model	THC: M75	HG-KR73	SGM7J-08	R2AA08075F		
	Rated output [kW]	0.75	0.75	0.75	0.75		
Ball screw lead [mm]			(3			
Reduction rat	io		32,	48			
Rated thrust *1	[kN]		3.	.2			
Instantaneous maximum	thrust *2 [kN]	6.4					
Maximum speed *3	[mm/s]	200					
Acceleration and decelera	tion rate *4 [G]	0.3					
Permissible axial load *5 [kN]	Pressing direction	6.4					
remissible axiai loau ** [kin]	Tensile direction	3.2					
Positioning repeatab	ility [mm]	±0.005					
Backlash [mn	ո]	0.020					
Permissible input torque *6 [N·m]		4.8					
Maximum load capac	ity *7 [kg]	25					

- *1 At rated motor torque.
- *2 Dependent on permissible axial load.
- *3 At rated motor revolution.
- *4 When maximum load capacity is applied.
- *5 Load that can be applied to the actuator when static.
- *6 To prevent mechanical damage, motor must be operated within this limit.
- *7 When actuator is positioned vertically with rod reaching lower end.



Stroke [mm] (Stroke between mechanical stoppers)			50 (60)	100 (110)	150 (160)	200 (210)	250 (260)		
		A	237	287	337	387	437		
		В	83	93	143	193	243		
Dimensions [mm]		THC: M75 (M75B) *9			108.7 (145.3)				
Dimensions [mm]	ons [mm] M075	M075M (M075BM) *9 *10	112 (152.3)						
		M075Y (M075BY) *9 *10			97 (144)				
		M075S (M075BS) *9 *10			107.3 (143)				
		THC: M75 (M75B) *9	13.5 (14.4)	15.1 (16.0)	16.6 (17.5)	18.1 (19.0)	19.6 (20.5)		
Maiabt [ka]	M075M (M075BM) *9 *10		13.8 (14.8)	15.4 (16.4)	16.9 (17.9)	18.4 (19.4)	19.9 (20.9)		
vveignt [kg]	Weight [kg] M075Y (M075BY) *9*10		13.2 (13.8)	14.8 (15.4)	16.3 (16.9)	17.8 (18.4)	19.3 (19.9)		
		M075S (M075BS) *9 *10	13.6 (14.5)	15.2 (16.1)	16.7 (17.6)	18.2 (19.1)	19.7 (20.6)		

^{*9} Values when a brake is installed are shown in parentheses.

^{*10 &}quot;M", "Y" or "S" at the end of the model number represents the motor manufacturer.

PC40H-08C

Press series

Rod outer diameter: 40mm, Rated thrust: 5.6 - 6.7kN

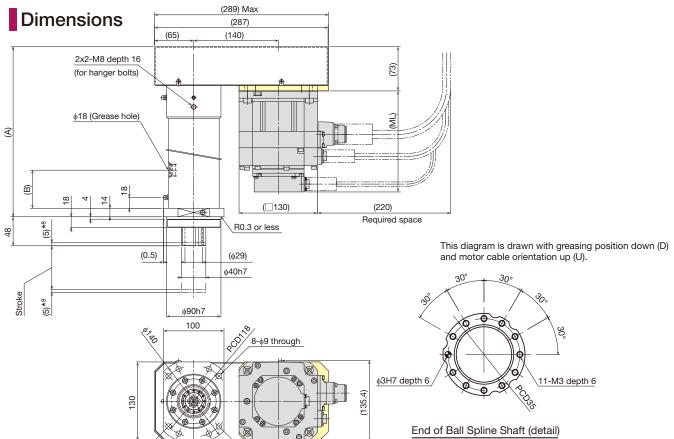


Specifications

	Motor symbol	M100 (B)M	M085 (B)Y	M120 (B)S	
Servo motor	Manufacturer	Mitsubishi Electric Corporation	Yaskawa Electric Corporation	Sanyo Denki Co., Ltd.	
Servo motor	Model	HG-SR102	SGM7G-09	R2AA13120B	
	Rated output [kW]	1	0.85	1.2	
Ball screw lead [n	nm]		8		
Reduction ratio)		25/44		
Rated thrust *1 [k	kN]	5.6	6.3	6.7	
Instantaneous maximum t	hrust *2 [kN]	11.2			
Maximum speed *3 [[mm/s]	151	113	151	
Acceleration and decelerati	ion rate *4 [G]	0.1			
Dermissible axial load *5 [kN]	Pressing direction	11.2			
Permissible axial load *5 [kN]	Tensile direction	5.6			
Positioning repeatabil	ity [mm]	±0.005			
Backlash [mm]		0.020			
Permissible input torque *6 [N·m]		9.5			
Maximum load capaci	ty * ⁷ [kg]	50			

- *1 At rated motor torque.
- *2 Dependent on permissible axial load.
- *3 At rated motor revolution.
- *4 When maximum load capacity is applied.
- *5 Load that can be applied to the actuator when static.
- *6 To prevent mechanical damage, motor must be operated within this limit.
- \star7 When actuator is positioned vertically with rod reaching lower end.

*8 Stroke up to mechanical stopper.



Stroke [mm] (Stroke between mechanical stoppers)			50 (60)	100 (110)	150 (160)	200 (210)	250 (260)	
		Α	271	321	371	421	471	
		В	83	93	113	163	213	
Dimensions [mm]	M100M (M100BM) *9 *10		132.5 (167)					
	ML	M085Y (M085BY) *9 *10	137 (173)					
		M120S (M120BS) *9 *10			120.5 (160)			
		M100M (M100BM) *9 *10	21.8 (23.8)	23.4 (25.4)	25.0 (27.0)	26.6 (28.6)	28.2 (30.2)	
Weight [kg]	M085Y (M085BY) *9 *10		21.1 (23.1)	22.7 (24.7)	24.3 (26.3)	25.9 (27.9)	27.5 (29.5)	
		M120S (M120BS) *9 *10	21.7 (23.6)	23.3 (25.2)	24.9 (26.8)	26.5 (28.4)	28.1 (30.0)	

^{*9} Values when brake is installed are shown in parentheses.

^{*10 &}quot;M", "Y" or "S" at the end of the model number represents the motor manufacturer.

M: Mitsubishi Electric Corporation, Y: Yaskawa Electric Corporation, S: Sanyo Denki Co., Ltd.

PC50-06D

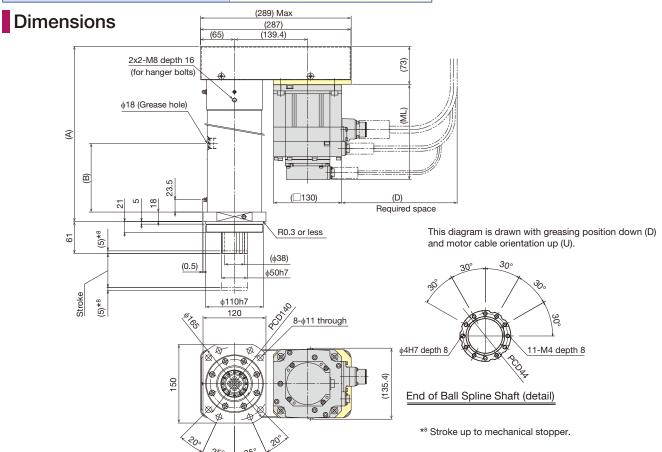
Press series

Rod outer diameter: 50mm, Rated thrust: 8.4 - 10.2kN



	Motor symbol	M150 (B)M	M130 (B)Y	M180 (B)S	
Canva mastav	Manufacturer	Mitsubishi Electric Corporation	Yaskawa Electric Corporation	Sanyo Denki Co., Ltd.	
Servo motor	Model	HG-SR152	SGM7G-13	R2AA13180H	
	Rated output [kW]	1.5	1.3	1.8	
Ball screw lead [n	nm]		6		
Reduction ratio)		30/40		
Rated thrust *1 [k	(N]	8.4	9.8	10.2	
Instantaneous maximum t	hrust *2 [kN]	16.8			
Maximum speed *3 [mm/s]	150	112	150	
Acceleration and decelerati	on rate *4 [G]	0.1			
Permissible axial load *5 [kN]	Pressing direction	16.8			
remissible axial load ** [kiv]	Tensile direction		8.4		
Positioning repeatabil	ity [mm]		±0.005		
Backlash [mm]			0.020		
Permissible input torque	e *6 [N·m]	14.3			
Maximum load capaci	ty * ⁷ [kg]	75			

- *1 At rated motor torque.
- *2 Dependent on permissible axial load.
- *3 At rated motor revolution.
- *4 When maximum load capacity is applied.
- *5 Load that can be applied to the actuator when static.
- *6 To prevent mechanical damage, motor must be operated within this limit.
- *7 When actuator is positioned vertically with rod reaching lower end.



Stroke [mm] (Stroke between mechanical stoppers)			50 (60)	100 (110)	150 (160)	200 (210)	250 (260)	
		А	294	344	394	444	494	
		В	10	01	111	161	211	
		M150M (M150BM) *9 *10			146.5 (181)			
Diagram in a formal	ML	M130Y (M130BY) *9 *10	153 (189)					
Dimensions [mm]		M180S (M180BS) *9 *10	138 (179)					
		M150M (M150BM) *10 220						
	D	D M130Y (M130BY) *10 220						
		M180S (M180BS) *10			250			
		M150M (M150BM) *9 *10	29.1 (31.1)	31.6 (33.6)	34.0 (36.0)	36.5 (38.5)	39.0 (41.0)	
Weight [kg]	M130Y (M130BY) *9 *10		28.9 (30.8)	31.4 (33.3)	33.8 (35.7)	36.3 (38.2)	38.8 (40.7)	
		M180S (M180BS) *9 *10	29.8 (31.0)	32.3 (33.5)	34.7 (35.9)	37.2 (38.4)	39.7 (40.9)	

^{*9} Values when brake is installed are shown in parentheses.

^{*10 &}quot;M", "Y" or "S" at the end of the model number represents the motor manufacturer. M: Mitsubishi Electric Corporation, Y: Yaskawa Electric Corporation, S: Sanyo Denki Co., Ltd.

PC60-10E

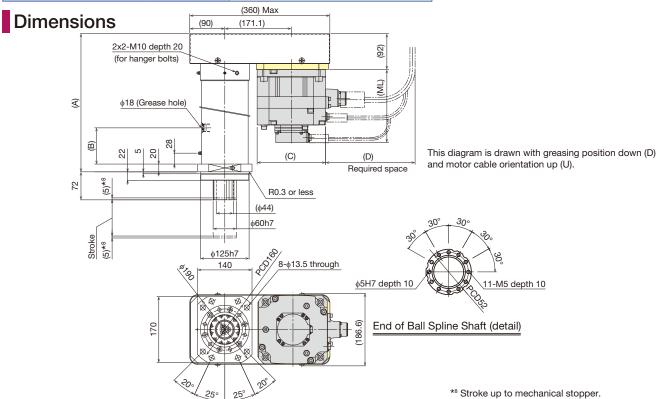
Press series

Rod outer diameter: 60mm, Rated thrust: 10.9 - 13.1kN



	Motor symbol	M200 (B)M	M180 (B)Y	M200 (B)S	
Comic motor	Manufacturer	Mitsubishi Electric Corporation	Yaskawa Electric Corporation	Sanyo Denki Co., Ltd.	
Servo motor	Model	HG-SR202	SGM7G-20	R2AA13200L	
	Rated output [kW]	2	1.8	2	
Ball screw lead [n	nm]		10		
Reduction ratio)		28/60		
Rated thrust *1 [(N]	10.9	13.1	10.9	
Instantaneous maximum t	hrust *2 [kN]	21.8			
Maximum speed *3 [mm/s]	155	116	155	
Acceleration and decelerati	on rate *4 [G]	0.1			
Permissible axial load *5 [kN]	Pressing direction	21.8			
remissible axial load ** [kiv]	Tensile direction	10.9			
Positioning repeatability [mm]		±0.005			
Backlash [mm]		0.020			
Permissible input torque *6 [N·m]		19.1			
Maximum load capaci	ty * ⁷ [kg]	100			

- *1 At rated motor torque.
- *2 Dependent on permissible axial load.
- *3 At rated motor revolution.
- *4 When maximum load capacity is applied.
- $^{\star 5}$ Load that can be applied to the actuator when static.
- *6 To prevent mechanical damage, motor must be operated within this limit.
- \star7 When actuator is positioned vertically with rod reaching lower end.



Stroke [mm] (Stroke between mechanical stoppers)		50 (60)	100 (110)	150 (160)	200 (210)	250 (260)		
	A		305	355	405	455	505	
	В			113		163	213	
		M200M (M200BM) *9 *10	138.5 (188)					
	ML	M180Y (M180BY) *9 *10	171 (207)					
Dimensions [mm]		M200S (M200BS) *9 *10	171 (216)					
	С	M200M (M200BM) *10	□176					
		M180Y (M180BY) *10	□130					
		M200S (M200BS) *10	□130					
		M200M (M200BM) *10	230					
	D	M180Y (M180BY) *10	240					
		M200S (M200BS) *10	250					
		M200M (M200BM) *9 *10	47.4 (53.4)	50.9 (56.9)	54.4 (60.4)	58.0 (64.0)	61.5 (67.5)	
Weight [kg]		M180Y (M180BY) *9 *10	45.0 (47.4)	48.5 (50.9)	52.0 (54.4)	55.6 (58.0)	59.1 (61.5)	
	M200S (M200BS) *9 *10		46.4 (48.4)	49.9 (51.9)	53.4 (55.4)	57.0 (59.0)	60.5 (62.5)	

^{*9} Values when brake is installed are shown in parentheses.

^{*10 &}quot;M", "Y" or "S" at the end of the model number represents the motor manufacturer.

M: Mitsubishi Electric Corporation, Y: Yaskawa Electric Corporation, S: Sanyo Denki Co., Ltd.

PC60H-10F

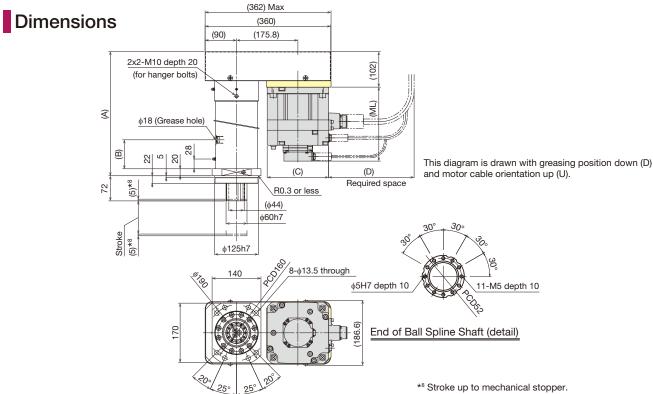
Press series

Rod outer diameter: 60mm, Rated thrust: 17.8 - 19.8kN



	Motor symbol	M350 (B)M	M290 (B)Y	M350 (B)S	
Servo motor	Manufacturer	Mitsubishi Electric Corporation	Yaskawa Electric Corporation	Sanyo Denki Co., Ltd.	
Servo motor	Model	HG-SR352	SGM7G-30	R2AA18350L	
	Rated output [kW]	3.5	2.9	3.5	
Ball screw lead [n	nm]		10		
Reduction ratio		30/60			
Rated thrust *1 [A	17.8	19.8	18.1		
Instantaneous maximum t	35.6				
Maximum speed *3 [Maximum speed *3 [mm/s]			166	
Acceleration and decelerati	on rate *4 [G]	0.1			
Permissible axial load *5 [kN]	Pressing direction	35.6			
remissible axial load ** [kiv]	Tensile direction	17.8			
Positioning repeatabil	±0.005				
Backlash [mm]	0.020				
Permissible input torqu	33.4				
Maximum load capaci	ty * ⁷ [kg]	150			

- *1 At rated motor torque.
- *2 Dependent on permissible axial load.
- *3 At rated motor revolution.
- *4 When maximum load capacity is applied.
- *5 Load that can be applied to the actuator when static.
- *6 To prevent mechanical damage, motor must be operated within this limit.
- *7 When actuator is positioned vertically with rod reaching lower end.



Stroke [mm] (Stroke between mechanical stoppers)		50 (60)	100 (110)	150 (160)	200 (210)	250 (260)		
	A		349	399	449	499	549	
	В			123		145	195	
Dimensions [mm]		M350M (M350BM) *9 *10	162.5 (212)					
	ML	M290Y (M290BY) *9 *10	160 (208)					
		M350S (M350BS) *9 *10	155 (205)					
	С	M350M (M350BM) *10	□176					
		M290Y (M290BY) *10	□180					
		M350S (M350BS) *10	□180					
		M350M (M350BM) *10	245					
	D	M290Y (M290BY) *10	285					
		M350S (M350BS) *10	300					
		M350M (M350BM) *9 *10	57.2 (63.2)	60.7 (66.7)	64.3 (70.3)	67.8 (73.8)	71.3 (77.3)	
Weight [kg]		M290Y (M290BY) *9 *10	54.7 (60.7)	58.2 (64.2)	61.8 (67.8)	65.3 (71.3)	68.8 (74.8)	
	M350S (M350BS) *9 *10		56.7 (61.2)	60.2 (64.7)	63.8 (68.3)	67.3 (71.8)	70.8 (75.3)	

^{*9} Values when brake is installed are shown in parentheses.

^{*10 &}quot;M", "Y" or "S" at the end of the model number represents the motor manufacturer. M: Mitsubishi Electric Corporation, Y: Yaskawa Electric Corporation, S: Sanyo Denki Co., Ltd.

PC80L-12G

Press series

Rod outer shape: 80mm, Rated thrust: 21 - 28kN



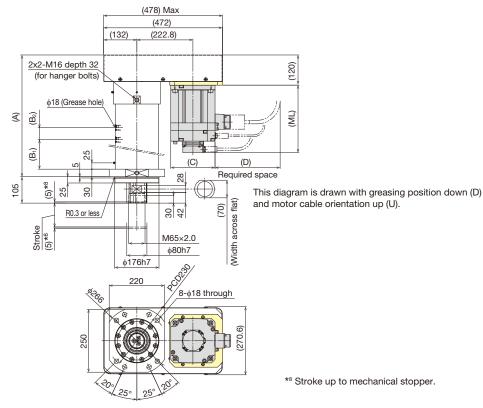
Specifications

	Motor symbol	M500 (B)M	M440 (B)Y	M450 (B)S	
Servo motor	Manufacturer	Mitsubishi Electric Corporation	Yaskawa Electric Corporation	Sanyo Denki Co., Ltd.	
Servo motor	Model	HG-SR502	SGM7G-44	R2AA18450H	
	Rated output [kW]	5	4.4	4.5	
Ball screw lead [n	nm]	12			
Reduction ratio)		40/90		
Rated thrust *1 [k	24	28	21		
Instantaneous maximum t	71	71	75		
Maximum speed *3 [Maximum speed *3 [mm/s]			177	
Acceleration and deceleration	on rate *4 [G]	0.1			
Deveniesible svietless #5 [kN]	Pressing direction	120			
Permissible axial load *5 [kN]	Tensile direction	48			
Positioning repeatabil	±0.005				
Backlash [mm]	0.020				
Permissible input torque	120				
Maximum load capaci	ty *7 [kg]	200			

- *1 At rated motor torque.
- *2 Dependent on permissible axial load.
- *3 At rated motor revolution.
- *4 When maximum load capacity is applied.
- $^{\star 5}$ Load that can be applied to the actuator when static.
- *6 To prevent mechanical damage, motor must be operated within this limit.
- \star7 When actuator is positioned vertically with rod reaching lower end.

Dimensions

Controller PCT/PC US/USW KRF/KSF



Stroke [mm] (Stroke between mechanical stoppers)		50 (60)	100 (110)	150 (160)	200 (210)	250 (260)		
A		484	534	584	634	684		
	B ₁		117	119	121	171	221	
		B_2	48	96	144			
		M500M (M500BM) *9 *10	178.5 (228)					
	ML	M440Y (M440BY) *9 *10	184 (232)					
Dimensions [mm]		M450S (M450BS) *9 *10	172 (222)					
Dimensions [mm]	С	M500M (M500BM) *10	□176					
		M440Y (M440BY) *10	□180					
		M450S (M450BS) *10						
		M500M (M500BM) *10	245					
	D	M440Y (M440BY) *10	285					
		M450S (M450BS) *10	380					
		M500M (M500BM) *9 *10	133 (139)	140 (146)	146 (152)	153 (159)	160 (166)	
Weight [kg]		M440Y (M440BY) *9 *10	131 (137)	137 (143)	144 (150)	151 (157)	157 (163)	
	M450S (M450BS) *9 *10		133 (135)	139 (142)	146 (149)	153 (155)	159 (168)	

^{*9} Values when brake is installed are shown in parentheses.

 $^{^{\}star10}$ "M", "Y" or "S" at the end of the model number represents the motor manufacturer.

M: Mitsubishi Electric Corporation, Y: Yaskawa Electric Corporation, S: Sanyo Denki Co., Ltd.

PC80-12G

Press series

Rod outer shape: 80mm, Rated thrust: 33 - 35kN

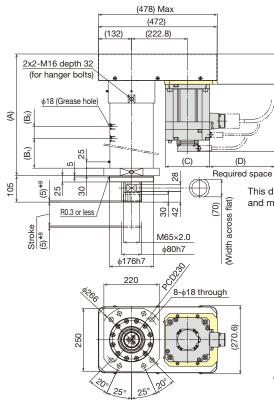


Specifications

Motor symbol	M700 (B)M	M550 (B)Y	M550 (B)S	
Manufacturer	Mitsubishi Electric Corporation	Yaskawa Electric Corporation	Sanyo Denki Co., Ltd.	
Model	HG-SR702	SGM7G-55A	R2AA18550H	
Rated output [kW]	7	5.5	5.5	
m]		12		
Reduction ratio				
Rated thrust *1 [kN]			35	
Instantaneous maximum thrust *2 [kN]			107	
nm/s]	177	133	133	
n rate *4 [G]	0.1			
Pressing direction	120			
Tensile direction	48			
Positioning repeatability [mm]				
Backlash [mm]				
Permissible input torque *6 [N·m]				
/ * ⁷ [kg]	200			
r	Manufacturer Model Rated output [kW] n] J J J J J J J J J J J J J J J J J	Manufacturer Misubshi Electric Corporation HG-SR702 Rated output [kW] 7 n] 33 rust *2 [kN] 100 nm/s] 177 n rate *4 [G] Pressing direction Tensile direction / [mm] *6 [N·m]	Manufacturer Misubshi Electric Corporation Yaskawa Electric Corporation Model HG-SR702 SGM7G-55A Rated output [kW] 7 5.5 n] 12 40/90 33 35 rust *2 [kN] 100 102 am/s] 177 133 n rate *4 [G] 0.1 Pressing direction 120 Tensile direction 48 t [mm] ±0.005 0.020 *6 [N·m] 120	

- *1 At rated motor torque.
- *2 Dependent on permissible axial load.
- *3 At rated motor revolution.
- *4 When maximum load capacity is applied.
- *5 Load that can be applied to the actuator when static.
- *6 To prevent mechanical damage, motor must be operated within this limit.
- *7 When actuator is positioned vertically with rod reaching lower end.

Dimensions



This diagram is drawn with greasing position down (D) and motor cable orientation up (U).

(M

*8 Stroke up to mechanical stopper.

(Stroke	Stroke [mm] (Stroke between mechanical stoppers)		50 (60)	100 (110)	150 (160)	200 (210)	250 (260)	
A		A	484	534	584	634	684	
		B ₁	117	119	121	171	221	
Dimensions [mm] -	B ₂		48	96		144		
		M700M (M700BM) *9 *10	218.5 (268)					
	ML	M550Y (M550BY) *9 *10	221 (265)					
		M550S (M550BS) *9 *10	228 (274)					
	С	M700M (M700BM) *10	□176					
		M550Y (M550BY) *10	□180					
		M550S (M550BS) *10						
		M700M (M700BM) *10	379					
	D	M550Y (M550BY) *10	432					
		M550S (M550BS) *10	505					
		M700M (M700BM) *9 *10	140 (146)	147 (153)	153 (159)	160 (166)	167 (173)	
Weight [kg]		M550Y (M550BY) *9 *10	135 (141)	141 (147)	148 (154)	155 (161)	161 (167)	
0 . 0.	M550S (M550BS) *9 *10		141 (144)	147 (150)	154 (157)	161 (164)	168 (170)	

^{*9} Values when brake is installed are shown in parentheses.

^{*10 &}quot;M", "Y" or "S" at the end of the model number represents the motor manufacturer.

PC80H-12G

Press series

Rod outer shape: 80mm, Rated thrust: 40 - 48kN

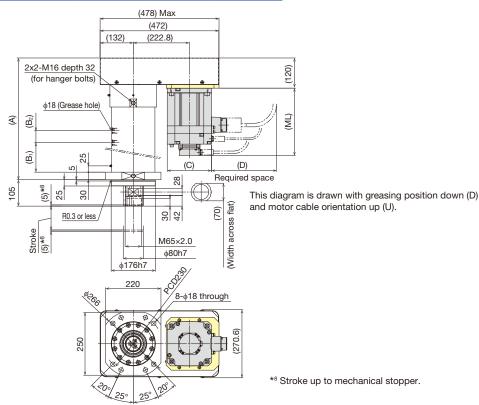


Specifications

	Motor symbol	M420 (B)M	M750 (B)Y	M750 (B)S			
Servo motor	Manufacturer	Mitsubishi Electric Corporation	Yaskawa Electric Corporation	Sanyo Denki Co., Ltd.			
Servo motor	Model	HG-SR421	SGM7G-75	R2AA18750H			
	Rated output [kW]	4.2	7.5	7.5			
Ball screw lead [n	nm]		12				
Reduction ratio)		40/90				
Rated thrust *1 [k	40	48	48				
Instantaneous maximum t	Instantaneous maximum thrust *2 [kN]			120			
Maximum speed *3 [mm/s]	88	133	133			
Acceleration and decelerati	on rate *4 [G]	0.1					
Demoissible svielled #5 [I/N]	Pressing direction	120					
Permissible axial load *5 [kN]	Tensile direction	48					
Positioning repeatabil	±0.005						
Backlash [mm]	0.020						
Permissible input torque	120						
Maximum load capaci	ty *7 [kg]	200					

- *1 At rated motor torque.
- *2 Dependent on permissible axial load.
- *3 At rated motor revolution.
- *4 When maximum load capacity is applied.
- $^{\star 5}$ Load that can be applied to the actuator when static.
- *6 To prevent mechanical damage, motor must be operated within this limit.
- \star7 When actuator is positioned vertically with rod reaching lower end.

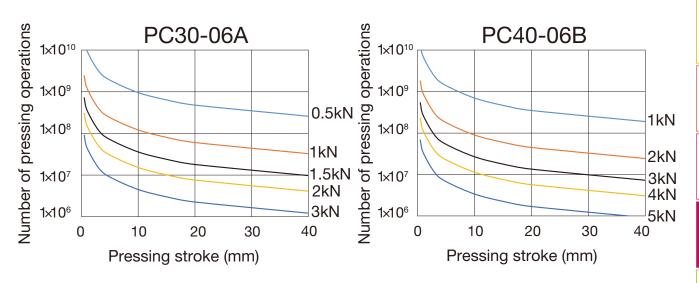
Dimensions

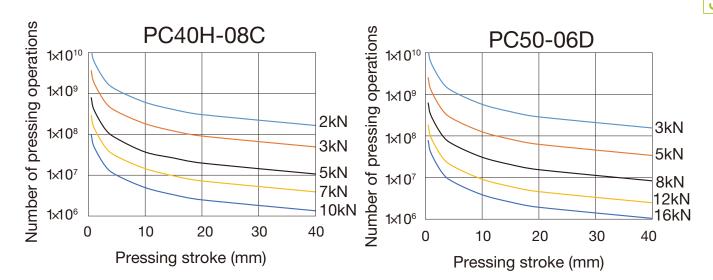


Stroke [mm] (Stroke between mechanical stoppers)		50 (60)	100 (110)	150 (160)	200 (210)	250 (260)		
	A		484	534	584	634	684	
		B ₁	117	119	121	171	221	
		$B_{\!\scriptscriptstyle 2}$	48	96		144		
		M420M (M420BM) *9 *10	218.5 (268)					
Dimensions [mm]	ML	M750Y (M750BY) *9 *10	267 (311)					
		M750S (M750BS) *9 *10	273 (329)					
Dimensions [mm]	С	M420M (M420BM) *10	□176					
		M750Y (M750BY) *10	□180					
		M750S (M750BS) *10	□160					
		M420M (M420BM) *10	379					
	D	M750Y (M750BY) *10	432					
		M750S (M750BS) *10	505					
		M420M (M420BM) *9 *10	140 (146)	147 (153)	153 (159)	160 (166)	167 (173)	
Weight [kg]		M750Y (M750BY) *9 *10	143 (148)	149 (155)	156 (161)	163 (168)	169 (175)	
	M750S (M750BS) *9 *10		149 (153)	155 (160)	162 (167)	169 (173)	176 (180)	

Values when brake is installed are shown in parentheses.

PC Theoretical pressing force running life (number of presses)





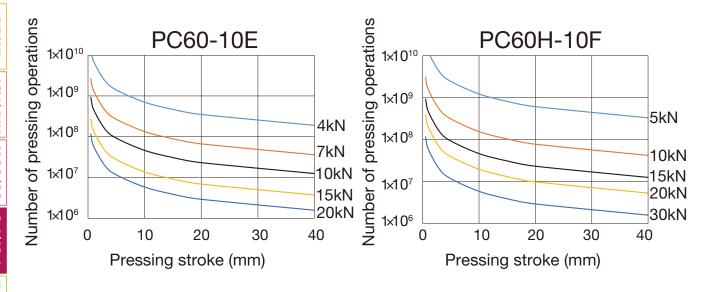
Running life will fluctuate depending on pressing load and pressing stroke.

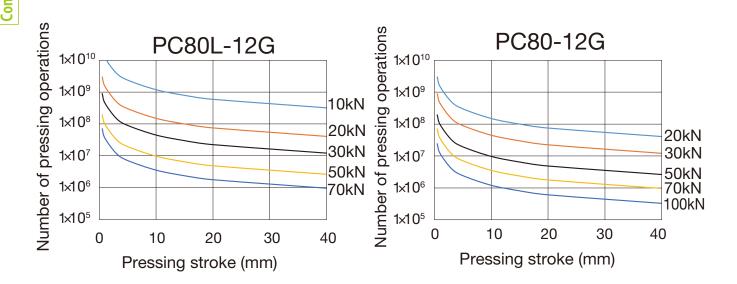
The operating life is a theoretical value under the following conditions.

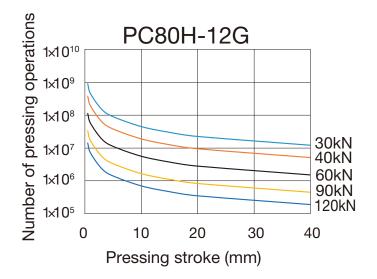
Mounting orientation: vertical (rod reaching lower end)

Pressing direction : compression direction Payload : at maximum load capacity

^{*} The graph does not guarantee the pressing stroke operation for pressing load.







Running life will fluctuate depending on pressing load and pressing stroke.

The operating life is a theoretical value under the following conditions.

Mounting orientation: Vertical (rod reaching lower end) Pressing direction : Compression direction Payload : at maximum load capacity

^{*} The graph does not guarantee the pressing stroke operation for pressing load.

Specifications

To maximize the performance of the actuator, periodic greasing is required.

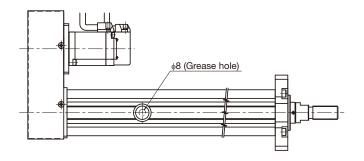
THK cylinder-type actuators have a grease hole.

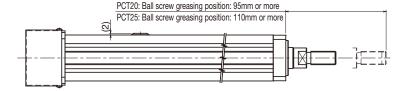
* For details of greasing procedures, refer to the Instruction Manual.

PCT

Standard grease: AFB-LF

To grease the ball screw portion, remove the plug and apply the grease directly to the ball screw shaft.

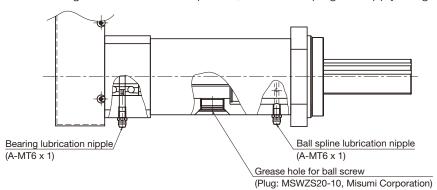




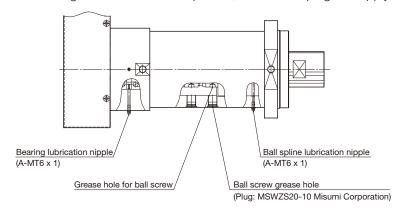
PC

Standard grease: L500

PC30 - 60H: To grease the ball screw portion, remove the plug and apply the grease directly to the ball screw shaft.



PC80L - 80H: To grease the ball screw portion, remove the plug and apply the grease via the ball screw grease hole.



Precautions on Use

Operation

- Do not unnecessarily disassemble the actuator or control devices. Doing so may allow foreign objects to enter or reduce functionality.
- Do not drop or knock the actuator or control devices. Doing so may cause injury or damage the unit. If the product is dropped or impacted, functionality may be reduced even if there is no surface damage.

Environment

Wrong environment can cause failures of the actuator and control devices. The best place to use the product is as follows:

- Actuator: A place with an ambient temperature from 0 to 40°C and humidity of from 20% to 80% RH that will not expose the product to freezing or condensation.
- Controller: A place with an ambient temperature from 0 to 40°C and humidity of no more than 90% RH that will not expose the product to freezing or condensation.
- A place free from corrosive gas and flammable gas.
- A place free from electrically conductive powder (such as iron powder), dust, oil mist, moisture, salt, and organic solvent.
- A place free from direct sunlight and radiant heat.
- A place free from strong electric and magnetic fields
- A place where vibration or impact is not transmitted to the unit.
- A place that is easily accessible for service and cleaning purposes.

Safety Precautions

- When the actuator is in motion or about to be in motion, do not touch any moving parts. Do not go near the actuator when it is in motion.
- Before performing installation, adjustment, checking, or services regarding the actuator and the connected peripherals, ensure that all power is disconnected. In addition, take countermeasures to prevent anyone other than the operator from turning on the power.
- If two or more people are involved in the operation, confirm the procedures such as sequences, signs, and abnormalities in advance, and appoint another person for monitoring the operation.
- Before operation, please read thoroughly and obey "Manipulating industrial robots
- Safety" (JIS B8433) and "Ordinance on Industrial Safety and Health" (Ministry of Health, Labor and Welfare).
- Operation of the actuator over the torque limit value leads to damage of parts or injury. Please keep the torque limit settings of parameters within THK specifications.
- For folding type of PCT and PC, this product does not include a safety device to protect users when the timing belt is broken. The customer must provide a safety device.
- Although a stopper is installed inside the product, it is intended to limit the stroke and therefore may be damaged in case of a hard collision.
- PC is designed to accommodate load in the pressing direction. Applying a load in the tensile direction may shorten product life.
- With PCT, only an axial load is permissible.
- Please contact THK if a rotational torque or moment load is applied to the PC rod.
- The total weight of PC exceeds 20kg. When moving the product, use hanger bolts to raise and move the product. Do not use a hanger belt alone to raise the product. When moving the product vertically, such as for installation, use two bolts at the motor side and the rod side. When moving it horizontally, use two or four bolts at the motor side and the rod side. Some models may tilt when raised, due to unbalanced center of gravity.