

MF7/MF7D

● Flat type available

● Can be used for wall-mount

Note. When the weight per carrier exceeds 7 kg, special parameters are applicable.



Ordering method

Single carriage model

MF7						TSP			
Model MF7: Incremental MF7A: Semi-absolute ^{Note 1}	Cable carrier entry location RH: Horizontal, right LH: Horizontal, left FRH: Horizontal, right (Flat) FLH: Horizontal, left (Flat) RW: Wall mount, right LW: Wall mount, left	Optional cable carrier for users ^{Note 2} No entry: None S: S type M: M type L: L type	Origin position change No entry: L side (Standard) Z: R side No entry: R side (Standard) Z: L side	Grease type No entry: Standard GC: Clean	Stroke ^{Note 3} Horizontal: 100 to 4000 (100mm pitch) 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 5} Wall: 100 to 2000 (100mm pitch)	Cable length ^{Note 4} 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 5}	Positioner ^{Note 6} TS-P	Driver: Power-supply voltage / Power capacity 110: 100V/200W 210: 200V/200W	LCD monitor No entry: None L: With LCD
						SR1-P Controller	10 Driver: Power capacity 10: 200W	Usable for CE No entry: Standard E: CE marking	I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ GW: No I/O board ^{Note 7}
						RDV-P Driver	2 Power-supply voltage 2: AC200V	10 Driver: Power capacity 10: 200W or less	RBR1 Regenerative unit

Note 1. When RDV-P is selected, the semi-absolute specifications cannot be selected.

Note 2. For models with a 2,100mm or longer stroke, optional L type cable carriers can only be used. Flat type cannot be selected for L type.

Note 3. Maximum stroke for flat type is 2000mm.

Note 4. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.692 for details on robot cable.

Note 5. If a flexible cable is needed for the SR1-P, TS-P, or RDV-P, then select 3K/5K/10K.

Note 6. These controllers can be mounted on DIN rails. See P.600 for details.

Note 7. Select this selection when using the gateway function.

Note. It is possible to provide the model without a cable carrier. To find information on wiring (cable terminals) within the cable carrier see P.703.

Double carriage model

MF7D					
Model MF7D: Incremental MF7AD: Semi-absolute ^{Note 1}	Installing direction H: Horizontal installation FH: Horizontal installation (Flat) W: Wall mount installation	Optional cable carrier for users ^{Note 2} No entry: None S: S type M: M type L: L type	Grease type No entry: Standard GC: Clean	Stroke ^{Note 3} Horizontal: 100 to 3800 (100mm pitch) 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 5} Wall: 100 to 1800 (100mm pitch)	Cable length 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 5}
					Controller RCX320 SR1-P (2 units) TS-P (2 units) TS-P (2 units)

Note. Specify various controller setting items.

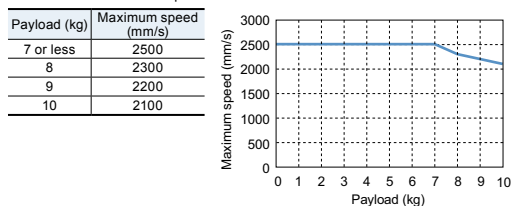
Specifications

Model	MF7	MF7D
Driving method	Steel cored linear motor with falt magnet	
Repeatability (μm)	+/-5	
Scale (μm)	Magnetic type: resolution of 1	
Maximum speed ^{Note 2} (mm/sec)	2500	
Rated thrust (N)	37	
Maximum payload (kg)	10 ^{Note 1}	
Stroke (mm)	Horizontal	100 to 4000 (100mm pitch)
	Wall mount	100 to 1800 (100mm pitch)
Linear guide	Horizontal	100 to 3800 (100mm pitch)
	Wall mount	100 to 1800 (100mm pitch)
Maximum cross-section outside dimensions (mm)	W85 × H80 (except the cable carrier section)	
Total length (mm)	Stroke+280 Stroke+480	
Cable length (m)	Standard: 3.5 / Option: 5.10	

Note. A vertical model (with brake) is not available with the PHASER series. Note. The basic specifications of semi-absolute model are the same as those of the incremental model.

Note 1. Payload per carrier. When the weight exceeds 7 kg, special parameters are applicable. Please consult our sales office or sales representative.

Note 2. Table of maximum speed



Allowable overhang

Horizontal installation (Unit: mm)				Wall installation (Unit: mm)			
	A	B	C		A	B	C
1kg	3000	3000	680	1kg	700	3000	3000
3kg	3000	1350	215	3kg	195	1260	3000
5kg	2900	830	125	5kg	90	630	2480
7kg	2400	580	85	7kg	50	360	1680
9kg	2200	460	60				
10kg	2100	410	55				

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

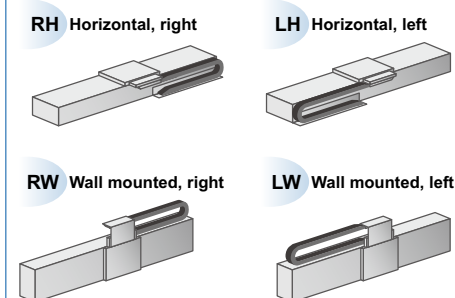
Static loading moment

Static loading moment (Unit: N·m)			
MY	MP	MR	
156	156	194	

Controller

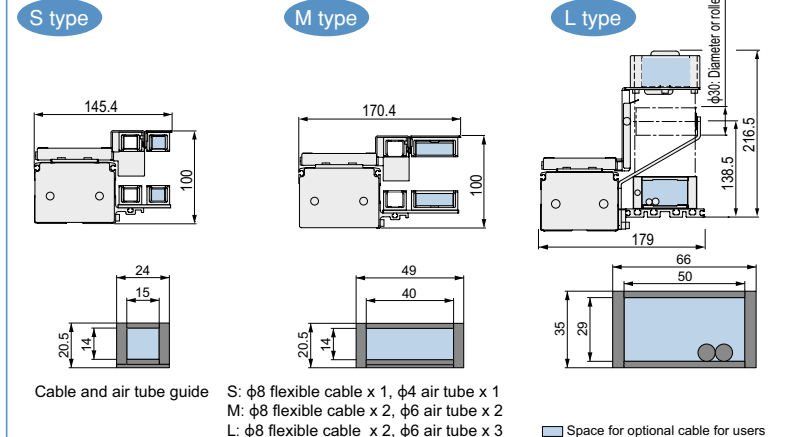
Controller	Operating method
SR1-P10	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX320 RCX340	
TS-P110	I/O point trace / Remote command
TS-P210	
RDV-P210-RBR1	Pulse train control

Cable carrier entry location

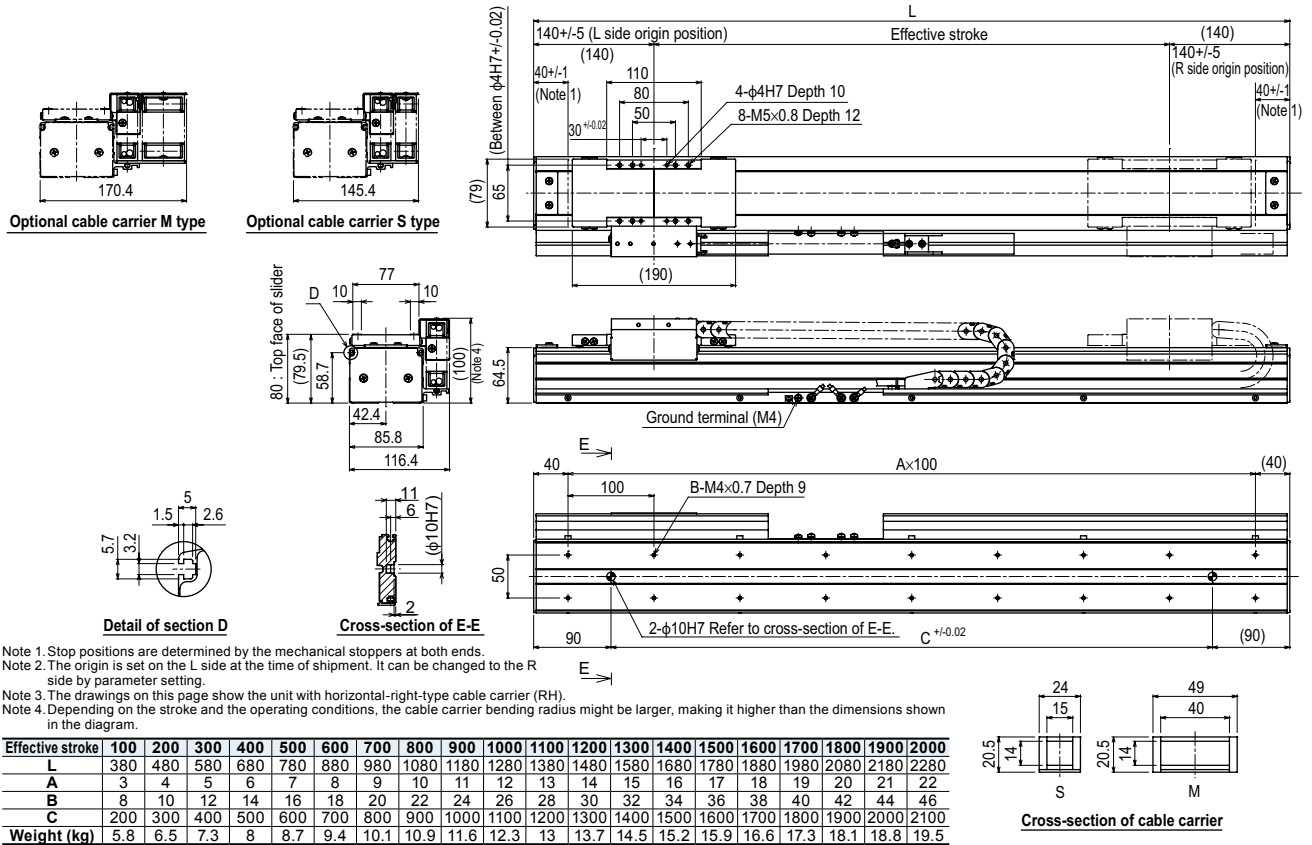


Note. Be sure to install in the direction as specified (in cable carrier take-out direction drawing and various specification drawings) individually. Installation in any other way will cause a failure. For requirement of installation in any way other than the above standard installation, please consult YAMAHA as special arrangement will be available.

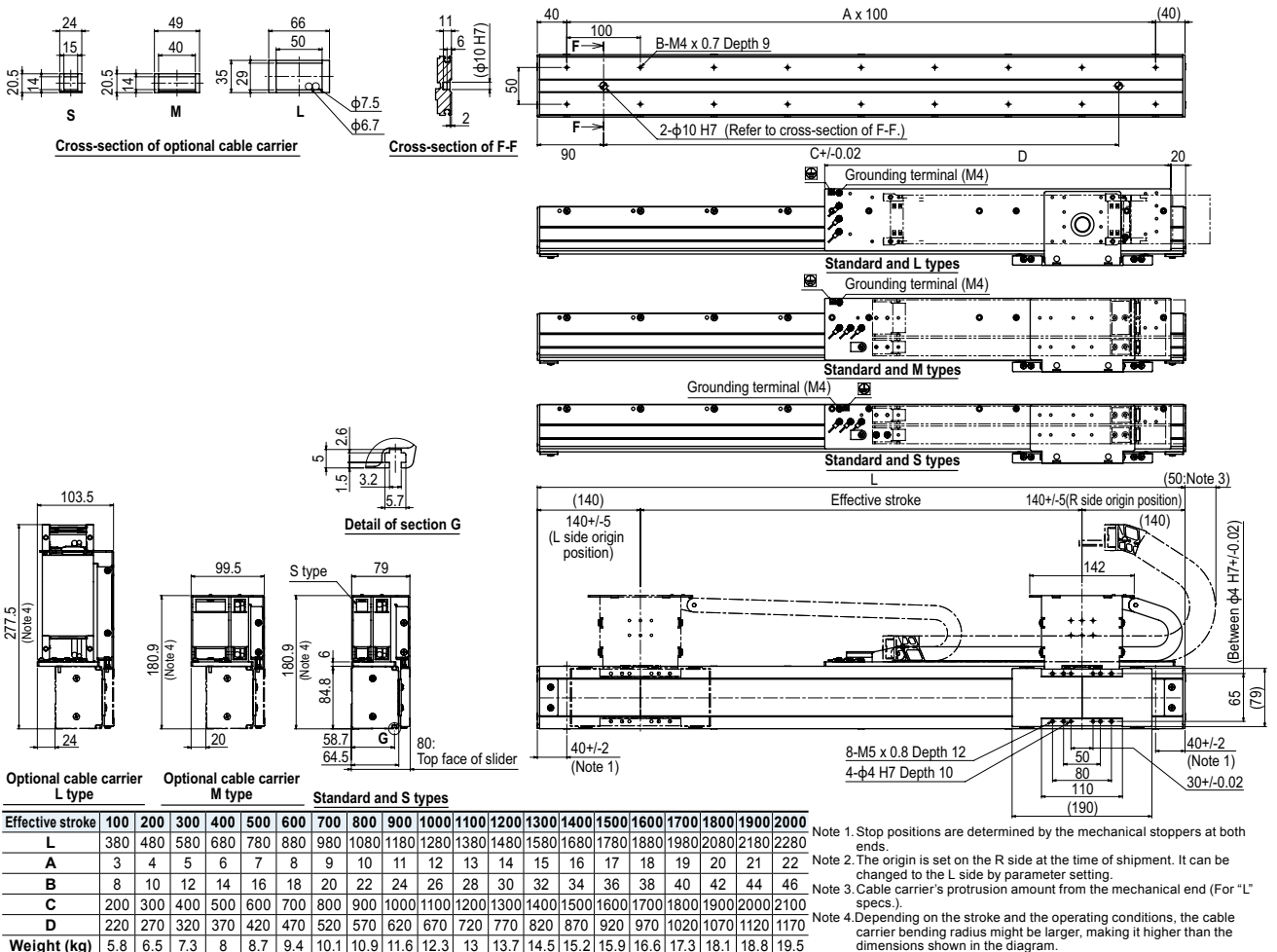
Optional cable carrier for users



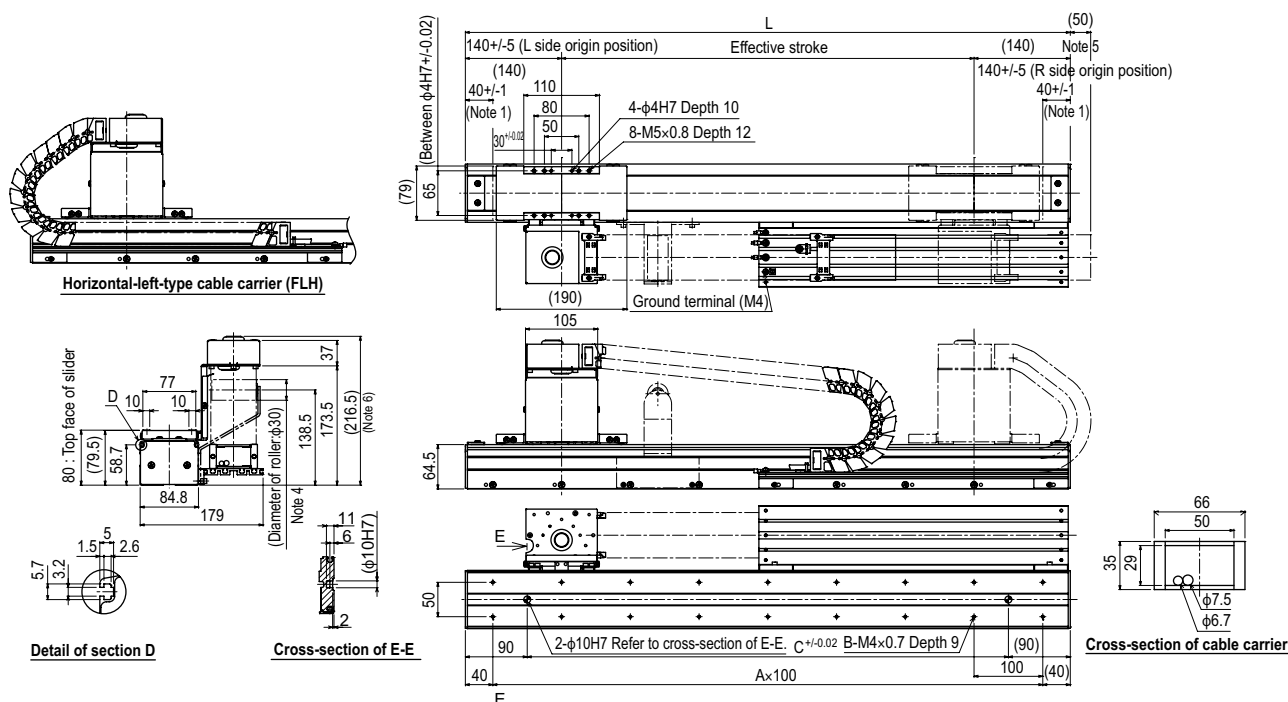
MF7 single carriage horizontal mount model RH



MF7 single carriage wall mount model RW



MF7 single carriage horizontal mount model **RH-L** Optional L-type cable carrier



Note 1. Stop positions are determined by the mechanical stoppers at both ends.

Note 2. The origin is set on the L side at the time of shipment. It can be changed to the R side by parameter setting.

Note 3. The drawings on this page show the unit with horizontal-right-type cable carrier (RH).

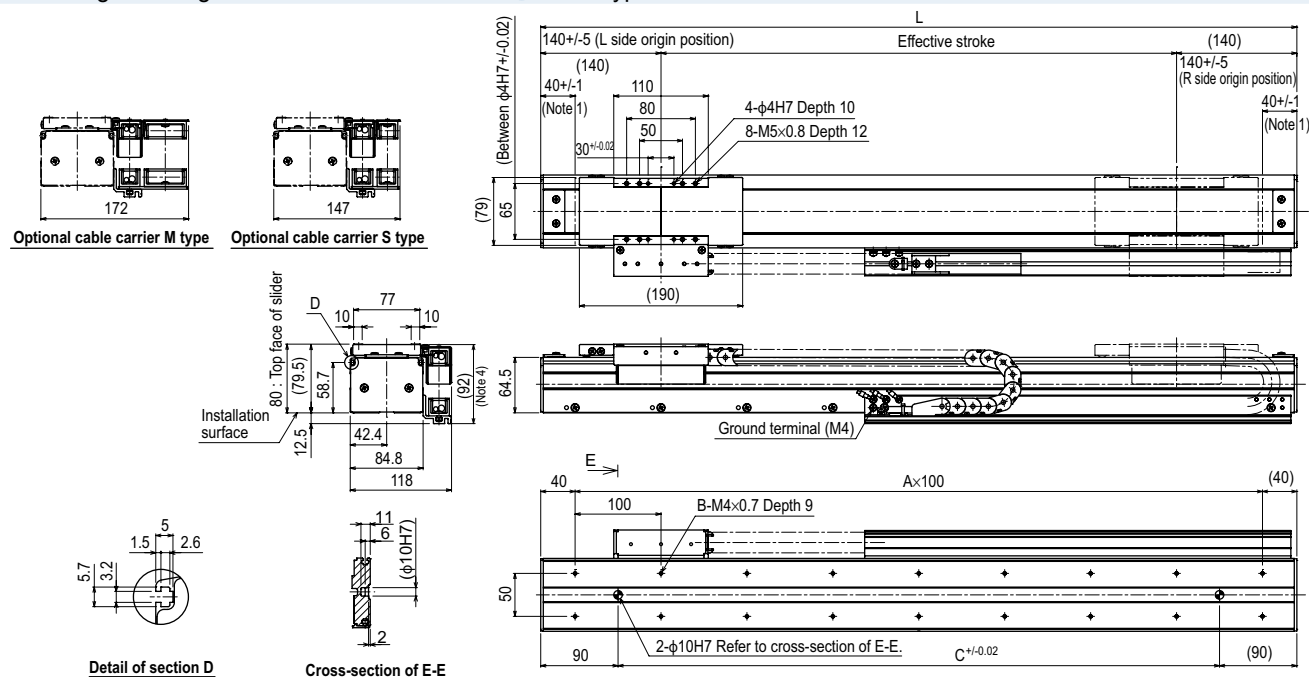
Note 4. For models with a 3,000mm or longer stroke, a roller is installed to prevent the cable carrier from sagging.

Note 5. Protrusion is the distance the cable carrier extends from the edge of the unit.

Note 6. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000
L	380	480	580	680	780	880	980	1080	1180	1280	1380	1480	1580	1680	1780	1880	1980	2080	2180	2280	2380	2480	2580	2680	2780	2880	2980	3080	3180	3280	3380	3480	3580	3680	3780	3880	3980	4080	4180	4280
A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
B	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86
C	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100
Weight (kg)	5.8	6.5	7.3	8.0	8.7	9.4	10.1	10.9	11.6	12.3	13.0	13.7	14.5	15.2	15.9	16.6	17.3	18.1	18.8	19.5	20.2	20.9	21.7	22.4	23.1	23.8	24.5	25.3	26.0	26.7	27.4	28.1	28.9	29.6	30.3	31.0	31.7	32.5	33.2	33.9

MF7 single carriage horizontal mount model **FRH** Flat type



Note 1. Stop positions are determined by the mechanical stoppers at both ends.

Note 2. The origin is set on the L side at the time of shipment. It can be changed to the R side by parameter setting.

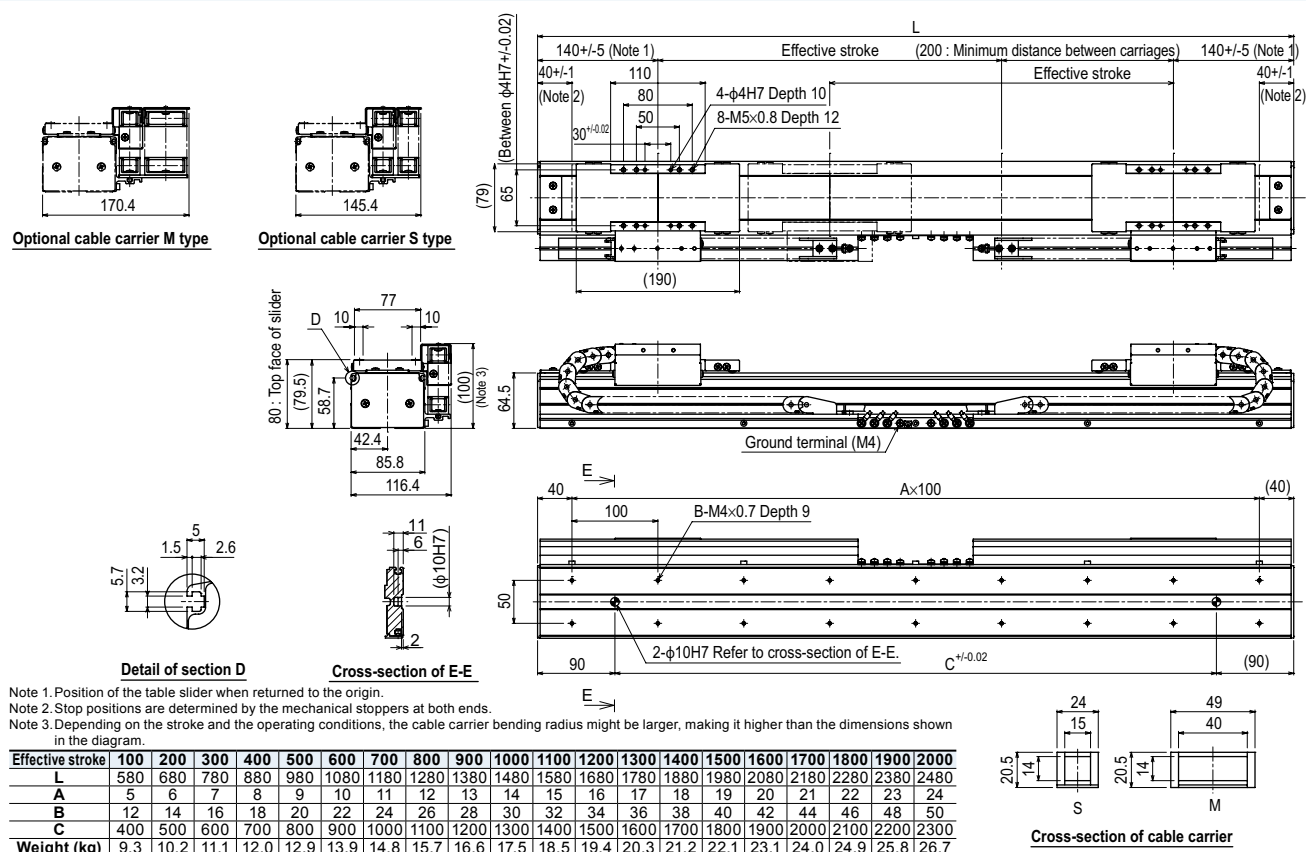
Note 3. The drawings on this page show the unit with horizontal-right-type cable carrier (RH).

Note 4. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	380	480	580	680	780	880	980	1080	1180	1280	1380	1480	1580	1680	1780	1880	1980	2080	2180	2280
A	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
B	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46
C	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
Weight (kg)	5.8	6.5	7.3	8.0	8.7	9.4	10.1	10.9	11.6	12.3	13.0	13.7	14.5	15.2	15.9	16.6	17.3	18.1	18.8	19.5

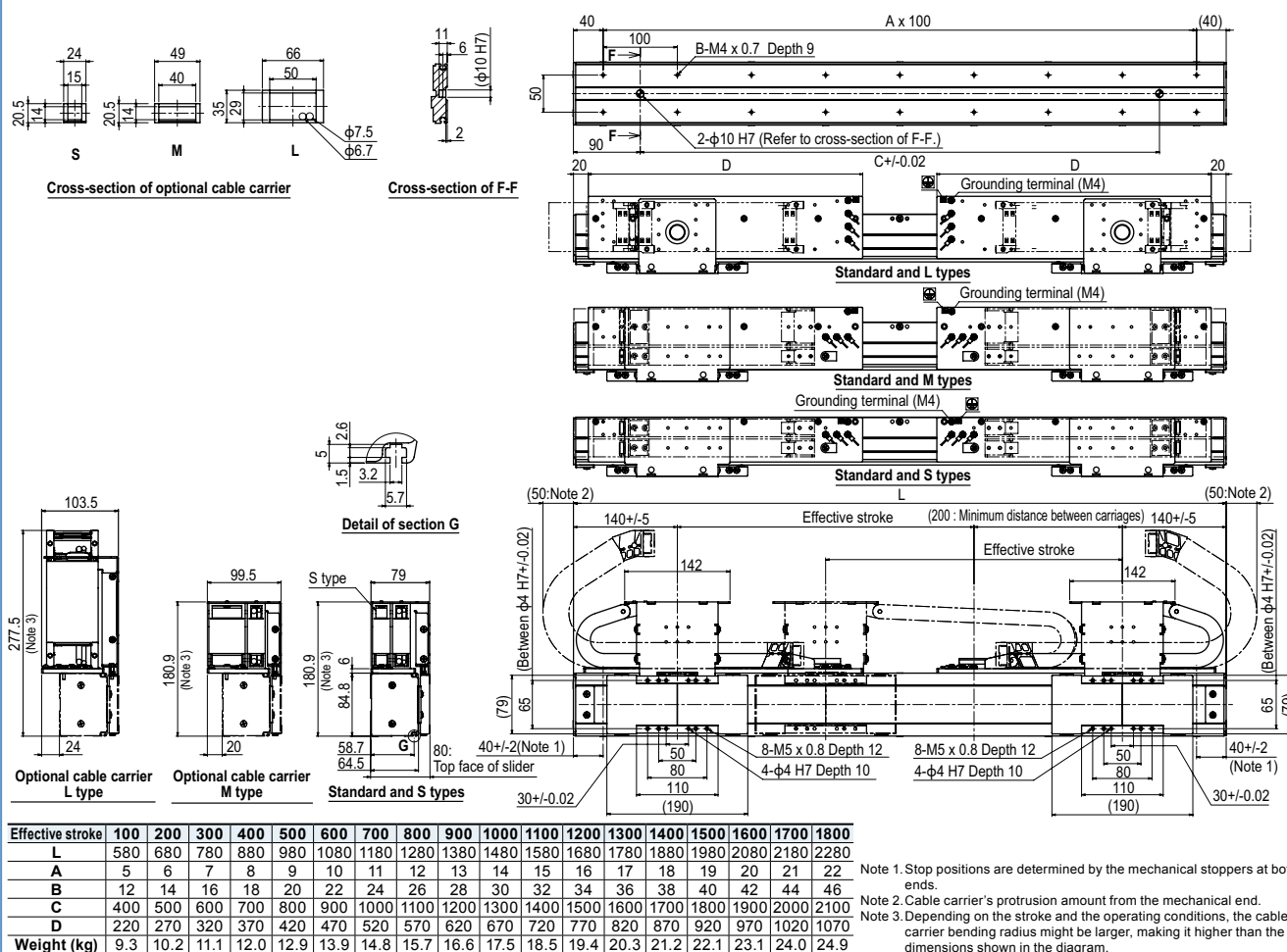
MF7D double carriage horizontal mount model

H



MF7D double carriage wall mount model

W



Linear conveyor modules LCMR200	Single-axis robots GX	Linear conveyor modules LCM100	SCARA robots YK-X	Single-axis robots Robonity	Linear motor single-axis robots PHASER	Single-axis robots FLIP-X	Compact single-axis robots TRANSERO	Cartesian robots XY-X	Pick & place robots YP-X	CLEAN	CONTROLLER	INFORMATION
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MF15/MF15D

● Can be used for wall-mount

Note. When the weight per carrier exceeds 15 kg, special parameters are applicable.



Ordering method

Single carriage model

MF15						TSP		
Model MF15: Incremental MF15A: Semi-absolute ^{Note 1}	Cable carrier entry location RH: Horizontal, right LH: Horizontal, left RW: Wall mount, right LW: Wall mount, left	Optional cable carrier for users^{Note 2} No entry: None S: S type M: M type L: L type	Origin position change Horizontal: No entry: L side (Standard) Z: R side Wall: No entry: R side (Standard) Z: L side	Grease type No entry: Standard GC: Clean	Stroke Horizontal: 100 to 4000 (100mm pitch) 100 to 2000 (100mm pitch) Wall: 100 to 2000 (100mm pitch)	Cable length^{Note 3} 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 4}	Positioner^{Note 5} TS-P	Driver: Power-supply voltage / Power capacity 110: 100V/200W 210: 200V/200W
							LCD monitor No entry: None L: With LCD	I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ GW: No I/O board ^{Note 6}
						SR1-P	10	
						Controller	Driver: Power capacity 10: 200W	Usable for CE No entry: Standard E: CE marking
								I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ PB: PROFIBUS
						RDV-P	2	10
						Driver	Power-supply voltage 2: AC200V	Driver: Power capacity 10: 200W or less
								RBR1
								Regenerative unit

Note 1. When RDV-P is selected, the semi-absolute specifications cannot be selected.

Note 2. For models with a 2,100mm or longer stroke, optional L type cable carriers can only be used.

Note 3. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.692 for details on robot cable.

Note 4. If a flexible cable is needed for the SR1-P, TS-P, or RDV-P, then select 3K/5K/10K.

Note 5. These controllers can be mounted on DIN rails. See P.600 for details.

Note 6. Select this selection when using the gateway function.

Note. It is possible to provide the model without a cable carrier. To find information on wiring (cable terminals) within the cable carrier see P.703.

Double carriage model

MF15D						Controller	
Model MF15D: Incremental MF15AD: Semi-absolute ^{Note 1}	Installing direction H: Horizontal installation W: Wall mount installation	Optional cable carrier for users^{Note 2} No entry: None S: S type M: M type L: L type	Grease type No entry: Standard GC: Clean	Stroke Horizontal: 100 to 3800 (100mm pitch) 100 to 1800 (100mm pitch) Wall: 100 to 1800 (100mm pitch)	Cable length 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 4}		
						RCX320 SR1-P (2 units) TS-P (2 units) RDV-P (2 units)	

Note. Specify various controller setting items.

Specifications

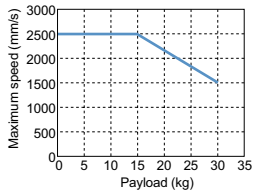
Model	MF15	MF15D
Driving method	Steel cored linear motor with falt magnet	
Repeatability (μm)	+/-5	
Scale (μm)	Magnetic type: resolution of 1	
Maximum speed^{Note 2} (mm/sec)	2500	
Rated thrust (N)	54	
Maximum payload^{Note 1} (kg)	30	
Stroke (mm)	Horizontal	100 to 4000 (100mm pitch) 100 to 3800 (100mm pitch)
	Wall mount	100 to 2000 (100mm pitch) 100 to 1800 (100mm pitch)
Linear guide	W100 × H80	
Maximum cross-section outside dimensions (mm)	(except the cable carrier section)	
Total length (mm)	Stroke+260 Stroke+460	
Cable length (m)	Standard: 3.5 / Option: 5,10	

Note. A vertical model (with brake) is not available with the PHASER series. Note. The basic specifications of semi-absolute model are the same as those of the incremental model.

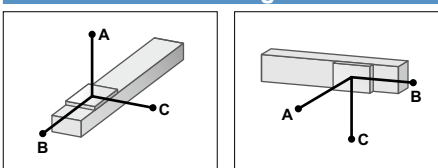
Note 1. Payload per carrier. When the weight exceeds 15 kg, special parameters are applicable. Please consult our sales office or sales representative.

Note 2. Table of maximum speed

Payload (kg)	Maximum speed (mm/s)
15 or less	2500
20	2200
25	1800
30	1500



Allowable overhang



Horizontal installation (Unit: mm)				Wall installation (Unit: mm)			
	A	B	C		A	B	C
5kg	3000	3000	915	5kg	865	1880	3060
10kg	2604	1542	481	10kg	410	905	2115
15kg	2368	1051	340	15kg	255	575	1910
20kg	1820	600	260	20kg	170	410	1780
25kg	1470	450	175	25kg	120	295	1660
30kg	1250	310	145	30kg	90	215	1440

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

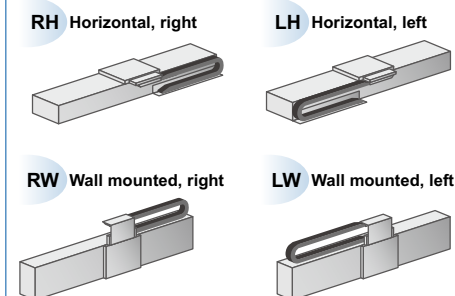
Static loading moment

(Unit: N·m)		
MY	MP	MR
290	291	256

Controller

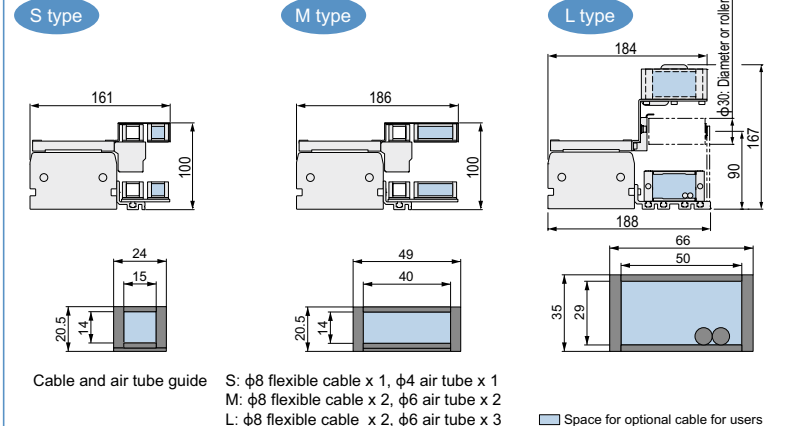
Controller	Operating method
SR1-P10	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX320 RCX340	
TS-P110	I/O point trace / Remote command
TS-P210	
RDV-P210-RBR1	Pulse train control

Cable carrier entry location



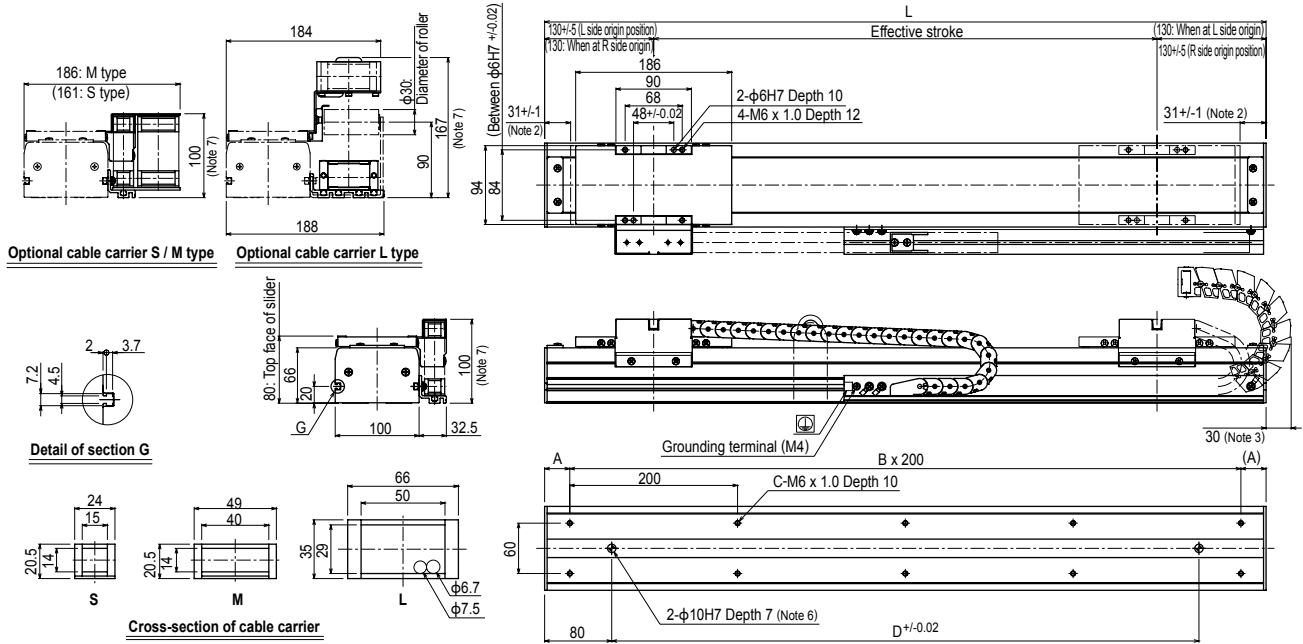
Note. Be sure to install in the direction as specified (in cable carrier take-out direction drawing and various specification drawings) individually. Installation in any other way will cause a failure. For requirement of installation in any way other than the above standard installation, please consult YAMAHA as special arrangement will be available.

Optional cable carrier for users



Cable and air tube guide
S: φ8 flexible cable x 1, φ4 air tube x 1
M: φ8 flexible cable x 2, φ6 air tube x 2
L: φ8 flexible cable x 2, φ6 air tube x 3

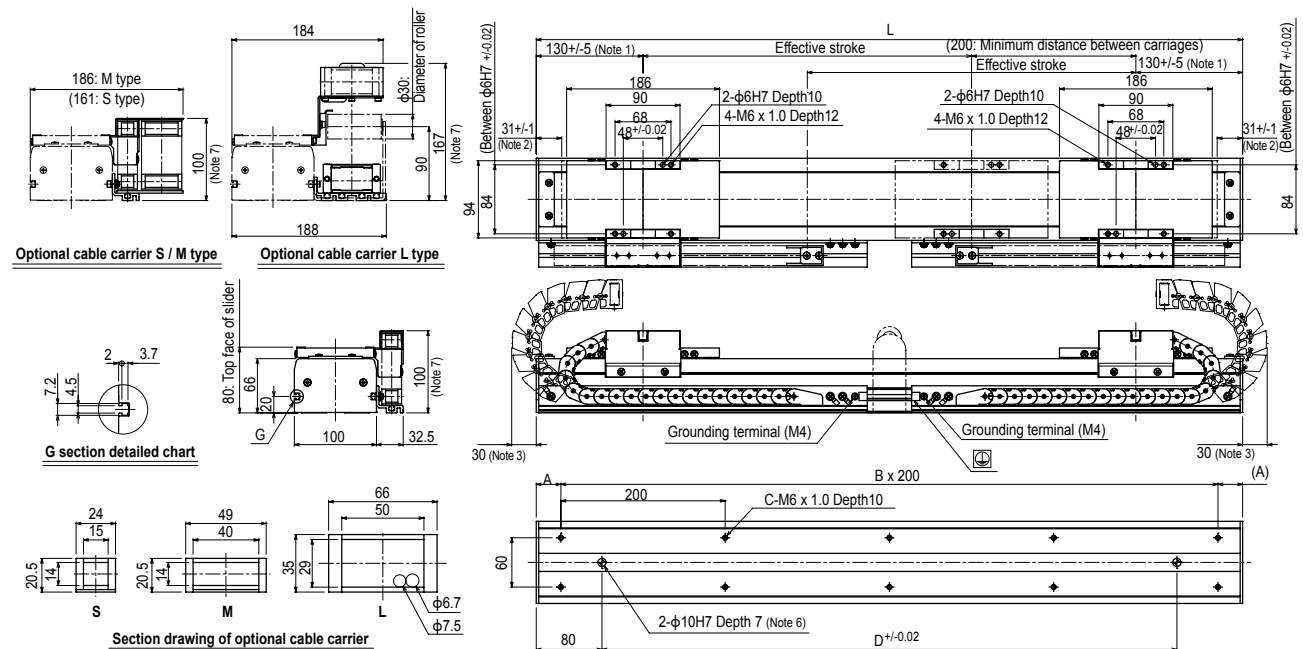
Space for optional cable for users

MF15 single carriage horizontal mount model **RH**

Note 1. Position of the table slider when returned to the origin.
 Note 2. Stop positions are determined by the mechanical stoppers at both ends.
 Note 3. Protrusion is the distance the cable carrier extends from the edge of unit when an optional L type cable carrier is used.
 Note 4. For models with a 2,100mm or longer stroke, optional L type cable carriers can only be used.

Note 5. For models with a 3,000mm or longer stroke and an optional L type cable carrier, a roller is installed to prevent the cable carrier from sagging.
 Note 6. When using φ10 H7 hole, do not insert the pin more than the depth stated in the drawing. Otherwise, the motor may break.
 Note 7. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000
L	360	460	560	660	760	860	960	1060	1160	1260	1360	1460	1560	1660	1760	1860	1960	2060	2160	2260	2360	2460	2560	2660	2760	2860	2960	3060	3160	3260	3360	3460	3560	3660	3760	3860	3960	4060		
A	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17	18	18	19	19	20	20	21
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44
D	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100
Weight (kg)	6.3	7.3	8.3	9.3	10.3	11.3	12.3	13.3	14.3	15.4	16.4	17.4	18.4	19.4	20.4	21.4	22.4	23.4	24.4	25.4	26.4	27.4	28.4	29.4	30.4	31.4	32.4	33.4	34.4	35.4	36.4	37.4	38.4	39.4	40.4	41.4	42.4	43.4	44.4	45.4

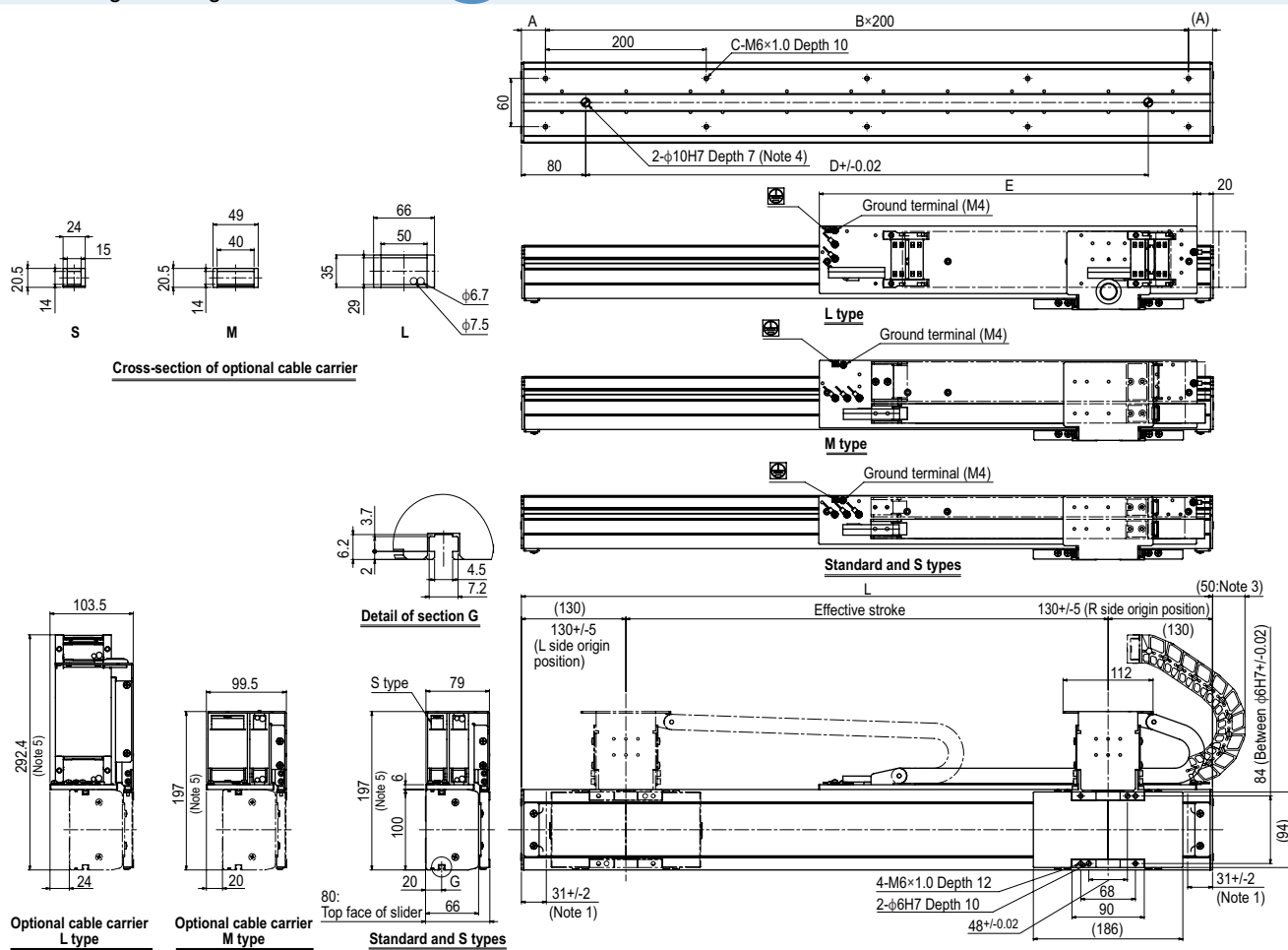
MF15D double carriage horizontal mount model **H**

Note 1. Position of the table slider when returned to the origin.
 Note 2. Stop positions are determined by the mechanical stoppers at both ends.
 Note 3. Protrusion is the distance the cable carrier extends from the edge of unit when an optional L type cable carrier is used.

Note 4. For models with a 2,100mm or longer stroke, optional L type cable carriers can only be used.
 Note 5. For models with a 3,000mm or longer stroke and an optional L type cable carrier, a roller is installed to prevent the cable carrier from sagging.
 Note 6. When using φ10 H7 hole, do not insert the pin more than the depth stated in the drawing. Otherwise, the motor may break.
 Note 7. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	
L	560	660	760	860	960	1060	1160	1260	1360	1460	1560	1660	1760	1860	1960	2060	2160	2260	2360	2460	2560	2660	2760	2860	2960	3060	3160	3260	3360	3460	3560	3660	3760	3860	3960	4060	4160	4260	
A	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	
B	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17	18	18	19	19	20	20	21	
C	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44	
D	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	
Weight (kg)	10.3	11.5	12.6	13.7	14.8	16.0	17.1	18.2	19.3	20.5	21.6	22.7	23.8	24.9	26.0	27.1	28.2	29.3	30.4	31.5	32.6	33.7	34.8	35.9	37.0	38.1	39.2	40.3	41.4	42.5	43.6	44.7	45.8	46.9	48.0	49.1	50.2	51.3	52.4

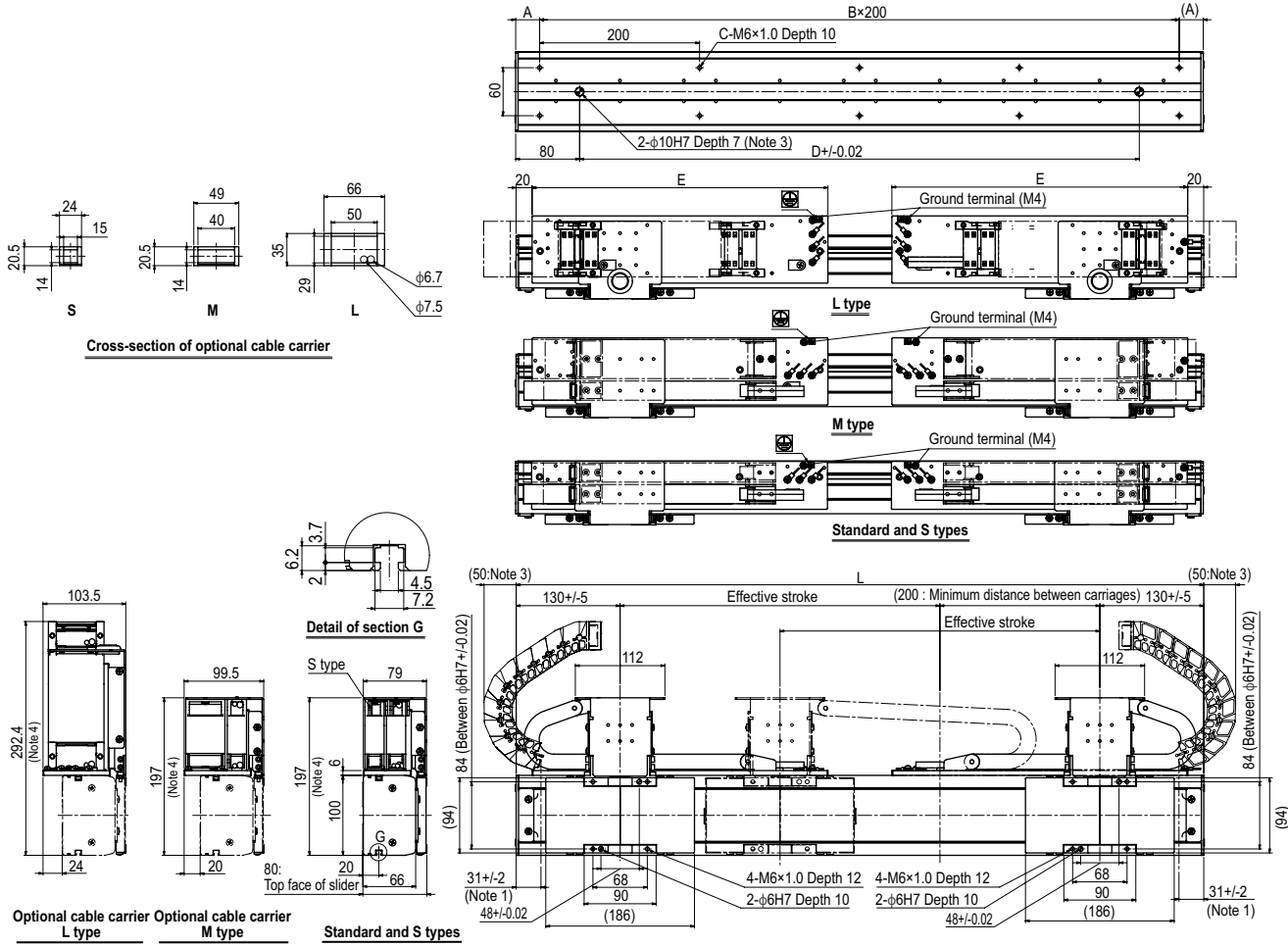
MF15/MF15D

MF15 single carriage wall mount model **RW**

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
 Note 2. The origin is set on the R side at the time of shipment. It can be changed to the L side by parameter setting.
 Note 3. Protrusion is the distance the cable carrier extends from the edge of unit when an optional L type cable carrier is used.
 Note 4. When using φ10 H7 hole, do not insert the pin more than the depth stated in the drawing. Otherwise, the motor may break.
 Note 5. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
L	360	460	560	660	760	860	960	1060	1160	1260	1360	1460	1560	1660	1760	1860	1960	2060	2160	2260
A	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30	80	30
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24
D	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100
E	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170
Weight (kg)	6.3	7.3	8.3	9.3	10.3	11.3	12.3	13.3	14.3	15.4	16.4	17.4	18.4	19.4	20.4	21.4	22.4	23.4	24.4	25.4

MF15D double carriage wall mount model **W**



MF20/MF20D

● Can be used for wall-mount

Note. When the weight per carrier exceeds 20 kg, special parameters are applicable.

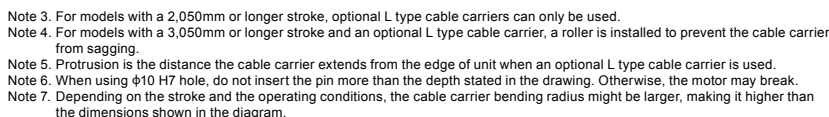


Ordering method

Single carriage model

MF20							TSP		R						
Model	Cable carrier entry location	Optional cable carrier for users	Origin position change	Grease type	Stroke	Cable length	Positioner	Driver: Power-supply voltage / Power capacity	Regenerative unit	LCD monitor	I/O selection				
MF20: Incremental MF20A: Semi-absolute	RH: Horizontal, right LH: Horizontal, left RW: Wall mount, right LW: Wall mount, left	No entry: None S: S type M: M type L: L type	No entry: L side (Standard) Z: R side No entry: R side (Standard) Z: L side	No entry: Standard GC: Clean	150 to 4050 (100mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)	Note 5 TS-P	110: 100V/200W 210: 200V/200W	R: With RGT	No entry: None L: With LCD	NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ GW: No I/O board				

RH

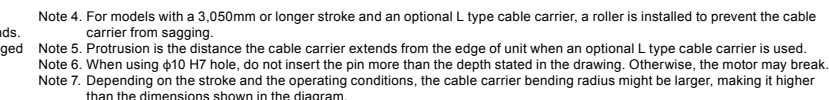


Note 2. The origin is set on the L side at the time of shipment. It can be changed to the R side by parameter setting.

Note 7. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	3150	3250	3350	3450	3550	3650	3750	3850	3950	4050		
L	410	510	610	710	810	910	1010	1100	1210	1310	1410	1510	1610	1710	1810	1910	2010	2110	2210	2310	2410	2510	2610	2710	2810	2910	3010	3110	3210	3310	3410	3510	3610	3710	3810	3910	4010	4110	4210	4310		
A	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55
B	1	2	2	3	3	4	4	5	5	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17	18	18	19	19	20	20	21	21		
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44	44	
D	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	
Weight (kg)	8.4	10.1	11.7	13.5	15.0	16.6	18.1	19.8	21.5	23.1	24.7	26.4	28.2	29.6	31.1	32.9	34.4	36.1	37.8	39.4	41.2	42.7	44.5	46.3	48.2	50.2	52.4	54.5	56.7	58.9	60.6	62.6	64.5	66.5	68.7	70.7	72.7	74.7	76.7	78.7		

RW



Note 3. For models with a 2,050mm or longer stroke, optional L type cable carriers can only be used.

Note 5. Protrusion is the distance the cable carrier extends from the edge of unit when an optional L type cable carrier is used.

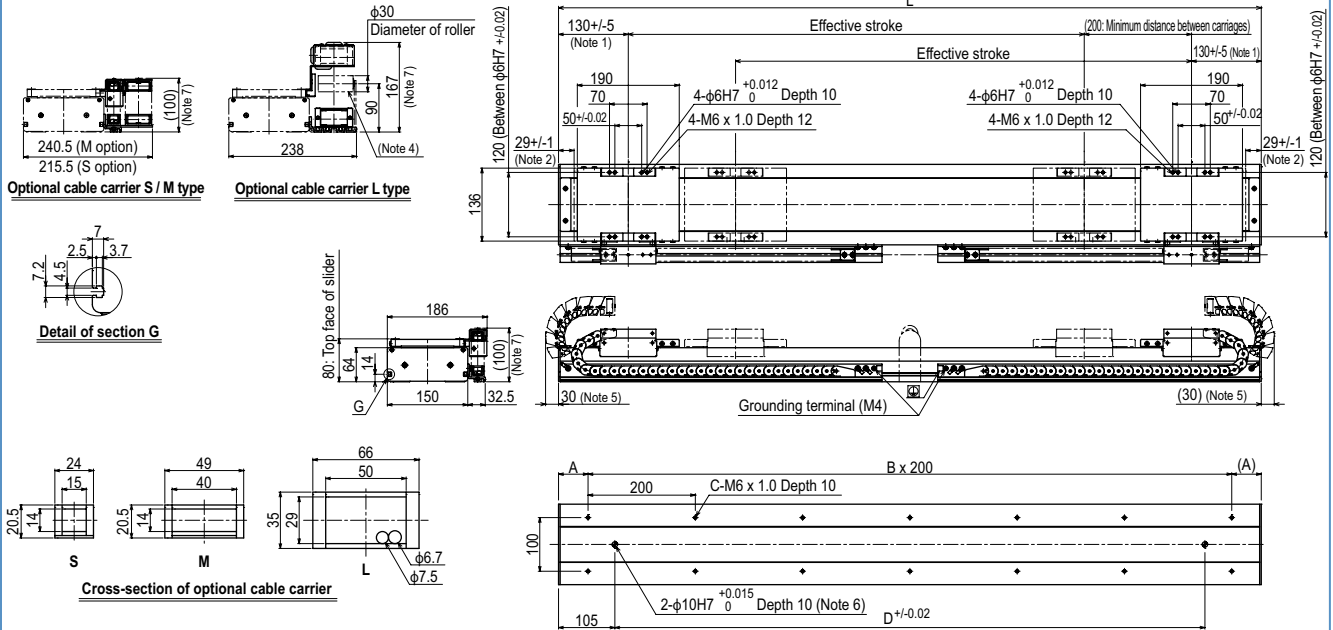
Note 7. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	3150	3250	3350	3450	3550	3650	3750	3850	3950	4050
A	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43
B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
C	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
D	4	6	8	8	8	10	10	12	12	14	14	14	16	16	18	18	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	40	40	42	42	44	44
E	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100
F	200	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920	1970	2020	2070	2120	2170	
Weight (kg)	8.4	10.1	11.7	13.4	15.0	16.8	18.2	19.8	21.2	22.3	23.4	24.6	26.2	28.2	30.3	32.4	34.6	36.9	39.3	41.7	44.2	46.7	49.3	51.9	54.6	57.3	60.0	62.7	65.4	68.2	71.0	73.8	76.6	79.4	82.2	85.0	87.8	90.6	93.4	

MF20/MF20D

MF20D double carriage horizontal mount model

(H)

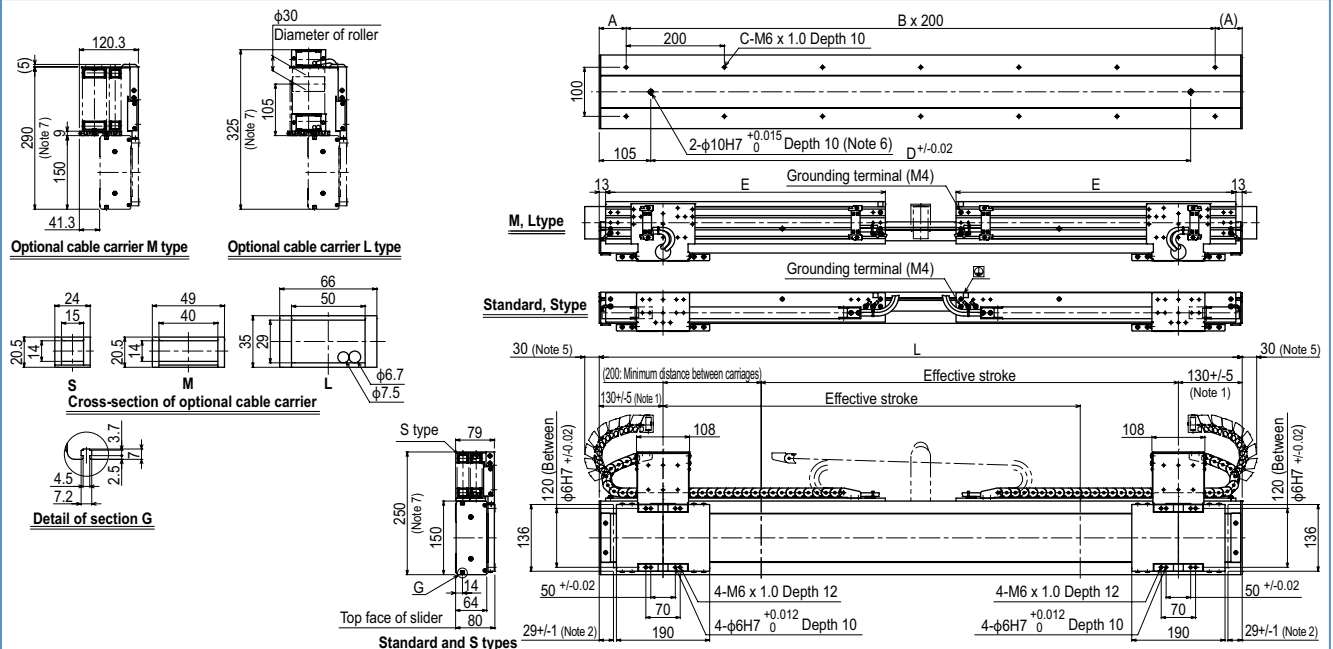


- Note 1. Position of table carriage when returned to the origin.
Note 2. Stop positions are determined by the mechanical stoppers at both ends.
Note 3. For models with a 2,050mm or longer stroke, optional L type cable carriers can only be used.
Note 4. For models with a 3,050mm or longer stroke and an optional L type cable carrier, a roller is installed to prevent the cable carrier from sagging.
Note 5. Protrusion is the distance the cable carrier extends from the edge of unit when an optional L type cable carrier is used.
Note 6. When using $\phi 10$ H7 hole, do not insert the pin more than the depth stated in the drawing. Otherwise, the motor may break.
Note 7. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	3150	3250	3350	3450	3550	3650	3750	3850
L	610	710	810	910	1010	1110	1210	1310	1410	1510	1610	1710	1810	1910	2010	2110	2210	2310	2410	2510	2610	2710	2810	2910	3010	3110	3210	3310	3410	3510	3610	3710	3810	3910	4010	4110	4210	4310
A	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55
B	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17	18	18	19	19	20	20	21
C	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44
D	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100
Weight (kg)	14.9	16.6	18.3	20.0	21.7	23.5	25.2	26.9	28.6	30.3	32.0	33.7	35.4	37.1	38.8	40.5	42.2	43.9	45.6	47.3	49.0	50.7	52.4	54.1	55.8	57.5	59.2	60.9	62.6	64.3	66.0	67.7	69.4	71.1	72.8	74.5	76.2	77.9

MF20D double carriage wall mount model

(W)



- Note 1. Position of table carriage when returned to the origin.
Note 2. Stop positions are determined by the mechanical stoppers at both ends.
Note 3. For models with a 2,050mm or longer stroke, optional L type cable carriers can only be used.
Note 4. For models with a 3,050mm or longer stroke and an optional L type cable carrier, a roller is installed to prevent the cable carrier from sagging.
Note 5. Protrusion is the distance the cable carrier extends from the edge of unit when an optional L type cable carrier is used.
Note 6. When using $\phi 10$ H7 hole, do not insert the pin more than the depth stated in the drawing. Otherwise, the motor may break.
Note 7. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	150	250	350	450	550	650	750	850	950	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950	3050	3150	3250	3350	3450	3550	3650	3750	3850
L	610	710	810	910	1010	1110	1210	1310	1410	1510	1610	1710	1810	1910	2010	2110	2210	2310	2410	2510	2610	2710	2810	2910	3010	3110	3210	3310	3410	3510	3610	3710	3810	3910	4010	4110	4210	4310
A	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55	105	55
B	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17	18	18	19	19	20	20	21
C	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44
D	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100
E	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920	1970	2020	2070
Weight (kg)	14.9	16.6	18.3	20.0	21.7	23.5	25.2	26.9	28.6	30.3	32.0	33.7	35.4	37.1	38.8	40.5	42.2	43.9	45.6	47.3	49.0	50.7	52.4	54.1	55.8	57.5	59.2	60.9	62.6	64.3	66.0	67.7	69.4	71.1	72.8	74.5	76.2	77.9

MF30/MF30D

● Can be used for wall-mount

Note. When the weight per carrier exceeds 30 kg, special parameters are applicable.



Ordering method

Single carriage model

MF30		TSP		220		R					
Model MF30: Incremental MF30AD: Semi-absolute ^{Note 1}	Cable carrier entry location RH: Horizontal, right LH: Horizontal, left RW: Wall mount, right LW: Wall mount, left	Optional cable carrier for users^{Note 2} No entry: None S: S type M: M type L: L type	Origin position change Horizontal No entry: L side (Standard) Z: R side Wall No entry: R side (Standard) Z: L side	Grease type No entry: Standard GC: Clean	Stroke 100 to 4000 (100mm pitch)	Cable length^{Note 3} 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 4}	Positioner^{Note 5} TS-P	Driver: Power-supply voltage / Power capacity 220: 200V/400 to 600W	Regenerative unit R: With RGT	LCD monitor No entry: None L: With LCD	I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ GW: No I/O board ^{Note 6}
SR1-P		20		R							
Controller^{Note 5}	Driver: Power capacity 20: 400 to 600W	Usable for CE No entry: Standard E: CE marking	Regenerative unit R: With RGT	I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PB: PROFIBUS							
RDV-P		2		20		RBR1					
Driver	Power-supply voltage 2: AC200V	Driver: Power capacity 20: 400W or less	Regenerative unit								

- Note 1. When RDV-P is selected, the semi-absolute specifications cannot be selected.
 Note 2. For models with a stroke of 2100 or longer (2050 or longer for double carriage models), only the optional L type cable carriers can be used.
 Note 3. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.692 for details on robot cable.
 Note 4. If a flexible cable is needed for the SR1-P, TS-P, or RDV-P, then select 3K/5K/10K.
 Note 5. These controllers can be mounted on DIN rails. See P.600 for details.
 Note 6. Select this selection when using the gateway function.
 Note. It is possible to provide the model without a cable carrier. To find information on wiring (cable terminals) within the cable carrier see P.703.

Double carriage model

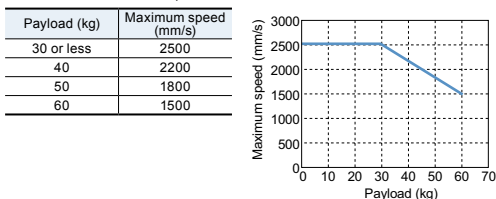
MF30D		Installing direction IH: Horizontal installation IW: Wall mount installation		Optional cable carrier for users^{Note 2} No entry: None S: S type M: M type L: L type		Grease type No entry: Standard GC: Clean		Stroke 150 to 3750 (100mm pitch)		Cable length 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 4}		Controller RCX320 SR1-P (2 units) TS-P (2 units) RDV-P (2 units)	
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Note. Specify various controller setting items.

Specifications

Model	MF30	MF30D
Driving method	Steel cored linear motor with falt magnet	
Repeatability (μm)	+/-5	
Scale (μm)	Magnetic type: resolution of 1	
Maximum speed ^{Note 2} (mm/sec)	2500	
Rated thrust (N)	125	
Maximum payload ^{Note 1} (kg)	60	
Stroke (mm)	100 to 4000 (100mm pitch)	150 to 3750 (100mm pitch)
Linear guide	4 rows of circular arc grooves × 2 rail	
Maximum cross-section outside dimensions (mm)	W150 × H80 (except the cable carrier section)	
Total length (mm)	Stroke+310	Stroke+560
Cable length (m)	Standard: 3.5 / Option: 5,10	

- Note. A vertical model (with brake) is not available with the PHASER series.
 Note. The basic specifications of semi-absolute model are the same as those of the incremental model.
 Note 1. Payload per carrier. When the weight exceeds 30 kg, special parameters are applicable. Please consult our sales office or sales representative.
 Note 2. Table of maximum speed



Allowable overhang

	A	B	C
Horizontal installation (Unit: mm)			
10kg	3364	2485	1284
20kg	2298	1265	694
30kg	2060	859	507
40kg	1570	600	310
50kg	1265	400	180
60kg	1070	350	135
Wall installation (Unit: mm)			
10kg	1290	1320	2730
20kg	650	610	1750
30kg	430	360	1460
40kg	205	230	610
50kg	145	175	470
60kg	105	140	380

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

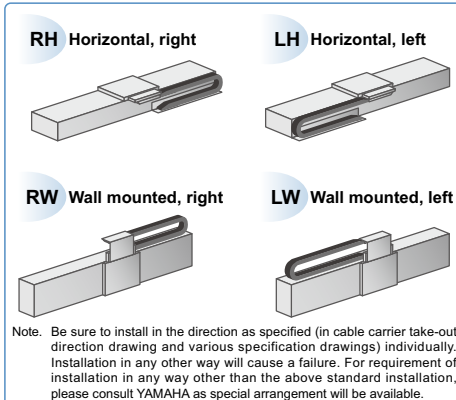
Static loading moment

	MY	MP	MR
(Unit: N·m)			
	373	373	328

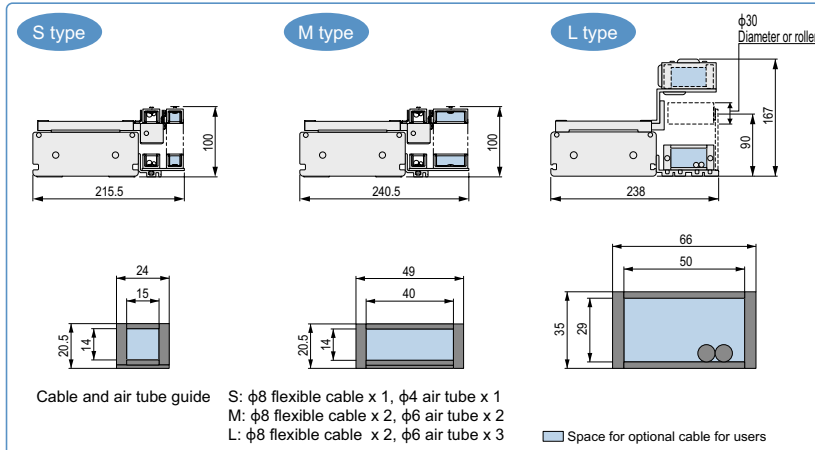
Controller

Controller	Operating method
SR1-P20-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX320-R RCX340	I/O point trace / Remote command
TS-P220-R	Pulse train control
RDV-P220-RBR1	

Cable carrier entry location



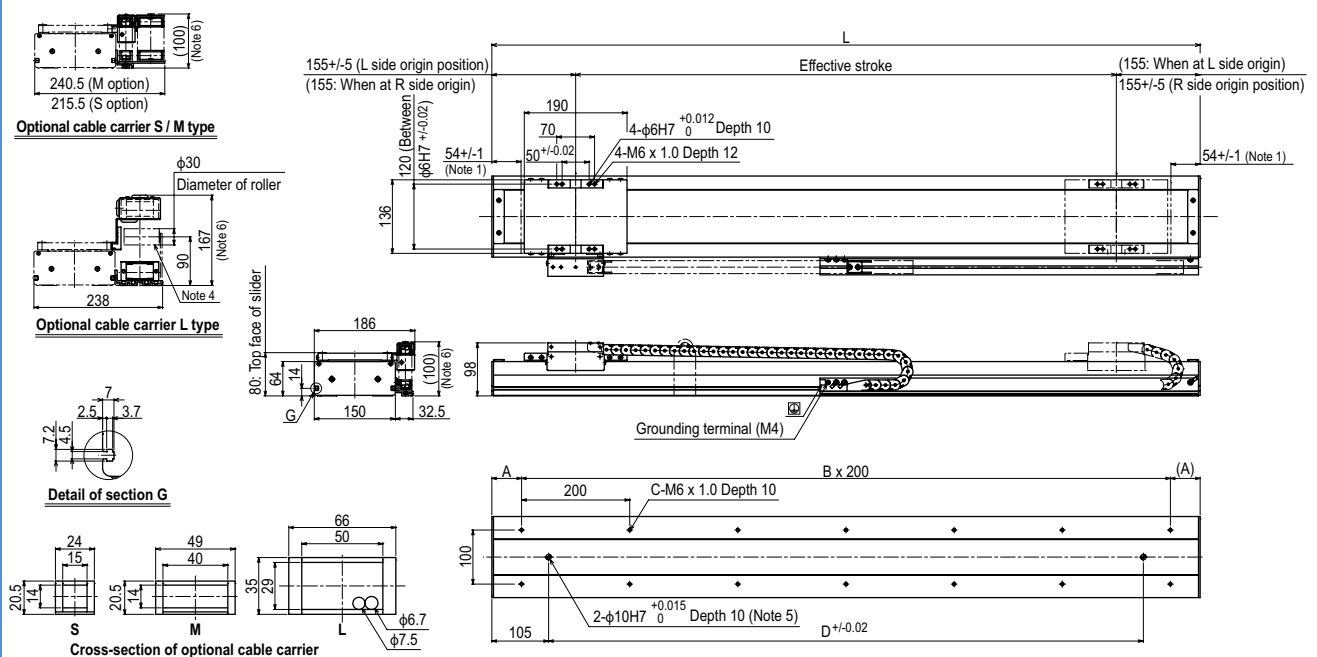
Optional cable carrier for users



Controller

SR1-P ▶ 618 RCX320 ▶ 626 TS-P ▶ 592 RDV-P ▶ 606

MF30 single carriage horizontal mount model RH



Note 1. Stop positions are determined by the mechanical stoppers at both ends.

Note 2. The origin is set on the L side at the time of shipment. It can be changed to the R side by parameter setting.

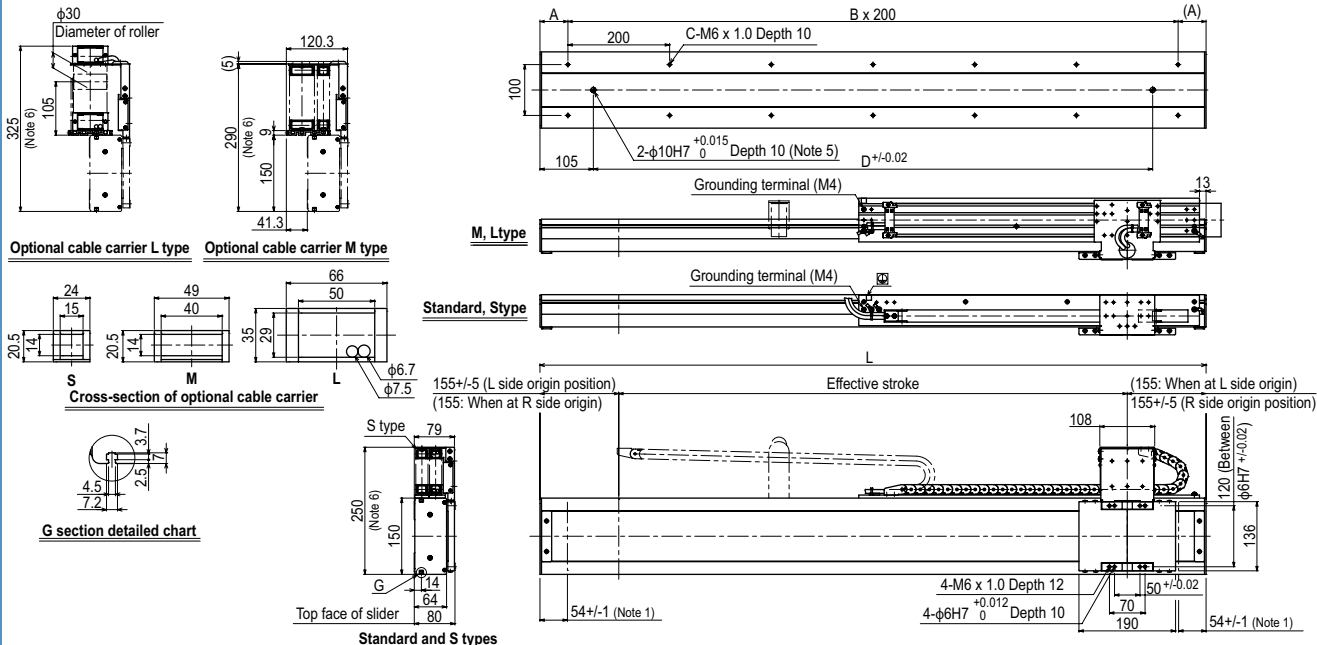
Note 3. For models with a 2,100mm or longer stroke, optional L type cable carriers can only be used.

Note 4. For models with a 3,000mm or longer stroke and an optional L type cable carrier, a roller is installed to prevent the cable carrier from sagging.

Note 5. When using $\phi 10$ H7 hole, do not insert the pin more than the depth stated in the drawing. Otherwise, the motor may break.

Note 6. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000		
L	410	510	610	710	810	910	1010	1110	1210	1310	1410	1510	1610	1710	1810	1910	2010	2110	2210	2310	2410	2510	2610	2710	2810	2910	3010	3110	3210	3310	3410	3510	3610	3710	3810	3910	4010	4110	4210	4310		
A	105	155	155	105	155	105	115	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17	18	18	19	19	20	20	21	21	
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	32	34	34	36	36	38	38	40	40	42	42	44	44	
D	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100	4200	4300
Weight (kg)	9.0	10.7	12.3	13.9	15.6	17.2	18.8	20.4	22.1	23.7	25.3	27.0	28.6	30.3	31.9	33.6	35.2	36.8	38.4	40.0	41.6	43.2	44.8	46.4	48.0	49.6	51.2	52.8	54.4	56.0	57.6	59.2	60.8	62.4	64.0	65.6	67.2	68.8	70.4	72.0	73.6	

MF30 single carriage wall mount model RW

Note 1. Stop positions are determined by the mechanical stoppers at both ends.

Note 2. The origin is set on the R side at the time of shipment. It can be changed to the L side by parameter setting.

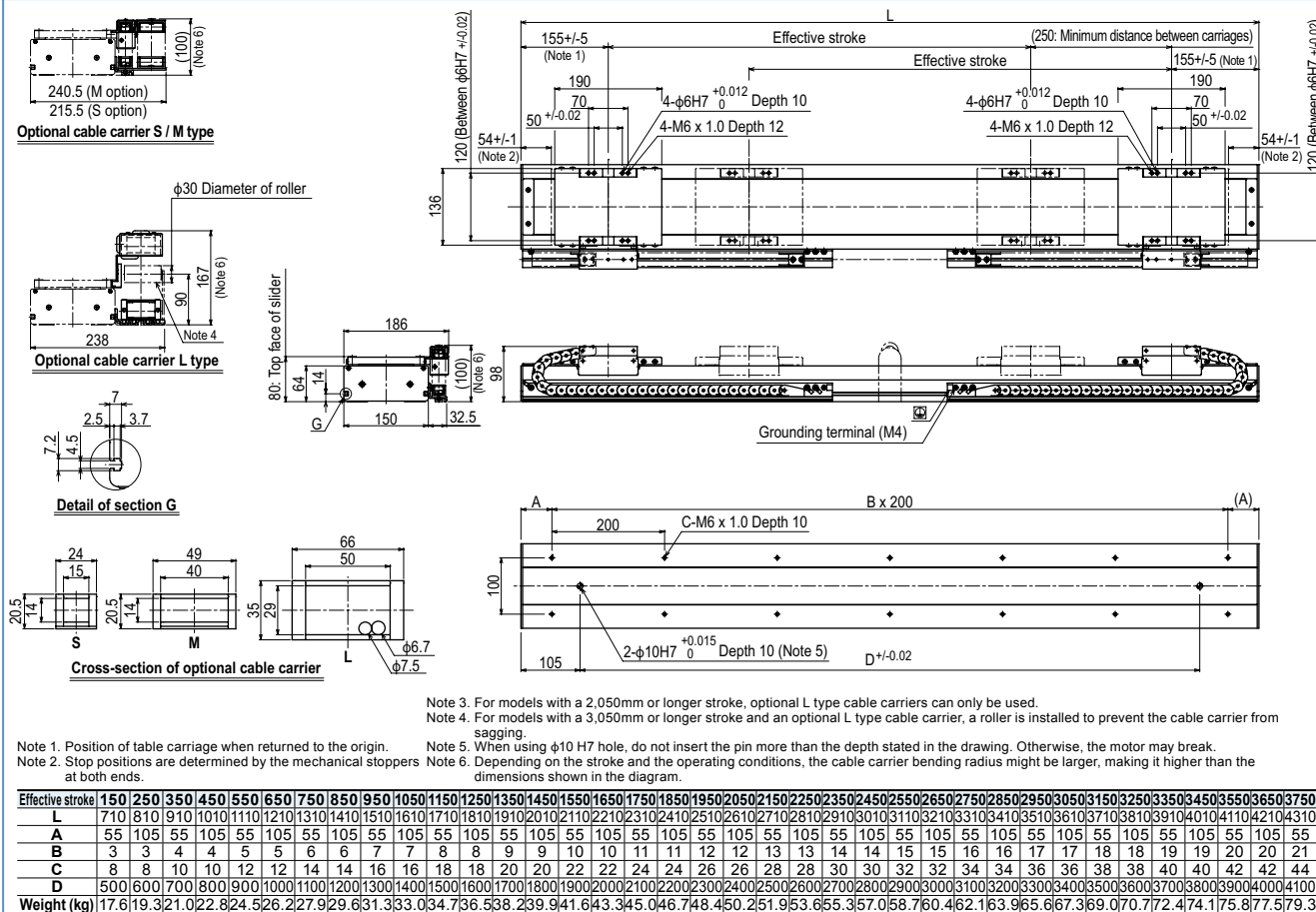
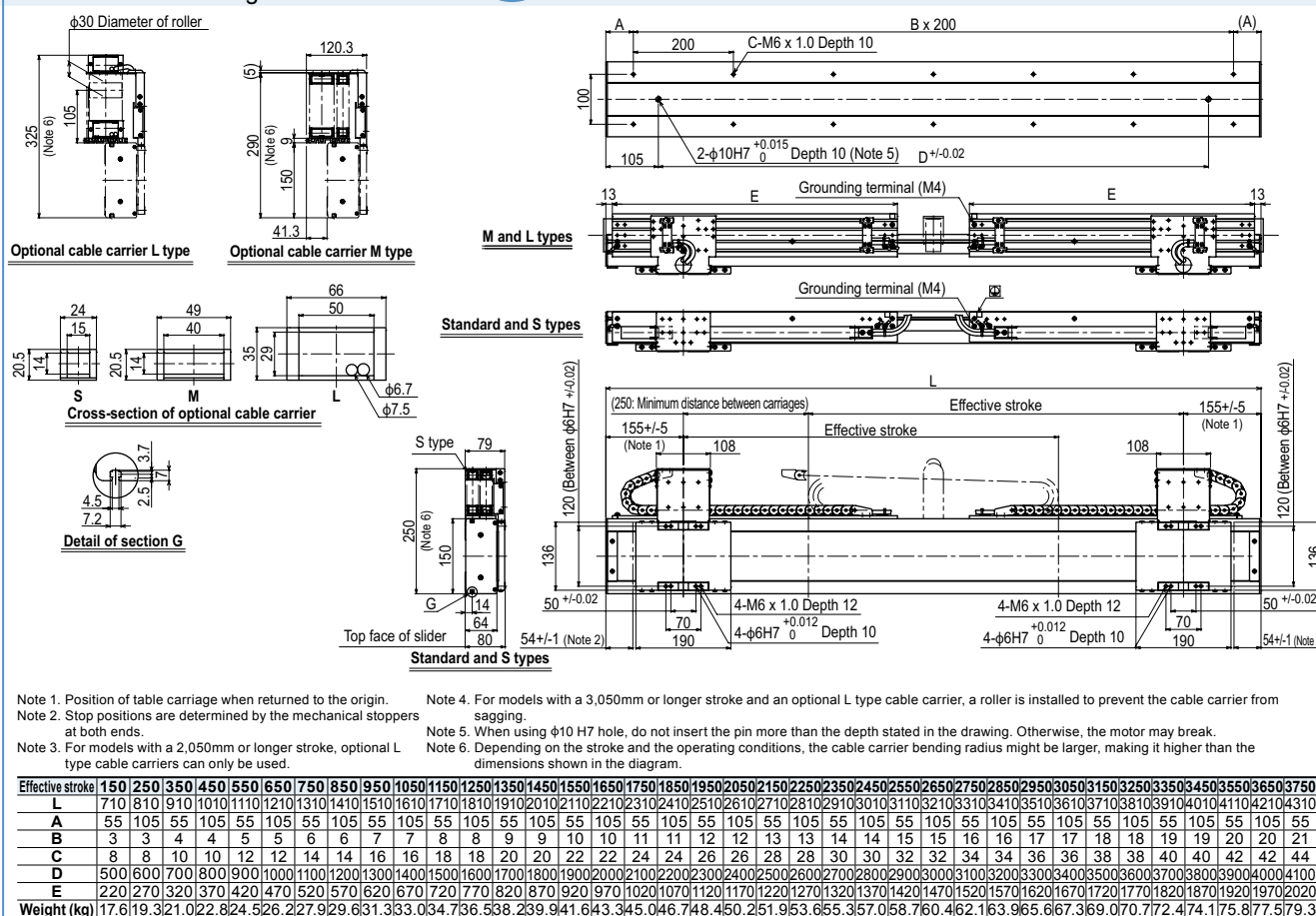
Note 3. For models with a 2.100mm or longer stroke, optional L type cable carriers can only be used.

Note 4. For models with a 3,000mm or longer stroke and an optional L type cable carrier, a roller is installed to prevent the cable carrier from sagging.

Note 5. When using $\phi 10$ H7 hole, do not insert the pin more than the depth stated in the drawing. Otherwise, the motor may break.

Note 6. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	
A	410	510	610	710	810	910	1010	1110	1210	1310	1410	1510	1610	1710	1810	1910	2010	2110	2210	2310	2410	2510	2610	2710	2810	2910	3010	3110	3210	3310	3410	3510	3610	3710	3810	3910	4010				
B	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	105	155	
C	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
D	4	6	8	8	8	10	12	12	14	14	16	16	18	18	20	22	22	24	24	26	26	28	28	30	30	32	32	34	36	36	38	38	40	42	42	44	44	46	46	48	48
E	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000		
F	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920	1970	2020	2070	2120	2170		
Weight (kg)	9.0	10.7	12.3	13.9	15.6	17.2	18.8	20.2	21.7	23.2	24.7	26.3	27.8	29.3	30.8	32.3	33.8	35.3	36.8	38.3	39.8	41.3	42.8	44.3	45.8	47.3	48.8	50.3	51.8	53.3	54.8	56.3	57.8	59.3	60.8	62.3	63.8	65.3	66.8	68.3	69.8

MF30D double carriage horizontal mount model **H**MF30D double carriage wall mount model **W**

MF75/MF75D

Note. When the weight per carrier exceeds 75 kg, special parameters are applicable.



Ordering method

Single carriage model

MF75						TSP				220		R		LCD monitor		I/O selection	
Model MF75: Incremental MF75A: Semi-absolute ^{Note 1}						Positioner Note 4 TS-P		Driver: Power-supply voltage / Power capacity 220: 200V/400 to 600W		Regenerative unit R: With RGU-2		No entry: None L: With LCD		I/O selection NP: NPN PN: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ GW: No I/O board ^{Note 5}			
Cable carrier entry location RH: Horizontal, right LH: Horizontal, left																	
Origin position change No entry: L side (Standard) Z: R side																	
Grease type No entry: Standard GC: Clean																	
Stroke 1000 to 4000 (100mm pitch)																	
Cable length Note 2 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 3}																	

SR1-P						20				R		I/O selection	
Controller Driver: Power capacity 20: 400 to 600W						Usable for CE No entry: Standard E: CE marking		Regenerative unit R: With RGU-2		I/O selection N: NPN P: PNP CC: CC-Link DN: DeviceNet™ EP: EtherNet/IP™ PB: PROFIBUS			

RDV-P						2				25		RBR2	
Driver Power-supply voltage 2: AC200V						Driver: Power capacity 25: 750W or less		Regenerative unit					

Note 1. When RDV-P is selected, the semi-absolute specifications cannot be selected.
 Note 2. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.692 for details on robot cable.
 Note 3. If a flexible cable is needed for the SR1-P, TS-P, or RDV-P, then select 3K/5K/10K.
 Note 4. These controllers can be mounted on DIN rails. See P.600 for details.
 Note 5. Select this selection when using the gateway function.
 Note. It is possible to provide the model without a cable carrier. To find information on wiring (cable terminals) within the cable carrier see P.703.

Double carriage model

MF75D - H						Controller			
Model MF75D: Incremental MF75AD: Semi-absolute ^{Note 1}						RCX320 SR1-P (2 units) TS-P (2 units) RDV-P (2 units)			
Installing direction H: Horizontal installation									
Grease type No entry: Standard GC: Clean									
Stroke 680 to 3680 (100mm pitch)									
Cable length 3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable) ^{Note 3}									

Note. Specify various controller setting items.

Specifications

Model	MF75	MF75D
Driving method	Steel cored linear motor with falt magnet	
Repeatability (μm)	+/- 5	
Scale (μm)	Magnetic type: resolution of 1	
Maximum speed^{Note 2} (mm/sec)	2500	
Rated thrust (N)	260	
Maximum payload^{Note 1} (kg)	160	
Stroke (mm)	1000 to 4000 (100mm pitch)	680 to 3680 (100mm pitch)
Linear guide	4 rows of circular arc grooves x 2 rail	
Maximum cross-section outside dimensions (mm)	W210×H100 (except the cable carrier section)	
Total length (mm)	Stroke+360	Stroke+680
Cable length (m)	Standard: 3.5 / Option: 5,10	

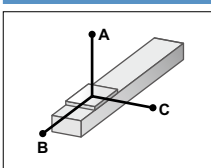
Note. A vertical model (with brake) is not available with the PHASER series.
 Note. The basic specifications of semi-absolute model are the same as those of the incremental model.

Note 1. Payload per carrier. When the weight exceeds 75 kg, special parameters are applicable. Please consult our sales office or sales representative.

Note 2. Table of maximum speed

Payload (kg)	Maximum speed (mm/s)
75 or less	2500
90	2310
100	2200
110	2090
120	2000
130	1920
140	1840
150	1770
160	1700

Allowable overhang

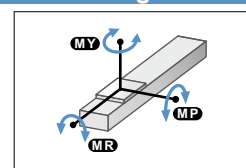


Horizontal installation (Unit: mm)

	A	B	C
20kg	3397	2841	1840
40kg	2795	1389	964
60kg	2200	530	450
80kg	1800	175	150
100kg	1500	130	110
120kg	1250	100	80
140kg	1100	80	65
160kg	950	60	50

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.

Static loading moment



(Unit: N-m)

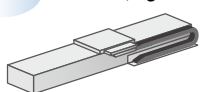
MY	MP	MR
830	831	730

Controller

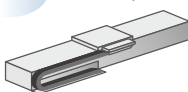
Controller	Operating method
SR1-P20-R	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX320-R RCX340	I/O point trace / Remote command
TS-P220-R	Pulse train control
RDV-P225-RBR2	

Cable carrier entry location

RH Horizontal, right

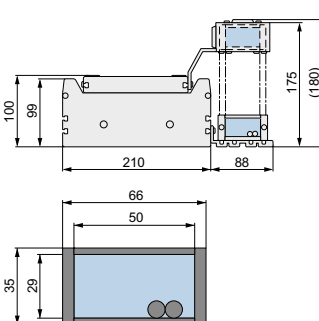


LH Horizontal, left



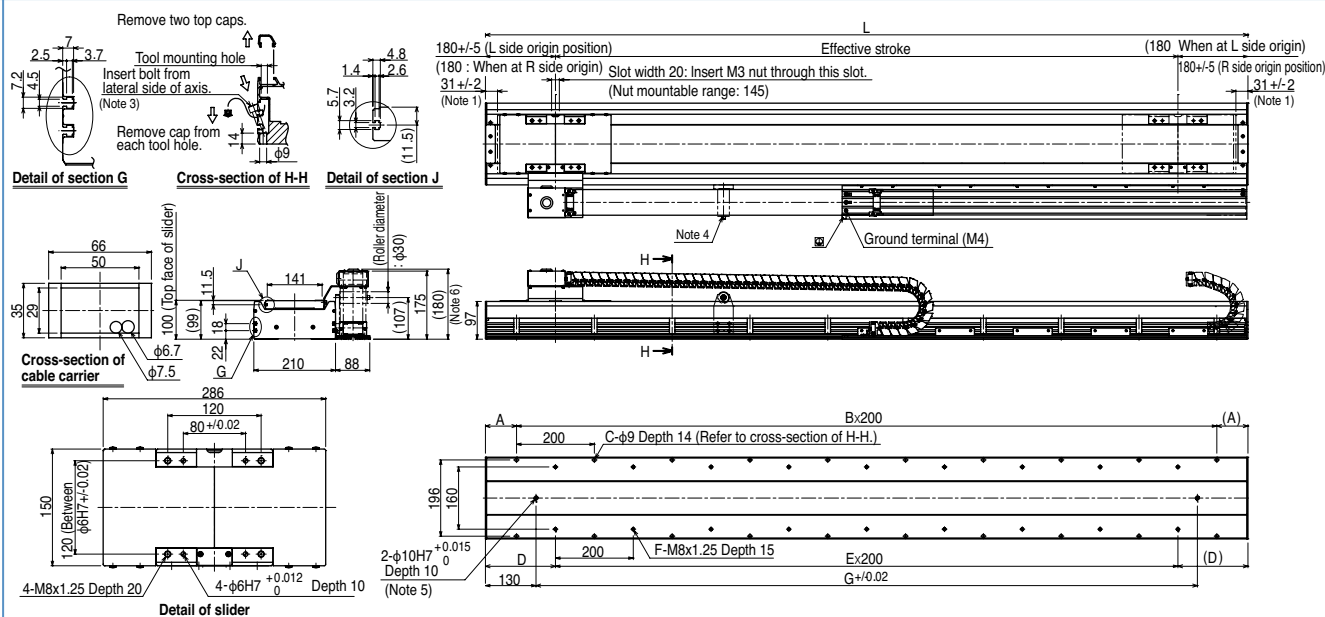
Note. Be sure to install in the direction as specified (in cable carrier take-out direction drawing and various specification drawings) individually. Installation in any other way will cause a failure. For requirement of installation in any way other than the above standard installation, please consult YAMAHA as special arrangement will be available.

Cable carrier



Cable and air tube guide φ8 flexible cable x 2, φ6 air tube x 3

Space for optional cable for users

MF75 single carriage horizontal mount model **RH**

Note 3. The length under head of M8 hex socket head bolts for installing the robot body must not be longer than 30mm.

Note 4. For models with a 3,000mm or longer stroke, a roller is installed to prevent the cable carrier from sagging.

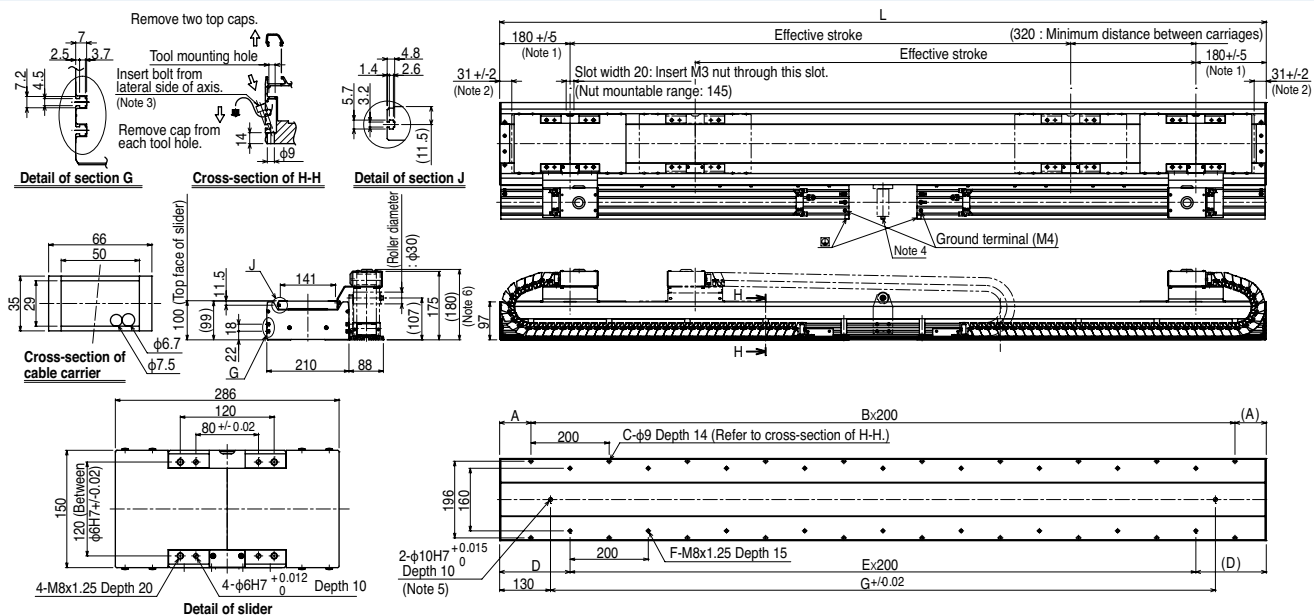
Note 5. When using $\phi 10$ H7 hole, do not insert the pin more than the depth stated in the drawing. Otherwise, the motor may break.

Note 6. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Note 1. Stop positions are determined by the mechanical stoppers at both ends.

Note 2. The origin is set on the L side (as shown above) at the time of shipment. It can be changed to the R side by parameter setting.

Effective stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000
L	1360	1460	1560	1660	1760	1860	1960	2060	2160	2260	2360	2460	2560	2660	2760	2860	2960	3060	3160	3260	3360	3460	3560	3660	3760	3860	3960	4060	4160	4260	4360
A	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80
B	5	5	7	7	7	7	9	9	9	11	11	11	11	11	13	13	13	13	15	15	15	15	17	17	17	17	19	19	19	19	21
C	12	12	16	16	16	16	20	20	20	24	24	24	24	24	28	28	28	28	32	32	32	32	36	36	36	36	40	40	40	40	44
D	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180
E	6	6	6	6	8	8	8	8	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
F	14	14	14	14	18	18	18	18	22	22	22	22	22	26	26	26	26	30	30	30	30	34	34	34	34	38	38	38	38	42	42
G	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100
Weight (kg)	46	49	51	54	56	59	61	64	66	69	71	74	76	79	81	84	86	89	91	94	96	99	101	104	106	109	111	114	116	119	121

MF75D double carriage mount model **H**

Note 3. The length under head of M8 hex socket head bolts for installing the robot body must not be longer than 30mm.

Note 4. For models with a 3,080mm or longer stroke, a roller is installed to prevent the cable carrier from sagging.

Note 5. When using $\phi 10$ H7 hole, do not insert the pin more than the depth stated in the drawing. Otherwise, the motor may break.

Note 6. Depending on the stroke and the operating conditions, the cable carrier bending radius might be larger, making it higher than the dimensions shown in the diagram.

Effective stroke	680	780	880	980	1080	1180	1280	1380	1480	1580	1680	1780	1880	1980	2080	2180	2280	2380	2480	2580	2680	2780	2880	2980	3080	3180	3280	3380	3480	3580	3680
L	1360	1460	1560	1660	1760	1860	1960	2060	2160	2260	2360	2460	2560	2660	2760	2860	2960	3060	3160	3260	3360	3460	3560	3660	3760	3860	3960	4060	4160	4260	4360
A	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80
B	5	5	7	7	7	7	9	9	9	11	11	11	11	11	13	13	13	13	15	15	15	15	17	17	17	17	19	19	19	19	21
C	12	12	16	16	16	16	20	20	20	24	24	24	24	24	28	28	28	28	32	32	32	32	36	36	36	36	40	40	40	40	44
D	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180	230	80	130	180
E	6	6	6	6	8	8	8	8	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20
F	14	14	14	14	18	18	18	18	22	22	22	22	22	26	26	26	26	30	30	30	30	34	34	34	34	38	38	38	38	42	42
G	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2600	2700	2800	2900	3000	3100	3200	3300	3400	3500	3600	3700	3800	3900	4000	4100
Weight (kg)	57	60	62	65	67	70	73	75	78	81	83	86	88	91	94	96	99	101	104	107	109	112	114	117	120	122	125	127	130	133	135