AGFS14/AGFS14H

Advanced model | Single-axis robots | Long-stroke type

Ordering method

Model	Lead	Shape	Motor specification	OP.1	Stroke	Note 1 Cable length	Cable entry location	Robot positioner	Driver: Power capacity	Note 2 Regenerative unit	I/O	Battery Note 3
AGFS14 AGFS14H	30: 30mm 20: 20mm 10: 10mm 5: 5mm	S: Straight R: Right attachment L: Left attachment	S: Standard/With no brake BK Standard/With brake BL: Battery-less absolute/ With no brake BKL: Battery-less absolute/With brake	No entry: Standard M: Centeraized lubrication	100 to 1050 (50mm pitch)	R3: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less A30: 400W/750W	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. The robot cable is flexible and resists bending.
Note 2. [For AGFS14]
When the actuator is used vertically, ①lead 30 is selected, and the stroke is 250 mm or more ②lead 20 is selected, and the stroke is 250mm or more ,the regenerative unit is needed.
When the actuator is used horizontally, ①lead 30 is selected, and the stroke is 200 to 1000 mm, ②lead 20 is selected, and the stroke is 250 to 750 mmthe regenerative unit is needed.
[For AGFS14H]
When the actuator is used vertically, ①lead 30 is selected, and the stroke is 250 mm or more ②lead 20 is selected, and the stroke is 200mm or more ③lead 10 is selected, and the stroke is 550mm or more, the regenerative unit is needed.
When the actuator is used horizontally, ①lead 30 is selected, and the stroke is 450 to 850 mm, ②lead 20 is selected, and the stroke is 350 to 700 mm ,the regenerative unit is needed.
Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)

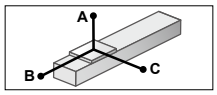
AGFS14(200W)

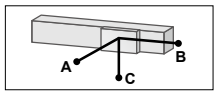
Specifications

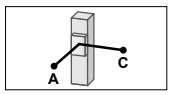
AC servo motor output		200 W			
Repeatability Note 1		±0.01 mm			
Deceleration mechanism		Rolled ball screw ϕ 15 (C7 class)			
Stroke		100 to 1050 (50 mm pitch)			
Maximum speed Note 2		1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		30 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	30 kg	45 kg	90 kg	120 kg
	Vertical	3 kg	6 kg	16 kg	30 kg
Rated Thrust		113 N	170 N	341 N	683 N
Maximum dimensions of cross section of main unit		W 140 mm × H 83 mm			
Overall length	Straight	ST + 469.5 mm			
	Bending	ST + 439.5 mm			
Degree of cleanliness Note 3		Equivalent to ISO Class 3 (ISO 14644-1)			
Intake air Note 4		90 Nℓ/min to 100 Nℓmin			
Position detector		Absolute Encoder Batteryless Absolute Encoder			
Resolution		23 bits			
Using ambient temperature and humidity Note 5		0 to 40 °C, 35 to 80 %RH (no condensation)			

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 600 mm, the ball screw may resonate. (Critical speed) At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.
Note 5. When operating in low-temperature environments, a deviation error may occur when starting from a stopped state. In such cases, reduce the speed to 50% or less and run the unit for at least one full cycle before setting it to the desired operating speed.

Allowable overhang Note







AGFS14-30

Horizontal installation (Unit: mm)	A	B	C
5kg	4905	3005	2651
15kg	2257	988	954
30kg	2045	558	627

Wall installation (Unit: mm)	A	B	C
5kg	2683	2966	4862
15kg	971	949	2185
30kg	632	519	1930

Vertical installation (Unit: mm)	A	C
1kg	11158	11158
3kg	3983	3983

AGFS14-20

Horizontal installation (Unit: mm)	A	B	C
15kg	3254	1258	1400
30kg	2079	614	714
45kg	1637	400	474

Wall installation (Unit: mm)	A	B	C
15kg	1400	1219	3197
30kg	704	575	1993
45kg	459	361	1523

Vertical installation (Unit: mm)	A	C
2kg	8093	8093
4kg	4175	4175
6kg	2872	2872

AGFS14-10

Horizontal installation (Unit: mm)	A	B	C
30kg	4186	855	1158
60kg	2619	413	566
90kg	2042	266	367

Wall installation (Unit: mm)	A	B	C
30kg	1124	816	4112
60kg	525	374	2511
90kg	322	227	1897

Vertical installation (Unit: mm)	A	C
5kg	5041	5041
10kg	2519	2519
16kg	1572	1572

AGFS14-5

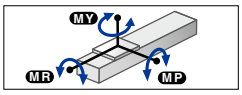
Horizontal installation (Unit: mm)	A	B	C
40kg	7737	681	982
80kg	4818	326	471
120kg	3749	208	301

Wall installation (Unit: mm)	A	B	C
40kg	932	641	7609
80kg	418	287	4627
120kg	246	169	3487

Vertical installation (Unit: mm)	A	C
10kg	2781	2781
20kg	1374	1374
30kg	905	905

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 600 mm stroke models.
Note. When using it suspended from the ceiling, the overhang will be the same as when used horizontally.

Static loading moment



(Unit: N·m)

MY	MP	MR
441	543	478

Controller

Controller	Operation method
EP-01	I/O point trace/ Remote command

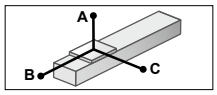
AGFS14H (400W)

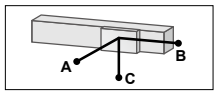
Specifications

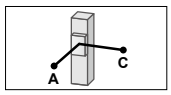
AC servo motor output		400 W			
Repeatability Note 1		±0.01 mm			
Deceleration mechanism		Rolled ball screw ϕ 15 (C7 class)			
Stroke		100 to 1050 (50 mm pitch)			
Maximum speed Note 2		1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		30 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	50 kg	70 kg	110 kg	140 kg
	Vertical	10 kg	15 kg	30 kg	45 kg
Rated Thrust		225 N	339 N	678 N	1360 N
Maximum dimensions of cross section of main unit		W 140 mm × H 83 mm			
Overall length	Straight	ST + 485.5 mm			
	Bending	ST + 439.5 mm			
Degree of cleanliness Note 3		Equivalent to ISO Class 3 (ISO 14644-1)			
Intake air Note 4		90 Nℓ/min to 100 Nℓmin			
Position detector		Absolute Encoder Batteryless Absolute Encoder			
Resolution		23 bits			
Using ambient temperature and humidity Note 5		0 to 40 °C, 35 to 80 %RH (no condensation)			

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 600 mm, the ball screw may resonate. (Critical speed) At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.
Note 5. When operating in low-temperature environments, a deviation error may occur when starting from a stopped state. In such cases, reduce the speed to 50% or less and run the unit for at least one full cycle before setting it to the desired operating speed.

Allowable overhang Note







AGFS14H-30

Horizontal installation (Unit: mm)	A	B	C
15kg	1923	982	912
30kg	1614	527	562
50kg	1658	349	416

Wall installation (Unit: mm)	A	B	C
15kg	913	943	1866
30kg	562	488	1518
50kg	403	310	1509

Vertical installation (Unit: mm)	A	C
3kg	3663	3663
5kg	2243	2243
10kg	1160	1160

AGFS14H-20

Horizontal installation (Unit: mm)	A	B	C
15kg	2756	1258	1347
30kg	1780	614	696
70kg	1100	247	294

Wall installation (Unit: mm)	A	B	C
15kg	1336	1219	2711
30kg	680	575	1712
70kg	268	208	969

Vertical installation (Unit: mm)	A	C
5kg	3206	3206
10kg	1627	1627
15kg	1093	1093

AGFS14H-10

Horizontal installation (Unit: mm)	A	B	C
30kg	3732	855	1148
50kg	2742	502	683
110kg	1781	212	293

Wall installation (Unit: mm)	A	B	C
30kg	1112	816	3670
50kg	642	462	2655
110kg	247	173	1615

Vertical installation (Unit: mm)	A	C
10kg	2499	2499
15kg	1664	1664
30kg	823	823

AGFS14H-5

Horizontal installation (Unit: mm)	A	B	C
50kg	5089	539	775
100kg	3425	255	368
140kg	2863	174	252

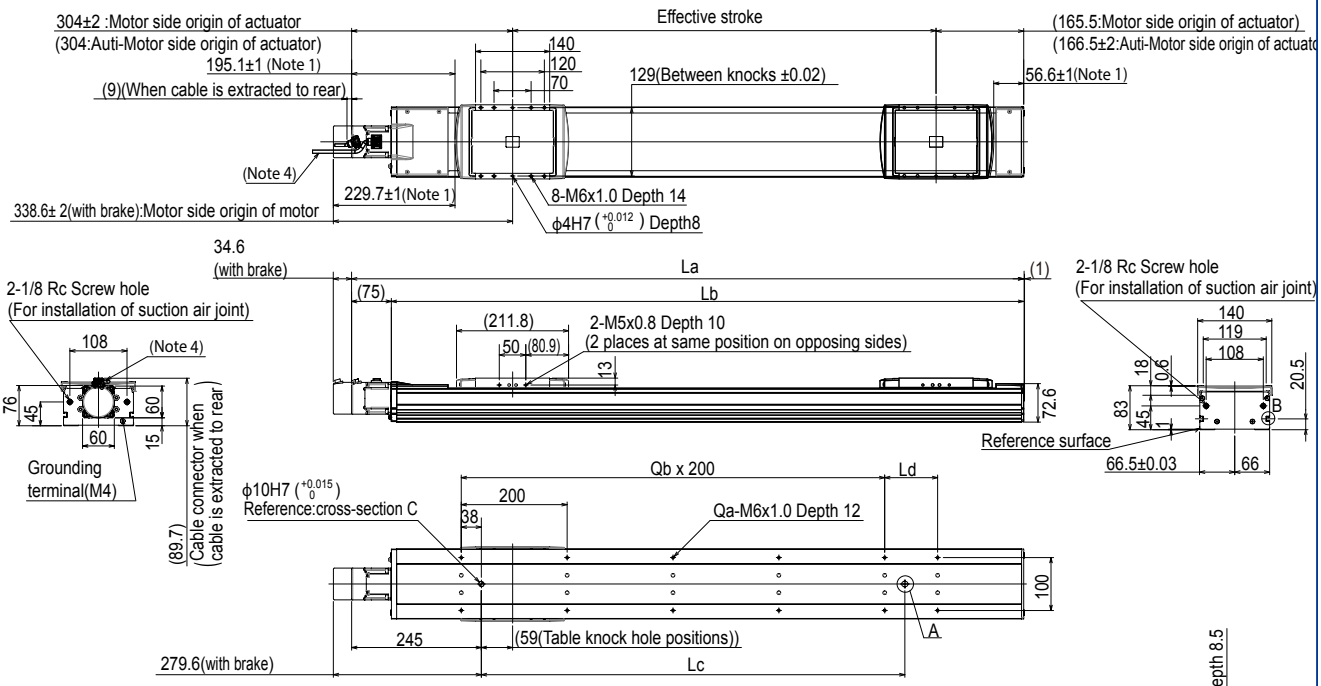
Wall installation (Unit: mm)	A	B	C
50kg	724	500	4991
100kg	314	216	3257
140kg	197	135	2630

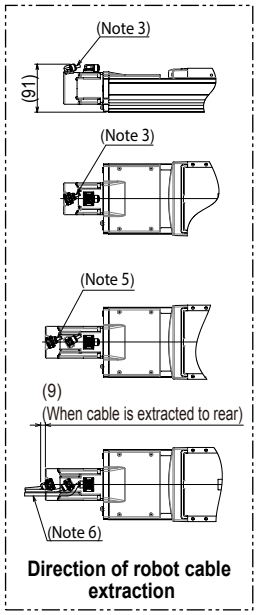
Vertical installation (Unit: mm)	A	C
15kg	1833	1833
30kg	900	900
45kg	589	589

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 600 mm stroke models.
Note. When using it suspended from the ceiling, the overhang will be the same as when used horizontally.

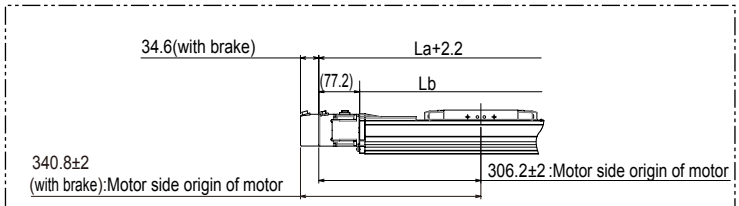
▶ The cycle time simulation and service life calculation can be performed easily from our member site.

AGFS14 Straight type (S)

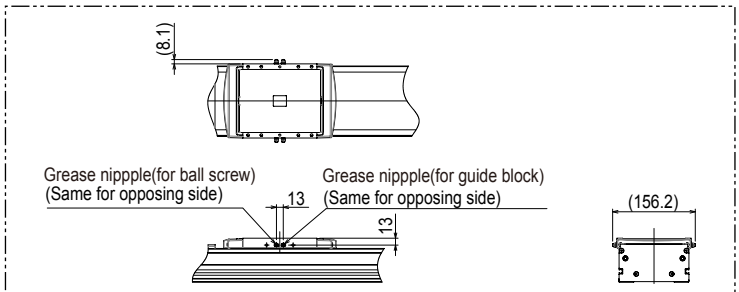




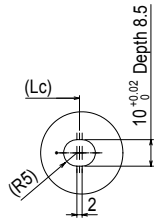
Direction of robot cable extraction



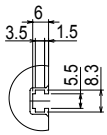
Battery-less absolute axis specification



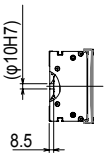
Centralized refueling specification



Detailed drawing A



Detailed drawing B



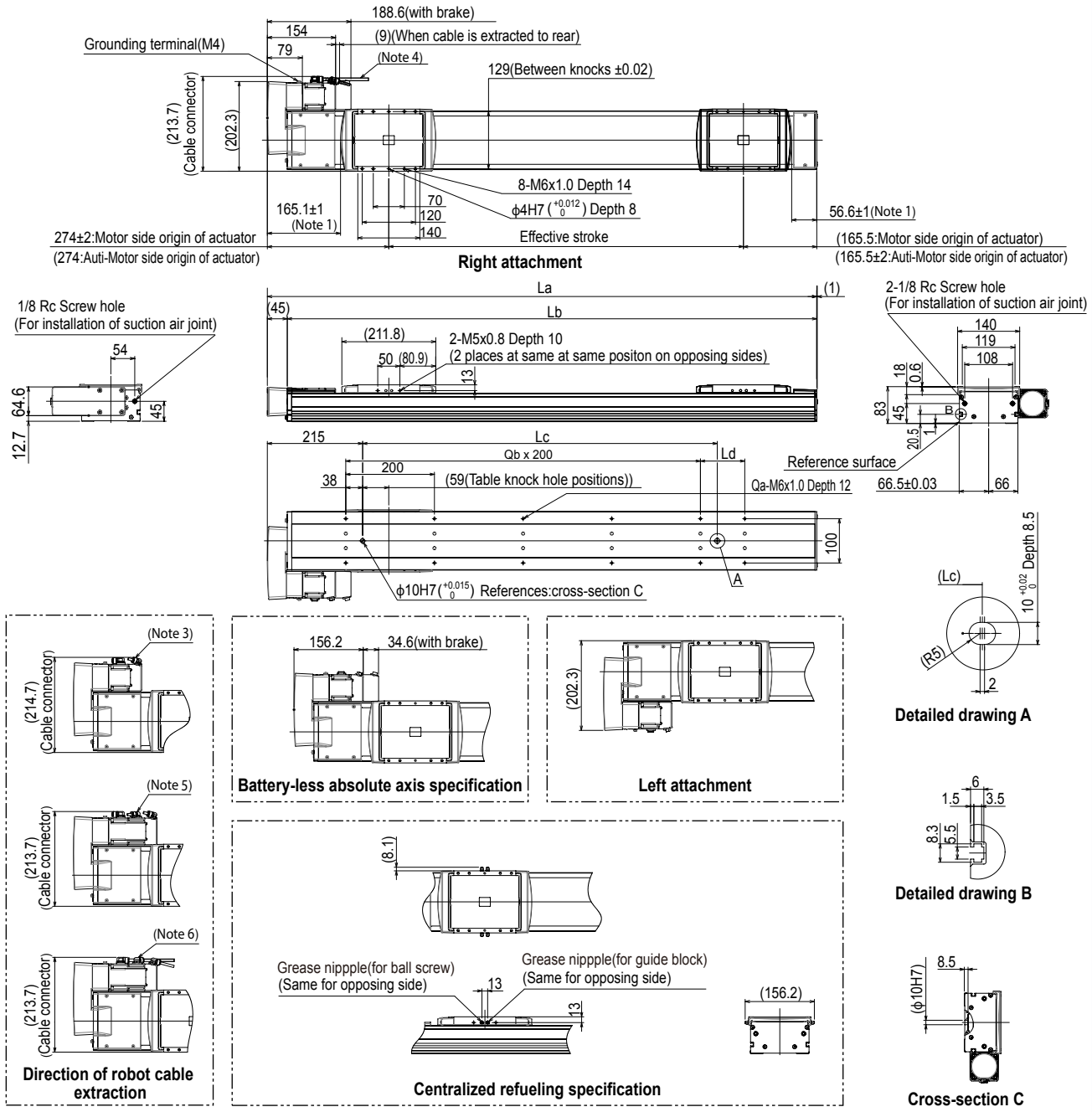
Cross-section C

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +10mm or less>> is recommended for the hex socket head bolts <M6×1.0> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
La		569.5	619.5	669.5	719.5	769.5	819.5	869.5	919.5	969.5	1019.5	1069.5	1119.5	1169.5	1219.5	1269.5	1319.5	1369.5	1419.5	1469.5	1519.5
Lb		494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5	994.5	1044.5	1094.5	1144.5	1194.5	1244.5	1294.5	1344.5	1394.5	1444.5
Lc		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
Ld		200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa		4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
Qb		0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Weight (kg) Note 2		8.7	9.3	9.8	10.3	10.9	11.4	11.9	12.4	13.0	13.5	14.0	14.6	15.1	15.6	16.2	16.7	17.2	17.7	18.3	18.8
Maximum speed (mm/sec)	Lead 30	1800													1710	1530	1170	990	900	810	720
	Speed setting	-													95%	85%	65%	55%	50%	45%	40%
	Lead 20	1200											1140	1020	900	780	660	600	540	480	420
	Speed setting	-											95%	85%	75%	65%	55%	50%	45%	40%	35%
	Lead 10	600											570	480	420	360	330	300	270	240	210
	Speed setting	-											95%	80%	70%	60%	55%	50%	45%	40%	35%
	Lead 5	300											270	240	210	180	165	150	135	120	105
	Speed setting	-											90%	80%	70%	60%	55%	50%	45%	40%	35%
Stroke restriction	Horizontal · Vertical	No stroke restrictions																			
	Wall hanging	No stroke restrictions																			
	Ceiling-mounted	No stroke restrictions																			

Controller EP-01 ▶ 582

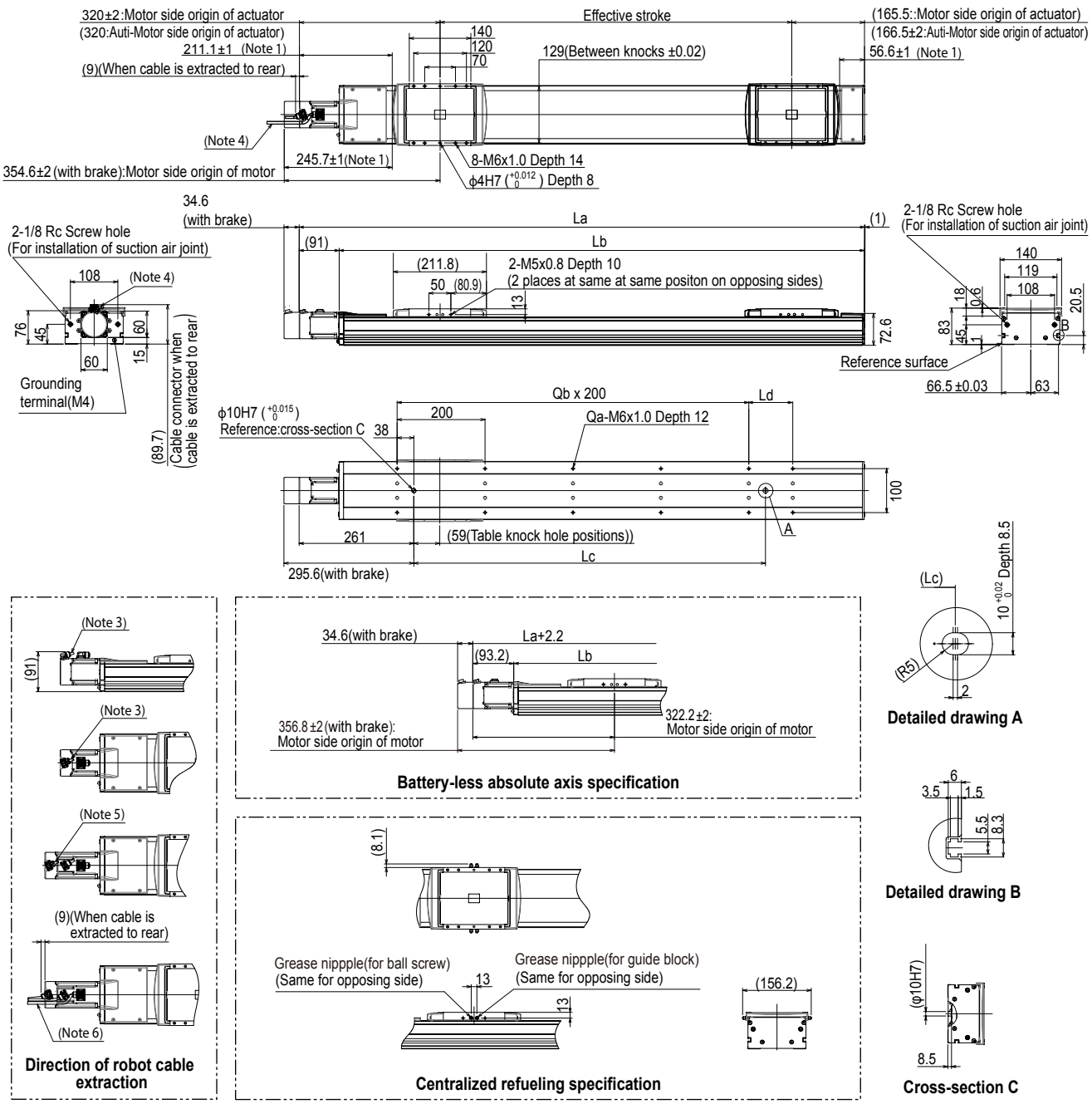
AGFS14 Bending type (R/L)



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +10mm or less>> is recommended for the hex socket head bolts <M6×1.0> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
La		539.5	589.5	639.5	689.5	739.5	789.5	839.5	889.5	939.5	989.5	1039.5	1089.5	1139.5	1189.5	1239.5	1289.5	1339.5	1389.5	1439.5	1489.5
Lb		494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5	994.5	1044.5	1094.5	1144.5	1194.5	1244.5	1294.5	1344.5	1394.5	1444.5
Lc		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
Ld		200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa		4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
Qb		0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Weight (kg) Note 2		9.9	10.5	11.0	11.5	12.1	12.6	13.1	13.6	14.2	14.7	15.2	15.8	16.3	16.8	17.4	17.9	18.4	18.9	19.5	20.0
Maximum speed (mm/sec)	Lead 30	1800													1710	1530	1170	990	900	810	720
	Speed setting	-													95%	85%	65%	55%	50%	45%	40%
	Lead 20	1200											1140	1020	900	780	660	600	540	480	420
	Speed setting	-											95%	85%	75%	65%	55%	50%	45%	40%	35%
	Lead 10	600											570	480	420	360	330	300	270	240	210
	Speed setting	-											95%	80%	70%	60%	55%	50%	45%	40%	35%
	Lead 5	300											270	240	210	180	165	150	135	120	105
	Speed setting	-											90%	80%	70%	60%	55%	50%	45%	40%	35%
Stroke restriction	Horizontal · Vertical	No stroke restrictions																			
	Wall hanging	No stroke restrictions																			
	Ceiling-mounted	No stroke restrictions																			

AGFS14H Straight type (S)



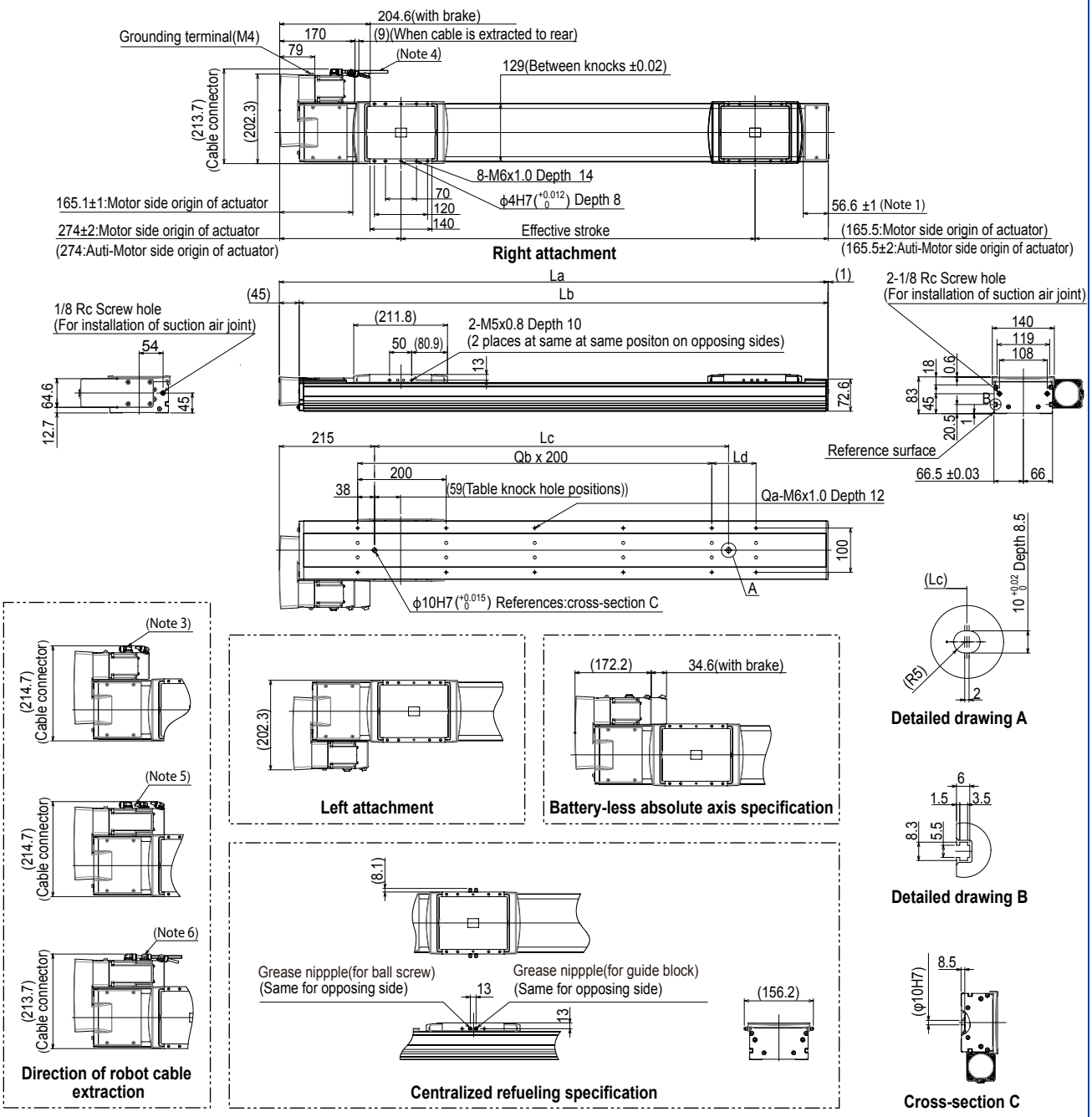
Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +10mm or less>> is recommended for the hex socket head bolts <M6×1.0> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
La		585.5	635.5	685.5	735.5	785.5	835.5	885.5	935.5	985.5	1035.5	1085.5	1135.5	1185.5	1235.5	1285.5	1335.5	1385.5	1435.5	1485.5	1535.5
Lb		494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5	994.5	1044.5	1094.5	1144.5	1194.5	1244.5	1294.5	1344.5	1394.5	1444.5
Lc		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
Ld		200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa		4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
Qb		0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Weight (kg) Note 2		9.0	9.6	10.1	10.6	11.2	11.7	12.2	12.7	13.3	13.8	14.3	14.9	15.4	15.9	16.5	17.0	17.5	18.0	18.6	19.1
Maximum speed (mm/sec)	Lead 30	1800													1710	1530	1170	990	900	810	720
	Speed setting	-													95%	85%	65%	55%	50%	45%	40%
	Lead 20	1200											1140	1020	900	780	660	600	540	480	420
	Speed setting	-											95%	85%	75%	65%	55%	50%	45%	40%	35%
	Lead 10	600											570	480	420	360	330	300	270	240	210
	Speed setting	-											95%	80%	70%	60%	55%	50%	45%	40%	35%
	Lead 5	300											270	240	210	180	165	150	135	120	105
	Speed setting	-											90%	80%	70%	60%	55%	50%	45%	40%	35%
Stroke restriction	Horizontal · Vertical	No stroke restrictions																			
	Wall hanging	No stroke restrictions																			
	Ceiling-mounted	No stroke restrictions																			

Controller EP-01 ▶ 582

AGFS14H

AGFS14H Bending type (R/L)



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +10mm or less>> is recommended for the hex socket head bolts <M6×1.0> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
La		539.5	589.5	639.5	689.5	739.5	789.5	839.5	889.5	939.5	989.5	1039.5	1089.5	1139.5	1189.5	1239.5	1289.5	1339.5	1389.5	1439.5	1489.5
Lb		494.5	544.5	594.5	644.5	694.5	744.5	794.5	844.5	894.5	944.5	994.5	1044.5	1094.5	1144.5	1194.5	1244.5	1294.5	1344.5	1394.5	1444.5
Lc		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
Ld		200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa		4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
Qb		0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Weight (kg) Note 2		10.1	10.7	11.2	11.7	12.3	12.8	13.3	13.8	14.4	14.9	15.4	16.0	16.5	17.0	17.6	18.1	18.6	19.1	19.7	20.2
Maximum speed (mm/sec)	Lead 30	1800													1710	1530	1170	990	900	810	720
	Speed setting	-													95%	85%	65%	55%	50%	45%	40%
	Lead 20	1200											1140	1020	900	780	660	600	540	480	420
	Speed setting	-											95%	85%	75%	65%	55%	50%	45%	40%	35%
	Lead 10	600											570	480	420	360	330	300	270	240	210
	Speed setting	-											95%	80%	70%	60%	55%	50%	45%	40%	35%
	Lead 5	300											270	240	210	180	165	150	135	120	105
	Speed setting	-											90%	80%	70%	60%	55%	50%	45%	40%	35%
Stroke restriction	Horizontal・Vertical	No stroke restrictions																			
	Wall hanging	No stroke restrictions																			
	Ceiling-mounted	No stroke restrictions																			

AGFS14L/AGFS14LH

Advanced model | Single-axis robots | Long-stroke type

Ordering method

Model	Lead	Shape	Motor specification	OP.1	Stroke	Note 1 Cable length	Cable entry location	Robot positioner	Driver: Power capacity	Note 2 Regenerative unit	I/O	Battery Note 3
AGFS14L AGFS14LH	30: 30mm 20: 20mm 10: 10mm 5: 5mm	S: Straight R: Right attachment L: Left attachment	S: Standard/With no brake BK Standard/With brake BL: Battery-less absolute/With no brake BKL: Battery-less absolute/With brake	No entry: Standard M: Centeraized lubrication	750 to 2000 (50mm pitch)	R3: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor	EP-01	A10: 200W or less A30: 400W/750W	No entry: None R: With EP-RU	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. The robot cable is flexible and resists bending.
Note 2. [For AGFS14L]
When the actuator is used vertically, lead 10 is selected, the regenerative unit is needed.
When the actuator is used horizontally, lead 20 is selected, and the stroke is 950mm or more, the regenerative unit is needed.
[For AGFS14LH]
When the actuator is used vertically, all lead and stroke, the regenerative unit is needed.
Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)

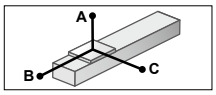
AGFS14L(200W)

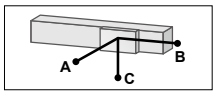
Specifications

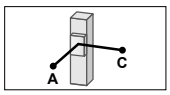
AC servo motor output		200 W			
Repeatability Note 1		±0.01 mm			
Deceleration mechanism		Rolled ball screw ϕ 15 (C7 class)			
Stroke		750 to 2000 (50 mm pitch)			
Maximum speed Note 2		1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		30 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	30 kg	45 kg	90 kg	120 kg
	Vertical	3 kg	6 kg	16 kg	30 kg
Rated Thrust		113 N	170 N	341 N	683 N
Maximum dimensions of cross section of main unit		W 140 mm × H 91.5 mm			
Overall length	Straight	ST + 537.5 mm			
	Bending	ST + 507.5 mm			
Degree of cleanliness Note 3		Equivalent to ISO Class 3 (ISO 14644-1)			
Intake air Note 4		90 Nℓ/min to 100 Nℓmin			
Position detector		Absolute Encoder Batteryless Absolute Encoder			
Resolution		23 bits			
Using ambient temperature and humidity Note 5		0 to 40 °C, 35 to 80 %RH (no condensation)			

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.
Note 5. When operating in low-temperature environments, a deviation error may occur when starting from a stopped state. In such cases, reduce the speed to 50% or less and run the unit for at least one full cycle before setting it to the desired operating speed.

Allowable overhang Note







AGFS14L-30

Horizontal installation (Unit: mm)	A	B	C
5kg	5829	3006	3007
15kg	2669	983	1061
30kg	1764	477	538

Wall installation (Unit: mm)	A	B	C
5kg	3034	2966	5786
15kg	1069	943	2597
30kg	536	438	1649

Vertical installation (Unit: mm)	A	C
1kg	12226	12226
3kg	4291	4291

AGFS14L-20

Horizontal installation (Unit: mm)	A	B	C
15kg	3873	1258	1526
30kg	2484	615	770
45kg	1964	400	509

Wall installation (Unit: mm)	A	B	C
15kg	1514	1219	3816
30kg	750	575	2398
45kg	483	361	1848

Vertical installation (Unit: mm)	A	C
2kg	8582	8582
4kg	4381	4381
6kg	2980	2980

AGFS14L-10

Horizontal installation (Unit: mm)	A	B	C
30kg	4980	855	1193
60kg	3127	413	581
90kg	2446	266	375

Wall installation (Unit: mm)	A	B	C
30kg	1151	816	4906
60kg	534	374	3018
90kg	326	227	2300

Vertical installation (Unit: mm)	A	C
5kg	5126	5126
10kg	2555	2555
16kg	1590	1590

AGFS14L-5

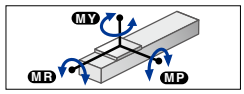
Horizontal installation (Unit: mm)	A	B	C
40kg	9198	681	988
80kg	5743	326	474
120kg	4484	208	302

Wall installation (Unit: mm)	A	B	C
40kg	936	641	9069
80kg	419	287	5550
120kg	247	169	4216

Vertical installation (Unit: mm)	A	C
10kg	2788	2788
20kg	1377	1377
30kg	906	906

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 1,000 mm stroke models.
Note. When using it suspended from the ceiling, the overhang will be the same as when used horizontally.

Static loading moment



(Unit: N·m)

MY	MP	MR
441	543	478

Controller

Controller	Operation method
EP-01	I/O point trace/ Remote command

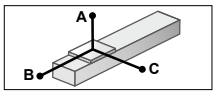
AGFS14LH (400W)

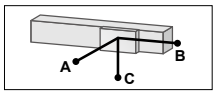
Specifications

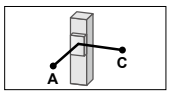
AC servo motor output		400 W			
Repeatability Note 1		±0.01 mm			
Deceleration mechanism		Rolled ball screw ϕ 15 (C7 class)			
Stroke		750 to 2000 (50 mm pitch)			
Maximum speed Note 2		1800 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		30 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	50 kg	70 kg	110 kg	140 kg
	Vertical	10 kg	15 kg	30 kg	45 kg
Rated Thrust		225 N	339 N	678 N	1360 N
Maximum dimensions of cross section of main unit		W 140 mm × H 91.5 mm			
Overall length	Straight	ST + 553.5 mm			
	Bending	ST + 507.5 mm			
Degree of cleanliness Note 3		Equivalent to ISO Class 3 (ISO 14644-1)			
Intake air Note 4		90 Nℓ/min to 100 Nℓmin			
Position detector		Absolute Encoder Batteryless Absolute Encoder			
Resolution		23 bits			
Using ambient temperature and humidity Note 5		0 to 40 °C, 35 to 80 %RH (no condensation)			

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 1000 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.
Note 5. When operating in low-temperature environments, a deviation error may occur when starting from a stopped state. In such cases, reduce the speed to 50% or less and run the unit for at least one full cycle before setting it to the desired operating speed.

Allowable overhang Note







AGFS14LH-30

Horizontal installation (Unit: mm)	A	B	C
15kg	2295	982	1028
30kg	1570	477	529
50kg	1409	297	353

Wall installation (Unit: mm)	A	B	C
15kg	1024	943	2238
30kg	522	438	1473
50kg	335	258	1260

Vertical installation (Unit: mm)	A	C
3kg	4023	4023
5kg	2450	2450
10kg	1255	1255

AGFS14LH-20

Horizontal installation (Unit: mm)	A	B	C
15kg	3281	1258	1481
30kg	2126	615	756
70kg	1328	247	316

Wall installation (Unit: mm)	A	B	C
15kg	1461	1219	3236
30kg	731	575	2058
70kg	281	208	1195

Vertical installation (Unit: mm)	A	C
5kg	3404	3404
10kg	1715	1715
15kg	1146	1146

AGFS14LH-10

Horizontal installation (Unit: mm)	A	B	C
30kg	4441	855	1186
50kg	3270	502	702
110kg	2140	212	300

Wall installation (Unit: mm)	A	B	C
30kg	1143	816	4379
50kg	656	462	3182
110kg	250	173	1971

Vertical installation (Unit: mm)	A	C
10kg	2542	2542
15kg	1689	1689
30kg	832	832

AGFS14LH-5

Horizontal installation (Unit: mm)	A	B	C
50kg	6053	539	781
100kg	4089	255	371
140kg	3429	174	253

Wall installation (Unit: mm)	A	B	C
50kg	727	500	5955
100kg	315	216	3918
140kg	197	135	3188

Vertical installation (Unit: mm)	A	C
15kg	1841	1841
30kg	903	903
45kg	590	590

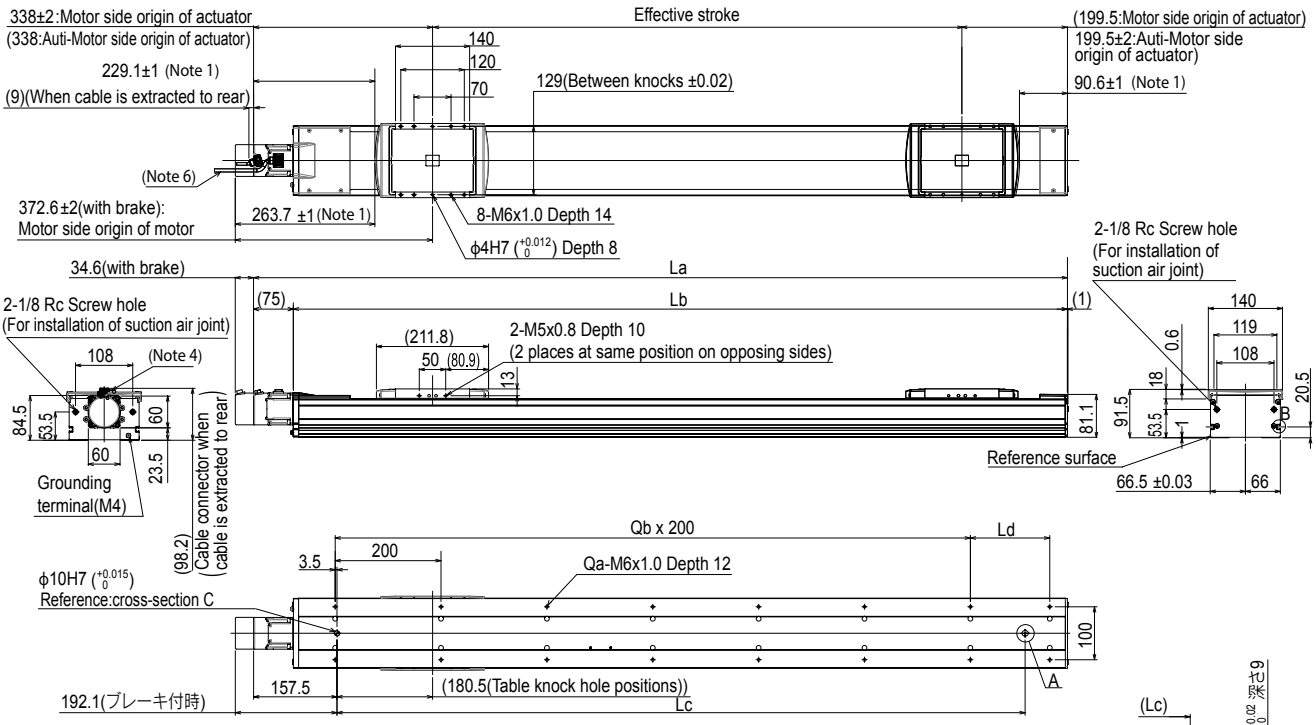
Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 1,000 mm stroke models.
Note. When using it suspended from the ceiling, the overhang will be the same as when used horizontally.

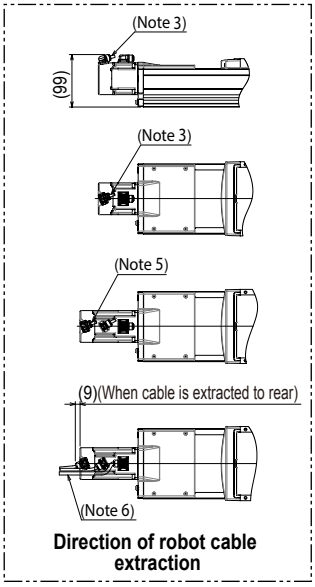
YAMAHA

▶ The cycle time simulation and service life calculation can be performed easily from our member site.

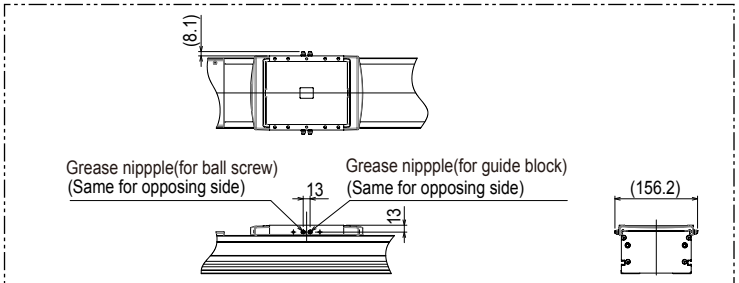
AGFS14L

AGFS14L Straight type (S)

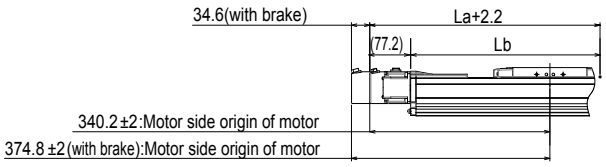




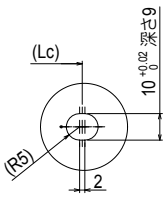
Direction of robot cable extraction



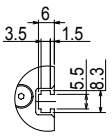
Centralized refueling specification



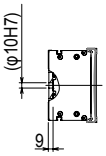
Battery-less absolute axis specification



Detailed drawing A



Detailed drawing B

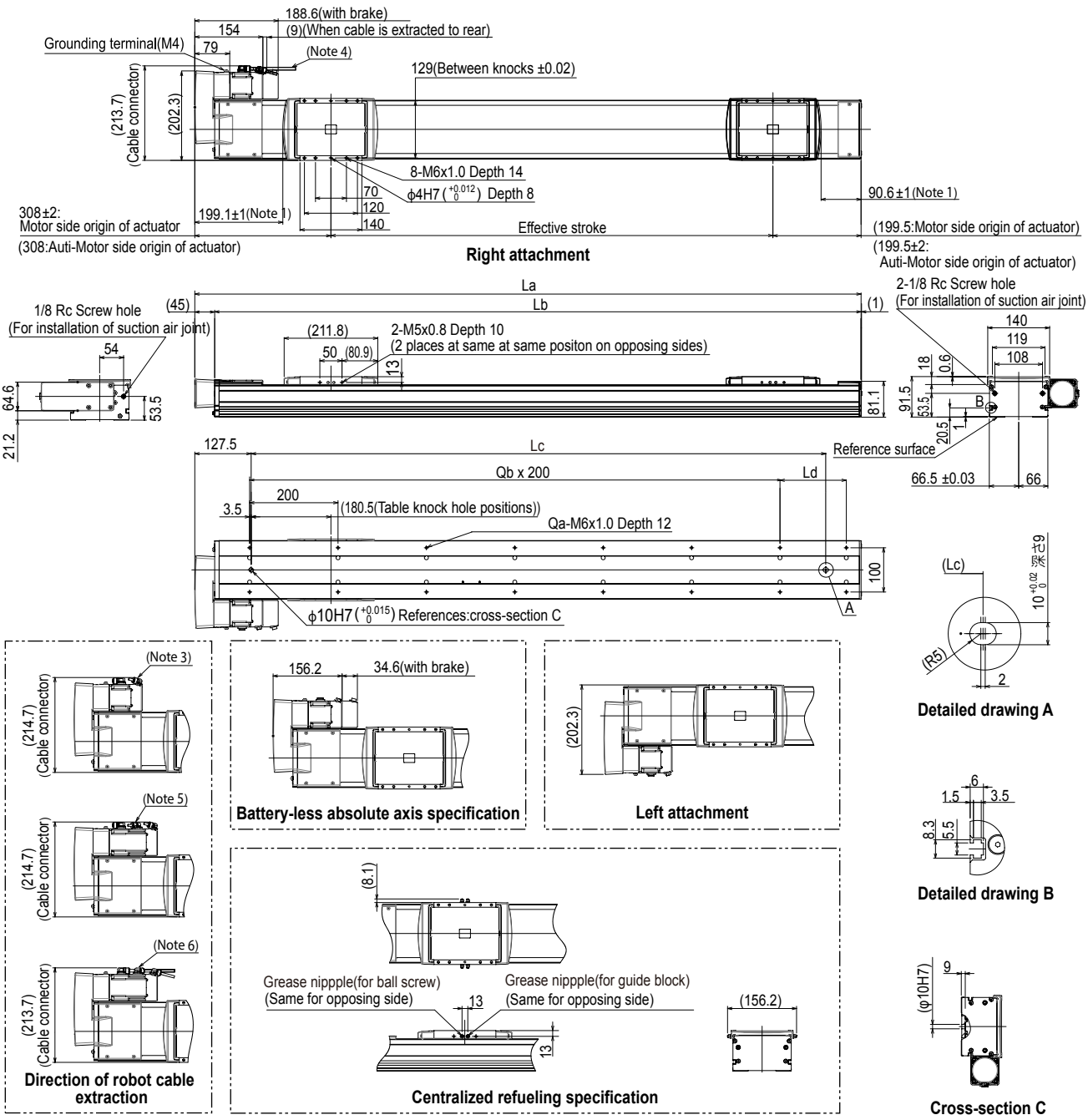


Cross-section C

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +10mm or less>> is recommended for the hex socket head bolts <M6×1.0> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000
La		1287.5	1337.5	1387.5	1437.5	1487.5	1537.5	1587.5	1637.5	1687.5	1737.5	1787.5	1837.5	1887.5	1937.5	1987.5	2037.5	2087.5	2137.5	2187.5	2237.5	2287.5	2337.5	2387.5	2437.5	2487.5	2537.5
Lb		1212.5	1262.5	1312.5	1362.5	1412.5	1462.5	1512.5	1562.5	1612.5	1662.5	1712.5	1762.5	1812.5	1862.5	1912.5	1962.5	2012.5	2062.5	2112.5	2162.5	2212.5	2262.5	2312.5	2362.5	2412.5	2462.5
Lc		1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300
Ld		100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa		14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24	26	26	26
Qb		5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11
Weight (kg) Note 2		19.4	20	20.6	21.1	21.7	22.3	22.9	23.4	24	24.6	25.1	25.7	26.3	26.9	27.4	28	28.6	29.2	29.7	30.3	30.9	31.4	32	32.6	33.2	33.7
Maximum speed (mm/sec)	Lead 30	1800																									
	Lead 20	1200																									
	Lead 10	600																									
	Lead 5	300																									
	Speed setting	-																									
Stroke restriction	Horizontal・Vertical	No stroke restrictions																									
	Wall hanging	To 1800st																									
	Ceiling-mounted	To 1200st																									

AGFS14L Bending type (R/L)



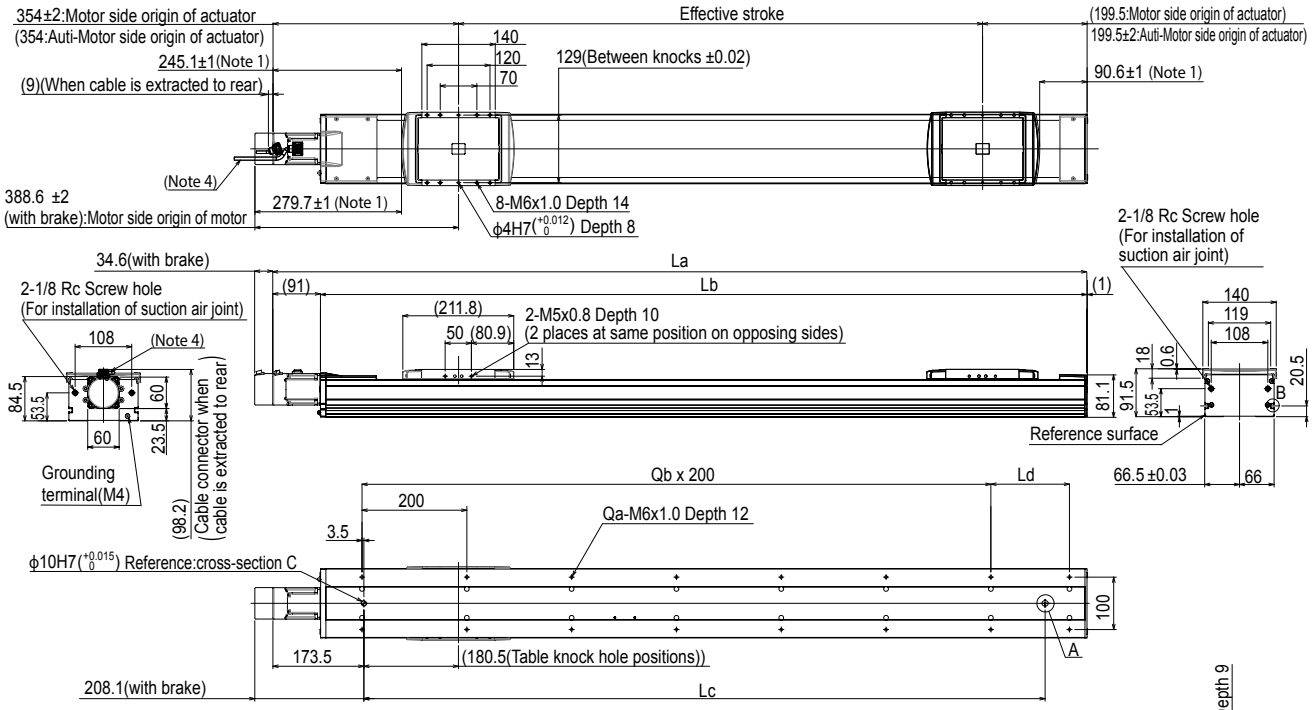
Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +10mm or less>> is recommended for the hex socket head bolts <M6×1.0> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

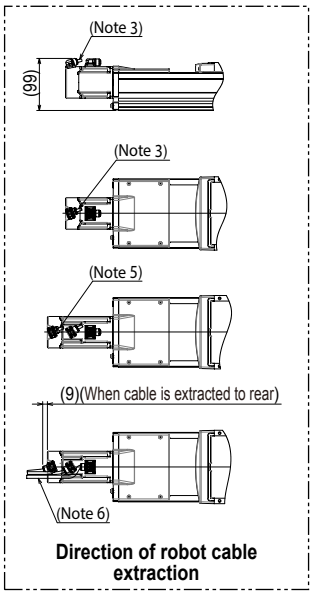
Effective stroke		750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000
La		1257.5	1307.5	1357.5	1407.5	1457.5	1507.5	1557.5	1607.5	1657.5	1707.5	1757.5	1807.5	1857.5	1907.5	1957.5	2007.5	2057.5	2107.5	2157.5	2207.5	2257.5	2307.5	2357.5	2407.5	2457.5	2507.5
Lb		1212.5	1262.5	1312.5	1362.5	1412.5	1462.5	1512.5	1562.5	1612.5	1662.5	1712.5	1762.5	1812.5	1862.5	1912.5	1962.5	2012.5	2062.5	2112.5	2162.5	2212.5	2262.5	2312.5	2362.5	2412.5	2462.5
Lc		1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300
Ld		100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa		14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24	26	26	26
Qb		5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11
Weight (kg) Note 2		20.6	21.2	21.8	22.3	22.9	23.5	24.1	24.6	25.2	25.8	26.3	26.9	27.5	28.1	28.6	29.2	29.8	30.4	30.9	31.5	32.1	32.6	33.2	33.8	34.4	34.9
Maximum speed (mm/sec)	Lead 30	1800																									
	Lead 20	1200																									
	Lead 10	600																									
	Lead 5	300																									
	Speed setting	-																									
Stroke restriction	Horizontal・Vertical	No stroke restrictions																									
	Wall hanging	To 1800st																									
	Ceiling-mounted	To 1200st																									

Controller EP-01 ▶ 582

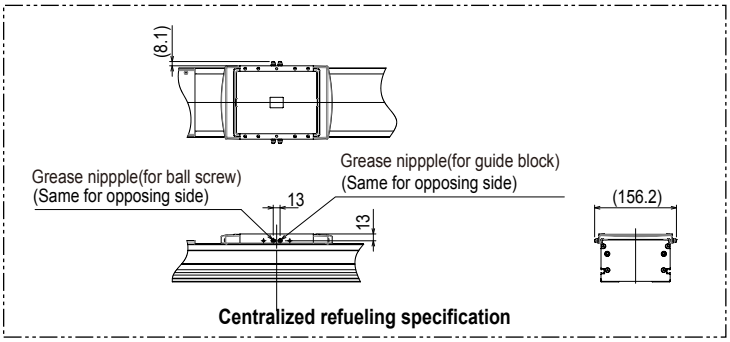
AGFS14LH

AGFS14LH Straight type (S)

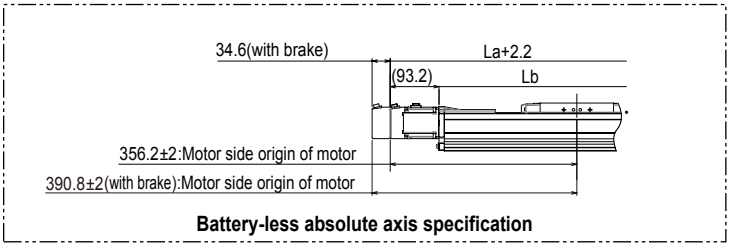




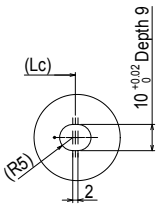
Direction of robot cable extraction



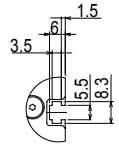
Centralized refueling specification



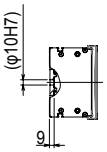
Battery-less absolute axis specification



Detailed drawing A



Detailed drawing B

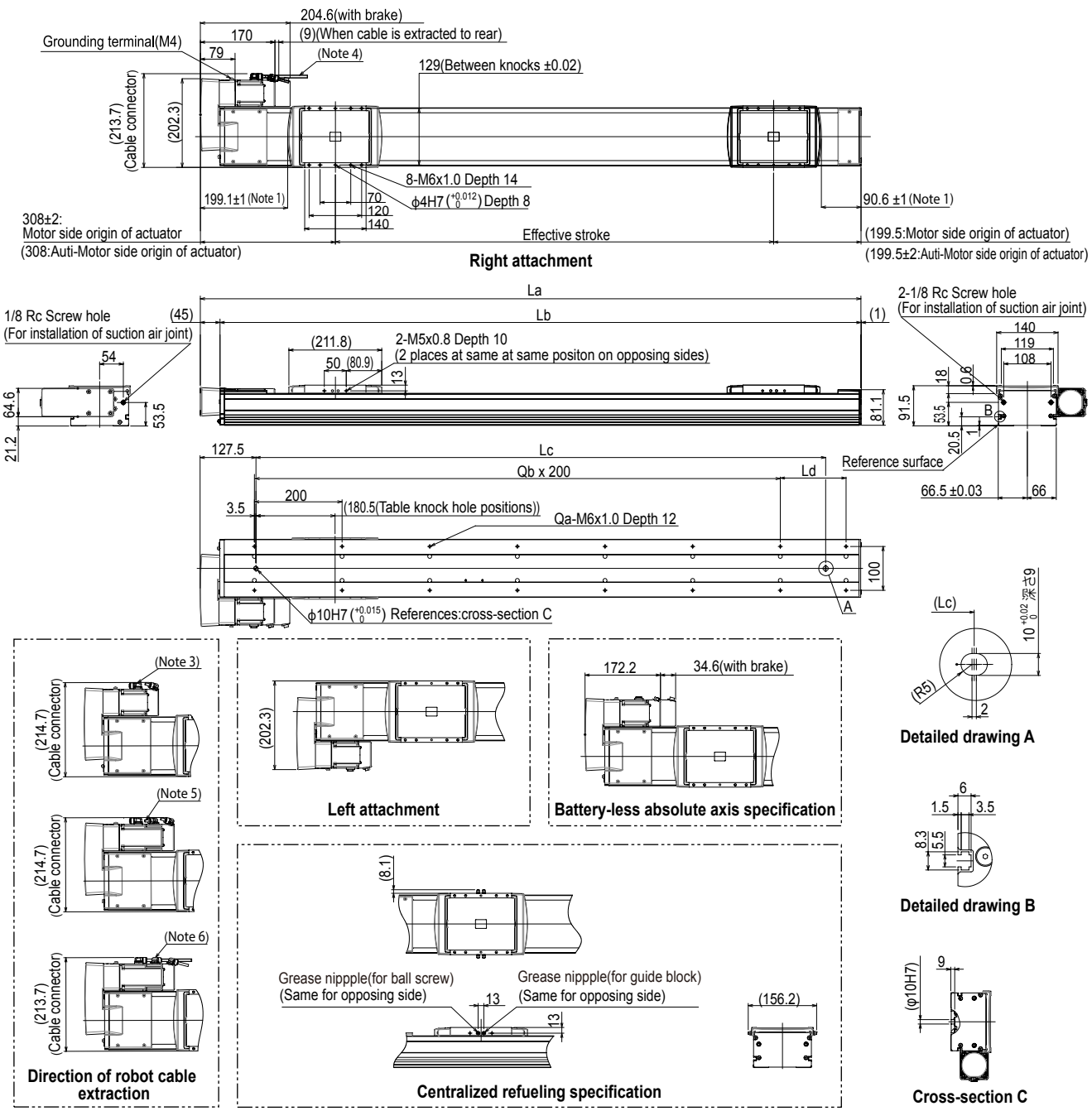


Cross-section C

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +10mm or less>> is recommended for the hex socket head bolts <M6×1.0> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000
La		1303.5	1353.5	1403.5	1453.5	1503.5	1553.5	1603.5	1653.5	1703.5	1753.5	1803.5	1853.5	1903.5	1953.5	2003.5	2053.5	2103.5	2153.5	2203.5	2253.5	2303.5	2353.5	2403.5	2453.5	2503.5	2553.5
Lb		1212.5	1262.5	1312.5	1362.5	1412.5	1462.5	1512.5	1562.5	1612.5	1662.5	1712.5	1762.5	1812.5	1862.5	1912.5	1962.5	2012.5	2062.5	2112.5	2162.5	2212.5	2262.5	2312.5	2362.5	2412.5	2462.5
Lc		1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300
Ld		100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa		14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24	26	26	26
Qb		5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11
Weight (kg) Note 2		19.7	20.3	20.9	21.4	22	22.6	23.2	23.7	24.3	24.9	25.4	26	26.6	27.2	27.7	28.3	28.9	29.5	30	30.6	31.2	31.7	32.3	32.9	33.5	34
Maximum speed (mm/sec)	Lead 30	1800																									
	Lead 20	1200																									
	Lead 10	600																									
	Lead 5	300																									
	Speed setting	-																									
Stroke restriction	Horizontal・Vertical	No stroke restrictions																									
	Wall hanging	To 1800st																									
	Ceiling-mounted	To 1200st																									

AGFS14LH Bending type (R/L)



Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +10mm or less>> is recommended for the hex socket head bolts <M6×1.0> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000
La		1257.5	1307.5	1357.5	1407.5	1457.5	1507.5	1557.5	1607.5	1657.5	1707.5	1757.5	1807.5	1857.5	1907.5	1957.5	2007.5	2057.5	2107.5	2157.5	2207.5	2257.5	2307.5	2357.5	2407.5	2457.5	2507.5
Lb		1212.5	1262.5	1312.5	1362.5	1412.5	1462.5	1512.5	1562.5	1612.5	1662.5	1712.5	1762.5	1812.5	1862.5	1912.5	1962.5	2012.5	2062.5	2112.5	2162.5	2212.5	2262.5	2312.5	2362.5	2412.5	2462.5
Lc		1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300
Ld		100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150
Qa		14	14	14	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24	26	26	26
Qb		5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11
Weight (kg) Note 2		20.9	21.5	22.1	22.6	23.2	23.8	24.4	24.9	25.5	26.1	26.6	27.2	27.8	28.4	28.9	29.5	30.1	30.7	31.2	31.8	32.4	32.9	33.5	34.1	34.7	35.2
Maximum speed (mm/sec)	Lead 30	1800																									
	Lead 20	1200																									
	Lead 10	600																									
	Lead 5	300																									
	Speed setting	-																									
Stroke restriction	Horizontal・Vertical	No stroke restrictions																									
	Wall hanging	To 1800st																									
	Ceiling-mounted	To 1200st																									

AGFS17/AGFS17H

Advanced model **Single-axis robots**
Long-stroke type

Ordering method

Model	Lead	Shape	Motor specification	OP.1	Stroke	Note 1 Cable length	Cable entry location	Robot positioner	Driver: Power capacity	Note 2 Regenerative unit	I/O	Note 3 Battery
AGFS17 AGFS17H	40: 40mm 20: 20mm 10: 10mm 5: 5mm (Only with brakes)	S: Straight R: Right attachment (Only 750W) L: Left attachment (Only 750W)	S: Standard/With no brake BK Standard/With brake BL: Battery-less absolute/With no brake BKL: Battery-less absolute/With brake	No entry: Standard M: Centeraized lubrication	100 to 1250 (50mm pitch)	R: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor	EP-01	A30: 400W/750W	No entry: None R: With EP-RU C: With RU-1	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. The robot cable is flexible and resists bending.
Note 2. [For AGFS17]
When the actuator is used horizontally, lead 40 is selected, and the stroke is 750mm to 1000mm, the regenerative unit is needed.
[For AGFS17H]
When the actuator is used vertically, ①lead 40 is selected, and the stroke is 200mm or more ②lead 20 is selected, and the stroke is 200mm or more ③lead 10 is selected, all stroke, the regenerative unit is needed. (In this case, please choose the regenerative device 'RU1'. ①lead 40 is selected, and the stroke is 400 to 1000mm ②lead 10 is selected, and the stroke is 100 to 900mm)
When the actuator is used horizontally, ①lead 40 is selected, and the stroke is 550mm to 1100mm ②lead 20 is selected, and the stroke is 250mm to 900mm ③lead 10 is selected, and the stroke is 250mm to 750mm, the regenerative unit is needed.
Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)

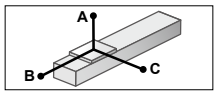
AGFS17(400W)

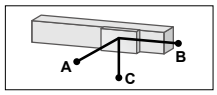
Specifications

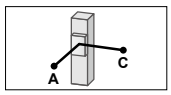
AC servo motor output		400 W			
Repeatability Note 1		±0.01 mm			
Deceleration mechanism		Rolled ball screw ϕ 20 (C7 class)			
Stroke		100 to 1250 (50 mm pitch)			
Maximum speed Note 2		2400 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		40 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	40 kg	90 kg	140 kg	-
	Vertical	6 kg	12 kg	35 kg	50 kg
Rated Thrust		169 N	339 N	678 N	1356 N
Maximum dimensions of cross section of main unit		W 168 mm × H 100 mm			
Overall length	Straight	ST + 547 mm			
	Bending	-			
Degree of cleanliness Note 3		Equivalent to ISO Class 3 (ISO 14644-1)			
Intake air Note 4		115 Nℓ/min			
Position detector		Absolute Encoder Batteryless Absolute Encoder			
Resolution		23 bits			
Using ambient temperature and humidity Note 5		0 to 40 °C, 35 to 80 %RH (no condensation)			

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 700 mm, the ball screw may resonate. (Critical speed) At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 800 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment
Note 5. When operating in low-temperature environments, a deviation error may occur when starting from a stopped state. In such cases, reduce the speed to 50% or less and run the unit for at least one full cycle before setting it to the desired operating speed.

Allowable overhang Note







AGFS17-40

Horizontal installation (Unit: mm)	A	B	C
10kg	4066	2660	2134
20kg	2619	1335	1199
40kg	2079	732	752

Wall installation (Unit: mm)	A	B	C
10kg	2165	2610	4005
20kg	1214	1284	2540
40kg	756	682	1965

Vertical installation (Unit: mm)	A	C
2kg	9892	9892
4kg	5527	5527
6kg	4137	4137

AGFS17-20

Horizontal installation (Unit: mm)	A	B	C
30kg	3378	1182	1321
50kg	2245	691	786
90kg	1444	364	423

Wall installation (Unit: mm)	A	B	C
30kg	1316	1131	3293
50kg	768	640	2142
90kg	392	313	1304

Vertical installation (Unit: mm)	A	C
4kg	8034	8034
8kg	4058	4058
12kg	2730	2730

AGFS17-10

Horizontal installation (Unit: mm)	A	B	C
50kg	5754	966	1299
100kg	3119	461	621
140kg	2347	316	427

Wall installation (Unit: mm)	A	B	C
50kg	1258	916	5628
100kg	568	410	2967
140kg	370	266	2171

Vertical installation (Unit: mm)	A	C
15kg	3255	3255
25kg	1942	1942
35kg	1379	1379

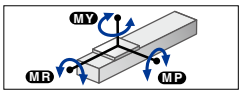
AGFS17-5

Horizontal installation (Unit: mm)	Wall installation (Unit: mm)
No settings	No settings

Vertical installation (Unit: mm)	A	C
10kg	5349	5349
30kg	1755	1755
50kg	1037	1037

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 600 mm stroke models.
Note. When using it suspended from the ceiling, the overhang will be the same as when used horizontally.

Static loading moment



(Unit: N·m)

MY	MP	MR
1062	1063	934

Controller

Controller	Operation method
EP-01	I/O point trace/ Remote command

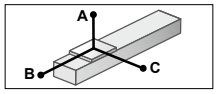
AGFS17H (750W)

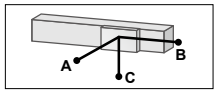
Specifications

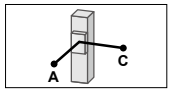
AC servo motor output		750 W			
Repeatability Note 1		±0.01 mm			
Deceleration mechanism		Rolled ball screw ϕ 20 (C7 class)			
Stroke		100 to 1250 (50 mm pitch)			
Maximum speed Note 2		2400 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		40 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	80 kg	150 kg	200 kg	-
	Vertical	12 kg	35 kg	70 kg	100 kg
Rated Thrust		320 N	640 N	1280 N	2560 N
Maximum dimensions of cross section of main unit		W 168 mm × H 100 mm			
Overall length	Straight	ST + 561.8 mm			
	Bending	ST + 511.5 mm			
Degree of cleanliness Note 3		Equivalent to ISO Class 3 (ISO 14644-1)			
Intake air Note 4		115 Nℓ/min			
Position detector		Absolute Encoder Batteryless Absolute Encoder			
Resolution		24 bits			
Using ambient temperature and humidity Note 5		0 to 40 °C, 35 to 80 %RH (no condensation)			

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 700 mm, the ball screw may resonate. (Critical speed) At this time, make the adjustment to decrease the speed while referring to the maximum speed shown in the table.
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 800 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment
Note 5. When operating in low-temperature environments, a deviation error may occur when starting from a stopped state. In such cases, reduce the speed to 50% or less and run the unit for at least one full cycle before setting it to the desired operating speed.

Allowable overhang Note







AGFS17H-40

Horizontal installation (Unit: mm)	A	B	C
20kg	1851	1307	1006
50kg	1404	555	548
80kg	1371	375	413

Wall installation (Unit: mm)	A	B	C
20kg	1000	1256	1793
50kg	537	505	1302
80kg	392	324	1224

Vertical installation (Unit: mm)	A	C
4kg	4200	4200
8kg	2186	2186
12kg	1523	1523

AGFS17H-20

Horizontal installation (Unit: mm)	A	B	C
50kg	2449	691	796
100kg	1708	325	388
150kg	1733	226	286

Wall installation (Unit: mm)	A	B	C
50kg	782	640	2331
100kg	359	275	1499
150kg	241	176	1430

Vertical installation (Unit: mm)	A	C
15kg	2256	2256
25kg	1470	1470
35kg	1131	1131

AGFS17H-10

Horizontal installation (Unit: mm)	A	B	C
100kg	3786	966	1263
150kg	2054	461	607
200kg	1548	316	419

Wall installation (Unit: mm)	A	B	C
100kg	1213	916	3718
150kg	551	410	1972
200kg	360	266	1452

Vertical installation (Unit: mm)	A	C
30kg	1579	1579
50kg	937	937
70kg	661	661

AGFS17H-5

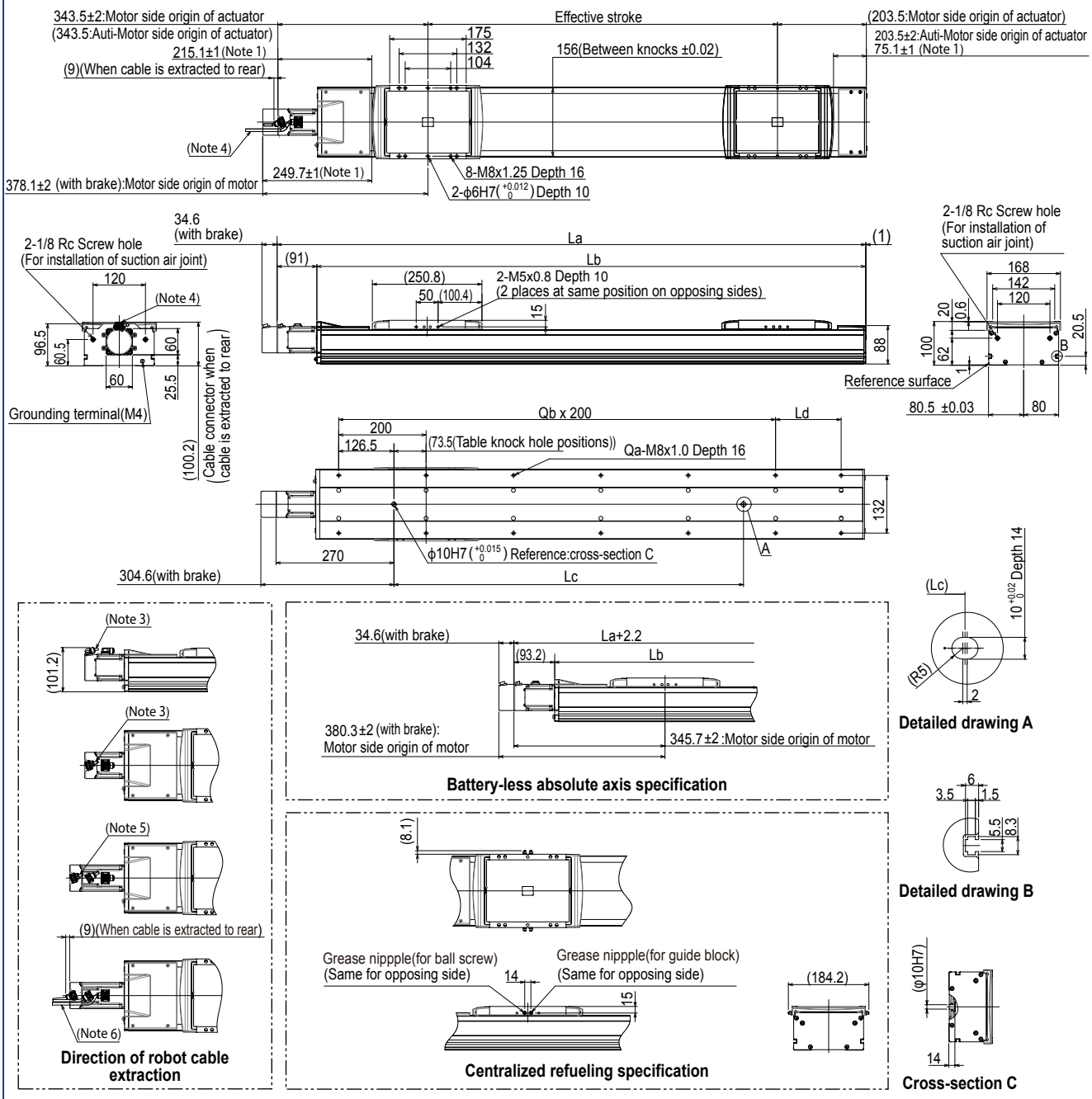
Horizontal installation (Unit: mm)	Wall installation (Unit: mm)
No settings	No settings

Vertical installation (Unit: mm)	A	C
40kg	1750	1750
70kg	1033	1033
100kg	726	726

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 600 mm stroke models.
Note. When using it suspended from the ceiling, the overhang will be the same as when used horizontally.

▶ **The cycle time simulation and service life calculation can be performed easily from our member site.**

AGFS17 Straight type (S)

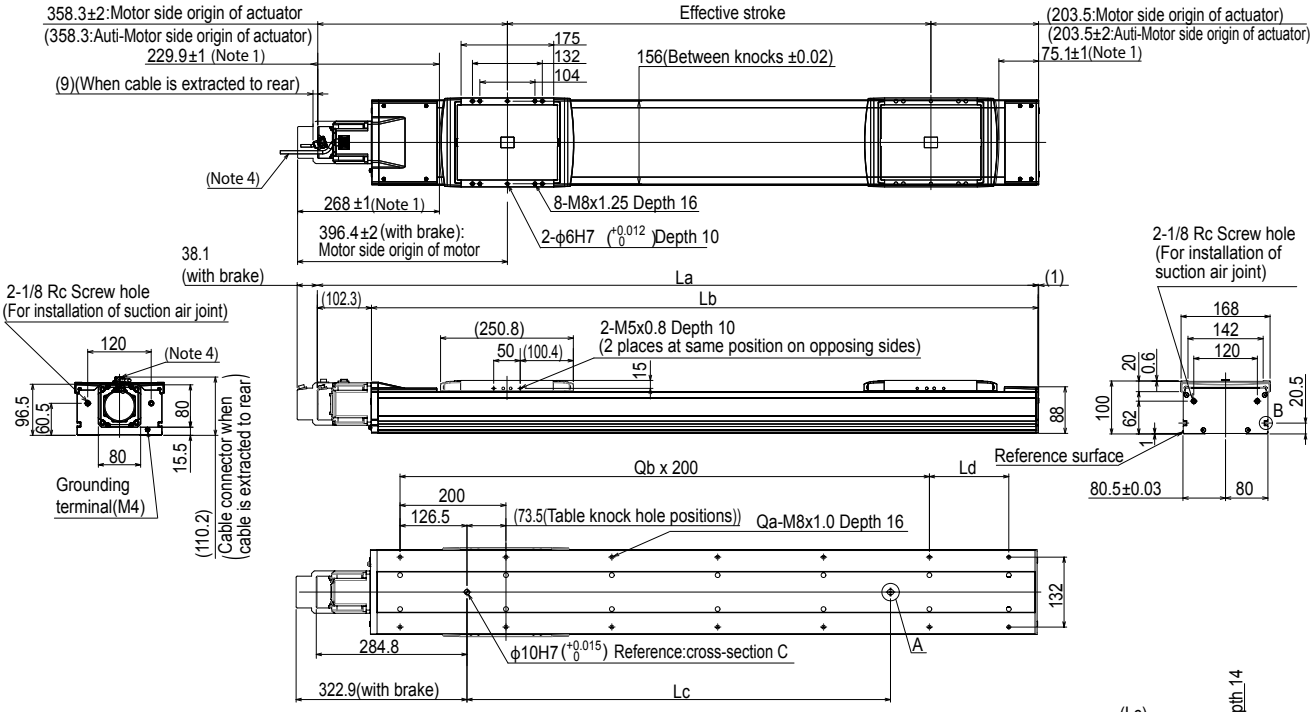


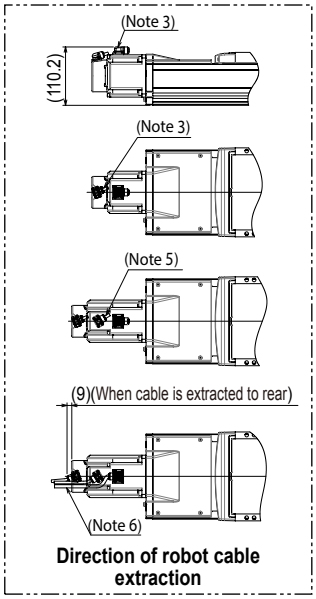
Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +15mm or less>> is recommended for the hex socket head bolts <M8×1.25> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
La		647	697	747	797	847	897	947	997	1047	1097	1147	1197	1247	1297	1347	1397	1447	1497	1547	1597	1647	1697	1747	1797
Lb		556	606	656	706	756	806	856	906	956	1006	1056	1106	1156	1206	1256	1306	1356	1406	1456	1506	1556	1606	1656	1706
Lc		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Ld		50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
Qa		8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18
Qb		2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7
Weight (kg) Note 2		15.9	16.7	17.5	18.3	19.0	19.8	20.6	21.4	22.2	22.9	23.7	24.5	25.3	26.0	26.8	27.6	28.4	29.2	29.9	30.7	31.5	32.3	33.1	33.8
Maximum speed (mm/sec)	Lead 40	2400															2280	2160	2040	1800	1560	1320	1200	1080	960
	Speed setting	-															95%	90%	85%	75%	65%	55%	50%	45%	40%
	Lead 20	1200														1140	1020	900	780	720	660	600	540	480	420
	Speed setting	-														95%	85%	75%	65%	60%	55%	50%	45%	40%	35%
	Lead 10	600													570	510	450	390	360	330	300	270	240	210	210
	Speed setting	-													95%	85%	75%	65%	60%	55%	50%	45%	40%	35%	35%
	Lead 5	300													270	240	225	195	180	165	150	135	120	105	
	Speed setting	-													90%	80%	75%	65%	60%	55%	50%	45%	45%	40%	35%
Stroke restriction	Horizontal・Vertical	No stroke restrictions																							
	Wall hanging	No stroke restrictions																							
	Ceiling-mounted	No stroke restrictions																							

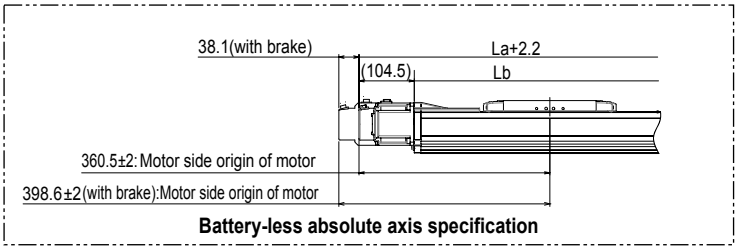
AGFS17H

AGFS17H Straight type (S)

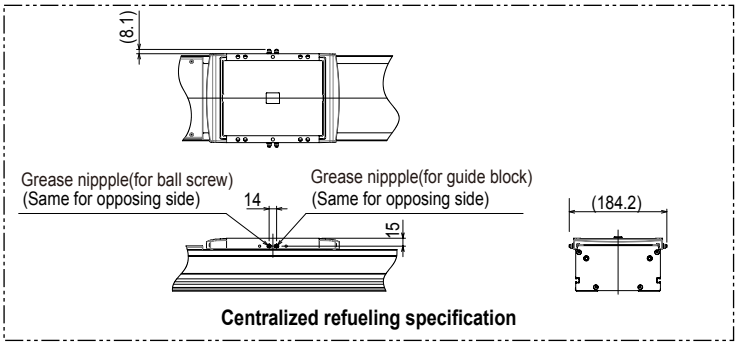




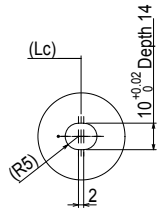
Direction of robot cable extraction



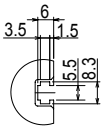
Battery-less absolute axis specification



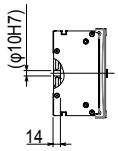
Centralized refueling specification



Detailed drawing A



Detailed drawing B

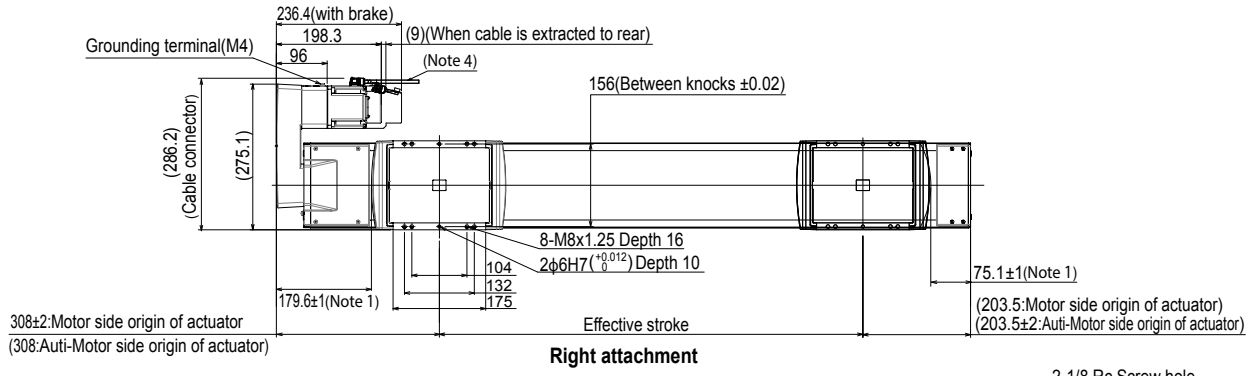


Cross-section C

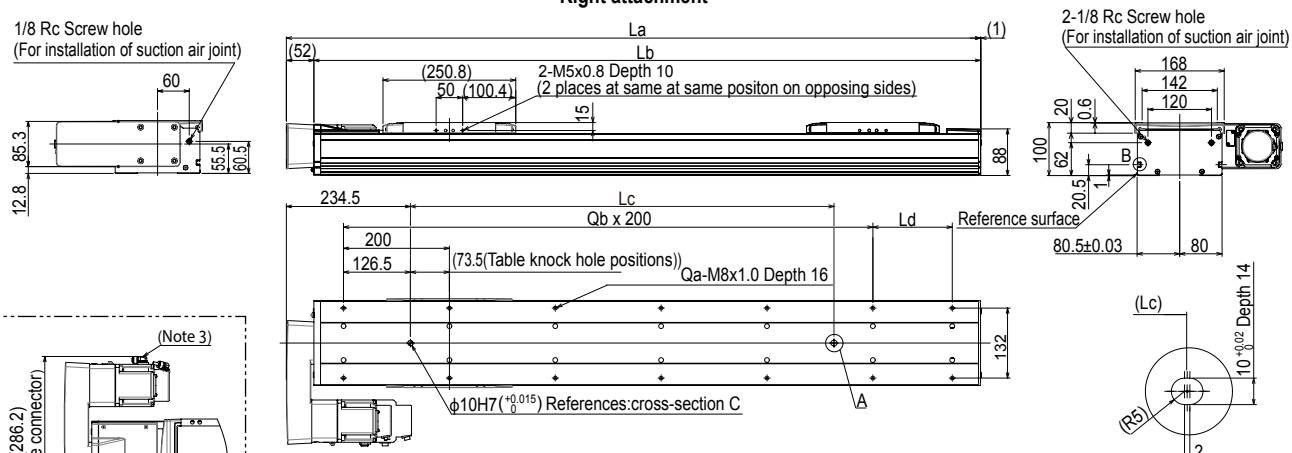
Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.9 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +15mm or less>> is recommended for the hex socket head bolts <M8×1.25> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
La		661.8	711.8	761.8	811.8	861.8	911.8	961.8	1011.8	1061.8	1111.8	1161.8	1211.8	1261.8	1311.8	1361.8	1411.8	1461.8	1511.8	1561.8	1611.8	1661.8	1711.8	1761.8	1811.8
Lb		559.5	609.5	659.5	709.5	759.5	809.5	859.5	909.5	959.5	1009.5	1059.5	1109.5	1159.5	1209.5	1259.5	1309.5	1359.5	1409.5	1459.5	1509.5	1559.5	1609.5	1659.5	1709.5
Lc		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Ld		50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
Qa		8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18
Qb		2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7
Weight (kg) Note 2		16.7	17.5	18.3	19.1	19.8	20.6	21.4	22.2	23.0	23.7	24.5	25.3	26.1	26.8	27.6	28.4	29.2	30.0	30.7	31.5	32.3	33.1	33.9	34.6
Maximum speed (mm/sec)	Lead 40	2400															2280	2160	2040	1800	1560	1320	1200	1080	960
	Speed setting	-															95%	90%	85%	75%	65%	55%	50%	45%	40%
	Lead 20	1200														1140	1020	900	780	720	660	600	540	480	420
	Speed setting	-														95%	85%	75%	65%	60%	55%	50%	45%	40%	35%
	Lead 10	600													570	510	450	390	360	330	300	270	240	210	210
	Speed setting	-													95%	85%	75%	65%	60%	55%	50%	45%	40%	35%	35%
	Lead 5	300													270	240	225	195	180	165	150	135	135	120	105
	Speed setting	-													90%	80%	75%	65%	60%	55%	50%	45%	45%	40%	35%
Stroke restriction	Horizontal · Vertical	No stroke restrictions																							
	Wall hanging	No stroke restrictions																							
	Ceiling-mounted	No stroke restrictions																							

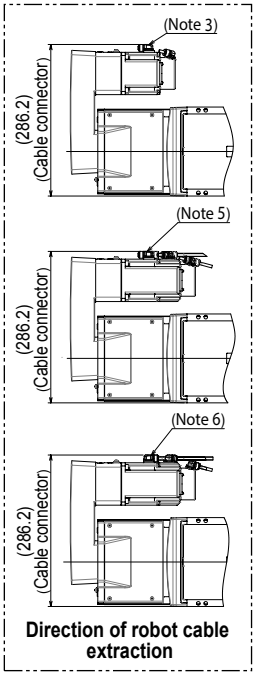
AGFS17H Bending type (R/L)



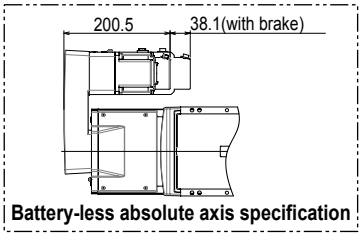
Right attachment



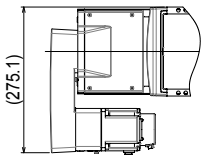
Detailed drawing A



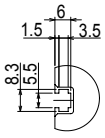
Direction of robot cable extraction



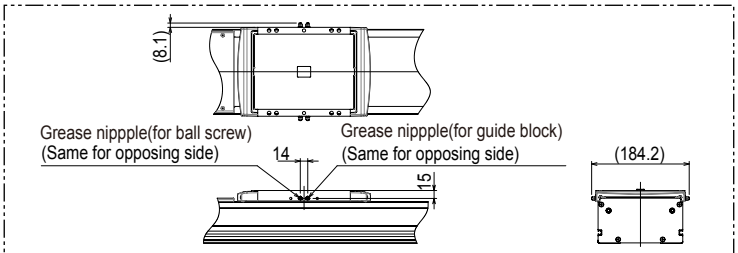
Battery-less absolute axis specification



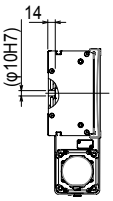
Left attachment



Detailed drawing B



Centralized refueling specification



Cross-section C

Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.9 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +15mm or less>> is recommended for the hex socket head bolts <M8×1.25> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
La		611.5	661.5	711.5	761.5	811.5	861.5	911.5	961.5	1011.5	1061.5	1111.5	1161.5	1211.5	1261.5	1311.5	1361.5	1411.5	1461.5	1511.5	1561.5	1611.5	1661.5	1711.5	1761.5
Lb		559.5	609.5	659.5	709.5	759.5	809.5	859.5	909.5	959.5	1009.5	1059.5	1109.5	1159.5	1209.5	1259.5	1309.5	1359.5	1409.5	1459.5	1509.5	1559.5	1609.5	1659.5	1709.5
Lc		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250
Ld		50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200
Qa		8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18
Qb		2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7
Weight (kg) Note 2		19.4	20.2	21.0	21.8	22.5	23.3	24.1	24.9	25.7	26.4	27.2	28.0	28.8	29.5	30.3	31.1	31.9	32.7	33.4	34.2	35.0	35.8	36.6	37.3
Maximum speed (mm/sec)	Lead 40	2400															2280	2160	2040	1800	1560	1320	1200	1080	960
	Speed setting	-															95%	90%	85%	75%	65%	55%	50%	45%	40%
	Lead 20	1200														1140	1020	900	780	720	660	600	540	480	420
	Speed setting	-														95%	85%	75%	65%	60%	55%	50%	45%	40%	35%
	Lead 10	600													570	510	450	390	360	330	300	270	240	210	210
	Speed setting	-													95%	85%	75%	65%	60%	55%	50%	45%	40%	35%	35%
	Lead 5	300													270	240	225	195	180	165	150	135	135	120	105
	Speed setting	-													90%	80%	75%	65%	60%	55%	50%	45%	45%	40%	35%
Stroke restriction	Horizontal · Vertical	No stroke restrictions																							
	Wall hanging	No stroke restrictions																							
	Ceiling-mounted	No stroke restrictions																							

Controller EP-01 ▶ 582

AGFS17L/AGFS17LH

Advanced model | Single-axis robots | Long-stroke type

Ordering method

Model	Lead	Shape	Motor specification	OP.1	Stroke	Note 1 Cable length	Cable entry location	Robot positioner	Driver: Power capacity	Note 2 Regenerative unit	I/O	Battery Note 3
AGFS17L AGFS17LH	40: 40mm 20: 20mm 10: 10mm 5: 5mm (Only with brakes)	S: Straight R: Right attachment (Only 750W) L: Left attachment (Only 750W)	S: Standard/With no brake BK Standard/With brake BL: Battery-less absolute/ With no brake BKL: Battery-less absolute/With brake	No entry: Standard M: Centeraized lubrication	850 to 3000 (50mm pitch)	R: 3m R5: 5m R10: 10m	R: From rear of motor F: From front of motor	EP-01	A30: 400W/750W	No entry: None R: With EP-RU C: With RU-1	EP: EtherNet/IP™ PT: PROFINET ES: EtherCAT NS: NPN CC: CC-Link	B: With battery N: None

Note 1. The robot cable is flexible and resists bending.
Note 2. [For AGFS17L]
When the actuator is used vertically, lead 40 or 10 is selected, all strokes need the regenerative unit.
When the actuator is used horizontally, lead 40 or 20 is selected, all strokes need the regenerative unit. (In this case, please choose the regenerative device 'RU1'. ①lead 40 is selected, and the stroke is 1400mm or more ②lead 20 is selected, and the stroke is 2300 to 2600mm)
[For AGFS17LH]
When the actuator is used vertically, all lead and all strokes need the regenerative unit. (In this case, please choose the regenerative device 'RU1'. ①lead 20 is selected, all stroke ②lead 10 is selected, all stroke)
When the actuator is used horizontally, lead 40 or 20 is selected, all strokes need the regenerative unit. (In this case, please choose the regenerative device 'RU1'. ①lead 40 is selected, alnd the stroke is 1050mm or more②lead 20 is selected, all stroke)
Note 3. When the motor specification is the standard (S, BK), whether to use the battery needs to be selected.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)

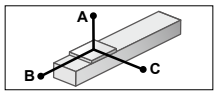
AGFS17L(400W)

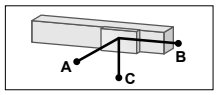
Specifications

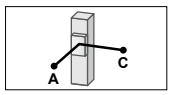
AC servo motor output		400 W			
Repeatability Note 1		±0.01 mm			
Deceleration mechanism		Rolled ball screw ϕ 20 (C7 class)			
Stroke		850 to 3000 (50 mm pitch)			
Maximum speed Note 2		2400 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		40 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	40 kg	90 kg	140 kg	-
	Vertical	6 kg	12 kg	35 kg	50 kg
Rated Thrust		169 N	339 N	678 N	1356 N
Maximum dimensions of cross section of main unit		W 168 mm × H 105.5 mm			
Overall length	Straight	ST + 661 mm			
	Bending	-			
Degree of cleanliness Note 3		Equivalent to ISO Class 3 (ISO 14644-1)			
Intake air Note 4		115 Nℓ/min			
Position detector		Absolute Encoder Batteryless Absolute Encoder			
Resolution		23 bits			
Using ambient temperature and humidity Note 5		0 to 40 °C, 35 to 80 %RH (no condensation)			

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 2000 mm, the ball screw may resonate. (Critical speed) At this time, make the adjustment to decrease the speed
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 800 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.
Note 5. When operating in low-temperature environments, a deviation error may occur when starting from a stopped state. In such cases, reduce the speed to 50% or less and run the unit for at least one full cycle before setting it to the desired operating speed.

Allowable overhang Note







AGFS17L-40

Horizontal installation (Unit: mm)

	A	B	C
10kg	4552	2660	2334
20kg	2637	1307	1198
40kg	1790	631	648

Wall installation (Unit: mm)

	A	B	C
10kg	2364	2610	4491
20kg	1211	1257	2557
40kg	644	580	1676

Vertical installation (Unit: mm)

	A	C
2kg	10270	10270
4kg	5285	5285
6kg	3719	3719

AGFS17L-20

Horizontal installation (Unit: mm)

	A	B	C
30kg	4027	1182	1432
50kg	2687	691	849
90kg	1743	364	454

Wall installation (Unit: mm)

	A	B	C
30kg	1412	1131	3942
50kg	817	641	2583
90kg	412	313	1600

Vertical installation (Unit: mm)

	A	C
4kg	8417	8417
8kg	4231	4231
12kg	2834	2834

AGFS17L-10

Horizontal installation (Unit: mm)

	A	B	C
50kg	6851	966	1332
100kg	3730	461	637
140kg	2817	316	438

Wall installation (Unit: mm)

	A	B	C
50kg	1280	916	6725
100kg	576	410	3577
140kg	374	266	2638

Vertical installation (Unit: mm)

	A	C
15kg	3284	3284
25kg	1957	1957
35kg	1388	1388

AGFS17L-5

Horizontal installation (Unit: mm): No settings

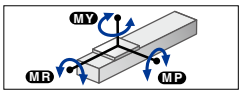
Wall installation (Unit: mm): No settings

Vertical installation (Unit: mm)

	A	C
10kg	5357	5357
30kg	1758	1758
50kg	1038	1038

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 1,000 mm stroke models.
Note. When using it suspended from the ceiling, the overhang will be the same as when used horizontally.

Static loading moment



(Unit: N·m)

MY	MP	MR
1062	1063	934

Controller

Controller	Operation method
EP-01	I/O point trace/ Remote command

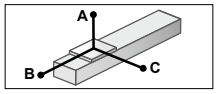
AGFS17LH (750W)

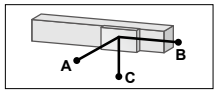
Specifications

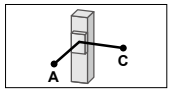
AC servo motor output		750 W			
Repeatability Note 1		±0.01 mm			
Deceleration mechanism		Rolled ball screw ϕ 20 (C7 class)			
Stroke		850 to 3000 (50 mm pitch)			
Maximum speed Note 2		2400 mm/sec	1200 mm/sec	600 mm/sec	300 mm/sec
Ball screw lead		40 mm	20 mm	10 mm	5 mm
Maximum payload	Horizontal	80 kg	150 kg	200 kg	-
	Vertical	12 kg	35 kg	70 kg	100 kg
Rated Thrust		320 N	640 N	1280 N	2560 N
Maximum dimensions of cross section of main unit		W 168 mm × H 105.5 mm			
Overall length	Straight	ST + 675.8 mm			
	Bending	ST + 625.5 mm			
Degree of cleanliness Note 3		Equivalent to ISO Class 3 (ISO 14644-1)			
Intake air Note 4		115 Nℓ/min			
Position detector		Absolute Encoder Batteryless Absolute Encoder			
Resolution		24 bits			
Using ambient temperature and humidity Note 5		0 to 40 °C, 35 to 80 %RH (no condensation)			

Note 1. Positioning repeatability in one direction.
Note 2. When a moving distance is short and depending on an operation When a moving distance is short and depending on an operation condition, it may not reach the maximum speed. If the effective stroke exceeds 2000 mm, the ball screw may resonate. (Critical speed) At this time, make the adjustment to decrease the speed
Note 3. When using in a clean environment, attach a suction air joint. The degree of cleanliness is the cleanliness level achieved when using at 800 mm/sec or less.
Note 4. The required suction amount will vary according to the operating conditions and operating environment.
Note 5. When operating in low-temperature environments, a deviation error may occur when starting from a stopped state. In such cases, reduce the speed to 50% or less and run the unit for at least one full cycle before setting it to the desired operating speed.

Allowable overhang Note







AGFS17LH-40

Horizontal installation (Unit: mm)

	A	B	C
20kg	2128	1307	1125
50kg	1250	495	488
80kg	1142	312	344

Wall installation (Unit: mm)

	A	B	C
20kg	1117	1257	2070
50kg	473	445	1148
80kg	317	262	995

Vertical installation (Unit: mm)

	A	C
4kg	4739	4739
8kg	2414	2414
12kg	1633	1633

AGFS17LH-20

Horizontal installation (Unit: mm)

	A	B	C
50kg	2930	691	856
100kg	2040	323	410
150kg	1619	200	257

Wall installation (Unit: mm)

	A	B	C
50kg	828	641	2812
100kg	369	272	1826
150kg	207	150	1311

Vertical installation (Unit: mm)

	A	C
15kg	2314	2314
25kg	1390	1390
35kg	987	987

AGFS17LH-10

Horizontal installation (Unit: mm)

	A	B	C
100kg	2456	461	627
150kg	1756	292	399
200kg	1395	208	285

Wall installation (Unit: mm)

	A	B	C
100kg	565	410	2373
150kg	335	242	1654
200kg	219	157	1270

Vertical installation (Unit: mm)

	A	C
30kg	1604	1604
50kg	949	949
70kg	668	668

AGFS17LH-5

Horizontal installation (Unit: mm): No settings

Wall installation (Unit: mm): No settings

Vertical installation (Unit: mm)

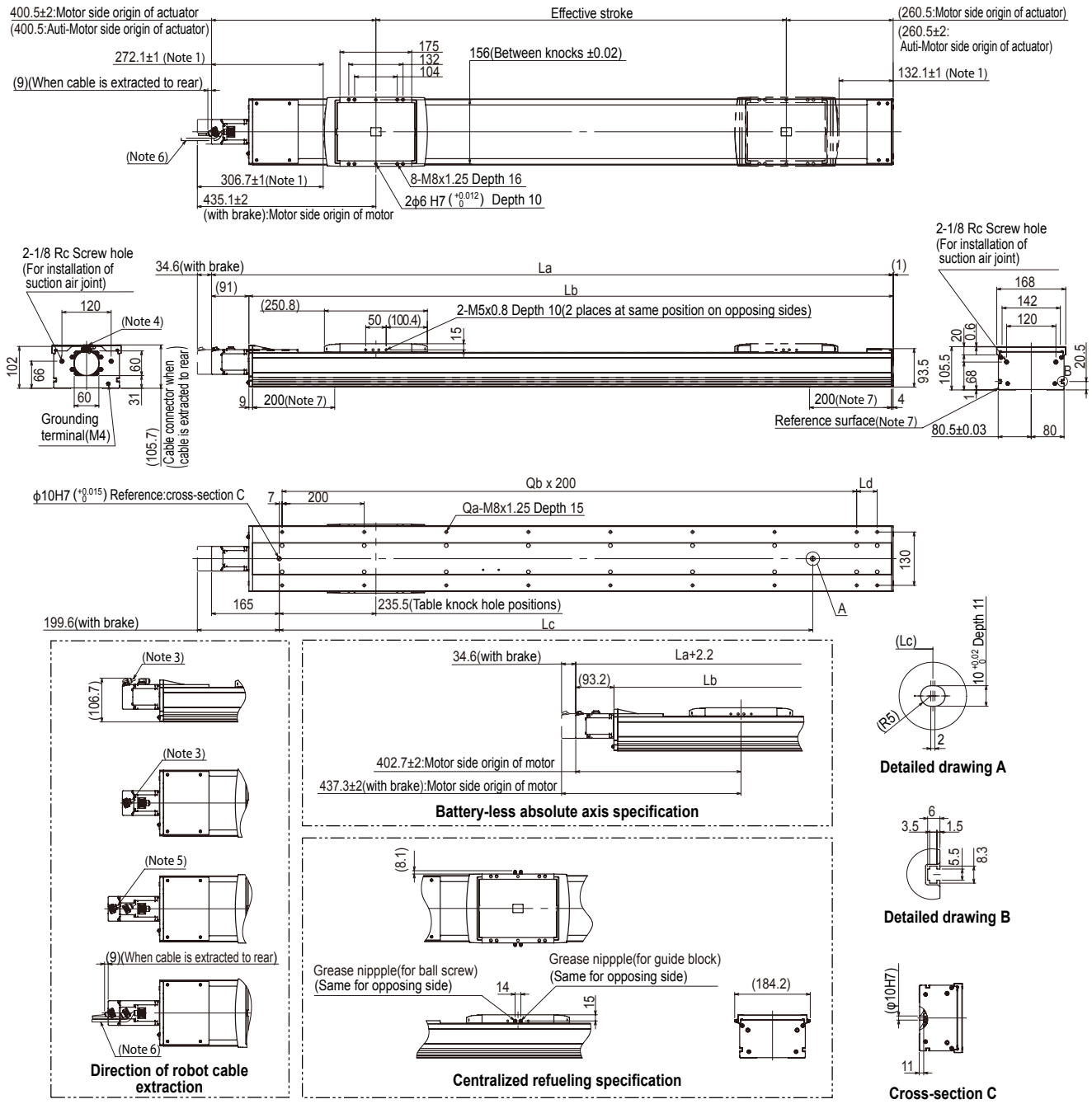
	A	C
40kg	1305	1305
70kg	728	728
100kg	497	497

Note. Distance from center of slider top to center of gravity of object being carried at a guide service life of 10,000 km.
Note. Service life is calculated for 1,000 mm stroke models.
Note. When using it suspended from the ceiling, the overhang will be the same as when used horizontally.

▶ The cycle time simulation and service life calculation can be performed easily from our member site.

Controller EP-01 ▶ 582

AGFS17L Straight type (S)



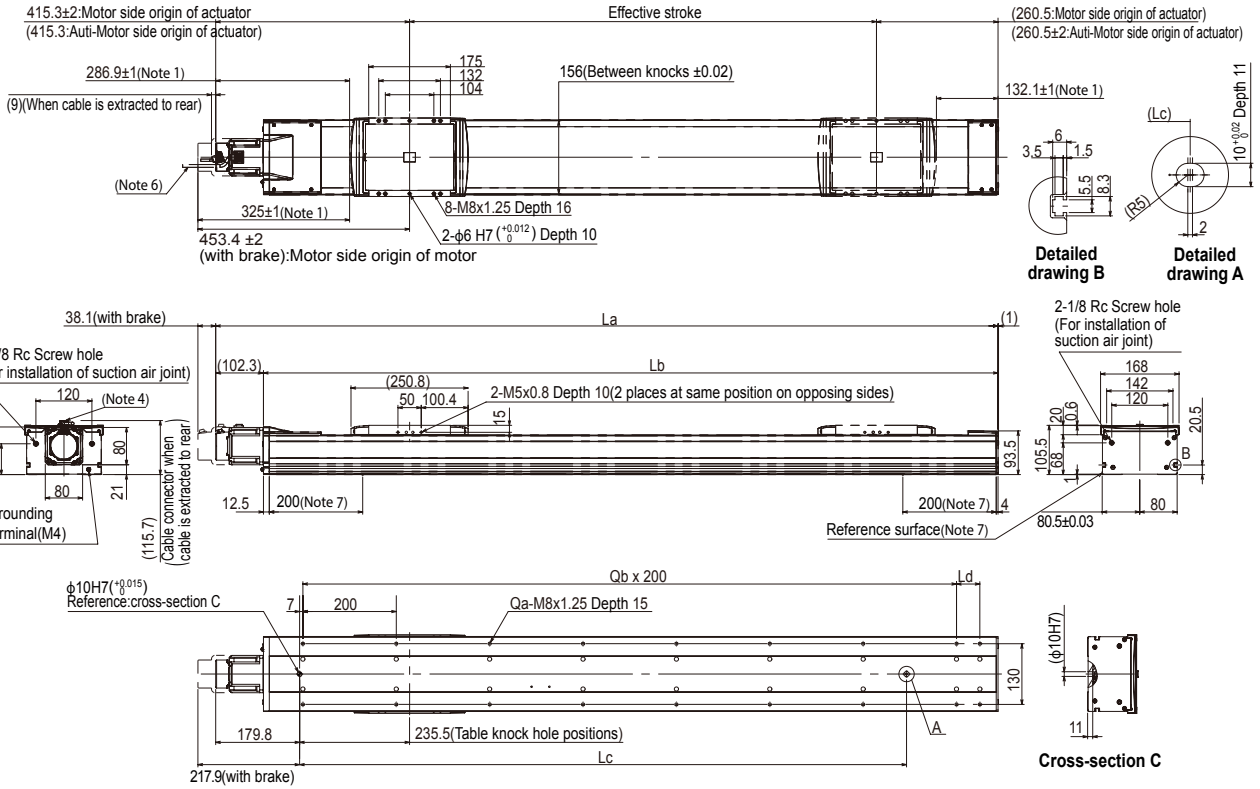
Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.4 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note 7. If the effective stroke is 2050mm or more, the reference surface will be within 200mm from both ends of the frame.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +15mm or less>> is recommended for the hex socket head bolts <M8×1.25> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

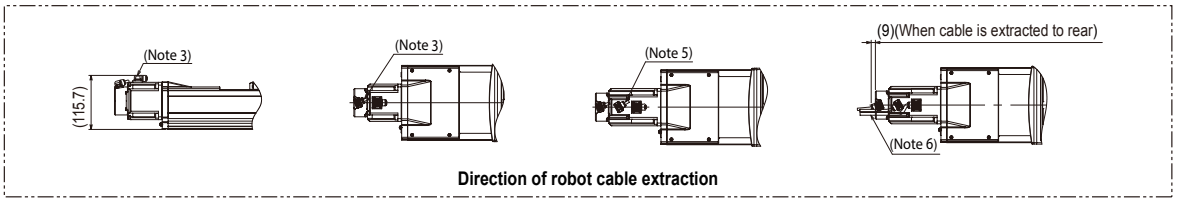
Effective stroke		850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000
La		1511	1561	1611	1661	1711	1761	1811	1861	1911	1961	2011	2061	2111	2161	2211	2261	2311	2361	2411	2461	2511	2561	2611	2661	2711	2761	2811	2861	2911	2961	3011	3061	3111	3161	3211	3261	3311	3361	3411	3461	3511	3561	3611	3661
Lb		1420	1470	1520	1570	1620	1670	1720	1770	1820	1870	1920	1970	2020	2070	2120	2170	2220	2270	2320	2370	2420	2470	2520	2570	2620	2670	2720	2770	2820	2870	2920	2970	3020	3070	3120	3170	3220	3270	3320	3370	3420	3470	3520	3570
Lc		1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300
Ld		100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
Qa		16	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36	36	38
Qb		6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16	16	17
Weight (kg) Note 2		33.2	34.1	34.9	35.8	36.6	37.5	38.3	39.2	40.0	40.9	41.7	42.6	43.4	44.3	45.1	46.0	46.8	47.7	48.5	49.4	50.2	51.1	51.9	52.7	53.6	54.4	55.3	56.1	57.0	57.8	58.7	59.5	60.4	61.2	62.1	62.9	63.8	64.6	65.5	66.3	67.2	68.0	68.9	69.7
Maximum speed (mm/sec)	Lead 40	2400																																		2280	2280	2160	2160	2040	2040	1920	1920	1800	1800
	Speed setting	-																																		95%	95%	90%	90%	85%	85%	80%	80%	75%	75%
	Lead 20	1200																											1140	1140	1080	1080	1020	1020	960	960	900	900	840	840	780	780	780	780
	Speed setting	-																											95%	95%	90%	90%	85%	85%	80%	80%	75%	75%	70%	70%	65%	65%	65%	65%
	Lead 10	600																							540	510	510	480	480	480	480	450	450	450	420	420	420	390	390	390	360	360	360	360
	Speed setting	-																							90%	85%	85%	80%	80%	80%	80%	75%	75%	75%	70%	70%	70%	65%	65%	65%	60%	60%	60%	60%
	Lead 5	300																							255	255	240	240	225	225	210	210	180	180	165	165	165	165	165	165	165	165	165	165
	Speed setting	-																							85%	85%	80%	80%	75%	75%	70%	70%	60%	60%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%
Stroke restriction	Horizontal · Vertical	No stroke restrictions																																											
	Wall hanging	To 1500st																																											
	Ceiling-mounted	To 1200st																																											

Controller EP-01 ▶ 582

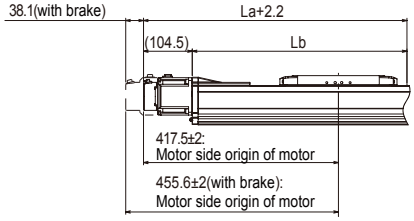
AGFS17LH

AGFS17LH Straight type (S)

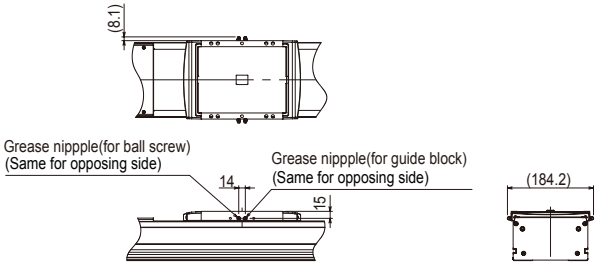




Direction of robot cable extraction



Battery-less absolute axis specification

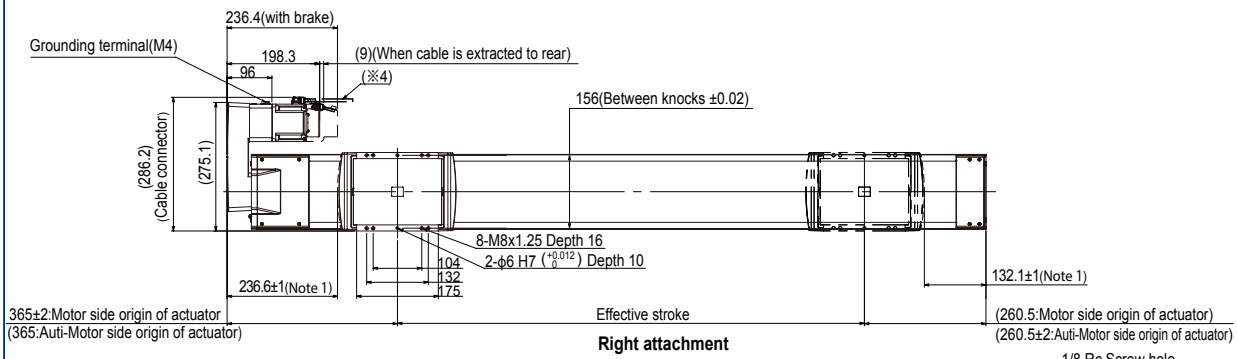


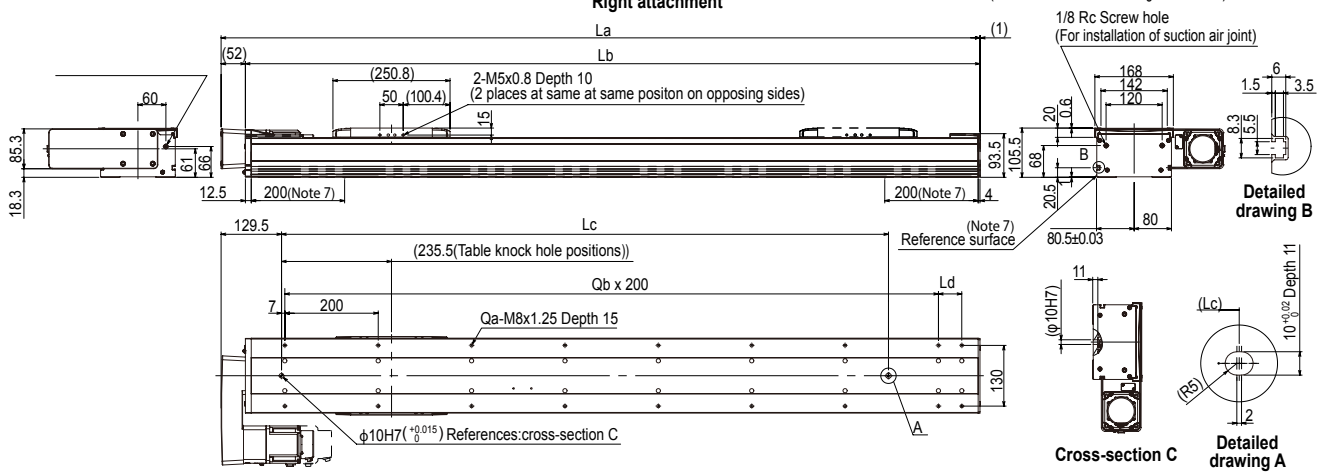
Centralized refueling specification

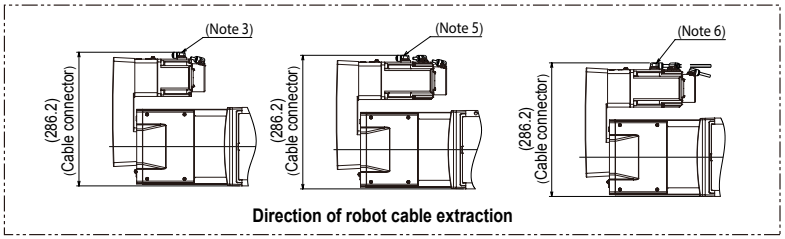
Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.9 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
Note 4. The robot cable is extracted from the rear.
Note 5. The robot cable (with brake) is extracted from the front.
Note 6. The robot cable (with brake) is extracted from the rear.
Note 7. If the effective stroke is 2050mm or more, the reference surface will be within 200mm from both ends of the frame.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +15mm or less>> is recommended for the hex socket head bolts <M8×1.25> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

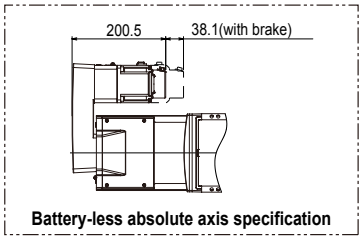
Effective stroke		850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000
La		1525.8	1575.8	1625.8	1675.8	1725.8	1775.8	1825.8	1875.8	1925.8	1975.8	2025.8	2075.8	2125.8	2175.8	2225.8	2275.8	2325.8	2375.8	2425.8	2475.8	2525.8	2575.8	2625.8	2675.8	2725.8	2775.8	2825.8	2875.8	2925.8	2975.8	3025.8	3075.8	3125.8	3175.8	3225.8	3275.8	3325.8	3375.8	3425.8	3475.8	3525.8	3575.8	3625.8	3675.8
Lb		1423.5	1473.5	1523.5	1573.5	1623.5	1673.5	1723.5	1773.5	1823.5	1873.5	1923.5	1973.5	2023.5	2073.5	2123.5	2173.5	2223.5	2273.5	2323.5	2373.5	2423.5	2473.5	2523.5	2573.5	2623.5	2673.5	2723.5	2773.5	2823.5	2873.5	2923.5	2973.5	3023.5	3073.5	3123.5	3173.5	3223.5	3273.5	3323.5	3373.5	3423.5	3473.5	3523.5	3573.5
Lc		1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300
Ld		100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
Qa		16	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36	36	38
Qb		6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16	16	17
Weight (kg) Note 2		34.0	34.9	35.7	36.6	37.4	38.3	39.1	40.0	40.8	41.7	42.5	43.4	44.2	45.1	45.9	46.8	47.6	48.5	49.3	50.2	51.0	51.9	52.7	53.5	54.4	55.2	56.1	56.9	57.8	58.6	59.5	60.3	61.2	62.0	62.9	63.7	64.6	65.4	66.3	67.1	68.0	68.8	69.7	70.5
Maximum speed (mm/sec)	Lead 40	2400																																		2280	2280	2160	2160	2040	2040	1920	1920	1800	1800
	Speed setting	-																																		95%	95%	90%	90%	85%	85%	80%	80%	75%	75%
	Lead 20	1200																											1140	1140	1080	1080	1020	1020	960	960	900	900	840	840	780	780	780	780
	Speed setting	-																											95%	95%	90%	90%	85%	85%	80%	80%	75%	75%	70%	70%	65%	65%	65%	65%
	Lead 10	600																							540	510	510	480	480	480	480	450	450	450	420	420	420	390	390	390	360	360	360	360
	Speed setting	-																							90%	85%	85%	80%	80%	80%	80%	75%	75%	75%	70%	70%	70%	65%	65%	65%	60%	60%	60%	60%
	Lead 5	300																							255	255	240	240	225	225	210	210	180	180	165	165	165	165	165	165	165	165	165	165
	Speed setting	-																							85%	85%	80%	80%	75%	75%	70%	70%	60%	60%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%
Stroke restriction	Horizontal・Vertical	No stroke restrictions																																										
	Wall hanging	To 1500st																																										
	Ceiling-mounted	To 1200st																																										

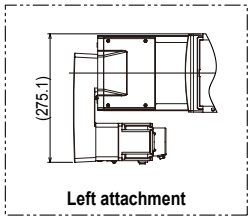
AGFS17LH Bending type (R/L)

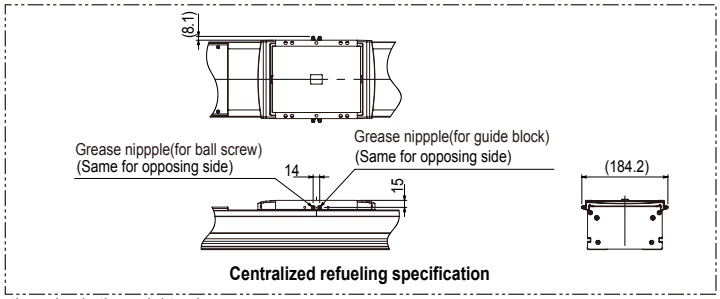












Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. Weight without brake. The weight with the brake is 0.9 kg heavier than the value in the weight column.
Note 3. The robot cable is extracted from the front.
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Note 5. The robot cable (with brake) is extracted from the front.
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Note 7. If the effective stroke is 2050mm or more, the reference surface will be within 200mm from both ends of the frame.
Note. The return-to-origin direction can be changed by changing the parameter. (The standard is that the origin is located on the motor side. For details about how to change the return-to-origin direction, see the instruction manual for EP-01.)
Note. In the installation tap hole, the length under head <<thickness of stand +15mm or less>> is recommended for the hex socket head bolts <M8×1.25> used to install the main unit.
Note. The minimum bending radius for robot cables should be R30 or more for fixed cables / R50 or more for movable cables.

Effective stroke		850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000
La		1475.5	1525.5	1575.5	1625.5	1675.5	1725.5	1775.5	1825.5	1875.5	1925.5	1975.5	2025.5	2075.5	2125.5	2175.5	2225.5	2275.5	2325.5	2375.5	2425.5	2475.5	2525.5	2575.5	2625.5	2675.5	2725.5	2775.5	2825.5	2875.5	2925.5	2975.5	3025.5	3075.5	3125.5	3175.5	3225.5	3275.5	3325.5	3375.5	3425.5	3475.5	3525.5	3575.5	3625.5
Lb		1423.5	1473.5	1523.5	1573.5	1623.5	1673.5	1723.5	1773.5	1823.5	1873.5	1923.5	1973.5	2023.5	2073.5	2123.5	2173.5	2223.5	2273.5	2323.5	2373.5	2423.5	2473.5	2523.5	2573.5	2623.5	2673.5	2723.5	2773.5	2823.5	2873.5	2923.5	2973.5	3023.5	3073.5	3123.5	3173.5	3223.5	3273.5	3323.5	3373.5	3423.5	3473.5	3523.5	3573.5
Lc		1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300	2350	2400	2450	2500	2550	2600	2650	2700	2750	2800	2850	2900	2950	3000	3050	3100	3150	3200	3250	3300
Ld		100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50	100	150	200	50
Qa		16	16	16	18	18	18	18	20	20	20	20	22	22	22	22	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32	32	34	34	34	34	36	36	36	36	38
Qb		6	6	6	7	7	7	7	8	8	8	8	9	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	16	16	17
Weight (kg) Note 2		36.7	37.6	38.4	39.3	40.1	41.0	41.8	42.7	43.5	44.4	45.2	46.1	46.9	47.8	48.6	49.5	50.3	51.2	52.0	52.9	53.7	54.6	55.4	56.2	57.1	57.9	58.8	59.6	60.5	61.3	62.2	63.0	63.9	64.7	65.6	66.4	67.3	68.1	69.0	69.8	70.7	71.5	72.4	73.2
Maximum speed (mm/sec)	Lead 40	2400																																		2280	2280	2160	2160	2040	2040	1920	1920	1800	1800
	Speed setting	-																																		95%	95%	90%	90%	85%	85%	80%	80%	75%	75%
	Lead 20	1200																											1140	1140	1080	1080	1020	1020	960	960	900	900	840	840	780	780	780	780
	Speed setting	-																											95%	95%	90%	90%	85%	85%	80%	80%	75%	75%	70%	70%	65%	65%	65%	65%
	Lead 10	600																							540	510	510	480	480	480	480	450	450	450	420	420	420	390	390	390	360	360	360	360
	Speed setting	-																							90%	85%	85%	80%	80%	80%	80%	75%	75%	75%	70%	70%	70%	65%	65%	65%	60%	60%	60%	60%
	Lead 5	300																							255	255	240	240	225	225	210	210	180	180	165	165	165	165	165	165	165	165	165	165
	Speed setting	-																							85%	85%	80%	80%	75%	75%	70%	70%	60%	60%	55%	55%	55%	55%	55%	55%	55%	55%	55%	55%
Stroke restriction	Horizontal・Vertical	No stroke restrictions																																										
	Wall hanging	To 1500st																																										
	Ceiling-mounted	To 1200st																																										

Controller EP-01 ▶ 582