

GF14XL

● Origin on the non-motor side is selectable

Note. If you need an installation posture other than the horizontal installation, please contact us.

Ordering method

GF14XL - S H - 20

Model	Model S: Straight model	Installation direction H: Horizontal installation	Lead designation	Cable entry location	Origin position change	Frame	Grease type	Stroke	Cable length
				No entry: Standard (S) U: From the top R: From the right L: From the left	None: Standard Z: Non-motor side	No entry: Standard Spot facing T: Tapping	None: Standard GC: Clean	750 to 2000 (50mm pitch)	3L: 3.5m 5L: 5m 10L: 10m 3K/5K/10K (Flexible cable)

TSX	SR1-X	RDV-X	Battery
Positioning: TSX: TS-X	Driver: Power supply voltage 110: 100V/200W 210: 200V/200W	Driver: Power capacity 10: 200W	B: With battery (Absolute) N: None (Incremental)

SR1-X	RDV-X	Battery
Controller	Driver: Power capacity 10: 200W	B: With battery (Absolute) N: None (Incremental)

RDV-X	Battery
Driver	B: With battery (Absolute) N: None (Incremental)

Note 1. The robot cable is standard cable (3L/5L/10L), but can be changed to flexible cable. See P.732 for details on robot cable.
Note 2. See P.634 for DIN rail mounting bracket.
Note 3. Select this selection when using the gateway function. For details, see P.96.

Cautions after purchase

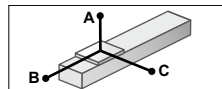
- When changing the origin position, contact us since the adjustment is needed.
- When changing the cable entry location, contact us since necessary parts may vary depending on the cable entry location.
- Do not install the robot with the horizontal installation specifications in a direction other than the horizontal direction.

Specifications

AC servo motor output (W)	200
Repeatability Note 1 (mm)	+/-0.01
Deceleration mechanism	Ball screw ϕ 15
Ball screw lead (mm)	20
Maximum speed (mm/sec)	1200
Maximum payload (kg)	45
Rated thrust (N)	170
Stroke (mm)	750 to 2000 (50mm pitch)
Overall length (mm)	Stroke+561
Maximum dimensions of cross section of main unit (mm)	W140×H91.5
Cable length (m)	Standard: 3.5 / Option: 5.10
Linear guide type	4 rows of circular arc grooves × 2 rail
Position detector	Resolvers Note 2
Resolution (Pulse/rotation)	20480

Note 1. Positioning repeatability in one direction.
Note 2. Position detectors (resolvers) are common to incremental and absolute specifications. If the controller has a backup function then it will be absolute specifications.

Allowable overhang Note

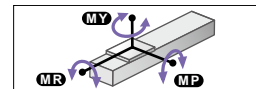


Horizontal installation (Unit: mm)			
Lead	A	B	C
	10kg	3550	1340
20kg	2075	685	633
45kg	1280	326	308

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 1000mm stroke models.

Static loading moment

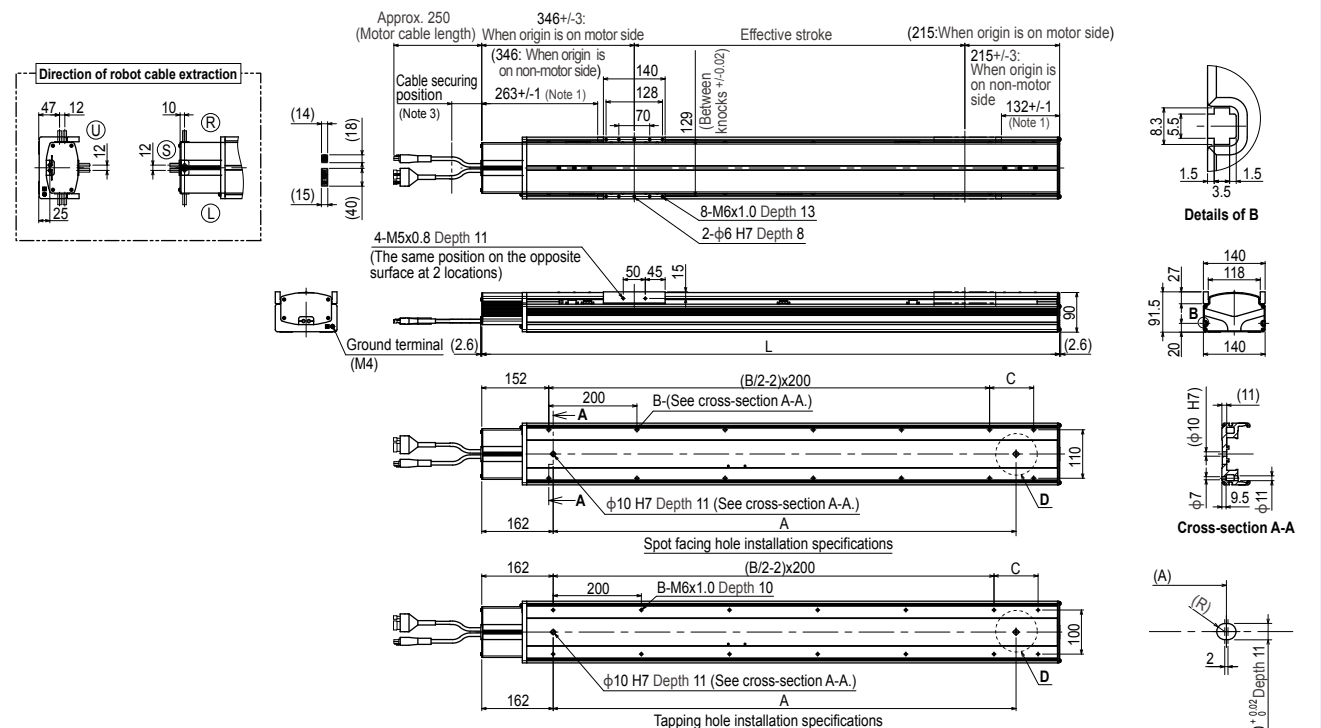


(Unit: N-m)		
MY	MP	MR
551	552	485

Controller

Controller	Operation method
SR1-X10	Programming / I/O point trace / Remote command / Operation using RS-232C communication
RCX320	
RCX221/222	
RCX340	
TS-X110	I/O point trace / Remote command
TS-X210	
RDV-X220-RBR1	Pulse train control

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Note 1. Stop positions are determined by the mechanical stoppers at both ends.
Note 2. When changing the return-to-origin direction, the adjustment is needed. (The standard is the origin on the motor side.)
Note 3. Secure the cable with a tie-band 100mm or less from unit's end face to prevent the cable from being subjected to excessive loads.
Note 4. The cable's minimum bend radius is R30.
Note 5. The length under head of the hexagonal socket head bolts (M6 x 1.0) that are used to install the main body with the spot facing hole installation specifications is 20mm or more. It is recommended that the length under head of the hexagonal socket head bolts (M6 x 1.0) that are used to install the main body with the tapping hole installation specifications is the thickness of the installation base + 10mm or less.

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
L	1311	1361	1411	1461	1511	1561	1611	1661	1711	1761	1811	1861	1911	1961	2011	2061	2111	2161	2211	2261	2311	2361	2411	2461	2511	2561
A	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
B	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
C	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
Weight (kg)	22.5	23.2	23.8	24.5	25.2	25.9	26.5	27.2	27.9	28.6	29.2	29.9	30.6	31.3	31.9	32.6	33.3	33.9	34.6	35.3	36.0	36.6	37.3	38.0	38.7	39.3