T5

High lead: Lead 20 **Origin at non-motor side**

Ordering method

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Model	Lead designation	Brake	Option	Stroke	Cable length Note 1	Controller	Usable for CE	Network option	Battery
	20: 20mm 12: 12mm 6: 6mm	No entry: No brakes BK: Brakes provided	Origin position change: None: Standard / Z: Non-motor side Grease type: None: Standard / GC: Clean	Lead 12·6: 50 to 600 (50mm pitch) Lead 20: 50 to 800 (50mm pitch)	3L: 3.5m (Standard) 5L: 5m 10L: 10m 3K/5K/10K No e 1	ERCX ERCD Note 2	No entry: Standard E: CE marking	No entry: None CC: CC-Link DN: DeviceNet PB: Profibus EN: Ethernet	B1: 700mAh B2: 2000mAh

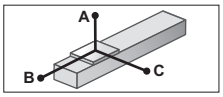
Note 1. The robot cable is standard cable, but can be changed to bend-resistant cable. See P.424 for details on robot cable.
Note 2. To find ERCD selection options, see the ordering method on P.370.

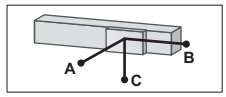
Specifications

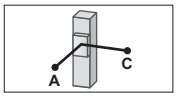
AC servo motor output (W)		30		
Repeatability Note 1 (mm)		+/-0.02		
Deceleration mechanism		Ball screw (Class C10)		
Ball screw lead (mm)		20	12	6
Maximum speed Note 2 (mm/sec)		1200	800	400
Maximum payload (kg)	Horizontal	3	5	9
	Vertical	–	1.2	2.4
Rated thrust (N)		19	32	64
Stroke (mm)		50 to 800 Note 3 (50mm pitch)		
Overall length (mm)	Horizontal	Stroke+201.5		
	Vertical	Stroke+239.5		
Maximum dimensions of cross section of main unit (mm)		W55 × H52		
Cable length (m)		Standard: 3 5 / Option: 5,10		
Linear guide type		2 rows of gothic arch grooves × 1 rail		
Position detector		Resolvers Note		
Resolution (Pulse/rotation)		16384		

Note 1. Positioning repeatability in one direction.
Note 2. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table below.
Note 3. 650mm or longer strokes are only available with high lead specifications (Lead 20).
Note 4. 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)

		A	B	C
Lead 20	1kg	600	323	683
	3kg	675	103	247
Lead 12	2kg	1170	159	406
	5kg	555	59	155
Lead 6	3kg	1498	104	294
	9kg	628	31	89

Wall installation (Unit: mm)

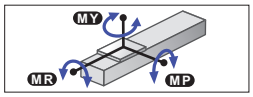
		A	B	C
Lead 20	1kg	600	291	600
	3kg	215	73	589
Lead 12	2kg	368	127	1082
	5kg	127	30	449
Lead 6	3kg	263	73	970
	9kg	54	0	400

Vertical installation (Unit: mm)

		A	C
Lead 12	1.2kg	242	240
Lead 6	2.4kg	113	113

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

Static loading moment



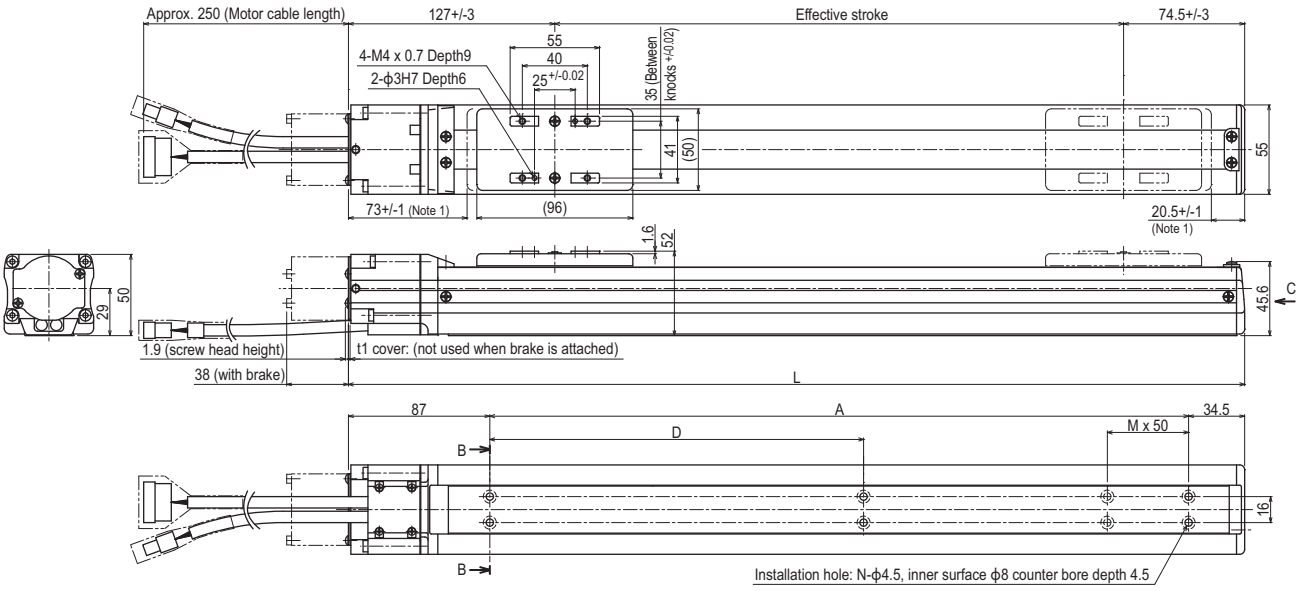
(Unit: N·m)

MY	MP	MR
30	34	40

Controller

Controller	Operation method
ERCX	Programming / I/O point trace / Remote command / Operation using RS-232C communication
ERCD	Pulse train control / Programming / I/O point trace / Remote command / Operation using RS-232C communication

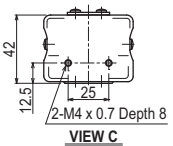
T5



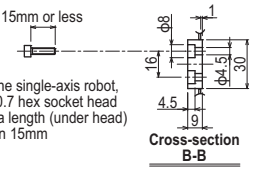
Note 1. Distance from both ends to the mechanical stopper.
Note 2. Minimum bend radius of motor cable is R50.
Note 3. Weight of models with no brake. The weight of brake-attached models is 0.2 kg heavier than the models with no brake shown in the table.
Note 4. Effective strokes of 650 to 800 mm are only available with high lead specifications (Lead 20).

Effective stroke		50	100	150	200	250	300	350	400	450	500	550	600	650 Note 4	700 Note 4	750 Note 4	800 Note 4
L		251 5	301.5	351.5	401 5	451.5	501.5	551.5	601.5	651.5	701.5	751.5	801.5	851.5	901.5	951 5	1001.5
A		130	180	230	280	330	380	430	480	530	580	630	680	730	780	830	880
D		–	–	–	–	–	–	230	230	230	230	230	230	230	230	230	230
M		0	1	2	3	4	5	0	1	2	3	4	5	6	7	8	9
N		4	6	8	10	12	14	6	8	10	12	14	16	18	20	22	24
Weight (kg) Note 3		2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5
Maximum speed for each stroke Note 5 (mm/sec)	Lead 20	1200												960	840	720	660
	Lead 12	800												–	–	–	–
	Lead 6	400												–	–	–	–
	Speed setting	-												80%	70%	60%	55%

Note 5. When the stroke is longer than 650mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program by referring to the maximum speeds shown in the table above.



VIEW C



To install the single-axis robot, use M4 x 0.7 hex socket head bolts with a length (under head) of less than 15mm

Cross-section B-B