

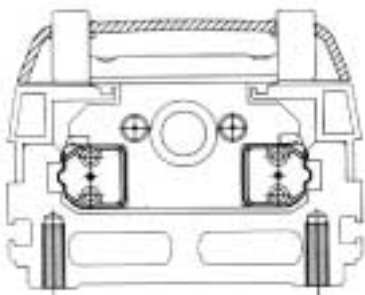




- A protective stainless steel sheet prevents particles from getting inside the actuator, and restrict grease from migrating outside the actuator
- All of the components used including the AC servo motor, ballscrew, guide and frame, were developed by our company
- Repeatability:  $\pm 0.02$  mm
- maximum Stroke: 1600 mm
- maximum Speed: 1000 mm/sec
- maximum Payload: 80 kg
- Operating Environment IP 40

## ISD-S-4-60-600-HP-B

	1	2	3	4	5
1 Size	S M (X) L (X)			small medium (with mid support) large (with mid support)	
2 Screw Lead		4, 8, 16 5, 10, 20 10, 20		Lead for S-Type Lead for M-Type Lead for L-Type	
3 Motor Wattage		60 100 200 400		60W 100W 200W 400W	
4 Stroke		100 1600		minimum stroke maximum stroke (depends on axis size)	
5 Options		B		Brake	



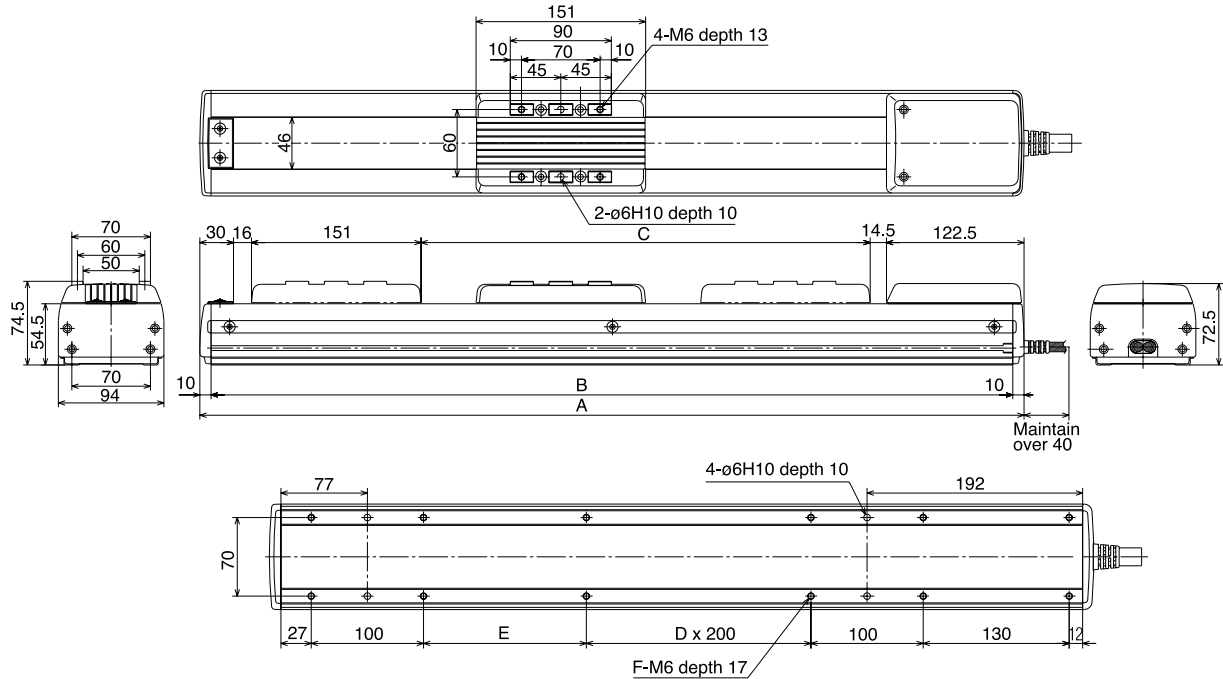
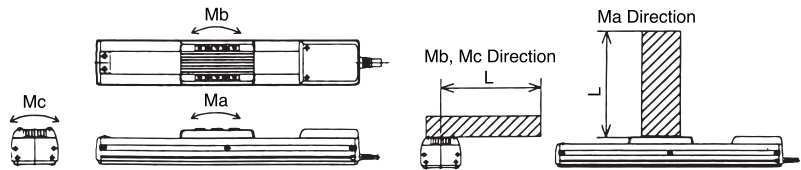
Type	Rated Power <i>W</i>	Screw Lead <i>mm</i>	Maximum Speed <i>mm/sec</i>	maximum Payload <i>kg</i>	Moment			Stroke <i>mm</i> (in steps of 100mm)
					<i>Nm</i>	Ma	Mb	
S	60	4	200	50	28.4	40.2	65.7	100-600
		8	400	25				
		16	800	12				
M	100	5	250	80	69.6	99.0	161.7	100-1000
		10	500	40				
	200	10	500	80				
		20	1000	40				
MX	200	20	1000	40	69.6	99.0	161.7	800-1600
L	200	10	500	80	104.9	149.9	248.9	100-1200
		20	1000	40				
		400	20	1000				
LX	200	20	1000	40	104.9	149.9	248.9	1000-1600
		400	20	1000				

# ISD-S-□-60 [Small 60W Type]

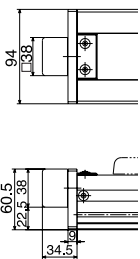
Specifications in ( ) are for 8mm lead. Specifications in <> are for 16 mm lead.

Stroke	mm	100	200	300	400	500	600
Rated Power	W	60					
Maximum Velocity	mm/sec	200 (400) <800>					190 (380) <760>
Rated Trust	N	254.8 (127.4) <63.7>					
Repeatability	mm	±0.02					
Unit Weight	kg	4.0	4.6	5.3	5.9	6.5	7.2
Motor		AC Servo Motor					
Encoder		Attached to Motor					
Ballscrew		ø12mm, Lead 4mm, (8mm), <16mm>, Rolled Thread C10, Backlash 0.05mm or less					
Guide		Unique to IS, Integrated into Base					
Motor/Ballscrew Connection		Motor/Ballscrew Shaft Integrated					
Base		Extruded Aluminium (A6N01S-T5) White Alumited Treatment					
Protective Stainless Sheet		Stainless Steel Sheet (SUS430), Thickness 0.1mm					
Maximum Trust (note 1)	N	509.6 (254.8) <127.4>					
Payload (note 2, 3)	kg	Horizontal Use: 50 (25) <12>, Vertical Use: 14 (6) <3>					
Moment (note 2, 4)	Nm	Ma: 28.4 Mb: 40.2 Mc: 65.7					
Overhang Load Length (note 5)	mm	Ma: 450 Mb, Mc: 450					

- Note 1) At a speed of 10mm/sec for 5 seconds
- Note 2) Load uniformly distributed on the slide. Base affixed to a flat, strong frame.
- Note 3) At an acceleration of 0.15 (0.3) <0.3> g and 200 (400) <800> mm/sec speed.
- Note 4) See figures.
- Note 5) The centre of gravity exists at the half-way point of the overhang load length.



## Optional Brake



Specification	Single Dry Disc Type Magnetic Brake		
Model	MB36B90-1		
Screw Lead (mm)	4	8	16
Holding force N	251.3	125.7	62.8
Attachment Position	Ballscrew Shaft		
Rated Power Volt.	approx. 80 V AC		

## Dimensions

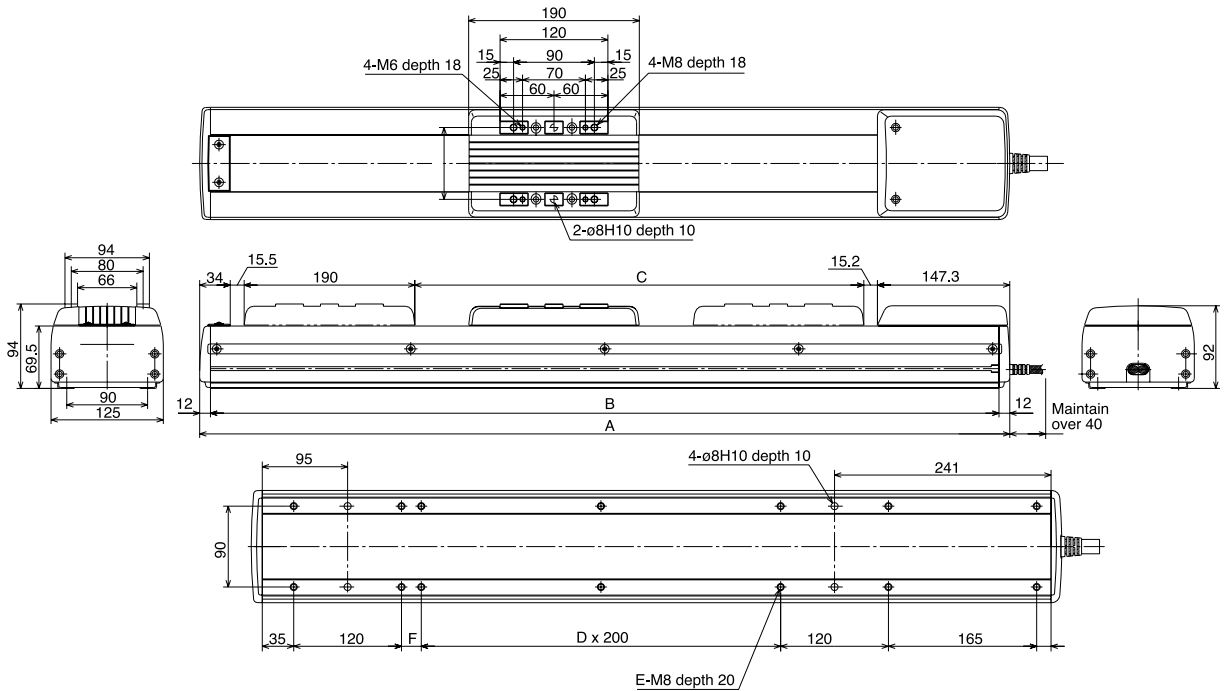
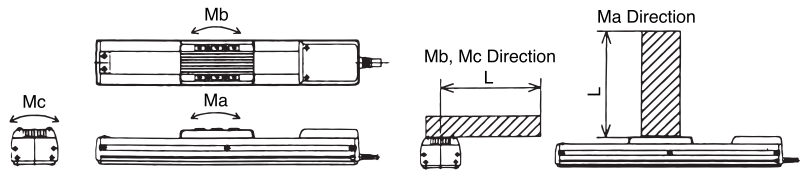
Stroke	100	200	300	400	500	600
A	434	534	634	734	834	934
B	414	514	614	714	814	914
C	100	200	300	400	500	600
D	-	-	1	1	2	2
E	45	145	45	145	45	145
F	10	10	12	12	14	14

# ISD-M-□-100 [Medium 100W Type]

Specifications in ( ) are for 10mm lead. Specifications in < > are for 20 mm lead.

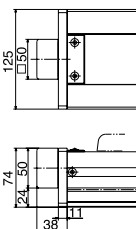
Stroke	mm	100	200	300	400	500	600	700	800	900	1000
Rated Power	W	100									
Maximum Velocity	mm/sec	250 (500) <1000>						225 (455) <915>	180 (365) <735>	150 (300) <600>	125 (250) <500>
Rated Trust	N	340.1 (169.5) <84.3>									
Repeatability	mm	±0.02									
Unit Weight	kg	7.8	8.9	10.1	11.2	12.3	13.5	14.6	15.7	16.9	18
Motor		AC Servo Motor									
Encoder		Attached to Motor									
Ballscrew		ø16mm, Lead 5mm, (10mm), <20mm>, Rolled Thread C10, Backlash 0.05mm or less									
Guide		Unique to IS, Integrated into Base									
Motor/Ballscrew Connection		Motor/Ballscrew Shaft Integrated									
Base		Extruded Aluminium (A6N01S-T5) White Alumited Treatment									
Protective Stainless Sheet		Stainless Steel Sheet (SUS430), Thickness 0.1mm									
Maximum Trust (note 1)	N	680.2 (339.0) <168.6>									
Payload (note 2, 3)	kg	Horizontal Use: 80 (40) <20>, Vertical Use: 19 (9) <5>									
Moment (note 2, 4)	Nm	Ma: 69.6 Mb: 99.0 Mc: 161.7									
Overhang Load Length (note 5)	mm	Ma: 600 Mb, Mc: 600									

- Note 1) At a speed of 10mm/sec for 5 seconds
- Note 2) Load uniformly distributed on the slide. Base affixed to a flat, strong frame.
- Note 3) At an acceleration of 0.15 (0.3) <0.3> g and 250 (500) <1000> mm/sec speed.
- Note 4) See figures.
- Note 5) The centre of gravity exists at the half-way point of the overhang load length.



## Optional Brake

## Dimensions



Specification	Single Dry Disc Type Magnetic Brake		
Model	MCNB3-04		
Screw Lead (mm)	5	10	20
Holding force N	492.6	246.3	123.2
Attachment Position	Ballscrew Shaft		
Rated Power Volt.	approx. 80 V AC		

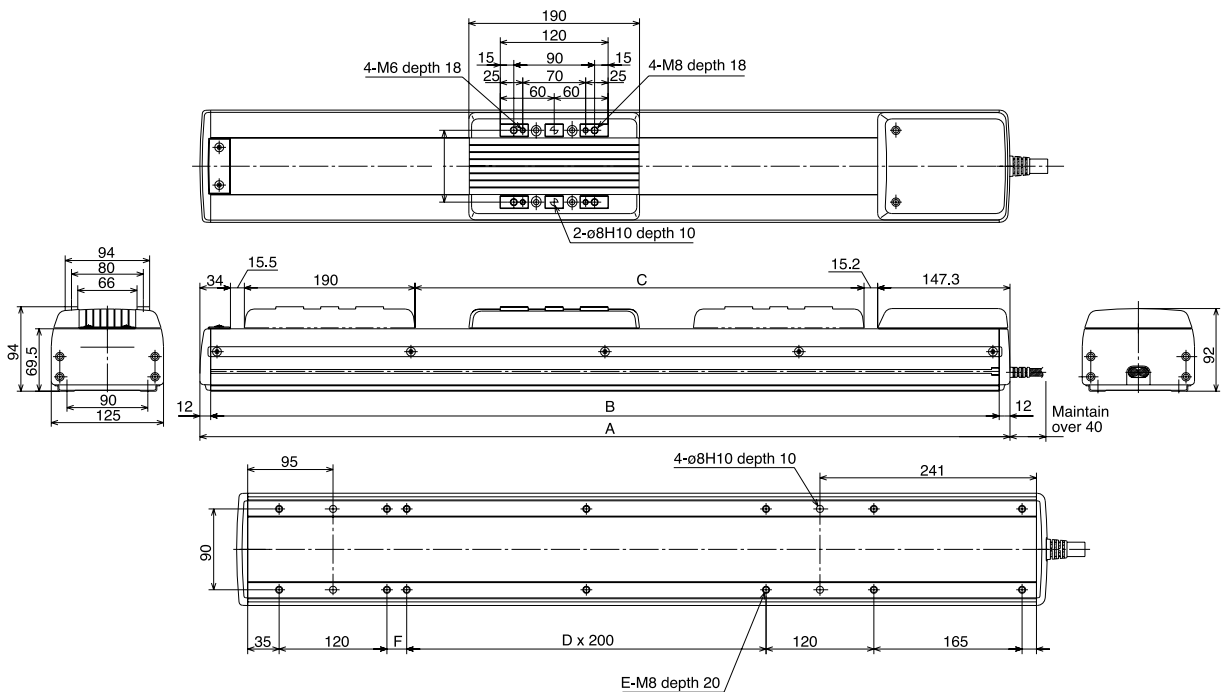
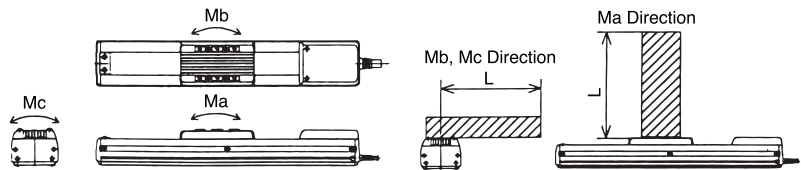
Stroke	100	200	300	400	500	600	700	800	900	1000
A	502	602	702	802	902	1002	1102	1202	1302	1402
B	478	578	678	778	878	978	1078	1178	1278	1378
C	100	200	300	400	500	600	700	800	900	1000
D	-	-	1	1	2	2	3	3	4	4
E	10	10	12	12	14	14	16	16	18	18
F	22	122	22	122	22	122	22	122	22	122

# ISD-M-□-200 [Medium 200W Type]

Specifications in ( ) are for 20mm lead

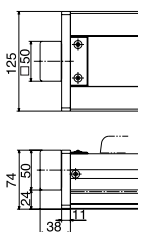
Stroke	mm	100	200	300	400	500	600	700	800	900	1000
Rated Power	W	200									
Maximum Velocity	mm/sec	500 (1000)						455 (915)	365 (735)	300 (600)	250 (500)
Rated Trust	N	340.1 (169.5)									
Repeatability	mm	±0.02									
Unit Weight	kg	7.8	8.9	10.1	11.2	12.3	13.5	14.6	15.7	16.9	18
Motor		AC Servo Motor									
Encoder		Attached to Motor									
Ballscrew		ø16mm, Lead 10mm, (20mm), Rolled Thread C10, Backlash 0.05mm or less									
Guide		Unique to IS, Integrated into Base									
Motor/Ballscrew Connection		Motor/Ballscrew Shaft Integrated									
Base		Extruded Aluminium (A6N01S-T5) White Alumited Treatment									
Protective Stainless Sheet		Stainless Steel Sheet (SUS430), Thickness 0.1mm									
Maximum Trust (note 1)	N	680.2 (339.0)									
Payload (note 2, 3)	kg	Horizontal Use: 80 (40); Vertical Use: 19 (9)									
Moment (note 2, 4)	Nm	Ma: 69.6 Mb: 99.0 Mc: 161.7									
Overhang Load Length (note 5)	mm	Ma: 600 Mb, Mc: 600									

- Note 1) At a speed of 10mm/sec for 5 seconds
- Note 2) Load uniformly distributed on the slide. Base affixed to a flat, strong frame.
- Note 3) At an acceleration of 0.3 g and 500 (1000) mm/sec speed.
- Note 4) See figures.
- Note 5) The centre of gravity exists at the half-way point of the overhang load length.



## Optional Brake

## Dimensions



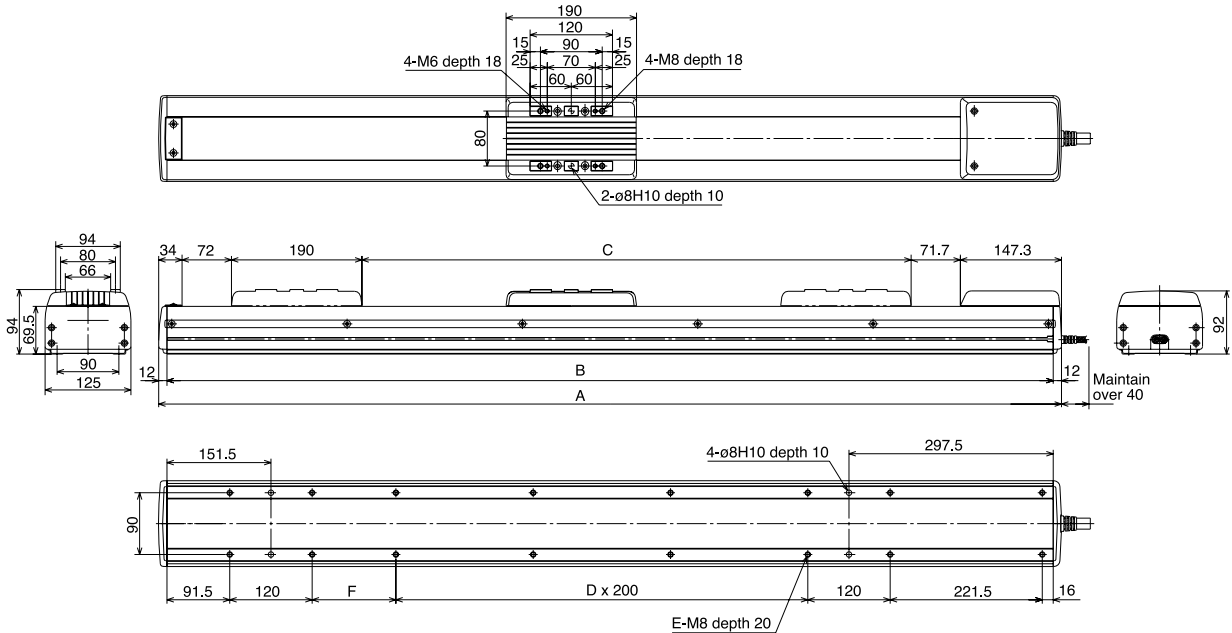
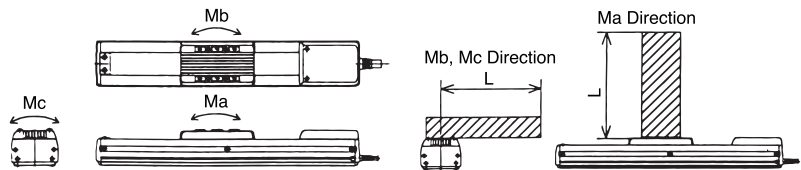
Specification	Single Dry Disc Type Magnetic Brake	
Model	MCNB3-04	
Screw Lead (mm)	10	20
Holding force N	246.3	123.2
Attachment Position	Ballscrew Shaft	
Rated Power Volt.	approx. 80 V AC	

Stroke	100	200	300	400	500	600	700	800	900	1000
A	502	602	702	802	902	1002	1102	1202	1302	1402
B	478	578	678	778	878	978	1078	1178	1278	1378
C	100	200	300	400	500	600	700	800	900	1000
D	-	-	1	1	2	2	3	3	4	4
E	10	10	12	12	14	14	16	16	18	18
F	22	122	22	122	22	122	22	122	22	122

# ISD-MX-200 [Medium 200W Type]

Stroke	mm	800	900	1000	1100	1200	1300	1400	1500	1600
Rated Power	W	200								
Maximum Velocity	mm/sec	1000						950	800	700
Rated Trust	N	169.5								
Repeatability	mm	±0.02								
Unit Weight	kg	17.8	18.9	20.1	21.2	22.3	23.5	24.6	25.8	26.9
Motor		AC Servo Motor								
Encoder		Attached to Motor								
Ballscrew		ø16mm, Lead 20mm, Rolled Thread C10, Backlash 0.05mm or less								
Guide		Unique to IS, Integrated into Base								
Motor/Ballscrew Connection		Motor/Ballscrew Shaft Integrated								
Base		Extruded Aluminium (A6N01S-T5) White Alumited Treatment								
Protective Stainless Sheet		Stainless Steel Sheet (SUS430), Thickness 0.1mm								
Maximum Trust (note 1)	N	339.0								
Payload (note 2, 3)	kg	Horizontale Use: 40								
Moment (note 2, 4)	Nm	Ma: 69.6 Mb: 99.0 Mc: 161.7								
Overhang Load Length (note 5)	mm	Ma: 600 Mb, Mc: 600								

- Note 1) At a speed of 10mm/sec for 5 seconds
- Note 2) Load uniformly distributed on the slide. Base affixed to a flat, strong frame.
- Note 3) At an acceleration of 0.3 g and 1000 mm/sec speed.
- Note 4) See figures.
- Note 5) The centre of gravity exists at the half-way point of the overhang load length.



## Dimensions

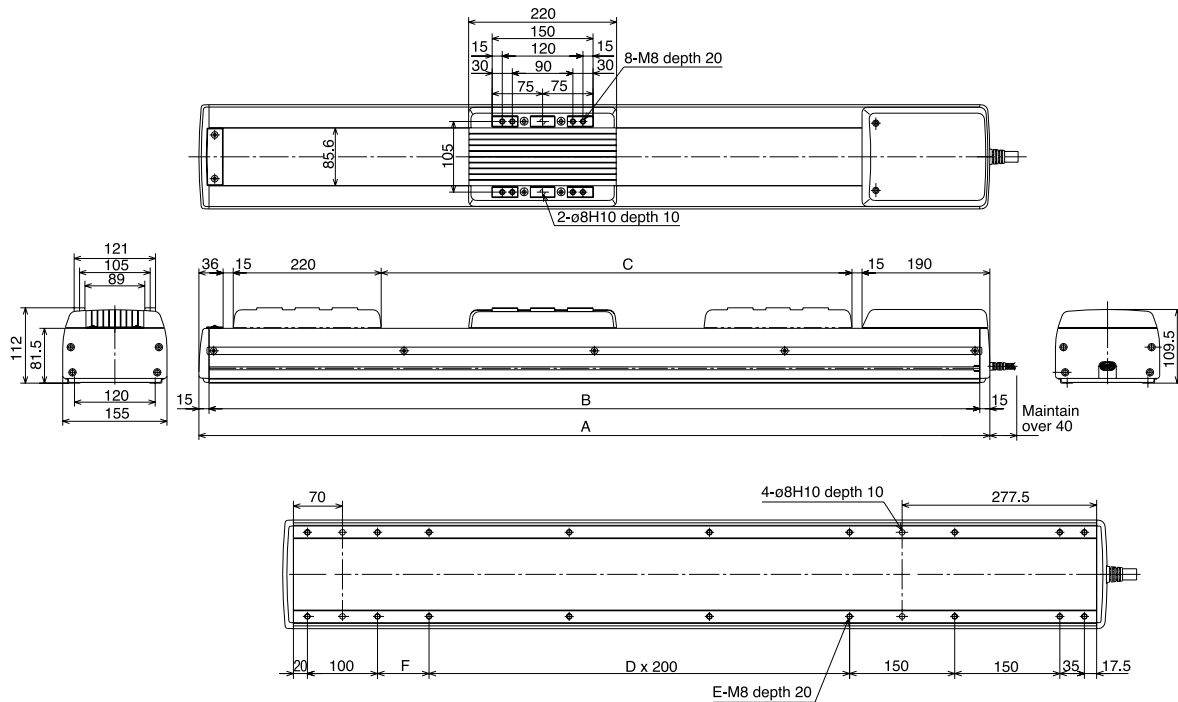
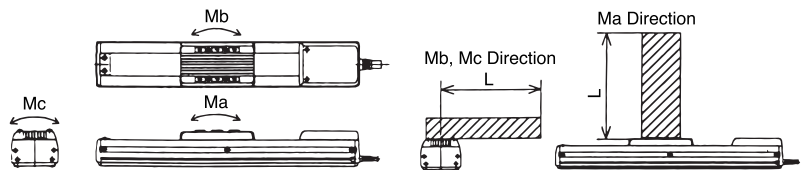
Stroke	800	900	1000	1100	1200	1300	1400	1500	1600
A	1315	1415	1515	1615	1715	1815	1915	2015	2115
B	1291	1391	1491	1591	1691	1791	1891	1991	2091
C	800	900	1000	1100	1200	1300	1400	1500	1600
D	3	3	4	4	5	5	6	6	7
E	16	16	18	18	20	20	22	22	24
F	122	222	122	222	122	222	122	222	122

# ISD-L-□-200 [Large 200W Type]

Specifications in ( ) are for 20mm lead.

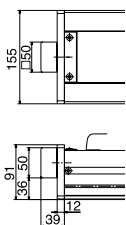
Stroke	mm	100	200	300	400	500	600	700	800	900	1000	1100	1200	
Rated Power	W	200												
Maximum Velocity	mm/sec	500 (1000)						465 (930)	380 (765)	320 (640)	270 (545)	230 (465)		
Rated Trust	N	340.1 (169.5)												
Repeatability	mm	±0.02												
Unit Weight	kg	13.2	14.8	16.4	18	19.6	21.2	22.8	24.4	26	27.6	29.2	30.8	
Motor		AC Servo Motor												
Encoder		Attached to Motor												
Ballscrew		ø20mm, Lead 10mm, (20mm), Rolled Thread C10, Baklsh 0.05mm or less												
Guide		Unique to IS, Integrated into Base												
Motor/Ballscrew Connection		Motor/Ballscrew Shaft Integrated												
Base		Extruded Aluminium (A6N01S-T5) White Alumited Treatment												
Protective Stainless Sheet		Stainless Steel Sheet (SUS430), Thickness 0.1mm												
Maximum Trust (note 1)	N	680.2 (339.0)												
Payload (note 2, 3)	kg	Horizontal Use: 80 (40), Vertical Use: 19 (9)												
Moment (note 2, 4)	Nm	Ma: 104.9 Mb: 149.9 Mc: 248.9												
Overhang Load Length (note 5)	mm	Ma: 750 Mb, Mc: 750												

- Note 1) At a speed of 10mm/sec for 5 seconds
- Note 2) Load uniformly distributed on the slide. Base affixed to a flat, strong frame.
- Note 3) At an acceleration of 0.3 g and 500 (1000) mm/sec speed.
- Note 4) See figures.
- Note 5) The centre of gravity exists at the half-way point of the overhang load length.



## Optional Brake

## Dimensions



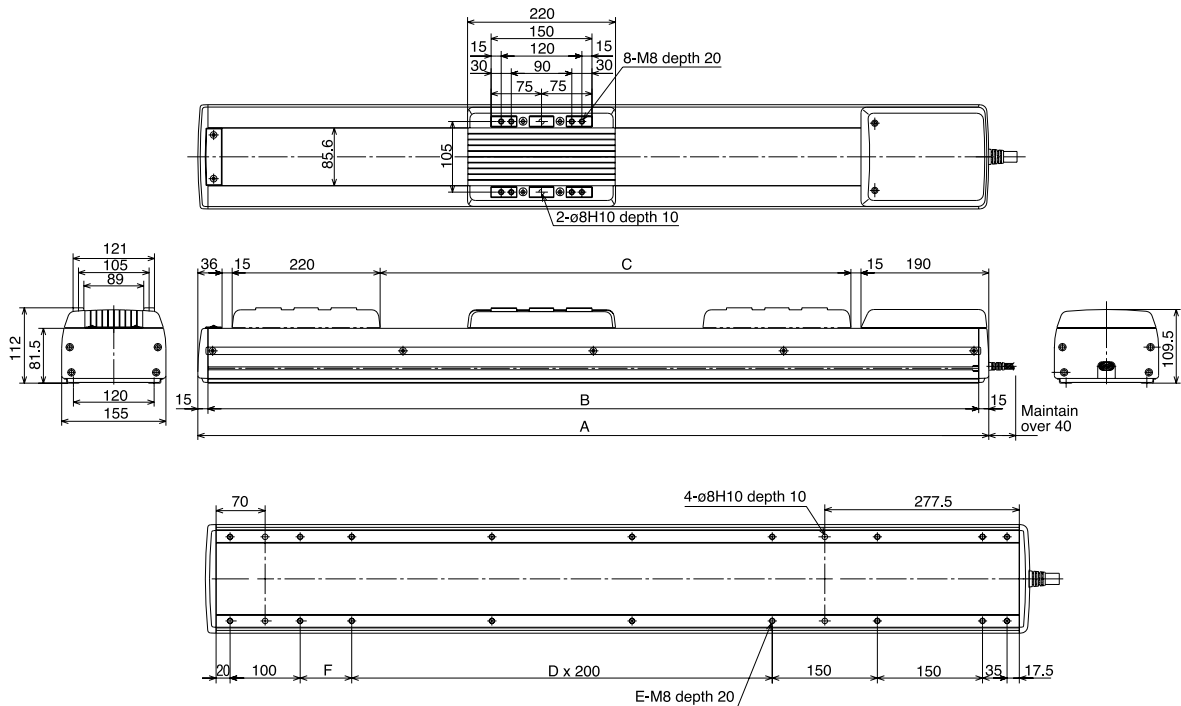
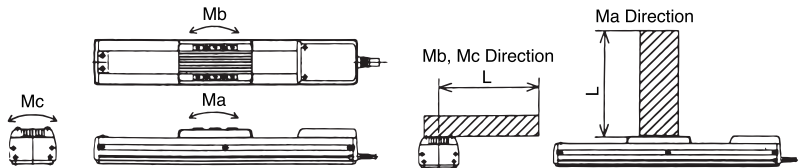
Specification	Single Dry Disc Type Magnetic Brake	
Model	MCNB3-04	
Screw Lead (mm)	10	20
Holding force N	246.3	123.2
Attachment Position	Ballscrew Shaft	
Rated Power Volt.	approx. 80 V AC	

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200
A	576	676	776	876	976	1076	1176	1276	1376	1476	1576	1676
B	546	646	746	846	946	1046	1146	1246	1346	1446	1546	1646
C	100	200	300	400	500	600	700	800	900	1000	1100	1200
D	-	-	1	1	2	2	3	3	4	4	5	5
E	12	12	14	14	16	16	18	18	20	20	22	22
F	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5

# ISD-L-400 [Large 400W Type]

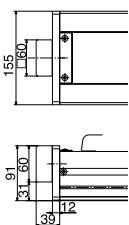
Stroke	mm	100	200	300	400	500	600	700	800	900	1000	1100	1200
Rated Power	W	400											
Maximum Velocity	mm/sec	1000							930	765	640	545	465
Rated Trust	N	340.1											
Repeatability	mm	±0.02											
Unit Weight	kg	13.2	14.8	16.4	18	19.6	21.2	22.8	24.4	26	27.6	29.2	30.8
Motor		AC Servo Motor											
Encoder		Attached to Motor											
Ballscrew		ø20mm, Lead 20mm, Rolled Thread C10, Backlash 0.05mm or less											
Guide		Unique to IS, Integrated into Base											
Motor/Ballscrew Connection		Motor/Ballscrew Shaft Integrated											
Base		Extruded Aluminium (A6N01S-T5) White Aluminited Treatment											
Protective Stainless Sheet		Stainless Steel Sheet (SUS430), Thickness 0.1mm											
Maximum Trust (note 1)	N	680.2											
Payload (note 2, 3)	kg	Horizontal Use: 80, Vertical Use: 19											
Moment (note 2, 4)	Nm	Ma: 104.9 Mb: 149.9 Mc: 248.9											
Overhang Load Length (note 5)	mm	Ma: 750 Mb, Mc: 750											

- Note 1) At a speed of 10mm/sec for 5 seconds
- Note 2) Load uniformly distributed on the slide. Base affixed to a flat, strong frame.
- Note 3) At an acceleration of 0.3g and 1000 mm/sec speed.
- Note 4) See figures.
- Note 5) The centre of gravity exists at the half-way point of the overhang load length.



## Optional Brake

## Dimensions



Specification	Single Dry Disc Type Magnetic Brake
Model	MCNB5-18
Screw Lead (mm)	20
Holding force N	215.5
Attachment Position	Ballscrew Shaft
Rated Power Volt.	approx. 80 V AC

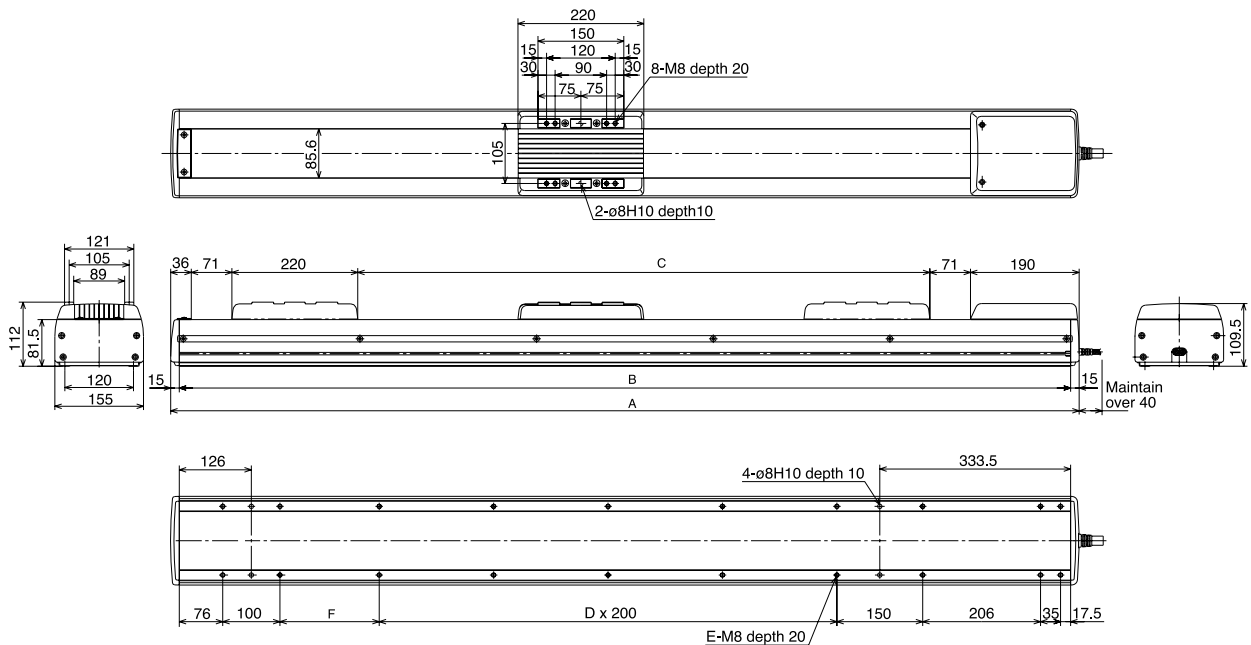
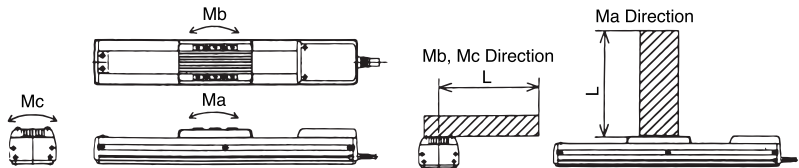
Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200
A	576	676	776	876	976	1076	1176	1276	1376	1476	1576	1676
B	546	646	746	846	946	1046	1146	1246	1346	1446	1546	1646
C	100	200	300	400	500	600	700	800	900	1000	1100	1200
D	-	-	1	1	2	2	3	3	4	4	5	5
E	12	12	14	14	16	16	18	18	20	20	22	22
F	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5

# ISD-LX-200 / 400 [Large 200 / 400W Type]

Specifications in ( ) are for 400W Type

Stroke	mm	1000	1100	1200	1300	1400	1500	1600
Rated Power	W	200 (400)						
Maximum Velocity	mm/sec	1000					950	830
Rated Trust	N	340.1						
Repeatability	mm	±0.02						
Unit Weight	kg	30.8 (31.2)	32.4 (32.8)	34.0 (34.4)	35.6 (36.0)	37.2 (37.6)	38.9 (39.2)	40.5 (40.8)
Motor		AC Servo Motor						
Encoder		Attached to Motor						
Ballscrew		ø20mm, Lead 20mm, Rolled Thread C10, Backlash 0.05mm or less						
Guide		Unique to IS, Integrated into Base						
Motor/Ballscrew Connection		Motor/Ballscrew Shaft Integrated						
Base		Extruded Aluminium (A6N01S-T5) White Alumited Treatment						
Protective Stainless Sheet		Stainless Steel Sheet (SUS430), Thickness 0.1mm						
Maximum Trust (note 1)	N	680.2						
Payload (note 2, 3)	kg	Horizontale Use: 40 (80)						
Moment (note 2, 4)	Nm	Ma: 104.9 Mb: 149.9 Mc: 248.9						
Overhang Load Length (note 5)	mm	Ma: 750 Mb, Mc: 750						

- Note 1) At a speed of 10mm/sec for 5 seconds
- Note 2) Load uniformly distributed on the slide. Base affixed to a flat, strong frame.
- Note 3) At an acceleration of 0.3 g and 1000 mm/sec speed.
- Note 4) See figures.
- Note 5) The centre of gravity exists at the half-way point of the overhang load length.



## Dimensions

Stroke	1000	1100	1200	1300	1400	1500	1600
A	1588	1688	1788	1888	1988	2088	2188
B	1558	1658	1758	1858	1958	2058	2158
C	1000	1100	1200	1300	1400	1500	1600
D	4	5	5	6	6	7	7
E	20	22	22	24	24	26	26
F	173.5	73.5	173.5	73.5	173.5	73.5	173.5

**ISD Series  
Catalogue No. 0599-E**

The information contained in this catalog is  
subject to change without notice for the purpose  
of product improvement



Providing quality products since 1986



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