

SR77

This slim type magnetic scale system that outputs position signals for machine tools and other equipment that require high-precision positioning.



- Measuring Length(ML) : 70-2,040mm
- Accuracy : 3+3ML/1,000 μm p-p,
5+5ML/1,000 μm p-p
- Maximum resolution : 0.01 μm
- Maximum response speed : 200m/min.
- Protocol : FANUC, Mitsubishi,
Panasonic, YASKAWA

ABS

Slim
type

Maximum
resolution
0.01 μm

Specifications

Model	SR77
Measuring length (ML)	70-2040mm 70, 120, 170, 220, 270, 320, 370, 420, 470, 520, 570, 620, 720, 770, 820, 920, 1020, 1140, 1240, 1340, 1440, 1540, 1640, 1740, 1840, 2040
Thermal expansion coefficient (/ °C)	12 ± 1 x 10 ⁻⁶ /°C
Output signal	Absolute serial bidirectional signal, compliant with EIA-485
Accuracy (at 20 °C) ML:mm	3+3ML/1,000 µm p-p or 5+5ML/1,000 µm p-p
Resolution	Selectable from 0.01,0.05,0.1,0.5 and 1.0 µm(Set at factory shipping)
Zero count position	Center mark
Power supply voltage	DC4.75 - 5.25V(At cable connection end)
Consumption current	200 mA (at 120 W terminal) max.
Inrush current	2A max. (When the power supply rise time is 10 ms)
Maximum response speed	200m/min (User-selected resolution setting)
Vibration resistance	150m/s ² (50Hz~3kHz)
Impact resistance	350m/s ² (11ms)
Protective design grade	IP54 (Air purge not included), IP65 (Air purge included)
Other protections	Oil lubricant can also be used under severe environmental conditions.
Power supply protection	In the case of errors such as a reverse-connected power supply or over-voltage, the internal fuse is cut to protect the power being supplied and wiring.
Safety standards	FCC Part15 Subpart B Class A. ICES-003 Class A Digital Device. EN55011 Gp1 Class A, EN61000-6-2. Safety standards not applicable (60 V DC or less).
Operating temperature range(°C)	0 ~ +50 °C
Storage temperature range(°C)	-20 ~ +55 °C
Mass	Approx.0.27kg + 1.36kg/m
Slider sliding resistance	1N or less

Model	CH33-**CP	CH33-**CE
Description	Cable with open end	Cable with open end
Cable length	3,5,10,15m	
Material	PVC	PU
Armor	YES	YES

*Please consult with our sales for the cable length other than above.

Details of model designation

SR77-XX × × ★ ○ △ ■ □ □ □ □

Absolute zero point shown by mm from left end of ML e.g. 850mm = 850, in case of center then X For 1000mm or longer, 2 left digits shown by alphabet

1,000-1,099mm A	1,400-1,499mm E	1,800-1,899mm J
1,100-1,199mm B	1,500-1,599mm F	1,900-1,999mm K
1,200-1,299mm C	1,600-1,699mm G	2,000-2,040mm L
1,300-1,399mm D	1,700-1,799mm H	Ex:1,050mm → A50

Communication protocol

Resolution & Direction*

Accuracy grade A:5+5ML/1000 S:3+3ML/1000µm
ML:Measuring length by mm
Cable out direction: R= Right, L= Left
Measuring length by cm

NC Maker	Wire	
FANUC	4	A
Mitsubishi	2	B
	4	D
YASKAWA	2	F
Panasonic	2	H

FANUC, Mitsubishi, Panasonic	
Resolution (µm)	Direction
0.01	A F
0.05	B G
0.1	C H
0.5	D J
1.0	E K
YASKAWA	
Number of Divisions	Direction
1/8192	L -
1/1024	M -

*When the slider is moved in the direction of the arrow, the signal is addition when the direction is "positive,"and it is subtraction when the direction is "negative." The direction is selected when ordering.

Note:Mitsubishi controller is only A

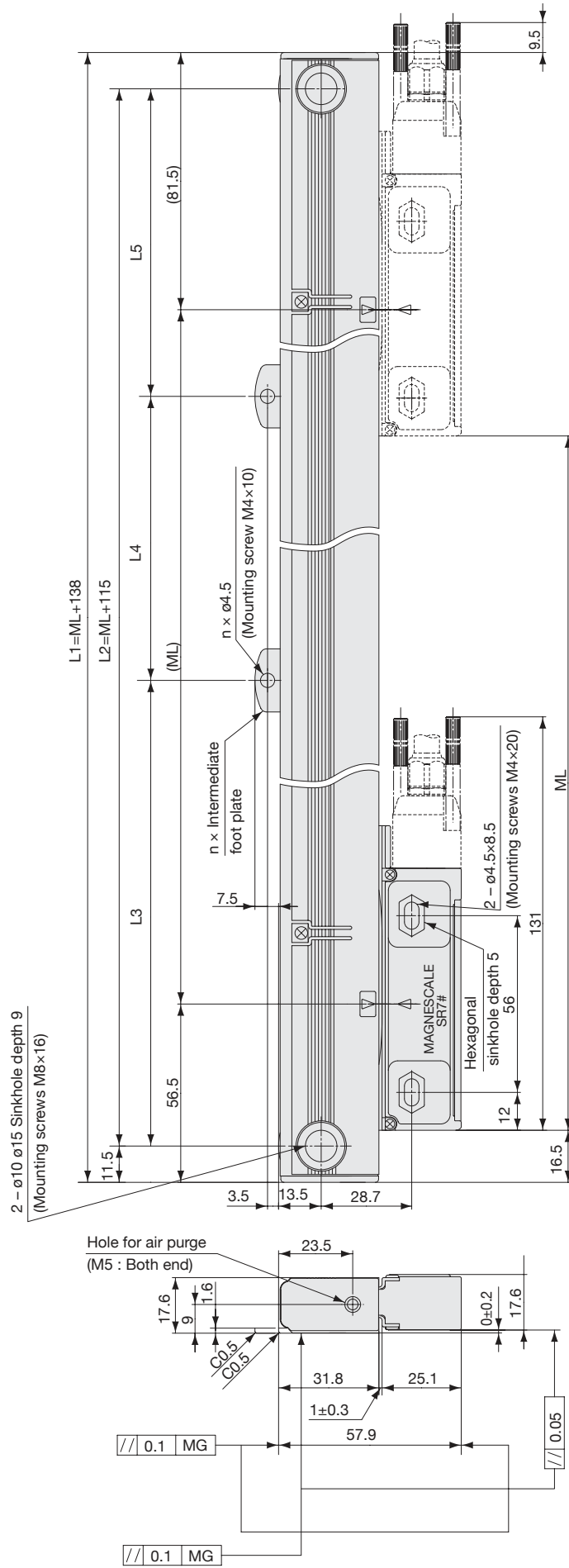
Dimensions SR77
Cable Direction Right

ML	L1	L2	L3	L4	L5	n
70	208	185	-	-	-	0
120	258	235	-	-	-	0
170	308	285	-	-	-	0
220	358	335	-	-	-	0
270	408	385	-	-	-	0
320	458	435	-	-	-	0
370	508	485	-	-	-	0
420	558	535	-	-	-	0
470	608	585	-	-	-	0
520	658	635	-	-	-	0
570	708	685	-	-	-	0
620	758	735	-	-	-	0
720	858	835	417.5	-	417.5	1

ML : Measuring length CL : Cable length MG: Machine guide

* Intermediate foot plate: Installed in one location when ML > 720 mm and two locations when ML > 1440 mm

Unit : mm



Unit : mm

Dimensions SR77
Cable Direction Left

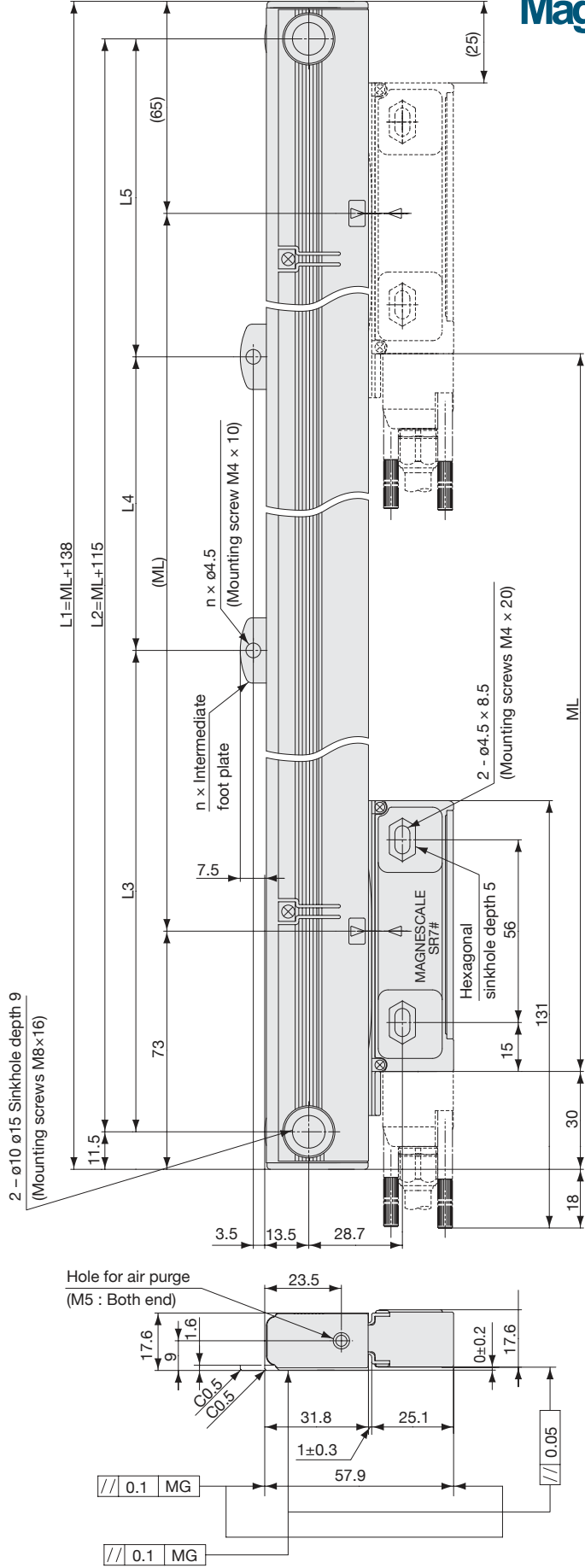


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