

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**

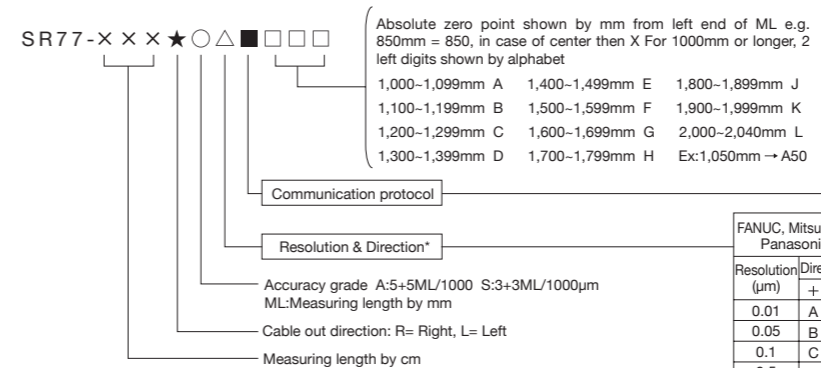
Specifications

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 × 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.
Imrush 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.

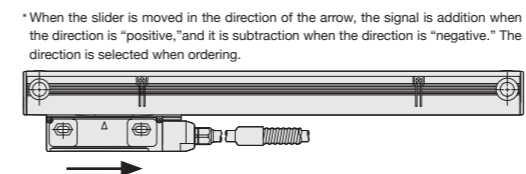
Details of model designation



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 -

Note:Mitsubishi controller is only A



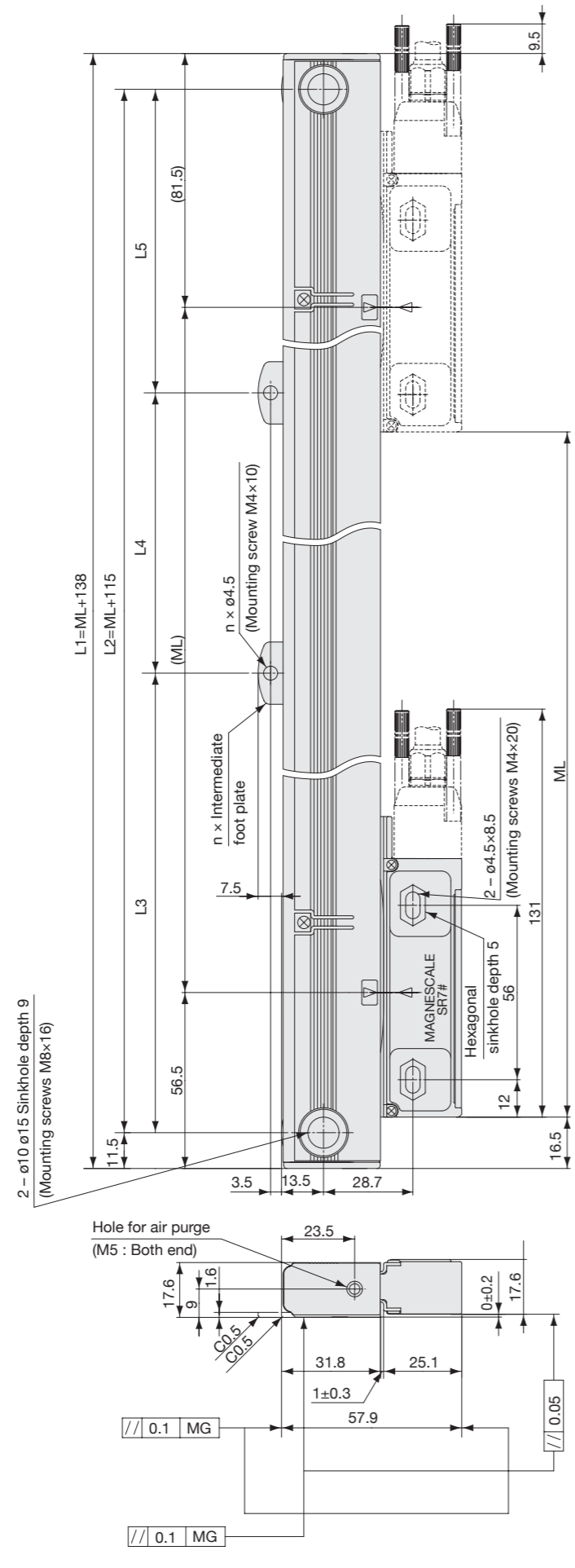
Dimensions SR77
Cable Direction Right

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
670	808	785	-	-	-	0
720	858	835	417.5	-	417.5	1

ML	L1	L2	L3	L4	L5	n
770	908	885	442.5	-	442.5	1
820	958	935	467.5	-	467.5	1
870	1008	1035	517.5	-	517.5	1
920	1058	1135	567.5	-	567.5	1
1020	1158	1255	627.5	-	627.5	1
1140	1278	1355	677.5	-	677.5	1
1240	1378	1455	727.5	-	727.5	1
1340	1478	1555	777.5	-	777.5	1
1440	1578	1655	827.5	520	515	2
1540	1678	1755	877.5	550	555	2
1640	1778	1855	927.5	585	585	2
1740	1878	1955	977.5	620	615	2
1840	1978	2055	1027.5	650	655	2
2040	2178	2155	1127.5	720	715	2

Unit : mm

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

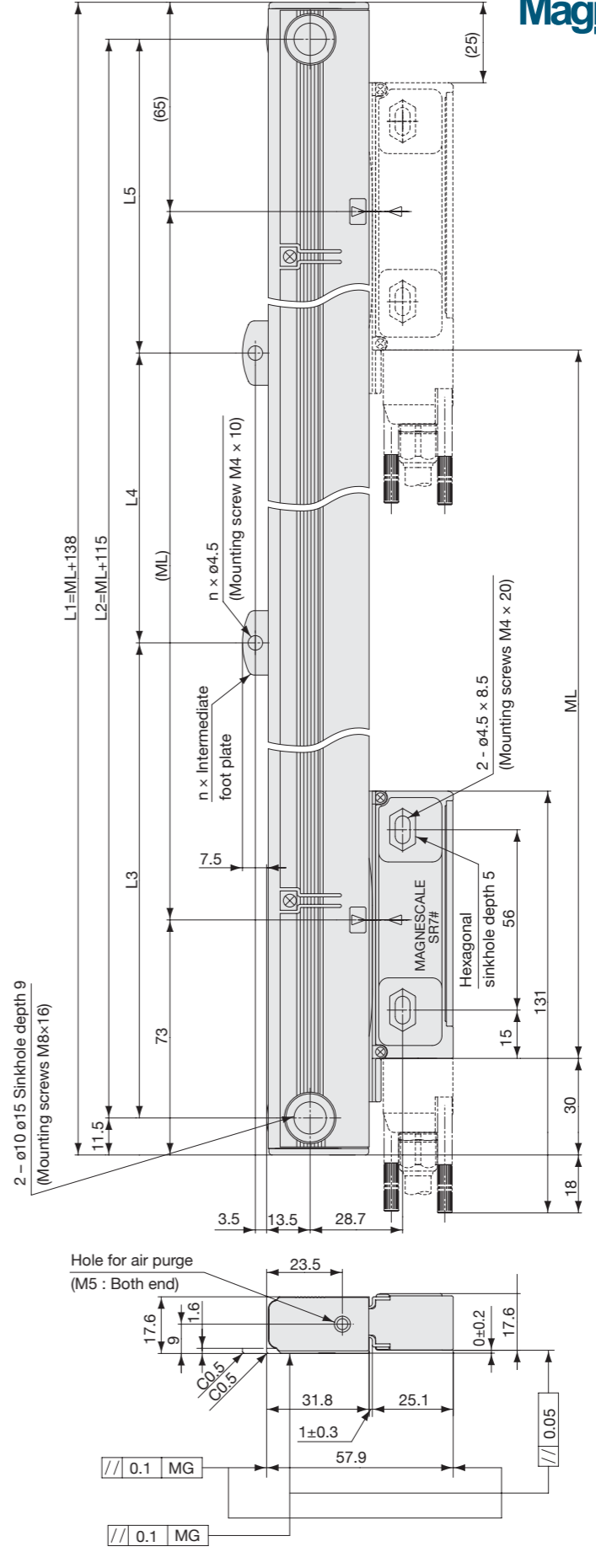
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370	508	485	-	-	-	0
420	558	535	-	-	-	0
470	608	585	-	-	-	0
520	658	635	-	-	-	0
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1540	1678	1755	877.5	550	555	2
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