

SR87

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



- Measuring Length(ML) : 140-3,040mm
- 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 Robust type Maximum resolution 0.01 μm

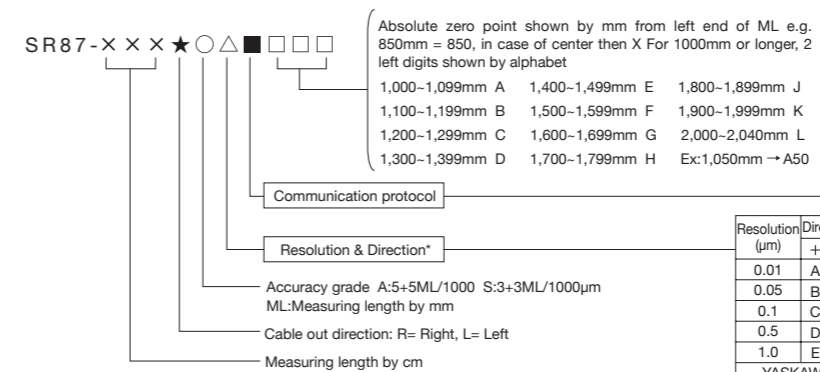
Specifications

Model	SR87
Measuring length (ML)	140-3040mm 140, 240, 340, 440, 540, 640, 740, 840, 940, 1040, 1140, 1240, 1340, 1440, 1540, 1640, 1740, 1840, 2040, 2240, 2440, 2640, 2840, 3040
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 Ω 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	250m/s ² (50Hz-2kHz)
Impact resistance	450m/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.1.24kg + 4kg/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

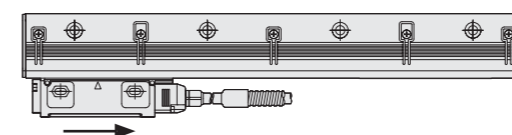


NC Maker	Wire	
FANUC	4	A
Mitsubishi	2	B
YASKAWA	4	F
Panasonic	2	H

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

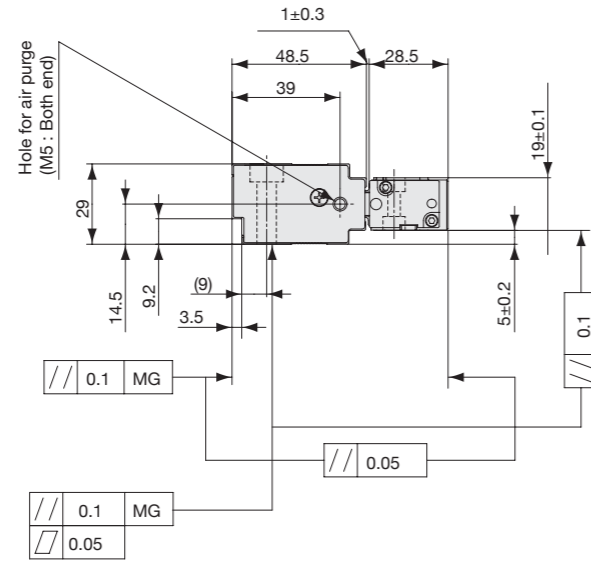
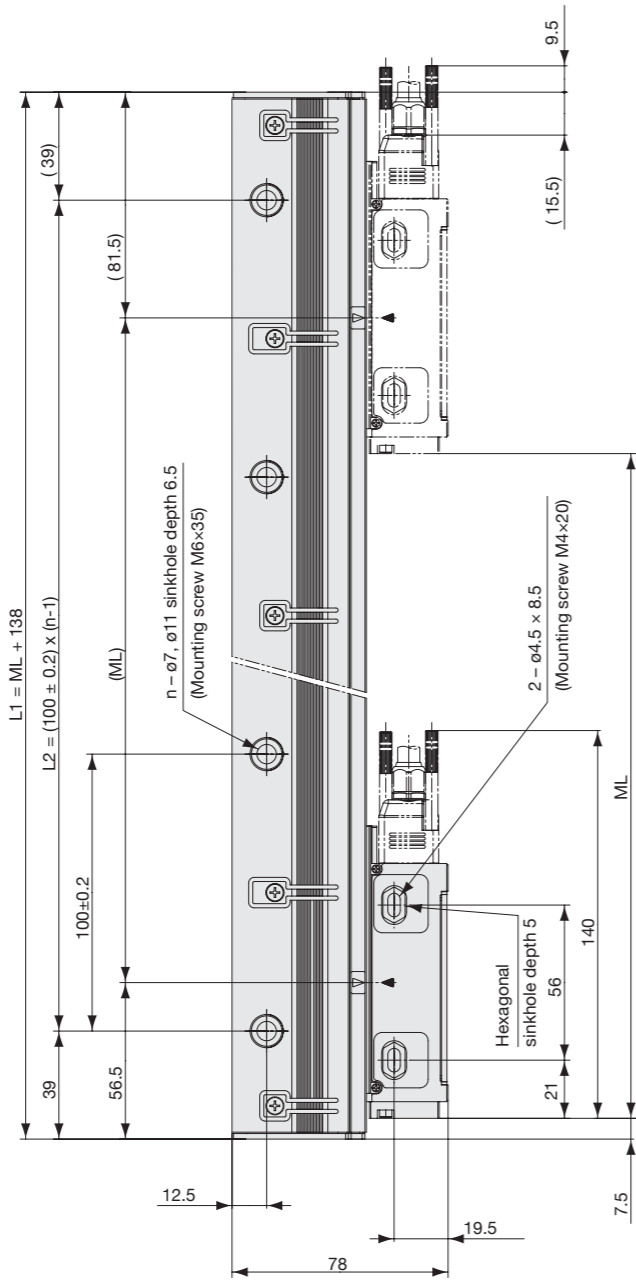


*When the slider is moved in the direction of the arrow, the signal is addition when the direction is "positive,"and it is subtraction when the direction is "negative." The direction is selected when ordering.

Dimensions SR87
Cable Direction Right

ML	L1	L2	n	ML	L1	L2	n
140	278	200	3	1340	1478	1400	15
240	378	300	4	1440	1578	1500	16
340	478	400	5	1540	1678	1600	17
440	578	500	6	1640	1778	1700	18
540	678	600	7	1740	1878	1800	19
640	778	700	8	1840	1978	1900	20
740	878	800	9	1940	2078	2100	22
840	978	900	10	2040	2178	2300	24
940	1078	1000	11	2140	2278	2500	26
1040	1178	1100	12	2240	2378	2700	28
1140	1278	1200	13	2340	2478	2900	30
1240	1378	1300	14	2440	2578	3100	32

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

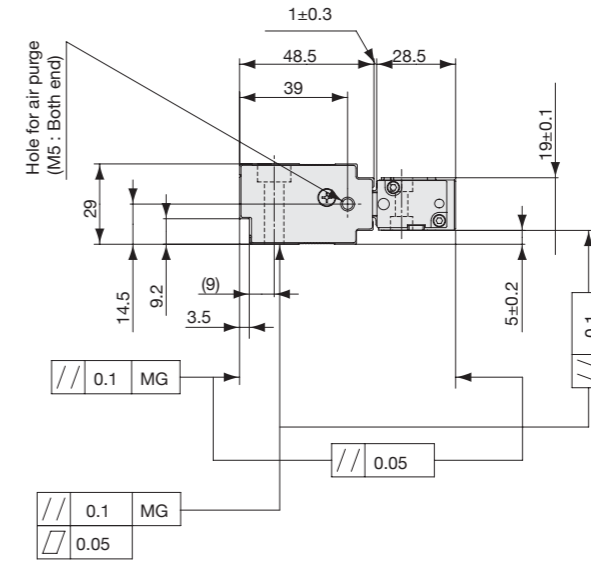
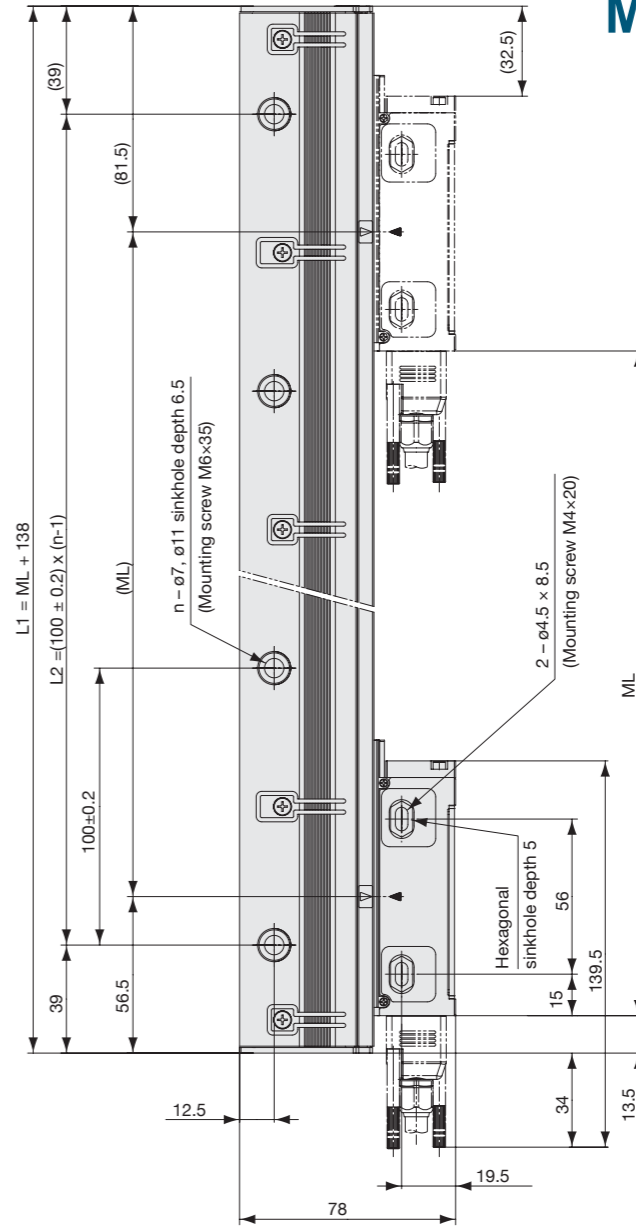


Unit : mm

Dimensions SR87
Cable Direction Left

ML	L1	L2	n	ML	L1	L2	n
140	278	200	3	1340	1478	1400	15
240	378	300	4	1440	1578	1500	16
340	478	400	5	1540	1678	1600	17
440	578	500	6	1640	1778	1700	18
540	678	600	7	1740	1878	1800	19
640	778	700	8	1840	1978	1900	20
740	878	800	9	1940	2078	2100	22
840	978	900	10	2040	2178	2300	24
940	1078	1000	11	2140	2278	2500	26
1040	1178	1100	12	2240	2378	2700	28
1140	1278	1200	13	2340	2478	2900	30
1240	1378	1300	14	2440	2578	3100	32

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



Unit : mm