

Other Models

Absolute linear encoder
slim type
SR77

FANUC

Mitsubishi Electric

Panasonic

Yaskawa Electric

Effective length :
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 mm

Maximum resolution : 0.01μm

Accuracy : (3+3L/1,000) μmp-p L:mm
(5+5L/1,000) μmp-p L:mm

Maximum response speed : 200m/min

Protective design grade : IP65

Cable: C H 3 3

※ Please refer to page 29 for cable specifications.

SR77-xxx★○△◆□□□

Effective length (L): cm units

Reference point position (Distance from left end of effective length)

Reference point position	Indication method	Reference point position	Indication method	Reference point position	Indication method
Less than 1,000	Number (850 mm→850)	1,700~1,799 mm	H + lower 2 digits	Center	X
1,000~1,099 mm	A + lower 2 digits (1,050 mm→A50)	1,800~1,899 mm	J + lower 2 digits		
1,100~1,199 mm	B + lower 2 digits	1,900~1,999 mm	K + lower 2 digits		
1,200~1,299 mm	C + lower 2 digits	2,000~2,040 mm	L + lower 2 digits		
1,300~1,399 mm	D + lower 2 digits				
1,400~1,499 mm	E + lower 2 digits				
1,500~1,599 mm	F + lower 2 digits				
1,600~1,699 mm	G + lower 2 digits				

Communication protocol

Type	NC manufacturer	Number of wires
A	FANUC α interface	4-wire
B	Mitsubishi Electric	2-wire
D	Mitsubishi Electric	4-wire
H	Panasonic	2-wire
F	Yaskawa Electric	2-wire

Resolution and direction

FANUC, Mitsubishi Electric, Panasonic

Type	Direction	Resolution	Type	Direction	Resolution
A		0.01	F		0.01
B		0.05	G		0.05
C	(plus)	0.1	H	(minus)	0.1
D		0.5	J		0.5
E		1	K		1

Yaskawa Electric

Type	Direction	Number of partitions
L	(plus)	1/8,192
M		1/1,024

Mitsubishi Electric is only A, B, C
Panasonic is only B, C, D, E

Cable lead-out direction

Type	Lead-out direction
R	Right
L	Left

Accuracy grade

Type	Accuracy grade
A	(5+5L/1,000) μm
S	(3+3L/1,000) μm

L: Effective length(mm)

Absolute linear encoder
robust type
SR87

FANUC

Mitsubishi Electric

Panasonic

Yaskawa Electric

Effective length :
140,240,340,440,540,640,740,840,940,1040,
1140,1240,1340,1440,1540,1640,1740,1840,
2040,2240,2440,2640,2840,3040 mm

Maximum resolution : 0.01μm

Accuracy : (3+3L/1,000) μmp-p L:mm
(5+5L/1,000) μmp-p L:mm

Maximum response speed : 200m/min

Protective design grade : IP65

Cable: C H 3 3

※ Please refer to page 29 for cable specifications.

SR87-xxx★○△◆□□□

Effective length (L): cm units

Reference point position (Distance from left end of effective length)

Reference point position	Indication method	Reference point position	Indication method	Reference point position	Indication method
Less than 1,000	Number (850 mm→850)	1,800~1,899 mm	J + lower 2 digits	2,700~2,799 mm	T + lower 2 digits
1,000~1,099 mm	A + lower 2 digits (1,050 mm→A50)	1,900~1,999 mm	K + lower 2 digits	2,800~2,899 mm	U + lower 2 digits
1,100~1,199 mm	B + lower 2 digits	2,000~2,040 mm	L + lower 2 digits	2,900~2,999 mm	V + lower 2 digits
1,200~1,299 mm	C + lower 2 digits	2,100~2,199 mm	M + lower 2 digits	3,000~3,040 mm	W + lower 2 digits
1,300~1,399 mm	D + lower 2 digits	2,200~2,299 mm	N + lower 2 digits	Center	X
1,400~1,499 mm	E + lower 2 digits	2,300~2,399 mm	P + lower 2 digits		
1,500~1,599 mm	F + lower 2 digits	2,400~2,499 mm	Q + lower 2 digits		
1,600~1,699 mm	G + lower 2 digits	2,500~2,599 mm	R + lower 2 digits		
1,700~1,799 mm	H + lower 2 digits	2,600~2,699 mm	S + lower 2 digits		

Communication protocol

Type	NC manufacturer	Number of wires
A	FANUC α interface	4-wire
B	Mitsubishi Electric	2-wire
D	Mitsubishi Electric	4-wire
H	Panasonic	2-wire
F	Yaskawa Electric	2-wire

Resolution and direction

FANUC, Mitsubishi Electric, Panasonic

Type	Direction	Resolution	Type	Direction	Resolution
A		0.01	F		0.01
B		0.05	G		0.05
C	(plus)	0.1	H	(minus)	0.1
D		0.5	J		0.5
E		1	K		1

Yaskawa Electric

Type	Direction	Number of partitions
L	(plus)	1/8,192
M		1/1,024

Mitsubishi Electric is only A, B, C
Panasonic is only B, C, D, E

Cable lead-out direction

Type	Lead-out direction
R	Right
L	Left

Accuracy grade

Type	Accuracy grade
A	(5+5L/1,000) μm
S	(3+3L/1,000) μm

L: Effective length(mm)

Incremental linear encoder
slim type
SR75

Mitsubishi Electric

Panasonic

Yaskawa Electric

Effective length :
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 mm

Maximum resolution : 0.01μm

Accuracy : (3+3L/1,000) μmp-p L:mm
(5+5L/1,000) μmp-p L:mm

Maximum response speed : 200m/min

Protective design grade : IP65

Cable: C H 3 3

※ Please refer to page 29 for cable specifications.

SR75-xxx★○△◆□□□

Effective length (L): cm units

Reference point position (Distance from left end of effective length)

Reference point position	Indication method	Reference point position	Indication method
Less than 1,000	Number (850 mm→850)	1,700~1,799 mm	H + lower 2 digits
1,000~1,099 mm	A + lower 2 digits (1,050 mm→A50)	1,800~1,899 mm	J + lower 2 digits
1,100~1,199 mm	B + lower 2 digits	1,900~1,999 mm	K + lower 2 digits
1,200~1,299 mm	C + lower 2 digits	2,000~2,040 mm	L + lower 2 digits
1,300~1,399 mm	D + lower 2 digits	Center	X
1,400~1,499 mm	E + lower 2 digits	Multi	Y
1,500~1,599 mm	F + lower 2 digits	Signed-type	Z
1,600~1,699 mm	G + lower 2 digits		

Communication protocol

Type	NC manufacturer	Number of wires
B	Mitsubishi Electric	2-wire
D	Mitsubishi Electric	4-wire
H	Panasonic	2-wire
F	Yaskawa Electric	2-wire

Resolution and direction

FANUC, Mitsubishi Electric, Panasonic

Type	Direction	Resolution
A		0.01
B		0.05
C	(plus)	0.1
D		0.5
E		1

Yaskawa Electric

Type	Direction	Number of partitions
L	(plus)	1/8,192
M		1/1,024

Mitsubishi Electric is only A, B, C
Panasonic is only B, C, D, E

Cable lead-out direction

Type	Lead-out direction
R	Right
L	Left

Accuracy grade

Type	Accuracy grade
A	5+5L/1,000 μm
S	3+3L/1,000 μm

L: Effective length(mm)

Incremental angle encoder
enclosed type
RU74

A/B/Reference point

Hollow diameter : φ20

Resolution : Approx.1/1,000° , Approx.1/10,000°

Accuracy : ±2.5"

Maximum response revolution : As the table on the right

Protective design grade : IP65

Cable

CE28-***○#

Scale side connector

Conduit

Type	Conduit
C	With conduit (standard)
N	Without conduit

Cable length

Written by flush right, indication in "10 cm" units, up to 14 m, 1 m pitch

Note: 15 m or less including RU74 main unit head cable length

RU74-4096A□■

Minimum phase difference

Type	Minimum phase difference	Response revolutions (min.)	Type	Minimum phase difference	Response revolutions (min.)	
		Approx.1°/1,000	Approx.1°/10,000		Approx.1°/1,000	
A	50	2,000	267	E	250	533
B	100	1,332	133	F	300	444
C	150	888	89	G	400	333
D	200	666	67	H	500	266
				J	650	205
				K	1,000	133

Resolution, rotation direction and polarity

Type	Resolution	Rotation direction and polarity	Number of pulses/revolution
A	Approx. 1°/1,000	CW/ +	360,448
B	Approx. 1°/1,000	CCW/ +	360,448
C	Approx. 1°/10,000	CW/ +	3,600,384
D	Approx. 1°/10,000	CCW/ +	3,600,384