CFA-1100 Series

Non-contact

Long-term stability

Digital output

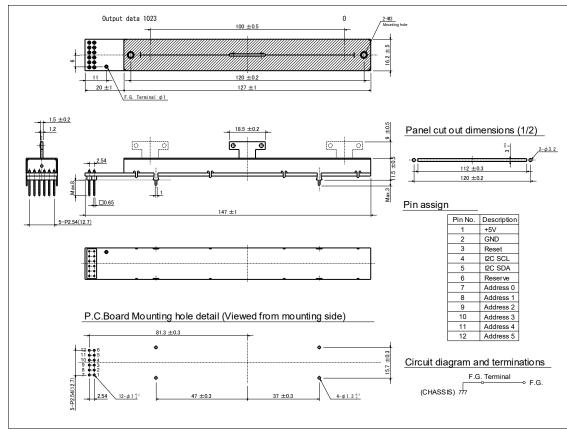
Facilitated in handling

High accuracy

Realized 10bit in 100mm stroke



Dimensions



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PROFADERTM

Model number

CFA-110 1 - A D

Product type CFA-1100: 100mm Torque

0: Normal torque

1: High torque *

Output

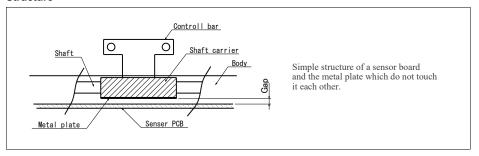
Blank: Incremental

A: Absolute

With Dust cover

* Only high torque type with CP-2 is applicable for the vertical use.

Structure



Electrical specifications

	CFA-110x	CFA-110x-A
Sensor system	Electrostatic capac	itance type sensor
Output value	Incremental type	Absolute type
Communication system	I ² C S	Slave
Operating voltage	5V: ±0	0.25V
Max. operating current	4mA	Max.
Resolution	10bit (0	~1023)
Output Law	1bit = 100mm	/1024 (Linear)
Bit error	±2	bit
Voltage proof	1 Min. at	AC100V
Insulation resistance	50Mohm or mo	ore at DC100V

Mechanical specifications

	CFA-1100	CFA-1101
Stroke length	100mm:	±0.5mm
Operating force	0~0.1N	0.1~0.3N
Strength of Nut-Attached	1001	Ncm
Attached Parts	M3 screw (Length: Pan	el thickness + 3~4mm)
Stopper strength	30	N .
Push-pull strength	30	N .

General specifications

	CFA-1100 Series
Temp.range	-10 to +70 deg C (Operating), -15 to +75 deg C (Storage)
Relative humidity	90%RH (No condensation)

Note

- * Non-waterproof.
- * Solder heat resistance: 350deg C max, 5sec max, 2 times. (Manual soldering only)
- * Do not give severe shocks.
- * Move to one end in Control-bar on the occasion of knob wearing, and can break into it slowly.

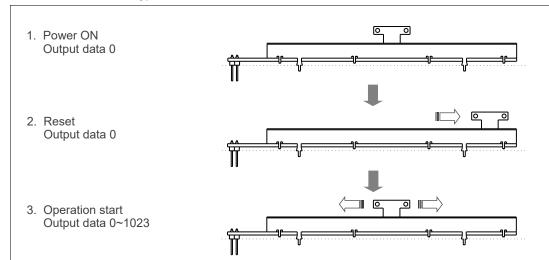
CFA-1100 Series

PROFADERTM

I²C specifications

					CFA-1100 Series																								
I ² C Clock													400	kbp	s/	10	0kbp	s / 5	0kl	ops									
Slave address																0.	~63												
General call ad	ldre	SS													Not	Sι	oqqı	rted											
Transfer data															Ν	/ISE	3 Fir	st											
Response time	;											1m	ns c	or le	е (I ² C	Clo	ck: 4	001	(bps))								
I ² C Communica	atio	n be	ehavio	r																									
I ² C Communica	atio S	n be	ehavic		ve Ad	dress			R/W	Α			-	Dat	а В	yte	,		Α			[Data	Byte	.			Α	Р
I ² C Communica Master				Sla			SA1	SA0	-	A 1			ı	Dat	а В	yte)		A 0			ſ	Data	Byte)			A 1	P P
	S			Sla				SA0	-		0	0	0			_	D9	D8	0	D7	D6			Byte		D1	D0	1	\vdash

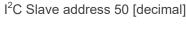
How to use (Incremental type)

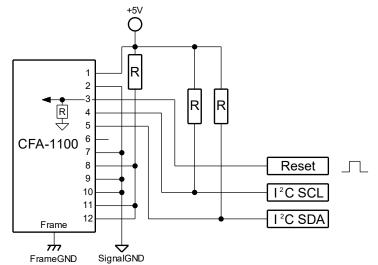


- 1. At the time of power on, output data are 0, regardless of the position of the control bar.
- 2. Resets works when the control bar is moved to the edge of the direction of the figure.
- 3. After reset, position data in proportion to the movement of the control bar are output.
 - * In power-off, the most recent position data are not retained.

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Circuit example





Connect the frameGND with the frame, otherwise with the F.G. through-hole.

Pin Assign

Pin Assig	jn
Pin No.	Description
1	Operating voltage DC+5V
2	Ground connection
3	Active high external reset with internal pull down
4	I2C SCL
5	I2C SDA
6	Reserve
7	I2C Slave address bit0
8	I2C Slave address bit1
9	I2C Slave address bit2
10	I2C Slave address bit3
11	I2C Slave address bit4
12	I2C Slave address bit5