

Board-type detector for position control

- Needs only + 5V DC power supply.
- High response speed (60 m/ min) with high resolution (0.5 μm)
- Alarm function
- Switch-selectable resolution and output pulse width.
- A/B quadrature signal, zero point signal and alarm signal output by differential line driver.



Specifications

Model	MD10
Resolution	0.5/ 1/ 2/ 2.5/ 4/ 5/ 10 μm selectable
Output pulse width	0.25/ 0.5/ 1/ 2/ 2.5/ 5/ 10/ 20 μs selectable
Response speed	60 m/min at 0.5 μm resolution
Output signal	A/B quadrature output by line driver (EIA-422 compliance)
Zero point signal	Z phase output (in synch with A/B quadrature output; 4 times the width of a selected resolution)
Alarm	Max. response speed exceeded, cable broken or disconnected, other circuit errors To reset, turn power off and back on or use external reset signal
Reset	External input
Power supply	5 V DC \pm 5%
Power consumption	Max. 2 W
Operating temperature	0 °C to 55 °C / 32 °F to 131 °F
Storage temperature	-10 °C to 75 °C / 14 °F to 167 °F
Mass	300 g/ 0.66 lbs

Maximum response speed

Resolution (μm)	Min.output pulse width (μs)								
	0.25	0.5	1	2	2.5	5	10	20	
0.5	60	45	22	11	9	4.5	2.2	1.1	
1	60	60	45	22	18	9	4.5	2.2	
2	60	60	60	45	36	18	9	4.5	
2.5	60	60	60	55	45	22	11	5.5	
4	60	60	60	60	60	36	18	9	
5	60	60	60	60	60	45	22	11	
10	60	60	60	60	60	60	45	22	

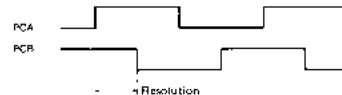
(Unit : m/min)

Zero point response speed

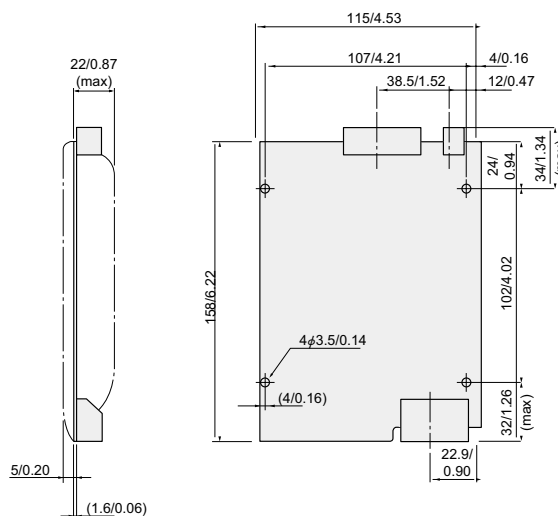
Resolution (μm)	Response speed	Resolution (μm)	Response speed
0.5	0.75	4	6
1	1.5	5	7.5
2	3	10	15
2.5	3.75	—	—

(Unit : m/min)

*The resolution of the A/B phase output is the min. phase difference.



Dimensions



Unit : mm/inch