Conductive Plastic Angle Sensor

CP-2F-S-RB Series

・Conductive Plastic Multi-turn Angle Sensor
・Effective Electrical Angle：

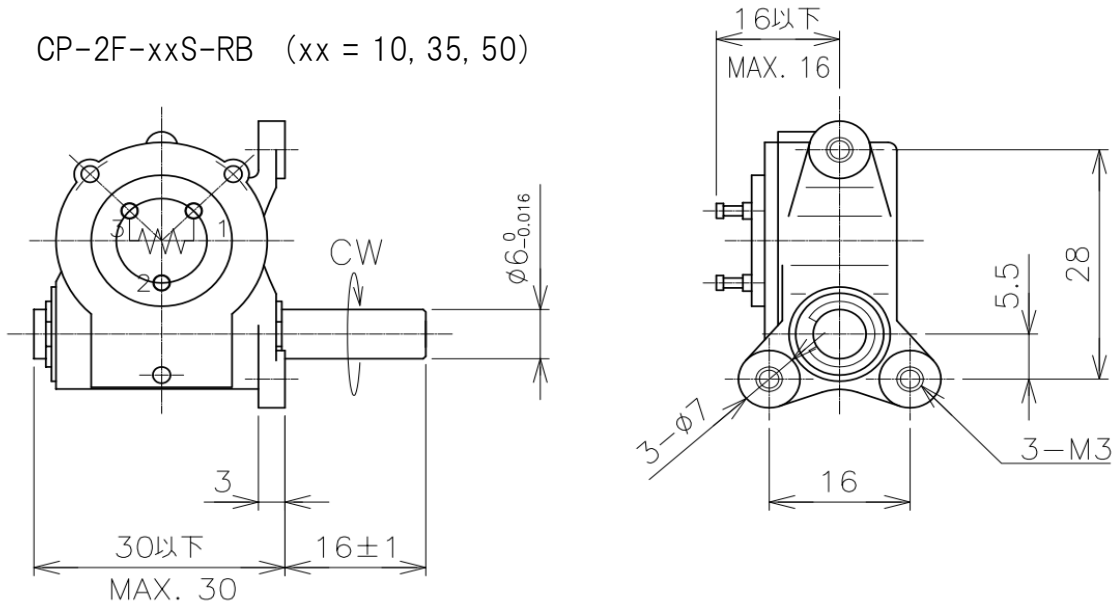
3400°	(10-turn)	CP-2F-10S-RB / CP-2F-10S-RB-1
11900°	(35-turn)	CP-2F-35S-RB
17000°	(50-turn)	CP-2F-50S-RB

・Independent Linearity：±1.5%
・Ball Bearing

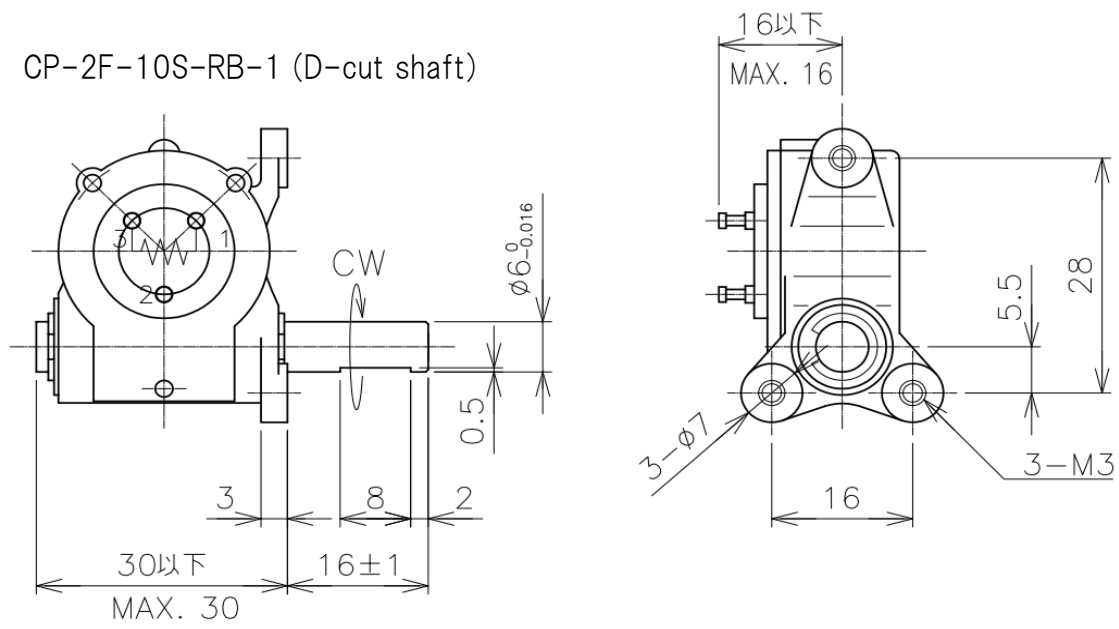
【Material】
●Housing ：Aluminum
●Shaft ：Stainless Steel
●Ball Bearing ：Stainless Steel

■Dimension [mm]

CP-2F-xxS-RB （xx = 10, 35, 50）

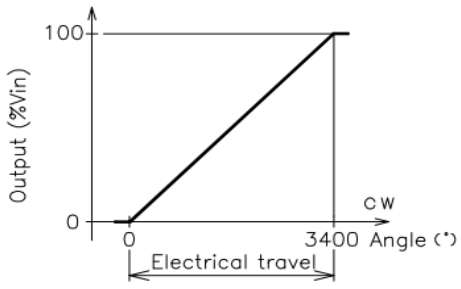


CP-2F-10S-RB-1 (D-cut shaft)

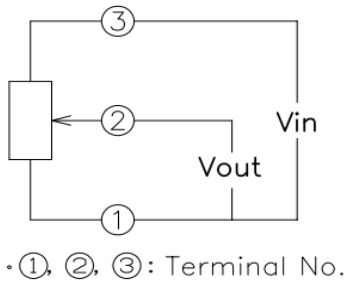


MIDORI PRECISIONS
URL: http://www.midori.co.jp
E-mail: overseas@midori.co.jp

■Output Characteristics

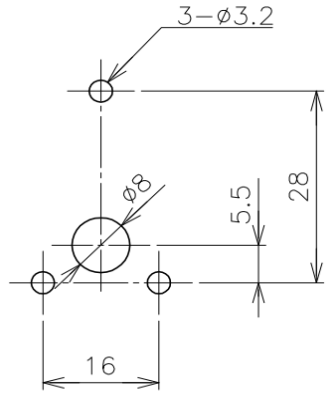


■Schematic



・①, ②, ③: Terminal No.

■Mounting



【Model No.】	CP-2F-10S-RB-1	CP-2F-10S-RB	CP-2F-35S-RB	CP-2F-50S-RB
	<10-turn D-cut Shaft>	<10-turn Round Shaft>	<35-turn Round Shaft>	<50-turn Round Shaft>

【Electrical Specifications】

Effective Electrical Travel	3400 +20、-30		11900 +70、-105	17000 +100、-150	°
Total Resistance	1、2、5				kΩ
Total Resistance Tolerance	±20				%
Independent Linearity	±1.5				%
Rated Dissipation	0.5/50℃				W
Output Smoothness	MAX. 0.1				%
Insulation Resistance	MIN. 100/DC1000V				MΩ
Dielectric Strength	AC1000/1Minute				V
Temperature Coefficient of Resistance	±400				ppm/K

【Mechanical Specifications】

Gear Ratio	10:1 (10-turn)		35:1 (35-turn)	50:1 (50-turn)	
Starting Torque	MAX. 4				mN·m
Repeatability	MAX. 0.5				%
Thrust Load Tolerance	3				N
Radial Load Tolerance	5				N
Mass	Approx. 30				g

【Environmental Specifications】

Category Temperature Range	-40～+100	℃
Storage Temperature Range	-40～+100	℃

■Handling Instruction

・To avoid burnout of resistive element, do not supply more than 1mA current to terminal 2.
・To remain IP level of CP-2FWP-xxS, please sealed terminal area by potting.
・In the case wear debris come into contact with the surface of resistive element, it might cause electrical noise.
・Miswiring might cause burnout of resistive element.
・To reduce sliding noise, add load resistance should be more than 100times and less than 1000times of total resistance.
・Slight continuous vibration such as dither might cause short lifetime of the sensor.

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