

## REFERENCE SPECIFICATIONS

M/S

MODEL AC Servo Motor (□20 DC24 V)  
MNMA2ACF1A (20 bit absolute encoder)

Issued on Apr.18.2016

Changed on . . .

Motor Business Unit, Electromechanical Control Business Division,  
Automotive & Industrial Systems Company, Panasonic Corporation

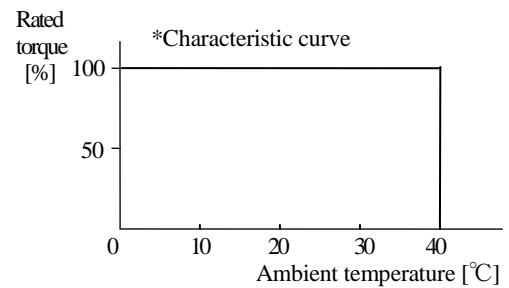
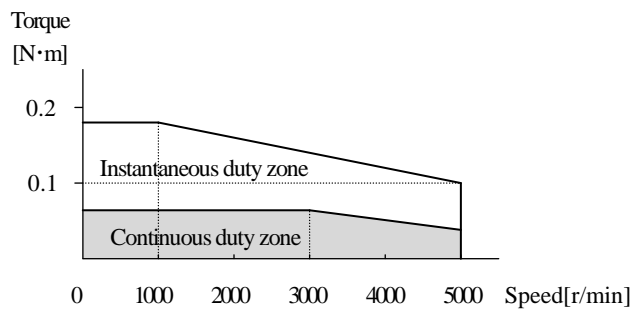
7-1-1 Morofuku, Daito-City, Osaka 574-0044, Japan

Checked	Checked	Designed

AC Servo Motor Specification

Motor model		MNMA2ACF1A (Without brake)		
Rated output	W	20		
Rating	%	100		
Rated speed	r/min	3000		
Max. speed	r/min	5000		
Rated torque	N·m	0.064		
Max. torque	N·m	0.18		
Rated current	A(rms)	(2.5)		
Rotor inertia	$\times 10^{-4} \text{ kg} \cdot \text{m}^2$	0.0026		
Momentary max. current	A(o-p)	(10.0)		
Mass	kg	(0.16)		
Structure		Totally-enclosed self-cooled type		Without oil seal
Supply voltage	V DC	24		

- This specification is guaranteed after combining and adjusting with the amplifier.  
(Representative value at 20 °C)
- This motor is not a waterproof construction. (IP40)
- This motor does not have to acquire the safety standards (UL, CSA, CE).
- Speed - Torque characteristic ( Representative value )  
Amplifier power supply voltage : at DC 24 V



SX-DSV0310701

Do NOT scale the drawings. Instead rely on the dimensions and their definitions

Opponent connector (No belongings)

Motor connector (AMP)

Cap :172159-1  
 Socket:170362-1  
 or 170366-1

Detector connector (AMP)

Cap :172161-1  
 Socket:170361-1  
 or 170365-1

Rotary encoder unit

PIN No.	Color	Signal
1	Red	BAT +
2	Pink	BAT -
3	Shield	FG
4	Sky blue	PS (SD)
5	Violet	PS (SD)
6	—	NC
7	White	E5 V
8	Black	E0 V
9	—	NC

\*Absolute encoder  
 20 bit

Motor unit

PIN No.	Color	Signal
1	Red	U
2	White	V
3	Black	W
4	Green/Yellow	E

Detector connector (AMP)

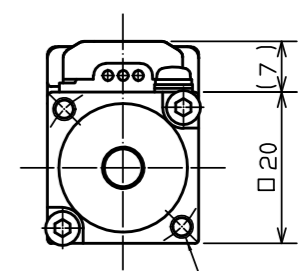
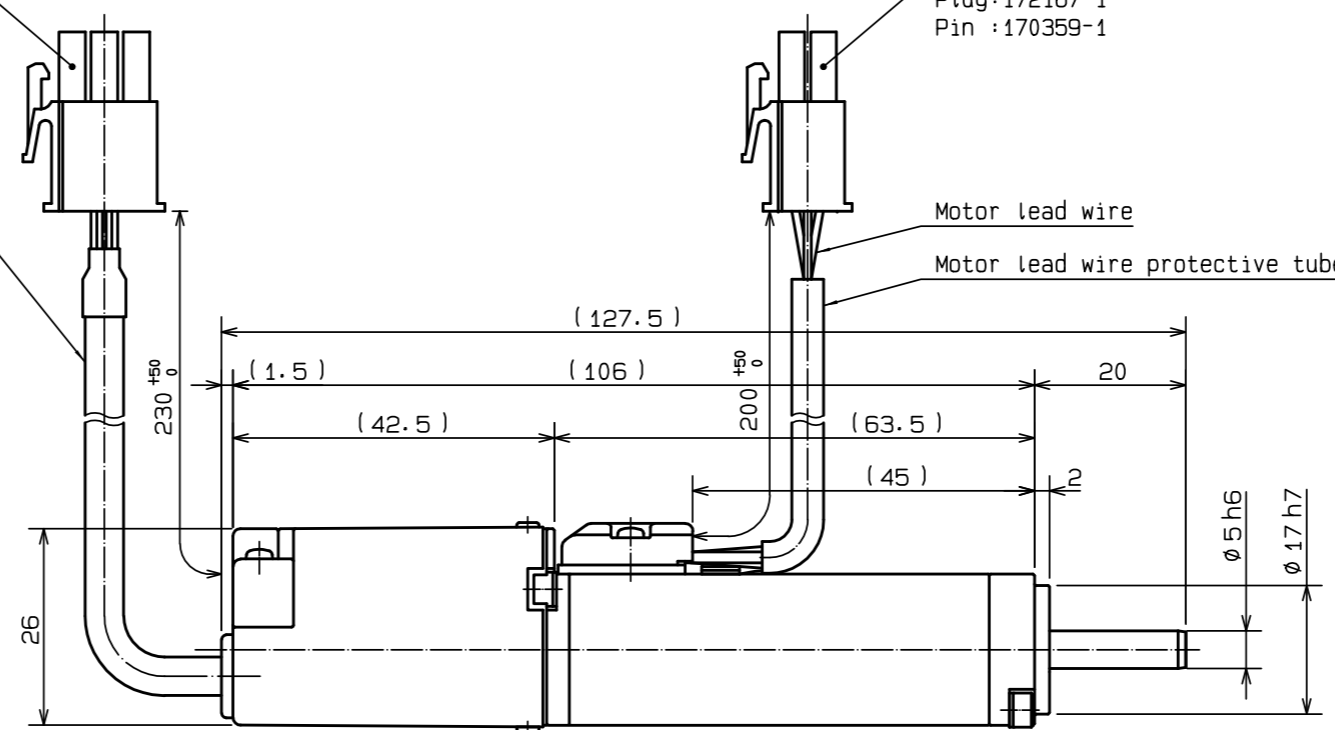
Plug:172169-1  
 Pin :770835-1  
 or 794059-1

Motor connector (AMP)

Plug:172167-1  
 Pin :170359-1

Detector lead wire  
 Multicore shielded wire

Motor lead wire  
 Motor lead wire protective tube



2-M3 depth 6  
 PCD22

MERCHAND G/CLASS SVM E TRACE

Scale	Panasonic Corporation				Agreement	Model	MNMA2ACF1A
1 : 1	3rd Angle System		Unit:mm				
Designed	Drawn	Checked	Checked	Checked	Name	OUTLINE DRAWING	
					No.	SX-DSV0310701	