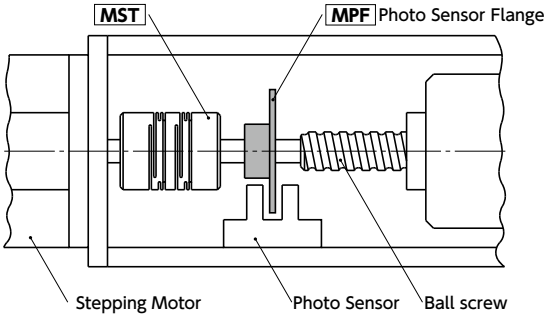
Couplicon®

MPF Photo Sensor Flange

WEB Selection Tool WEB CAD Download

Structure

- Photo sensor flange for origin detection.
- Light weight and ultra small moment of inertia.
- Bore-completed products. Bore diameter of ϕ4 to ϕ15.

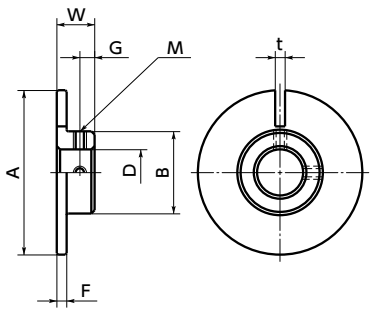


- Products of special specifications including outside diameter of flange, slit width, bore diameter, material, and surface treatment can also be manufactured. Please contact our customer service.

- Material/Finish

RoHS Compliant

	MPF
Main Body	A2017 Alumite Treatment
Hex Socket Set Screw	SCM435 Ferrosoferric Oxide Film



Dimensions

Unit : mm

Part Number 1	A	B	W	F	t	G	M	Moment*1 of Inertia (kg・m²)	Mass*1 (g)	Standard Bore Diameter (dimensional allowance H8) D 2									
										4	5	6	6.35	8	9.525	10	12	14	15
MPF-32	32	14	8	1.5	1.5	3.5	M3	5.1×10^{-7}	5.2	●	●	●	●	●					
MPF-40	40	20	10	1.5	2	4.5	M3	1.4×10^{-6}	9.8	●	●	●	●	●	●	●	●		
MPF-50	50	25	10	1.5	2.5	4.5	M4	3.5×10^{-6}	15			●	●	●	●	●	●	●	●

*1 These are values with max. bore diameter.

- These are order-made products. For delivery period, please contact our customer service.
- All products are provided with hex socket set screw.
- In a case where the bore diameter is ϕ 4 or less, the set screw is used in only one place.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.

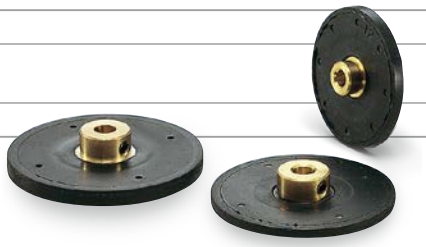
- Part number specification

MPF-32 - 8
1 2

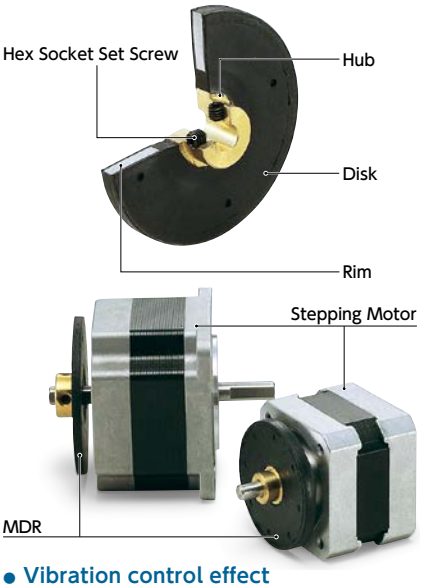
Additional Keyway at Shaft Hole ➡ P.788	Cleanroom Wash & Packaging ➡ P.792	Change to Stainless Steel Screw ➡ P.790
Please feel free to contact us	Please feel free to contact us	Available / Add'l charge

MDR Damper Roll

WEB Selection Tool WEB CAD Download



Structure

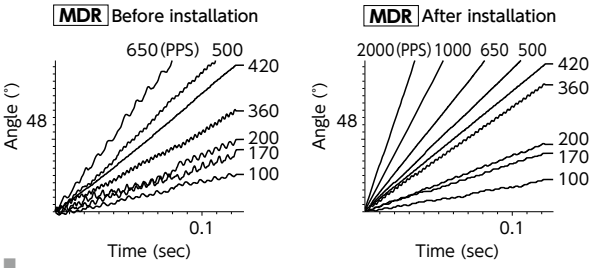


- This reduces the vibration in the resonance area of a stepping motor.
- This supports the follow-up to pulse speed of a stepping motor in high speed zone to improve the max. rotational frequency.
- Allowable operating temperature: −10℃ to 40℃
- Bore-completed products. Special processing is not required.
- **MDR** of special specifications according to the operating environment and device conditions can be manufactured. Also, a coupling with a vibration-proof function using **MDR** can be manufactured. Please contact our customer service.

- **Vibration control effect**

Below is a figure that shows the measurement of vibration control effect of **MDR** by stepping motor speed (pulse).

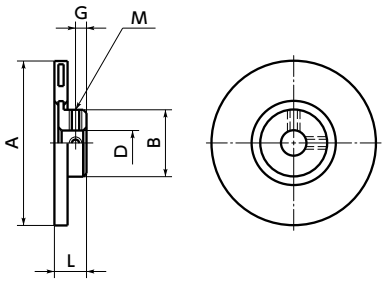
Vibration is reduced by attachment of **MDR**.



- Material/Finish

RoHS Compliant

	MDR
Hub	C3604
Disk	NBR
Rim	SPCC
Hex Socket Set Screw	SCM435 Ferrosoferric Oxide Film



Selection

From the moment of inertia of the rotor of the stepping motor to use, select the applicable part number of **MDR** according to the following table.

Part Number	Moment of inertia of the stepping motor's rotor
MDR-41	Not more than 50 g·cm²
MDR-52	Not more than 150 g·cm²
MDR-57	Not more than 250 g·cm²

- Part number specification

MDR-41 - 5

1 2

Dimensions

Unit : mm

Part Number 1	A	L	B	M	G	Moment*1 of Inertia (g·cm²)	Mass*1 (g)	Standard Bore Diameter (dimensional allowance H8) D 2			
								5	6	6.35	8
MDR-41	41	8	10	1 - M3	3	48	23	●			
MDR-52	52	9.5	15	2 - M4	3.5	139	46	●	●	●	
MDR-57	57	12	15	2 - M4	3.5	270	70		●	●	●

*1 These are values with max. bore diameter.

- All products are provided with hex socket set screw.
- Recommended dimensional allowances of applicable shaft diameter are h6 and h7.

Additional Keyway at Shaft Hole ➡ P.788	Cleanroom Wash & Packaging ➡ P.792	Change to Stainless Steel Screw ➡ P.790
Please feel free to contact us	Please feel free to contact us	Available / Add'l charge

24ZWSK06-S-XXX(Support CAN2.0B protocol)

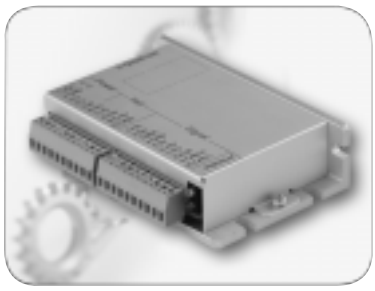
● Model instructions

(For driver of speed closed-loop for brushless DC motor with hall sensor)

XX ZWSK 06 — S — X XX

- XX — Voltage
- ZWSK — BLDC Driver
- 06 — Peak Current
- S — Small Size
- X — Motor Poles
- XX — Max Speed

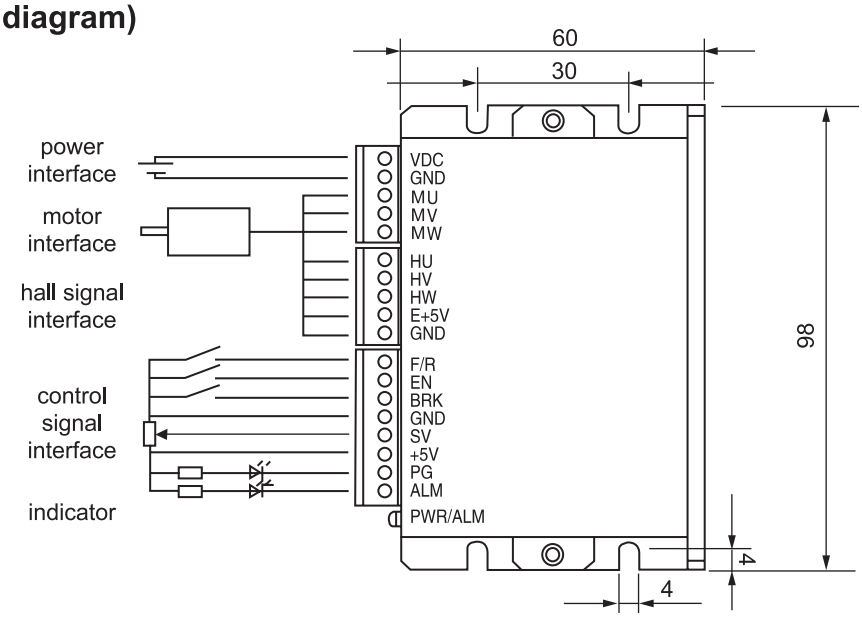
Max Speed: Maximum speed when the motor no-load.(unit: KRPM, For example: 08 mean 8000RPM)



● Function Parameters

Adapted motor	Brushless DC Hall Motor(120° ~240° hall signal)
Supply Voltage	8~30VDC
Operating current	Continuous current 3A, Peak current 6A. (Ambient temperature below 25°C)
Power range	⩽80W
Speed range	100~20000rpm
Speed adjustment mode	Support external potentiometer speed control and PWM velocity command.
Working mode	Hall speed closed - loop mode(Factory Default), Open - loop mode(Optional)
Protective function	Over voltage protection, Under voltage protection, Over current protection, Over temperature protection, Soft - Start and hall signal fault alarm function.
Heat dissipation mode	Natural cooling or external radiator
Dimension	98 × 60 × 24.5(unit: mm)
Temperature	-10° ~70°
Humidity	No more than 85%RH
Other	No corrosive, flammable, explosive, conductive gas, liquid and dust.

● Interface (wiring diagram)



36ZWSK20-N-XXX(Support CAN2.0B protocol)

● Model instructions

(For driver of speed closed-loop for brushless DC motor with hall sensor)

XX ZWSK 20 — N — X XX

- XX — Voltage
- ZWSK — BLDC Driver
- 20 — Peak Current
- N — Medium Size
- X — Motor Poles
- XX — Max Speed

Max Speed: Maximum speed when the motor no-load.(unit: KRPM, For example: 08 mean 8000RPM)

● Function Parameters

Adapted motor	Brushless DC Hall Motor(120° ~240° hall signal)
Supply Voltage	12~40VDC
Operating current	Continuous current 10A, Peak current 20A(Ambient temperature below 25°C)
Power range	⩽400W
Speed range	100~20000rpm
Speed adjustment mode	Support external potentiometer speed control, PWM velocity command. Communication(CAN/Serial port)
Working mode	Hall speed closed - loop mode(Factory Default), Open - loop mode(Optional)
Protective function	Over voltage protection, Under voltage protection, Over current protection, Over temperature protection, Soft -Start and hall signal fault alarm function.
Heat dissipation mode	Natural cooling or external radiator
Dimension	150 × 82 × 26.5(unit: mm)
Temperature	-10° ~70°
Humidity	No more than 85%RH
Other	No corrosive, flammable, explosive, conductive gas, liquid and dust.

● Interface (wiring diagram)