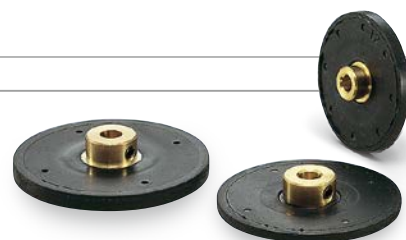
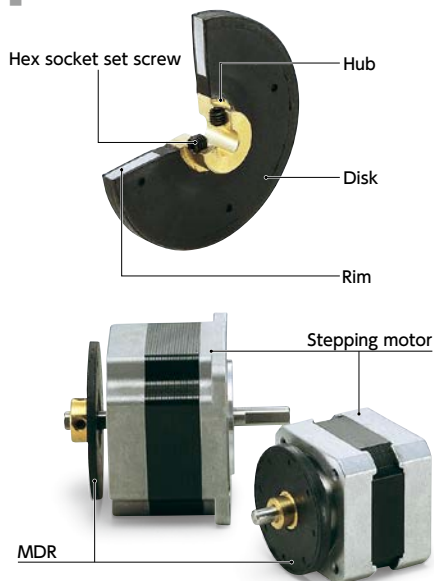


# MDR Damper Rolls



## 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°C to 40°C
- Bore - completed products. Special processing is not required.

### Material/Finish

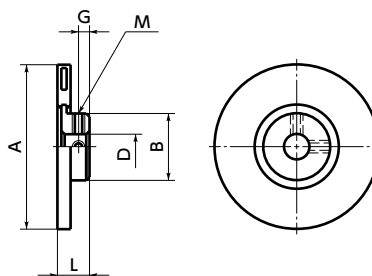
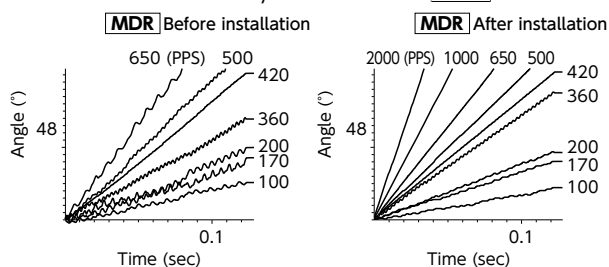


	MDR
Hub	C3604
Disk	NBR
Rim	SPCC
Hex Socket Set Screw	SCM435 Ferrosferic Oxide Film (Black)

### 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**.



## 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 Stepping Motor's Rotor
<b>MDR-41</b>	$5 \times 10^{-6} \text{kg} \cdot \text{m}^2$ or Less
<b>MDR-52</b>	$1.5 \times 10^{-5} \text{kg} \cdot \text{m}^2$ or Less
<b>MDR-57</b>	$2.5 \times 10^{-5} \text{kg} \cdot \text{m}^2$ or Less

Unit : mm

## Dimensions

Part Number	A	L	B	M	G	Moment <sup>*1</sup> of Inertia (kg·m <sup>2</sup> )	Mass <sup>*1</sup> (g)	Standard Bore Diameter (Dimensional Allowance H8)				
								D	5	6	6.35	8
<b>MDR-41</b>	41	8	10	1 - M3	3	$4.8 \times 10^{-6}$	23	●				
<b>MDR-52</b>	52	9.5	15	2 - M4	3.5	$1.39 \times 10^{-5}$	46	●	●	●		
<b>MDR-57</b>	57	12	15	2 - M4	3.5	$2.7 \times 10^{-5}$	70		●	●	●	●

- \*1 : These are values with max. bore diameter.
- All products are provided with hex socket set screws.
- Recommended tolerance for shaft diameters is h6 and h7.

### Part number specification

## MDR-41-5



Additional Keyway at Shaft Hole → P. xxxx | Cleanroom Wash & Packaging → P. xxxx | Change to Stainless Steel Screw → P. xxxx  
 Please feel free to contact us | Please feel free to contact us | Available / Add'l charge