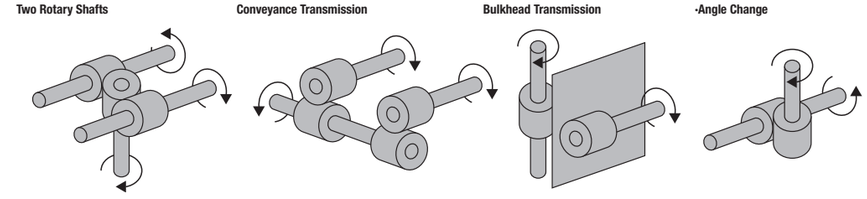
TM Magnetic Transmission Drive

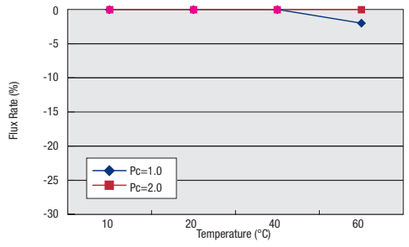
Parts for Non-Contact Magnetic Force Transmission, *continued*

Example of Use

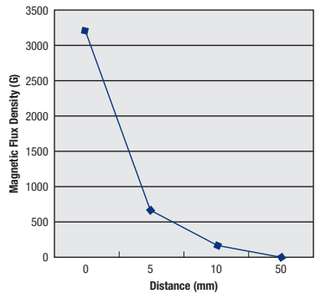


Design Data

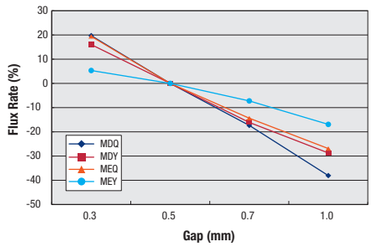
Magnetic Flux Variation Rate by Temperature (Reference)



Space Magnetic Flux Density by Distance



Torque Rate by Distance Change (Reference)



Cautions

– No alteration is available for the magnet parts.
– Strong impact may cause damage and lead to deterioration in magnetic force.
– The following objects are negatively affected by strong magnetic field.
Electric devices such as cell-phones, PCs and watches. Medical electronics such as pacemakers, etc.
– For its non-contact nature, not suitable for extremely high-speed rotation. (Maximum rotational speed 1500 rpm)

TM Magnetic Transmission Drive

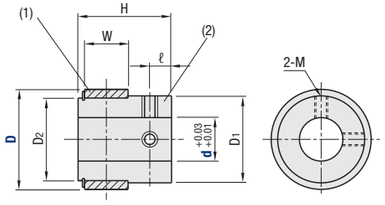
Standard / Economy Type

Features: Usable in vacuum

TM Magnetic Transmission Drive – Standard Type

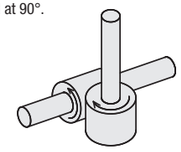
RoHS10

Type		Combined Type	Material (1) Magnet Section	Material (2) Holder Section	Surface Treatment (1) Magnet Section	Surface Treatment (2) Holder Section
Standard Type	MDQ	Perpendicular Type	Neodymium Sintered Magnet	5056 Aluminum Alloy	Out-gassing Prevention Treatment	Corrosion Resistant Anodizing
	MDY	Parallel Type				

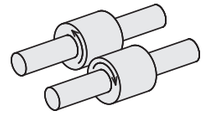


Material Speed 1500rpm Operating Temperature: 0–60°C

Perpendicular Type
Force is transmitted with TM Magnets arranged at 90°.



Parallel Type
Force is transmitted with TM Magnets arranged in parallel.



Part Number Type	D	d	D_1	D_2	H	W	ℓ	M	*Allowable Torque (Nm) Standard Torque MDQ	MDY
Perpendicular Type MDQ	16	6 8	13	12	19.5	8	5	M3	0.013	0.032
	22	8 10 12	18	17	23.5	12			0.050	0.105
Parallel Type MDY	26	10 12 15	22	20	25.5	14			0.068	0.186
	35	12 15 20	32	29	34.0	22		M4	0.245	0.558

⊗ Perpendicular Type and Parallel Type cannot be used in combination.
⊗ Cannot be combined with other manufacturer's products. Please be sure to order in sets of the compatible product types.

* Allowable Torque values are for reference at 0.5mm gap.

Part Number Example

Part Number	-	d
MDQ22	-	8
MEQ35	-	20

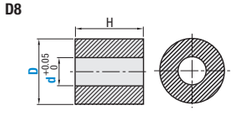
Features: This type is made of plastic and more economical than the Standard Type. Suitable for use in normal atmosphere. Equivalent allowable torque to the Standard Type.

TM Magnetic Transmission Drive – Economy Type

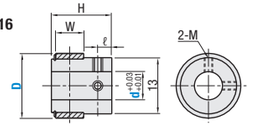
RoHS10

Type		Combined Type	Material (1) Magnet Section	Material (2) Holder Section	Surface Treatment (1) Magnet Section	Surface Treatment (2) Holder Section
Standard Type	MEQ	Perpendicular Type	Neodymium Bonded Magnet	Polyacetal (D16: 5056 Aluminum Alloy)	Electrostatic Paint	—
	MEY	Parallel Type				

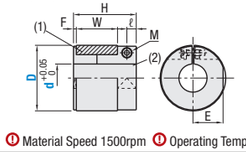
D8



D16

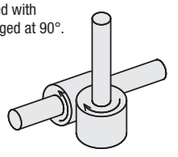


D26, 35, 45

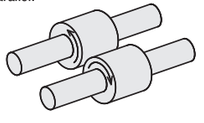


Material Speed 1500rpm Operating Temperature: 0–60°C

Perpendicular Type
Force is transmitted with TM Magnets arranged at 90°.



Parallel Type
Force is transmitted with TM Magnets arranged in parallel.



Part Number Type	D	d	H	W	ℓ	Lock Screw (D16: Set Screw) M	Lock Screw (D16: Set Screw) Tightening Torque (Nm)	F	E	*Allowable Torque (Nm) MEQ	MEY
Perpendicular Type MEQ	8	5	8	—	—	—	—	—	—	0.0058	0.0078
	16	6 8	19.5	8	5	M3	1.5	1.5	—	0.015	0.021
	26	12 15	25.5	14		M2.5	0.333		11.5	0.098	0.167
Parallel Type MEY	35	15 20	33.5	22		M3	0.422		16	0.221	0.515
	45	20	45	30	6.35	M5	0.784	2.0	20.5	0.804	—

⊗ Perpendicular Type and Parallel Type cannot be used in combination.
⊗ Cannot be combined with other manufacturer's products. Please be sure to order in sets of the compatible product types.
ⓘ D diameter 45 is available for Perpendicular Type only.
ⓘ D8 does not have (2) holder section. Use adhesive to fix.
ⓘ The holder section of D16 is tightened with a set screw. (Set screw included)

* Allowable Torque values are for reference at 0.5mm gap.

Part Number Example

Part Number	-	d
MDQ22	-	8
MEQ35	-	20