

# Magnetic Couplings

Magnet coupling designed to transmit torque using the magnetic field that is established between the inner and outer rotor without mechanical contact between shafts. The magnetic couplings create neither slippage nor induction current during rotation. The magnets are installed alternating between poles in a side by side and opposing position. The inner and outer magnetic rotors are locked together by magnetic forces and work as a synchronous coupling. The use of magnetic couplings is recommended in applications where it is necessary to hermetically separate two zones in order to prevent fluid or gas leakage from one area to another. The classic example is fluid transfer pump applications. In these applications the fluid must not come into contact with the external environment. These magnetic couplings also prevent transmission of vibration and *axial and radial* loads through the drive shaft.



## Advantages

### Zero pump maintenance -

They work free of wear. Vibrations are not transmitted to the pump. There is no more the requirement to periodically check/change the sealing. The maintenance cost drops down drastically.

### No leakage -

The isolation cover is mounted on the pump end and the ability to hermetically separate two areas to prevent fluid or gas from leaking to another area to avoid serious leaks.

### Component protection -

If the pump requires a torque (power) bigger than the maximum allowed, the magnets will decouple, they will not recouple unless the pump is stopped.

## Application

Medicine

Chemical industry

Oil and gas industry

Refining technology

Pharmaceutical industry

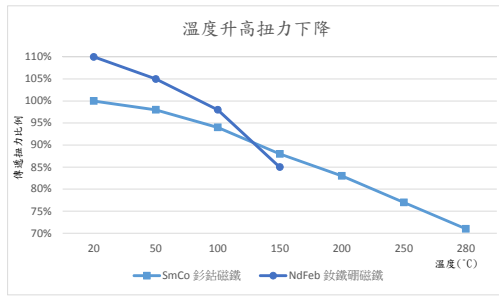
Food industry

Centrifugal pumps

Gear pumps

Screw pumps

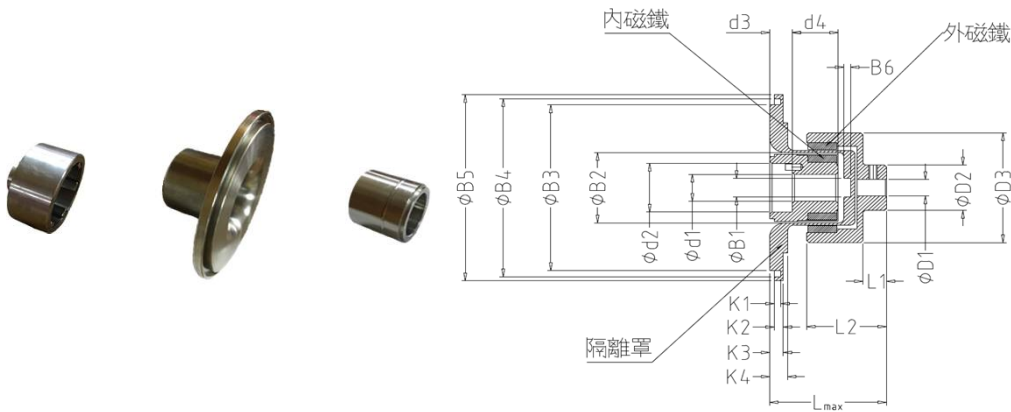
Especially for flammable, explosive, volatile, toxic, conveying high temperature, strong acids and alkalis, organic solvent and precious liquid.



磁鐵材質	最大工作溫度
NdFeB	150 °C
SmCo	280 °C

\*如果工作溫度不超過150°C，為減少成本建議使用NdFeB。

## Dimensions



單位: mm

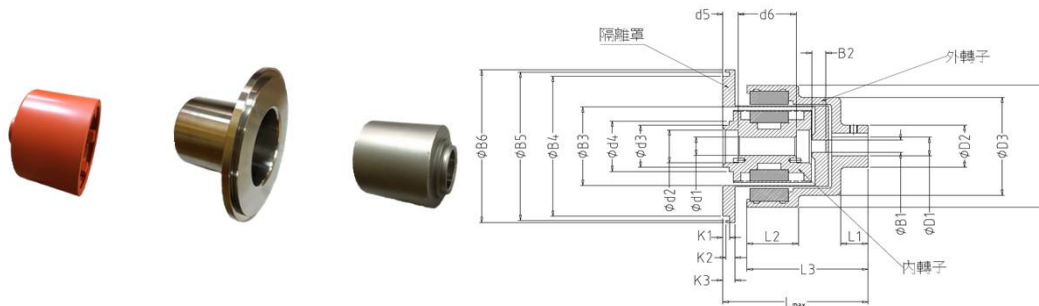
型號	隔離罩 Isolation Cover								外轉子 Outer Rotor					內轉子 Inner Rotor				Lmax		
	B1	B2	B3	B4	B5	B6	K1	K2	K3	K4	D1	D2	D3	L1	L2	d1	d2		d3	d4
GRMC60-B	9	34	80	86	90	3	3	4	6	8	8	22	53	10.5	35.5	13	23.5	10	20.5	51.5

型號 20°C環境溫度扭力  
GRMC60-B 0.035mkg

\*GRMC60-B最大工作溫度為150°C。 GRMC60-B max work temperature is 150°C.

\*內外轉子軸心孔可視使用軸心做小範圍修改。

\*規格品訂做。 Specifications product customization.



單位: mm

型號	隔離罩 Isolation Cover								外轉子 Outer Rotor						內轉子 Inner Rotor						Lmax			
	B1	B2	B3	B4	B5	B6	K1	K2	K3	D1	D2	D3	D4	L1	L2	L3	d1	d2	d3	d4		d5	d6	
GRMC10-2N				80	88	90																		97.3
GRMC11-4N6N	9	9	56	100	106	109	4.5	6	8	13.5	30.1	70	87.1	18	34	80.1	13	23.5	30	36	4	3		96
GRMC21-6N				125	137	140																		97.1

型號 20°C環境溫度扭力

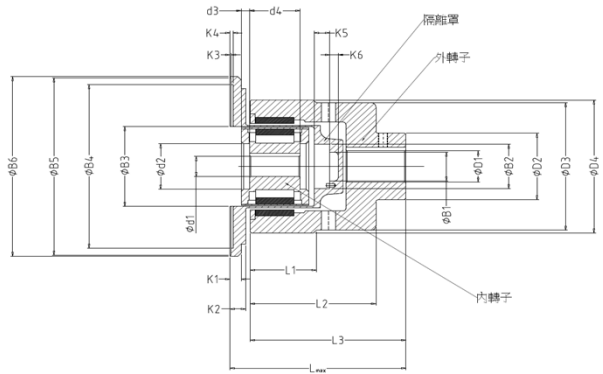
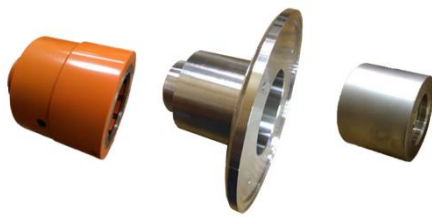
GRMC10-2N 0.1mkg

GRMC11-4N6N 0.2mkg/0.4mkg

GRMC21-6N 0.4mkg

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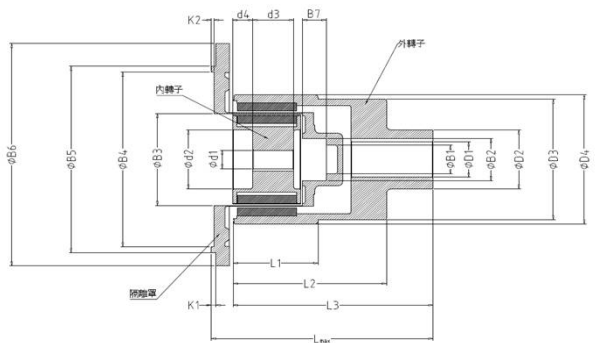


單位: mm

型號	隔離罩 Isolation Cover										外轉子 Outer Rotor						內轉子 Inner Rotor				Lmax			
	B1	B2	B3	B4	B5	B6	K1	K2	K3	K4	K5	K6	D1	D2	D3	D4	L1	L2	L3	d1		d2	d3	d4
GRMC210-N20				123	135	137																		
GRMC221-N2032	26	40	72	148	160	186	9.5	13	1	2.5	13	7	28	60	115	120	55	105	130	18	41	7	42	149.5
GRMC222-N32				173	185	187																		

型號	20°C環境溫度扭力
GRMC210-N20	1.2mkg
GRMC221-N2032	1.2mkg/2.5mkg
GRMC222-N32	2.5mkg

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單位: mm

型號	隔離罩 Isolation Cover										外轉子 Outer Rotor						內轉子 Inner Rotor				Lmax			
	B1	B2	B3	B4	B5	B6	B7	K1	K2	D1	D2	D3	D4	L1	L2	L3	d1	d2	d3	d4				
GRMCL-V40																								
GRMCL-V65	34	50	109	207	221	264	26	15	5	42	70	143	153	93	168	219	22	70	8	45			226.5	
																								236.5

型號	20°C環境溫度扭力
GRMCL-V40	8mkg
GRMCL-V65	14mkg

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