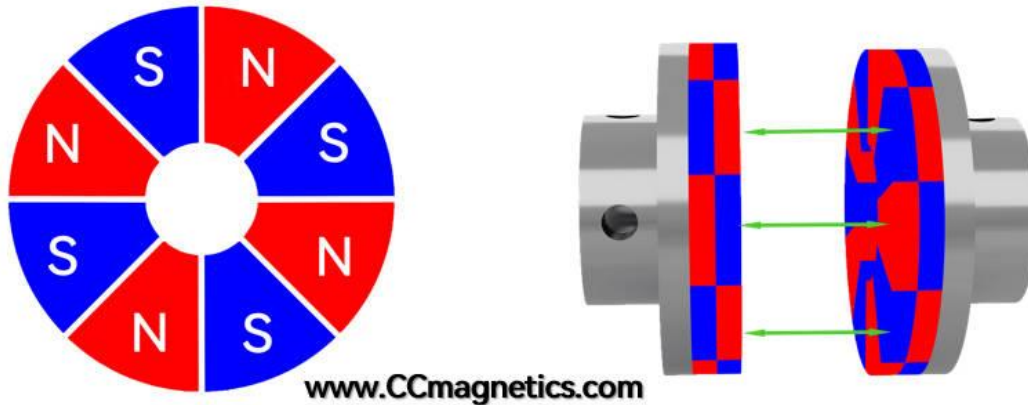


# XD - Magnetic Disc Couplings Catalog

What are magnetic disc couplings?



[Magnetic disc couplings](#) provide a contactless means of torque transfer. The concept is straightforward: Opposite poles attract. This fundamental principle enables the transmission of torque from one magnetic hub to another. By rotating one magnetic hub, the torque is magnetically conveyed to the companion hub. This transmission can occur through air or via a non-magnetic barrier like stainless steel or fiberglass, achieving complete isolation of the inner from the outer hub. The design excludes any contacting components.

What makes magnetic disc couplings so efficient?



All sizes of CCmagnetics' magnetic disc couplings use sector-shaped magnets for torque transfer. These magnets maximize the use of the disc surface area, eliminating redundancy. The image above, captured using magnetic field viewing film, illustrates this point by showing the magnetic field distribution within a CCmagnetics magnetic disc coupling.

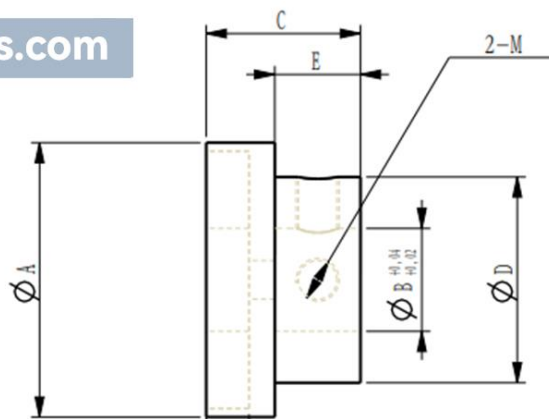
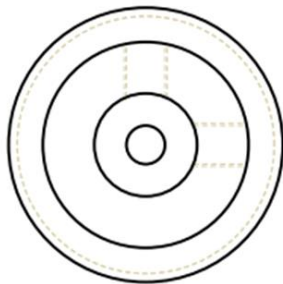
Compared to the Demo magnetic disc coupling, CCmagnetics' magnetic coupling is smaller and lighter while achieving greater torque. This disc-shaped magnetic coupling is not only more efficient but also saves valuable space within the device.

## Product Overview:

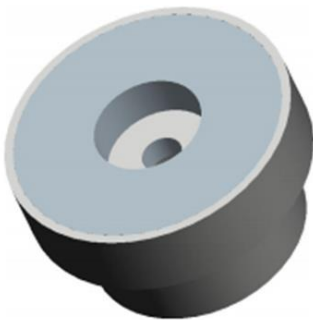
### Drawing:

# XD

[www.ccmagnetics.com](http://www.ccmagnetics.com)



[www.ccmagnetics.com](http://www.ccmagnetics.com)



Part Number Example:

**XD-38-8-L-C-F**

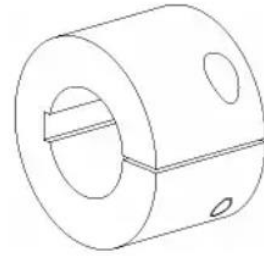
| Outside diameter: 38mm  
| Inner /shaft diameter: 8mm  
| L= 316L (stainless steel)  
| SCM-surface covering material,  
| SFM-shaft fix method: C  
| MC-material coverage: fully



**Type A**  
setscrew



**Type B**  
with feather keyway  
and setscrew



**Type C**  
clamping hub  
single slot with  
feather keyway

### Parameter defined in mm/N.m

Mod	A (mm)	B (mm)	SCM	SFM	MC	Max Speed RPM	Tq1 (N.m)	Tq5 (N.m)	C (mm)	D (mm)	E (mm)	M
XD	12	4~6	S/L	A	F	35,500	0.05	-	16	12	-	M3
XD	24	6~10	S/L/A	B/C/A	F/H	35,000	0.42	0.04	18	18	10	M4
XD	28	6~10	S/L/A	B/C/A	F/H	34,000	0.75	0.12	18	20	10	M4
XD	32	8~12	S/L/A	B/C/A	F/H	32,000	1.95	0.32	18	24	10	M5
XD	38	8~15	S/L/A	B/C/A	F/H	30,000	2.98	0.82	18	28	10	M5
XD	43	12~20	S/L/A	B/C/A	F	26,500	3.8	1.2	20	30	12	M5
XD	50	12~20	S/L/A	B/C/A	F	23,000	4.2	1.5	22	34	13	M5
XD	63	15~25	S/L/A	B/C	F	20,000	11	4.5	25	36	15	M5
XD	68	15~25	S/L/A	B/C	F	17,500	16.2	7.8	30	40	18	M5
XD	78	18~30	S/L/A	B/C	F	15,000	18.5	10	32	42	18	M5
XD	90	20~35	S/L/A	B/C	F	13,500	22.8	8.7	38	-	20	M6
XD	100	20~35	S/L/A	B/C	F	12,000	28.5	10.5	40	-	22	M6
XD	120	28~38	S/L/A	B/C	F	10,000	33	12.3	50	-	30	M8
XD	130	35~40	S/L/A	B/C	F	9,000	50	19.6	45	-	25	M8

### Parameter defined in inches/in.lbs

Mod	A (in)	B (in)	SCM	SFM	MC	Max Speed RPM	Tq1 (in.lbs)	Tq5 (in.lbs)	C (in)	D (in)	E (in)	M
XD	0.47	0.16~0.24	S/L	A	F	35,500	0.4	-	0.63	0.47	-	M3
XD	0.94	0.24~0.39	S/L/A	B/C/A	F/H	35,000	3.7	0.4	0.71	0.71	0.39	M4
XD	1.1	0.24~0.39	S/L/A	B/C/A	F/H	34,000	6.6	1.1	0.71	0.79	0.39	M4
XD	1.26	0.31~0.47	S/L/A	B/C/A	F/H	32,000	17.3	2.8	0.71	0.94	0.39	M5
XD	1.5	0.31~0.59	S/L/A	B/C/A	F/H	30,000	26.4	7.3	0.71	1.1	0.39	M5
XD	1.69	0.47~0.79	S/L/A	B/C/A	F	26,500	33.6	10.6	0.79	1.18	0.47	M5
XD	1.97	0.47~0.79	S/L/A	B/C/A	F	23,000	37.2	13.3	0.87	1.34	0.51	M5
XD	2.48	0.59~0.98	S/L/A	B/C	F	20,000	97.4	39.8	0.98	1.42	0.59	M5
XD	2.68	0.59~0.98	S/L/A	B/C	F	17,500	143.4	69	1.18	1.57	0.71	M5
XD	3.07	0.71~1.18	S/L/A	B/C	F	15,000	163.7	88.5	1.26	1.65	0.71	M5
XD	3.54	0.79~1.38	S/L/A	B/C	F	13,500	201.8	77	1.5	-	0.79	M6
XD	3.94	0.79~1.38	S/L/A	B/C	F	12,000	252.2	92.9	1.57	-	0.87	M6
XD	4.72	1.1~1.5	S/L/A	B/C	F	10,000	292.1	108.9	1.97	-	1.18	M8
XD	5.12	1.38~1.57	S/L/A	B/C	F	9,000	442.5	173.5	1.77	-	0.98	M8

### Parameter Notes:

Term	Explanation	Notes
SCM	Surface Covering Material	A=Aluminum 6061 Alloy (UNS A96061), S=Stainless Steel 304 (UNS S30400), L=Stainless Steel 316 (UNS S31600), T=TC4 Titanium Alloy, Ti-6Al-4V, (UNS R56400).
SFM	Shaft Fixing Method	A or C, refer to the picture for details.
MC	Material Coverage	F= Fully, H= Half
Tq1	Torque, gap = 1mm / 0.03in	The torque value shown is for a 1mm or 0.03in gap.
Tq5	Torque, gap = 5mm / 0.2in	The torque value shown is for a 1mm or 0.03in gap.

### Customizable Items:

#### 1. Third-party authoritative testing available.

Globally recognized torque and material test reports issued by authoritative organizations are provided.

## 2. No MOQ and Global Door-to-Door Delivery

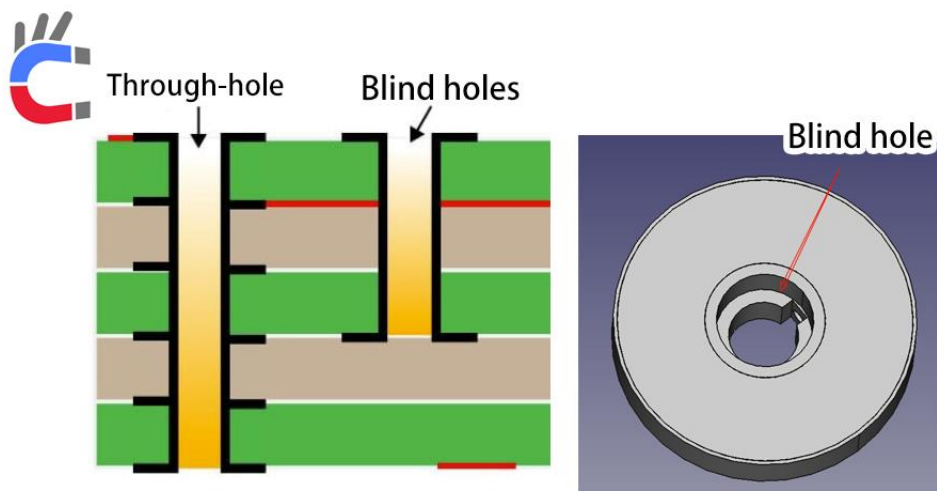
We offer global door-to-door delivery service with no minimum order quantity (MOQ).

## 3. Shaft Diameter and Shape (Free Service)



You can choose the shaft's size and shape to meet your specific needs.

## 4. Blind Holes and Through Holes (Free Service)



You can choose between blind holes and through holes as needed.

## 5. Half-Enclosed and Fully-Enclosed Designs (Paid Service)



You can choose between half-enclosed and fully-enclosed designs. Half-enclosed designs are less expensive but are not waterproof, while fully-enclosed designs are waterproof.

**6. Material Selection (Paid Service)**

You can choose the material for your magnetic disc coupling, including surface material and magnet materials. Different materials are suitable for various applications. [Learn more about materials used in disc-type magnetic couplings](#), or describe your butterfly coupling's working environment, and our staff will recommend the appropriate material.



**Stainless Steel 316L**



**Stainless Steel 304 (standard)**



**Aluminum Alloy 6061**

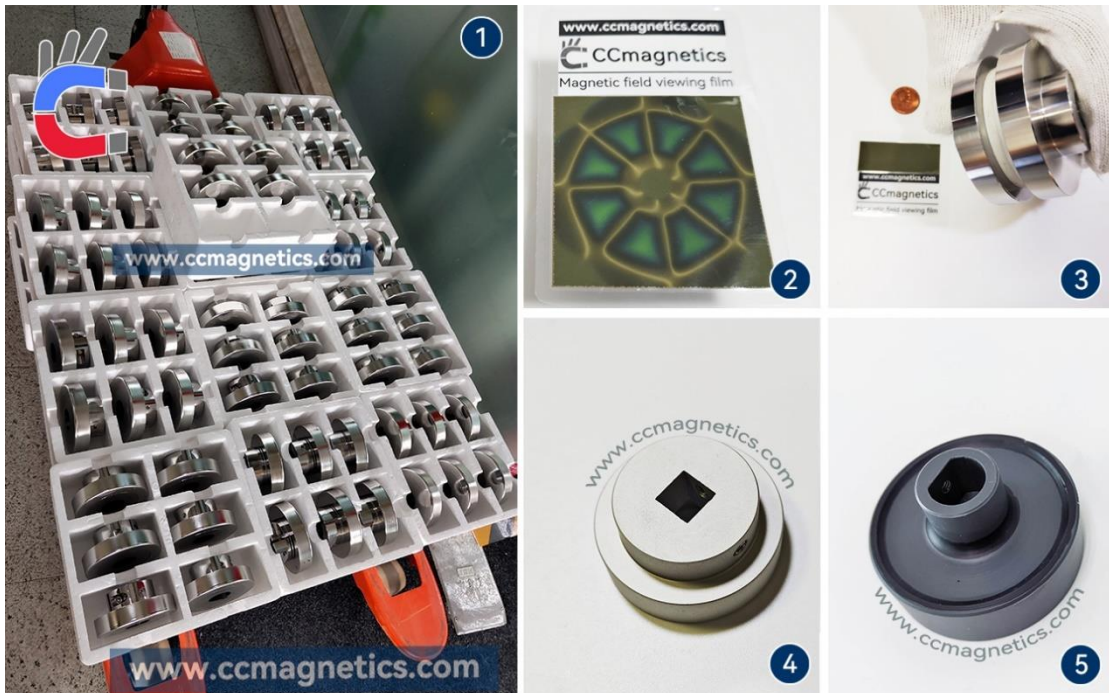


**PVC Magnetic Coupler**

## About Us:

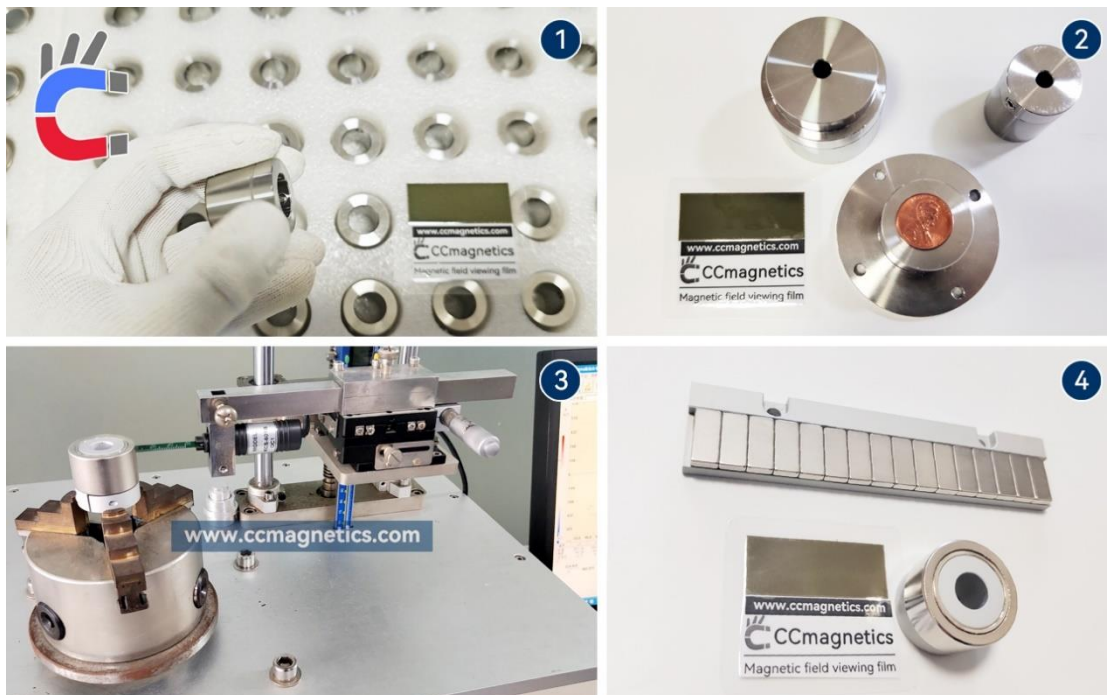
Established in 2010 and headquartered in Beijing, China, CCmagnetics is a duly registered commercial entity operating under the auspices of the Chinese industrial and commercial authorities.

CCmagnetics supplies contactless magnetic drives products to 39 countries and regions worldwide. This is made possible by: exquisite workmanship, meticulous and professional service, and extremely high overall cost performance. Our products have won widespread praise from global customers.



**Image Captions:**

1. A large number of magnetic disc couplings for export to Brazil are waiting to be packaged and shipped.
2. CCmagnetics' magnetic disc couplings feature a fan-shaped magnet arrangement for high magnetic transmission efficiency.
3. A custom-made stainless steel 316L (UNS S31603) magnetic disc couplings with an outer diameter of 78mm / 3.07 inches.
4. Custom aluminum alloy 6061 (UNS A96061) disc type magnetic coupling with square shaft hole, specially designed for damper closer.
5. A custom-made PVC (polyvinyl chloride) disk magnetic couplings designed for liquid mixers in chemical corrosive environments.

**Image Captions:**

1. Stainless steel 316l (UNS31603) PT series magnetic gear pairs awaiting packaging and shipment to germany.
2. Custom-made stainless steel 304 (UNS30400) co-axial magnetic couplings for our valued customer.
3. All magnetic drive/transmission products undergo rigorous magnetic field testing before shipment.
4. Custom-made rack pinion gears designed for laboratory liquid shaking applications.

**Representative Patents**

Since its inception, our company has been dedicated to the field of magnetic



transmission and magnetic rings. Our representative patents include:



Patent Name 1: Comprehensive management system for magnetic ring production line.

Patent Name 2: Fixture tooling for rubber mold.

Patent Name 3: Axial magnetization equipment.

Patent Name 4: Magnetic detection equipment for sealing ring.

Patent Name 5: Torque adjustable magnetic coupling.

Patent Name 6: Magnetic suction coupling with clutch function.

## Ordering Information:

### Payment:

We accept payment via proforma invoice and 100% T/T.

Credit card payments are accepted, but a 2.9% surcharge will apply.

### Packaging and Logistics:

We accept delivery through the customer's preferred shipping company.

Our packaging materials, including tinplate, kraft paper, and foam, fully comply with EU environmental regulations.

### Delivery Time:

Shipment will be arranged within 30 days after receipt of payment. Delivery time may be shorter if our factory schedule permits.

Transportation time is estimated to be 7-10 days.

#### After-sales Service:

- Our products undergo rigorous quality inspection and testing before leaving the factory.
- Based on the demagnetization curve of neodymium iron boron, our products have a lifespan of 60-100 years under normal conditions.
- Our products are made of metal and magnets that meet international standards, and the adhesives are made of the well-known brand 3M, and additional material safety reports can be provided.
- If any quality issues are found within one year, please provide photos as proof. We will compensate with a new product in your next order. The defective product does not need to be returned.

#### Contact us:

