

NON-CONTACT MAGNETIC GEARS & COUPLINGS

*Clean, Quiet, and Safe Motion
Powered by Non-Contact Technology*

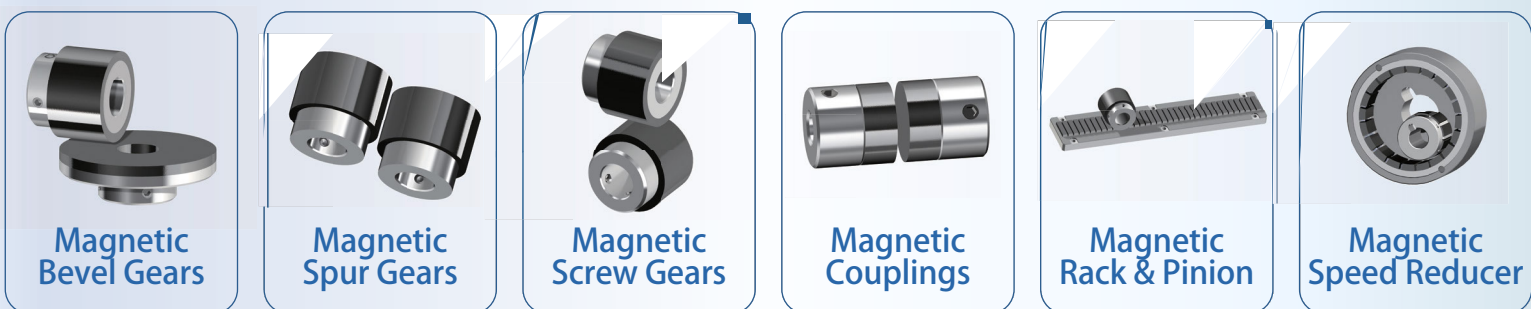


Why Non-Contact Technology?

- No particle generation from tooth surface wear
- Operates without the need for lubrication
- Barrier transmission allows for seal-less designs
- Low noise and vibration due to non-contact power transmission
- Easier assembly with high angular and eccentric misalignment tolerance
- Magnetic slip under overload enhances safety conditions

What Are Magnetic Gears?

A magnetic gear, also known as a non-contact gear, is a toothless power-transmission component that utilizes magnetic force from permanent magnets such as neodymium magnets to transfer rotational speed and torque between two shafts without physical contact. This contactless power transmission offers magnetic gears significant advantages over conventional mechanical gears.



SEE THE BACK
for
Applications & Benefits!



Conventional
Mechanical Gears

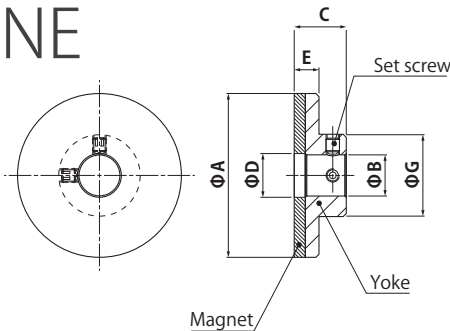
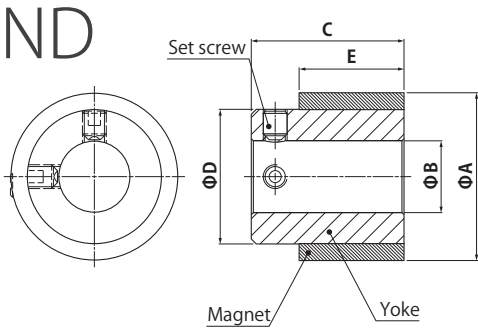
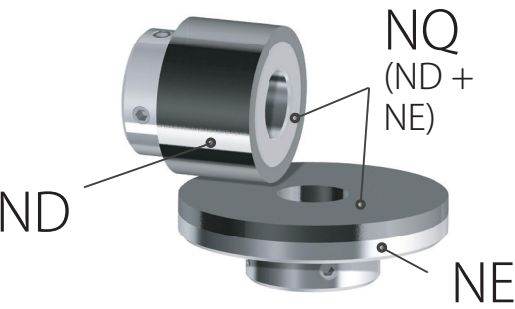


Magnetic
Bevel Gears



Magnetic Pole
Arrangement

Magnetic gears (center) offer unique benefits beyond conventional gears (left). The image on the right shows the magnetic pole arrangement.



Standard Items

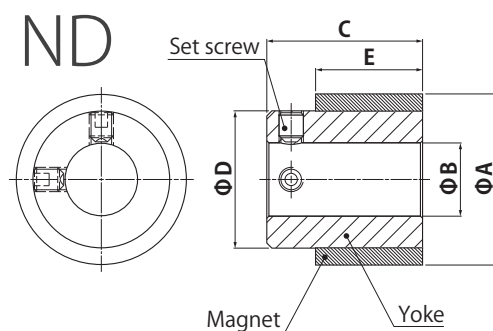
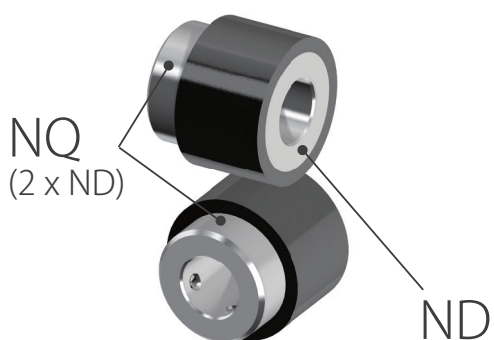
Model (Set)	Model (Individual)	Dimensions								Unit Weight (g)	Maximum Transmissible Torque (N·m) and Air Gap		
		A	B Dimensions	B Tolerance	C	D	E	G	Set Screw		0.5 mm	1 mm	2 mm
NQ2247-08	ND22C-08	22	10	+0.022 0	25	17.2	17.5	-	M4	50	0.308	0.252	0.162
	NE47-08	47	10		19	12	9	24	M4	150			
NQ3560-12	ND35-12	35	15	+0.027 0	32	28.2	22	-	M5	170	0.746	0.611	0.39
	NE60-12	60	15		19	16	9	30	M5	220			

The product data shown above are measured at room temperature.

Made-To-Order Items

Model (Set)	Model (Individual)	Dimensions								Unit Weight (g)	Maximum Transmissible Torque (N·m) and Air Gap		
		A	B Dimensions	B Tolerance	C	D	E	G	Set Screw		0.5 mm	1 mm	2 mm
NQ5580-12	ND55-12	55	25	+0.033 0	38	46.2	25	-	M8	485	2.609	2.226	1.618
	NE80-12	80	25		29	30	11	45	M8	560			

The product data shown above are measured at room temperature.



Standard Items

Model (Set)	Model (Individual)	Dimensions								Unit Weight (g)	Maximum Transmissible Torque (N·m) and Air Gap		
		A	B (Dimensions)	B (Tolerance)	C	D	E	G	Set Screw		0.5 mm	1 mm	2 mm
NQ2222-08	ND22C-08	22	10	+0.022 0	25	17.2	17.5	-	M4	50	0.172	0.135	0.084
NQ2626-08	ND26-08	26	12	+0.027 0	25	20.2	14	-	M4	65	0.204	0.167	0.109
NQ3535-08	ND35-08	35	15		32	29.3	22	-	M5	170	0.576	0.495	0.366
NQ3535-12	ND35-12	35	15		32	28.2	22	-	M5	170	0.507	0.403	0.256
NQ5555-12	ND55-12	55	25	+0.033 0	38	46.2	25	-	M8	485	1.785	1.648	1.177

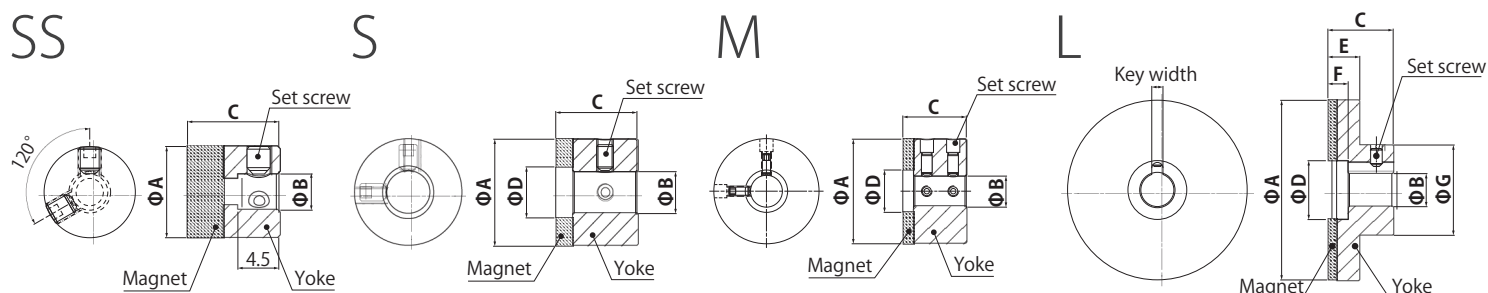
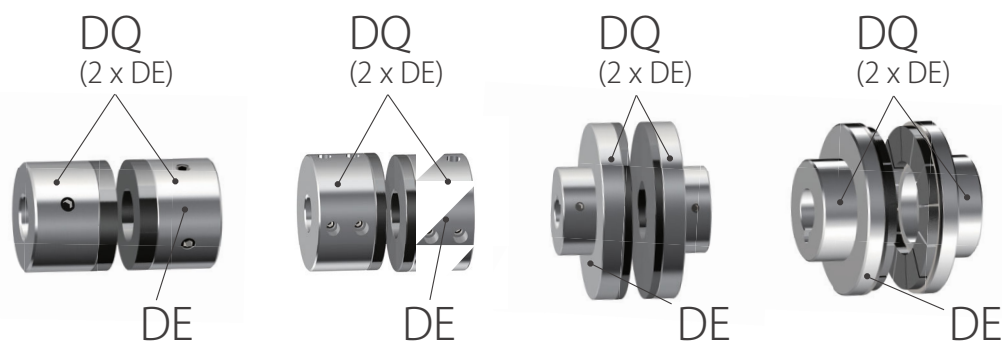
The product data shown above are measured at room temperature.



Standard Items

Model (Set)	Model (Individual)	Dimensions							Unit Weight (g)	Maximum Transmissible Torque (N·m) and Air Gap		
		A	B Dimensions	B Tolerance	C	D	E	Set Screw		0.5 mm	1 mm	2 mm
NM1616-08	MD16-08	16	8	+0.05 0	19.5	15	12	M3	15	0.02	0.015	0.008
NM2626-08	MD26-08	26	12		25	24	14	M4	40	0.098	0.08	0.053
NM3535-12	MD35-12	35	15		32	32	22	M5	100	0.24	0.191	0.121

The product data shown above are measured at room temperature.



Standard Items

Model (Set)	Model (Individual)	Ref. Drawing	Dimensions											Unit Weight (g)	Maximum Transmissible Torque (N·m) and Air Gap		
			A	B Dimensions	B Tolerance	C	D	E	F	G	Key Width Dimensions	Key Width Tolerance	Set Screw		1 mm	5 mm	10 mm
DQ1010-02	DE10-02	SS	10	4	+0.018 0	10	-	-	-	-	-	-	M2.5	6	0.031	0.007	0.0016
DQ2020-08	DE20-08	S	20	8	+0.022 0	14	10	-	-	-	-	-	M4	27	0.32	0.031	0.003
DQ2525-08	DE25-08		25	10		19	12	-	-	-	-	-	M4	59	0.727	0.111	0.014
DQ3030-08	DE30-08		30	12	+0.027 0	19	14	-	-	-	-	-	M4	85	1.37	0.281	0.044
DQ3535-08	DE35-08	M	35	12	+0.027 0	24	16	-	-	-	-	-	M4	151	2.215	0.568	0.112
DQ4040-08	DE40-08		40	12		24	16	-	-	-	-	-	M4	206	3.511	1.046	0.244
DQ5050-08	DE50-08	L	50	12	+0.027 0	24	20	14	9	30	4	+0.1 0	M4	231	6.45	2.454	0.751
DQ6060-08	DE60-08		60	15		29	26	14	9	40	5		M5	386	9.929	4.477	1.648
DQ7070-08	DE70-08		70	15		29	26	14	9	40	5		M5	497	15.486	7.388	3.125

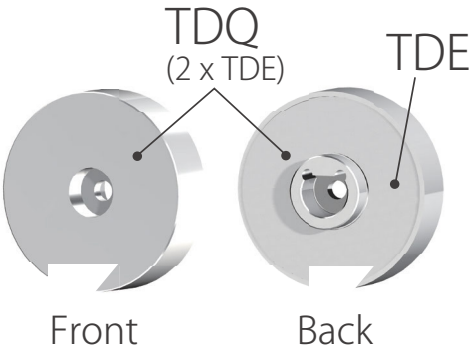
The product data shown above are measured at room temperature.

Made-To-Order Items

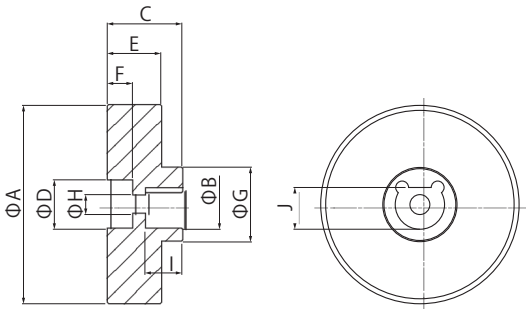
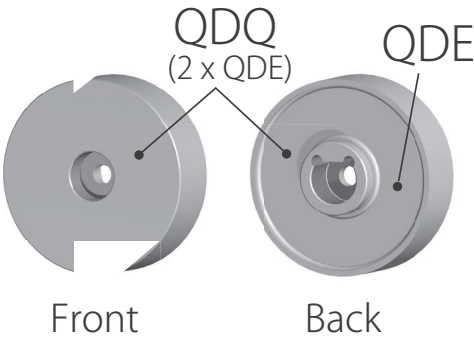
Model (Set)	Model (Individual)	Ref. Drawing	Dimensions											Unit Weight (g)	Maximum Transmissible Torque (N·m) and Air Gap		
			A	B Dimensions	B Tolerance	C	D	E	F	G	Key Width Dimensions	Key Width Tolerance	Set Screw		1 mm	5 mm	10 mm
DQ4545-08	DE45-08	L	45	12	+0.027 0	24	20	14	9	30	4	+0.1 0	M4	191	4.595	1.598	0.434
DQ5555-08	DE55-08		55	15		29	26	14	9	40	5		M5	337	7.621	3.178	1.167
DQ6565-08	DE65-08		65	15		29	26	14	9	40	5		M5	439	12.614	5.942	2.346
DQ7575-08	DE75-08		75	15		29	26	14	9	40	5		M5	558	-	9.309	4.165
DQ8080-08	DE80-08		80	15	+0.033 0	29	26	14	9	40	5	+0.2 0	M5	624	-	10.589	4.755
DQ100100-12	DE100-12		100	25		39	42	18	15	60	8		M6	1199	-	25.317	10.602
DQ120120-16	DE120-16		120	35		41	54	18	17	70	10		M8	1653	-	47.343	18.636
DQ150150-18	DE150-18		150	50		51	76	18	21	100	16		M12	3100	-	99.455	44.934

The product data shown above are measured at room temperature.

SUS Cover
(300 Series Stainless Steel)



Resin Cover (PVC)



Made-To-Order Items / TDQ Stainless Steel Cover

Model (Set)	Model (Individual)	Dimensions												Maximum Transmissible Torque (N·m) and Air Gap	
		A	B Dimensions	B Tolerance	C	D	E	F	G	H	I	J Dimensions	J Tolerance	5 mm	10 mm
TDQ6060-08	TDE60-08	60	15	+0.05 0	25	16	16.6	10	22	8.2	10	13	+0.1 +0.02	2.059	0.716
TDQ7070-08	TDE70-08	70	20		25	20	16.6	10	30	8.2	10	17		3.707	1.52
TDQ8080-08	TDE80-08	80	20		30	20	21.5	10	30	8.2	15	17		6.238	2.863
TDQ100100-08	TDE100-08	100	20		30	20	21.5	10	30	8.2	15	17		12.384	6.404
TDQ120120-10	TDE120-10	120	25		42	25	22	15	38	11	20	21		21.153	11.082
TDQ150150-12	TDE150-12	150	35		50	25	22	15	55	11	28	30		47.243	25.917

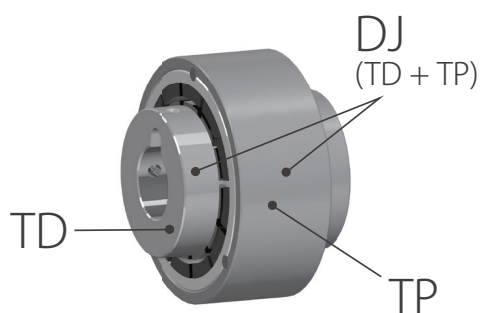
The product data shown above are measured at room temperature.

Made-To-Order Items / QDQ Resin Cover

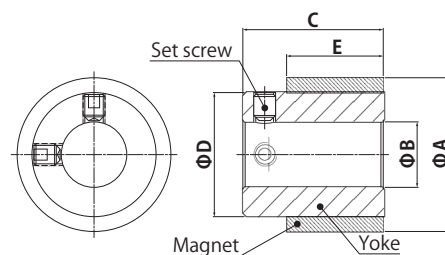
Model (Set)	Model (Individual)	Dimensions												Maximum Transmissible Torque (N·m) and Air Gap	
		A	B Dimensions	B Tolerance	C	D	E	F	G	H	I	J Dimensions	J Tolerance	5 mm	10 mm
QDQ6060-08	QDE60-08	60	15	+0.05 0	25	16	19	10	22	8.2	10	13	+0.1 +0.02	2.059	0.716
QDQ7070-08	QDE70-08	70	20		25	20	19	10	30	8.2	10	17		3.707	1.52
QDQ8080-08	QDE80-08	80	20		30	20	24	10	30	8.2	15	17		6.238	2.863

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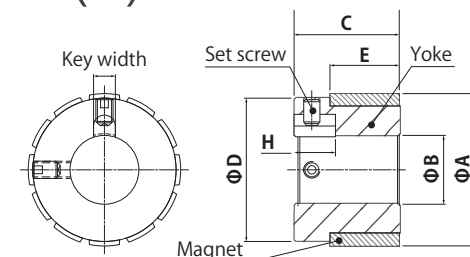
Magnet : Neodymium magnet + Electrolytic nickel plating
Yoke : SC steel + Electroless nickel plating



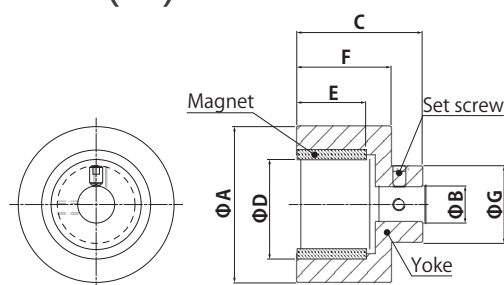
TD (A)



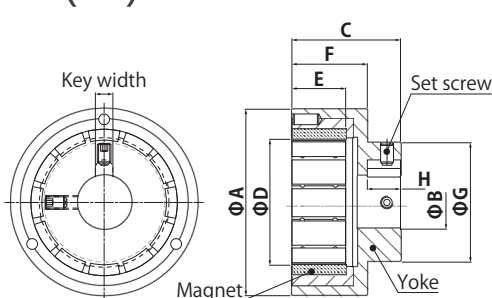
TD (B)



TP (C)



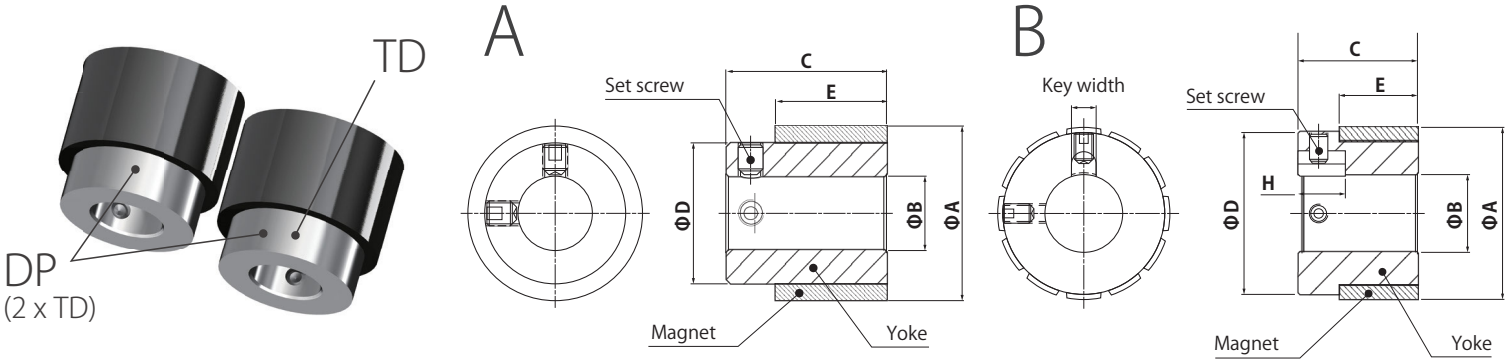
TP (D)



Made-To-Order Items

Model (Set)	Model (Individual)	Ref. Drawing	Dimensions											Set Screw	Maximum Transmissible Torque (N·m) and Air Gap
			A	B Dimensions	B Tolerance	C	D	E	F	G	H	Key Width Dimensions	Key Width Tolerance		1.5 mm
DJ2635-18	TD26-18	A	26	12	+0.027 0	25	20.2	14	-	-	-	-	-	M4	1.707
	TP35-18	C	50	12		40	29.1	22	30	25	-	-	-		
DJ4355-12	TD43-12	B	43	20	+0.033 0	38	41	25	-	-	12	6	+0.1 0	M5	14.008
	TP55-12	D	73	20		50	46	25	35	45	12	6			
DJ5568-12	TD55-12	B	55	25		+0.2 0	38	52	25	-	-	15	8	+0.2 0	M6
	TP68-12	D	86	25	50		58	25	35	55	15	8			

The product data shown above are measured at room temperature.



Standard Items

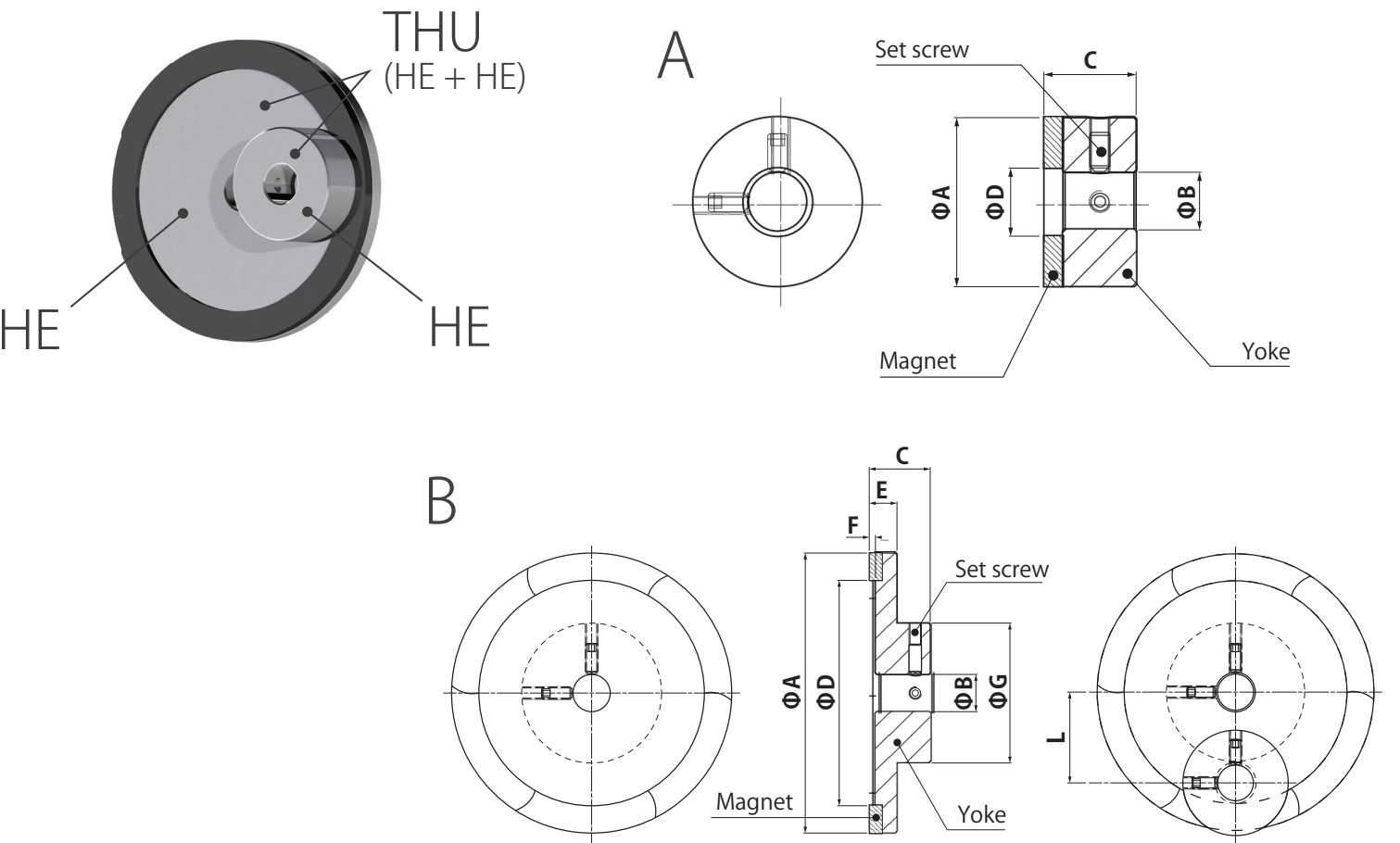
Model (Set)	Model (Individual)	Ref. Drawing	Dimensions									Unit Weight (g)	Maximum Transmissible Torque (N·m) and Air Gap		
			A	B Dimensions	B Tolerance	C	D	E	Key Width Dimensions	Key Width Tolerance	Set Screw		0.5 mm	1 mm	2 mm
DP2626-08	TD26-08	A	26	12	+0.027 0	25	20.2	14	-	-	M4	65	0.36	0.31	0.23
DP2626-18	TD26-18	A	26	12		25	20.2	14	-	-	M4	65	0.174	0.121	0.066
DP3535-18	TD35-18	A	35	15	+0.033 0	32	29.3	22	-	-	M5	170	0.773	0.598	0.369

The product data shown above are measured at room temperature.

Made-To-Order Items

Model (Set)	Model (Individual)	Ref. Drawing	Dimensions										Maximum Transmissible Torque (N·m) and Air Gap		
			A	B Dimensions	B Tolerance	C	D	E	H	Key Width Dimensions	Key Width Tolerance	Set Screw	0.5 mm	1 mm	2 mm
DP5555-12	TD55-12	B	55	25	+0.033 0	38	52	25	15	8	+0.2 0	M6	2.524	2.249	1.785

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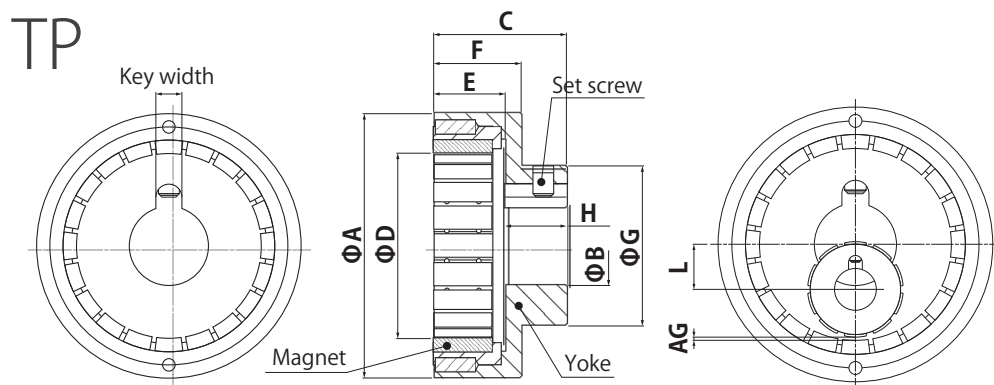
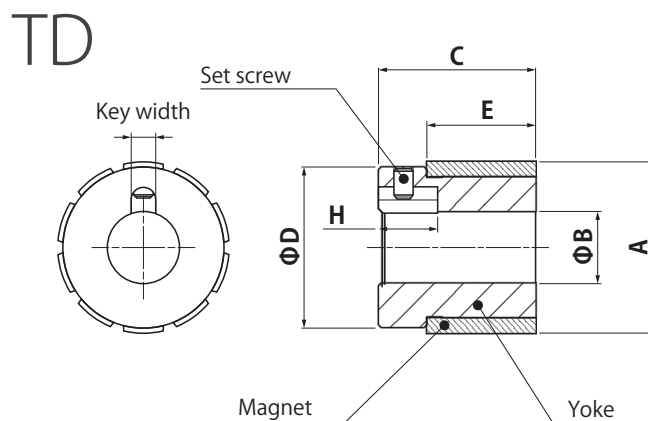
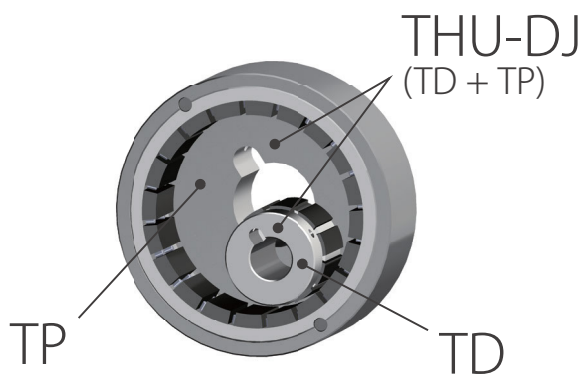
Made-To-Order Items

Model (Set)	Model (Individual)	Ref. Drawing	Dimensions										Maximum Transmissible Torque (N·m) and Air Gap		
			A	B Dimensions	B Tolerance H8	C	D	E	F	G	L	Set Screw	0.5 mm	1 mm	2 mm
THU6-2	HE35-20	A	35	12	+0.027 0	10	19	-	-	-	12	M4	0.353	0.226	0.096
	HE56-40	B	56	12		19	43.6	9	2	28	12	M4	0.715	0.46	0.194
THU10-4	HE35-12	A	35	12		19	14	-	-	-	30	M5	0.441	0.36	0.165
	HE92-48	B	92	12		20	74	9	2	46	30	M5	1.75	1.239	0.665

The product data shown above are measured at room temperature.



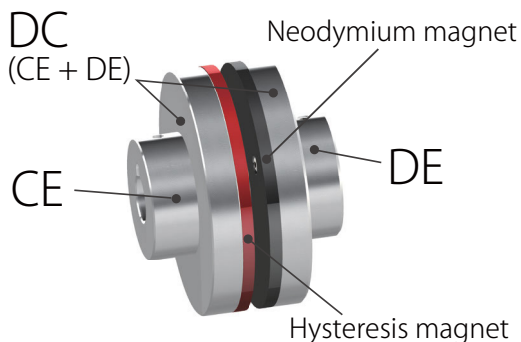
Magnet : Neodymium magnet + Electrolytic nickel plating
Yoke : SC steel + Electroless nickel plating



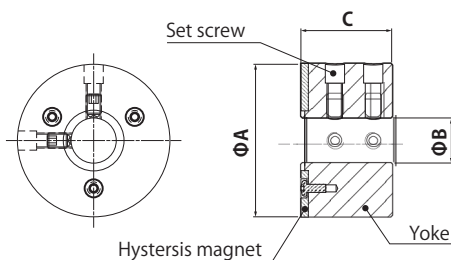
Made-To-Order Items

Model (Set)	Model (Individual)	Dimensions													Maximum Transmissible Torque (N·m) and Air Gap		
		A	B Dimensions	B Tolerance	C	D	E	F	G	H	Key Width Dimensions	Key Width Tolerance	Set Screw	L	0.5 mm	1 mm	2 mm
THU-DJ35	TD35-10	35	15	+0.027 0	32	33	22	-	-	12	5	+0.1 0	M4	17.5-AG	2.589	2.197	1.579
	TP100-20	100	30	+0.033 0	50	70	27	33	60	23	10	+0.2 0	M8		5.188	4.393	3.158
THU-DJ55	TD55-12	55	25	+0.033 0	38	52	25	-	-	15	8	+0.2 0	M6	27.5-AG	6.383	5.54	4.423
	TP140-24	140	40	+0.039 0	57	110	30	37	80	27	12		M10		12.726	11.032	8.787

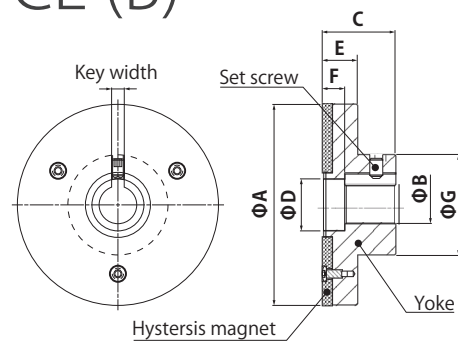
The dimension "L" above is the value after subtracting the air gap (AG).
The product data shown above are measured at room temperature.



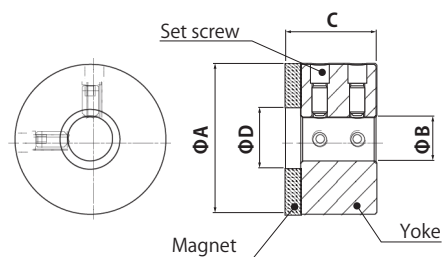
CE (A)



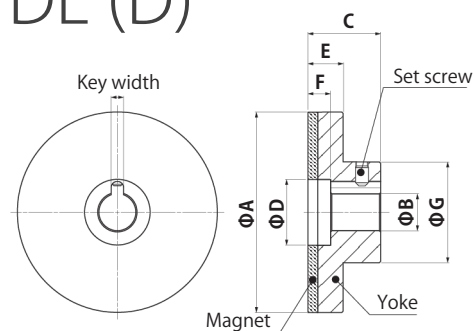
CE (B)



DE (C)



DE (D)



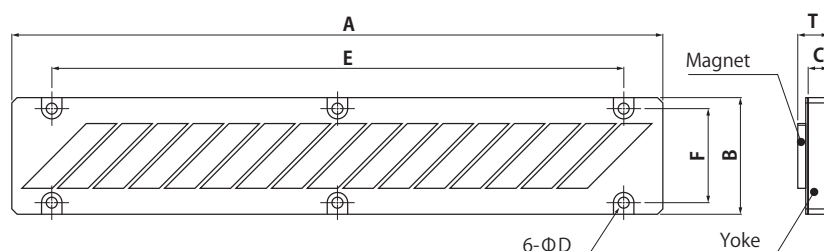
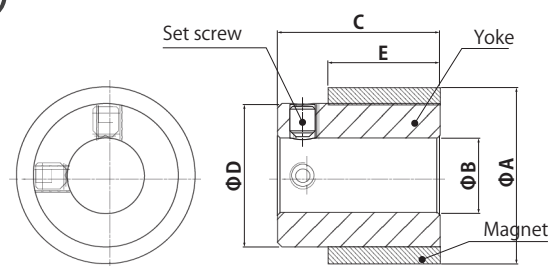
Magnet Material : Neodymium magnet, Hysteresis magnet
Magnet Surface Treatment : Electrolytic Ni plating
Yoke DE : SC steel + Electroless nickel plating
Yoke CE : : SUS 300 series

Made-To-Order Items

Model (Set)	Model (Individual)	Ref. Drawing	Dimensions											Maximum Transmissible Torque (N·m) and Air Gap		
			A	B Dimensions	B Tolerance	C	D	E	F	G	Key Width Dimensions	Key Width Tolerance	Set Screw	1 mm	2 mm	3 mm
DC40	CE40	A	40	12	+0.027 0	24	12	-	-	-	-	-	M4	0.118	0.098	0.049
	DE40-08	C	40	12		24	16	-	-	-	-	-	M4			
DC60	CE60	B	60	15		29	21	14	9	40	5	+0.1 0	M5	0.618	0.392	0.226
	DE60-08	D	60	15		29	26	14	9	40	5		M5			
DC80	CE80	B	80	15		29	21	14	9	40	5		M5	1.363	1.157	0.814
	DE80-08	D	80	15		29	26	14	9	40	5		M5			
DC100	CE100	B	95	25	+0.033 0	39	42	18	15	60	8	+0.2 0	M6	2.53	1.893	1.275
	DE100-12	D	100	25		39	42	18	15	60	8		M6			

The product data shown above are measured at room temperature.

~0 111^vv v110 v1



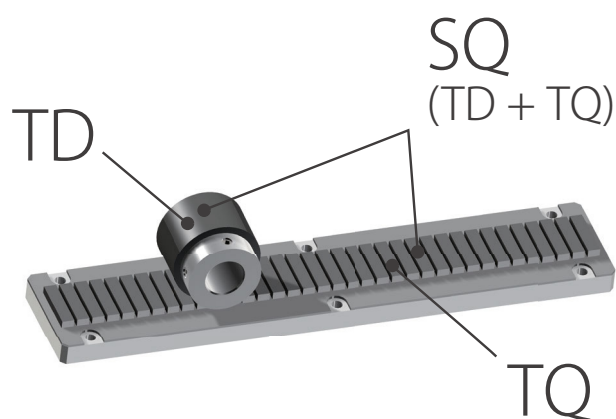
Made-To-Order Items

Model (Set)	Model (Individual)	Dimensions									Air Gap	0.5mm	1 mm	2 mm
		A	B Dimensions	B Tolerance	C	D	E	F	T	Set Screw				
MT2222-08	ND22C-08	22	10	+0.022 0	25	17.2	17.5	-	-	M4	Maximum Transmissible Torque (N·m)	0.335	0.262	0.162
	MQ22-16	160	30	-	8	3.3	140	24	12	-	Thrust (N)	30.59	24.22	14.81
MT2626-08	ND26-08	26	12	+0.027 0	25	20.2	14	-	-	M4	Maximum Transmissible Torque (N·m)	0.422	0.345	0.224
	MQ26-16	195	45	-	8	4.4	175	36	12	-	Thrust (N)	33.14	26.97	17.65
MT3535-08	ND35-08	35	15	+0.027 0	32	29.3	22	-	-	M5	Maximum Transmissible Torque (N·m)	1.086	0.931	0.694
	MQ35-16	250	45	-	8	4.4	220	36	12	-	Thrust (N)	62.26	53.14	39.42
MT3535-12	ND35-12	35	15	+0.027 0	32	28.2	22	-	-	M5	Maximum Transmissible Torque (N·m)	1.052	0.84	0.526
	MQ35-24	250	45	-	8	4.4	220	36	12	-	Thrust (N)	60.2	47.84	30
MT5555-12	ND55-12	55	25	+0.033 0	38	46.2	25	-	-	M8	Maximum Transmissible Torque (N·m)	3.44	2.99	2.222
	MQ55-24	390	60	-	12	4.4	320	50	16	-	Thrust (N)	120	106.38	77.16

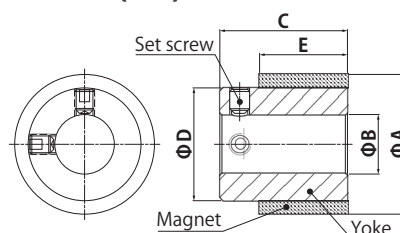
The product data shown above are measured at room temperature.



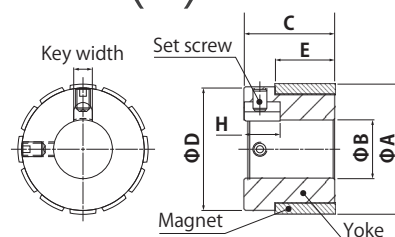
Magnet : Neodymium magnet + Electrolytic nickel plating
Yoke : SC steel + Electroless nickel plating



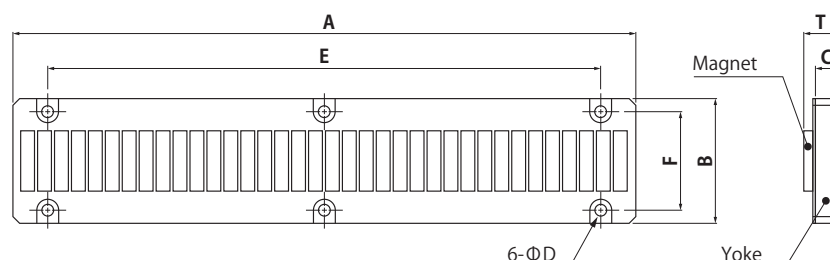
TD (A)



TD (B)



TQ



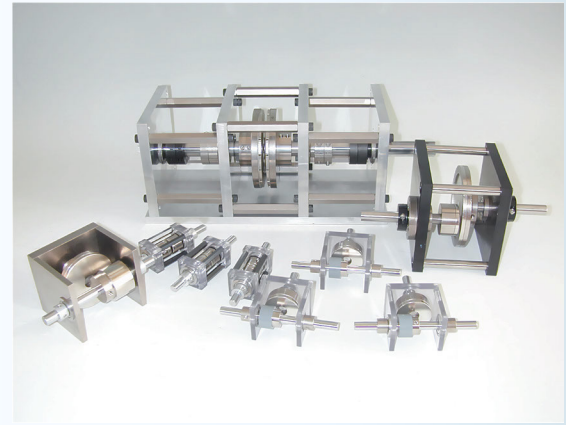
Made-To-Order Items

Model (Set)	Model (Individual)	Ref. Drawing	Dimensions												Air Gap	0.5mm	1 mm	2 mm
			A	B Dimensions	B Tolerance	C	D	E	F	H	T	Key Width Dimensions	Key Width Tolerance	Set Screw				
SQ2626-18	TD26-18	A	26	12	+0.027 0	25	20.2	14	-	-	-	-	-	M4	Maximum Transmissible Torque (N·m)	0.366	0.256	0.125
	TQ26-36	-	170	30	-	8	3.3	150	24	-	12	-	-	-	Thrust (N)	28.43	19.71	9.71
SQ3535-18	TD35-18	A	35	15	+0.027 0	32	29.3	22	-	-	-	-	-	M5	Maximum Transmissible Torque (N·m)	1.255	0.968	0.572
	TQ35-36	-	225	45	-	8	4.4	200	36	-	12	-	-	-	Thrust (N)	71.97	55.49	32.56
SQ5555-12	TD55-12	B	55	25	+0.033 0	38	52	25	-	15	-	8	+0.2 0	M6	Maximum Transmissible Torque (N·m)	4.365	3.875	3.047
	TQ55-24	-	360	50	-	12	4.4	300	38	-	16	-	-	-	Thrust (N)	157.79	140.1	110.5

The product data shown above are measured at room temperature.

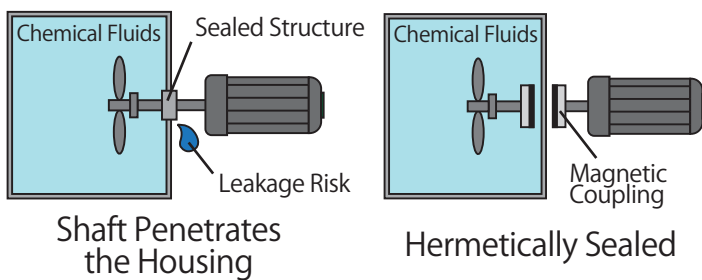
Solve It with a Non-Contact Solution!

- Concerned about particle generation in cleanrooms?
- Looking to reduce lubrication requirements?
- Experiencing leakage issues with shaft seals?
- Concerned about noise and vibration?
- Struggling with gear assembly and alignment?
- Need overload protection?

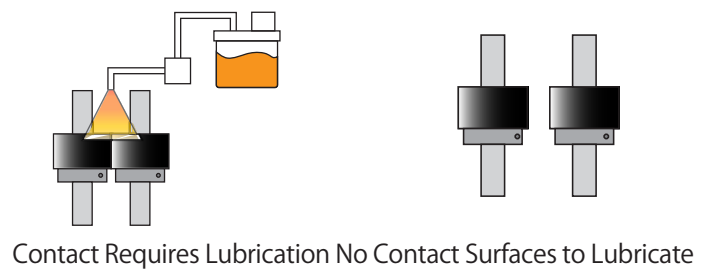


Applications & Benefits

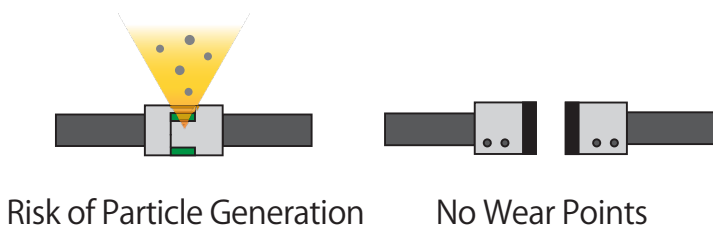
No Shaft. Just Torque.



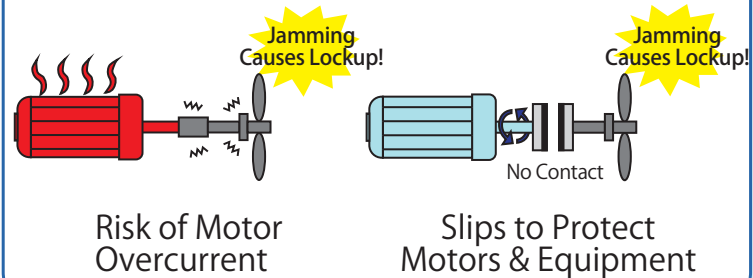
Nothing to Lubricate



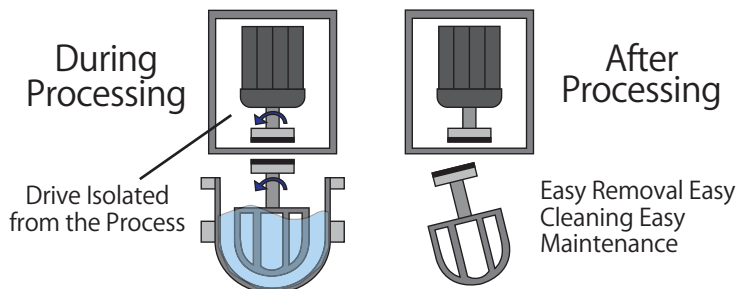
No Contact. No Particles.



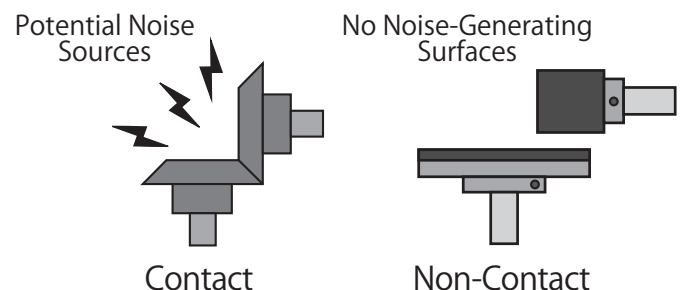
Slip. Not Break.



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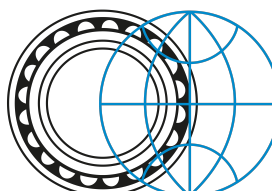
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