

Ferro Feedthrough for Rotation Transmission

Standard Feedthrough:

Magnetic feedthrough is the ideal way to transfer rotational motion from atmosphere to vacuum or overpressure environment. Benefits are friction-less motion, high torque transmission, high speed (>10,000 Rpm) capability, low drag, smooth motion and no particle generation . Withstand corrosive process without degrading.

Common use of ferro feedthrough are:

- 1) Cost effective O-ring feedthrough replacement
- 2) Sample handling, position and Robotics
- 3) Substrate rotation in vacuum chamber
- 4) Agitate fluid under vacuum
- 5) Damper for vibration-free application
- 6) Hematic seal for clean environment

Our Product range includes **standard** and **special** feedthroughs. We also supply **retrofits** of conventional feedthroughs of other manufacturers.

We specialize in **customized design** to optimize performance at competitive price

Standard Specification:

Leak rate: 1×10^{-9} std. cc/sec, He
Vacuum range: 8×10^{-7} Torr
Max. operation pressure: 28 psi
Bearing lubrication: Fomblin / Krytox

Specification for CF flange

Leak rate: 1×10^{-11} std cc/sec, He
Vacuum range: 5×10^{-10} Torr

Standard ferrofluid

Base oil: Hydrocarbon
Max. operation temperature: 0-80 °C

Reactive gas ferrofluid

Base oil: Perfluorinated Polyether
Max. operation temperature: 0-90 °C

Solid Shaft Thread Mounting



Solid Shaft Nose Mounting



Hollow Shaft



Ferromagnetic Feedthrough

Standard Feedthrough:

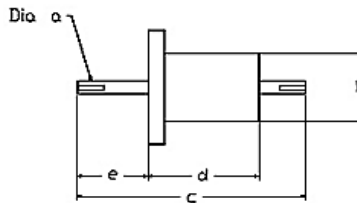
Part number system

S	F	N	Shaft size	Cooling	Bearing	Mounting
S= solid shaft	F= flange	N= non-active	025= 0.25"	W= water cooling	N= ordinary	C133=CF1.33
H= hollow shaft	B= base plate	A= active	100= 1.00"	N= no cooling	H= overload	C275=CF2.75
	T= thread				C= cantilever	O6=6" flange w/o-ring
	C= cartridge				O= special	O7=7" flange w/o-ring
						516= 5/16-24 thread
						716= 7/16-20 thread
						100= 1" mtg plate

Solid Shaft - CF Flange

Apex P/N	a	b	c	d	e	Torque [lb.in]	Speed (RPM)
SFN025NN-C133	0.250	0.750	3.250	1.750	0.750	8.4	6300
SFN025NN-C275	0.250	1.500	4.060	2.560	0.750	8.4	6300
SFN025WN-C275	0.250	1.500	4.060	2.560	0.750	8.4	7000
SFN038NN-C275	0.375	1.500	4.060	2.560	0.750	54	3820
SFN038WN-C275	0.375	1.500	4.560	3.060	0.750	54	7000
SFN050NN-C275	0.500	2.375	8.656	4.906	2.500	107	3100

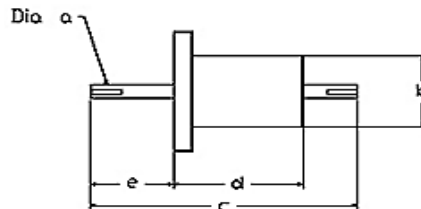
(Dimension: Inch)



Solid Shaft - O-Ring

Apex P/N	a	b	c	d	e	B.C.	O-R face seal	Torque [lb.in]	Speed (RPM)
SFN050NN-O6	0.50	2.87	6.03	3.56	1.22	4.75 x 4	V234	107	3100
SFN050WN-O6	0.50	2.87	6.03	3.56	1.22	4.75 x 4	V234	107	7000
SFN050WN-O7	0.50	5.00	16.32	6.00	4.32	6.00 x 6	V351	107	7000
SFN075WN-O5	0.75	3.00	9.39	4.88	1.84	6.00 x 6	V337	205	6300
SFN075NN-O6	0.75	2.87	6.03	3.56	1.25	4.75 x 4	V234	205	1910
SFN100WN-O6	1.00	4.00	12.625	5.38	3.00	5.00 x 6	V340	709	2730

(Dimension: Inch)



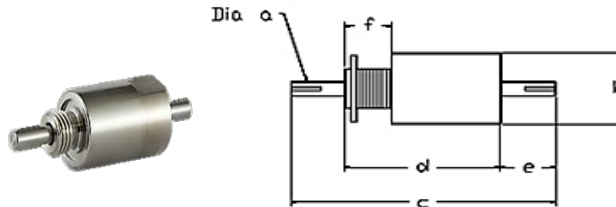
Ferromagnetic Feedthrough

Standard Feedthrough:

Solid Shaft - Thread Mount

Apex P/N	a	b	c	d	e	B.C.	O-R face seal	Torque [lb.in]	Speed (RPM)
STN019NN-516	0.187	0.63	2.562	1.58	0.482	0.28	V012	5	7600
STN025NN-716	0.25	0.75	3.437	1.937	0.75	0.375	V015	6	6300
STN050NN-114	0.5	2.87	8.812	5.072	1.25	1.51	V128	205	3100
STN050WN-114	0.5	2.87	8.812	5.072	1.25	1.51	V128	205	7000
STN075NN-114	0.75	2.87	8.812	5.072	1.25	1.51	V128	709	1910
STN075WN-114	0.75	2.87	8.812	5.072	1.25	1.51	V128	709	6300

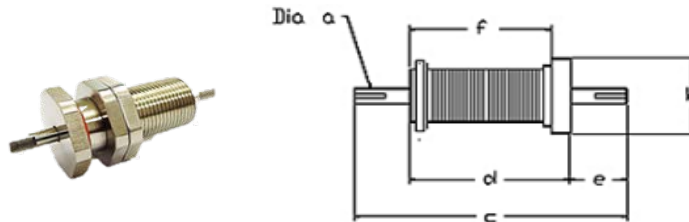
(Dimension: Inch)



Solid Shaft - Baseplate Mount

Apex P/N	a	b	c	d	e	B.C.	O-R face seal	Torque [lb.in]	Speed (RPM)
SBN025NN-100	0.25	1.625	3.44	1.93	0.75	1.68	V026	8	6300
SBN025NN-100E	0.25	1.618	3.12	1.62	0.75	1.37	V026	8	6300
SBN025NN-150	0.25	2.12	3.97	2.47	0.75	2.22	V132	8	6300
SBN025NN-075	0.25	1.625	3.44	1.93	0.75	1.68	V026	8	6300
SBN038NN-100	0.375	1.62	3.39	1.65	0.865	1.30	V026	54	3820
SBN038NN-150	0.375	2.12	3.97	2.47	0.75	2.22	V132	54	3820

(Dimension: Inch)



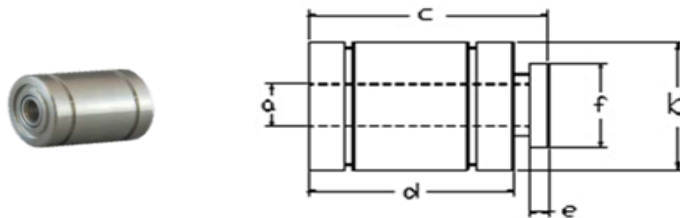
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Standard Feedthrough:

Hollow Shaft - Cartridge Mount

Apex P/N	a	b	c	d	e	f	O-R OUTER	O-R INNER	Speed (RPM)
HCN050NN	0.5025	1.9975	3.215	2.75	0.375	1.25	V032	V014	3100
HCN100NN	1.0025	2.6225	3.339	2.75	0.50	2.00	V037	V022	1500
HCN150NN	1.5025	3.2475	3.714	3.00	0.625	3.00	V041	V029	950
HCN200NN	2.0025	3.7475	3.966	3.25	0.625	3.50	V153	V033	760
HCN300NN	3.0025	5.2475	4.464	3.625	0.75	4.50	V159	V151	500

(Dimension: Inch)

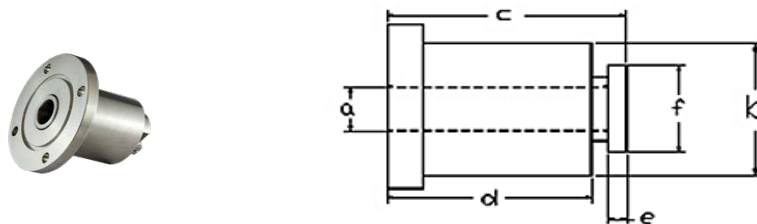


Hollow Shaft - O-Ring Flanged

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Apex P/N	a	b	c	d	e	f	O-R OUTER	O-R INNER	Speed (RPM)
HFN050NN-O6	0.5025	2.75	3.215	2.75	0.38	1.25	V238	V014	3100
HFN050WN-O6	0.5025	2.75	3.215	2.75	0.38	1.25	V238	V014	6300
HFN100NN-O7	1.0025	3.00	3.34	2.75	0.50	2.00	V244	V022	1500
HFN100WN-O7	1.0025	3.00	3.34	2.75	0.50	2.00	V244	V022	2730
HFN150NN-O7	1.5025	3.75	3.714	3.00	0.625	3.00	V244	V029	955
HFN150WN-O7	1.5025	3.75	3.714	3.00	0.625	3.00	V244	V029	1600
HFN200NN-O7	2.0025	4.18	3.966	3.25	0.625	3.50	V244	V033	764
HFN200WN-O7	2.0025	4.18	3.966	3.25	0.625	3.50	V244	V033	1100
HFN300NN-O10	3.0025	5.87	4.717	3.875	0.75	4.50	V262	V151	500
HFN300WN-O10	3.0025	5.87	4.717	3.875	0.75	4.50	V262	V151	610

(Dimension: Inch)



Ferromagnetic Feedthrough

Cross Reference Chart

Solid Shaft - CF Flange

Apex P/N	LESKER P/N	FERROTEC P/N	REGAKU P/N	Description
SFN025NN-C133	KLFDCF025133	FE103915	FD-CFM-0250	1/4" shaft, CF1.33 flange
SFN025NN-C275	KLFDCF025275	FE103532	FD-CF-0250	1/4" shaft, CF2.75 flange
SFN025WN-C275	KLFDCF025275W	FE103501	FD-CF-0250-W	1/4" shaft, CF2.75 flange, water cool
SFN038NN-C275	KLFDCF037276	FE103154	FD-CF-0375	3/8" shaft, CF2.75 flange
SFN038WN-C275	KLFDCF037275W	FE103912	FD-CF-0375-W	3/8" shaft, CF2.75 flange, water cool
SFN050NN-C275	KLFDCF050276	FE103909	FD-CF-0500	1/2" shaft, CF2.75 flange

Solid Shaft - O-Ring

Apex P/N	LESKER P/N	FERROTEC P/N	REGAKU P/N	Description
SFN050NN-O6	KLFDOF05060	FE103244	FD-F1-0500	1/2" shaft, 6" flange, Viton
SFN050WN-O6	KLFDOF05060W	FE103182	FD-F1-0500-W	1/2" shaft, 6" flange, Viton, water cool
SFN050WN-O7	KLFDOF05070W	FE103329		1/2" shaft, 7" flange, Viton, water cool
SFN075WN-O5	KLFDOF07550W	FE103904	FD-F1-0750-W	3/4" shaft, 5" flange, Viton, water cool
SFN075NN-O6	KLFDOF07560	FE103246		3/4" shaft, 6" flange, Viton
SFN100WN-O6	KLFDOF10060W	FE103259		1" shaft, 6" flange, Viton, water cool

Solid Shaft - Thread Mount

Apex P/N	LESKER P/N	FERROTECH P/N	REGAKU P/N	Description
STN019NN-516	KLFDTM018516	FE103971		3/16" shaft, 5/16-25
STN025NN-716	KLFDTM025716	FE103978	FD-BS-0250	1/4" shaft, 7/16-21
STN0505NN-114	KLFDTM050114	FE103191		1/2" shaft, 1"-15
STN0505WN-114	KLFDTM050114W	FE103204	FD-BS-0500-W	1/2" shaft, 1"-14, water cool
STN075NN-114	KLFDTM075114	FE103193		3/4" shaft, 1"-15
STN075WN-114	KLFDTM075114W	FE103206	FD-BS-0750-W	3/4" shaft, 1"-14, water cool

Solid Shaft - Baseplate Mount

Apex P/N	LESKER P/N	FERROTECH P/N	REGAKU P/N	Description
SBN025NN-10	KLFDBP02510	FE103237	FD-LSR-0250-A	1/4" shaft, 1.0" mtg plate
SBN025NN-10E	KLFDBP02510E	FE103519		1/4" shaft, 1.0" mtg plate
SBN025NN-15	KLFDBP02515	FE103979	FD-LSR-0250-C	1/4" shaft, 1.5" mtg plate
SBN025NN-075	KLFDBP02575	FE103236	FD-LSR-0250-D	1/4" shaft, 0.75" mtg plate
SBN038NN-10	KLFDBP03710	FE103664		3/8" shaft, 1.0" mtg plate
SBN038NN-15	KLFDBP03715	FE103991	FD-CF-.375-B	3/8" shaft, 1.5" mtg plate

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Hollow Shaft - Cartridge Mount

VPC P/N	LESKER P/N	FERROTECH P/N	REGAKU P/N	Description
HCN050NN	KLFDHC050	FE132405		1/2" hollow cartridge
HCN100NN	KLFDHC100	FE103319	10C-8925-B	1" hollow cartridge
HCN150NN	KLFDHC150	FE103320	10C-8925-C	1.5" hollow cartridge
HCN200NN	KLFDHC200	FE103321	10C-8925-D	2" hollow cartridge
HCN300NN	KLFDHC300	FE103322	10C-8925-E	3" hollow cartridge

Hollow Shaft - O-Ring Flanged

VPC P/N	LESKER P/N	FERROTECH P/N	REGAKU P/N	Description
HFN050NN-O6	KLFDHOF05060	FE103358		1/2" hollow shaft, 6" flange
HFN050WN-O6	KLFDHOF05060W	FE105395		1/2" hollow shaft, 6" flange, water cool
HFN100NN-O7	KLFDHOF10070	FE103359		1" hollow shaft, 7" flange
HFN100WN-O7	KLFDHOF10070W	FE105396		1" hollow shaft, 7" flange, water cool
HFN150NN-O7	KLFDHOF15070	FE103360		1.5" hollow shaft, 7" flange
HFN150WN-O7	KLFDHOF15070W	FE103354		1.5" hollow shaft, 7" flange, water cool
HFN200NN-O7	KLFDHOF20070	FE103361		2" hollow shaft, 7" flange
HFN200WN-O7	KLFDHOF20070W	FE103921		1.5" hollow shaft, 7" flange, water cool
HFN300NN-O10	KLFDHOF30010	FE133218		3" hollow shaft, 10" flange
HFN300WN-O10	KLFDHOF30010W	FE133760		3" hollow shaft, 10" flange, water cool