

NSPT-Couplings

*Powerful Transmission
Reliable Connection*



The series of NSPT-COUPPLINGS have the characteristics of easy installation and good durability. They are economical and practical for most power transmission mechanisms.

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Reliable Connection**



NSPT series of couplings are designed to be used on all kinds of power transmission mechanisms. They are economical and practical with easy installation and practical with easy installation and good durability.

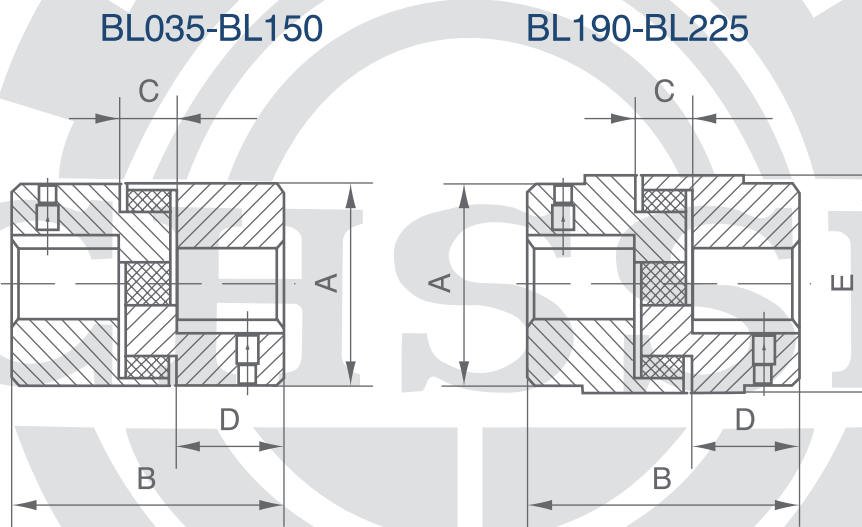
NSPT BL-Couplings



Characteristics:

- Good Temperature and Oil Resistance
- Free of Maintenance
- Simple Structure and Easy to Install
- Individually Replaced Rubbers When They Are Worn
- Choice of Standard and/or Finished Bore Products

The couplings are made of sintered alloy with smooth surfaces and precise dimensions.



The couplings are made of GG25 or C1045. The surface is machined and treated by the following ways:

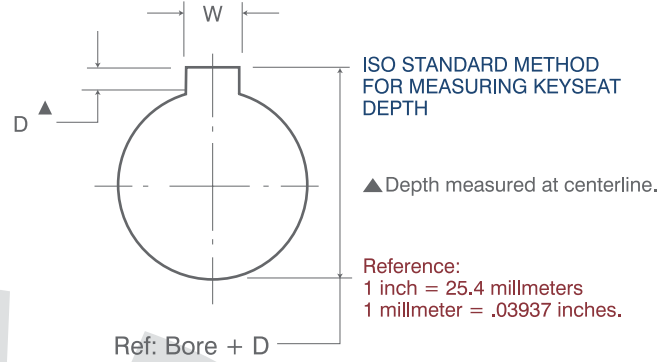
- C1045: Oxidizing or zinc plating.
- GG25: Phosphating or zinc plating.

Catalog	Dimension					Wt-Lbs		Torque In.-Lbs	Maximum RPM	Bore	
	A	B	C	D	E	Min Bore	Max Bore			Min	Max
BL035	5/8	13/16	9/32	17/64	—	0.01	0.01	3.52	31000	1/8	3/8
BL050	15/64	123/32	15/32	5/8	—	0.29	0.24	25.8	18000	1/4	5/8
BL070	123/64	2	1/2	3/4	—	0.59	0.54	44.1	14000	1/4	3/4
BL075	13/4	21/8	1/2	13/16	—	1.00	0.86	88.2	11000	1/4	7/8
BL090	27/64	21/8	1/2	13/16	—	1.48	1.32	145	9000	1/4	1
BL095	27/64	21/2	1/2	1	—	1.75	1.52	189	9000	7/16	11/8
BL099	217/32	27/8	3/4	11/16	—	2.50	2.17	315	7000	7/16	13/16
BL100	217/32	31/2	3/4	13/8	—	3.42	2.92	415	7000	7/16	13/8
BL110	35/16	41/4	7/8	111/16	—	6.45	5.61	788	5000	5/8	15/8
BL150	33/4	41/2	1	13/4	—	8.95	7.73	1260	5000	5/8	17/8
BL190	4	51/4	1	21/8	41/2	8.83	7.04	1702	5000	3/4	21/8
BL225	41/4	6	1	21/2	5	12.28	9.60	2332	4000	3/4	23/8

*Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969, USAS B 17.1-1967, GB 1095-1979 standards.

NSPT BL-Coupling

F^{inished}
B_{ore}



Stock Bores	Keyseat	BL035	BL050	BL070	BL075	BL090	BL095	BL099	BL100	BL110	BL150	BL190	BL225
1/8	No Kw.	X	—	—	—	—	—	—	—	—	—	—	—
3/16	No Kw.	X	—	—	—	—	—	—	—	—	—	—	—
1/4	No Kw./No SS	—	X	X	X	X	—	—	—	—	—	—	—
1/4	No Kw.	X	X	X	X	X	—	—	—	—	—	—	—
1/4	1/8x1/16	—	—	—	X	—	—	—	—	—	—	—	—
5/16	No Kw.	X	X	X	X	—	—	—	—	—	—	—	—
3/8"	No Kw.	X	X	X	X	X	—	—	—	—	—	—	—
3/8"	3/32x3/64	—	—	—	X	X	—	—	—	—	—	—	—
3/8"	1/8x1/16	—	—	—	X	X	—	—	—	—	—	—	—
7/16	No Kw./No SS	—	—	—	—	—	X	—	—	—	—	—	—
7/16	No Kw.	—	—	X	X	X	X	X	X	—	—	—	—
7/16	3/32x3/64	—	—	—	X	X	X	X	X	—	—	—	—
7/16	1/8x1/16	—	—	—	X	X	X	X	X	—	—	—	—
1/2	No Kw./No SS	—	—	—	—	—	—	X	X	—	—	—	—
1/2	No Kw.	—	X	X	X	X	X	X	X	—	—	—	—
1/2	1/8x1/16	—	X	X	X	X	X	X	X	—	—	—	—
9/16	No Kw.	—	X	—	X	X	X	X	X	—	—	—	—
9/16	1/8x1/16	—	X	X	X	X	X	X	X	—	—	—	—
5/8	No Kw./No SS	—	—	—	—	—	—	—	X	X	X	X	X
5/8	No Kw.	—	X	—	—	—	—	—	—	X	X	—	—
5/8	5/32x5/64	—	—	—	X	X	X	X	X	X	X	—	—
5/8	3/16x3/32	—	—	X	X	X	X	X	X	X	X	—	—
11/16	3/16x3/32	—	—	X	X	X	X	X	X	X	X	—	—
3/4	No Kw.	—	—	—	—	—	—	—	—	—	—	X	X
3/4	1/8x1/16	—	—	—	X	X	X	X	X	X	X	X	—
3/4	3/16x3/32	—	—	X	X	X	X	X	X	X	X	X	X
13/16	3/16x3/32	—	—	—	X	X	—	X	X	X	X	X	X
7/8	3/16x3/32	—	—	—	X	X	X	X	X	X	X	X	X
7/8	1/4x1/8	—	—	—	—	X	X	X	X	X	X	X	X
15/16	1/4x1/8	—	—	—	—	—	X	X	X	X	X	X	X
1	3/16x3/32	—	—	—	—	X	X	X	X	X	X	X	X
1	1/4x1/8	—	—	—	—	X	X	X	X	X	X	X	X
1 1/16	1/4x1/8	—	—	—	—	—	X	X	X	X	X	X	X
1 1/8	1/4x1/8	—	—	—	—	—	X	X	X	X	X	X	X
1 3/16	1/4x1/8	—	—	—	—	—	—	X	X	X	X	X	X
1 1/4	1/4x1/8	—	—	—	—	—	—	—	X	X	X	X	X
1 1/4	5/16x3/32	—	—	—	—	—	—	—	X	X	X	X	X
1 5/16	5/16x3/32	—	—	—	—	—	—	—	X	X	X	X	—
1 3/8	5/16x5/32	—	—	—	—	—	—	—	X	X	X	X	X
1 3/8	3/8x3/16	—	—	—	—	—	—	—	X	X	X	X	X
1 7/16	3/8x3/16	—	—	—	—	—	—	—	X	X	X	X	X
1 1/2	5/16x5/32	—	—	—	—	—	—	—	—	X	X	X	X
1 1/2	3/8x3/16	—	—	—	—	—	—	—	—	X	X	X	X
1 9/16	3/8x3/16	—	—	—	—	—	—	—	—	X	X	—	X
1 5/8	3/8x3/16	—	—	—	—	—	—	—	—	X	X	X	X
1 11/16	3/8x3/16	—	—	—	—	—	—	—	—	—	X	X	X
1 3/4	3/8x3/16	—	—	—	—	—	—	—	—	—	X	X	X
1 3/4	7/16x7/32	—	—	—	—	—	—	—	—	—	X	X	X
1 13/16	1/2x1/4	—	—	—	—	—	—	—	—	—	—	X	—
1 7/8	1/2x1/4	—	—	—	—	—	—	—	—	—	X	X	X
1 15/16	1/2x1/4	—	—	—	—	—	—	—	—	—	—	X	X
2	1/2x1/4	—	—	—	—	—	—	—	—	—	—	X	X
2 1/16	1/2x1/4	—	—	—	—	—	—	—	—	—	—	X	—
2 1/8	1/2x1/4	—	—	—	—	—	—	—	—	—	—	X	X
2 3/16	1/2x1/4	—	—	—	—	—	—	—	—	—	—	—	X
2 1/4	1/2x1/4	—	—	—	—	—	—	—	—	—	—	—	X
2 3/8	5/8x5/16	—	—	—	—	—	—	—	—	—	—	—	X

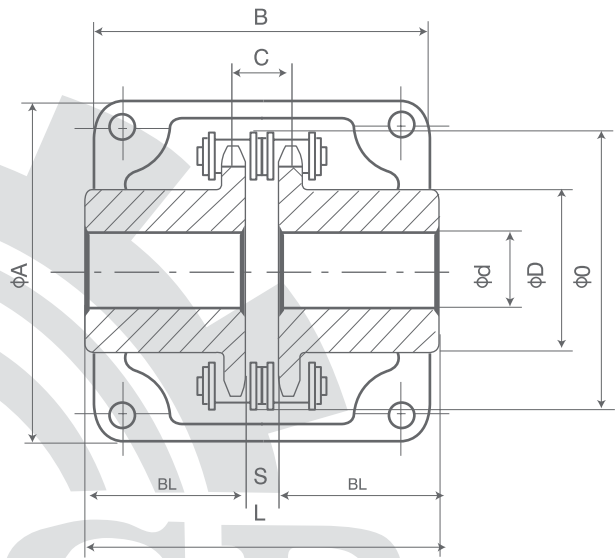
Chain Couplings

KC

Chain coupling is composed of a duplex roller chain and two sprockets. The function of connection and detachment is done by the joint of chain. It has the characteristics of simplicity, high efficiency, easy-on and easy-off and nice out-looking.

It also has aluminium cover to prevent dust and protect the lubricant in order to extend the life of chain coupling.

**S_{tock}
B_{ore}**



KC Chain Couplings

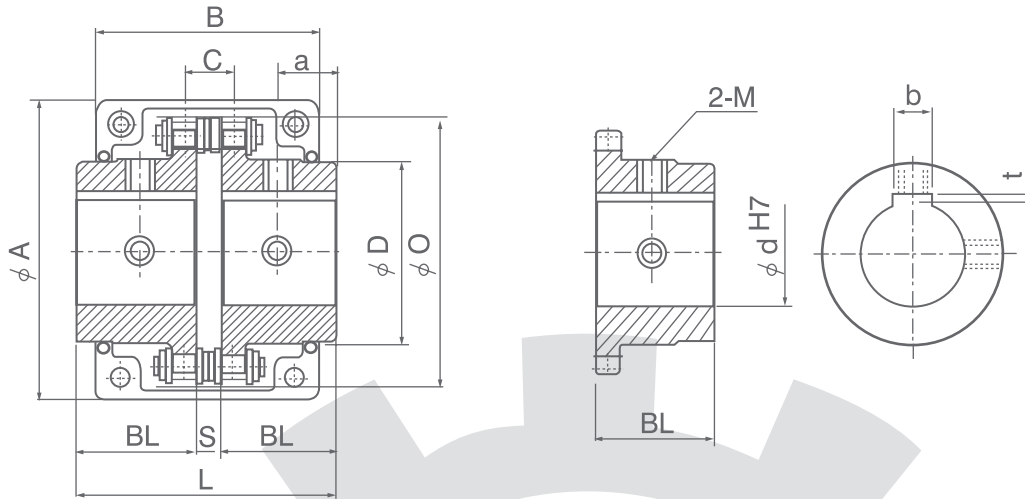
NSPT Standard

Coupling TYPE	Chain TYPE	Bore		Dimension						Rated Torque (lb-in)	Wt Lbs	Dia. of Cover		
		Min	Max	L	BL	S	d	O	C			A	B	Wt Lbs
C-3012	06B-2X12	1/2	5/8	29/16	13/16	0.204	13/8	125/32	0.402	4.66	0.8	223/32	21/2	0.62
C-4012	40-2X12	1/2	7/8	31/8	17/16	0.291	13/8	27/16	0.567	20.40	1.6	31/32	227/32	0.62
C-4014	40-2X14	1/2	1 1/8	31/8	17/16	0.291	1 21/32	223/32	0.567	38.48	2.2	35/16	231/32	0.82
C-4016	40-2X16	9/16	1 1/4	37/16	19/16	0.291	1 31/32	31/32	0.567	65.70	2.8	35/8	231/32	0.82
C-5014	50-2X14	9/16	1 3/8	3 15/16	1 25/32	0.382	2 1/8	3 3/8	0.713	120.20	4.51	4	3 11/32	1.0
C-5016	50-2X16	5/8	1 9/16	3 15/16	1 25/32	0.382	2 7/16	3 21/32	0.713	194.40	5.5	4 11/32	3 11/32	1.2
C-5018	50-2X18	5/8	1 3/4	3 15/16	1 25/32	0.382	2 3/4	4 3/16	0.713	308.40	7.8	4 13/16	3 11/32	1.6
C-6018	60-2X18	3/4	2 3/16	4 7/8	2 3/16	0.453	3 11/32	5	0.898	804.20	12.7	5 19/32	4 1/8	2.5
C-6020	60-2X20	3/4	2 3/8	4 7/8	2 3/16	0.453	3 15/16	5 15/32	0.898	1257.4	16.0	6 1/4	4 1/8	3.3
C-6022	60-2X22	3/4	2 25/32	4 7/8	2 3/16	0.453	4 11/32	5 31/32	0.898	1869.0	21.4	6 5/8	4 19/32	3.7
C-8018	80-2X18	3/4	3 1/8	5 9/16	2 1/2	0.598	4 11/32	6 21/32	1.154	2840.6	26.1	7 1/2	5 1/16	5.2
C-8020	80-2X20	3/4	3 1/2	5 23/32	2 9/16	0.598	4 11/16	7 9/32	1.154	4098.0	33.0	8 1/4	5 13/32	5.9
C-8022	80-2X22	3/4	3 15/16	6 1/8	2 25/32	0.598	5 1/2	7 31/32	1.154	6823.4	41.6	8 7/8	5 13/32	7.4
C-10020	100-2X20	1	4 5/16	7 1/32	3 1/8	0.740	6 3/8	9 3/16	1.409	12925	68.0	11 1/16	6 1/32	9.5
C-12018	120-2X18	1 3/8	5	8	3 17/32	0.894	6 11/16	10 1/16	1.787	21514	96.9	12 1/32	7 1/8	12.8
C-12022	120-2X22	1 3/8	5 1/2	8 25/32	3 15/16	0.894	8 1/4	11 31/32	1.787	4.9090	148.4	14 1/32	7 1/8	16.5

Inner diameter dimension can supply finished chain coupling according to JIS,GB,BS and ASA standard series.

Chain Couplings

KC



**F^{inished}
B^{ore}**

FB-KC Chain Couplings

NSPT Standard

Coupling	L	BL	S	BO	O	C	Finished Bore ϕd_{H7}							
FB-KC-3012	29/16	13/16	0.204	13/8	125/32	0.402	9/16	5/8						
FB-KC-4012	31/8	17/16	0.291	13/8	27/16	0.567	9/16	5/8	11/16	3/4	13/16	7/8		
FB-KC-4014	31/8	17/16	0.291	121/32	223/32	0.567	11/16	3/4	13/16	7/8	15/16	1"	11/8	
FB-KC-4016	37/16	19/16	0.291	131/32	31/32	0.567	3/4	13/16	7/8	15/16	1"	11/8	3/16	11/4
FB-KC-5014	315/16	125/32	0.382	21/8	33/8	0.713	13/16	7/8	15/16	1"	11/8	11/4	13/8	
FB-KC-5016	315/16	125/32	0.382	27/16	321/32	0.713	7/8	15/16	1"	11/8	13/16	11/4	13/8	11/2 19/16
FB-KC-5018	315/16	125/32	0.382	23/4	43/16	0.713	13/16	11/4	13/8	11/2	19/16	15/8	13/4	
FB-KC-6018	47/8	23/16	0.453	311/32	5	0.898	19/16	15/8	13/4	2"	21/4			
FB-KC-6020	47/8	23/16	0.453	315/16	515/32	0.898	5/8	13/4	2"	21/4	23/8			
FB-KC-6022	47/8	23/16	0.453	411/32	531/32	0.898	17/8	2"	21/4	23/8	21/2			

Keyway & Set Screws

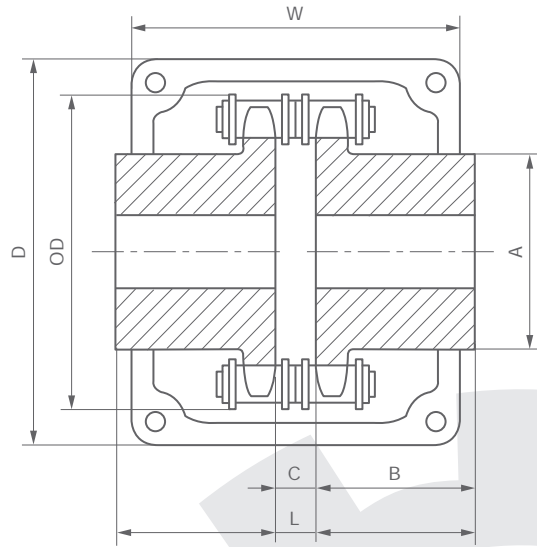
Bore Range	Keyseat	Bore Range
1/2-9/16	1/8x1/16	10-24
5/8-7/8	3/16x3/32	1/4x3/8
15/16-11/4	1/4x1/8	5/16x3/8
15/16-13/8	5/16x5/32	5/16x3/8
17/16-13/4	3/8x3/16	3/8x1/2
113/16-21/4	1/2x1/4	1/2x5/8
25/16-23/4	5/8x5/16	5/8x3/4



Chain Couplings

MC

**S^{tock}
B^{ore}**



Stock Coupling Covers

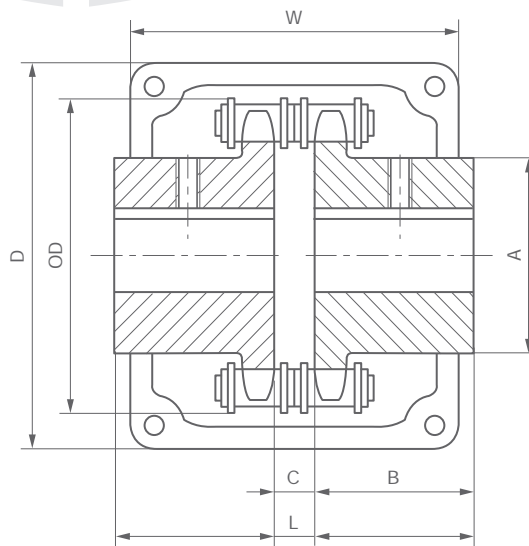
This type of cover fits stock bore, finished bore and QTL taper bushed couplings. The use of covers will allow great lubrication and is recommended in order to achieve the maximum lifetime of the component. Covers are made of aluminum in halves for easy installation. Synthetic rubber oil seals are used between coupling hubs for retaining the lubricant and preventing the entry of dirt. Gaskets are used between the halves.

Coupling Number	Bore		Dimension					Wt Lbs	Dia. of Cover		
	Min	Max	A	B	C	L	O.D		D	W	Wt Lbs
MC4012	1/2	3/4	1 13/32	1 1/8	9/32	2 17/32	2 13/32	0.4	4	2	0.78
MC4016	5/8	1 1/4	1 31/32	1 1/8	9/32	2 17/32	3 1/32	0.8	4	2	0.92
MC5016	3/4	1 5/8	2 1/2	1 7/16	3/8	3 1/4	3 25/32	1.6	5 1/8	2 3/8	1.3
MC5018	3/4	1 15/16	2 31/32	1 11/16	3/8	3 3/4	4 3/16	2.4	5 1/8	2 3/8	1.3
MC6018	1	2 7/16	3 1/2	1 7/8	7/16	4 3/16	5	4.8	6 3/8	2 15/16	2.44
MC6020	1 1/8	2 5/8	3 7/8	2	7/16	4 7/16	5 1/2	5.2	6 3/8	2 15/16	2.44
MC6022	1 1/8	2 7/8	4 1/2	2 1/8	7/16	4 11/16	5 61/64	7.8	8 3/16	4	4.88
MC8018	1 1/8	2 15/16	4 9/16	2 3/8	3 7/64	5 21/64	6 21/32	9.5	8 3/16	4	4.88
MC8020	1 1/2	3 7/16	5 3/8	2 5/8	3 7/64	5 33/64	7 19/64	13.4	8 3/16	4	4.88
MC10018	1 1/2	3 7/16	5 11/16	2 3/4	2 3/32	6 7/32	8 21/64	18.2	9 3/8	5 15/16	8.76
MC10020	2	3 15/16	6 23/32	3 1/8	2 3/32	6 31/32	9 1/8	25.0	10 1/8	5 1/4	12.66
MC12018	3 7/16	4 7/16	6 3/4	3 1/2	5 5/64	7 7/8	10	28.0	11 3/8	7 3/8	16.40
MC12022	4 3/8	4 15/16	8 3/4	4	5 5/64	8 7/8	11 57/64	55.0	13 1/4	7 15/16	19.50

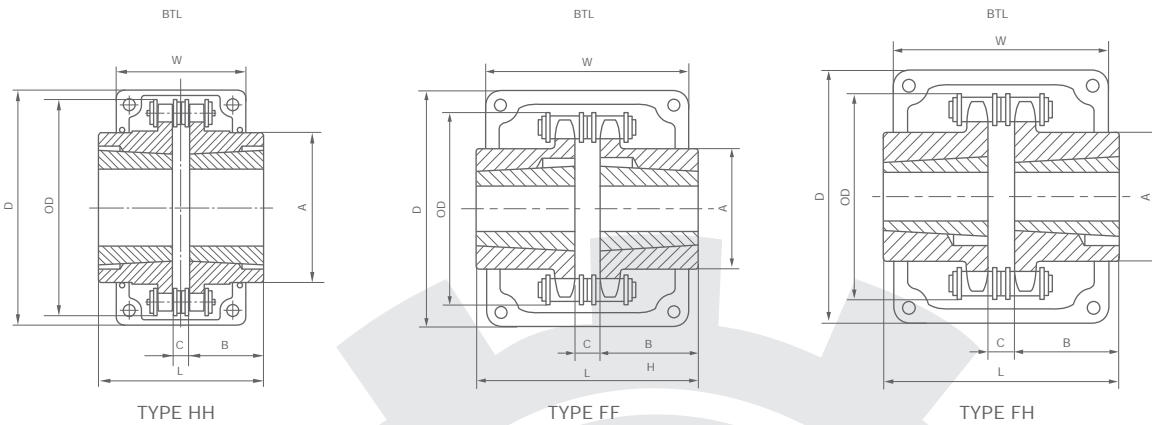
Standard Keyseats

Bore Range	Keyseat
1/2"-9/16"	1/8"x1/16"
5/8-7/8	3/16x3/32
15/16-1 1/4	1/4x1/8
1 5/16-1 3/8	5/16x5/32
1 7/16-1 3/4	3/8x3/16
1 13/16-2 1/4	1/2x1/4
2 5/16-2 3/4	5/8x5/16
2 13/16-3 1/4	3/4x3/8
3 5/16-3 3/4	7/8x7/16
3 13/16-4 1/2	1x1/2
4 9/16-5 1/2	1 1/4x5/8

*1 3/8" Bore Bushings also available with 3/8"x3/16" Keyseat.



**F^{inished}
B^{ore}**



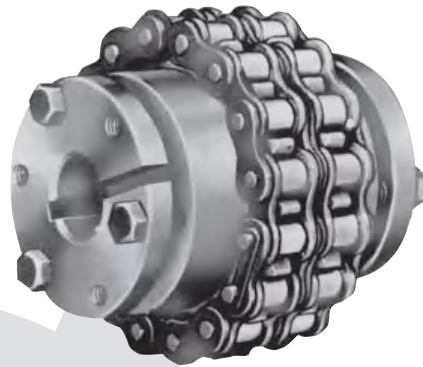
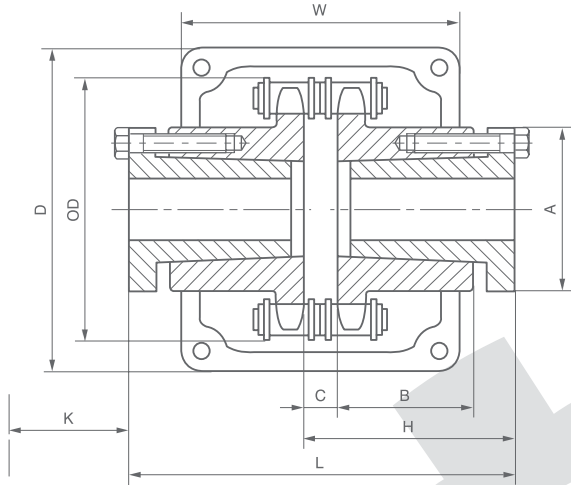
Coupling Number	Bushing			Dimension							
	Bushing	Boro Max	Bore Min	A	B	C	J*	K▲	L	O.D	Wt Lbs
MC4016TB	1108	1 1/8	1/2	131/32	7/8	9/32	5/8	3/4	21/32	31/32	0.9
MC5018TB	1610	1 5/8	1/2	231/32	1	3/8	13/16	11/16	23/8	43/16	1.1
MC6020TB	2012	2	1/2	37/8	1 1/4	7/16	15/16	13/8	215/16	51/2	2.7
MC8020TB	3020	3	15/16	53/8	2	37/64	13/16	21/16	437/64	719/64	6.1
MC10020TB	3535	3 1/2	13/16	623/32	3 1/2	23/32	2	25/8	723/32	91/8	19

*Space needed for (1) tightening bushing with shortened hex key (2) loosening screws for puller to remove hub.
 ▲Minimum clearance required to remove the coupling half by using the screws as jack screws with shortened hex key.

BTL Taper Bushing

Bush. No.	Bore	Bushing Keyway	Bush. No.	Bore	Bushing Keyway	Bush. No.	Bore	Bushing Keyway	Bush. No.	Bore	Bushing Keyway	Bush. No.	Bore	Bushing Keyway	Bush. No.	Bore	Bushing Keyway		
1108	1/2	1/8x1/16	△	1 1/4	3/8x3/16	2012	17/16	1/2x1/4	3020	113/16	1/2x1/4	3535	13/16	3/8x3/16	3535	213/16	7/8x1/4		
	9/16			15/16			11/2			17/8			114/16			114/16		215/16	
	5/8	5/16x5/32		19/16			15/8			115/16			15/16			5/16x5/32		3	31/8
	11/16	3/16x3/32		17/16			11/8			2			17/16			31/8		3/4x3/8	
	3/4	3/16x3/32		11/2			111/16			21/16			11/2			33/16			
	13/16	3/8x1/8		19/16			13/4			21/8			15/8			31/4			
	7/8	15/8		113/16			17/8			23/16			111/16			35/16			
	15/16	1/4x1/8		17/8			115/16			21/4			13/4			33/8			
	1	1/4x1/8		115/16			2			25/16			37/16			31/2			
	11/16	1/4x1/16		7/8			3/16x3/32			27/16			31/2						
1610	1/2	1/8x1/16	△	15/16	1/4x1/8	3020	1	5/8x5/16	3020	213/16	3/4x1/4	3535	21/8	5/8x5/16	3535	21/8	7/8x1/4		
	9/16			13/16			11/8			211/16			23/8			23/16			
	5/8	7/8		11/16			11/4			25/8			21/4			25/16			
	11/16	3/16x3/32		1			15/16			21/2			23/8			23/8			
	3/4	3/16x3/32		11/16			13/8			211/16			27/16			27/16			
	13/16	1/4x1/8		11/8			5/16x5/32			23/4			21/2			25/8			
	7/8	1/4x1/8		13/16			17/16			215/16			21/2			211/16			
	15/16	1/4x1/8		11/4			11/2			3			25/8			23/4			
	1	1/4x1/8		15/16			19/16						211/16						
	11/16	1/4x1/8		13/8			11/8						23/4						
13/16	1/4x1/8		11/16																
			13/4																

△ -shallow keyway



Couplings Number	Bushing	Bore Max*	Dimension							
			A	B	H	C	L	O.D	K▲	wt Lbs
MC4016JA	JA	1	2	7/8	15/16	9/32	229/32	31/32	11/4	0.9
MC5018SH	SH	13/8	231/32	1	11/2	3/8	33/8	43/16	13/4	1.3
MC6020SK	SK	21/8	37/8	11/4	17/8	7/16	43/16	51/2	21/4	2.5
MC8018SF	SF	25/16	49/16	13/4	23/8	37/64	521/64	621/32	21/4	5.3

*Maximum bore shown is the maximum bore with standard keyway. It is recommended that this maximum not be exceeded in both halves of a coupling.
▲Minimum clearance required to remove the coupling half by using the screws as jack screws.

BORES AND KEYWAYS

Bushing	Bores	Keyseat
JA	3/8-7/16	None
	1/2-1	Std.
	11/16-13/16	1/4x1/16
	11/4	None
SH	1/2-13/8	Std.
	17/16-15/8	3/8x1/16
	111/16	None
SK	1/2-21/8	Std.
	23/16-21/4	1/2x1/8
	25/16-21/2	5/8x1/16
	29/16-25/8	None
SF	1/2-21/4	Std.
	25/16-21/2	5/8x3/16
	29/16-23/4	5/8x1/16
	213/16-27/8	3/4x1/16
	215/16	3/4x1/32

QTL Taper Bushing

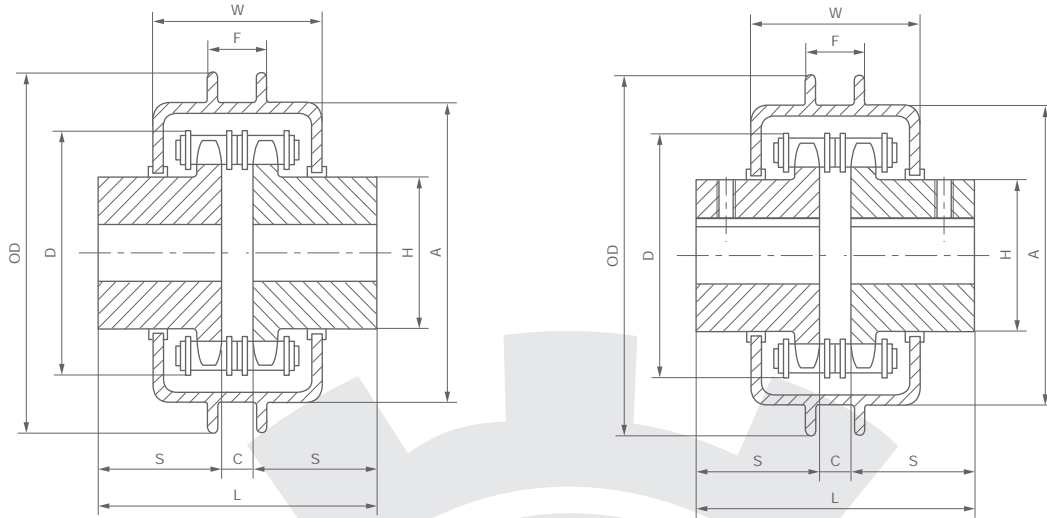
STANDARD KEYWAY & KEY DIMENSION

Bore	Key Seat	Key
1/2-9/16	1/8x1/16	1/8x1/8
5/8-7/8	3/16x3/32	3/16x3/16
15/16-11/4	1/4x1/8	1/4x1/4
15/16-13/8	5/16x5/32	5/16x5/16
17/16-13/4	3/8x3/16	3/8x3/8
113/16-21/4	1/2x1/4	1/2x1/2
25/16-23/4	5/8x5/16	5/8x5/8
213/16-31/4	3/4x3/8	3/4x3/4
35/16-33/4	7/8x7/16	7/8x7/8
313/16-41/2	1x1/2	1x1
49/16-51/2	11/4x5/8	11/4x11/4
59/16-61/2	11/2x3/4	11/2x11/2
69/16-71/2	13/4x7/8	13/4x13/4

Dimension:inch

Chain Couplings

BC



Coupling Number	Dimension						Dia. of cover				
	D	L	H	S	C	wt Lbs	O.D	A	W	F	wt Lbs
BC4012	23/8	2 11/16	1 3/8	1 3/16	5/16	0.3	3 3/8	2 11/16	1 11/16	9/16	0.7
BC4016	3	2 11/16	2	1 3/16	5/16	0.8	4	3 5/16	1 11/16	9/16	0.9
BC5016	3 3/4	3	2 1/2	1 5/16	3/8	1.8	4 3/4	4 1/16	2	9/16	1.3
BC5018	4 1/8	3 5/8	3	1 5/8	3/8	2.0	5 5/8	4 11/16	2 3/16	7/8	2.7
BC6018	5	4 9/16	3 5/8	2 1/16	7/16	5.2	6 15/16	5 13/16	2 13/16	1 1/8	5.1

Coupling Number	Stock Bores																		
	1/2	5/8	3/4	7/8	1	1 1/8	1 3/16	1 1/4	1 3/8	1 7/16	1 1/2	1 5/8	1 3/4	1 7/8	1 15/16	2	2 1/8	2 3/8	
BC4012FB	●	●	●																
BC4016FB			●	●	●	●	●	●											
BC5016FB			●	●	●	●	●	●	●	●	●	●							
BC5018FB								●	●	●	●	●	●	●	●				
BC6018FB									●	●	●	●	●	●	●	●	●	●	●

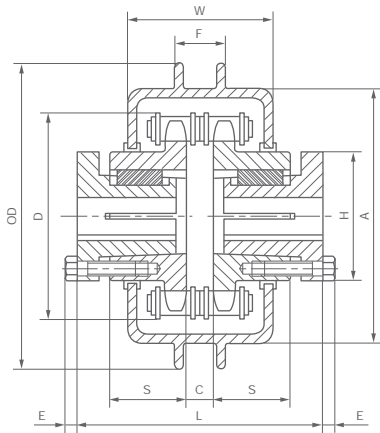


*Packaged Half Couplings only. For Complete Couplings, order two Halves and one chain.

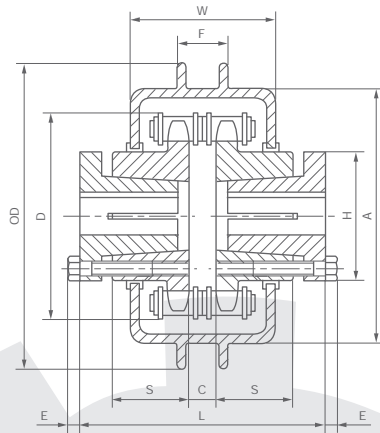
Standard Keyways

Bore Range	Keyway
1/2"	None
5/8-7/8	3/16"x3/32"
1-1 1/4	1/4x1/8
1 5/16-1 3/8	5/16x5/32
1 7/16-1 3/4	3/8x3/16
1 7/8-2 1/4	1/2x1/4
2 3/8	5/8x5/16

Finished Bore Chain Couplings are made with Solid Steel Sprockets with Hardened Teeth, Standard Keyway and Hollow Head Set Screw.



Bushed Type G and H Couplings



Bushed Type P1, Q1 and R1 Couplings

Taper bore Bushed Type Chain Couplings are made with Solid Steel Sprockets with Hardened Teeth. They are machined for STL Taper Bushings.

Coupling Number	Bushing		Dimension							Dia. of cover				
	Size	Bore	D	L	H	S	C	E	wt Lbs	O.D	A	W	F	wt Lbs
BC3520G	G	3/8-1	23/4	23/4	2	13/16	1/4	3/16	0.5	33/4	31/16	13/8	9/16	0.7
BC3524H	H	3/8-1 1/2	33/16	31/8	2 1/2	1	1/4	3/16	0.9	43/16	31/2	13/8	9/16	0.8
BC4020H	H	3/8-1 1/2	35/8	33/16	2 1/2	1	5/16	3/16	1.0	45/8	315/16	1 11/16	9/16	1.1
BC4022P	P1	1/2-1 3/4	315/16	47/16	3	17/16	5/16	1/4	1.3	57/16	4 1/2	1 7/8	7/8	1.5
BC5016H	H	3/8-1 1/2	33/4	31/8	2 1/2	15/16	3/8	3/16	1.4	43/4	41/16	2	9/16	2.5
BC5018P	P1	1/2-1 3/4	41/8	47/16	3	1 13/32	3/8	1/4	1.8	55/8	411/16	23/16	7/8	2.7
BC6016P	P1	1/2-1 3/4	4 1/2	47/16	3	1 3/8	7/16	1/4	1.9	6	51/16	211/16	7/8	3.5
BC6020Q	Q1	3/4-2 11/16	5 1/2	59/16	4 1/8	1 13/16	7/16	5/16	3.5	75/16	63/16	213/16	1 1/8	5.5
BC8016Q	Q1	3/4-2 11/16	6 1/16	59/16	4 1/8	1 3/4	9/16	5/16	3.8	77/8	63/4	33/8	1 1/8	7.0
BC10018R	R1	1 1/8-3 3/4	8 3/8	6 1/2	5 3/8	2	3/4	5/16	8.0	10 1/8	9	315/16	1 1/8	11.2

Standard Keyseats

Bore Range	Keyseat	Bore Range	Keyway
3/8"-7/16"	None	17/16"-13/4"	3/8"x3/16"
1/2-9/16	1/8"x1/16"	113/16-21/4	1/2x1/4
5/8-7/8	3/16x3/32	25/16-23/4	5/8x5/16
15/16-1 1/4	1/4x1/8	213/16-3 1/4	3/4x3/8
15/16-1 3/8	5/16x5/32	33/8-33/4	7/8x7/16
		37/8-4 1/4	1x1/2

1 3/8" Bore Bushings also available with 3/8"x3/16" Keyseat.

Bore Range

Bushing	Bore Range
G	3/8"-1"
H	3/8-1 1/2
P1	1/2-1 3/4
Q1	3/4-2 11/16
R1	1 1/8-3 3/4
S1	1 11/16-4 1/4

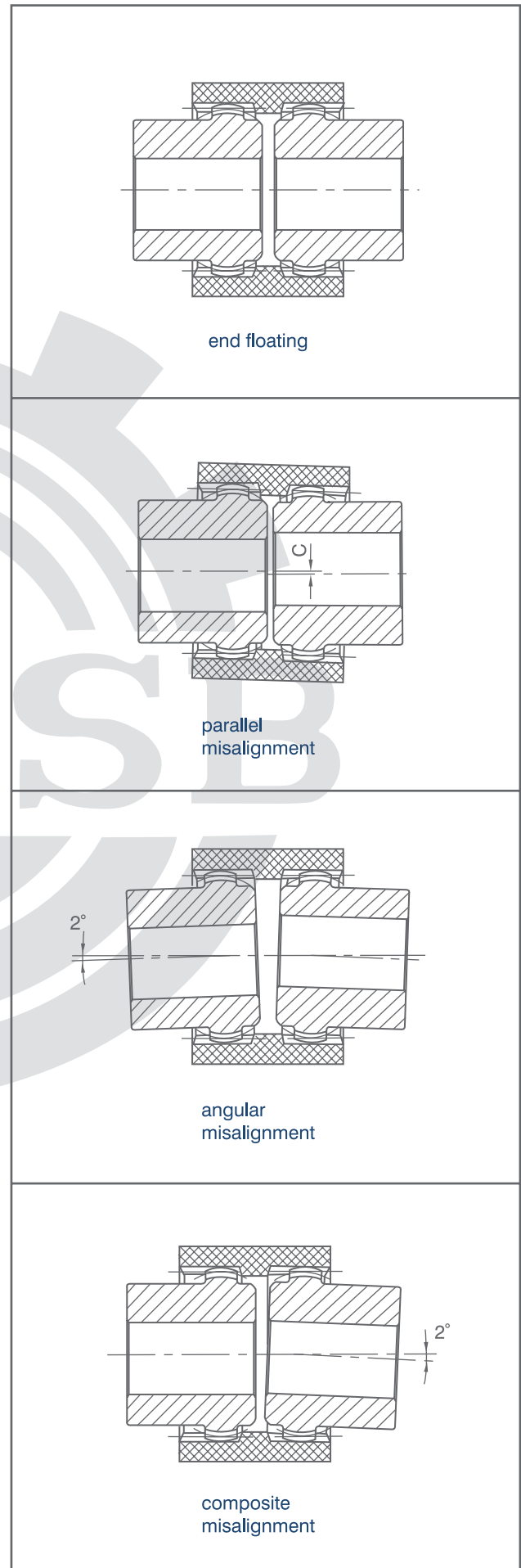
STL Taper Bushing

NSPT GF-Couplings

Conceptual Diagram for Installation Errors



Catalog	Parallel Misalignment	Angular Misalignment	Shaft End-play
GF-14	0.03	±2°	±0.04
GF-19	0.03	±2°	±0.04
GF-24	0.03	±2°	±0.04
GF-28	0.04	±2°	±0.04
GF-32	0.04	±2°	±0.04
GF-38	0.035	±2°	±0.04
GF-42	0.035	±2°	±0.04
GF-48	0.035	±2°	±0.04
GF-55	0.05	±2°	±0.04
GF-65	0.05	±2°	±0.04

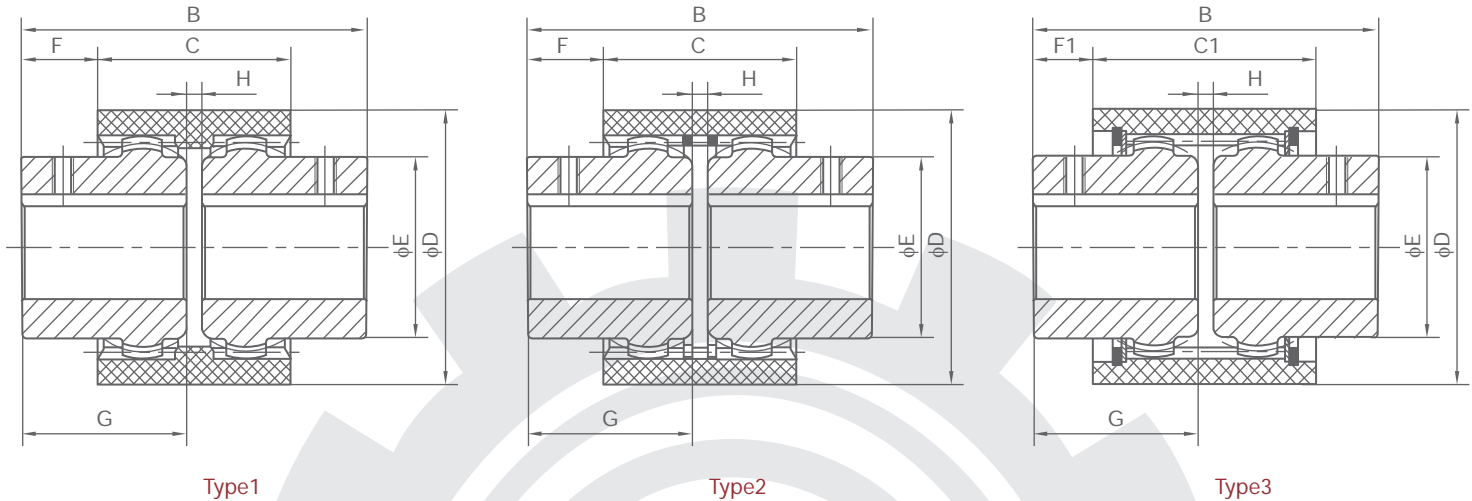


Direction for Installation:

When installing the coupling, ensure the shaft is parallel to the gear face. The existences of slot in between two gears, enough external length required for installation and the proper radial eccentricity have to be guaranteed. Angular and axial deviations should be ensured within allowed range.

NSPT GF-Couplings

GF Couplings have been used widely by various mechanical engineering and hydraulic fields nowadays. It is suitable for both horizontal and vertical installations. Its axial-shaft-inserting assembling method makes the installation very convenient to users. It also adopts the curve surface drum type teeth, which avoid the focal of stress under installation tolerance. The maintenance is eliminated through the assembly of steel gear and nylon teeth sheath. This will compensate axial, radial and angular tolerance for two shaft lines.



NSPT GF-Coupling (Standard Series)(Type1 & Type2)

Catalog	Fundamental Dimensions							Bore		Max Torque Ft.lb	Max Revolution (rpm)	Moment of inertia lb.in ²	Wt Lbs
	D	E	B	C	F	G	H	Pilot	Max				
GF-14	15/8	1	2	1 1/2	1/4	15/16	3/16	1/4	9/16	16.96	14000	0.092	0.48
GF-19	1 7/8	1 1/4	2 3/16	1 1/2	5/16	1	3/16	5/16	3/4	27.29	12000	0.218	0.83
GF-24	2 1/16	1 7/16	2 1/4	1 5/8	5/16	1 1/16	3/16	3/8	15/16	33.93	10000	0.314	1.06
GF-28	2 5/8	1 3/4	3 3/8	1 7/8	3/4	1 5/8	3/16	3/8	1 1/8	75.96	8000	1.176	2.50
GF-32	2 15/16	2	3 1/16	1 7/8	1 1/16	1 9/16	3/16	1/2	1 1/4	101.78	7100	1.715	3.05
GF-38	3 3/8	2 1/4	3 5/16	2	5/8	1 9/16	3/16	9/16	1 1/2	129.80	6300	3.270	4.26
GF-42	3 3/4	2 1/2	3 7/16	2	3/4	1 5/8	3/16	3/4	1 5/8	162.25	6000	4.453	5.11
GF-48	3 15/16	2 5/8	4 1/16	2	1 1/16	2	3/16	3/4	1 7/8	227.15	5600	6.189	6.85
GF-55	4 3/4	3 1/4	4 7/8	2 9/16	1 3/16	2 3/8	3/16	1	2 3/16	420.37	4800	16.859	12.00
GF-65	5 1/2	3 3/4	5 5/8	2 7/8	1 7/16	2 3/4	3/16	1	2 5/8	619.50	4000	36.260	18.50

NSPT GF-Coupling (Standard Series)(Type3)

Catalog	Fundamental Dimensions							Bore		Max Torque Ft-Lb	Max Revolution (rpm)	Moment of inertia lb.in ²	Wt Lbs
	D	E	B	C1	F1	G	H	Pilot	Max				
GF-24	2 1/16	1 7/16	2 1/4	2 1/16	3/32	1 1/16	3/16	3/8	15/16	33.93	10000	0.314	1.06
GF-28	2 5/8	1 3/4	3 3/8	2 1/4	9/16	1 5/8	3/16	3/8	1 1/8	75.96	8000	1.176	2.50
GF-32	2 15/16	2	3 5/16	2 1/4	1/2	1 9/16	3/16	1/2	1 1/4	101.78	7100	1.715	3.05
GF-38	3 3/8	2 1/4	3 5/16	2 7/16	9/16	1 9/16	3/16	9/16	1 1/2	129.80	6300	3.270	4.26
GF-42	3 3/4	2 1/2	3 7/16	2 7/16	9/16	1 5/8	3/16	3/4	1 5/8	162.25	6000	4.453	5.11
GF-48	3 15/16	2 5/8	4 1/16	2 9/16	9/16	2	3/16	3/4	1 7/8	227.15	5600	6.189	6.85
GF-55	4 3/4	3 1/4	4 7/8	3 3/16	5/8	2 3/8	3/16	1	2 3/16	420.37	4800	16.859	12.0
GF-65	5 1/2	3 3/4	5 5/8	3 7/16	5/8	2 3/4	3/16	1	2 9/16	619.50	4000	36.260	18.5

Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969, GB 1095-1979 standards.

NSPT GF-Coupling

NSPT GF-coupling(lengthen series)(Type1 Type2)

Catalog	Fundamental Dimensions							Bore		Max Torque Ft-Lbs	Max Revolution (rpm)	Moment of inertia Lb·in ²	wt Lbs
	D	E	B	C	F	G	H	min	max				
GF-14L	15/8	1	2 1/2	1 1/2	1/2	1 3/16	3/16	1/4	9/16	16.96	14000	0.092	0.60
GF-19L	1 7/8	1 1/4	3 5/16	1 1/2	7/8	1 9/16	3/16	5/16	3/4	27.29	12000	0.218	1.26
GF-24L	2 1/16	1 7/16	4 1/16	1 5/8	1 1/4	2	3/16	3/8	15/16	33.93	10000	0.314	1.88
GF-28L	2 5/8	1 3/4	4 7/8	1 7/8	1 1/2	2 3/8	3/16	3/8	1 1/8	75.96	8000	1.176	3.57
GF-32L	2 15/16	2	4 7/8	1 7/8	1 1/2	2 3/8	3/16	1/2	1 1/4	101.78	7100	1.715	4.38
GF-38L	2 3/8	2 1/4	6 7/16	2	2 1/4	3 1/8	3/16	9/16	1 1/2	129.80	6300	3.270	8.12
GF-42L	3 3/4	2 1/2	8 13/16	2	3 7/16	4 3/8	3/16	3/4	1 5/8	162.25	6000	4.453	12.2
GF-48L	3 15/16	2 5/8	8 13/16	2	3 7/16	4 3/8	3/16	3/4	1 7/8	227.15	5600	6.189	14.07
GF-55L	4 3/4	3 1/4	8 13/16	2 9/16	3 1/8	4 3/8	3/16	1	2 3/16	420.37	4800	16.859	29.12
GF-65L	5 1/2	3 3/4	8 13/16	2 13/16	3	4 3/8	3/16	1	2 9/16	619.50	4000	36.260	35.2

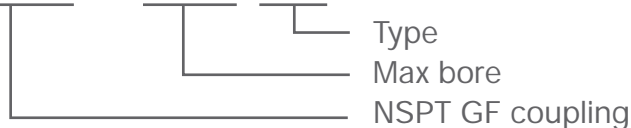
NSPT GF-coupling(lengthen series)(Type3)

Catalog	Fundamental Dimensions							Bore		Max Torque Ft-Lbs	Max Revolution (rpm)	Moment of inertia Lb·in ²	wt Lbs
	D	E	B	C1	F1	G	H	Pilot	Max				
GF-24L	2 1/16	1 7/16	4 1/16	2 1/16	1	2	3/16	3/8	7/8	33.93	10000	0.314	1.88
GF-28L	2 5/8	1 3/4	4 7/8	2 1/4	1 1/4	2 3/8	3/16	3/8	1 1/8	75.96	8000	1.176	3.57
GF-32L	2 15/16	2	4 7/8	2 1/4	1 1/4	2 3/8	3/16	1/2	1 1/4	101.78	7100	1.715	4.38
GF-38L	3 3/8	2 1/4	6 7/16	2 7/16	2 1/16	3 3/16	3/16	9/16	1 1/2	129.80	6300	3.270	8.12
GF-42L	3 3/4	2 1/2	8 13/16	2 7/16	3 1/4	4 3/8	3/16	3/4	1 5/8	162.25	6000	4.453	12.2
GF-48L	3 15/16	2 5/8	8 13/16	2 9/16	3 1/4	4 3/8	3/16	3/4	1 7/8	227.15	5600	6.189	14.2
GF-55L	4 3/4	3 1/4	8 13/16	3 3/16	1 13/16	4 3/8	3/16	1	2 3/16	420.37	4800	16.859	29.1
GF-65L	5 1/2	3 3/4	8 13/16	3 7/16	2 11/16	5 1/2	3/16	1	2 9/16	619.50	4000	36.260	35.2

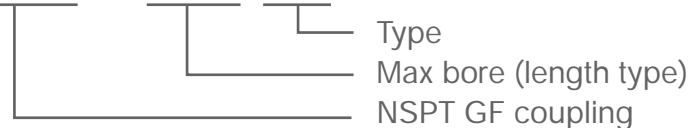
Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969, GB 1095-1979 standards.

Expressing method:

GF - 14 - 1



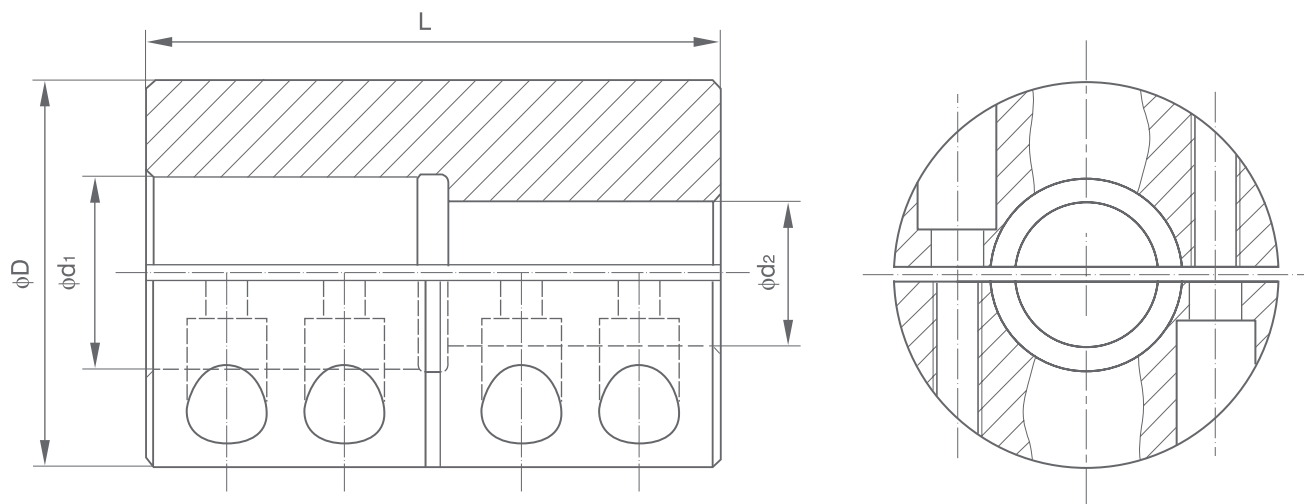
GF - 14L - 1



NSPT 2CC-Coupling



- Axially inserting style assembly;
- Precise concentricity is required for two shafts;
- Compact structure
- Suitable for horizontal and vertical installation.

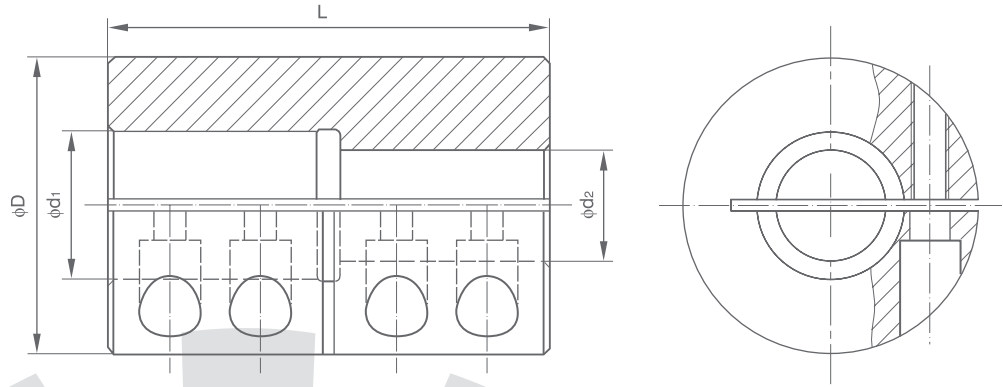


NSPT 2CC-coupling

Catalog		Fundamental Dimensions		Bore		Bolts		Max Torque (in.Lbs)	Max Revolution (rpm)	G (Lbs)
Black Oxide Stell	Black Oxide Stell With Keykey	D	L	d1	D2	Sizes	Qty			
CC-050-050	2CC-050-050KW	1-1/4	1-7/8	1/2	1/2	#8-32X1/2	8	163	3008	0.481
CC-062-050	2CC-062-050KW	1-1/2	2-1/4	5/8	1/2	#10-32X1/2		275	2506	0.852
CC-062-062	2CC-062-062KW	1-1/2	2-1/4	5/8	5/8	#10-32X1/2		281	2506	0.781
CC-075-062	2CC-075-062KW	1-3/4	2-5/8	3/4	5/8	1/4-28X5/8		439	2148	1.377
CC-075-075	2CC-075-075KW	1-3/4	2-5/8	3/4	3/4	1/4-28X5/8		447	2148	1.377
CC-087-087	2CC-087-087KW	1-7/8	2-7/8	7/8	7/8	1/4-28X5/8		533	2005	1.589
CC-100-057	2CC-100-075KW	2	3	1	3/4	1/4-28X5/8		614	1880	1.821
CC-100-100	2CC-100-100KW	2	3	1	1	1/4-28X5/8		627	1880	1.821
CC-112-112	2CC-112-112KW	2-1/8	3-1/4	1-1/8	1-1/8	1/4-28X3/4		730	1769	2.141
CC-125-100	2CC-125-100KW	2-1/4	3-3/8	1-1/4	1	1/4-28X3/4		827	1671	2.653
CC-125-125	2CC-125-125KW	2-1/4	3-3/8	1-1/4	1-1/4	1/4-28X3/4		843	1671	2.653
CC-137-100	2CC-137-100KW	2-3/8	3-5/8	1-3/8	1	1/4-28X3/4		950	1583	2.828
CC-137-137	2CC-137-137KW	2-3/8	3-5/8	1-3/8	1-3/8	1/4-28X3/4		965	1583	2.828
CC-150-150	2CC-150-150KW	2-1/2	3-3/4	1-1/2	1-1/2	1/4-28X3/4		1096	1504	3.097
CC-175-175	2CC-175-175KW	3	4-1/2	1-3/4	1-3/4	5/16-24X1		1954	1253	5.634
CC-200-200	2CC-200-200KW	3-1/4	4-7/8	2	2	5/16-24X1		2381	1157	6.885
CC-225-225	2CC-255-255KW	3-1/2	5	2-1/4	2-1/4	5/16-24X1		2856	1074	8.137

eyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969, B 1095-1979 standards.

NSPT CC-Coupling

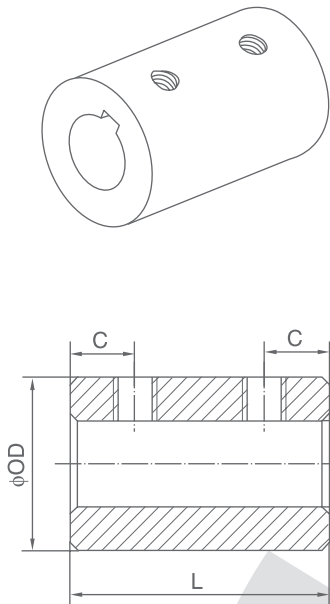


CC NSPT-coupling

Catalog		Fundamental Dimensions		Bore		Bolts		Max Torque (in.Lbs)	Max Revolution (rpm)	G (Lbs)	
Black Oxide Stell	Black Oxide Stell With Keykey	D	L	d1	d2	Sizes	Qty				
C-025-025	CC-037-037KW	13/16	1-1/4	1/4	1/4	#4-40X3/8	4	130	4600	0.141	
C-037-025		1-1/16	1-5/8	3/8	1/4	#6-32X3/8		288	3500	0.320	
C-037-037		1-1/6	1-5/8	3/8	3/8	#6-32X3/8		290	3500	0.311	
C-050-037		1-1/4	1-7/8	1/12	3/8	#8-32X1/2		453	3000	0.508	
C-050-050		CC-050-050KW	1-1/4	1-7/8	1/2	1/2		#8-32X1/2	461	3000	0.481
C-062-050	CC-062-062KW	1-1/2	2-1/4	5/8	1/2	#10-32X1/2	4	787	2500	0.832	
C-062-062		1-1/2	2-1/4	5/8	5/8	#10-32X1/2		798	2500	0.832	
C0-75-075		1-3/4	2-5/8	3/4	1/2	1/4-28X5/8		1256	2100	1.377	
C-075-062		1-3/4	2-5/8	3/4	5/8	1/4-28X5/8		1256	2100	1.377	
C-075-075		CC-075-075KW	1-3/4	2-5/8	3/4	3/4		1/4-28X5/8	1267	2100	1.309
C-087-062	CC-087-087KW	1-7/8	2-7/8	7/8	5/8	1/4-28X5/8	4	1498	2000	1.715	
C-087-087		1-7/8	2-7/8	7/8	7/8	1/4-28X5/8		1519	2000	1.589	
C-100-050		2	3	1	1/2	1/4-28X5/8		1804	1800	1.053	
C-100-075		2	3	1	3/4	1/4-28X5/8		1804	1800	1.965	
C-100-100		CC-100-100KW	2	3	1	1		1/4-28X5/8	1813	1800	1.815
C-112-100	CC-112-112KW	2-1/8	3-1/4	1-1/8	1	1/4-28X3/4	4	2126	1700	2.247	
C-112-112		2-1/8	3-1/4	1-1/8	1-1/8	1/4-28X3/4		2136	1700	2.172	
C-125-100		2-1/4	3-3/8	1-1/4	1	1/4-28X3/4		2479	1600	2.616	
C-125-125		CC-125-125KW	2-1/4	3-3/8	1-1/4	1-1/4		1/4-28X3/4	2490	1600	2.402
C-137-100		2-3/8	3-5/8	1-3/8	1	1/4-28X3/4		2863	1500	3.130	
C-137-137	CC-137-137KW	2-3/8	3-5/8	1-3/8	1-3/8	1/4-28X3/4	2874	1500	2.797		
C-150-100	CC-150-150KW	2-1/2	3-3/4	1-1/2	1	1/4-28X3/4	4	3275	1450	3.592	
C-150-150		2-1/2	3-3/4	1-1/2	1-1/2	1/4-28X3/4		3286	1450	3.097	
C-175-175		CC-175-175KW	3	4-1/2	1-3/4	1-3/4		5/16-24X1	5804	1200	5.634
C-200-200		CC-200-200KW	3-1/4	4-7/8	2	2		5/16-24X1	7066	1100	6.695

way dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969, B 1095-1979 standards.

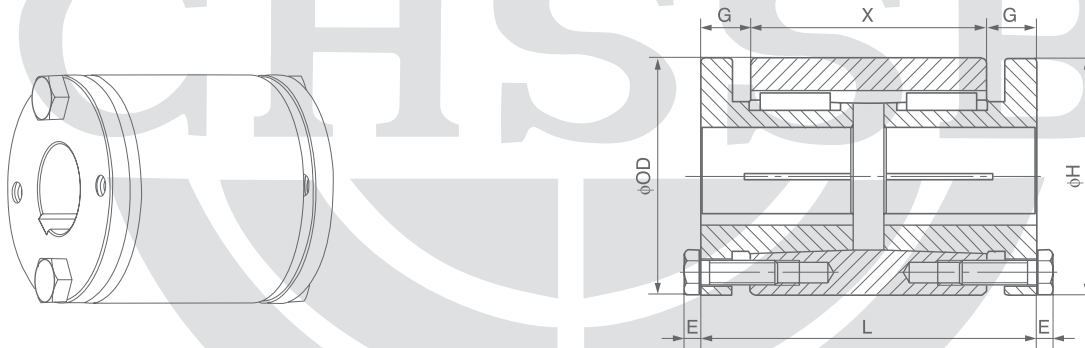
NSPT CS-Coupling



Catalog	Fundamental Dimensions				Bolt		Keyway	wt Lbs
	OD	B	L	C	Size	Qty		
CS-04	1/2	1/4	3/4	3/16	#6-32X1/8	2	-	0.06
CS-05	5/8	5/16	1	1/4	#10-24X3/16		-	0.06
CS-06	3/4	3/8	1	1/4	#10-24X3/16		-	0.1
CS-08	1	1/2	1 1/2	3/8	1/4-20X1/4		-	0.2
CS-10	1 1/4	5/8	2	1/2	1/4-20X1/4		-	0.5
CS-10K	1 1/4	5/8	2	1/2	1/4-20X3/16		3/16X3/32	0.5
CS-12	1 1/2	3/4	2	1/2	5/16-18X1/4		-	0.8
CS-12K	1 1/2	3/4	2	1/2	5/16-18X1/4		3/16X3/32	0.8
CS-14	1 3/4	7/8	2	1/2	5/16-18X1/4		-	1.0
CS-14K	1 3/4	7/8	2	1/2	5/16-18X1/4		3/16X3/32	1.0
CS-16	2	1	3	3/4	3/8-16X3/8		-	1.9
CS-16K	2	1	3	3/4	3/8-16X3/8		1/4X1/8	1.9
CS-18	2 1/8	1 1/8	3	3/4	3/8X16X3/8		1/4X1/8	2.1
CS-18K	2 1/8	1 1/8	3	3/4	3/8X16X1/8		1/4X1/8	2.1
CS-20	2 1/4	1 1/4	4	1	3/8X16X3/8		-	3.1
CS-20K	2 1/4	1 1/4	4	1	3/8X16X3/8		1/4X1/8	3.1
CS-22	2 1/2	1 3/8	4 1/2	1	3/8X16X3/8		-	4.3
CS-22K	2 1/2	1 3/8	4 1/2	1	3/8X16X3/8		5/16X5/32	4.3

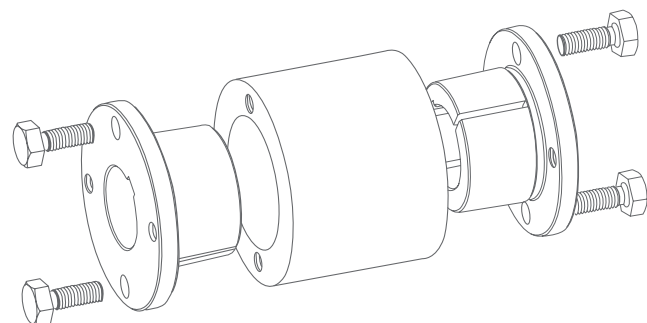
Keyway dimensions conform to DIN6885, JIS B 1310-1976, UNI 6604-1969, GB 1095-1979 standards.

NSPT CSX-Coupling



Catalog	Bushing			Fundamental Dimensions						Max.Torque (in.Lbs)	G (Lbs)
	Size	Bore		OD	L	H	G	X	E		
		Min	Max								
CSH	H	3/8	1-1/2	2-1/8	2-7/8	2-1/8	7/16	2	3/16	1700	1.6
CSP	PI	1/2	1-3/4	3	4-1/4	3	5/8	3	1/4	5660	3.4
CSQ	QI	3/4	2-11/16	4-3/8	4-1/2	4-1/8	3/4	4	9/32	14600	9.6

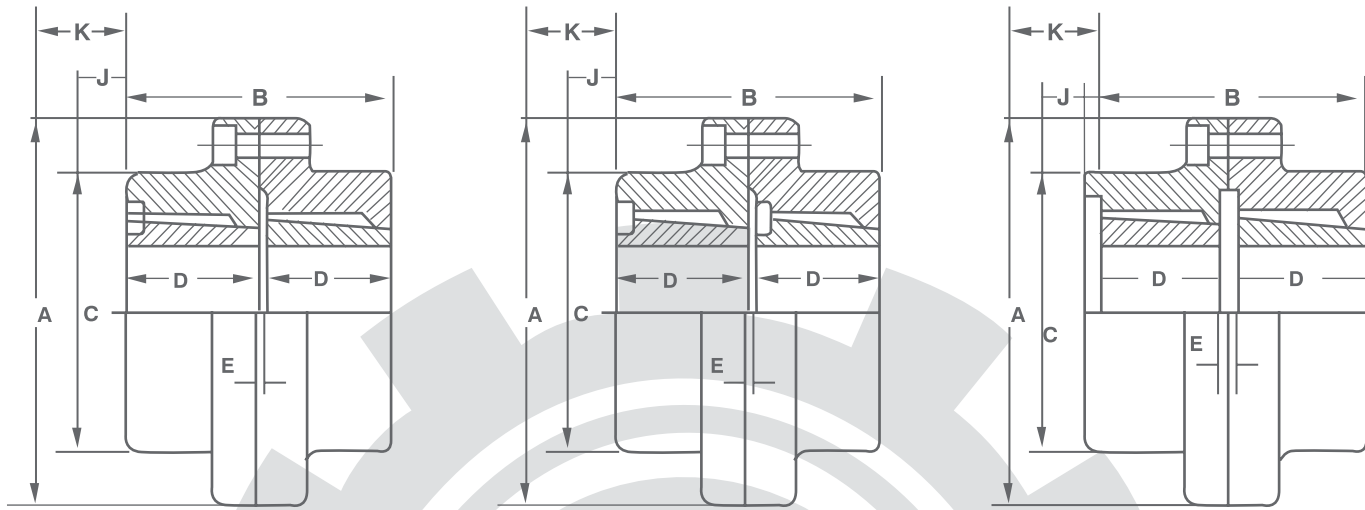
Keyway dimensions conform to DIN6885, JIS B 1310-1976, UNI 6604-1969, GB 1095-1979 standards.



NSPT RM-Coupling

T_{aper}
B_{ore}

BTL
Taper Bushing



RM12-RM30

RM35-RM50

RM60

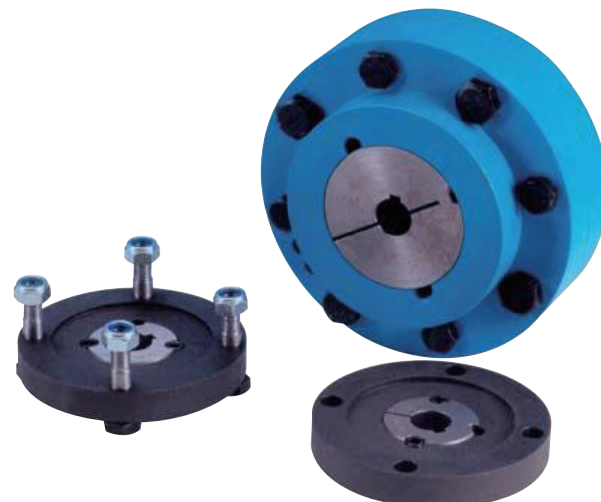
NSPT Taper Bore RM-Coupling

NSPT Standard

Catalog	Bush	Bore		Dimension							Torque (In-Lb)	Max (RPM)	wt Lbs
		Min	Max	A	B	C	D	E	J	K			
RM12	1210	1/2	1 1/4	45/8	2 1/4	3	1	1/4	0.65	1.00	1150	4,980	7.7
RM16	1615	1/2	1 11/16	5	3 1/4	3 1/4	1 1/2	1/4	0.81	1.06	1947	4,000	9.9
RM25	2517	1/2	2 11/16	7	3 7/8	5	1 3/4	1/4	1.00	1.63	4425	3545	24.2
RM30	3030	13/16	3 1/4	8 1/2	6 1/4	6	3	1/4	1.19	2.06	8850	2920	50.7
RM35	3535	13/16	3 15/16	9 3/4	7 1/4	7	3 1/2	1/4	1.31	2.69	12390	2545	83.8
RM40	4040	17/16	4 7/16	11 3/4	8 1/4	8 1/2	4	1/4	1.63	3.33	23895	2115	141.1
RM45	4545	1 15/16	4 15/16	13	9 1/4	9 1/2	4 1/2	1/4	1.94	4.05	28320	1910	194
RM50	5050	27/16	5	14 1/4	10 1/4	10 1/2	5	1/4	1.94	4.05	35400	1910	341.7
RM60	6050	47/16	6	20	10 3/4	16	5	3/4	1.63	4.35	254000	1240	526

Special notice

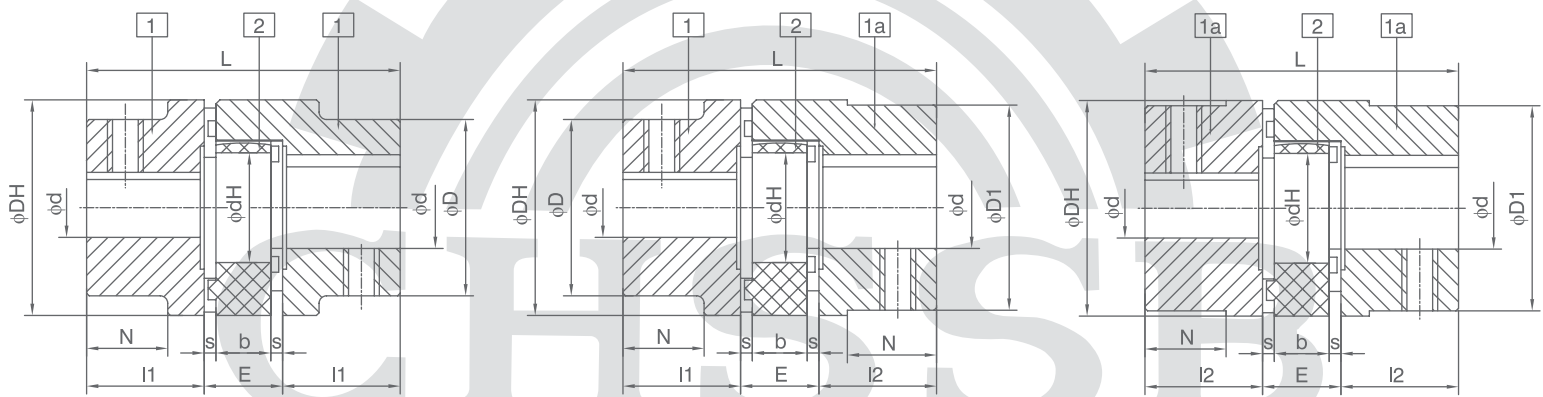
Special Notice: RM-coupling should be dynamically balanced according to degree Q6.3 when the rotational speed in use reaches 1/2 of its limit.



NSPT GE-Couplings



- Elastic torque transmitting with no need for maintenance.
- Lose efficacy protection
- Vibration absorbing
- Axial inserting installation
- Excellent dynamic characteristics
- Simplified design and limited inertia
- Effectively rectify axial, radial and angular deviation in installation.



NSPT GE-COUPPLINGS

Material:AL

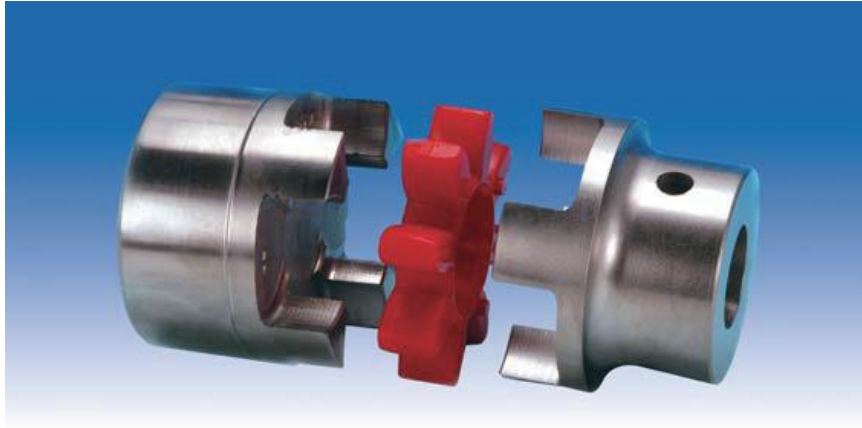
Catalog	Part	Elastomer Rating Moment			Collectivity Size(Inch)											Moment of inertia (lb·in ²)	G (Lbs)
		Yellow ft-lbs	Red ft-lbs	Moment of inertia lb·in ²	Bore (d)		L	l _{1,2}	E	b	s	N	DH	D,D1	d _H		
					Pilot	Max											
GE-14	1a	5.53	9.22	0.0014	-	5/8	1.38	0.43	0.51	3/8	0.06	0	13/16	13/16	3/8	0.0085	0.044
GE-19	1	7.37	12.50	0.0102	-	3/4	2.60	0.98	0.63	1/2	0.08	3/4	15/8	11/4	11/16	0.0358	0.119
	1a				15/16	15/8								0.0630			
GE-24	1	25.80	44.25	0.0341	-	15/16	3.07	1.18	0.71	9/16	0.08	15/16	23/16	15/8	11/16	0.1260	0.242
	1a				11/8	23/16								0.2760			
GE-28	1	70.10	118.08	0.0682	-	11/8	3.54	1.38	0.79	5/8	0.10	11/8	25/8	17/8	13/16	0.3070	0.396
	1a				11/8	25/8								0.6340			

Order Form:

GE-24	AL	Yellow	1	3/8	1a	5/8
GE-24	AL	Yellow	1	—	1	—
Coupling size	Material	Spider	Hub Design	Finished Bore	Hub Design	Finished Bore

Note: All items are in pilot bore, Finished bore can be provided according to customers' requirements

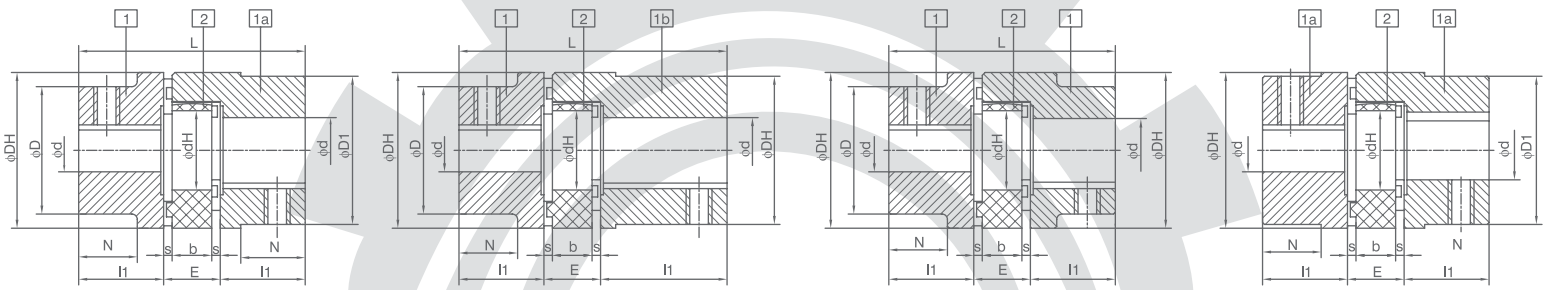
NSPT GE-Coupling



Standard Keyseats

Bores	Key Seat
1/2"-9/16"	1/8"x1/16"
5/8-7/8	3/16"x3/32"
15/16-1 1/4	1/4x1/8
1 5/16-1 3/8	5/16x5/32
1 7/16-1 3/4	3/8x3/16
1 13/16-2 1/4	1/2x1/4

1 3/8" Bore Bushings Also available with 3/8" x 3/16" Ks



NSPT GE-COUPLING

Material: GG25

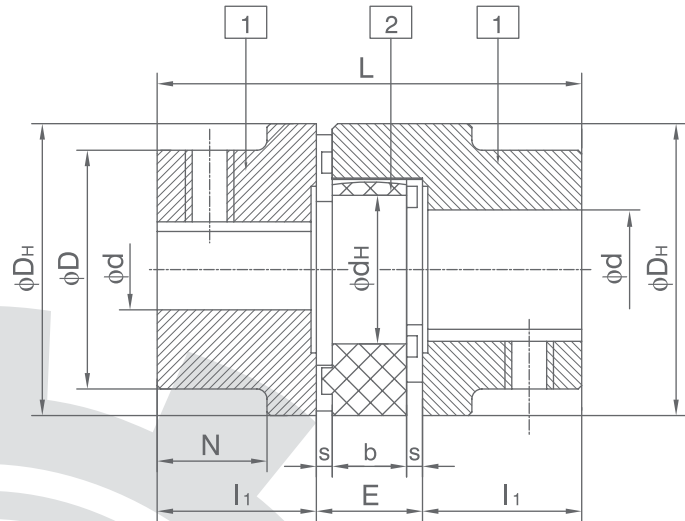
Catalog	Part	Elastomer Rating Moment			Collectivity Size(mm)											Moment of Inertia Lb-in ²	Wt Lbs		
		Yellow ft-lbs	Red ft-lbs	Moment of Inertia Lb-in ²	Bore (d)		L	1 ₁ , 1 ₂	E	b	s	N	D _H	D, D ₁	dH				
					Pilot	Max													
GE-38	1	140	240	0.170	3/8	1 1/2	4.49	1.77	0.95	11/16	0.12	17/16	31/8	29/16	11/2	2.90	2.16		
	1a				3/4	1 3/4								31/16				4.33	2.51
	1b													27/16				6.62	3.70
GE-42	1	195	332	0.341	3/8	1 5/8	4.96	1.97	1.02	3/4	0.12	19/16	33/4	3	1 13/16	6.12	3.34		
	1a				1 1/8	2 1/8								311/16				10.23	4.03
	1b													29/16				14.70	5.74
GE-48	1	229	387	0.682	1/2	1 7/8	5.51	2.20	1.10	13/16	0.14	1 3/4	4 1/8	33/8	2	10.37	4.60		
	1a				1 1/8	2 3/8								41/16				16.90	5.46
	1b													23/4				23.39	7.52
GE-55	1	302	505	1.023	5/8	2 1/8	6.30	2.56	1.18	7/8	0.16	2 1/16	4 3/4	37/8	2 3/8	20.95	6.96		
	1b				19/16	2 3/4								45/8				32.25	11.13
GE-65	1	461	693	1.705	3/4	2 9/16	7.28	2.95	1.38	1	0.18	1 15/16	5 5/16	4 1/2	2 11/16	47.96	10.62		
GE-75	1	944	1416	6.820	1	2 7/8	8.27	3.35	1.59	1 3/8	0.20	2 1/16	6 1/4	5 5/16	3 5/8	105.24	16.75		
GE-90	1	1770	2655	13.600	1 3/8	3 1/2	9.65	3.94	1.77	1 5/16	0.22	2 7/16	7 7/8	6 5/16	3 15/16	283.29	28.70		

Order Form:

GE-42	GG25	Red	1	3/8	1a	1 1/8
GE-42	GG25	Yellow	1	3/8	1	1 1/8
Coupling Size	Material	Spider	Hub Design	Finish Bore	Hub Design	Finish Bore

Note: All items are in pilot bore, Finished bore can be provided according to customers' requirements

NSPT GE-Coupling



NSPT GE-COUPLING

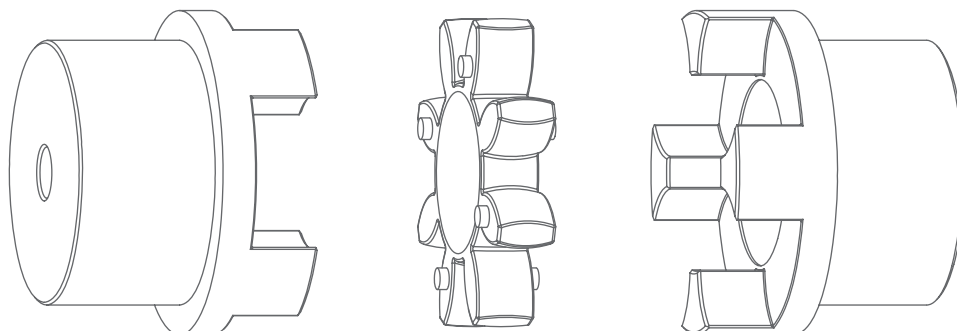
Material: GGG40

Catalog	Part	Elastomer Rating Moment			Collectivity Size(mm)											Moment of inertia Lb·in ²	wt Lbs
		Yellow ft-lbs	Red ft-lbs	Moment of Inertia Lb·in ²	Bore (d)		L	L ₁	E	b	s	N	D _H	D	d _H		
					Pilot	Max											
GE-100	1	2434	3651	24	13/4	4 1/2	10.63	4.33	1.97	1 1/8	0.24	3 1/2	8 7/8	7 1/16	4 7/16	394	35.9
GE-110	1	3540	5310	51	2 1/4	5	11.61	4.72	2.17	1 5/8	0.26	3 3/4	10	7 7/8	5	707	51.2
GE-125	1	4904	7375	85	2 1/4	5 3/4	13.39	5.51	2.36	1 13/16	0.28	4 7/16	1 17/16	9	5 3/4	1388	76.2
GE-140	1	6306	9440	136	2 1/4	6 1/4	14.76	6.10	2.56	1 15/16	0.30	4 7/8	1 29/16	10	6 1/2	2520	103.4
GE-160	1	9440	14160	273	3	7 1/4	16.73	6.89	2.95	2 1/4	0.36	5 1/2	1 49/16	1 17/16	7 1/2	4924	105.5
GE-180	1	13754	20650	590	3 1/8	7 7/8	18.20	7.28	3.35	2 1/2	0.43	6 1/8	1 6 1/2	1 23/4	8 5/8	9008	231.3

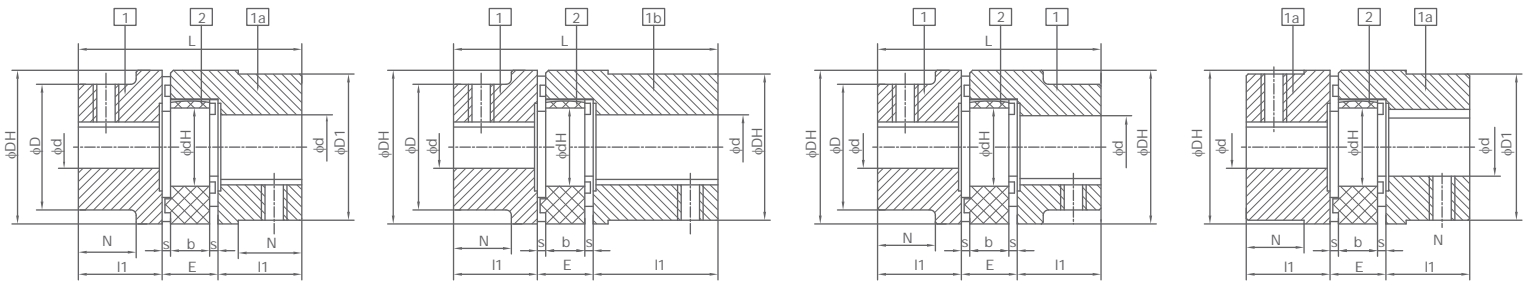
Order Form:

GE-125	GGG40	Yellow	1	2 1/8	1	2 5/8
Coupling size	Material	Spider	Hub design	Finish bore	Hub design	Finish bore

Note: All items are in pilot bore, Finished bore can be provided according to customers' requirements



NSPT GE-Coupling



NSPT GE-COUPLING

Material: Steel

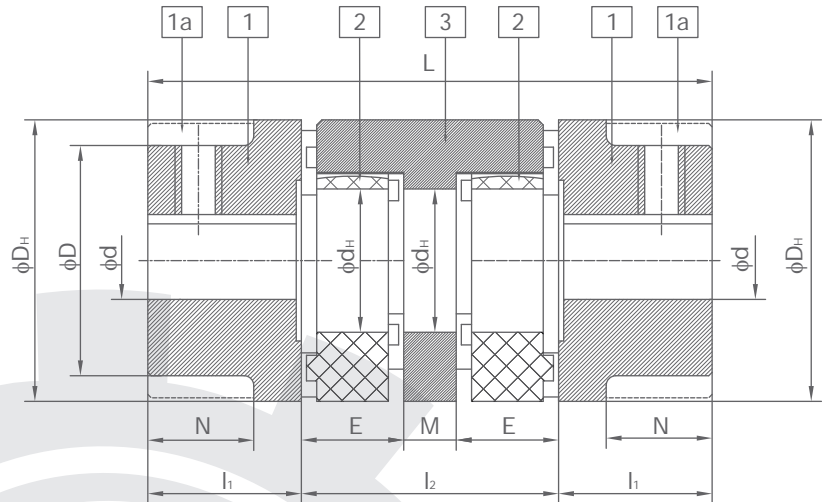
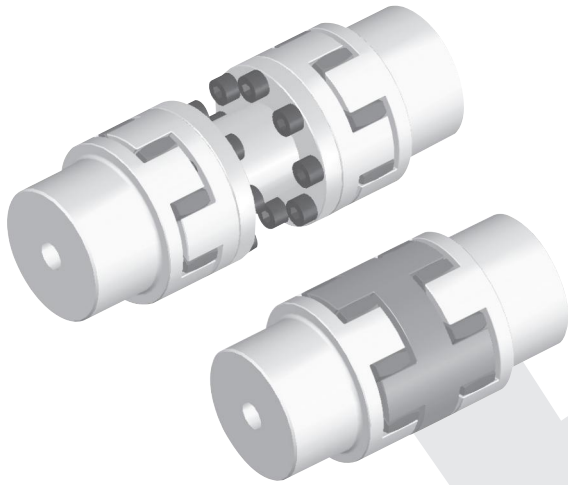
Catalog	Part	Elastomer Rating Moment			Collectivity Size(mm)										Moment of Inertia Lb·in ²	Wt lbs	
		Yellow ft-lbs	Red ft-lbs	Moment of Inertia Lb·in ²	Bore (d)		L	I _{1,2}	E	b	s	N	D _H	D _{1, D₂}			d _H
					Pilot	Max											
GE-19	1a	7.37	12.50	0.0102	-	1	2.60	0.98	0.63	1/2	0.08	-	19/16	19/16	11/16	0.164	0.39
	1b				3.54	1.46	0.232	0.49									
GE-24	1a	25.80	44.25	0.0341	-	1 3/8	3.07	1.18	0.71	9/16	0.08	-	23/16	23/16	11/16	0.678	0.79
	1b				4.65	1.97	1.078	1.26									
GE-28	1a	70.10	118.08	0.0682	-	1 9/16	3.54	1.38	0.79	5/8	0.10	-	29/16	29/16	13/16	1.562	1.37
	1b				5.51	2.36	2.558	2.19									
GE-38	1	140.00	240.00	0.1700	-	1 7/8	4.49	1.77	0.94	3/4	0.12	11/16	31/8	23/4	11/4	3.458	2.46
	1b				6.46	2.76	-	31/8				6.854		3.94			
GE-42	1	195.00	332.00	0.3410	-	2 1/8	4.96	1.97	13/16	0.12	11/8	33/4	33/5	113/16	8.400	3.34	
	1b				6.93	2.95	-	33/4			15.260				6.25		
GE-48	1	229.00	387.00	0.6820	-	2 7/16	5.51	2.20	1.02	13/16	0.14	11/4	41/8	33/4	2	13.787	4.60
	1b				7.40	3.15	-	41/8				23.830		8.67			
GE-55	1	302.00	505.00	1.0230	-	2 15/16	6.30	2.56	1.18	7/8	0.16	17/16	43/4	41/16	23/8	27.160	6.96
	1b				8.20	3.54	-	43/4				44.610		13.06			
GE-65	1	461.00	693.00	1.7050	-	3 1/8	7.28	2.95	1.38	1	0.18	17/8	55/16	41/2	211/16	43.430	10.62
	1b				9.28	3.04	-	55/16				81.740		19.08			
GE-75	1	944.00	1416.00	6.8200	-	3 3/4	8.27	3.35	1.57	13/16	0.20	21/16	61/4	55/16	31/8	94.290	16.75
	1b				10.24	4.33	-	61/4				176.480		30.0			
GE-90	1	1770.00	2655.00	13.6000	-	4 5/16	9.365	3.94	1.77	13/8	0.22	27/16	77/8	61/4	315/16	262.190	28.7
	1b				11.61	4.92	-	77/8				510.020		53.55			

Order Form:

GE-24	Steel	Red	1a	3/8	1b	3/4
GE-24	Steel	Yellow	1a	—	1a	—
Coupling size	Material	Spider	Hub design	Finish bore	Hub design	Finish bore

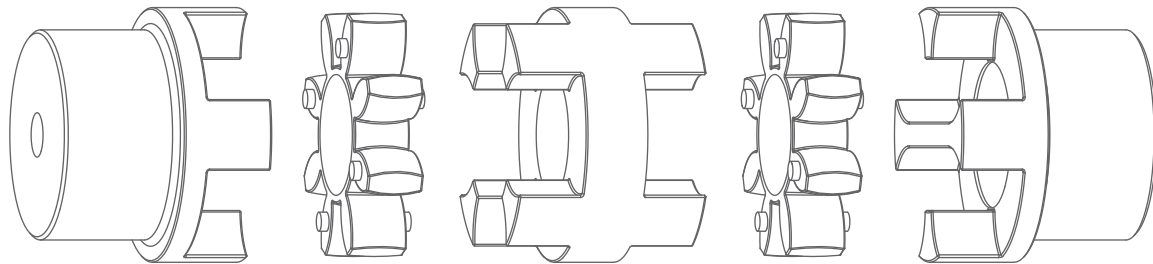
Note: All items are in pilot bore, Finished bore can be provided according to customers' requirements

NSPT GEM-Coupling



NSPT GEM-COUPLING

Catalog	Part	Rating Moment ft-lbs		l ₁	E	M	l ₂	L	D _H	d _H	Max Displacement at n=1500 rpm		Max.Axial Displacement	Moment of Inertia Lb·in ²	Wt Lbs	
		Rating	Max								Radial	Angular				
GEM-19	3	7.375	14.75	0.98	0.63	3/8	1.65	35/8	19/16	11/16	The rest dimensions see GE-Coupling	0.025	1.5°	0.043	0.085	0.15
GEM-24	3	25.810	51.63	1 1/8	0.71	5/8	2.05	43/8	23/16	11/16		0.035		0.055	0.205	0.30
GEM-28	3	70.060	140.13	1.38	0.79	11/16	2.28	5.00	29/16	13/16		0.039		0.059	0.443	0.47
GEM-38	3	140.100	280.25	1.77	0.95	13/16	2.68	6 1/4	31/8	11/2		0.045		0.071	1.194	0.75
GEM-42	3	195.400	390.88	1.97	1.02	7/8	2.91	6 7/8	33/4	1 7/8		0.050		0.079	2.387	1.09
GEM-48	3	228.600	457.30	2.20	1.10	15/16	3.15	7 9/16	4 1/8	2		0.054		0.083	3.410	1.44
GEM-55	3	302.400	604.80	2.56	1.18	1 1/8	3.46	8 9/16	4 3/4	2 3/8		0.060		0.086	6.820	2.08
GEM-65	3	460.900	921.90	2.95	1.3/8	1 1/4	4.02	9.15	5 5/16	2 11/16		0.069		0.102	13.640	3.06
GEM-75	3	944.000	1888.00	3.35	1.57	1 7/16	4.57	11 1/4	6 1/4	3 3/16		0.079		0.118	30.690	4.71
GEM-90	3	1770.000	3540.00	3.94	1.77	1 9/16	5.12	13.0	7 7/8	3 15/16		0.098		0.134	85.250	8.50

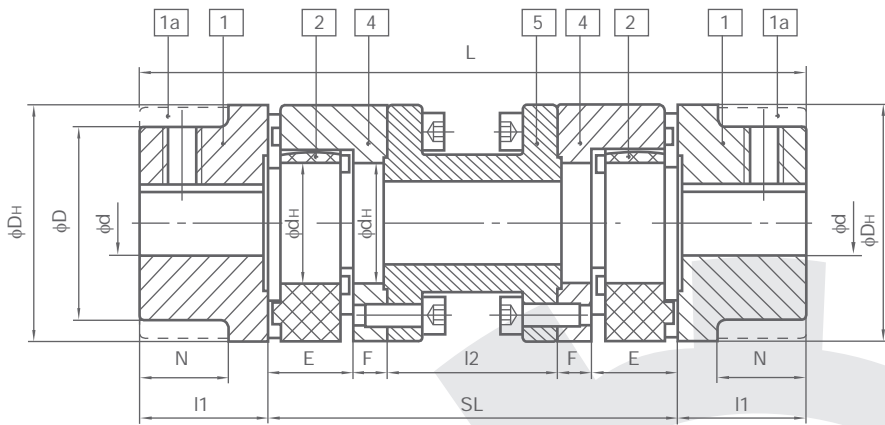


Order Form:

GEM-24	AL-D	Red	1a	—	1a	—
Coupling size	Material	Spider	Hub design	Finish bore	Hub design	Finish bore

Note: All items are in pilot bore, Finished bore can be provided according to customers' requirements

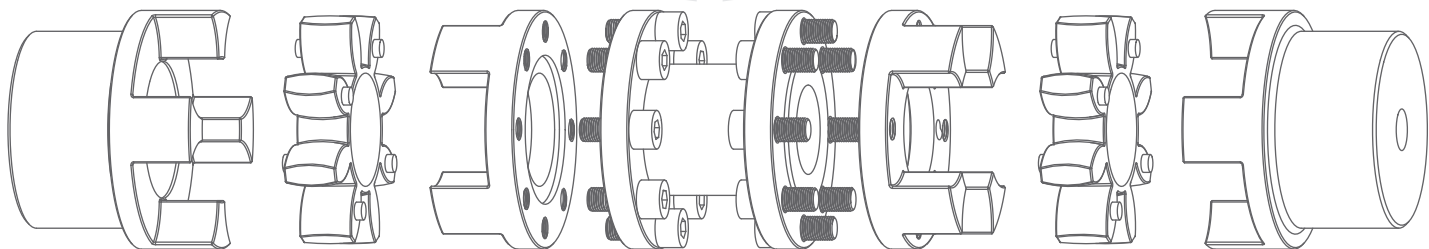
NSPT GEL-Coupling



- Torque is transmitted elastically, no need for maintenance.
- Lose efficacy protection
- Excellent vibration reducing capacity
- Relevant components utility time can be extended
- Double-connection structure, saving time for calibrating
- Decrease unbalanced degree, keep stability

NSPT GEL-COUPLING

Catalog	Rating Moment ft-lbs		I ₁	E	F	L ₂	L	D _H	d _H	The rest dimensions see GE-Coupling	Max.Radial Displacement when angular displacement is 1° and n = 1500 rpm	Dismountable Length SL				Max.Axial Displacement	Internal Hexagon Head Bolt	
	Rating	Max										100	140	180	250		Size	QTY
GEL-24	25.81	51.63	1.18	0.71	0.31	SL+23/8	23/16	11/16	The rest dimensions see GE-Coupling	Max.Radial Displacement when angular displacement is 1° and n = 1500 rpm	0.06				0.055	M5	16	
GEL-28	70.06	140.13	1.38	0.79	0.30	SL+23/4	29/16	13/16			0.06				0.059	M6	16	
GEL-38	140.10	280.25	1.77	0.95	0.39	SL+31/2	33/16	11/2				0.07			0.071	M8	16	
GEL-42	195.40	390.88	1.97	1.02	0.47	SL+315/16	33/4	113/16				0.07			0.079	M8	24	
GEL-48	228.60	457.30	2.20	1.10	0.47	SL+43/8	43/16	2				0.07			0.083	M8	24	
GEL-55	302.40	604.80	2.56	1.18	0.63	SL+51/8	43/4	23/8					0.10	0.15	0.086	M10	16	
GEL-65	460.90	921.90	2.95	1.38	0.63	SL+57/8	35/16	25/8						0.15	0.102	M10	24	
GEL-75	944.00	1888.00	3.35	1.57	0.75	SL+65/8	63/8	33/16						0.15	0.118	M12	24	
GEL-90	1770.00	3540.00	3.93	1.77	0.79	SL+77/8	77/8	4						0.15	0.134	M16	30	



Order Form:

GEL-24	AL	140	Red	1a	—	1a	—
Coupling size	Material	Dismountable length	Spider	Hub design	Pilot bore	Hub design	Pilot bore

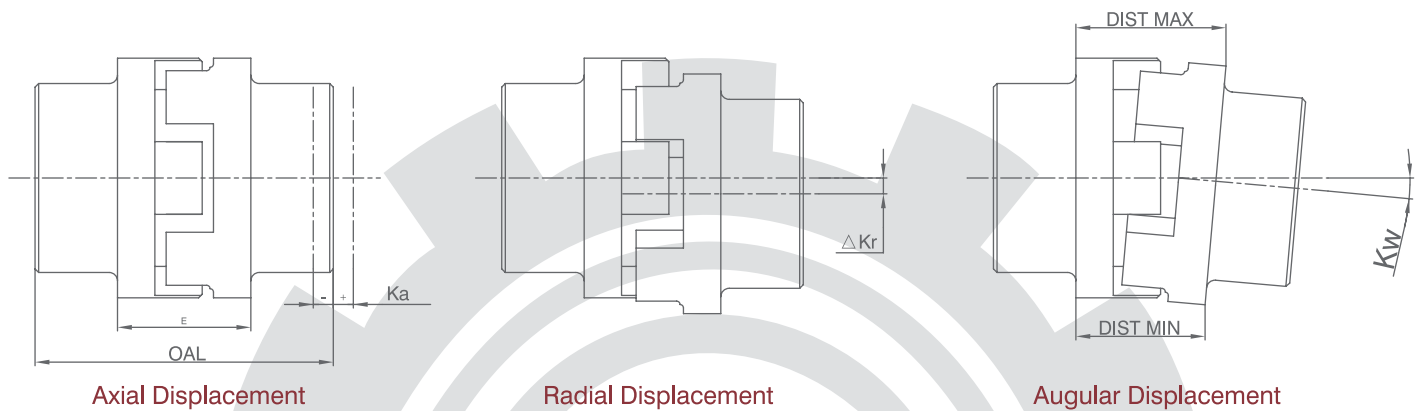
Note: All items are in pilot bore, Finished bore can be provided according to customers' requirements

Direction for Installation of GE Couplings

In normal condition, the working temperature for coupling body's elasticity is $-40^{\circ}\text{C} \sim +110^{\circ}\text{C}$. The allowable maximum instant temperature is $+120^{\circ}\text{C}$. The advantages of this type of couplings include the high wear/oil resistance and excellent internal buffer capacity for anti-overload protection. The yellow body applies to general mechanical transmission and the transmission in hydraulic pressure.

The red body applies to heavy load transmission with vibration absorbing and amortization features.

When practicing axial inserting type installation, dimension E must be guaranteed during installation. Tolerance caused by installation can then be minimized.

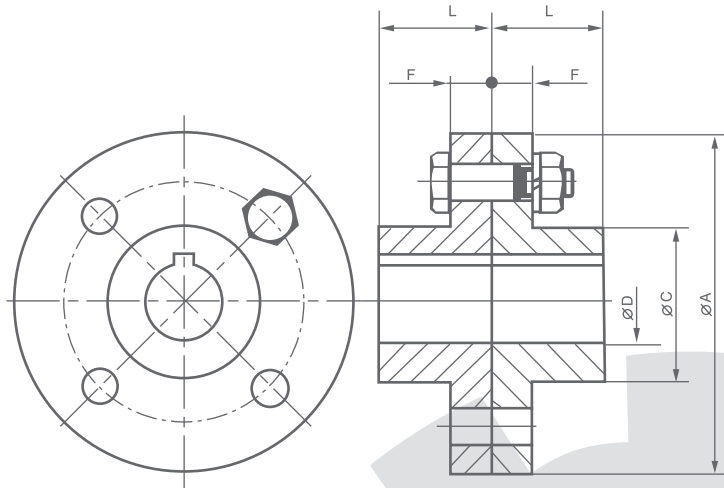


Coupling Size	GE-14	GE-19	GE-24	GE-28	GE-38	GE-42	GE-48	GE-55	GE-65	GE-75	GE-90	GE-100	GE-110	GE-125	GE-140	GE-160	GE-180
Max.Axial (mm) Displacement.(Ka)	-0.5 +1.0	-0.5 +1.2	-0.5 +1.4	-0.7 +1.5	-0.7 +1.8	-1.0 +2.0	-1.0 +2.1	-1.0 +2.2	-1.0 +2.6	-1.5 +3.0	-1.5 +3.4	-1.5 +3.8	-2.0 +4.6	-2.0 +4.6	-2.0 +5.0	-2.5 +5.7	-3.0 +6.4
Max.Radial (mm) Displacement.(Kr)	0.17	0.2	0.22	0.25	0.28	0.32	0.36	0.38	0.42	0.48	0.5	0.52	0.55	0.6	0.62	0.64	0.68
Max.Angular Displacement.(Kw)	1.2°	1.2°	0.9°	0.9°	1°	1°	1.1°	1.1°	1.2°	1.2°	1.2°	1.2°	1.3°	1.3°	1.2°	1.2°	1.2°
Wind-Up Angle	Nominal	6.4°										3.2°					
	Max	10°										5°					



NSPT FL-Coupling

NSPT Standard



F^{inished}
B^{ore}



Special Notice

Special Notice: FL-coupling or FLS-coupling should be dynamically balanced according to degree Q6.3 when rotational speed in use reaches 1/2 of its limit .

Material can be GG25 and S45C and S45C. After surface is machined and phosphated, they are with high precision and good durability in use.

NSPT FL-Coupling

Material:GG25

Catalog	Fundamental Dimensions						Bore		Max Torque (in-lb)	Max Revolution rpm	Number of Bolts n	Wt lbs
	A	L	c	B	F	a	Pilot Bore	Max Bore				
FL-40	4	17/16	15/8	25/8	5/8	3/8	—	1	558	4000	4	4.6
FL-44	43/8	19/16	2	3	5/8	3/8	—	1 1/8	797	4000	4	6.1
FL-50	5	13/4	23/16	33/8	23/32	9/16	—	1 1/4	1151	4000	4	8.5
FL-55	5 1/2	2	2 13/16	4	23/32	9/16	—	1 1/2	1947	4000	6	11.8
FL-63	63/8	23/16	3 1/8	49/16	23/32	9/16	—	1 3/4	3186	4000	8	15.8
FL-71	7 1/8	2 1/2	3 1/2	5 1/4	23/32	9/16	—	2	4425	3800	8	20.8
FL-79	7 7/8	2 13/16	4	5 3/4	7/8	3/4	11/16	2 3/16	6284	3550	8	32.4
FL-88	8 7/8	3 1/8	4 3/8	6 11/16	7/8	3/4	11/16	2 1/2	8850	3150	8	41.7
FL-100	10	3 1/2	5	7 1/8	1 1/8	1	3/4	2 13/16	12390	2800	8	60.4
FL-110	11	4	5 1/2	7 7/8	1 1/8	1 1/8	13/16	3 1/8	17700	2500	8	80.3
FL-124	12 3/8	4 3/8	6 1/4	9 3/8	1 1/8	1 1/8	1 1/4	3 1/2	24780	2240	10	108
FL-140	14	5	7 1/16	10 1/4	1 7/16	1 7/16	1 1/4	4	35400	2000	8	166
FL-158	15 3/4	5	7 7/8	11 7/8	1 7/16	1 7/16	2	4 3/8	46905	1800	10	210
FL-180	17 3/4	5 1/2	8 13/16	14	1 7/16	1 7/16	2 3/8	5	66375	1600	12	276
FL-220	22	6 1/4	9 7/8	17 3/4	1 7/16	1 7/16	3 1/8	5 1/2	97350	1250	14	417
FL-250	24 7/8	7 1/16	11	20 7/8	1 7/16	1 7/16	3 1/2	6 1/4	141600	1120	18	551

Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969,USAS B17.1-1967 GB 1095-1979 standards.

FL/FLS-158-2 1/4



NSPT FLS-Coupling

NSPT Standard

NSPT FLS-Coupling

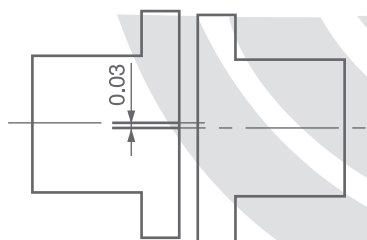
Material:S45C

Catalog	Fundamental Dimensions						Bore		Max Torque (In-Lb)	Max Revolution rpm	Number of Bolts n	Wt Lbs
	A	L	c	B	F	a	Pilot Bore	Max Bore				
FLS-44	43/8	19/16	2	3	5/8	3/8	1/2	13/16	974	6000	4	6.0
FLS-50	5	13/4	23/16	33/8	23/32	9/16	1/2	13/8	1505	6000	4	8.3
FLS-55	5 1/2	2	2 13/16	4	23/32	9/16	1/2	15/8	2655	6000	6	11.4
FLS-63	63/8	23/16	31/8	49/16	23/32	9/16	9/16	17/8	3983	6000	8	15.4
FLS-71	71/8	2 1/2	3 1/2	5 1/4	23/32	9/16	9/16	23/16	5576	5700	8	20.1
FLS-79	77/8	2 13/16	4	5 3/4	7/8	3/4	11/16	23/8	7523	5200	8	31.5
FLS-88	87/8	3 1/8	4 3/8	6 11/16	7/8	3/4	11/16	23/4	12390	4700	8	39.8
FLS-100	10	3 1/2	5	7 1/8	11/8	1	3/4	3	14160	4200	8	59.4
FLS-110	11	4	5 1/2	7 7/8	11/8	1 1/8	13/16	35/16	22150	3750	8	78.4
FLS-124	123/8	4 3/8	6 1/4	9 3/8	11/8	1 1/8	1 1/4	3 15/16	35400	3350	10	103
FLS-140	14	5	7 1/16	10 1/4	17/16	17/16	1 1/4	45/16	44250	3000	8	160
FLS-158	15 3/4	5	7 7/8	11 7/8	17/16	17/16	2	4 15/16	66375	2650	10	198
FLS-180	17 3/4	5 1/2	8 13/16	14	17/16	17/16	2 3/8	5 1/2	96750	2360	10	262
FLS-220	22	6 1/4	9 7/8	17 3/4	17/16	17/16	3 1/8	5 15/16	123900	1900	10	408
FLS-250	24 7/8	7 1/16	11	20 7/8	17/16	17/16	3 1/2	6 9/16	177000	1670	10	539

Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969, GB 1095-1979 standards.

Direction of Installation:

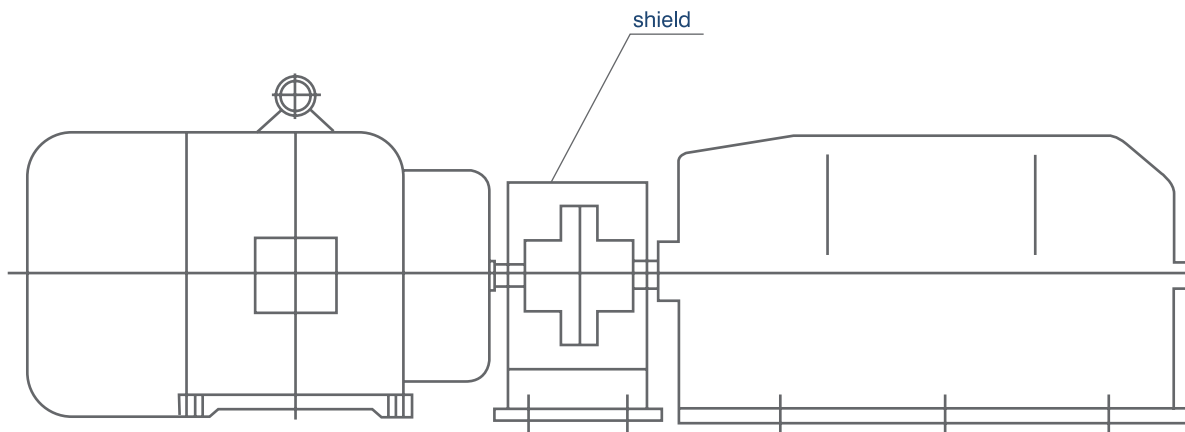
1. When installing couplings, the concentricity between the center lines of the bores of the two half couplings should be within 0.03.



parallel misalignment



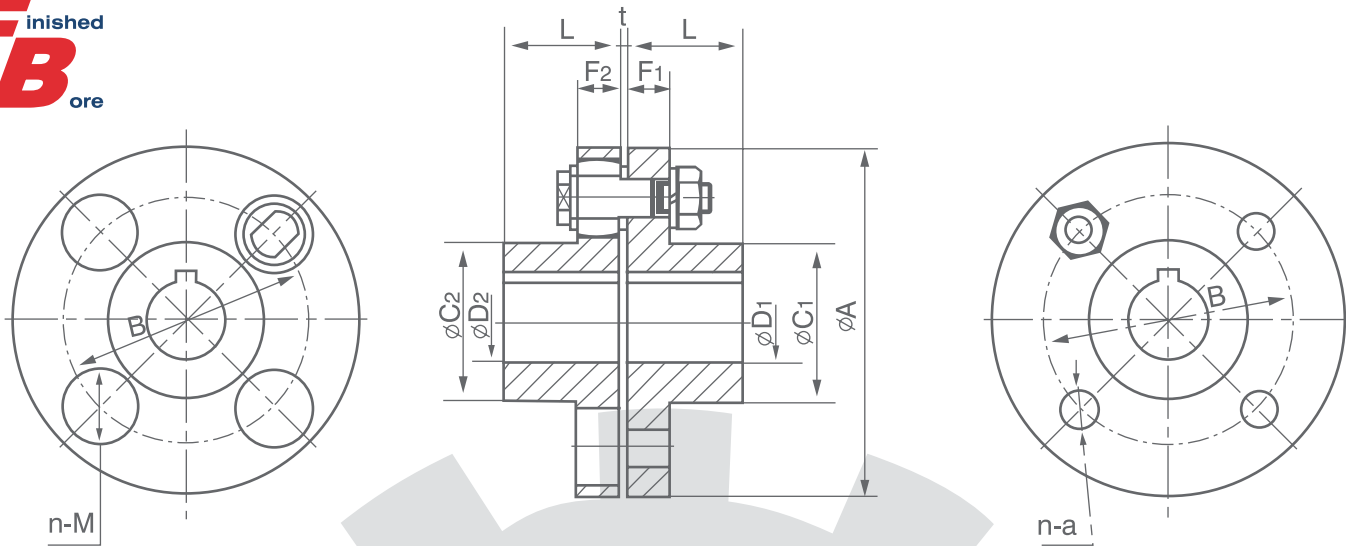
2. When using the couplings, safety device must be provided.



NSPT EL-Coupling

NSPT Standard

F_{inished}
B_{ore}



Material can be GG25 and S45C and S45C. After surface is machined and phosphated, they are with high precision and are durable in use.

Special Notice

Special Notice: EL-coupling or ELS-coupling should be dynamically balanced according to degree Q6.3 when rotational speed reaches 1/2 of its limit in use.



NSPT EL-COUPLING

Material:GG25

Catalog	Fundamental Dimensions								Bore		Max Torque (In-Lb)	Max Revolution (r/Pm)	Number of Bolts (n)	Wt Lbs	
	A	L	B	a	M	t	C		F	Pilot Bore					Max Bore
							C1	C2	F1	F2					
EL-35	39/16	11/8	23/8	5/16	3/4	0.118	17/16		9/16		3/4	133	4000	4	2.8
EL-40	4	17/16	25/8	3/8	7/8	0.118	111/16		5/8		1	257	4000	4	4.1
EL-44	43/8	19/16	215/16	3/8	7/8	0.118	2		5/8		11/8	292	4000	4	5.4
EL-50	5	13/4	33/8	9/16	11/4	0.118	23/16	2	11/16		11/8	646	4000	4	7.4
EL-55	51/2	2	4	9/16	11/4	0.118	213/16	21/2	11/16		13/8	1151	4000	6	10.0
EL-63	63/8	23/16	41/2	9/16	11/4	0.118	31/8		11/16		13/4	1770	4000	8	13.8
EL-71	71/8	21/2	53/16	9/16	11/4	0.118	31/2		11/16		2	2036	3500	8	18.5
EL-79	77/8	213/16	511/16	3/4	15/8	0.157	4		7/8	11/16	23/16	3894	3200	8	28.7
EL-88	87/8	31/8	65/8	3/4	15/8	0.157	43/8		7/8	11/16	21/2	4514	2850	8	37.3
EL-100	10	31/2	71/16	1	2	0.157	5		11/8	3/4	213/16	7524	2550	8	54.8
EL-110	11	4	77/8	11/8	21/4	0.157	51/2		11/8	19/16	13/16	13275	2300	8	77.1
EL-124	123/8	43/8	93/8	11/8	21/4	0.157	61/4		11/8	19/16	11/4	19470	2050	10	104
EL-140	14	5	101/4	17/16	27/8	0.197	71/16		17/16	23/16	11/4	30975	1800	8	163
EL-158	153/4	5	117/8	17/16	27/8	0.197	77/8		17/16	23/16	2	44250	1600	10	206
EL-180	173/4	51/2	14	17/16	27/8	0.197	87/8		17/16	23/16	23/8	62835	1400	12	272
EL-220	22	61/4	173/4	17/16	27/8	0.197	10		17/16	23/16	31/8	88500	1150	14	426
EL-250	247/8	71/16	207/8	17/16	27/8	0.197	11		17/16	23/16	31/2	141600	1000	18	559
EL-280	28	813/16	235/8	17/16	27/8	0.197	123/8		23/16		45/16	221250	900	24	876
EL-281	28	97/8	227/8	13/4	37/16	0.276	14		31/8		411/16	300900	900	20	1212
EL-315	311/2	107/16	263/8	13/4	37/16	0.276	143/4		31/8		51/8	398250	800	22	1536

Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969,USAS B17.1-1967,USAS B17.1-1967 GB 1095-1979 standards.

NSPT ELS-Couplings

NSPT Standard

ELS-Coupling

Material: S45C

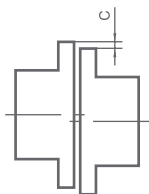
Catalog	Fundamental Dimensions								Bore		Max Torque (In-Lb)	Max Revolution (rpm)	Bolts (n)	Wt Lbs	
	A	L	B	a	M	t	C		F						
							C ₁	C ₂	F ₁	F ₂					
ELS-44	43/8	19/16	215/16	3/8	7/8	0.118	2	5/8	1/2	13/16	292	6,000	4	5.7	
ELS-50	5	13/4	33/8	9/16	11/4	0.118	23/16	2	11/16	1/2	13/8	646	6,000	4	7.8
ELS-55	5 1/2	2	4	9/16	11/4	0.118	213/16	21/2	11/16	1/2	11/2	1151	6,000	6	10.4
ELS-63	63/8	23/16	41/2	9/16	11/4	0.118	31/8	11/16	9/16	17/8	1770	6,000	8	14.4	
ELS-71	71/8	21/2	53/16	9/16	11/4	0.118	31/2	11/16	9/16	21/8	2036	5,250	8	19.0	
ELS-79	77/8	213/16	511/16	3/4	15/8	0.157	4	7/8	11/16	23/8	3894	4,800	8	29.7	
ELS-88	87/8	31/8	65/8	3/4	15/8	0.157	43/8	7/8	11/16	23/4	4514	4,300	8	37.9	
ELS-100	10	31/2	71/16	1	2	0.157	5	11/8	3/4	215/16	7523	3,800	8	57.3	
ELS-110	11	4	77/8	11/8	21/4	0.157	51/2	11/8	19/16	13/16	35/16	13275	3,450	8	80.2
ELS-124	123/8	43/8	93/8	11/8	21/4	0.157	61/4	11/8	19/16	11/4	4	19470	3,050	10	106
ELS-140	14	5	101/4	17/16	27/8	0.197	71/16	17/16	23/16	11/4	45/16	30975	2,700	8	168
ELS-158	153/4	5	117/8	17/16	27/8	0.197	77/8	17/16	23/16	2	5	44250	2,400	10	210
ELS-180	173/4	5 1/2	14	17/16	27/8	0.197	87/8	17/16	23/16	23/8	51/2	62835	2,150	12	278
ELS-220	22	61/4	173/4	17/16	27/8	0.197	10	17/16	23/16	31/8	57/8	88500	1,700	14	445
ELS-250	247/8	71/16	207/8	17/16	27/8	0.197	11	17/16	23/16	31/2	65/8	141600	1,500	18	585

Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969, GB 1095-1979 standards.

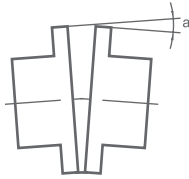


Conceptual Diagrams For Installing Error

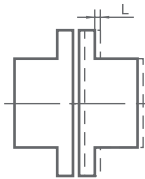
Catalog	Error of Eccentricity (in.)	Error of Angularity (°)	Error of Shaft End-play (in.)
EL90-125	0.004	0.17	±0.083
EL140-180	0.008	0.17	±0.083
EL200-250			±0.110
EL280-315	0.012	0.17	±0.110
EL355-710			±0.138
EL711-800			±0.193



Parallel Misalignment



Angular Misalignment



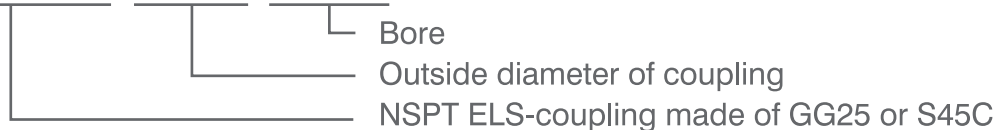
End floating

1. When flange outside diameter fits tightly without gap, set the center of the drive and the driven shaft precisely.

2. To maintain rubber bush for a long time, keep the installing error to the minimum.

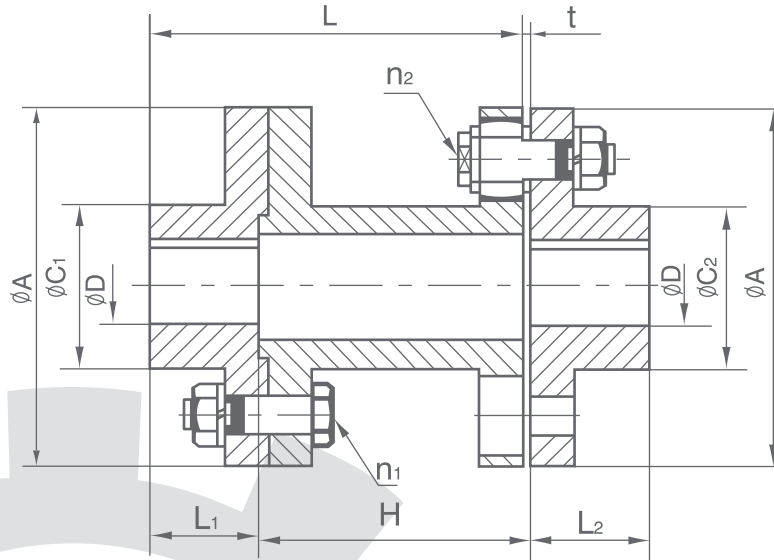
3. The value of 't' is equivalent to the thickness of washer.

EL/ELS-124-11/2



NSPT GL-Coupling

NSPT Standard



NSPT GL-COUPLING

material:GG25

Catalog A X H	Fundamental Dimensions						Bore		n		Max Torque (In-Lb)	Max Revolution (rPm)	wt Lbs
	L	L ₁	c ₁	L ₂	c ₂	t	pilot	Max	n ₁	n ₂			
GL44x40	5 1/4	1 7/16	2	1 9/16	2	0.118	—	1 1/8	4	4	292	4000	11.4
GL50x40	5 7/16	1 5/8	2 3/16	1 3/4	2 3/16	0.118	—	1 1/4	4	4	646	4000	15.4
GL55x40	5 1 1/16	1 7/8	2 13/16	2	2 13/16	0.118	—	1 1/2	6	6	1150	4000	20.4
GL55x55	7 1/4	1 7/8	2 13/16	2	2 13/16	0.118	—	1 1/2	6	6	1150	4000	21.6
GL63x40	5 15/16	2 1/16	3 1/8	2 3/16	3 1/8	0.118	—	1 3/4	8	8	1770	4000	26.4
GL63x55	7 1/2	2 1/16	3 1/8	2 3/16	3 1/8	0.118	—	1 3/4	8	8	1770	4000	28.0
GL71x40	6 3/16	2 3/8	3 1/2	2 1/2	3 1/2	0.118	—	2	8	8	2036	3500	34.2
GL71x55	7 3/4	2 3/8	3 1/2	2 1/2	3 1/2	0.118	—	2	8	8	2036	3500	36.1
GL71x63	9 5/16	2 3/8	3 1/2	2 1/2	3 1/2	0.118	—	2	8	8	2036	3500	37.9
GL79x55	8	2 5/8	4	2 13/16	4	0.157	1 1/16	2 3/16	8	8	3894	3200	55.1
GL79x71	9 9/16	2 5/8	4	2 13/16	4	0.157	1 1/16	2 3/16	8	8	3894	3200	57.3
GL79x79	11 3/16	2 5/8	4	2 13/16	4	0.157	1 1/16	2 3/16	8	8	3894	3200	59.6
GL88x55	8 3/8	3	4 3/8	3 1/8	4 3/8	0.157	1 1/16	2 1/2	8	8	4524	2850	69.9
GL88x71	9 15/16	3	4 3/8	3 1/8	4 3/8	0.157	1 1/16	2 1/2	8	8	4524	2850	72.8
GL88x87	11 1/2	3	4 3/8	3 1/8	4 3/8	0.157	1 1/16	2 1/2	8	8	4524	2550	75.7
GL100x55	8 3/4	3 3/8	5	3 1/2	5	0.157	3/4	2 3/4	8	8	7523	2550	102
GL100x71	10 5/16	3 3/8	5	3 1/2	5	0.157	3/4	2 3/4	8	8	7523	2550	106
GL100x87	11 7/8	3 3/8	5	3 1/2	5	0.157	3/4	2 3/4	8	8	7523	2550	110
GL100x100	13 7/16	3 3/8	5	3 1/2	5	0.157	3/4	2 3/4	8	8	7523	2550	114
GL110x71	10 11/16	3 3/4	5 1/2	4	5 1/2	0.157	1 3/16	3 1/8	8	8	13275	2300	143
GL110x87	12 1/4	3 3/4	5 1/2	4	5 1/2	0.157	1 3/16	3 1/8	8	8	13275	2300	148
GL110x100	13 7/8	3 3/4	5 1/2	4	5 1/2	0.157	1 3/16	3 1/8	8	8	13275	2300	153
GL110x118	15 7/16	3 3/4	5 1/2	4	5 1/2	0.157	1 3/16	3 1/8	8	8	13275	2300	158
GL124x71	11 3/16	4 1/4	6 1/4	4 3/8	6 1/4	0.157	1 1/4	3 1/2	10	10	19470	2050	186
GL124x87	12 3/4	4 1/4	6 1/4	4 3/8	6 1/4	0.157	1 1/4	3 1/2	10	10	19470	2050	193
GL124x100	14 3/8	4 1/4	6 1/4	4 3/8	6 1/4	0.157	1 1/4	3 1/2	10	10	19470	2050	200
GL124x118	15 29/32	4 1/4	6 1/4	4 3/8	6 1/4	0.157	1 1/4	3 1/2	10	10	19470	2050	200

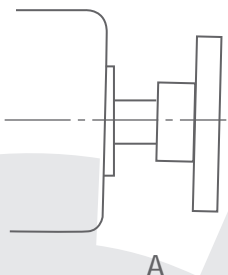
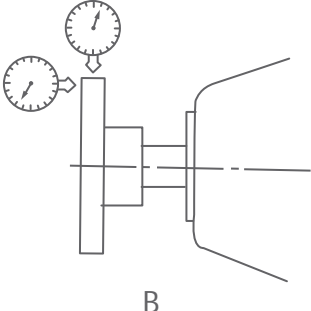
Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969,USAS B17.1-1967 GB 1095-1979 standards.

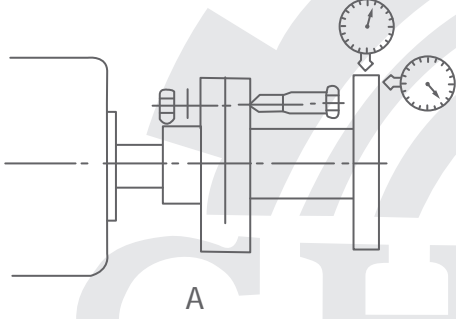
NSPT GL-Couplings

NSPT Standard

Conceptual Diagrams for Installation

Install side A and side B of GL-coupling on the transmitting shafts of primary engine and secondary engine separately. Correct their locations till the run out is under 0.03mm.

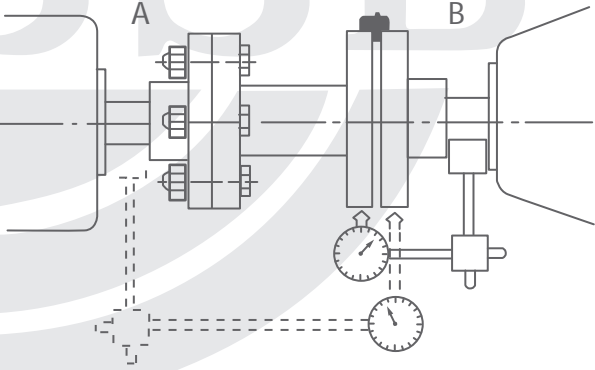





A

Install the connection tube on the coupling of the primary engine and fix the bolts, nuts and spacer. Correct the location till the run out is under 0.05mm.

Keep the flange of GL-coupling on the secondary engine in line with the shaft center of the connecting tube flange. A relevant gap is necessary. Correct the relevant locations till the tolerances fall within the maximum data allowed by GL-Coupling installation.



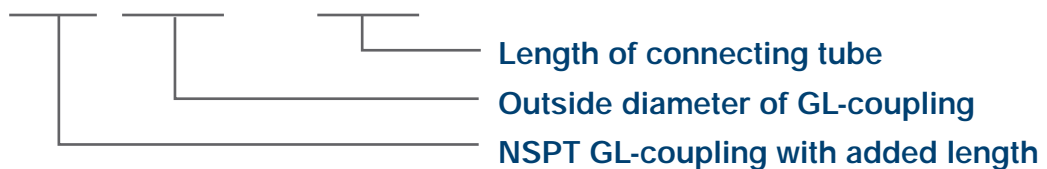
A B

Using material GG25.
After surface is machined and phosphated, the coupling will have high precision and good durability.

Special Notice:

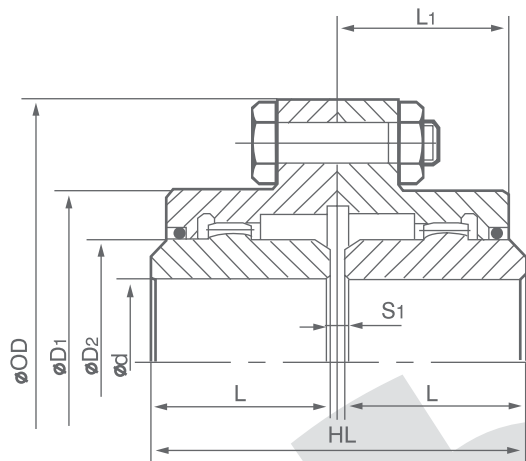
GL-coupling should be dynamically balanced according to the degree Q6.3 when rotational speed reaches 1/2 of its working limit.

GL 44 X 40



NSPT GRL-Couplings

NSPT Standard



Characteristics:

- Special design with teeth connection
Longer lifetime due to the larger contact surface receiving the force
- Best torque transmitting capability per unit area and advantage of anti-bending feature
- Using steel alloy for anti-corrosion and anti-overheating features

Special Notice

GRL-coupling should be dynamically balanced according to the degree Q6.3 when rotational speed reaches 1/2 of its working limit.

NSPT GRL-Couplings

Catalog	Fundamental Dimensions							Bore		Max Torque (In-Lb)	Max Revolution (Lrpm)	Max b (In)	Wt Lbs
	OD	HL	D1	D2	L	S1	L1	Min	Max				
GRL-100	49/16	3 1/2	3 1/8	2 1/4	1 11/16	1/8	1 21/32	9/16	1 1/2	7523	6000	0.055	7.8
GRL-150	6	4	3 15/16	3 1/8	1 15/16	1/8	1 29/32	3/4	2 1/8	15045	5500	0.060	15.7
GRL-200	7	5	4 15/16	3 7/8	2 7/16	1/8	2 11/32	1	2 3/4	28763	5000	0.085	25.8
GRL-250	8 3/8	6 1/4	5 7/8	4 5/8	3 1/32	3/16	2 11/16	1 3/8	3 3/8	53100	4400	0.105	43.3
GRL-300	9 7/16	7 3/8	6 7/8	5 1/2	3 19/32	3/16	3 9/32	1 3/4	4	88500	4000	0.115	63.9
GRL-350	11	8 1/2	7 29/32	6 1/2	4 1/8	1/4	3 27/32	2 1/8	4 5/8	141600	3500	0.130	105
GRL-400	12 1/2	9 3/4	9 1/4	7 3/8	4 3/4	1/4	4 7/32	2 9/16	5 1/2	208860	3000	0.150	150
GRL-450	13 5/8	10 15/16	10 3/8	8 3/8	5 5/16	5/16	4 23/32	3 1/8	6 1/4	287625	2700	0.175	195
GRL-500	15 5/16	12 1/8	11 9/16	9 5/16	6 29/32	5/16	5 5/32	3 1/2	7	420375	2500	0.196	286
GRL-550	16 3/4	14 1/8	12 13/16	10 3/8	6 29/32	5/16	6 15/16	4	7 7/8	592950	2200	0.220	385
GRL-600	18 1/8	15 1/4	14	11 7/16	7 15/32	5/16	6 21/32	4 3/4	8 5/8	796500	2100	0.246	462
GRL-700	20 7/8	17 3/4	15 3/4	13 1/8	8 11/16	3/8	7 11/16	5 7/8	9 3/4	1106250	2000	0.275	684

- Max. Torque of GRL78-GRL295 and their max. parallel tolerance should be based on $a=1/2"$ and max. bore diameters.
- Max. Torque of GRL325-GRL520 and their max. parallel tolerance should be based on $a=3/4"$ and max. bore diameters.

GRL - 200



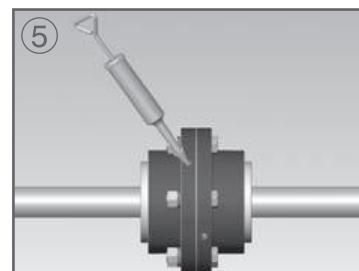
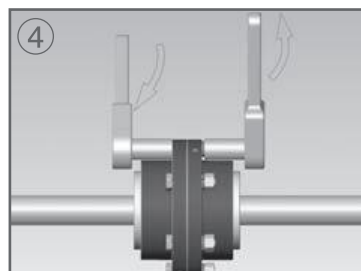
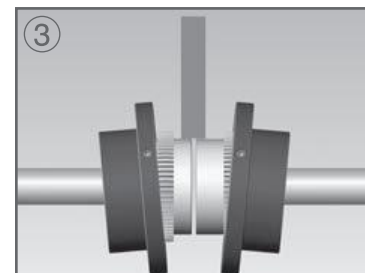
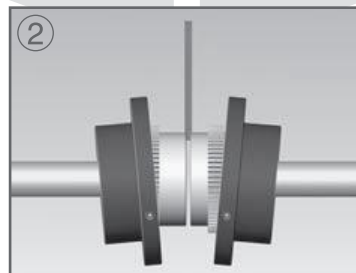
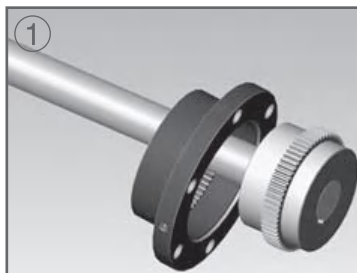
NSPT GRL-Coupling

NSPT Standard

Instruction for Installation:



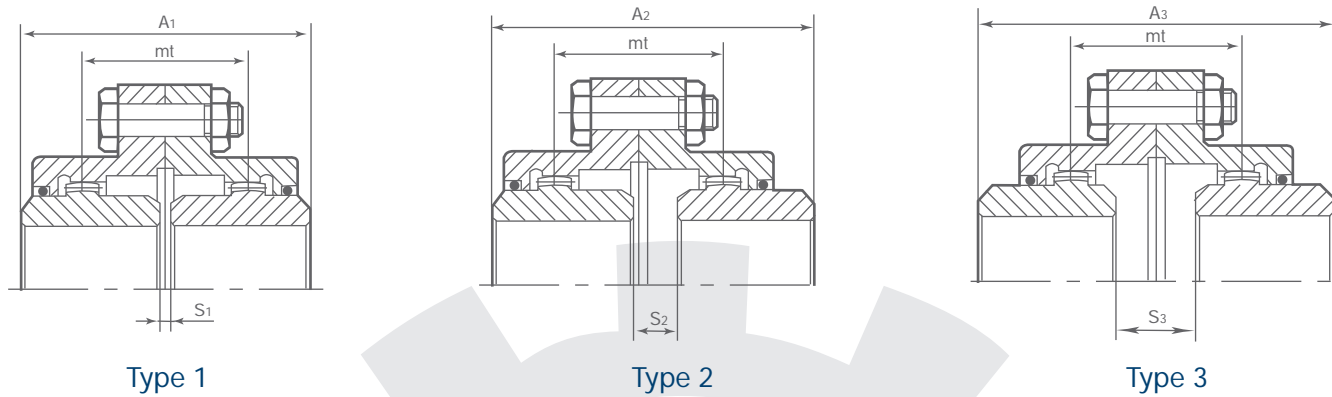
1. Clean all parts. Grease the crowned gear teeth and O-Ring. Put O-Ring onto the shafts.
2. Place the flanged sleeves on the shafts and mount the hubs.
3. Using a spacer bar to make a gap between the hubs equal to the normal gap as specified.
4. Align the shaft with a straight bar, check every 90 degree to make sure no exceeding of the offset limit with a gauge.
5. Insert gasket between the flanged sleeves; fasten the bolts and position the lube holes at the maximum degree.
6. Fill up the grease until overflowing at the opened opposite hole.



NSPT GRL-Coupling

NSPT Standard

Installation for GRL-Coupling



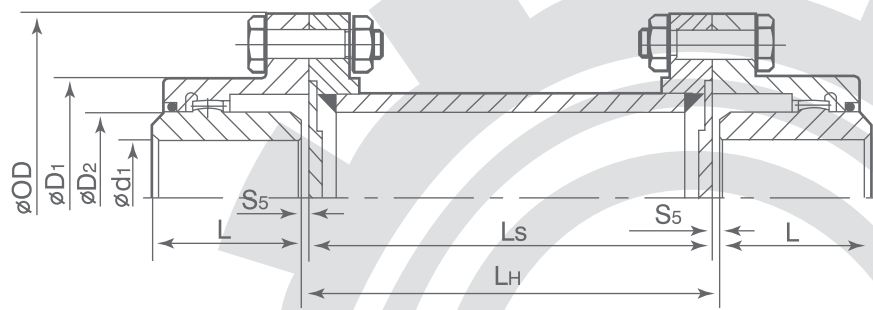
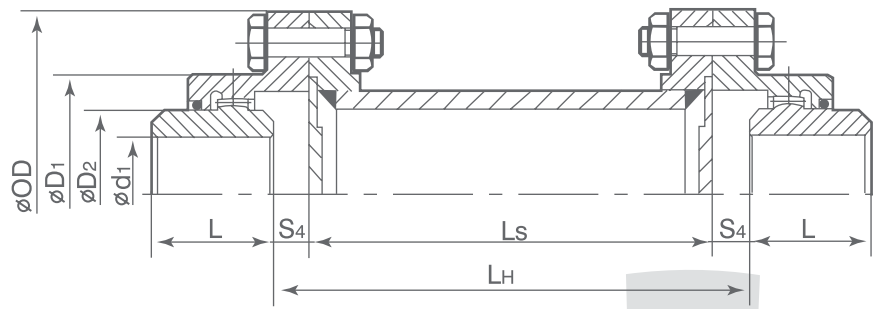
Catalog	mt	A1	A2	A3	S1	S2	S3
GRL-100	131/32	31/2	321/32	327/32	1/8	9/32	7/16
GRL-150	25/16	41/16	49/32	417/32	1/8	11/32	19/32
GRL-200	33/32	5	59/16	61/8	3/16	21/32	17/32
GRL-250	311/16	63/16	617/32	71/8	3/16	21/32	15/32
GRL-300	45/16	79/32	727/32	83/8	3/16	3/4	19/32
GRL-350	51/32	81/2	93/16	927/32	1/4	7/8	19/16
GRL-400	521/32	911/16	103/8	111/8	1/4	15/16	121/32
GRL-450	67/16	1015/16	1125/32	129/16	5/16	11/8	131/32
GRL-500	73/16	121/8	131/16	14	5/16	11/4	27/32
GRL-550	813/32	141/16	155/16	1617/32	5/16	117/32	23/4
GRL-600	95/16	151/4	163/4	181/4	5/16	113/16	35/16
GRL-700	103/8	1711/16	19	205/16	3/8	121/32	3

Dimensions for the flange with teeth

Catalog	O.D	DW	D3	P	T	n	d
GRL-100	49/16	313/16	27/8	0.138	9/16	6	3/8
GRL-150	6	413/16	33/4	0.138	3/4	8	7/16
GRL-200	7	515/16	417/32	0.138	3/4	6	1/2
GRL-250	83/8	71/4	519/32	0.138	7/8	6	21/32
GRL-300	97/16	83/16	65/8	0.138	7/8	8	21/32
GRL-350	11	99/16	71/2	0.138	11/8	8	13/16
GRL-400	121/2	11	83/4	0.138	11/8	8	13/16
GRL-450	135/8	12	97/8	0.157	11/8	10	13/16
GRL-500	153/8	139/16	11	0.157	11/2	10	13/16
GRL-550	1623/32	1415/32	121/4	0.157	11/2	14	13/16
GRL-600	181/8	16	135/8	0.236	11/8	14	1
GRL-700	207/8	181/8	1413/16	0.315	19/16	16	1

NSPT GSL-Coupling

NSPT Standard



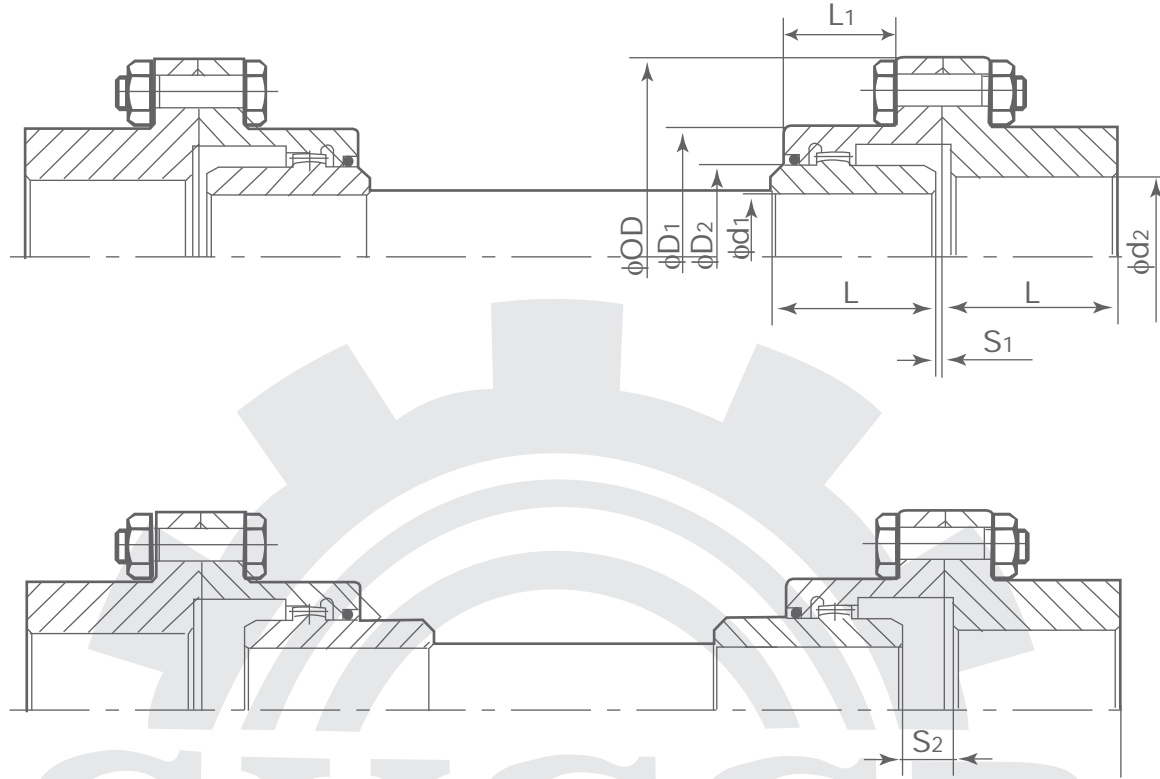
NSPT GSL-COUPLING

Catalog	Fundamental Dimensions						Bore		Max Torque (In-Lb)	Max revolution (rpm)	Ls Min	wt Lbs
	OD	D2	D1	L	S4	S5	Min	Max				
GSL-100	49/16	21/4	31/8	111/16	7/32	1/16	9/16	11/2	7523	6000	215/16	27.8
GSL-150	6	31/8	315/16	115/16	9/32	1/16	3/4	21/8	15045	5500	35/16	47.4
GSL-200	7	37/8	415/16	27/16	5/8	1/16	1	23/4	28763	5000	33/4	53.6
GSL-250	83/8	45/8	57/8	31/32	9/16	3/32	13/8	33/8	53100	4400	4	113
GSL-300	97/16	51/2	67/8	319/32	21/32	3/32	13/4	4	88500	4000	45/16	167
GSL-350	11	61/2	729/32	41/8	25/32	1/8	21/8	45/8	141600	3500	415/16	241
GSL-400	121/2	73/8	91/4	43/4	13/16	1/8	29/16	51/2	208860	3000	415/16	332
GSL-450	135/8	83/8	103/8	55/16	1	5/32	31/8	61/4	287625	2700	415/16	400
GSL-500	155/16	95/16	119/16	529/32	11/8	5/32	31/2	7	420375	2500	511/16	555
GSL-550	163/4	103/8	1213/16	629/32	13/8	5/32	4	77/8	592950	2200	511/16	738
GSL-600	181/8	117/16	131/11	715/32	121/32	5/32	43/4	85/8	796500	2100	511/16	858
GSL-700	207/8	131/8	153/4	811/16	11/2	3/16	57/8	93/4	1106250	2000	511/16	1171

To assemble, keyways must be sealed off to prevent lubricant discharge.
 Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969, USAS B17.1-1967
 GB 1095-1979 standards.

NSPT GWL-Coupling

NSPT Standard



NSPT GWL-COUPLING

Catalog	Fundamental Dimensions						Bore				Max Torque (N.m)	Max Revolutm (rpm)	Wt kg
	OD	D2	D1	L	S1	S2	d1		d2				
							min	max	min	max			
GWL-100	49/16	21/4	31/8	111/16	1/8	9/32	9/16	11/2	9/16	21/8	2523	6000	10
GWL-150	6	31/8	315/16	115/16	1/8	11/32	3/4	21/8	3/4	23/4	15045	5500	18
GWL-200	7	37/8	415/16	27/16	1/8	21/32	1	23/4	1	23/4	28763	5000	33
GWL-250	83/8	45/8	57/8	31/32	3/16	21/32	13/8	33/8	13/8	45/16	53100	4400	57
GWL-300	97/16	51/2	67/8	319/32	3/16	3/4	13/4	4	13/4	415/16	88500	4000	85
GWL-350	11	61/2	729/32	41/8	1/4	7/8	21/8	45/8	21/8	51/2	141600	3500	130
GWL-400	121/2	73/8	91/4	43/4	1/4	15/16	29/16	51/2	29/16	65/8	208860	3000	192
GWL-450	135/8	83/8	103/8	55/16	5/16	11/8	31/8	61/4	31/8	71/2	287625	2700	261
GWL-500	155/16	95/16	119/16	529/32	5/16	11/4	31/2	7	31/2	81/4	420375	2500	376
GWL-550	163/4	103/8	1213/16	629/32	5/16	117/32	4	77/8	4	9	592950	2200	474
GWL-600	181/8	117/6	131/4	715/32	5/16	113/16	43/4	85/8	43/4	93/4	796500	2100	604
GWL-700	207/8	131/8	153/4	811/16	3/8	121/32	57/8	93/4	57/8	113/8	1106250	2000	902

To assemble, keyways must be sealed off to prevent lubricant discharge.
 Keyway dimensions conform to DIN 6885, JIS B 1310-1976, UNI 6604-1969, USAS B 17.1-1967
 GB 1095-1979 standards.

NSPT GSL-Coupling

1. Suggestions for Choosing Couplings

1) Mechanical Characteristics

Couplings should be selected based on the characteristics of power machines. They are used to adjust the natural frequency of shafts, reduce the twisting vibration of the amplitude, improve the stability of output power, and increase the lifetime of transmission parts.

2) Load Classifications

The main classifications of loads are: shocking, vibration, forward-backward turning, breakings, starting frequency, etc. They are the basic factors for choosing couplings. Flexible couplings should be used for the working loads such as shocking, vibration and obviously torque changing in order to improve the working function of the system. In low speed and heavy load working modes, avoid middle or low power. Torque should be several times larger than normal working load in case of forward-backward turning, braking or frequent starting. The loads of metal flexible elements are higher than those of non-metal flexible elements.

3) Allowable Rotational Speed of Couplings

The allowable rotational speed of a coupling is decided by its material. The allowable rotational speed of steel is higher than cast iron. High rotational speed requires dynamic balance.

4) Relative Displacement Between Two shafts Combined By Couplings

Normally the relative displacement between two shafts can't be avoided. Different flexible couplings should be adopted based on relative displacements of shaft direction, axial direction and/or angular direction. Steel couplings may be used only for high precision.

5) Transmission Precision of Couplings

If the transmission is used for transferring movement, the couplings are required to provide high precision. However, if the transmission is used for transferring power only, lower transmission precision is fine.

6) Coupling Dimensions, Installation and Maintenance

The dimension of couplings must be fitted with the installation space of the machine. When choosing the right couplings, take into account the ease of installation, maintenance, replacement and the adjustment for concentricity.

7) Working Condition

The surroundings must meet the work conditions of the selected couplings to ensure their expected lifetime.

8) Economical Advantage

Everything being equal, the low-cost couplings are the optimal and economical choice.

2. Torque As the Key Element for Choosing the Right Couplings

$T = 9550 \times P_w / n$ P_w = power of driving machine

n = rotational speed of driving machine

The theoretical torque (T) can be got from above formula. The torque $T_c = K_1 * T$ can be calculated after choosing the working coefficient K_1 (see the table on next page; temperature coefficient K_2 , starting coefficient K_3 should be taken into consideration if necessary). Choosing a similar sized torque from standard values to ensure $T \leq T_c \leq T_n$. Finding the allowable torque (n) of couplings to ensure $n \leq (n)$. In order to meet the diameters of the driving and driven shaft of the moving sides, adjust the size of couplings accordingly. When the driving and driven shaft diameters of the moving sides are different, couplings should be chosen according to the larger one. After choosing the coupling, the strength of shafts and keys should be checked and calculated again to make sure the right sized coupling and the right type of key joint have been selected.

NSPT-Couplings

Table of Working Condition Coefficient

Prime Mover		Working Machine					
		I	II	III	IV	V	VI
Motor, Steam Turbine		1.3	1.5	1.7	1.9	2.3	3.1
Explosion Engine	Four Cylinders and Above	1.5	1.7	1.9	2.1	2.5	3.3
	Two cylinders	1.8	2.0	2.2	2.4	2.8	3.6
	Single cylinder	2.2	2.4	2.6	2.8	3.2	4.0

Classification of Working Machines:

- I : Torque Changes Very Slightly: motor-generator, small type of ventilator, small type of centrifugal, etc.
- II : Torque Changing Slightly: turbo-compressor, wood lathe, conveyor, etc.
- III: Torque Changes Normally: mixer, boost pump, flywheel reciprocation compressor, etc.
- IV : Normal Torque Changing and Normal Impact Load: weaving machine, cement mixer, etc.
- V : Large Torque Changing and Heavy Impact Load: printing machine, crane, stone crusher, etc.
- VI : Torque Changing Largely and Serious Impact Load: rolling mill, heavy type of cogging mill, etc.

