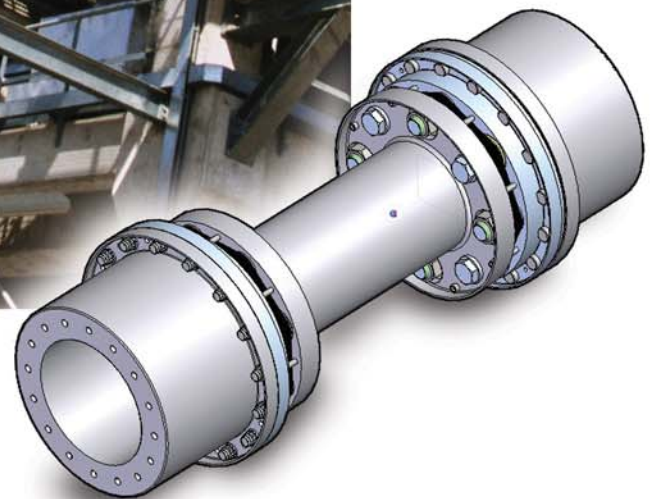




Turboflex HF Series Disc Couplings for High Performance Applications



 **Bibby**[®]
Transmissions

An Altra Industrial Motion Company

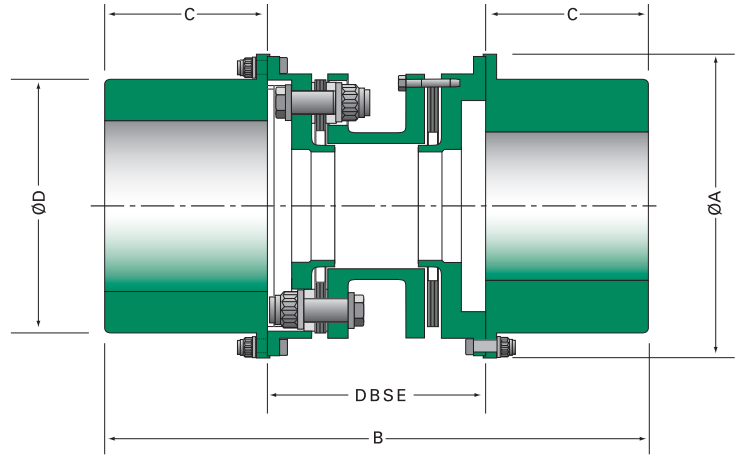


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Turboflex HF Series Disc Coupling Ranges

Specifically designed for high performance applications.

- Plug-in design allows rapid installation and ensures that shaft alignment is always maintained.
- Standard couplings fully compliant with the requirements of API 671 / ISO 10441.
- Incorporates anti-flail feature.
- Incorporates windage shrouds (where required).



HF Ratings

Coupling Size HF	kW/RPM	Rating kNm	MAX SPEED RPM	COUPLING DIMENSIONS					MAX BORE mm	Coupling Weight (kg)*
				A mm	B mm	C mm	D mm	Min DBSE mm**		
250	0.3	2.5	19500	155	307	85	118	137	79	16.2
450	0.5	4.5	15600	180	364	105	140	154	93	25.4
720	0.8	7.2	13800	209	426	120	162	186	108	39.8
1480	1.5	14.8	11400	247	520	145	194	230	129	67.6
2700	2.8	27.0	11100	282	575	150	228	275	152	102.6
4600	4.8	46.0	10100	312	580	150	256	280	171	121.4
5900	6.2	59.0	9100	335	638	164	282	310	188	155.0
7600	8.0	76.0	8500	369	694	182	304	330	203	202.4
12900	13.5	129.0	6800	447	825	230	366	365	244	345.2
16300	17.1	163.0	6000	458	885	245	378	395	252	396.8
19300	20.2	193.0	5900	494	958	262	408	434	272	499.0
25800	27.0	258.0	5600	540	1056	292	444	472	296	645.2

* Coupling weight based on 457.2mm (18") DBSE and maximum bores

** The inclusion of additional features such as shims and/or electrical insulation will increase the minimum DBSE (Distance Between Shaft Ends)

Selection Procedure

1. Select an appropriate service factor "SF®"
2. Calculate rating = Power (kW) x SF/Speed (rpm)
3. Select a coupling with sufficient rating
4. Check hub bore is capable of accommodating shafts
5. Check Speed is within the maximum for the coupling selected
6. Specify required dynamic balance
7. Specify the distance between shaft ends and check this is not less than the minimum for the selected coupling

® In accordance with API 671, a minimum service factor of 1.5 is recommended

- TURBOFLEX HF Couplings consist of 2 hubs and a factory assembled transmission unit. Installation involves fitting the hubs to the machinery shaft ends, introducing the transmission unit, then securing with the attachment bolts and nuts.
- MAXIMUM SPEEDS shown are for standard materials. When higher speeds are required, please consult Bibby Transmissions.
- API 671 defined PEAK TORQUE capacity is 1.33 X continuous rating and API 671 defined MOMENTARY TORQUE capacity (or SCT) is 1.9 X continuous rating.
- SPARK FREE overload protection is provided as a standard feature on all Turboflex HF couplings making them suitable for GAS ZONE environments.
- SPECIAL VERSIONS are available for:
 - Torque overload protection
 - Limited end float
 - Electrical insulation

Type HF - Materials

The following standard materials of construction are used in the Torsiflex range. Alternative materials are available for special applications and are available on request.

Hubs: Alloy Steel

Spacers: Alloy Steel

Adapters: Alloy Steel

Discs: Stainless Steel (301)

Bolts: Alloy Steel

Nuts: Alloy Steel

Overload Collars: High strength 'non-sparking' material



Approval Certificate
No. SIRA 03ATEX205

Misalignment Data

These will be supplied upon request with any order. Guidelines are available for assessment at preliminary stages. The methods of machinery alignment vary accordingly to personal preference. Simple recommended methods are highlighted in our Installation Instructions which are available upon request.

The following is a guide to acceptable misalignments at installation.

Note, however, that if machinery growths are known the values may be adjusted in the form of pre-deflection, etc. In addition, please note that the values shown here are **MAXIMUM** values.

Reduction in these values will reduce bearing loads and improve the allowance for misalignment due to machinery settlement, etc. thus ensuring greater machinery life and trouble free operation of the coupling.

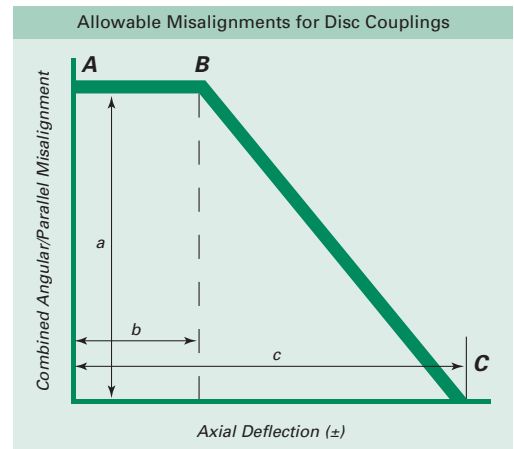
Installation Alignment

Recommended Installation Alignments shown as % of the Maximum Permitted values for the Couplings	
Allowable Angular / Radial Misalignment	Allowable Axial Misalignment
20% Maximum	10% Maximum

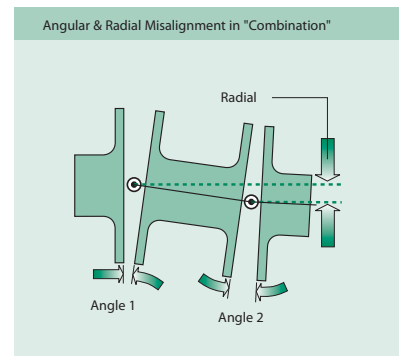
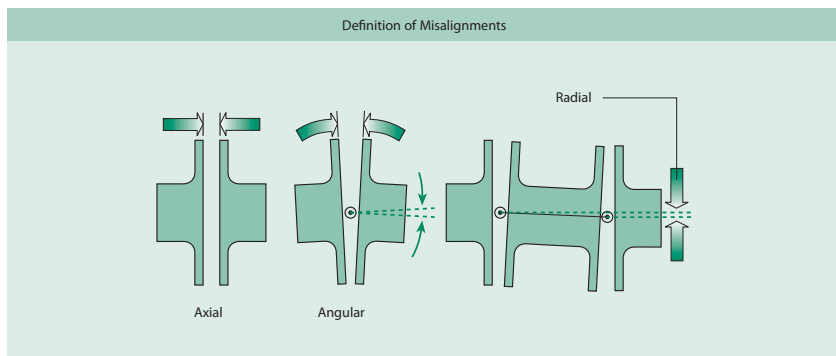
Note: Angular / Radial as percentage of stated value for 'Point A'. Axial as percentage of stated value for 'Point C'.

HF Misalignment

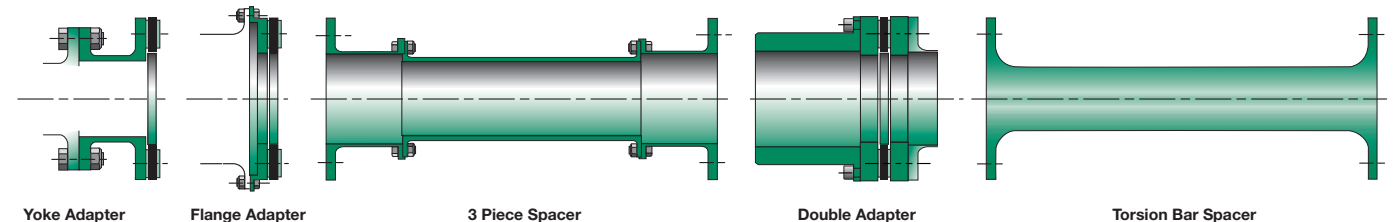
Coupling Size HF	Max. Angular Misalignment (Deg)	Bending Moment (Nm/deg)	Max. Axial Deflection (Zero Angular Misalignment) (mm)	Max. Axial Thrust (N)
	Point A (1) (2)	(4)	Point C (3)	
	Per Element		Per Assembly	
250	0.33	21	2.4	2300
450	0.33	32	3.0	3700
720	0.33	52	3.7	6100
1480	0.33	83	4.5	10300
2700	0.33	160	5.0	15000
4600	0.25	340	4.0	21500
5900	0.25	420	4.5	25000
7600	0.25	500	5.0	32300
12900	0.25	720	6.2	38300
16300	0.25	1090	6.6	48200
19300	0.25	1040	7.2	68400
25800	0.25	1390	7.8	70500



1. Combined angular/radial misalignment
2. 1 degree angle is equivalent to 0.017 mm/mm radial misalignment
3. At zero speed (Static)
4. At maximum speed & continuous rated torque



Alternative arrangements available



Electromagnetic Clutches and Brakes

Warner Electric

Electromagnetic Clutches and Brakes

New Hartford, CT - USA
1-800-825-6544

For application assistance:
1-800-825-9050

St Barthelemy d'Anjou, France
+33 (0) 2 41 21 24 24

Precision Electric Coils and Electromagnetic Clutches and Brakes

Columbia City, IN - USA
1-260-244-6183

Matrix International

Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes

Brechin, Scotland
+44 (0) 1356 602000

New Hartford, CT - USA
1-800-825-6544

Inertia Dynamics

Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes

New Hartford, CT - USA
1-800-800-6445

Overrunning Clutches

Formsprag Clutch

Overrunning Clutches and Holdbacks

Warren, MI - USA
1-800-348-0881 – Press #1

For application assistance:
1-800-348-0881 – Press #2

Marland Clutch

Roller Ramp and Sprag Type Overrunning Clutches and Backstops

Burr Ridge, IL - USA
1-800-216-3515

Stieber Clutch

Overrunning Clutches and Holdbacks

Heidelberg, Germany
+49 (0) 6221 30 47 0

Engineered Couplings

Ameridrives Couplings

Mill Spindles, Ameriflex, Ameridisc

Erie, PA - USA
1-814-480-5000

Gear Couplings

San Marcos, TX - USA
1-800-458-0887

Bibby Transmissions

Disc, Gear, Grid Couplings, Overload Clutches

Dewsbury, England
+44 (0) 1924 460801

Boksburg, South Africa
+27 11 918 4270

TB Wood's

Elastomeric Couplings

Chambersburg, PA - USA
1-888-829-6637 – Press #5

For application assistance:
1-888-829-6637 – Press #7

General Purpose Disc Couplings

San Marcos, TX - USA
1-888-449-9439

Ameridrives Power Transmission

Universal Joints, Drive Shafts, Mill Gear Couplings

Green Bay, WI - USA
1-920-593-2444

Huco Dynatork

Precision Couplings and Air Motors

Hertford, England
+44 (0) 1992 501900

Charlotte, NC - USA
1-800-825-6544

Linear Products

Warner Linear

Linear Actuators

Belvidere, IL - USA
1-800-825-6544

For application assistance:
1-800-825-9050

St Barthelemy d'Anjou, France
+33 (0) 2 41 21 24 24

Heavy Duty Clutches and Brakes

Wichita Clutch

Pneumatic Clutches and Brakes

Wichita Falls, TX - USA
1-800-964-3262

Bedford, England
+44 (0) 1234 350311

Twiflex Limited

Caliper Brakes and Thrusters

Twickenham, England
+44 (0) 20 8894 1161

Industrial Clutch

Pneumatic and Oil Immersed Clutches and Brakes

Waukesha, WI - USA
1-262-547-3357

Gearing

Boston Gear

Enclosed and Open Gearing, Electrical and Mechanical P.T. Components

Charlotte, NC - USA
1-800-825-6544

For application assistance:
1-800-816-5608

Nuttall Gear and Delroyd Worm Gear

Worm Gear and Helical Speed Reducers

Niagara Falls, NY - USA
1-716-298-4100

Belted Drives and Sheaves

TB Wood's

Belted Drives

Chambersburg, PA - USA
1-888-829-6637 – Press #5

For application assistance:
1-888-829-6637 – Press #7

Engineered Bearing Assemblies

Kilian Manufacturing

Engineered Bearing Assemblies

Syracuse, NY - USA
1-315-432-0700

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