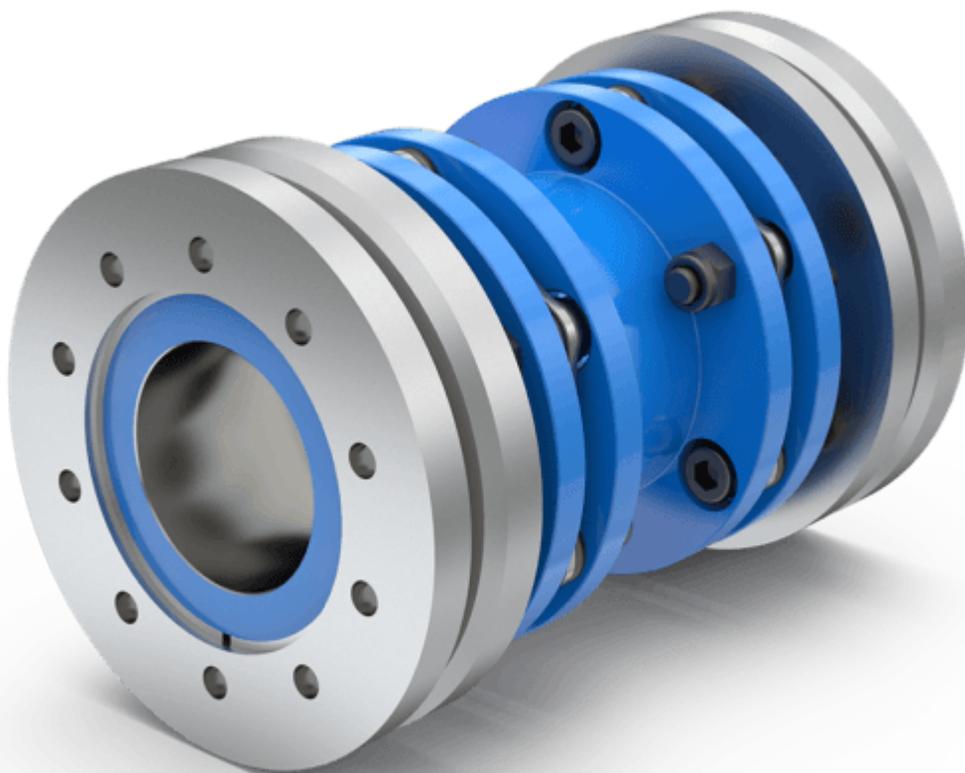


Reich

SIMPLY POWERFUL.

Reich USA Corporation

D2C
Designed to Customer

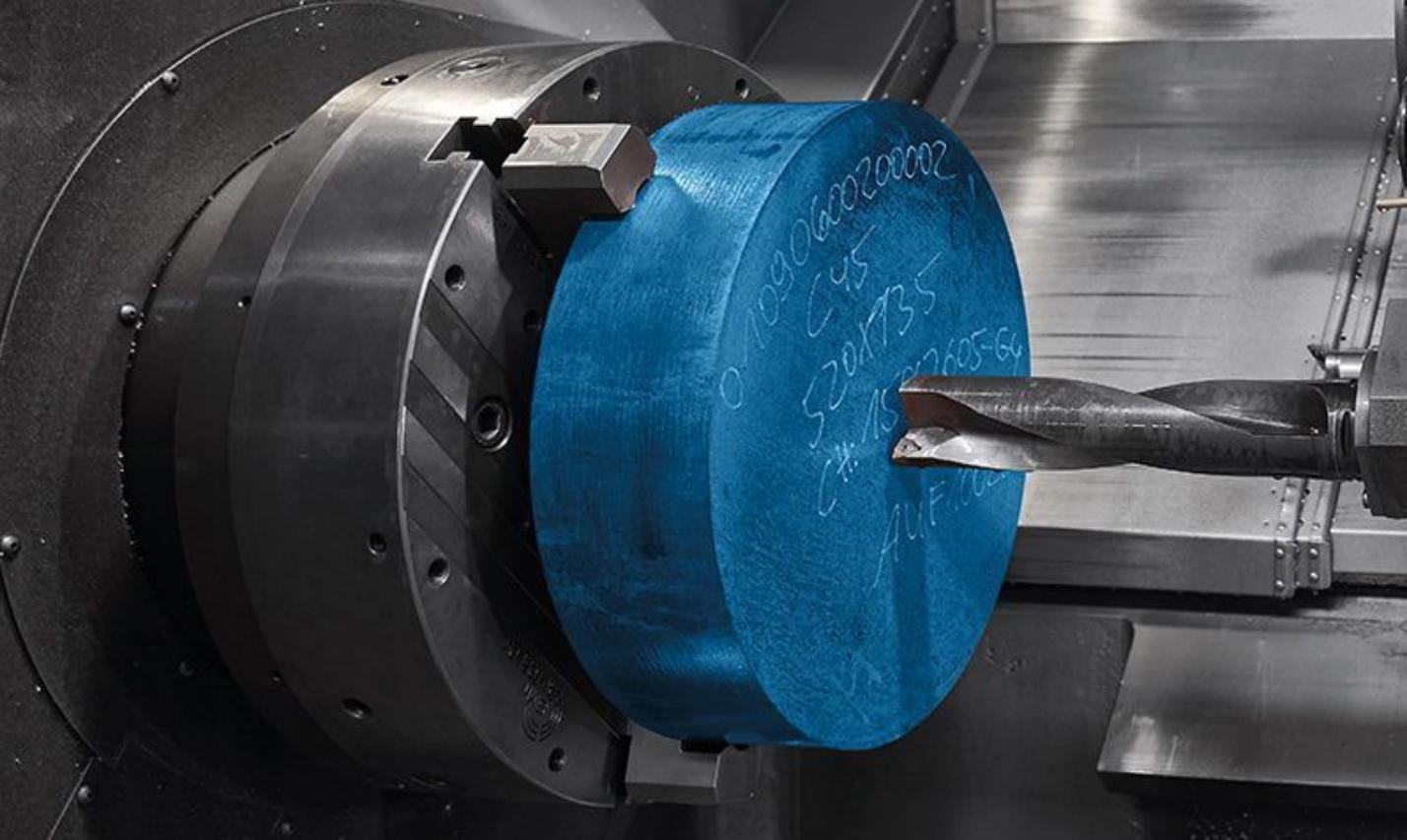


R-FLEX COUPLINGS

All steel disc couplings

www.reichusa.com





D2C – DESIGNED TO CUSTOMER

Customized products to meet your needs.

In addition to our catalogue of products, we design and develop specialized couplings to meet our customers' individual requirements. By using modular components, we offer a customized solution at the right price, delivered when you need it.

Engage with us at any stage of the product lifecycle. We are available for consultation, design, development, production, integration into existing applications, and after-sales service. We are experts in meeting customer requirements in all project sizes, from small batch prototyping to full scale production.

REICH not only supplies you with a coupling, but a solution. Talk to us, we will find a solution for your requirement.





R-FLEX COUPLINGS

TABLE OF CONTENTS

04	Introduction to R-Flex Couplings
05	R-Flex coupling sizing and selection
06	Six Bolt Coupling with dropout spacer
08	Eight Bolt Couplings: with spacers, reverse hub and spacer
14	General Assembly Instructions

Ask us about your API 610/671 or ATEX 2014//34/UE requirements. Our Six and Eight bolt couplings can be designed as Axial Limiters with Electrical insulation.

Because we are constantly improving our products, catalogue dimensions, features, and values may change without prior notice.

The **R-FLEX** coupling is an all metal, maintenance free coupling manufactured to the highest standards for applications requiring no backlash and high torsional stiffness.



Fig. 1 Single flex coupling without spacer

R-FLEX COUPLINGS

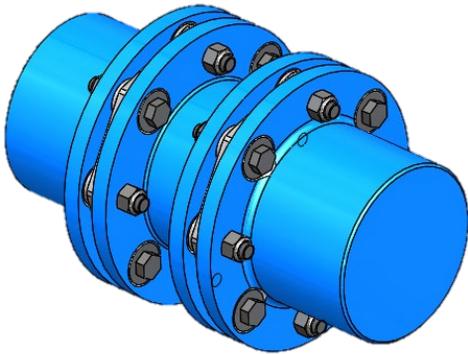


Fig. 2 Double flex coupling with spacer

R-FLEX COUPLINGS ADVANTAGES AND FEATURES

- ➔ Torsionally rigid and backlash-free torque transmission
- ➔ Low weight with high torque capacity
- ➔ High rotation speeds
- ➔ No maintenance or lubrication required
- ➔ Accommodate angular, axial and radial misalignments
- ➔ Operate at high and low temperatures
- ➔ Small reaction forces from shaft misalignment
- ➔ Possible to replace disc pack elements without displacement of coupled equipment
- ➔ Can be provided to meet API 610 and API 671 upon request
- ➔ Almost unlimited life and wear-free with proper shaft alignment

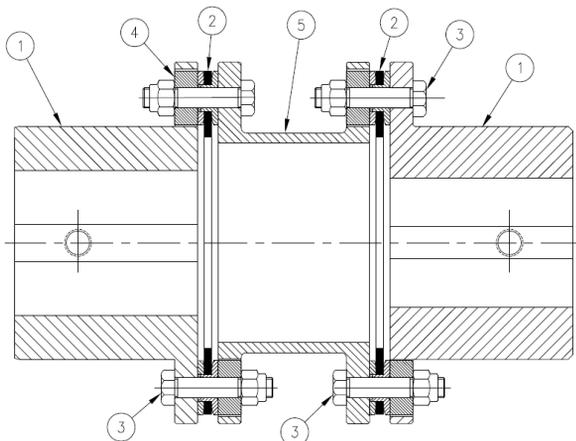


Fig. 3 Double flex with spacer coupling components

Components

(1)	Hub	Steel
(2)	Disc Pack	Stainless Steel
(3)	Bolts/Nuts	Alloy Steel
(4)	Washers	Steel
(5)	Center Spacer	Steel (Composite upon request)

COUPLING SELECTION

The selection of the coupling size depends mainly upon the required torque transmission and the shaft size(s) of the coupled components. However, other application conditions like shaft misalignments, application speeds or shaft expansion must be taken into consideration as well. For any special applications, please consult with Reich USA Engineers.

When selecting a coupling type and size, make sure that under all operating conditions the coupling nominal torque capacity and speed range are not exceeded.

1. Calculate the driving torque (T_{AN}) to be transmitted from:

$$T_{AN}(\text{lb-in}) = 63,000 \times \frac{P(\text{HP})}{\text{RPM}} \quad \text{or} \quad T_{AN}(\text{Nm}) = 9550 \times \frac{P(\text{kW})}{\text{RPM}}$$

2. Determine the required coupling torque capacity (T_{KN}) by taking the proper service factor (S_m) into consideration in order to compensate for the operating characteristics of the driving and driven equipment. See Table 1.

$$T_{KN} \geq T_{AN} \times S_m$$

NOTE: R-FLEX couplings can transmit a peak torque of up to 1.5 X TKN for a short period of time without considering an additional service factor.

3. Check if selected coupling is suitable for speed, shaft sizes, shaft misalignment and peak torque requirements.

Table 1 Service factor (S_m)

Load	Driven Equipment	Driving Equipment	
		Motor or Turbine	Reciprocating Engine
Uniform	Centrifugal Pumps; Conveyors-Even Loaded; Alternators; Fans and Blowers-light duty; Generators-even loaded; Mixers-liquid	1.0	3.0
Light Shock	Centrifugal Pumps; Generators-Pulsating Load; Grinders; Hydraulic Pumps; Machine Tools; Oscillating Pumps; Textile Machinery; Woodworking Machinery	1.5	3.0
Medium Shock	Air Compressors-Multi-Cylinder; Cranes; Elevators; Hoists; Punch Presses; Reciprocating Pumps; Ship Drives	2.0	4.0
Heavy Shock	Air Compressors-Single Cylinder; Dredges; Drilling Rigs; Mine Machinery; Rubber Mixers	3.0	5.0

NOTE: The service factors listed are intended only as a general guide. If the working conditions (i.e. RPM, Power, starting frequency, temperature) change, then it may be necessary to change the coupling selection.

EXAMPLE CALCULATION

An 115 HP (84.5 kw) electric motor is to drive a reciprocating compressor at 890 RPM. The motor shaft size is 3.5" (88.9 mm) and the compressor shaft is 3.0" (76.2 mm). Distance between shaft ends is approximately 5.25" (133.4 mm).

1. Driving torque $T_{AN} = 63,000 \times \frac{115}{890} = 8140 \text{ lb-in}$

$$\text{or } T_{AN} = 9550 \times \frac{84.5}{890} = 907 \text{ Nm}$$

2. Required coupling torque capacity based on a service factor $S_m = 3.0$ from Table 1:

$$T_{KN} \geq 8140 \times 3.0 = 24,420 \text{ lb-in}$$

$$\text{or } T_{KN} \geq 907 \times 3.0 = 2721 \text{ Nm}$$

Selected coupling size: HNS 160-6-AH

$$T_{KN} = 24780 \text{ lb-in} \geq 26,545 \text{ lb-in}$$

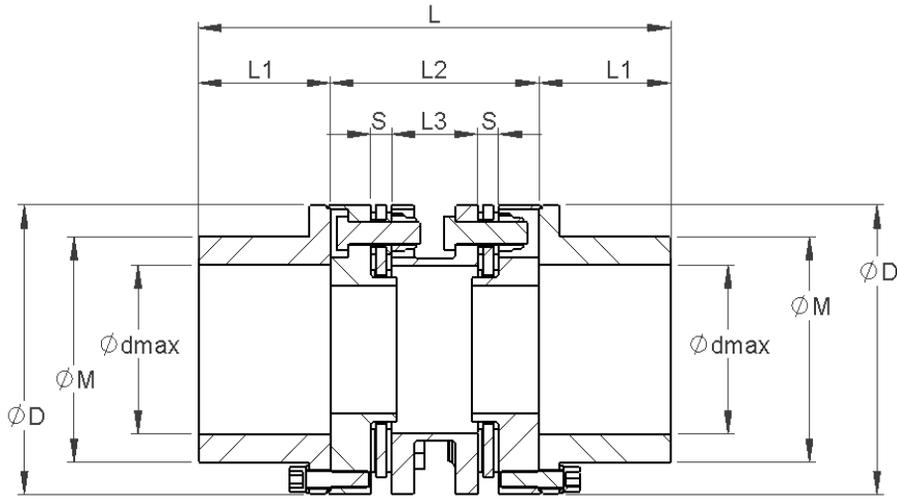
$$\text{or } T_{KN} = 2800 \text{ Nm} \geq 3000 \text{ Nm}$$

3. This coupling will accommodate the 3.5" motor shaft and the 3.0" compressor shaft. The HNS series provides the required DBSE of 5.25" (133.4 mm).

SAFETY NOTICE

R-FLEX couplings are designed and manufactured to high standards and tolerances for reliable and safe operation. Any modifications not authorized by Reich USA that can compromise the working conditions of the couplings are not recommended. The couplings must only be used within the specified design limits to ensure their safe operation and long service life.

HNS-AH-6 DISC COUPLING



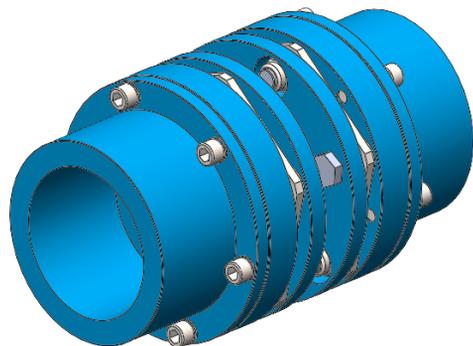
Technical Data

Size	Nominal Torque		Maximum Torque		Short Circuit Torque		Max Misalignment*				Max Speed RPM
	Nm	lb-in	Nm	lb-in	Nm	lb-in	Axial		Parallel		
							± mm	± in	mm	in	
85-6	320	2830	480	4250	960	8500	2.0	0.079	0.49	0.019	22500
105-6	750	6640	1125	9960	2250	19910	2.4	0.094	0.60	0.024	18000
125-6	950	8410	1425	12610	2850	25220	3.2	0.126	0.60	0.023	15000
140-6	1600	14160	2400	21240	4800	42480	3.4	0.134	0.67	0.027	13500
160-6	2800	24780	4200	37170	8400	74350	3.8	0.150	0.82	0.032	12000
185-6	5500	48680	8250	73020	16500	146060	4.2	0.165	0.96	0.038	10000
205-6	6700	59300	10050	88950	20100	177900	4.8	0.189	1.01	0.040	9000

*Maximum angular misalignment = 0° 30'

Coupling Selection

Please contact Reich USA for the proper coupling pre-selection. With our technical expertise, Reich USA's engineers will help make the best pre-selection possible to minimize calculation time and cost, while optimizing the package assembly and maintenance features.



NOTES:

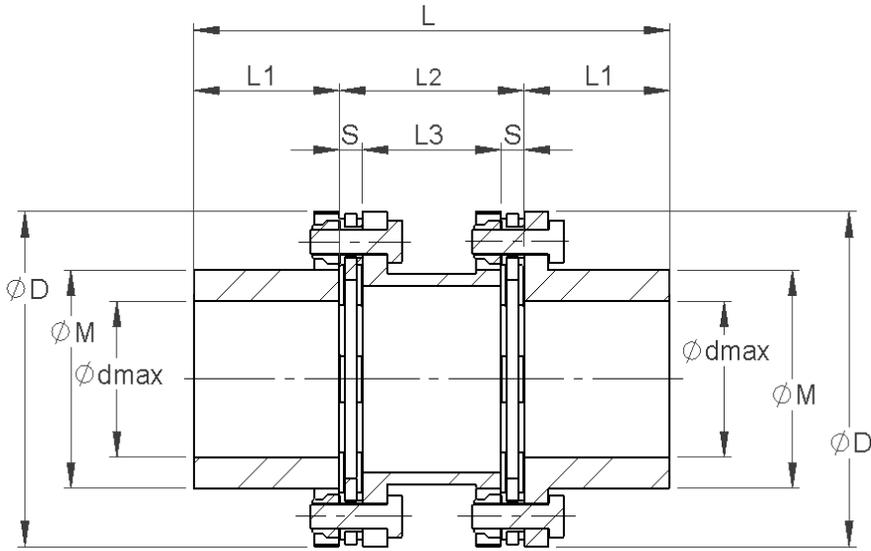
- 1) Weight, inertia, maximum speed are calculated with steel hubs, standard dimensions, with max bore "dmax", and hub maximum "M"
- 2) Torsional stiffness is given between hub flanges for standard dimensions (spacer, element blades, bolts, adaptors, etc.)

Other hub and length dimensions available upon request.

Dimensional Data

Size	D In [mm]	L In [mm]	d max In [mm]	L1 In [mm]	S In [mm]	L2 In [mm]	L3 In [mm]	M In [mm]	Wt Lb [kg]	Inertia Lb-in ² [kg-m ²]	Torsional stiffness Lb-in/rad *10 ⁶ [Nm/rad *10 ⁶]
85-6	3.35 [85]	5.91 [150]	1.65 [42]	1.57 [40]	0.33 [8.5]	2.76 [70]	1.14 [29]	2.32 [59]	6.0 [2.7]	8.658 [0.0025]	1.648 [0.1862]
105-6	4.13 [105]	6.89 [175]	2.17 [55]	1.77 [45]	0.35 [9.0]	3.35 [85]	1.46 [37]	3.11 [79]	11.3 [5.1]	25.77 [0.0075]	3.531 [0.3989]
125-6	4.92 [125]	7.68 [195]	2.76 [70]	2.17 [55]	0.37 [9.5]	3.35 [85]	1.42 [36]	3.86 [98]	17.2 [7.8]	57.40 [0.0168]	5.699 [0.6439]
140-6	5.51 [140]	8.82 [224]	2.95 [75]	2.44 [62]	0.41 [10.5]	3.94 [100]	1.61 [41]	4.13 [105]	26.5 [12.0]	109.0 [0.0319]	9.588 [1.0833]
160-6	6.30 [160]	10.24 [260]	3.54 [90]	2.76 [70]	0.51 [13.0]	4.72 [120]	1.97 [50]	4.72 [120]	38.2 [17.3]	210.9 [0.0617]	15.302 [1.7289]
185-6	7.28 [185]	12.80 [325]	4.13 [105]	3.54 [90]	0.55 [14.0]	5.71 [145]	2.32 [59]	5.51 [140]	62.6 [28.4]	447.3 [0.1309]	23.785 [2.6874]
205-6	8.07 [205]	13.39 [340]	4.72 [120]	3.74 [95]	0.59 [15.0]	5.91 [150]	2.44 [62]	6.30 [160]	82.6 [37.5]	770.2 [0.2254]	33.261 [3.7580]

HNS-8 DISC COUPLING



Technical Data

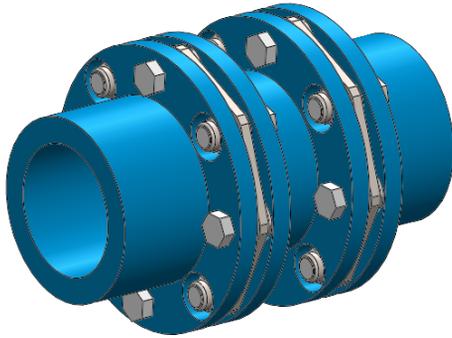
Size	Nominal Torque		Maximum Torque		Short Circuit Torque		Max Misalignment*				Max Speed RPM
	Nm	lb-in	Nm	lb-in	Nm	lb-in	Axial		Parallel		
							± mm	± in	mm	in	
215-8	9000	79657	13500	119485	27000	238970	3.4	0.134	0.74	0.029	8800
245-8	16500	146037	24750	219056	49500	438112	3.8	0.150	0.82	0.032	7800
275-8	23000	203567	34500	305351	69000	610702	4.4	0.173	0.92	0.036	7000
305-8	30000	265523	45000	398284	90000	796568	5.0	0.197	1.01	0.040	6200
345-8	43500	385008	65250	577511	130500	1155023	5.6	0.220	1.08	0.043	5500
375-8	59500	526620	89250	789929	178500	1579859	6.0	0.236	1.22	0.048	5000
410-8	78500	694784	117750	1042176	235500	2084352	6.4	0.252	1.31	0.052	4600
445-8	96500	854097	144750	1281146	289500	2562292	7.0	0.276	1.46	0.058	4300
475-8	123000	1088642	184500	1632963	369000	3265927	7.4	0.291	1.50	0.059	4000
520-8	152000	1345314	228000	2017971	456000	4035942	8.2	0.323	1.53	0.060	3600

*Maximum angular misalignment = 0° 30'

Coupling Selection

Please contact Reich USA for the proper coupling pre-selection. With our technical expertise, Reich USA's engineers will help make the best pre-selection possible to minimize calculation time and cost, while optimizing the package assembly and maintenance features.

8-BOLT COUPLING WITH SPACER



NOTES:

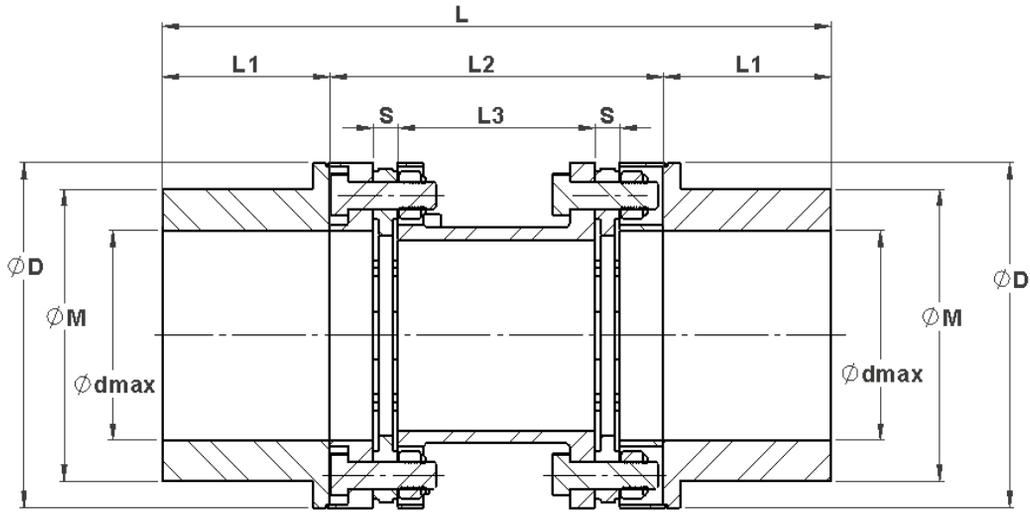
- 1) Weight, inertia, maximum speed are calculated with steel hubs, standard dimensions, with max bore "dmax", and hub maximum "M"
- 2) Torsional stiffness is given between hub flanges for standard dimensions (spacer, element blades, bolts, adaptors, etc.)

Other hub and length dimensions available upon request.

Dimensional Data

Size	D	L	d max	L1	L2	L3	S	M	Wt	Inertia	Torsional stiffness
	In [mm]	In [mm]	In [mm]	In [mm]	In [mm]	In [mm]	In [mm]	In [mm]	Lb [kg]	Lb-in ² [kg-m ²]	Lb-in/rad *10 ⁶ [Nm/rad *10 ⁶]
215-8	8.46 [215]	12.80 [325]	3.94 [100]	3.94 [100]	4.92 [125]	3.74 [95]	0.59 [15]	5.51 [140]	60 [27]	542.6 [0.1588]	52.88 [5.9749]
245-8	9.65 [245]	14.57 [370]	4.33 [110]	4.33 [110]	5.91 [150]	4.41 [112]	0.75 [19]	5.98 [152]	90 [41]	1062.3 [0.3109]	79.75 [9.011]
275-8	10.83 [275]	15.94 [405]	4.92 [125]	4.72 [120]	6.50 [165]	4.92 [125]	0.79 [20]	6.89 [175]	127 [57.5]	1895 [0.5546]	127.19 [14.37]
305-8	12.01 [305]	18.31 [465]	5.51 [140]	5.51 [140]	7.28 [185]	5.43 [138]	0.93 [23.5]	7.60 [193]	229 [104]	4196 [1.228]	157.09 [17.749]
345-8	13.58 [345]	19.88 [505]	6.10 [155]	5.91 [150]	8.07 [205]	6.10 [155]	0.98 [25]	8.43 [214]	273 [124]	6291 [1.8411]	235.3 [26.583]
375-8	14.76 [375]	22.24 [565]	6.69 [170]	6.69 [170]	8.86 [225]	6.73 [171]	1.06 [27]	9.25 [235]	331 [150]	9139 [2.6747]	312.9 [35.351]
410-8	16.14 [410]	23.62 [600]	7.28 [185]	7.09 [180]	9.45 [240]	7.09 [180]	1.18 [30]	10.04 [255]	410 [186]	13523 [3.9576]	397.4 [44.901]
445-8	17.52 [445]	25.98 [660]	7.68 [195]	7.48 [190]	11.02 [280]	8.19 [208]	1.42 [36]	10.63 [270]	534 [242]	20888 [6.1133]	474.6 [53.619]
475-8	18.70 [475]	27.95 [710]	8.27 [210]	8.27 [210]	11.42 [290]	8.58 [218]	1.42 [36]	11.42 [290]	650 [295]	28858 [8.4456]	583.2 [65.897]
520-8	20.47 [520]	29.92 [760]	9.06 [230]	9.06 [230]	11.81 [300]	8.98 [228]	1.42 [36]	12.60 [320]	829 [376]	43767 [12.809]	772.8 [87.309]

HNS-8-AH DISC COUPLING



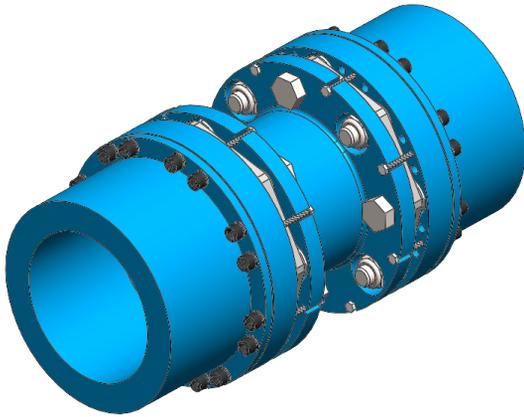
Technical Data

Size	Nominal Torque		Maximum Torque		Short Circuit Torque		Max Misalignment*				Max Speed RPM
	Nm	lb-in	Nm	lb-in	Nm	lb-in	Axial		Parallel		
							± mm	± in	mm	in	
215-8	9000	79657	13500	119485	27000	238970	3.4	0.134	0.74	0.029	8800
245-8	16500	146037	24750	219056	49500	438112	3.8	0.150	0.82	0.032	7800
275-8	23000	203567	34500	305351	69000	610702	4.4	0.173	0.92	0.036	7000
305-8	30000	265523	45000	398284	90000	796568	5.0	0.197	1.01	0.040	6200
345-8	43500	385008	65250	577511	130500	1155023	5.6	0.220	1.08	0.043	5500
375-8	59500	526620	89250	789929	178500	1579859	6.0	0.236	1.22	0.048	5000
410-8	78500	694784	117750	1042176	235500	2084352	6.4	0.252	1.31	0.052	4600
445-8	96500	854097	144750	1281146	289500	2562292	7.0	0.276	1.46	0.058	4300
475-8	123000	1088642	184500	1632963	369000	3265927	7.4	0.291	1.50	0.059	4000
520-8	152000	1345314	228000	2017971	456000	4035942	8.2	0.323	1.53	0.060	3600

*Maximum angular misalignment = 0° 30'

Coupling Selection

Please contact Reich USA for the proper coupling pre-selection. With our technical expertise, Reich USA's engineers will help make the best pre-selection possible to minimize calculation time and cost, while optimizing the package assembly and maintenance features.



NOTES:

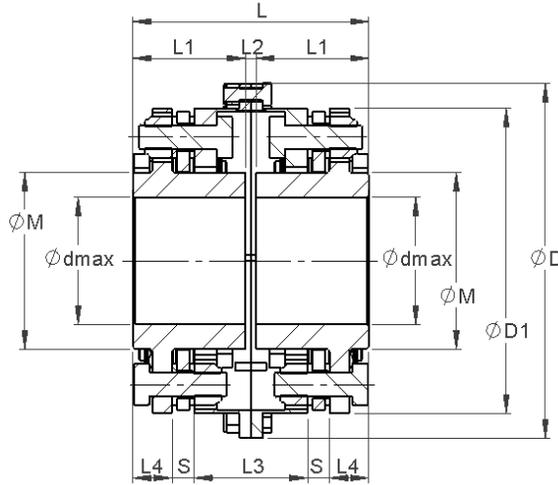
- 1) Weight, inertia, maximum speed are calculated with steel hubs, standard dimensions, with max bore "dmax", and hub maximum "M"
- 2) Torsional stiffness is given between hub flanges for standard dimensions (spacer, element blades, bolts, adaptors, etc.)

Other hub and length dimensions available upon request.

Dimensional Data

Size	D	L	d max	L1	L2	L3	S	M	Wt	Inertia	Torsional stiffness
	In [mm]	In [mm]	In [mm]	In [mm]	In [mm]	In [mm]	In [mm]	In [mm]	Lb [kg]	Lb-in ² [kg-m ²]	Lb-in/rad *10 ⁶ [Nm/rad *10 ⁶]
215-8	8.46 [215]	14.57 [370]	4.92 [125]	4.13 [105]	6.30 [160]	2.83 [72]	0.59 [15]	6.77 [172]	94 [42.6]	1027.1 [0.3006]	57.05 [6.4453]
245-8	9.65 [245]	16.14 [410]	5.71 [145]	4.53 [115]	7.09 [180]	3.07 [78]	0.75 [19]	7.83 [199]	143 [65]	2003.3 [0.5863]	101.32 [11.448]
275-8	10.83 [275]	18.50 [470]	6.50 [165]	5.31 [135]	7.87 [200]	3.46 [88]	0.79 [20]	9.02 [229]	200 [90.5]	3616 [1.0584]	143.24 [16.184]
305-8	12.01 [305]	20.47 [520]	7.28 [185]	5.91 [150]	8.66 [220]	3.74 [95]	0.93 [23.5]	10.16 [258]	273 [124]	6128 [1.7935]	182.79 [20.653]
345-8	13.58 [345]	22.83 [580]	8.27 [210]	6.69 [170]	9.45 [240]	4.02 [102]	0.98 [25]	11.50 [292]	317 [144]	9198 [2.692]	275.0 [31.07]
375-8	14.76 [375]	25.20 [640]	9.06 [230]	7.28 [185]	10.63 [270]	4.57 [116]	1.06 [27]	12.60 [320]	522 [237]	17531 [5.131]	359.6 [40.627]
410-8	16.14 [410]	27.17 [690]	9.84 [250]	7.87 [200]	11.42 [290]	4.88 [124]	1.18 [30]	13.70 [348]	675 [306]	26928 [7.881]	456.6 [51.593]
445-8	17.52 [445]	29.92 [760]	10.43 [265]	8.46 [215]	12.99 [330]	5.35 [136]	1.42 [36]	14.41 [366]	873 [396]	40893 [11.968]	573.1 [64.756]
475-8	18.70 [475]	31.50 [800]	11.22 [285]	9.06 [230]	13.39 [340]	5.51 [140]	1.42 [36]	15.39 [391]	1155 [524]	60489 [17.703]	724.1 [81.811]
520-8	20.47 [520]	33.46 [850]	12.40 [315]	9.84 [250]	13.78 [350]	5.67 [144]	1.42 [36]	17.17 [436]	1303 [591]	83317 [24.384]	932.2 [105.33]

HNS-8-RH DISC COUPLING



Technical Data

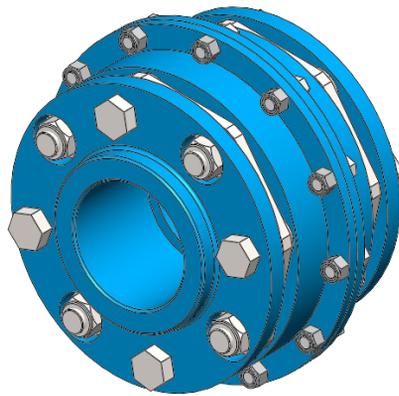
Size	Nominal Torque		Maximum Torque		Short Circuit Torque		Max Misalignment*				Max Speed RPM
	Nm	lb-in	Nm	lb-in	Nm	lb-in	Axial		Parallel		
							± mm	± in	mm	in	
120-8	1200	1200	1800	15931	3600	31863	2.0	0.079	0.42	0.017	13000
150-8	2300	2300	3450	30535	6900	61070	2.4	0.094	0.46	0.018	10000
185-8	4300	4300	6450	57087	12900	114175	3.2	0.126	0.60	0.023	8800
215-8	9000	9000	13500	119485	27000	238970	3.4	0.134	0.71	0.028	7800
245-8	16500	16500	24750	219056	49500	438112	3.8	0.150	0.87	0.034	6500
275-8	23000	23000	34500	305351	69000	610702	4.4	0.173	1.05	0.041	5900
305-8	30000	30000	45000	398284	90000	796568	5.0	0.197	1.19	0.047	5300
345-8	43500	43500	65250	577511	130500	1155023	5.6	0.220	1.37	0.054	4800
375-8	59500	59500	89250	789929	178500	1579859	6.0	0.236	1.25	0.049	4300
410-8	78500	78500	117750	1042176	235500	2084352	6.4	0.252	1.43	0.056	4000
445-8	96500	96500	144750	1281146	289500	2562292	7.0	0.276	1.67	0.066	3600
475-8	123000	123000	184500	1632963	369000	3265927	7.4	0.291	1.90	0.075	3400
520-8	152000	152000	228000	2017971	456000	4035942	8.2	0.323	2.38	0.094	3100

*Maximum angular misalignment = 0° 30'

Coupling Selection

Please contact Reich USA for the proper coupling pre-selection. With our technical expertise, Reich USA's engineers will help make the best pre-selection possible to minimize calculation time and cost, while optimizing the package assembly and maintenance features.

8-BOLT COUPLING WITH REVERSED HUBS



NOTES:

- 1) Weight, inertia, maximum speed are calculated with steel hubs, standard dimensions, with max bore "dmax", and hub maximum "M"
- 2) Torsional stiffness is given between hub flanges for standard dimensions (spacer, element blades, bolts, adaptors, etc.)

Other hub and length dimensions available upon request.

Dimensional Data

Size	D In [mm]	L In [mm]	d max In [mm]	L1 In [mm]	S In [mm]	L2 In [mm]	L3 In [mm]	M In [mm]	Wt Lb [kg]	Inertia Lb-in ² [kg-m ²]	Torsional stiffness Lb-in/rad *10 ⁶ [Nm/rad *10 ⁶]
120-8	5.709 [145]	3.504 [89]	1.969 [50]	1.693 [43]	0.374 [9.5]	0.118 [3.0]	1.575 [40]	2.717 [69]	9 [4.3]	34.85 [0.0102]	11.509 [1.3003]
150-8	7.283 [185]	4.055 [103]	2.559 [65]	1.969 [50]	0.413 [10.5]	0.118 [3.0]	1.732 [44]	3.543 [90]	19 [8.4]	109.0 [0.0319]	23.842 [2.6938]
185-8	8.465 [215]	5.000 [127]	3.150 [80]	2.441 [62]	0.512 [13]	0.118 [3.0]	2.244 [57]	4.409 [112]	32 [14.5]	258.7 [0.0757]	41.331 [4.6698]
215-8	9.685 [246]	6.181 [157]	3.543 [90]	2.992 [76]	0.591 [15]	0.197 [5.0]	2.717 [69]	4.961 [126]	54 [24.6]	578.8 [0.1694]	81.258 [9.1809]
245-8	11.417 [290]	7.283 [185]	3.937 [100]	3.543 [90]	0.748 [19]	0.197 [5.0]	3.268 [83]	5.512 [140]	88 [39.7]	1239 [0.3626]	147.10 [16.620]
275-8	12.598 [320]	8.504 [216]	4.528 [115]	4.134 [105]	0.787 [20]	0.236 [6.0]	4.094 [104]	6.339 [161]	122 [55.5]	2139 [0.6261]	185.26 [20.931]
305-8	13.976 [355]	9.685 [246]	5.118 [130]	4.724 [120]	0.925 [23.5]	0.236 [6.0]	4.606 [117]	7.047 [179]	167 [75.7]	3617 [1.0586]	248.23 [28.046]
345-8	15.551 [395]	10.945 [278]	5.709 [145]	5.315 [135]	0.984 [25]	0.315 [8.0]	5.354 [136]	7.992 [203]	236 [107]	6290 [1.8409]	328.15 [37.076]
375-8	17.323 [440]	10.945 [278]	6.299 [160]	5.315 [135]	1.063 [27]	0.315 [8.0]	4.724 [120]	8.701 [221]	309 [140]	10245 [2.9984]	497.84 [56.248]
410-8	18.701 [475]	12.126 [308]	6.693 [170]	5.906 [150]	1.181 [30]	0.315 [8.0]	5.433 [138]	9.370 [238]	392 [178]	15157 [4.4359]	629.04 [71.072]
445-8	20.669 [525]	14.094 [358]	7.283 [185]	6.890 [175]	1.417 [36]	0.315 [8.0]	6.299 [160]	10.079 [256]	498 [226]	22598 [6.6135]	819.08 [92.544]
475-8	21.850 [555]	15.276 [388]	7.874 [200]	7.480 [190]	1.417 [36]	0.315 [8.0]	7.402 [188]	10.827 [275]	648 [294]	33800 [9.8922]	1018.4 [115.06]
520-8	23.622 [600]	17.717 [450]	8.661 [220]	8.661 [220]	1.417 [36]	0.394 [10]	9.606 [244]	11.969 [304]	829 [376]	50652 [14.824]	1021.3 [115.39]

R-Flex Disc Couplings

THESE INSTRUCTIONS ARE FOR THE STANDARD SERIES COUPLINGS WITH NORMAL RUNNING CONDITIONS. SPECIAL COUPLING DESIGNS MAY HAVE DIFFERENT INSTRUCTIONS.

1. Attachment To The Shaft – BORE and KEYWAY

- Inspect the shaft, hub bores, and keyways to make sure that they are clean and free of burrs. Lightly oiling the shaft will make it easier to assemble the hub on the shaft.
- Place the hub on the shaft. Be sure to slide the hub far enough onto the shaft so the shaft end is even with the hub face. This should not be changed without consulting Reich USA Corporation.
- Standard hubs are supplied with a slight clearance fit. For hubs with interference fits, consult with Reich USA for proper assembly instructions. The use of torches or rosebuds is not recommended because this can cause high stresses and permanent distortions.
- Fit the key into the hub. If supplied with a set screw, turn the set screw until the top of the key is contacted in the hub.
- Follow the instructions for axial alignment and secure the second hub if needed following these installation steps.

2. Coupling Alignment

The life of the coupling is directly affected by the alignment accuracy between the two coupling halves. Careful initial alignment will permit the coupling to operate at full capacity and allow for some future operational misalignments (e.g. equipment settling). Keeping all three directions of misalignment (axial, angular and parallel (radial)) within the limits stated in installation instructions provided with each coupling will increase the coupling and equipment life.

The values in the Technical Data tables are for general use and can vary in specific cases. After having properly aligned the coupling, make sure that all the bolts and nuts are tightened to their proper torque. It is a good idea to check the torque after some hours of operation as well.

Axial Alignment

The allowable tolerance for axial misalignment will vary with the number of disc pack bolts. In general, fewer disc pack bolts will mean higher allowable misalignment capabilities. In order to ensure proper coupling operation and coupling life, it is recommended to not exceed the values stated on the installation instructions shipped with the coupling.

To perform the axial alignment:

- Bring the equipment into the best visual alignment possible.
- Position the hubs axially so that the distance between shaft ends is within the minimum and maximum dimensions $L2 \pm Da$ or $S \pm Da/2$. See Figures 3 and 4, respectively, for reference.

For non-standard couplings, see instructions on the corresponding coupling drawing.

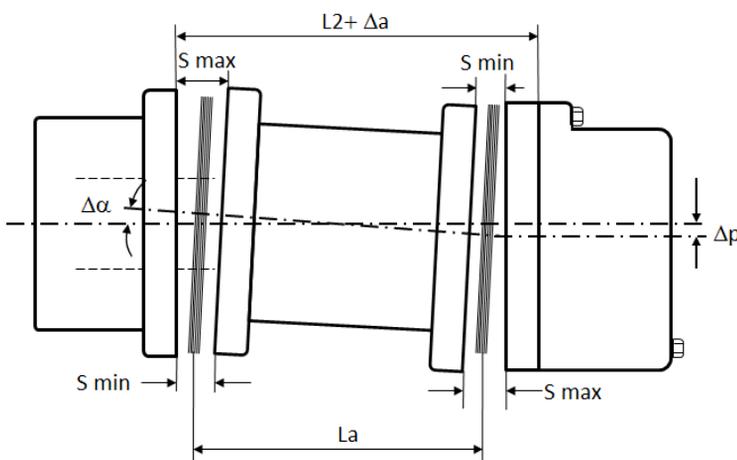


Figure 3 Double flex coupling alignment dimensions

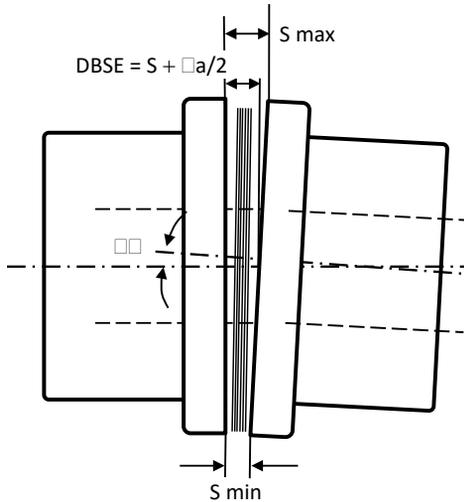


Figure 4 Single flex coupling alignment dimensions

Parallel (Radial) Alignment

Please note: Couplings with one disc pack have no parallel misalignment capability, so $\Delta p = 0$ for single disc pack couplings.

1. Initial parallel misalignment can be checked by using a straight-edge across the hub flanges (see Figure 5) to measure the approximate distance Δp . A more precise method is to use a dial indicator or laser system and measure the parallel off-set in at least two locations 90 degrees apart while rotating the hub (see Figure 6).
2. Adjust or shim the equipment to bring the indicator or laser reading within the maximum allowable parallel misalignment Δp per the values shown in the Technical Data tables for each coupling series.

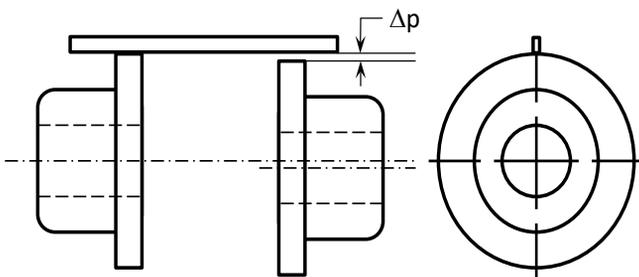


Figure 5 Parallel misalignment measurement

CAUTION

All rotating power transmission products are potentially dangerous and must be properly guarded for the speeds and applications for which they were intended.

Angular Alignment

1. With a dial indicator or laser system (see Figure 6) measure the angular misalignment by determining the parallelism of the coupling flange faces.
2. Dimension $\Delta \alpha$, as shown in Figures 3 and 4, should be measured in at least three points, equally spaced, to determine the maximum value for $\Delta \alpha$. This must not exceed the maximum allowable dimension stated in the Technical Detail tables for each coupling series.
3. Adjust or shim the equipment to bring either the indicator reading or the measured and calculated flange gap within the maximum allowable angular misalignment.

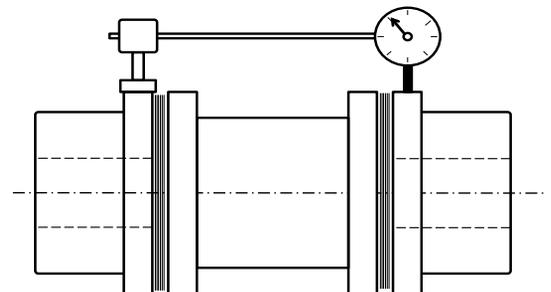


Figure 6 Coupling with dial indicator



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