TRANSDRIVE® DRIVE PERFORMANCE



Couplings

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TRANSDRIVE® DRIVE PERFORMANCE

TransDrive was established to bring together our passion and experience in power transmission by being able to offer affordable, high-quality products to the power transmission and bearing market. Built on the philosophy of improving performance and quality of all of our TransDrive products.

Transdrive products have been manufactured and tested to meet ISO standards and the tough, working conditions of heavy industries.

Our team have experience in power transmission and bearings. Every product we design and manufacture is backed by years of industry knowledge and an understanding of what our customers and the market need.

At TransDrive, our goal is simple: to provide accessible, high-quality products at affordable pricing. With an unwavering commitment to excellence, TransDrive operates with a focus on providing innovative industry solutions.

Whether it is through our custom products, the standard range of pulleys, slew drives, chains and sprockets, TransDrive is dedicated to delivering effective solutions for the trades that offer increased productivity and reliability.

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HRC Couplings

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About Couplings



Couplings are to be used to mechanically connect two shafts to transmit power from one shaft to another. They are also able to compensate for shaft misalignment in a torsionally rigid way.

Misalignment can be angular, parallel or skew. This is particularly important for applications where misalignment could affect the speed and acceleration of the driven shaft. The performance of the coupling depends on how it is installed and maintained.

There is a variation of couplings on the market today. Selecting the correct coupling for a particular application can be a complicated matter.

A coupling can be simply defined as "a device that transmits power (torque) from one shaft to another, while allowing some degree of misalignment (angular, parallel or combined) between the two rotating shafts".

In addition to the above definition, some couplings allow for axial (end-float) movement. Also, couplings may be classified as flexible or rigid.

Depending on the type of the coupling may be required to tolerate a variety of conditions during its service life.

Some of these functions could be to:

- Transmit power (torque).
- Permit and accommodate limited amounts of misalignment (angular and/or parallel).
- Allow for ease of assembly, maintenance and dis-assembly.
- Allow for some amount of dampening (if required).
- Allow or compensate for end-float/axial movement/thermal expansion.
- Retain rigidity between the connecting hubs and the shafts.
- Withstand/compensate for temperature fluctuations/thermal growth.
- Provide protection against overload of the driven machine.

TransDrive Couplings



Chain couplings



HRC Couplings

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Cone Ring Couplings

Jaw Couplings



RM Rigid Couplings



GE Curved Jaw Couplings



Tyre Couplings



Where the main motion is an electric motor and demand power or demand torque unknown, select the coupling using Table 2. This selection will give a minimum service factor of 1.6.

Where the driven machine demand power (or torque) and operating duty are known, select the coupling using the following procedure.

a. Service Factor	Determine appropriate service factor from Table 1.						
b. Design Power	Multiply running of driven machine by the service factor. This gives the Design Power which is used as a basis for coupling selection.						
c. Coupling Size	Refer to Table 3 and read across from the appropriate speed until an power equal to or greater than the Design Power is found. The size of the coupling required is given at the head of that column.						
d. Bore Size	From dimension Table 4 check that the required bores can be accommodated.						
Example: A shaft coupling is required to transmit 70kW between a 1200 rev/min DC electric motor and a Banbury Mixer running 8hrs/day. Motor shaft is 70mm and the mixer shaft is 75mm.							

- a. Service Factor From table 1 the service factor is 2,5.
- b. Design Power Design Power is 70 x 2,5 175kW.
- c. Coupling size Reading across from 1200 rev/min in the speed column of Table 3; 251kW is the first power to exceed the required 175kW (Design Power). The size of the coupling at the head of this column is 230.
- d. Bore Size Table 4 shows that both shaft diameters are within the bore range available.

Table 1: Service Factors	Type of Driving Unit							
Special Classes1		Electric Motors Steam Turbines		Internal Combustion Engines Steam Engines Water Turbines				
	Hc	ours Per Day Duty	,	Hours Per Day Duty				
Driven Machine Class2	8 and under	Over 8 to 16 inclusive	Over 16	8 and under	Over 8 to 16 inclusive	Over 16		
Uniform	1.00	1.12	1.25	1.25	1.40	1.60		
Moderate Shock3 *	1.60	1.80	2.00	2.00	2.24	2.50		
Heavy Shock4 **	2.50	2.80	3.12	3.12	3.55	4.00		

* It is recommended that top clearance keys are fitted for applications where load fluctuation is expected.

- ** For Centrifugal Compressor multiply Service Factor by an additional 1.15.
- For applications where substantial shock, vibration and torque fluctuation occur, and for reciprocating machines, e.g. internal combustion engines, piston type pumps and compressors, refer to GB Power Transmission with full machine details for torsional analysis.
- 2 Agitators, Brewing Machinery, Centrifugal Compressors**, Conveyors, Centrifugal Fans and pumps, Generators, Sewage Disposal Equipment.
- 3 Clay working machinery, Crane Hoists, Laundry machinery, Wood working machinery, Machine Tools, Rotary Mills, Paper Mill machinery, Textile machinery.

	Table 2: Selection from Power to I.E.C. Motor Frames												
Мо	otor		3000 rev/mir	1	1	500 rev/mir	1		1000 rev/mir		750 rev/min		
		Motor	Siz	ze	Motor	Si	ze	Motor	Si	ze	Motor	Siz	ze
Frame Size	Shaft Dia.	Power (kW)	Flange	Туре	Power	Flang	е Туре	Power (kW)	Flange Type		Power (kW)	Flange Type	
		(KVV)	H or F	В	(kW)	H or F	В	(KVV)	H or F	В	(KVV)	H or F	В
63	11	0.18	70	70	0.12	70	70	—	—	—	—	—	—
63	11	0.25	70	70	0.18	70	70		—	—	—	—	—
71	14	0.37	70	70	1.25	70	70	—	—	—	—	—	—
71	14	0.55	70	70	0.37	70	70	_		—	—	—	—
80	19	0.75	70	70	1.55	70	70	0.37	70	70	—	—	—
80	19	1.1	70	70	0.75	70	70	0.55	70	70	—	—	—
90S	24	1.5	70	70	1.1	70	70	0.75	70	70	—	—	—
90L	24	2.2	70	70	1.5	70	70	1.1	70	70	—	—	—
100L	28	3	90	70	2.2	90	70	1.5	90	70	0.75	90	70
100L	28	3	90	70	3	90	70	1.5	90	70	1.1	90	70
112M	28	4	90	70	4	90	90	2.2	90	90	1.5	90	70
132S	38	5.5	130	90	5.5	130	90	3	130	90	2.2	130	90
132S	38	7.5	130	90	5.5	130	90	3	130	90	2.2	130	90
132M	38	_	—	_	7.5	130	90	4	130	90	3	130	90
132M	38	_	—	_	7.5	130	90	5.5	130	110	3	130	90
160M	42	11	130	90	11	130	90	7.5	130	110	4	130	110
160M	42	15	130	90	11	130	90	7.5	130	110	5.5	130	110
160L	42	18.5	130	110	15	130	110	11	130	130	7.5	130	110

*3000 rev/min only.

1. Opposite motor frame size under the applicable speed find motor power.

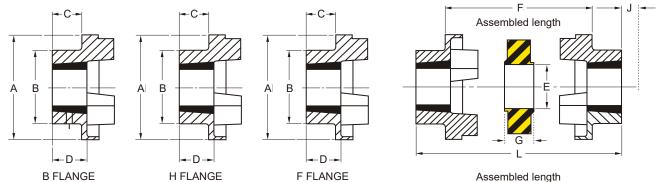
2. Selection of Taper Bush (H or F) or Bored to size (B) is shown in column headed.

	Table 2: Selection from Power to I.E.C. Motor Frames													
Motor 3000 rev/min				ı	1	500 rev/mir	1		1000 rev/mir	1	750 rev/min			
	Shaft Dia.	Motor	Si	ze	Motor	Si	ze	Motor	Si	ze	Motor	Si	ze	
Frame Size		Power	Flange	е Туре	Power	Flang	е Туре	Power	Flange	е Туре	Power	Flange	е Туре	
		(kW)	H or F	В	(kW)	H or F	В	(kW)	H or F	В	(kW)	H or F	В	
180M	48	22	150	110	18.5	150	130	—	—	—	—	—	_	
180L	48	_	—	—	22	150	130	15	150	130	11	150	130	
200L	55*	30	180	110	30	180	130	18.5	180	130	15	180	150	
200L	55*	37	180	130	30	180	130	22	180	130	15	180	150	
225S	60	_	—	_	37	180	150	_	_	_	18.5	180	150	
225M	50*	45	180	130	45	180	150	30	180	150	22	180	150	
225M	70	45	180	130	45	180	150	30	180	150	22	180	150	
250M	60*	55	180	130	55	230	150	37	230	150	30	230	180	
250M	70	55	180	130	55	230	150	37	230	150	30	230	180	
280S	65*	75	—	150	75	280	180	45	280	180	37	280	180	
280S	80	75	—	150	75	280	180	45	280	180	37	280	180	
280M	65*	90	—	180	90	280	180	55	280	180	45	280	180	
280M	80	90	—	180	90	280	180	55	280	180	45	280	180	
315S	65*	110	—	180	110	280	230	75	280	230	55	280	230	
315S	85	110	—	180	110	280	230	75	280	230	55	280	230	
315	65*	132	—	180	132	280	230	90	280	230	75	280	230	
315	85	132	_	180	132	280	230	90	280	230	75	280	230	

Power Ratings & Dimensions



	Table 3: Power Ratings (kW)										
Our and many/unite	Coupling Size										
Speed rev/min	70	90	110	130	150	180	230	280			
100	0.33	0.84	1.68	3.30	6.28	9.95	20.9	33.0			
200	0.66	1.68	3.35	6.6	12.6	19.9	11.9	65.0			
400	1.32	3.35	6.70	13.2	25.1	39.8	83.8	132			
600	1.98	5.03	10.1	19.8	37.7	59.7	126	198			
720	2.37	6.03	12.1	23.8	45.2	71.6	151	238			
800	2.64	6.70	13.4	26.4	50.3	79.6	168	264			
960	3.17	8.04	16.1	31.7	60.3	95.5	201	317			
1200	3.96	10.1	20.1	39.6	75.4	119	251	396			
1440	4.75	12.1	24.1	47.5	90.5	143	302	475			
1600	5.28	13.4	26.8	52.8	101	159	335	528			
1800	5.94	15.1	30.2	59.4	113	179	377	594			
2000	6.60	16.8	33.5	66.0	126	199	419	660			
2200	7.26	18.4	36.9	72.6	138	219	461	726			
2400	7.92	20.1	40.2	79.2	151	239	503	_			
2600	8.58	21.8	43.6	85.8	163	259	545	_			
2880	9.50	24.1	48.3	95	181	286	_	_			
3000	9.90	25.1	50.3	99	188	298	—	_			
3600	11.9	30.1	60.3	118	226			_			



Assembled length

Power Ratings & Dimensions



	Table 4: Dimensions																		
							Bored to												
0:	Duch	Bore				Bore+				Dia.	Dia.	Dia.	F				L3	Jt	
Size		Max	Min	C	C D	Мах	Min	Min C		D	Α	В	С		G	L1	L2	L3	JT
70	1008	25	9	19.0	23.5	32	8	21	25	69	60	31	27	18	65	66.5	68	29	
90	1108	28	9	18.5	23.5	38	8	26	30	85	65	32	32.5	22.5	69.5	75	82.5	29	
110	1610	42	11	18.5	26.5	55	8	37	45	112	100	45	45	29	82	100.5	119	38	
130	1610	42	14	17.5	26.5	60	36	47	55	130	105	50	54	36	89	117.5	145	38	
150	2012	50	14	23.0	33.5	65	40	50	60	150	115	62	61	40	107	133.5	160	42	
180	2517	60	16	34.0	46.5	80	46	58	70	180	125	77	74	49	142	165.5	189	48	
230	3020	75	25	39.5	52.5	100	52	77	90	225	155	99	85.5	59.4	142	202	239.5	55	
280	3535	90	35	74.0	90.5	115	62	90	105	275	185	119	107.5	74.5	142	270	284.5	67	

L 1

is the length with assembly combinations F.F - H.H F.H. L 2 is the length with assembly combinations F.B - H.B

L 3 is the length with assembly combinations B.B

J t is the wrench clearance required for tightening and loosening the bush on the shaft. The use of a shortened key will allow this dimension to be reduced.

+ Bore limit H8 unless specified otherwise.





	Table 5: Physical Characteristics									
Size	Power Rating Per	Maximum Speed* (rev/	Torque R	ating (Nm)	Moment of Inertia MR2	Torsional Stiffness		mum gnment	Mass (kg)	
UI20	100 rev/min	min)	Normal	Maximum	(kgm2)	(Nm/o)	Parallel	Axial	(Ng)	
70	0.33	9100	31.5	72	0.00085	10.2	0.3	+0.20	1.00	
90	0.84	7400	80	180	0.00115	25.5	0.3	+0.49	1.17	
110	1.168	5630	160	360	0.00400	48.0	0.3	+0.61	5.00	
130	3.30	4850	315	720	0.00780	84.0	0.4	+0.79	5.46	
150	6.28	4200	600	1500	0.01810	176	0.4	+0.92	7.11	
180	9.95	350	950	2350	0.04340	240	0.4	+1.09	16.60	
230	20.9	2800	2000	5000	0.12068	336	0.5	+1.32	26.00	
280	33.0	230	3150	7200	0.44653	960	0.5	+1.70	50.00	

Maximum Coupling speeds are calculated using an allowable peripheral speed for hub material. For selection of smaller sizes with speeds in excess of 3600 rev/min - Power Transmission.

Mass is for Coupling with mid-range bore Taper Bushes.

For speeds below 100rpm or intermediate speeds use normal torque rating.



TransDrive Jaw Coupling eliminates the need for dismantling connected equipment while replacing or inspecting the element because of it's wrap around rubber connecting element.

This eliminates excessive downtime on machinery which dramatically improves productivity.

The Jaw Coupling has a modular hub design and a spacer option with a range of pre-bored hubs, the Wrap 'N' Snap (WNS) coupling is perfect for quick installation, maintenance free, and is unsurpassed for quality, and flexibility.

WNS Coupling features:

•	ling allows inspection and replacement within minutes.							
Modular hub design allow the same hubs to be used for different models.								
Hubs are fully r	nachined which guarantees a smooth contact surface,							
ease of alignme	ent and excellent balance.							
Hubs come pre	Hubs come pre-bored and keyed to standard IEC motor shaft sizes.							
Taper Fit hubs	are also available to accommodate to non-standard shaft sizes.							
Spacer couplin	gs are available for pump applications.							
Water, dust, oil	and greases do not affect performance.							
a. Service Factor	Determine appropriate service factor from Table 1, (Table 1-7).							

- b. Design Power Multiply running power of driven machinery by the service factor. This gives design power which is used as a basis for coupling selection.
- C. Coupling Size Refer to respective table for your required coupling type and read from the appropriate speed column until a power equal to or greater than the design power is found, (Table 2 page 1-8).
- d. Bore Size Refer respective coupling dimensional table to check that the required bores can be accommodated, (Table 2 page 1-8).

Example: A coupling is required to transmit 15kW from an electric motor which runs at 1500 rev/min to a centrifugal pump for 12 hours a day. The motor shaft diameter is 42mm and the pump shaft diameter is 38mm.

- a. Service Factor From Table 1 the service factor is 1.0
- b. Design Power Design Power 15 x 1.0 = 15kW
- c. Coupling Size Reading from 1500 rev./min in the speed column of Table 2, 22.35 kW is the first power to exceed the Design Power of 15 kW. The size of the coupling specified in the first column is WNS150.
- d. Bore Size Table 2 shows that both shaft diameters are within the range available.



Service Factors



Table 1: Service Factors			Type of I	Driving Unit					
Special Class1	Electric Moto	rs / Steam Turbines	\$	Internal Combustion Engines / Steam Engines / Water Turbines					
	Hours	Per Day Duty		Ho	urs Per Day Duty				
Driven Machine Class2	8 and under	Over 8 to 16 inclusive	Over 16	8 and under	Over 8 to 16 inclusive	Over 16			
Uniform	1.00	1.12	1.25	1.25	1.40	1.60			
Moderate Shock3 *	1.60	1.80	2.00	2.00	2.24	2.50			
Heavy Shock4 **	2.50	2.80	3.12	3.12	3.55	4.00			

* It is recommended that top clearance keys are fitted for applications where load fluctuation is expected.

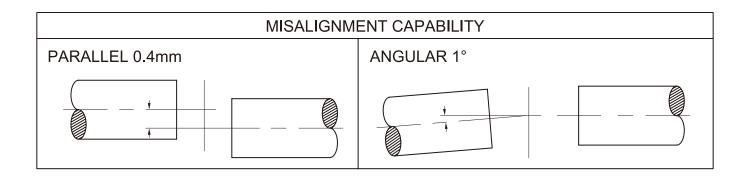
** For Centrifugal Compressor multiply Service Factor by an additional 1.15.

1 For applications where substantial shock, vibration and torque fluctuation occur, and for reciprocating machines, e.g. internal combustion engines, piston type pumps and compressors, refer to GB Power Transmission with full machine details for torsional analysis.

2 Agitators, Brewing Machinery, Centrifugal Compressors**, Conveyors, Centrifugal Fans and pumps, Generators, Sewage Disposal Equipment.

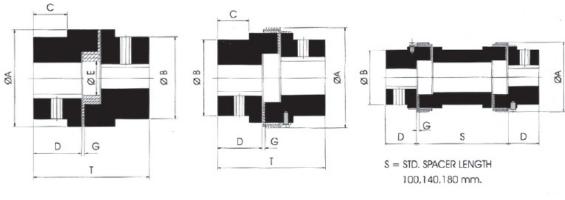
3 Clay working machinery, Crane Hoists, Laundry machinery, Wood working machinery, Machine Tools, Rotary Mills, Paper Mill machinery, Textile machinery.

4 Reciprocating conveyors, Crushers, Shakers, Metal Mills, Rubber machinery. (Banbury Mixers and Mills, Reciprocating Compressors.)



Type L/WNS/SPA





TYPE L

TYPE WNS

TYPE SPA

						Table 2:	L/WNS/S	PA Dimen	sional Da	ita					
Coupling		Rated Torque Nm	kW Capacity		Bore		o	ΟΑ			Gap			# Overall	
Туре	Size		100 rpm	1440 rpm	2880 rpm	Min.	Max	WNS/ SPA	L	thru Bore D	OB	G	OE	С	Length T (WNS/L)
	050	3.51	0.037	0.53	1.05	3	16	-	27	15	27	1	-	-	42
L	070	5.77	0.06	0.87	1.73	6	20	-	35	19	35	2	-	-	53
	075	11.9	0.12	1.80	3.61	9	22	-	44.5	21	44.5	2	-	-	53
	095	25.8	0.27	3.89	7.78	9	28	64	54	25	54	2	19	13	65
L	100	554	0.58	8.36	16.73	12	35	77	65	35	65	2	27	-	86
WNS	110	105	1.10	15.88	31.77	15	42	97	84	43	84	3	35	30	110
WINS	150	150	1.56	22.46	44.93	15	48	112	96	45	96	3	35	30	113
SPA	190	200	2.09	30.14	60.28	19	55	130	115	54	102	3	45	35	133
SPA	225	280	2.93	42.40	84.40	19	60	143	127	64	108	3	45	45	155

All dimensions are in mm.

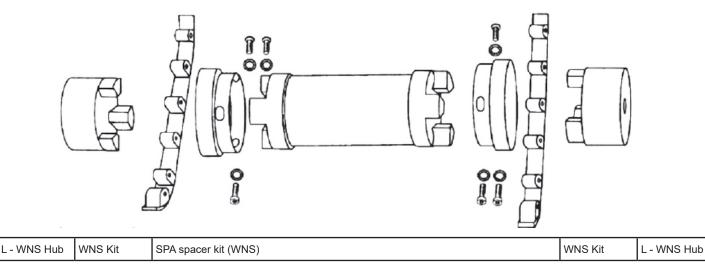
Above ratings are based on shore 80o elements.

Shore 920 elements are recommended for low rpm applications

For power rating of elements with shore 800 & 920, refer to table 4 on page 1-10

For SPA/WNS maintain gap 'G' at the time of assembly.

Maximum bores can be increased in case of steel hubs. Consult manufacturer.



Every effort has been taken to ensure that the data listed in this catalogue is correct. Transdrive will not accept liability for any damage or loss caused as a result of the data in this catalogue.

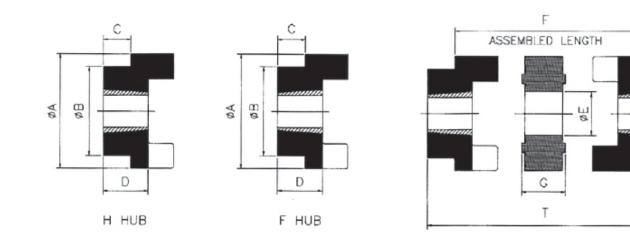


			Table	3: TF/TWNS Din	nensional Data								
		Bush											
Size TF/TWNS	Size	Max. Bore			A	ОВ	OE	F	G	С	D	J	т
		mm	Inch	TF	TWNS								
100	1108	28	1 1/8	65	78	65	27	44	18	10.5	23.5	29	65
110	1210	32	1 1/4	84	96	84	35	48	22	13.5	26.5	38	75
150	1210	32	1 1/4	96	111	96	35	55	25	11.5	26.5	38	78
190	1610	42	1 5/8	115	129	102	45	63	25	7.5	26.5	38	78
225	2012	50	2	127	142	108	45	63	25	14.5	33.5	42	92

J is the wrench clearance required for tightening and loosening the bush on the shaft. The use of shortened key will allow this dimension to be reduced. Couplings can be supplied with F/F or H/H or F/H flange as required.

Weight is for flange without Bore.

JAW couplings are supplied with taper bore suitable to the bush size specified in this column.

TF couplings are supplied with spider.

TWNS couplings are supplied with Wrap N Snap.



L

S

l

-

L1

L2

Type 1a

σ



					Tab	le 4: DE Di	mensiona	Data						
	Hub	Max	Rat	ed Torque (N	lm)									Mass
TYPE	Туре	Speed RPM	92 Sh A YELLOW	98 Sh A RED	64 Sh D WHITE	D	D1	d-min	d-max	S	L1	L2	L	kg/ hub
14	1	17000	7.5	12.5	16	30	22	6	16	1	32	20	51	0.12
14	1a	17000	1.0	12.0	10	00		0	10		02	20	01	0.12
19	1	19000	10	17	21	40	32	6	19	1	39	25	65	0.19
10	1a	10000	10		21	40	02	19	24		00	20	00	0.10
24	1	14000	35	60	75	56	40	9	24	1	46	30	77	0.38
24	1a	14000		00	15	50	40	22	28		40	50	11	0.00
28	1	11800	95	160	200	65	48	10	28	1.5	52.5	35	89	0.62
20	1a	11000	95	160	200	00	40	28	38	1.5	52.5	30	09	0.62
38	1	0500	100	205	405	20	66	12	38	4	66	45	440	1.26
30	1a	9500	190	325	405	80	00	38	45	1	66	45	112	1.36
40	1	0000	005	450	500	05	75	14	42	4	70	50	404	0.00
42	1a	8000	265	450	560	95	75	42	55	1	73	50	124	2.03
48	1	7100	310	525	<u>CEE</u>	105	85	15	48	1.5	80.5	56	138	2.85
40	1a	7100	310	525	655	105	60	48	60	1.5	60.5	00	130	2.00
	1	c200	440	695	005	100	00	20	55	0	04	05	450	4.00
55	1a	6300	410	685	825	120	98	55	70	2	91	65	158	4.32
	1	5000				105		22	65		105 5		100	
65	1a	5600	625	940	1175	135	115	22	65	1.5	105.5	75	182	6.66
75	1	4750	1000	4000	0.400	100	105	30	75		100	05	000	10.10
75	1a	4750	1280	1920	2400	160	135	30	75	1	120	85	206	10.48
	1	0750	0.400	0000	4500	000	160	40	90	4 -	400 5	100		47.00
90	1a	3750	2400	3600	4500	200	180	40	90	1.5	139.5	100	241	17.89



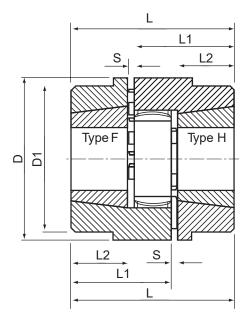




					Table 4: [DE Dimensi	ional Data						
	Hub	Ra	ted Torque (N	m)	Brush	Мах							Mass
TYPE	Туре	92 Sh A YELLOW	98 Sh A RED	64 Sh D WHITE	Size	Bore	D	D1	S	L1	L2	L	kg/hub
24 F	14000	35	60	75	1008	25	56	-	1.0	39.0	23.0	63.0	0.31
24 H	14000	35	60	75	1008	25	56	-	1.0	39.0	23.0	63.0	0.31
28 F	11800	95	160	200	1108	28	65	-	1.5	40.5	23.0	65.0	0.46
28 H	11600	95	160	200	1108	28	65	-	1.5	40.5	23.0	65.0	0.46
38 F	9500	190	325	405	1108	28	80	78	1.0	44.0	23.0	68.0	0.79
38 H	9300	190	325	405	1108	28	80	78	1.0	44.0	23.0	68.0	0.79
42 F	8000	256	450	560	1610	42	95	94	1.0	49.0	26.0	76.0	1.10
42 H	8000	250	450	500	1610	42	95	94	1.0	49.0	26.0	76.0	1.10
48 F	7100	310	525	655	1615	42	105	104	1.5	63.5	39.0	104.0	2.07
48 H	7100	310	525	055	1615	42	105	104	1.5	63.5	39.0	104.0	2.07
55 F	6300	410	685	825	2012	50	120	118	2.0	59.0	33.0	94.0	2.22
55 H	0300	410	005	025	2012	50	120	118	2.0	59.0	33.0	94.0	2.22
65 F	5600	625	940	1175	2012	50	135	133	1.5	63.5	33.0	98.0	3.14
65 H	5000	020	340	1175	2517	65	135	133	1.5	75.5	45.0	122.0	4.03
75 F	4750	1280	1920	2400	2517	65	160	135	1.0	81.0	46.0	128.0	4.69
75 H	4750	1200	1920	2400	3020	75	160	135	1.0	87.0	52.0	140.0	4.99
90 F	3750	2400	3600	4500	3020	75	200	160	1.5	91.5	52.0	145.0	7.74
90 H	3750	2400	3000	4300	3525	100	200	160	1.5	103.5	64.0	169.0	8.74

Curved Jaw Couplings

TRANSDRIVE DRIVE PERFORMANCE

Service Factor Determine the Service factor using Table 1.

Design Power

Multiply the power of the driven machine by the service factor obtained from Table 1. This is the design power and is used to select to coupling providing maximising the service life.

GE Coupling Model Selection

Refer to the Power Rating tables as shown on the nex page, 16. Select the "Yellow 92 Shore", "Red 98 Shore", or heavy-duty "White 64 Shore". Read down the left column to the required speed then read across horizontally until the design power is exceeded to select the coupling model. If the exact speed is not shown calculate based on power rating per/100 RPM shown in the first column.

Bore Dimensions

Check maximum bore dimensions and select from pilot bore model to be machined to required bore and key or taper fit option in available metric and imperial bore sizes.



Features & Benefits

High Torque capacity for size Compact design Low weight for reduced intertia Machined surfaces for extended life Absorbs shock loads Vibration dampening

Selection via Tore Calculation Method

Torque

Calculate tore applied to the coupling by using the formula below

Torque (Nm) = $\frac{9550 \text{ x Power kW}}{\text{Speed (RPM)}}$

Service Factor

Apply the service factor to the torque figure in Nm, this is the deign torque rating

Coupling Torque Ratings

Check the torque ratings for the Yellow 92 Shore, Red 98 shore or heavy duty White 64 Shore as shown in the dimensions tables on the previous pages. Select a suitable coupling that exceeds the design torque rating.

Bore Dimensions

Check maximum bore dimensions and select from pilot bore model to be machined to required bore and key or taper fit option in available metric and imperial bore sizes.

			Tab	le 1: Power R	atings (kw) fo	r 92 shore ele	ments (YELL)	OW)			
RPM	14	19	24	28	38	42	48	55	65	75	90
100	0.07	0.1	0.37	1	1.99	2.78	3.25	42.9	6.55	13.4	25.1
500	0.38	0.52	1.83	4.98	9.95	13.9	16.2	21.5	35.7	67	126
700	0.54	0.73	2.56	6.97	13.9	19.4	22.7	30.1	45.8	93.8	176
720	0.56	0.75	2.64	7.16	14.3	20	23.4	30.9	47.1	96.5	181
800	0.62	0.84	2.93	7.96	15.9	22.2	26	34.3	52.4	107	201
900	0.7	0.94	3.29	8.96	17.9	25	29.2	38.6	58.9	121	226
960	0.75	1.01	3.51	9.55	19.1	26.6	31.2	41.2	62.8	129	241
1000	0.78	1.05	3.66	9.95	19.9	27.8	32.5	42.9	65.5	134	251
1200	0.93	1.26	4.39	11.9	23.9	33.3	39	51.5	78.5	161	302
1400	1.09	1.47	5.12	13.9	27.9	38.9	45.4	60.1	91.6	188	352
1440	1.12	1.51	5.27	14.3	28.7	40	46.7	61.8	94.2	193	362
1500	1.16	1.57	5.49	14.9	29.9	41.6	48.7	64.4	98.2	201	377
1800	1.39	1.88	6.59	17.9	35.8	50	58.4	77.3	118	241	452
2000	1.55	2.09	7.32	19.9	39.8	55.5	64.9	85.9	131	268	503
2880	2.23	3.02	10.5	28.7	57.3	79.9	93.5	124	188	386	724
3000	2.32	3.14	11	29.9	59.7	83.3	97.4	129	196	402	754
4000	3.1	4.19	14.6	39.8	79.6	111	130	172	262	536	—

			Т	able 2: Power	Ratings (kw)	for 98 shore e	elements (REI))			
RPM	14	19	24	28	38	42	48	55	65	75	90
100	0.13	0.18	0.63	1.68	3.4	4.71	5.5	7.17	9.84	20.1	97.7
500	0.66	0.89	3.14	8.38	17	23.6	27.5	35.9	49.2	101	189
700	0.93	1.25	4.4	11.7	23.8	33	38.5	50.2	68.9	141	264
720	0.95	1.28	4.52	12.1	24.5	33.9	39.5	51.6	70.9	145	271
800	1.05	1.42	5.02	13.4	27.2	37.7	44	57.4	78.7	161	302
900	1.18	1.6	5.65	15.1	30.6	42.4	49.5	64.6	88.6	181	339
960	1.27	1.71	3.51	16.1	32.7	45.2	52.8	68.9	94.5	193	362
1000	1.32	1.78	3.66	16.8	34	47.1	55	71.7	98.4	201	377
1200	1.58	2.14	4.39	20.1	40.8	56.5	66	86.1	118	241	452
1400	1.84	2.49	5.12	23.5	47.6	66	77	100	138	281	528
1440	1.89	2.56	5.27	24.1	49	67.9	79.2	103	142	290	543
2880	3.83	5.2	18.1	48.4	97.9	135.7	158.4	206.5	283.4	578.9	1085.8

			Та	ble 3: Power I	Ratings (kw) f	or 64 shore el	ements (WHII	E)			
RPM	14	19	24	28	38	42	48	55	65	75	90
100	0.16	0.2	0.8	2.1	4.2	5.8	6.8	8.8	12.1	24.7	46.4
500	0.81	1.1	3.9	10.3	20.9	29	33.8	44.2	60.5	124.2	232.5
700	1.14	1.5	5.4	14.4	29.3	40.6	47.4	61.8	84.8	173.4	324.7
720	1.16	1.6	5.6	14.9	30.1	41.7	48.7	63.5	87.2	178.4	333.3
800	1.3	1.8	6.2	16.5	33.5	46.4	54.1	70.6	96.8	198	371.5
900	1.46	2.0	7.0	18.6	37.6	52.2	60.9	79.5	109	222.6	417
960	1.55	2.1	7.4	19.8	40.2	55.6	64.9	84.8	116.2	237.4	445.3
1000	1.62	2.2	7.7	20.7	41.8	57.9	67.7	88.2	121	247.2	463.7
1200	1.95	2.6	9.3	24.7	50.2	69.5	81.2	105.9	145.1	296.4	556
1400	2.26	3.1	10.8	28.9	58.6	81.2	94.7	123	169.7	345.6	649.4
1440	2.33	3.2	11.1	29.6	60.3	83.5	97.4	126.7	174.7	356.7	667.9
2880	4.69	6.3	22.2	59.6	120.4	166.8	195.0	254	348.5	711.9	1335.5

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