



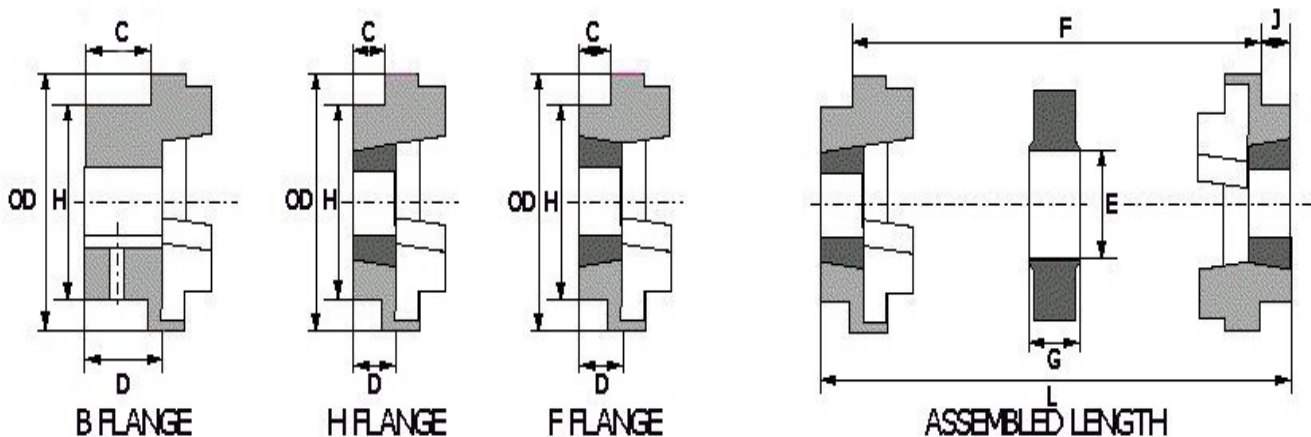
engineering catalogue 2008

COUPLINGS

**HRC FLEXIBLE COUPLINGS
CHAIN SHAFT COUPLINGS
SPLINE CLUTCHES
TORQUE LIMITERS
TORQUE LIMITER COUPLINGS**

FLEXIBLE COUPLINGS HRC TYPE

Hercus HRC Couplings are designed for general-purpose applications where the demand for a low cost, spacer type flexible coupling is required. Hercus HRC Couplings absorb shock loads, dampen small amplitude vibration and allow for incidental misalignment. Hercus HRC Couplings have integrally cast driving dogs to maintain a positive drive in the unlikely event of the flexible element being destroyed. With the addition of taper bushes Hercus HRC Couplings permit quick and easy assembly. Hercus HRC Couplings require no lubrication and are virtually maintenance free making them suitable for most environments. Hercus HRC finished bore with keyway.



DIMENSIONS

COMMON DIMENSIONS						TYPE F & H						TYPE B			
SIZE	OD	H	E	F	G	BUSH SIZE	MAX BORE		C	D	J	BORE DIA		C	D
							MM	INCHES				MAX	PILOT		
70	69	60	31	25	18	1008	25	1	20	23.5	29	32	10	20	25.8
90	85	70	32	30.5	22.5	1108	28	1.125	19.5	23.5	29	38	10	26	30
110	112	100	45	45	29	1610	42	1.625	18.5	26.5	38	55	10	37	45.3
130	130	105	50	54	36	1610	42	1.625	18	26.5	38	60	20	39	47.5
150	150	115	62	61	40	2012	50	2	23.5	33.5	42	70	28	46	60
180	180	125	77	74	49	2517	60	2.5	34.5	46.5	48	80	28	58	70
230	225	155	99	85.5	59.5	3020	75	3	39.5	52.5	55	100	45	77	90
280	275	206	119	105.5	74.5	3525	100	4	51	66.5	67	115	55	90	105.5

Dimensions in MM unless otherwise specified

ASSEMBLED DIMENSIONS AND SPECIFICATIONS

Dimensions in MM unless otherwise specified
All Hercus HRC Couplings have an angular misalignment capacity of up to 1 degree
Weight is for an FF, FH or HH coupling with mid range taper bush

SIZE	ASSEMBLED LENGTH (L)			TORQUE Nm	MAX. MISALIGNMENT		KG
	FF, FH, HH	FB, HB	BB		PARALLEL	AXIAL	
70	65	65	65	70	0.3	+0.2	1
90	69.5	76	82.5	90	0.3	+0.5	1.17
110	82	100.5	119	110	0.3	+0.6	5
130	89	110	131	130	0.4	+0.8	5.46
150	107	129.5	152	150	0.4	+0.9	7.11
180	142	165.5	189	180	0.4	+1.1	16.6
230	164.5	202	239.5	230	0.5	+1.3	26
280	207.5	246.5	285.5	280	0.5	+1.7	50

FLEXIBLE COUPLINGS HRC TYPE

SELECTION CRITERIA

1) SERVICE FACTOR Determine appropriate service factor from table below.	1) SERVICE FACTOR (EXAMPLE) The appropriate service factor is 1.25
2) DESIGN POWER Multiply the running power of the driven machinery by the service factor. This gives the design power, which is used as a basis for the coupling selection.	2) DESIGN POWER (EXAMPLE) Design power 1.5 x 1.25 = 1.875 kW
3) COUPLING SIZE Refer to the power ratings table below and read across from the corresponding speed until a power greater than the design power is found. The size of the coupling is given at the head of the column.	3) COUPLING SIZE (EXAMPLE) Read across from 1440 RPM in the speed column of the power ratings table below, 4.75 kW is the first power to exceed the required 1.875 kW (design power). The size at the head of this column is 70.
4) BORE SIZE From the dimension table check that the required bore diameters can be accommodated.	4) BORE SIZE (EXAMPLE) The dimension table shows that both shaft diameters are within the bore range available.

The example shown above is based upon a requirement to transmit 1.5kw between a 1440-rpm electric motor and a dust extraction unit running at over 16 hours per day. Motor shaft is 24mm and extraction unit shaft is 25mm.

SERVICE FACTORS

DRIVEN MACHINE CLASS	TYPE OF DRIVING UNIT					
	ELECTRIC MOTOR			INTERNAL COMBUSTION ENGINE		
	HOURS PER DAY			HOURS PER DAY		
	UNDER 8	OVER 8 TO 16 INCLUSIVE	OVER 16	UNDER 8	OVER 8 TO 16 INCLUSIVE	OVER 16
UNIFORM [^]	1.00	1.12	1.25	1.25	1.40	1.60
MODERATE SHOCK*	1.60	1.80	2.00	2.00	2.24	2.50
HEAVY SHOCK*	2.5	2.80	3.12	3.12	3.55	4.00

*It is recommended that keys (with top clearance if in taper bushes) are fitted for applications where load fluctuations are expected.

[^]For centrifugal compressors multiply the service factor by an additional 1.15.

POWER RATINGS (kW)

For speeds below 100 RPM and intermediate speeds use nominal torque ratings.
Maximum coupling speeds are calculated using an allowable peripheral speed for the hub material.

SPEED RPM	COUPLING SIZE							
	70	90	110	130	150	180	230	280
100	0.33	0.84	1.68	3.30	6.28	9.95	20.90	33.00
200	0.66	1.68	3.35	6.60	12.60	19.90	41.90	65.00
400	1.32	3.36	6.70	13.20	25.10	39.80	83.80	132.00
600	1.98	5.03	10.10	19.80	37.70	59.70	126.00	198.00
720	2.37	6.03	12.10	23.80	45.20	71.60	151.00	238.00
800	2.65	6.70	13.40	26.40	50.30	79.60	168.00	264.00
960	3.17	8.04	16.10	31.70	60.30	95.50	201.00	317.00
1200	3.96	10.10	20.10	39.60	75.40	119.00	251.00	396.00
1440	4.75	12.10	24.10	47.50	90.50	143.00	302.00	475.00
1600	5.28	13.40	26.80	52.80	101.00	159.00	335.00	528.00
1800	5.94	15.10	30.20	59.40	113.00	179.00	377.00	594.00
2000	6.60	16.80	33.50	66.00	126.00	199.00	419.00	660.00
2200	7.26	18.40	36.90	72.60	138.00	219.00	461.00	726.00
2400	7.92	20.10	40.20	79.20	151.00	239.00	503.00	
2600	8.58	21.80	43.60	85.80	163.00	259.00	545.00	
2880	9.50	24.10	48.30	95.00	181.00	286.00		
3000	9.90	25.10	50.30	99.00	188.00	298.00		
3600	11.90	30.10	60.30	118.00	226.00			
NOMINAL TORQUE (NM)	31.50	80.00	160.00	315.00	600.00	950.00	2000.00	3150.00
MAX TORQUE (NM)	72.00	180.00	360.00	720.00	1500.00	2350.00	5000.00	7200.00

FLEXIBLE COUPLINGS HRC TYPE

CATALOGUE CODES

HRC COUPLINGS

SIZE	TYPE F	TYPE H	TYPE B (PILOT BORE)	ELEMENTS
70	HRC-70F	HRC-70H	HRC-70B	HRC-70SE
90	HRC-90F	HRC-90H	HRC-90B	HRC-90SE
110	HRC-110F	HRC-110H	HRC-110B	HRC-110SE
130	HRC-130F	HRC-130H	HRC-130B	HRC-130SE
150	HRC-150F	HRC-150H	HRC-150B	HRC-150SE
180	HRC-180F	HRC-180H	HRC-180B	HRC-180SE
230	HRC-230F	HRC-230H	HRC-230B	HRC-230SE
280	HRC-280F	HRC-280H	HRC-280B	HRC-280SE.

TAPER BUSHES METRIC

BORE	W X H KEYWAY		CAT. CODE 1008	CAT. CODE 1108	CAT. CODE 1610	CAT. CODE 2012	CAT CODE 2517	CAT. CODE 3020	CAT. CODE 3525
10	3	1.4	TB1008 - 10MM	TB1108 - 10MM	xxx	xxx	Xxx	xxx	xxx
11	4	1.8	TB1008 - 11MM	TB1108 - 11MM	xxx	xxx	Xxx	xxx	xxx
12	4	1.8	TB1008 - 12MM	TB1108 - 12MM	xxx	xxx	Xxx	xxx	xxx
14	5	2.3	TB1008 - 14MM	TB1108 - 14MM	TB1610 - 14MM	TB2012 - 14MM	Xxx	xxx	xxx
15	5	2.3	xxx	xxx	TB1610 - 15MM	TB2012 - 15MM	Xxx	xxx	xxx
16	5	2.3	TB1008 - 16MM	TB1108 - 16MM	TB1610 - 16MM	TB2012 - 16MM	TB2517 - 16MM	xxx	xxx
17	5	2.3	TB1008 - 17MM	xxx	TB1610 - 17MM	TB2012 - 17MM	TB2517 - 17MM	xxx	xxx
18	6	2.8	TB1008 - 18MM	TB1108 - 18MM	TB1610 - 18MM	TB2012 - 18MM	TB2517 - 18MM	xxx	xxx
19	6	2.8	TB1008 - 19MM	TB1108 - 19MM	TB1610 - 19MM	TB2012 - 19MM	TB2517 - 19MM	xxx	xxx
20	6	2.8	TB1008 - 20MM	TB1108 - 20MM	TB1610 - 20MM	TB2012 - 20MM	TB2517 - 20MM	xxx	xxx
22	6	2.8	TB1008 - 22MM	TB1108 - 22MM	TB1610 - 22MM	TB2012 - 22MM	TB2517 - 22MM	xxx	xxx
23	6	2.8	xxx	TB1108 - 23MM	TB1610 - 23MM	TB2012 - 23MM	TB2517 - 23MM	xxx	xxx
24	8	3.3	TB1008 - 24MM	TB1108 - 24MM	TB1610 - 24MM	TB2012 - 24MM	TB2517 - 24MM	xxx	xxx
25	8	3.3	TB1008 - 25MM	TB1108 - 25MM	TB1610 - 25MM	TB2012 - 25MM	TB2517 - 25MM	TB3020 - 25MM	xxx
28	8	3.3	xxx	TB1108 - 28MM	TB1610 - 28MM	TB2012 - 28MM	TB2517 - 28MM	TB3020 - 28MM	xxx
30	8	3.3	xxx	xxx	TB1610 - 30MM	TB2012 - 30MM	TB2517 - 30MM	TB3020 - 30MM	xxx
32	10	3.3	xxx	xxx	TB1610 - 32MM	TB2012 - 32MM	TB2517 - 32MM	TB3020 - 32MM	xxx
35	10	3.3	xxx	xxx	TB1610 - 35MM	TB2012 - 35MM	TB2517 - 35MM	TB3020 - 35MM	TB3525 - 35MM
38	10	3.3	xxx	xxx	TB1610 - 38MM	TB2012 - 38MM	TB2517 - 38MM	TB3020 - 38MM	TB3525 - 38MM
40	12	3.3	xxx	xxx	TB1610 - 40MM	TB2012 - 40MM	TB2517 - 40MM	TB3020 - 40MM	TB3525 - 40MM
42	12	3.3	xxx	xxx	TB1610 - 42MM	TB2012 - 42MM	TB2517 - 42MM	TB3020 - 42MM	TB3525 - 42MM
45	14	3.8	xxx	xxx	xxx	TB2012 - 45MM	TB2517 - 45MM	TB3020 - 45MM	TB3525 - 45MM
48	14	3.8	xxx	xxx	xxx	TB2012 - 48MM	TB2517 - 48MM	TB3020 - 48MM	TB3525 - 48MM
50	14	3.8	xxx	xxx	xxx	TB2012 - 50MM	TB2517 - 50MM	TB3020 - 50MM	TB3525 - 50MM
55	16	4.3	xxx	xxx	xxx	xxx	TB2517 - 55MM	TB3020 - 55MM	TB3525 - 55MM
60	18	4.4	xxx	xxx	xxx	xxx	TB2517 - 60MM	TB3020 - 60MM	TB3525 - 60MM
65	18	4.4	xxx	xxx	xxx	xxx	Xxx	TB3020 - 65MM	TB3525 - 65MM
70	20	4.9	xxx	xxx	xxx	xxx	Xxx	TB3020 - 70MM	TB3525 - 70MM
75	20	4.9	xxx	xxx	xxx	xxx	Xxx	TB3020 - 75MM	TB3525 - 75MM
80	22	5.4	xxx	xxx	xxx	xxx	Xxx	xxx	TB3525 - 80MM
85	22	5.4	xxx	xxx	xxx	xxx	Xxx	xxx	TB3525 - 85MM
90	25	5.4	xxx	xxx	xxx	xxx	Xxx	xxx	TB3525 - 90MM
95	25	5.4	xxx	xxx	xxx	xxx	Xxx	xxx	TB3525 - 95MM
100	28	6.4	xxx	xxx	xxx	xxx	Xxx	xxx	TB3525 - 100MM

Dimensions in MM unless otherwise specified

FLEXIBLE COUPLINGS HRC TYPE

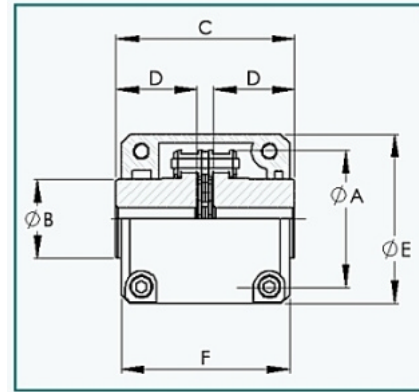
TAPER BUSHES IMPERIAL

BORE	W X H KEYWAY		CAT. CODE 1008	CAT. CODE 1108	CAT. CODE 1610	CAT. CODE 2012	CAT. CODE 2517	CAT. CODE 3020	CAT. CODE 3525
0.375	0.125	0.062	TB1008 - 3/8"	TB1108 - 3/8"	xxx	xxx	xxx	xxx	xxx
0.5	0.125	0.062	TB1008 - 1/2"	TB1108 - 1/2"	TB1610 - 1/2"	xxx	xxx	xxx	xxx
0.625	0.187	0.093	TB1008 - 5/8"	TB1108 - 5/8"	TB1610 - 5/8"	TB2012 - 5/8"	xxx	xxx	xxx
0.75	0.187	0.093	TB1008 - 3/4"	TB1108 - 3/4"	TB1610 - 3/4"	TB2012 - 3/4"	TB2517 - 3/4"	xxx	xxx
0.875	0.25	0.125	TB1008 - 7/8"	TB1108 - 7/8"	TB1610 - 7/8"	TB2012 - 7/8"	TB2517 - 7/8"	xxx	xxx
1	0.25	0.125	TB1008 - 1"	TB1108 - 1"	TB1610 - 1"	TB2012 - 1"	TB2517 - 1"	xxx	xxx
1.125	0.312	0.125	xxx	TB1108 - 1-1/8"	TB1610 - 1-1/8"	TB2012 - 1-1/8"	TB2517 - 1-1/8"	xxx	xxx
1.25	0.312	0.125	xxx	xxx	TB1610 - 1-1/4"	TB2012 - 1-1/4"	TB2517 - 1-1/4"	TB3020 - 1-1/4"	xxx
1.375	0.375	0.125	xxx	xxx	TB1610 - 1-3/8"	TB2012 - 1-3/8"	TB2517 - 1-3/8"	TB3020 - 1-3/8"	xxx
1.5	0.375	0.125	xxx	xxx	TB1610 - 1-1/2"	TB2012 - 1-1/2"	TB2517 - 1-1/2"	TB3020 - 1-1/2"	TB3525 - 1-1/2"
1.625	0.437	0.156	xxx	xxx	TB1610 - 1-5/8"	TB2012 - 1-5/8"	TB2517 - 1-5/8"	TB3020 - 1-5/8"	TB3525 - 1-5/8"
1.75	0.437	0.156	xxx	xxx	xxx	TB2012 - 1-3/4"	TB2517 - 1-3/4"	TB3020 - 1-3/4"	TB3525 - 1-3/4"
1.875	0.5	0.156	xxx	xxx	xxx	TB2012 - 1-7/8"	TB2517 - 1-7/8"	TB3020 - 1-7/8"	TB3525 - 1-7/8"
2	0.5	0.156	xxx	xxx	xxx	TB2012 - 2"	TB2517 - 2"	TB3020 - 2"	TB3525 - 2"
2.125	0.625	0.218	xxx	xxx	xxx	xxx	TB2517 - 2-1/8"	TB3020 - 2-1/8"	TB3525 - 2-1/8"
2.25	0.625	0.218	xxx	xxx	xxx	xxx	TB2517 - 2-1/4"	TB3020 - 2-1/4"	TB3525 - 2-1/4"
2.375	0.625	0.218	xxx	xxx	xxx	xxx	TB2517 - 1-3/8"	TB3020 - 2-3/8"	TB3525 - 2-3/8"
2.5	0.625	0.218	xxx	xxx	xxx	xxx	TB2517 - 2-1/2"	TB3020 - 2-1/2"	TB3525 - 2-1/2"
2.625	0.75	0.25	xxx	xxx	xxx	xxx	xxx	TB3020 - 2-5/8"	TB3525 - 2-5/8"
2.75	0.75	0.25	xxx	xxx	xxx	xxx	xxx	TB3020 - 2-3/4"	TB3020 - 2-3/4"
2.875	0.75	0.25	xxx	xxx	xxx	xxx	xxx	TB3020 - 2-7/8"	TB3525 - 2-7/8"
3	0.75	0.25	xxx	xxx	xxx	xxx	xxx	TB3020 - 3"	TB3525 - 3"
3.125	0.875	0.312	xxx	xxx	xxx	xxx	xxx	xxx	TB3525 - 3-1/8"
3.25	0.875	0.312	xxx	xxx	xxx	xxx	xxx	xxx	TB3525 - 3-1/4"
3.375	0.875	0.312	xxx	xxx	xxx	xxx	xxx	xxx	TB3525 - 3-3/8"
3.5	0.875	0.312	xxx	xxx	xxx	xxx	xxx	xxx	TB3525 - 3-1/2"
3.75	1	0.375	xxx	xxx	xxx	xxx	xxx	xxx	TB3525 - 3-3/4"
4	1	0.375	xxx	xxx	xxx	xxx	xxx	xxx	TB3525 - 4"

Dimensions in inches unless otherwise specified

CHAIN SHAFT COUPLINGS

Chain couplings are ideal where high static or starting loads apply. They are easily disconnected and are composed of two hardened steel sprockets connected by duplex roller chain. Each coupling is supplied complete with an aluminium alloy casing.



Chain Coupling

Imperial	Bore		Dimensions				Weight	Dimensions		Weight
	Inches		Inches				Pounds	Inches		Pounds
	Metric		Metric				kg	Metric		kg
	Min.	Max.	A	B	C	D		E	F	
4012	0.433"	0.866"	2.40"	1.38"	3.126"	1.42"	1.76	2.95"	2.95"	0.66
	11	22	61	35	79.4	36	0.8	75	75	0.3
4016	0.591"	1.181"	3.03"	1.97"	3.126"	1.42"	3.09	3.62"	2.95"	0.88
	15	30	77	50	79.4	36	1.4	92	75	0.4
5016	0.591"	1.496"	3.78"	2.36"	3.925"	1.77"	5.73	4.37"	3.35"	1.32
	15	38	96	60	99.7	45	2.6	111	85	0.6
5018	0.748"	1.772"	4.17"	2.76"	3.925"	1.77"	7.72	4.80"	3.35"	1.76
	19	45	106	70	99.7	45	3.5	122	85	0.8
6018	0.866"	2.165"	5.00"	3.35"	4.705"	2.13"	13.23	5.59"	4.17"	2.65
	22	55	127	85	119.5	54	6.0	142	106	1.2
6022	0.984"	2.953"	5.95"	4.33"	4.705"	2.13"	20.94	6.58"	4.17"	3.53
	25	75	151	110	119.5	54	9.5	167	106	1.6
8018	1.181"	3.071"	6.26"	4.53"	5.874"	2.64"	30.87	7.32"	5.12"	5.51
	30	78	159	115	149.2	67	14.0	186	130	2.5
8022	1.378"	3.740"	7.95"	5.51"	5.874"	2.64"	44.09	8.66"	5.12"	5.95
	35	95	202	140	149.2	67	20.0	220	130	2.7
10020	1.496"	4.331"	9.13"	6.30"	7.906"	3.58"	74.96	9.76"	5.67"	6.61
	38	110	232	160	200.8	91	34.0	248	144	3.0

Dimensions in Inches and mm.

Transmission Capacity (kw)

Cat. No.	Shaft Dia.	Revolutions per Minute (RPM)																							
		10	25	50	100	200	300	400	500	600	800	1000	1200	1500	1800	2000	2500	3000	3600	4000	4800	5200	6000		
4012	22	0.22	0.58	1.15	1.73	2.63	3.46	4.15	4.96	5.67	7.01	8.53	9.68	11.6	13.7	14.8	17.9	20.7	24.1	26.3	30.8				
4016	30	0.41	1.03	2.06	3.09	4.69	6.17	7.41	8.85	10.1	12.5	15.3	17.3	21.0	24.4	26.3	31.9	37.0	43.0	46.9	54.9				
5016	38	0.78	1.95	3.91	5.86	8.92	11.7	14.1	16.8	19.2	23.8	28.9	32.9	39.9	46.4	50.0	60.6	70.4	81.6						
5018	45	0.99	2.48	4.95	7.43	11.3	14.9	17.8	21.3	24.4	30.1	36.6	41.6	50.5	58.8	63.4	76.8	89.2							
6018	55	1.87	4.67	9.33	14.0	21.3	28.0	33.6	40.1	45.9	56.8	69.1	78.4	95.2	111	120	145								
6022	75	2.51	6.31	12.5	18.8	28.6	37.7	45.3	54.1	61.9	76.5	93.1	105	128	149	161	195								
8018	78	4.14	10.3	20.7	31.0	47.2	62.1	74.5	89.0	101	126	153	174	211	246	265									
8022	95	5.93	14.8	29.6	44.5	67.2	89.0	106	127	146	180	219	249	302	352	379									
10020	110	9.33	23.3	46.6	70.0	106	140	168	200	229	283	345	392	476	554										

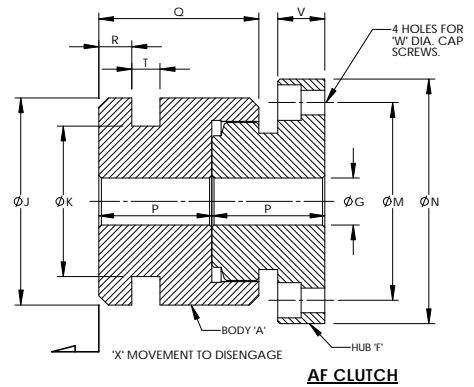
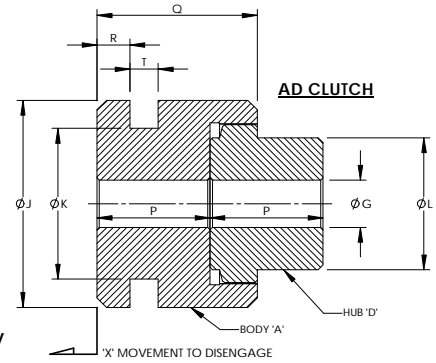
SPLINE CLUTCHES

These consist of two mating components with internal and external involute splines for clutch engagement. The leading edge of each spline is pointed to assist in the engagement, which should occur when the unit is stationary or rotating very slowly.

The sliding component is the Body 'A' which has an operating groove in the outside diameter. This can be used with either a Plain Hub 'D' or Flanged Hub 'F'.

The clutches are made from mild steel and for more severe applications may be case hardened and tempered at 220°C.

The maximum torque, which can be transmitted by the clutch, is generally limited by the size of shaft and key used to drive it and the selection of clutch should normally be made on this basis.



Cat. No.	Max. Bore	G	J	K	L	M	N	P	Q	R	T	V	W	X
SH 15	0.750"	0.375"	2.1/4"	1.5/8"	1.1/4"	2"	2.500"	1.1/4"	1.3/4"	3/8"	5/16"	1/2"	1/4"	3/8"
	19	9.53	57.2	41.3	31.7	50.8	63.50	31.7	44.4	9.5	7.9	12.7	6.3	9.5
SH 20	1.062"	0.625"	2.3/4"	2"	1.3/4"	2.5/8"	3.250"	1.1/2"	2.1/8"	7/16"	3/8"	5/8"	5/16"	1/2"
	27	15.88	59.9	50.8	44.4	66.7	82.55	38.1	54.0	11.1	9.5	15.9	7.9	12.7
SH 25	1.375"	0.750"	3.1/4"	2.1/2"	2.1/4"	3.1/4"	4.000"	1.3/4"	2.1/2"	1/2"	7/16"	3/4"	3/8"	5/8"
	35	19.05	82.6	63.5	57.1	82.5	101.60	44.4	63.5	12.7	11.1	19.0	9.5	15.9
SH 30	1.750"	1.000"	3.3/4"	3"	2.3/4"	3.3/4"	4.625"	2"	2.7/8"	9/16"	7/16"	7/8"	7/16"	3/4"
	45	25.40	95.3	76.2	69.8	95.2	117.48	50.8	73.0	14.3	11.1	22.2	11.1	19.0
SH 40	2.375"	1.250"	5"	4.1/4"	3.3/4"	5"	6"	2.3/4"	3.7/8"	5/8"	1/2"	1"	1/2"	7/8"
	60	31.75	127	108	95	127	152.40	69.9	98.4	15.9	12.7	25.4	12.7	22.2

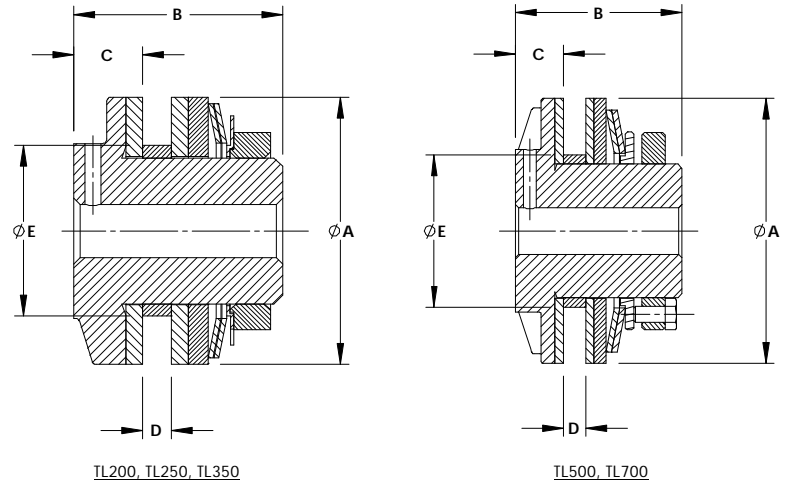
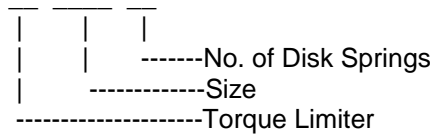
Dimensions in Inches and mm.

TORQUE LIMITERS

An adjustable friction type overload protection device which can be set to slip at a pre-determined torque loading and will automatically re-engage when the torque is reduced to the appropriate level.

The selected driving plate (i.e. Sprocket, Gear etc.) is mounted on a self lubricating bronze bushing which is carried on the cast iron hub and held between two friction disks. Loading is applied to the pressure plate through the disk spring or springs.

TL 250 - 1



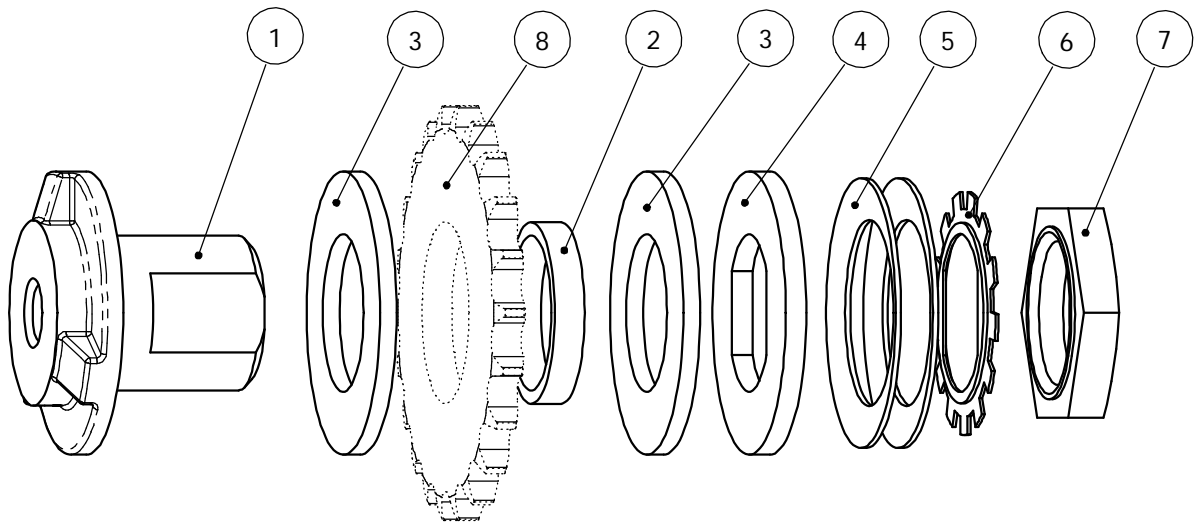
DIMENSIONS AND CAPACITIES FOR TL200-1 TO TL700-2

Model	Torque Range (Nm)	Plain Bore	Max. Bore	'A'	'B'	'C'	'D' Max	'E'	Std. Bush Length	Weight (kg)
TL200-1 TL200-2	3 - 10 7 - 20	7	14	50	29	6.5	7	30.00	3.8	0.2
TL250-1 TL250-2	7 - 27 14 - 54	10	22	65	48	16	9	41.00	4.5	0.5
TL350-1 TL350-2	20 - 75 35 - 150	17	25	89	62	19	16	49.00	6.5	1.2
TL500-1 TL500-2	47 - 210 88 - 420	20	42	127	76	22	16	74.00	6.5	3
TL700-1 TL700-2	116 - 570 224 - 1085	30	64	178	98	24	29	105.00	9.5	6.7

Dimensions in mm.

Maximum bore sizes listed above are for standard parallel keyways placed at 90° to flats on Hub. Driving plates should be bored to Size 'E' -0.00 / +0.05mm.

TORQUE LIMITERS



PARTS LIST FOR TL200-1 TO TL350-2

KEY No.	DESCRIPTION	QTY	TL200	TL250	TL350
1	HUB	1	25S8611	25S8411	25S8461
2	BUSH	1	25S8621	25S8421	25S8472
3	FACING	2	25S8631	25S8431	25S8481
4	PRESSURE PLATE	1	25S8632	25S8432	25S8482
5	DISK SPRING	1 or 2	25S8633	25S8433	25S8483
6	LOCK WASHER	1	25S8635	25S8435	25S8485
7	ADJUSTMENT NUT	1	25S8636	25S8436	25S8486
8	Customer Supplied	1			

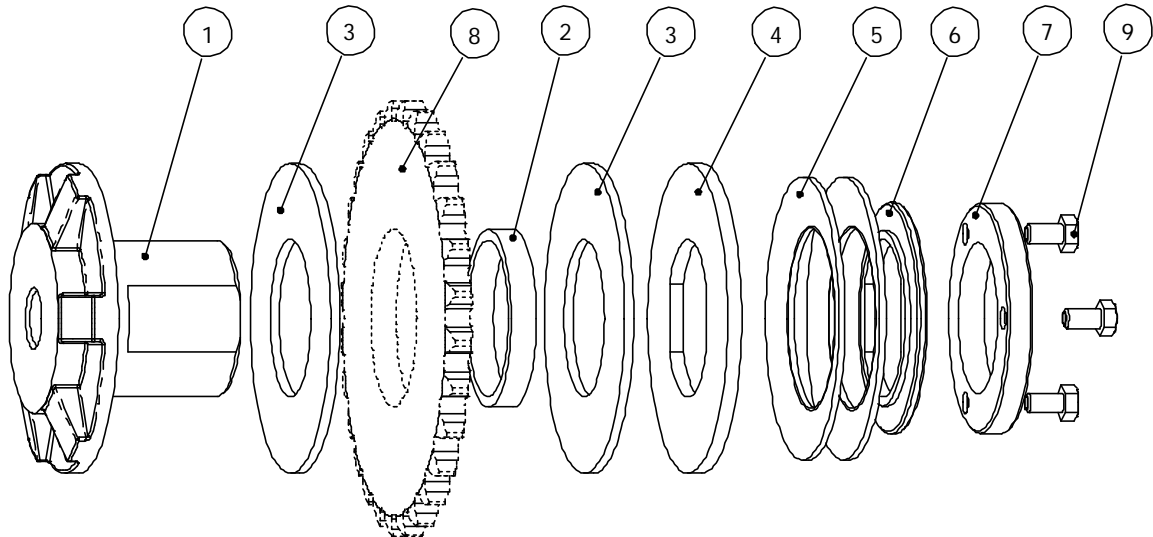
The customer selected driving plate (i.e. Sprocket, Gear etc.) is mounted on a self lubricating bronze bush which in turn is carried on the cast iron hub and held between two friction disks. Loading is applied to the pressure plate through the disk springs.

For TL200 to TL350 Torque Limiters this is achieved by tightening the hexagon adjusting nut by hand until the disk spring makes contact with the plate, then tighten the nut by approximately 60 degrees, secure the nut in place by the use of the tab washer. Final setting of the torque limiter should be done after a run in period of approximately 500 revolutions at 50 – 70 rpm.

The torque ratings for the TL200 to TL350 are:-

One disk spring (item 5)	TL200 3 – 10Nm	TL250 7 – 27Nm	TL350 20 – 75Nm
Two disk springs (item 5)	7 – 20Nm	14 – 54Nm	35 – 150Nm

TORQUE LIMITERS



PARTS LIST FOR TL500-1 TO TL700-2

KEY No.	DESCRIPTION	QTY	TL500	TL700
1	HUB	1	25S8511	25S8561
2	BUSH	1	25S8522	25S8573
3	FACING	2	25S8531	25S8581
4	PRESSURE PLATE	1	25S8532	25S8582
5	DISK SPRING	1 or 2	25S8533	25S8583
6	SPRING PLATE	1	25S8534	25S8584
7	ADJUSTMENT NUT	1	25S8536	25S8586
8	Customer Supplied	1		
9	LOCK SCREW	3	25S8537	25S8587

The customer selected driving plate (i.e. Sprocket, Gear etc.) is mounted on a self lubricating bronze bush which in turn is carried on the cast iron hub and held between two friction disks. Loading is applied to the pressure plate through the disk springs.

For the TL500 and TL700 Torque Limiters the adjustment nut is positioned and the three loading screws are tightened on to the spring plate until their heads lock on the adjustment nut. Final setting of the torque limiter should be done after a run in period off approximately 500 revolutions at 50 – 70 rpm.

The torque ratings for the TL500 and TL700 are:-

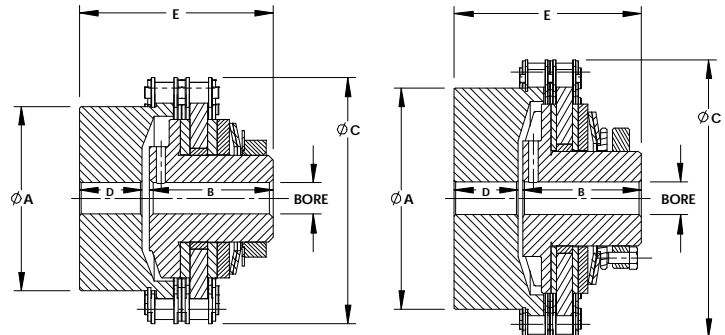
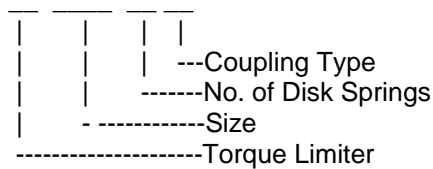
One disk spring (item 5)	TL500 47 – 210Nm	TL700 116 – 570Nm
Two disk springs (item 5)	88 – 420Nm	224 – 1085Nm

TORQUE LIMITER COUPLINGS

These couplings combine the flexibility of a chain coupling with the overload protection features of the torque limiter.

They are made up from a torque limiter fitted with a plate sprocket and a mating hub sprocket, hollowed out to clear the head of the torque limiter. The two sprockets are connected by duplex chain to form the coupling.

TL250-1C



TL200-C, TL250-C, TL350-C

TL500-C, TL700-C

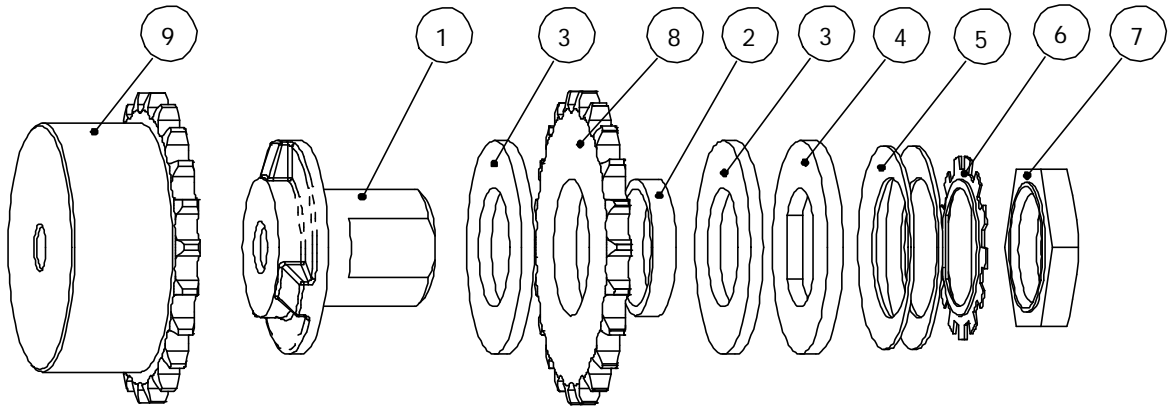
DIMENSIONS AND CAPACITIES FOR TL200-1C TO TL700-2C

Model	Torque Range (Nm)	Max. Running Speed (RPM)	Plain Bore		Max. Bore		Sprocket	'A'	'B'	'C'	'D'	'E'	Weight (kg)
			Coupling Half	TL Half	Coupling Half	TL Half							
TL200-1C	3 – 10	1200	8	7	31	14	RS-40-16T	50	29	76	24	55	1.0
TL200-2C	7 – 20												
TL250-1C	7 – 27	1000	13	10	38	22	RS-40-22T	56	48	102	25	76	2.0
TL250-2C	14 – 54												
TL350-1C	20 – 75	800	13	17	45	25	RS-50-24T	72	62	137	37	103	5.2
TL350-2C	35 – 150												
TL500-1C	47 – 210	500	18	20	65	42	RS-60-28T	105	76	188	40	120	12.3
TL500-2C	88 – 420												
TL700-1C	116 – 570	400	23	30	90	64	RS-80-28T	150	98	251	66	168	31.0
TL700-2C	224 – 1085												

Dimensions in mm.

Maximum bore sizes listed above are for standard parallel keyways placed at 90° to flats on Hub.

TORQUE LIMITER COUPLINGS



PARTS LIST FOR TL200-1C TO TL350-2C

KEY No.	DESCRIPTION	QTY	TL200	TL250	TL350
1	HUB	1	25S8611	25S8411	25S8461
2	BUSH	1	25S8621	25S8421	25S8472
3	FACING	2	25S8631	25S8431	25S8481
4	PRESSURE PLATE	1	25S8632	25S8432	25S8482
5	DISK SPRING	1 or 2	25S8633	25S8433	25S8483
6	LOCK WASHER	1	25S8635	25S8435	25S8485
7	ADJUSTMENT NUT	1	25S8636	25S8436	25S8486
8	PLATE WHEEL	1	25S8641	25S8441	25S8491
9	SPROCKET	1	25S8642	25S8442	25S8492
-	DUPLEX CHAIN	1	25S8643	25S8443	25S8493
-	LINK	1	25S8644	25S8444	25S8494

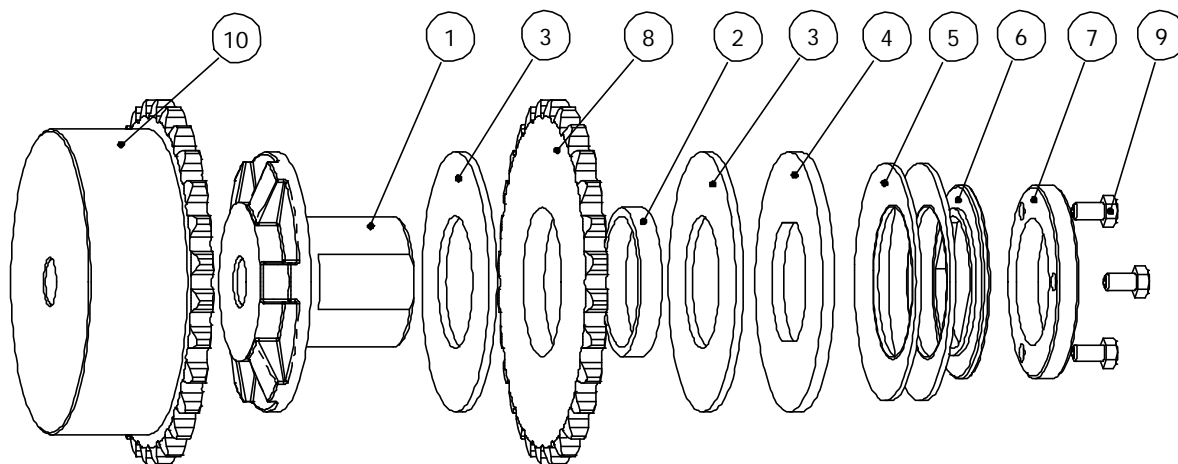
The torque setting of the unit is achieved in the same way as for the torque limiter.

For TL200 to TL350 Torque Limiters this is achieved by tightening the hexagon adjusting nut by hand until the disk spring makes contact with the plate, then tighten the nut by approximately 60 degrees, secure the nut in place by the use of the tab washer. Final setting of the torque limiter should be done after a run in period of approximately 500 revolutions at 50 – 70 rpm.

The torque ratings for the TL200 to TL350 are:-

One disk spring (item 5)	TL200	3 – 10Nm	TL250	7 – 27Nm	TL350	20 – 75Nm
Two disk springs (item 5)		7 – 20Nm		14 – 54Nm		35 – 150Nm

TORQUE LIMITER COUPLINGS



PARTS LIST FOR TL500-1C TO TL700-2C

KEY No.	DESCRIPTION	QTY	TL500	TL700
1	HUB	1	25S8511	25S8561
2	BUSH	1	25S8522	25S8573
3	FACING	2	25S8531	25S8581
4	PRESSURE PLATE	1	25S8532	25S8582
5	DISK SPRING	1 or 2	25S8533	25S8583
6	SPRING PLATE	1	25S8534	25S8584
7	ADJUSTMENT NUT	1	25S8536	25S8586
8	PLATE WHEEL	1	25S8541	25S8591
9	LOCK SCREW	3	25S8537	25S8587
10	SPROCKET	1	25S8542	25S8592
-	DUPLEX CHAIN	1	25S8543	25S8593
-	LINK	1	25S8544	25S8594

The torque setting of the unit is achieved in the same way as for the torque limiter.

For the TL500 and TL700 Torque Limiters the adjustment nut is positioned and the three loading screws are tightened on to the spring plate until their heads lock on the adjustment nut.

Final setting of the torque limiter should be done after a run in period off approximately 500 revolutions at 50 – 70 rpm.

The torque ratings for the TL500 and TL700 are:-

One disk spring (item 5)	TL500 47 – 210Nm	TL700 116 – 570Nm
Two disk springs (item 5)	88 – 420Nm	224 – 1085Nm