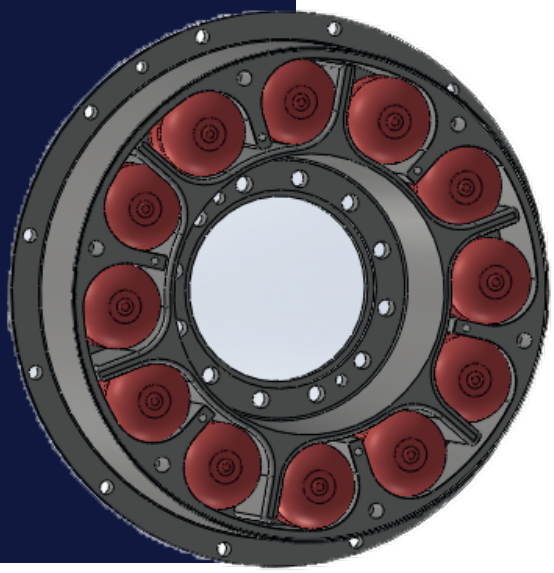
POONA
COUPLINGS
PVT. LTD.



PCT - H COUPLINGS

INDUSTRIAL RANGE

PCT - H FLEXIBLE COUPLING

Features

- Unique blind assembly
- High temperature capability (up to 200°C)
- Severe shock load protection
- Intrinsically fail safe
- Maintenance free
- Noise attenuation

Applications

High temperature blind assembly, coupling designed for bell housing applications.

- Marine propulsion
- Generator sets
- Pump sets
- Compressors
- Rail traction

Construction Details

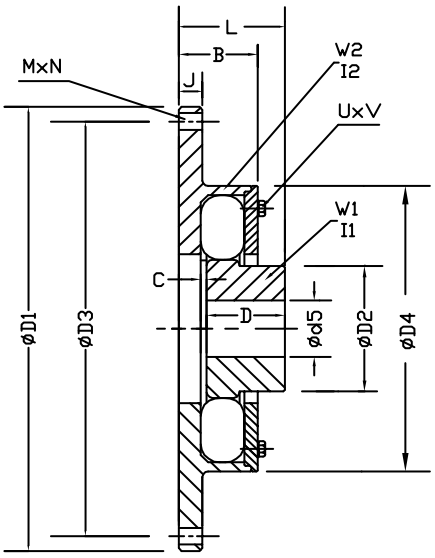
- Spheroidal Graphite to BS 2789 Grade 400/15
- High temperature elastomer with a 200°C temperature capability
- Keep plate integral with outer member
- Hub manufactured to meet application requirements

Benefits

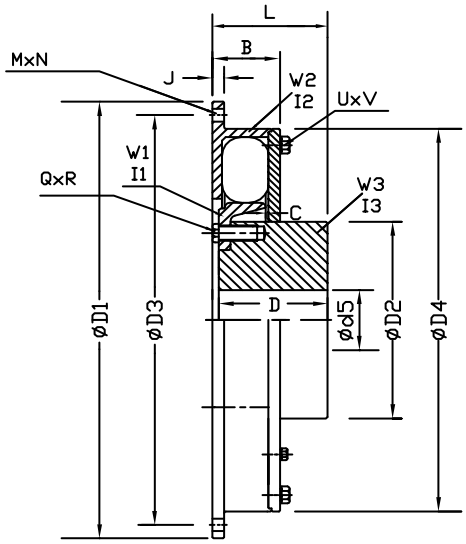
- Allows easy assembly for applications in bell housings
- Allows operation in bell housings where ambient temperatures can be high
- Avoids failure of the driveline under short circuit and other transient conditions
- Ensures continuous operation of the driveline in the unlikely event of rubber damage
- No lubrication or adjustment required resulting in low running costs
- Gives quiet running conditions in sensitive applications by the elimination of metal to metal contact

PCT - H STANDARD SAE FLYWHEEL TO SHAFT

PCT - H 150 - 500



PCT - H 800

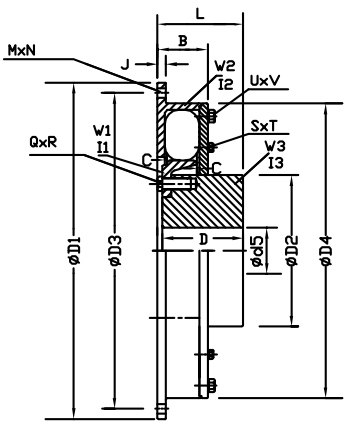


DIMENSIONS, WEIGHT, INERTIA, ALIGNMENT

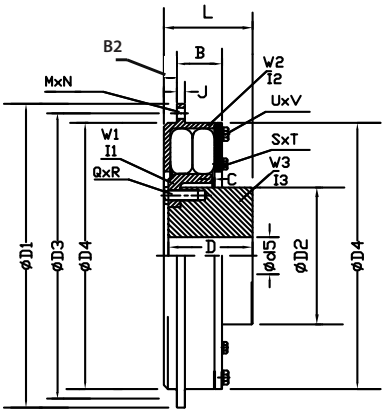
COUPLING SIZE		150		500		800	
		SAE 7.5	SAE 10	SAE 10	SAE 11.5	SAE 10	SAE 11.5
DIMENSIONS (mm)	D1	241.3	314.3	314.3	352.4	314.3	352.4
	B	36.5	36.5	52.0	52.0	47.5	47.5
	C	3.0	3.0	3.0	3.0	3.0	3.0
	D	41.0	41.0	50.0	50.0	85.0	85.0
	D2	68.0	68.0	95.0	95.0	120.0	120.0
	D3	222.25	295.3	295.3	333.38	295.3	333.38
	D4	155.0	155.0	225.0	225.0	265.0	265.0
	J	10.0	10.0	10.0	10.0	10.0	10.0
	L	51	51	60.0	60.0	95.5	95.5
	M	8	8	8	8	8	8
	N	9.2	10.5	10.5	10.5	10.5	10.5
	Q	-	-	-	-	10	10
	R	-	-	-	-	M12	M12
	U	4	4	4	4	5	5
	V	M6	M6	M10	M10	M12	M12
	MAXd5	45.0	45.0	60.0	60.0	85.0	85.0
	MINd5	15.0	15.0	25.0	25.0	25.0	25.0
RUBBER ELEMENTS	PER CAVITY	1	1	1	1	1	1
	PER COUPLING	8	8	8	8	10	10
MAXIMUM SPEED (rpm)		5550	5050	4700	4300	4000	3600
WEIGHT (kg)	W1	1.5	1.5	2.9	2.9	9.8	9.8
	W2	3.0	6.1	7.4	8.7	7.1	8.9
	W3	-	-	-	-	6.7	6.7
	TOTAL (W1 & W2)	4.5	7.6	10.3	11.6	16.9	18.7
INERTIA (kgm^2)	I1	0.001	0.001	0.005	0.005	0.110	0.160
	I2	0.024	0.072	0.094	0.134	0.030	0.030
	I3	-	-	-	-	0.011	0.011
ALLOWABLE MISALIGNMENT RADIAL (mm)	ALIGN	0.25	0.25	0.25	0.25	0.25	0.25
	MAX	1	1	1	1	1	1
AXIAL (mm)	ALIGN	1	1	1	1	1	1
	MAX	2	2	2	2	2	2
CONICAL (degree)		0.5	0.5	0.5	0.5	0.5	0.5

PCT - H STANDARD SAE FLYWHEEL TO SHAFT

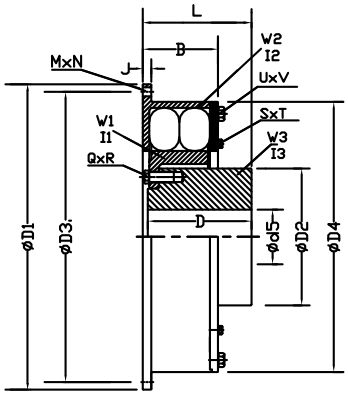
PCT - H 1200 - 10000



PCT - H 4500



PCT - H 12000 - 40000



DIMENSIONS, WEIGHT, INERTIA, ALIGNMENT

COUPLING SIZE		1200		3000		4500		6000		10000	12000		20000	30000	40000
		SAE 11.5	SAE 14	SAE 14	SAE 18	SAE 14	SAE 18	SAE 18	SAE 21	SAE 21	SAE 18	SAE 21	SAE 21	SAE 24	
D1		352.4	466.7	466.7	571.5	466.7	571.5	571.5	673.1	673.1	571.5	673.1	673.1	733.42	860.0
B		50.0	50.0	67.0	67.0	69.5	69.5	84.0	84.0	103.0	141.0	141.0	173.0	213.0	215.0
B2		-	-	-	-	20.0	20.0	-	-	-	-	-	-	-	-
C		3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	7.0	7
D	STANDARD	100.0	100	112.0	112.0	128.0	128.0	139.0	139.0	166.0	194.0	194.0	236.0	278.0	276.0
D	(DIN 6281)	100.0	85.8	105.0	105.0	105.0	105.0	-	-	-	-	-	-	-	-
D2		156.0	156.0	210.0	210.0	210.0	210.0	256.0	256.0	308.0	256.0	256.0	308.0	346.0	416.0
D3		333.4	438.2	438.2	542.9	438.2	542.9	542.9	641.4	641.4	542.9	641.4	641.4	692.0	820.0
D4		304.0	304.0	409.0	409.0	409.0	409.0	505.0	505.0	600.0	505.0	505.0	600.0	646.0	778.0
J		10.0	10.0	12.0	12.0	12.0	12.0	16.0	16.0	20.0	16.0	16.0	20.0	20.0	22.0
L	STANDARD	106.6	106.6	120.0	120.0	136.0	136.0	150.0	150.0	180.0	205.0	205.0	250.0	300.0	300.0
M		8	8	8	6	8	6	6	12	12	6	12	12	12	32
N		10.5	13.5	13.5	17.0	13.5	17.0	17.0	17.0	17.0	17.0	17.0	17.0	22.0	21.0
L	(DIN 6281)	106.6	92.4	92.4	-	92.4	-	-	-	-	-	-	-	-	-
Q		12	12	12	12	16	16	12	12	12	12	12	12	16	16
R		M12	M12	M16	M16	M16	M16	M20	M20	M24	M20	M20	M24	M24	M24
S		6	6	6	6	6	6	6	6	6	6	6	6	-	-
T		M6	M6	M8	M8	M8	M8	M10	M10	M10	M10	M10	M10	-	-
U		6	6	6	6	6	6	6	6	6	6	6	6	6	6
V		M12	M12	M14	M14	M14	M14	M16	M16	M20	M16	M16	M20	M24	M24
d5	(MAX)	85.0	85.0	115.0	115.0	115.0	115.0	150.0	150.0	170.0	150.0	150.0	170.0	215.0	220.0
d5	(MIN)	40.0	40.0	50.0	50.0	50.0	50.0	60.0	60.0	60.0	60.0	60.0	60.0	90.0	110.0
RUBBER ELEMENTS	PER CAVITY	1	1	1	1	2	2	1	1	1	2	2	2	2	2
	PER COUPLING	12	12	12	12	24	24	12	12	12	24	24	24	24	24
MAX. SPEED (rpm)	(1)	3730	2820	2820	2300	2820	2300	2300	1950	1950	2300	1950	1950	1850	1500
WEIGHT (kg)	W1	3.0	3.0	7.0	7.0	10.6	10.6	16.0	16.0	24.4	41.7	41.7	56.0	65.3	98.3
	W2	10.00	15.2	22.1	29.2	26.4	34.5	43.2	55.1	77.9	58.6	70.5	112.1	145.2	199.7
	W3 (STANDARD)	12.1	12.2	22.9	22.9	22.9	22.9	42.0	42.0	46.7	65.1	65.1	114.5	185.2	262.6
	W3 (DIN 6281)	12.2	10.3	20.5	-	20.5	-	-	-	-	-	-	-	-	-
	TOTAL (W1 & W2)	13.00	18.2	29.2	36.2	37.0	45.1	59.2	71.1	102.3	100.3	-	168.1	210.5	298.0
INERTIA (kgm^2)	I1	0.03	0.03	0.09	0.1	0.15	0.15	0.26	0.26	0.64	0.98	0.98	1.92	3.07	5.97
	I2	0.19	0.42	0.75	0.9	0.88	0.92	2.26	3.35	5.39	2.79	3.95	6.63	12.21	23.68
	I3 (STANDARD)	0.04	0.04	0.14	0.1	0.17	0.17	0.37	0.37	1.0	0.58	0.58	1.47	2.92	5.96
	I3 (DIN 6281)	0.03	0.04	0.12	-	0.12	-	-	-	-	-	-	-	-	-
ALLOWABLE MISALIGNMENT	ALIGN	0.25	0.25	0.40	0.4	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
	MAX	1.00	1.00	1.50	1.5	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
AXIAL (mm)	ALIGN	1.00	1.00	1.00	1.0	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	MAX	2.00	2.00	2.50	2.5	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50
CONICAL (degree)		0.50	0.50	0.50	0.5	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50

PCT - H TECHNICAL DATA

1.1Torque Capacity - Diesel Engine Drives
The PCT - H Coupling is selected on the "Nominal Torque, T_{kn}" without service factors.

The full torque capacity of the coupling for transient vibration whil.st passing through major criticals on run up is published as the Maximum Torque T (T_{kmax} = 3 X T_{kn}).

There is additional torque capacity built within the coupling for short circuit and shock torques, which is 3 x T_{kmax}.
The published “Vibratory Torque T_{kW}”, relates to the amplitude of the permissible torque fluctuation.
The vibratory torque values shown in the technical data are at the frequency of 10 Hz.
The allowable vibratory torque at higher or lower frequencies

$$fe = TKW \frac{\sqrt{10Hz}}{fe}$$

The measure used for acceptability of the coupling under vibratory torque, is published as “Allowable dissipated heat at ambient temperature 30^{o}C”.

1.2 Transient Torques
Prediction of transient torques in marine drives can be complex. Normal installations are well provided for by selecting couplings based on the “Nominal Torque T_{kn}”. Transients, such as start up and clutch manoeuvre, are usually within the “Maximum Torque T_{kmax}” for the coupling.

Care needs to be taken in the design of couplings with shaft brakes, to ensure coupling torques are not increased by severe deceleration.

Sudden torque applications of propulsion devices such as thrusters or waterjets, need to be considered when designing the coupling connection.

2.0 Stiffness Properties
The Poona Coupling coupling remains fully flexible under all torque conditions. The PCT - H series is a non-bonded type operating with the Rubber-in-Compression principle.

2.1 Axial Stiffness
When subject to axial misalignment, the coupling will have an axial resistance which gradually reduces due to the effect of vibratory torque.

The axial stiffness of the coupling is torque dependent, and variation is as shown in the technical data page.

2.2 Radial Stiffness
The radial stiffness of the coupling is torque dependent, and is as shown in the technical data page.

2.3 Torsional Stiffness
The torsional stiffness of the coupling is dependent upon applied torque and temperature as shown in the technical data page.

2.4 Prediction of the System Torsional Vibration Characteristics

An adequate prediction of the system’s torsional vibration characteristics, can be made by the following method:

2.4.1 Use the torsional stiffness as shown in the technical data, which is based upon data measured at a 30^{0}C ambient temperature.

2.4.2 Repeat the calculation 2.4.1, but using the maximum temperature correction factor S_{t100} (S_{t200} for Si70 rubber), and dynamic magnifier correction factor, M_{100} (M_{200} for Si70 rubber), for the selected rubber. Use tables in the catalogue to adjust values for both torsional stiffness and dynamic magnifier.
ie. C_{T100} = C_{Tdyn} X S_{t100} .

2.4.3 Review calculations 2.4.1 and 2.4.2 and if the speed range is clear of criticals which do not exceed the allowable heat dissipation value as published in the catalogue, then the coupling is considered suitable for the application with respect to the torsional vibration characteristics. If there is a critical in the speed range, then actual temperature of the coupling will need to be calculated at this speed.

PCT - H TECHNICAL DATA

Rubber Grade	$Temp_{max}$ °C	S_t
Si70	200	$S_t200 = 0.48$
NM 45	100	$S_t100 = 0.90$
SM 50	100	$S_t100 = 0.85$
SM 60	100	$S_t100 = 0.75$
SM 70	100	$S_t100 = 0.63$
SM 80	100	$S_t100 = 0.58$
Si70 is considered "standard"		

Rubber Grade	Dynamic Magnifier at 30° C (M_{30})	Dynamic Magnifier at 100°C (M_{100})
Si70	7.5	$M_{200} = 15.63$
NM 45	15	16.7
SM 50	10	11.8
SM 60	8	10.7
SM 70	6	9.5
SM 80	4	6.9
Si70 is considered "standard"		

2.5 Prediction of the Actual Coupling Temperature and Torsional Stiffness

2.5.1 Use the torsional stiffness as published in the catalogue. This is based upon data measured at 30°C and the dynamic magnifier at 30°C(M_{30})

2.5.2 Compare the synthesis value of the calculated heat load in the coupling (P_K) at the speed of interest. to the • Allowable Heat Dissipation"(P_{kW}).

$$^0C = Temp_{Coup} = \left(\frac{P_K}{P_{kW}}\right) x\ 170$$

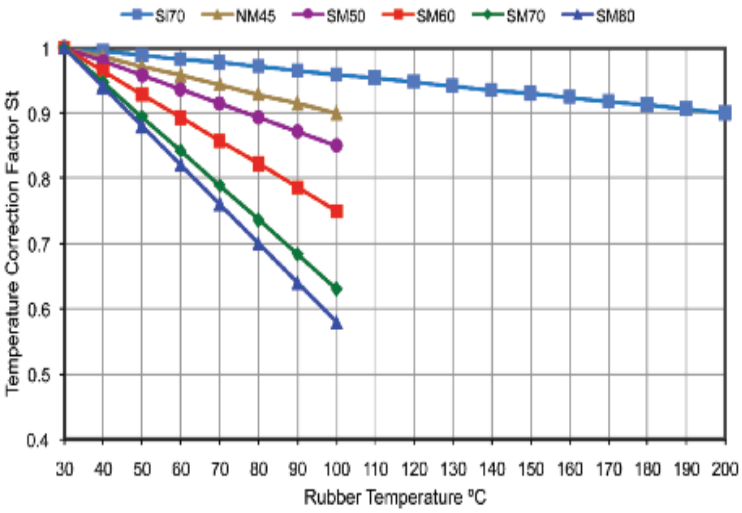
The coupling temperature = ų

ų = $Temp_{coup}$ + Ambient Temp.

2.5.3 Calculate the temperature correction factor from 2.6 (if the coupling temperature> 200°C. then use), Calculate the dynamic magnifier as per 2.7. Repeat the calculation with the new value of coupling stiffness and dynamic magnifier.

2.5.4 Calculate the coupling temperature as per 2.5. Repeat calculation until the coupling temperature agrees with the correction factors for torsional stiffness and dynamic magnifier used in the calculation.

2.6 Temperature Correction Factor



2.7 Dynamic Magnifier Correction Factor

The Dynamic Magnifier of the rubber is usbject to temperature variation in the same way as the torsional stiffness.

$$M_T = \frac{M_{30}}{S_t} \qquad \psi_T = \psi_{30} X\ S_t$$

Rubber Grade	Dynamic Magnifier (M_{30})	Relative Damping ψ_{30}
Si70	7.5	0.83
NM 45	15	0.42
SM 50	10	0.63
SM 60	8	0.78
SM 70	6	1.05
SM 80	4	1.57
Si70 is considered "standard"		

PCT - H TECHNICAL DATA

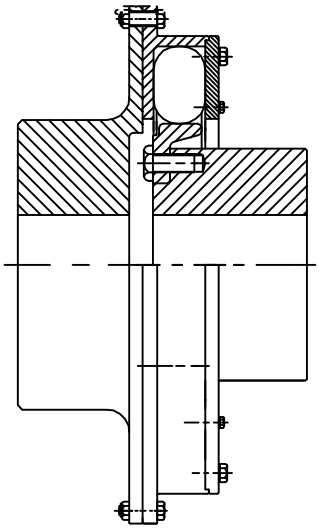
COUPLING SIZE		150		500		800	
		SAE 7.5	SAE 10	SAE 10	SAE 11.5	SAE 10	SAE 11.5
Nominal Torque Tkn (kNm)		0.15	0.15	0.50	0.50	0.80	0.80
Maximum Torque Tkmax (kNm)		0.45	0.45	1.50	1.50	2.40	2.40
Vibratory Torque TKw (kNm)		0.09	0.09	0.16	0.16	0.26	0.26
Dynamic Torsional Stiffness CTdyn (MNm/rad)							
10 % Tkn	Si70	0.0005	0.0006	0.0010	0.0010	0.0002	0.0002
	NM45	0.0004	0.0004	0.0007	0.0007	0.0014	0.0014
	SM50	0.0004	0.0004	0.0009	0.0009	0.0018	0.0018
	SM60	0.0005	0.0005	0.0010	0.0010	0.0021	0.0021
	SM70	0.0007	0.0007	0.0013	0.0013	0.0026	0.0026
	SM80	0.0010	0.0010	0.0019	0.0019	0.0038	0.0038
25 % Tkn	Si70	0.0022	0.0022	0.0040	0.0040	0.0060	0.0060
	NM45	0.0016	0.0016	0.0029	0.0029	0.0043	0.0043
	SM50	0.0019	0.0019	0.0036	0.0036	0.0054	0.0054
	SM60	0.0023	0.0023	0.0042	0.0042	0.0063	0.0063
	SM70	0.0029	0.0029	0.0052	0.0052	0.0079	0.0079
	SM80	0.0042	0.0042	0.0077	0.0077	0.0116	0.0116
50 % Tkn	Si70	0.0060	0.0061	0.0110	0.0110	0.0170	0.0170
	NM45	0.0044	0.0044	0.0080	0.0080	0.0124	0.0124
	SM50	0.0054	0.0054	0.0099	0.0099	0.0153	0.0153
	SM60	0.0063	0.0063	0.0115	0.0115	0.0178	0.0178
	SM70	0.0079	0.0079	0.0145	0.0145	0.0224	0.0224
	SM80	0.0117	0.0117	0.0213	0.0213	0.0329	0.0329
75 % Tkn	Si70	0.0121	0.0121	0.0220	0.0220	0.0340	0.0340
	NM45	0.0088	0.0088	0.0160	0.0160	0.0248	0.0248
	SM50	0.0108	0.0108	0.0198	0.0198	0.0306	0.0306
	SM60	0.0127	0.0127	0.0231	0.0231	0.0357	0.0357
	SM70	0.0159	0.0159	0.0145	0.0145	0.0448	0.0448
	SM80	0.0234	0.0234	0.0213	0.0213	0.0659	0.0659
100 % Tkn	Si70	0.0210	0.0210	0.0380	0.0380	0.0580	0.0580
	NM45	0.0153	0.0153	0.0277	0.0277	0.0423	0.0423
	SM50	0.0189	0.0189	0.0342	0.0342	0.0522	0.0522
	SM60	0.0220	0.0220	0.0399	0.0399	0.0609	0.0609
	SM70	0.0277	0.0277	0.0501	0.0501	0.0765	0.0765
	SM80	0.0407	0.0407	0.0737	0.0737	0.0112	0.0112
Allowable Heat Loading @ 30°C (W) PkW	Si70	100	100	181	181	284	284
	NM45	42	42	76	76	121	121
	SM50	44	44	80	80	125	125
	SM60	46	46	84	84	131	131
	SM70	50	50	91	91	142	142
	SM80	52	52	93	93	145	145
Dynamic Magnifier (M)	Si70	7.5	7.5	7.5	7.5	7.5	7.5
	NM45	15	15	15	15	15	15
	SM50	10	10	10	10	10	10
	SM60	8	8	8	8	8	8
	SM70	6	6	6	6	6	6
	SM80	4	4	4	4	4	4
Maximum Speed (RPM)		5550	5050	4700	4300	4000	3600
Radial Stiffness							
No Load (N/mm)		120	120	218	218	343	343
TkN (N/mm)		382	382	695	695	1092	1092
Axial Stiffness							
No Load (N/mm)		45	45	82	82	129	129
TkN (N/mm)		194	194	353	353	554	554

PCT - H TECHNICAL DATA

COUPLING SIZE		1200		3000		4500		6000		10000	12000		20000	30000	40000
		SAE 11.5	SAE 14	SAE 14	SAE 18	SAE 14	SAE 18	SAE 18	SAE 21	SAE 21	SAE 18	SAE 21	SAE 21	SAE 24	
Nominal Torque Tkn (kNm)		1.2	1.2	3.0	3.0	4.5	4.5	6.0	6.0	10.0	12.0	12.0	20.0	30.0	40.0
Maximum Torque Tkmax (kNm)		3.6	3.6	9.0	9.0	13.5	13.5	18.0	18.0	30.0	36.0	36.0	60.0	90.0	120.0
Vibratory Torque TkW (kNm)		0.4	0.4	1.0	1.0	1.5	1.5	2.0	2.0	3.3	4.0	4.0	6.6	10.0	13.3
Dynamic Torsional Stiffness CTdyn (MNm/rad)															
10 % Tkn	Si70	0.003	0.003	0.008	0.008	0.012	0.012	0.015	0.015	0.027	0.030	0.030	0.054	0.080	0.117
	NM45	0.005	0.005	0.013	0.013	0.019	0.019	0.024	0.024	0.043	0.048	0.048	0.086	0.129	0.187
	SM50	0.006	0.006	0.015	0.015	0.022	0.022	0.028	0.028	0.050	0.056	0.056	0.100	0.150	0.218
	SM60	0.007	0.007	0.018	0.018	0.027	0.027	0.034	0.034	0.061	0.068	0.068	0.122	0.183	0.265
	SM70	0.012	0.012	0.030	0.030	0.044	0.044	0.056	0.056	0.100	0.112	0.112	0.200	0.301	0.437
	SM80	0.018	0.018	0.045	0.045	0.067	0.067	0.085	0.085	0.152	0.170	0.170	0.304	0.456	0.663
25 % Tkn	Si70	0.008	0.008	0.021	0.021	0.032	0.032	0.040	0.040	0.072	0.080	0.080	0.143	0.184	0.310
	NM45	0.012	0.012	0.029	0.029	0.043	0.043	0.055	0.055	0.098	0.110	0.110	0.197	0.295	0.429
	SM50	0.012	0.012	0.030	0.030	0.045	0.045	0.057	0.057	0.102	0.114	0.114	0.204	0.306	0.445
	SM60	0.013	0.013	0.033	0.033	0.049	0.049	0.062	0.062	0.111	0.124	0.124	0.222	0.333	0.484
	SM70	0.020	0.020	0.050	0.050	0.075	0.075	0.095	0.095	0.170	0.190	0.190	0.340	0.510	0.741
	SM80	0.025	0.025	0.064	0.064	0.096	0.096	0.121	0.121	0.217	0.242	0.242	0.433	0.650	0.944
50 % Tkn	Si70	0.022	0.022	0.056	0.056	0.086	0.083	0.105	0.105	0.188	0.210	0.210	0.376	0.565	0.819
	NM45	0.024	0.024	0.060	0.060	0.089	0.089	0.113	0.113	0.202	0.226	0.226	0.404	0.606	0.880
	SM50	0.025	0.025	0.064	0.064	0.095	0.095	0.120	0.120	0.215	0.240	0.240	0.430	0.644	0.936
	SM60	0.028	0.028	0.070	0.070	0.105	0.105	0.133	0.133	0.238	0.266	0.266	0.476	0.714	1.037
	SM70	0.038	0.038	0.096	0.096	0.144	0.144	0.182	0.182	0.326	0.364	0.364	0.652	0.977	1.420
	SM80	0.051	0.051	0.130	0.130	0.194	0.194	0.245	0.245	0.439	0.490	0.490	0.877	1.315	1.911
75 % Tkn	Si70	0.043	0.043	0.109	0.109	0.162	0.162	0.205	0.205	0.367	0.410	0.410	0.734	1.096	1.597
	NM45	0.038	0.038	0.096	0.096	0.143	0.143	0.181	0.181	0.324	0.362	0.362	0.648	0.972	1.412
	SM50	0.042	0.042	0.106	0.106	0.158	0.158	0.200	0.200	0.358	0.400	0.400	0.716	1.074	1.560
	SM60	0.050	0.050	0.127	0.127	0.190	0.190	0.240	0.240	0.430	0.480	0.480	0.859	1.288	1.872
	SM70	0.063	0.063	0.158	0.158	0.235	0.235	0.298	0.298	0.533	0.596	0.596	1.067	1.600	2.324
	SM80	0.095	0.095	0.239	0.239	0.356	0.356	0.451	0.451	0.807	0.902	0.902	1.615	2.421	3.518
100 % Tkn	Si70	0.074	0.074	0.178	0.178	0.265	0.265	0.335	0.335	0.600	0.670	0.670	1.200	1.790	2.609
	NM45	0.054	0.054	0.137	0.137	0.205	0.205	0.259	0.259	0.464	0.518	0.518	0.927	1.390	2.020
	SM50	0.063	0.063	0.159	0.159	0.237	0.237	0.300	0.300	0.537	0.600	0.600	1.074	1.610	2.340
	SM60	0.080	0.080	0.201	0.201	0.300	0.300	0.380	0.380	0.680	0.760	0.760	1.360	2.040	2.964
	SM70	0.093	0.093	0.234	0.234	0.349	0.349	0.442	0.442	0.791	0.884	0.884	1.582	2.373	3.448
	SM80	0.155	0.155	0.391	0.391	0.582	0.582	0.737	0.737	1.319	1.474	1.474	2.638	3.956	5.749
Allowable Heat Loading @ 30°C (W) PkW	Si70	430	430	600	600	760	760	735	735	900	1150	1150	1425	1650	1800
	NM45	140	140	215	215	260	260	300	300	385	420	420	535	645	750
	SM50	140	140	215	215	260	260	300	300	385	420	420	535	645	750
	SM60	140	140	215	215	260	260	300	300	385	420	420	535	645	750
	SM70	145	145	230	230	280	280	320	320	410	450	450	575	700	810
	SM80	155	155	245	245	300	300	350	350	450	500	500	635	750	900
Dynamic Magnifier (M)	Si70	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
	NM45	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	SM50	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	SM60	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	SM70	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	SM80	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Maximum Speed (RPM)		3730	2820	2820	2300	2820	2300	2300	1950	1950	2300	1950	1950	1850	1500
Radial Stiffness															
No Load (N/mm)		520	520	710	710	1050	1050	900	900	1040	1800	1800	2080	2255	2430
TkN (N/mm)		1655	1655	2275	2275	3360	3360	2875	2875	3325	5740	5740	6640	7195	7750
Axial Stiffness															
No Load (N/mm)		195	195	275	275	515	515	345	345	415	980	980	1150	1570	2650
TkN (N/mm)		840	840	1180	1180	2210	2210	1490	1490	1790	4230	4230	4770	6782	8560

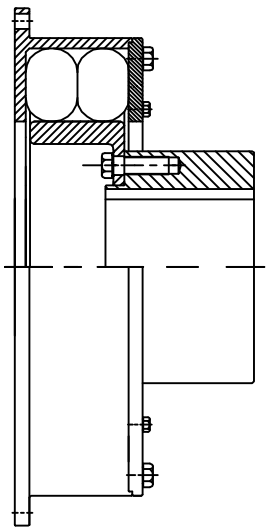
PCT - H DESIGN VARIATIONS

SHAFT TO SHAFT COUPLING



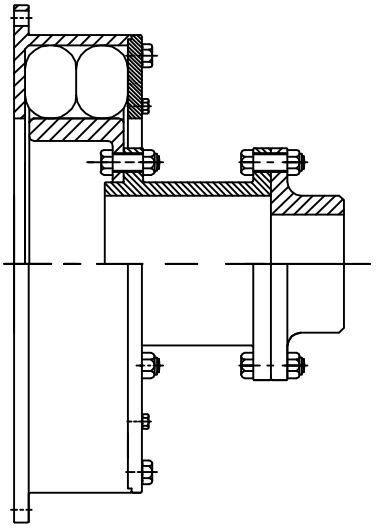
Shaft to shaft coupling is designed for use on electric motor drives and power take of applications

REVERSED INNER MEMBER COUPLING



Coupling with reversed inner member to increase distance between flywheel face and shaft end.

SPACER COUPLING



Spacer coupling is used to increase the distance between shaft ends and allow easy access to driven and driving machine.

ENGINEERED TO ORDER COUPLINGS (ETO)

We design and manufacture couplings to custom fit the drive and driven components for one to one replacement. Our engineering expertise create value added offering for the products by taking efforts to design, develop, analyse, engineer and test.

Engineered to Order Couplings (ETO):

Cardan Shaft
Spacers of various dimensions
Floating / Long Shaft for large DBSE
Brake Disc / Brake Drum
Stub Shaft
Limited End Float
Underwater Coupling
Shear Pin Device
Long Boss Hubs for increased shaft engagement
Splined Hub
Special Adapters
Slim Line
Uni - Directional Couplings

PCPM 600 Spacer Coupling of 1200 mm dia used in a ball mill application for a gold mine in South Africa.

PCPM 27 Underwater Coupling with Shear Pin device on a river dredger in Greece.

Special PCRB 150 Coupling with splined hub for pump application.

PCPM 40 Cardan Shaft Coupling for fan drive where motor was coupled to VFD for power saving to replace fluid coupling. DBSE was more than 2 mtrs. This was for a steel plant.

High temperature blind assembly coupling.

GLOBAL PRESENCE

Representatives

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