

IOI

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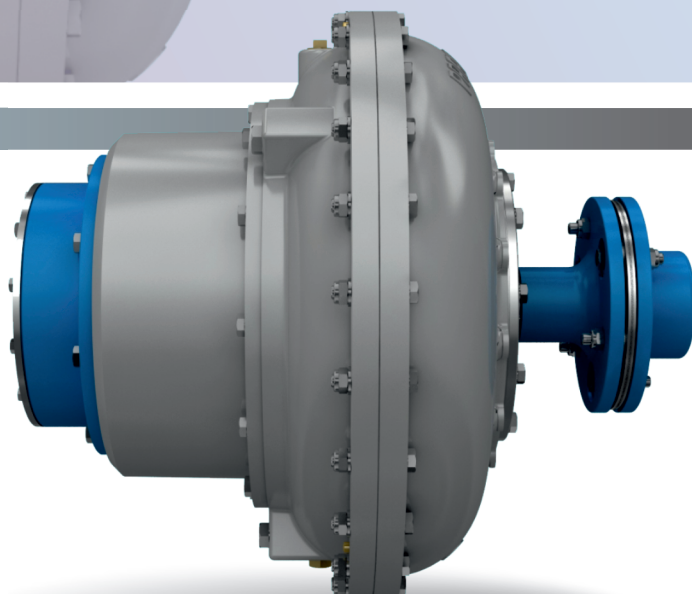
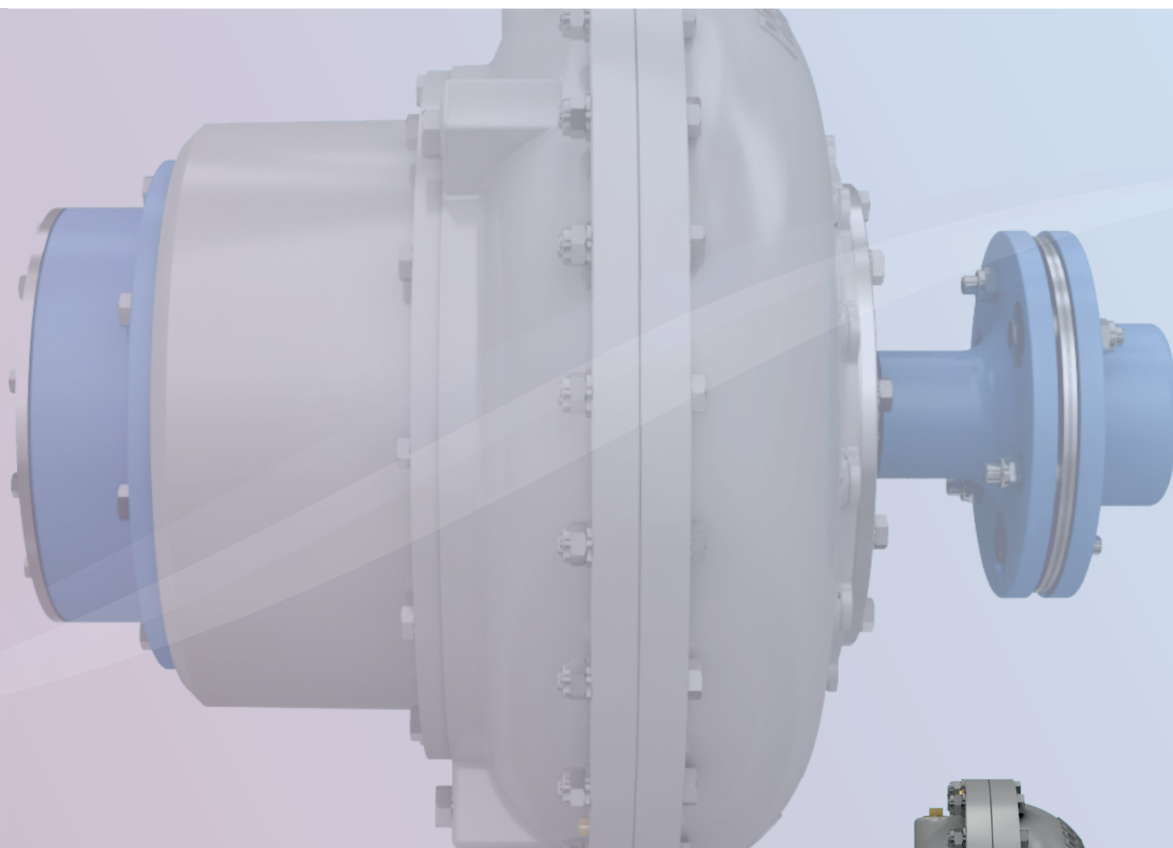
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PREMIUM

Premium Transmission Pvt. Ltd.



PREMIUM

FLUID COUPLING

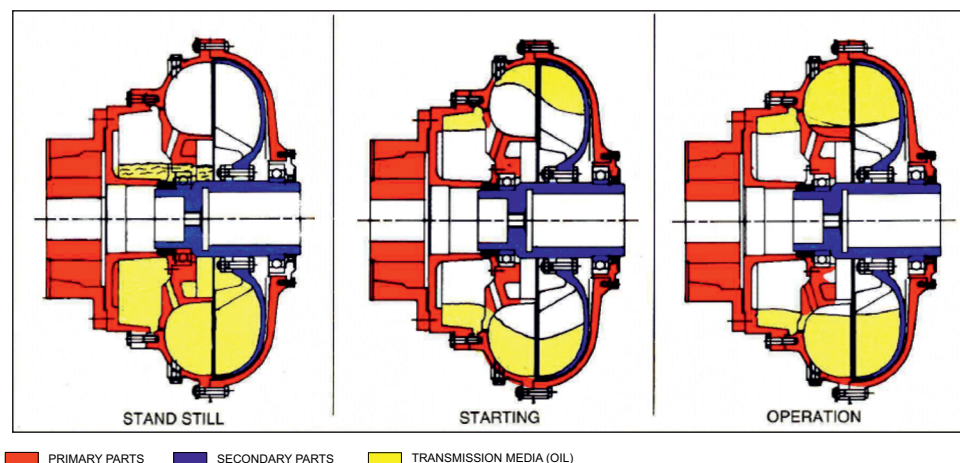


PREMIUM Fluid couplings are hydrodynamic power transmission devices where in power is transmitted from input to output shaft by transference of kinetic energy of a circulating fluid.

PREMIUM constant speed or constant fill fluid coupling consist of two rotating elements each in the form of a bowl fitted with a number of straight radial vanes. These are positioned face to face within a casing which is partially filled with measured quantity of fluid. One bowl called impeller is connected to the prime mover shaft (e.g electric motor, IC engine) and acts as a centrifugal pump. The other bowl called runner is connected to the driven machine shaft and acts as a turbine. When prime mover is started, the fluid is picked up in the vanes of the impeller and thrown outwards and across the gap into the vanes of the runner. As a result the runner begins to rotate and transmit the power to the driven machine.

There is no mechanical connection between the input and output shaft of fluid coupling and transmission of power is by the hydro-kinetic energy of the fluid filled in the casing.

The below figure shows the functional operation during start up and running



In **stand still** state the fluid rests in the lowest position of the fluid coupling.

During **start up** impeller starts rotating and a fluid vortex is created between impeller and runner due to difference in rotational speed of impeller and runner. Fluid vortex is essential for transmission of torque from impeller to runner. This difference in rotational speed between impeller and runner is called '**slip**'. At start-up slip is 100% and gradually reduces as the runner accelerates.

In **operation** the impeller and runner are rotating together with low speed difference (minimum slippage) necessary to generate the nominal / operational torque required by the driven machine.

Characteristics: Typical characteristics of Premium fluid couplings are shown in Fig. 1 & 2 when used with a direct-on-line started squirrel-cage motor.

Starting: At the motor switch-on, fluid coupling has no torque capacity. As the motor accelerates the fluid coupling torque remains low. The motor thus starts under light load and runs up to speed quickly, while torque of the fluid coupling increases smoothly to start the machine as shown in Fig.1. The motor's current draw is also reduced considerably.

PREMIUM fluid couplings accelerate the load utilizing the optimal condition of the motor. High torque is available at this stage for starting and accelerating the machine. Accelerating torque and stalling value can be adjusted simply by varying quantity of fluid in the coupling.



Fig. 1. Starting

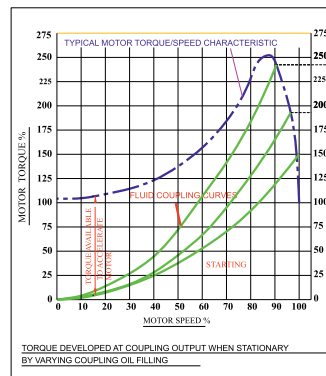
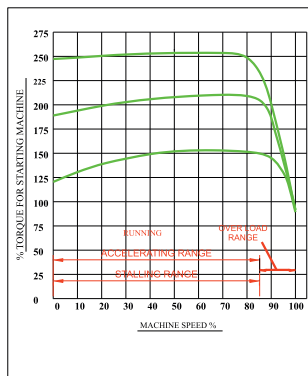


Fig. 2. Running



Running: Typical coupling torque / output speed characteristics available for bringing the machine up to speed smoothly and rapidly are shown in **Fig. 2**

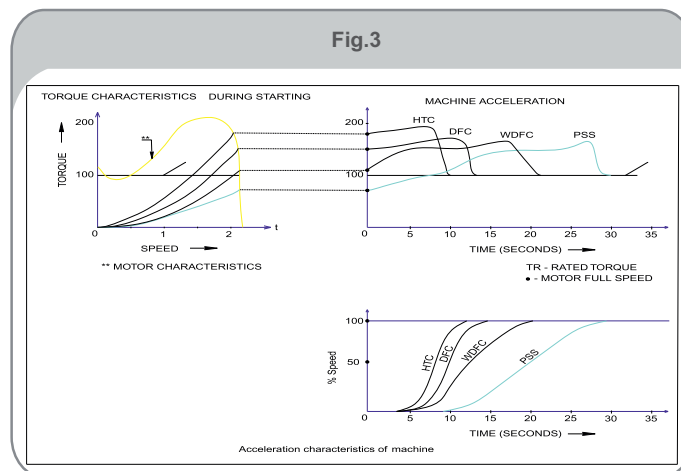
The characteristics of PREMIUM fluid coupling allow motor to be selected according the demand torque of the driven machine, not for the starting torque. It allows smooth acceleration of the driven machine thus prolonging the life of machine due to reduced wear & tear. Slip characteristic of PREMIUM fluid coupling also protects motor and the machine from damages due to overload / jamming.

DELAY FILLING CONSTANT SPEED COUPLINGS: Even more smooth start up is possible with PREMIUM delay filling constant speed fluid couplings. These couplings are provided with an additional chamber (called delay chamber) which retains part of the fluid required for transmission.

During start-up the fluid stored in the delay chamber is transferred to the main circuit through nozzles to achieve controlled acceleration. This feature improves the starting characteristic of machines by controlling the volume of oil into working circuit and also to reduce slip at full load.

Torque and Accelerations characteristics of PREMIUM fluid couplings with / without delay chamber are given in Fig.3 below

Fig.3



In PREMIUM fluid couplings starting or stalling torque required for the application can be set precisely by filling calculated amount of fluid in the coupling. Further adjustment at site can also be made by adjusting the quantity of fluid.

Filling plugs are fitted on the periphery of coupling casing to fill the oil or remove oil.



PREMIUM fluid couplings are well protected by '**fusible plug**' to provide protection against excess temperature rise should the motor overload trip fail to operate during stalled or overload conditions. In the event of overheating fusible plug melts and oil is discharged. This protects motor and driven machine from damages.

In addition to Fusible plug, a '**fusible trip device (FTD)**' can be provided as an option. The temperature setting of FTD is below that of fusible plug. When the set temperature is reached the fusible material melts and releases a plunger which actuates an alarm or gives trip signal in the motor control circuit. Fusible trip device is available as a mechanically operated switch and can be provided as optional. There is no release of oil in this case. Fusible plug provides additional safety in case alarm or trip signal fails to stop the motor.

Non-contact type Thermal sensor / transmitter can also be provided as an option which will also give alarm or trip signal to motor control circuit.

Advantages of PREMIUM Constant speed fluid coupling:

- Light load start
- Smooth controlled acceleration of the driven machine
- Reduced current during start-up. High energy saving
- Motor can be sized according to rated duty of the driven machine
- Asynchronous squirrel cage motors can be used
- High efficiency due to low slip at rated duty.
- Over load protection for motor & driven machine
- Absorbs torsional vibrations in IC Engine drives
- Bidirectional rotation
- Allows multiple start-ups
- Possible to balance loads in case of multiple motor drives
- With wider delay chamber couplings it is possible to limit starting torque to 120% or less for super soft start
- Low first cost with simplicity & reliability
- Fusible plug in all couplings protect against abnormal temperature rise due to overload / jamming

Applications where PREMIUM fluid couplings are used:

Agitators	Belt Conveyors
Ball Mills	Barking Drums
Crushers	Cranes
Chain Conveyors	Centrifuges
Fans	Haulages
Hammer	Mills Mixers
Marine Transmission	Mine-Head belt conveyors
Rotary Dryers	Ring Granulator
Reciprocating Pumps	Winches
Etc.	



PREMIUM CONSTANT SPEED FLUID COUPLING RANGE:

HOLLOW SHAFT FLUID COUPLING TYPE HTC / DFC / WDFC / PSS-H:

These fluid coupling can be mounted rigidly on motor or machine shaft and the other side is connected via flexible coupling which can take axial / radial misalignment. Both hollow shaft & flexible couplings are machined in finished bore to suit motor & machine shafts. Torque transmitting capacity can be set in the range of 120 to 270% of the full load torque.

HTC couplings are without delay chamber and are used in high inertia machines where in starting torque requirement is above 170% of the rated torque.

DFC couplings are with standard size delay chamber. Fluid passes from delay chamber to working circuit through internal nozzles. DFC recommended to limit the starting torque above 140% of the rated torque.

WDFC & PSS-H couplings are having wider delay fill Chambers. Wider delayed fill chambers allows longer acceleration time than standard delayed chambers. In **WDFC** couplings, Oil passes from delayed fill chamber to main circuit through internal nozzles, whereas in **PSS-H** couplings oil passes through externally fitted nozzles. By changing nozzle diameter the flow of fluid can be controlled which allows getting the desired acceleration time or super soft start.

WDFC couplings are employed to limit the starting torque above 120% of rated torque. **PSS-H** couplings can be configured with suitable nozzle diameter to deliver starting torque from 70% of the rated torque.

These couplings can also be offered with brake drum or brake disc wherever required. The couplings provided with brake drum are designated as **BR-HTC / BR-DFC / BR-WDFC & BR-PSS-H** The couplings provided with brake disc are designated as **BD-HTC / BD-DFC / BD-WDFC & BD-PSS-H**

SOLID SHAFT FLUID COUPLING SSTC / SDFC / SWDFC / PSS-S:

These fluid Couplings are having flexible coupling on input side and solid shaft with multidisc type coupling on output side. This design of fluid coupling allows radial removal facility, therefore these couplings can be removed without disturbing the motor and machine alignment.

Characteristics of these fluid couplings are similar to HTC / DFC / WDFC and PSS-H respectively. These couplings can also be offered with **brake drum** or **brake disc** wherever required. The couplings provided with brake drum are designated as **BR-SSTC / BR-SDFC / BR-SWDFC & BR-PSS-S** The couplings provided with brake disc are designated as **BD-SSTC / BD-SDFC / BD-SWDFC & BD-PSS-S**

TRACTION FLUID COUPLING TYPE FCU

FCU type fluid couplings are compact, rugged unit, major components being aluminum alloy castings. It comprises of basic fluid coupling, driving boss along with driving plate mounting on the input side and multidisc type semi-flexible coupling on the output side. These couplings have metallic seal on the output side which allows the coupling to withstand higher temperature. Torque transmitting capacity can be set in the range of 150 to 250% of the full load torque.

FCU couplings can also be offered with brake drum or brake disc upon request and are designated as **BR-FCU & BD-FCU** respectively.

FLUID COUPLING WITH PULLEY TYPE FP / DFP:

FP type fluid couplings are provided with a V-belt pulley. This coupling replaces the pulley usually mounted on a motor shaft in a V-belt drive. It can be fitted simply and quickly on to the new or existing drives. **FP** fluid coupling is mounted directly on to the motor shaft. The **FP** fluid coupling can also be supplied without the pulley sheave (except sizes FP-8) thus allowing the customer to fit his own pulley sheave (or chain sprocket) if required.

DFP type fluid couplings are similar to FP coupling but are provided with standard delay fill chamber.



SOLID SHAFT FLUID COUPLING WITH TWIN MULTIDISC COUPLING TYPE DTMC / WDTMC:

DTMC & WDTMC are similar to DFC & WDFC couplings but are provided with solid shaft and multidisc type couplings at both input and output side.

STEEL CASE FLUID COUPLING TYPE SFC/AFC

These fluid couplings have deep drawn outer steel casing which makes it very compact and exceptionally robust. The internal power transmitting components (impeller & runner) are aluminum alloy castings which make the coupling lighter.

SFC type fluid coupling use mineral oil as power transmission fluid.

AFC type fluid couplings use water or fire resistance fluid for power transmission. In AFC couplings in addition to fusible plug a rupture disc is also provide for safety. The rupture disc will break and allow fluid to come out from the coupling in case inside pressure due to vapor increases beyond the set limit.

SFC & AFC type steel case fluid couplings are specially designed for underground mining application or in atmosphere where explosion hazard is present and use of aluminum are restricted.

SFC & AFC are hollow shaft couplings which can be mounted rigidly on motor or machine shaft and the other side is connected via flexible coupling with bores machined to suit motor & machine shafts.

SFC & AFC couplings can be offered with flexible coupling on input side and solid shaft with multidisc coupling on the output side upon request. These special versions are designated as **SFC-S & AFC-S** respectively. SFC & AFC couplings can also be offered with standard delay fill cambers upon request. These special versions are designated as **DSFC & DAFC** respectively.

Fusible Plug/Rupture disc:

All fluid couplings are fitted with fusible plug. Water filled fluid couplings, in addition to fusible plug, are fitted with Rupture disc, for the safety of the fluid couplings and machines.

Recommended operation fluid

Oil Filling : High grade mineral oil of reputed make conforming to ISO VG : 32 or 46 grade

Water Filling: Normal drinking water mixed with Phosphate Ester (5 to 10%)

Optional accessories:

- Fusible trip device assembly
- Contactless thermal sensor/ transmitter
- Brake Drum
- Brake Disc
- Over size flexible coupling to accommodate larger shaft diameter.
- Pedestal, foot mounting arrangement

Additional Information:

- Fluid couplings will be delivered without oil filling. Oil can be filled at site and adjusted according to absorbed power and desired performance characteristics.
- All rotating components are individually dynamically balanced to Grade 2.5 – ISO 1940
- Couplings are tested as per Quality Acceptance Protocol of Premium Transmission Private Ltd.
- A protection cover is necessary to protect working staff from accidental touching with rotating parts of fluid coupling. Protection cover should be designed to allow adequate air circulation for cooling of fluid coupling.
- Fusible plug reaction temperature is $145^{\circ}\text{C} \pm 5^{\circ}\text{C}$ for all couplings except FCU couplings for which it is $183^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and for couplings with water it is $95^{\circ}\text{C} \pm 5^{\circ}\text{C}$.
- Fluid couplings can be offered with special adaptor for diesel engine drives



MAXIMUM OPERATING KW RATING AT VARIOUS OPERATING SPEEDS

HTC / DFC / WDFC / PSS-H / SSTC / SDFC / SWDFC / PSS-S / DTMC / WDTMC

Size	Maximum Operating KW rating at Various operating speeds						
	720	870	960	1200	1450	1750	2950
204	0.4	0.7	0.9	2.4	3	5.2	17.5
266	1.5	2.5	3.7	7.5	12	20	30
290	2.8	4.6	6	11	22	32	75
320	4	7.5	11	15	35	56	85
370	6	11	15	30	56	90	140
410	11	19	26	47	90	140	275
450	17	30	40	72	134	215	450
500	31	55	75	131	175	275	-
540	47	82	110	182	260	408	-
580	60	105	150	240	350	500	-
620	82	150	200	300	430	621	-
660	105	187	250	360	600	900	-
740	200	337	390	567	800	1150	-
810	290	490	600	699	1150	1450	-
910	532	760	860	1192	-	-	-
1040	870	1150	1252	1500	-	-	-
1150	1015	1450	1552	1840	-	-	-

Notes:

- Sizes 204 & 266 are available only in HTC couplings.
- DTMC couplings are available upto 740 size only.
- SSTC / SDFC / SWDFC / PSS-S / WDTMC are available from size 290 to 1040.
- Size 1150 is available in HTC / DFC / WDFC / PSS-H.

DFP

Size	Maximum Operating KW rating at Various operating speeds							
	500	580	720	870	960	1200	1450	1750
290	0.67	0.95	2.5	4.1	5.3	9.5	20	25
320	0.96	1.42	3.6	6.3	8.7	13	28	39
370	1.9	2.8	4.7	9	14	24	45	63
410	3.9	5	9.4	17	22	40	73	100
450	5	9	14.5	26	35	63	107	148
500	10	14	25	53	72	112	140	215



FCU

Size	Maximum Operating KW rating at Various operating speeds							
	500	580	720	870	960	1200	1450	1750
8	-	-	0.29	0.51	0.69	1.2	2.3	4.1
9.25	-	0.31	0.6	1.06	1.4	2.6	4.9	8.6
10.5	0.38	0.59	1.3	2	2.7	4.7	9.2	16.2
11.5	0.61	0.96	2	3	4	8	15	26
12.75	1.04	1.64	3.1	4.5	7.5	13.6	26	43
14.5	1.86	3	5.7	10	13.4	24.3	46	76
16.25	3.5	5.4	10.4	18.4	24.8	45	75	107
17.75	5.2	8.1	15.5	27.6	37.3	67	120	158
20	10.3	15.7	30	55	75	112	151	210
23	19	30	56.7	100	130	180	275	418
26	37.3	58	112	172	210	261	455	574
29	64.9	101	187	261	340	420	615	-
32	100	155	271	360	420	692	837	-
36	175	273	345	560	725	-	-	-
41	336	410	634	750	1000	-	-	-

FP

Size	Maximum Operating KW rating at Various operating speeds							
	500	580	720	870	960	1200	1450	1750
8	-	-	0.26	0.45	0.62	1.1	2	3.65
9	-	0.3	0.54	0.93	1.27	2.24	4.47	7.46
10	0.34	0.52	1	1.79	2.39	4.33	8.2	14.16
11	0.54	0.86	1.6	2.8	3.8	6.7	13	22.3
12	0.89	1.4	2.7	4.5	6.3	11.6	22.3	33.6
14	1.7	2.7	5	9	12.3	21.6	41	59.7
16	3	4.7	9	15.6	21.6	38.7	64	-
17	4.7	7.4	14	24.6	33.5	59.7	93.2	-
20	9	13.7	24.3	52.7	71	108	135	-

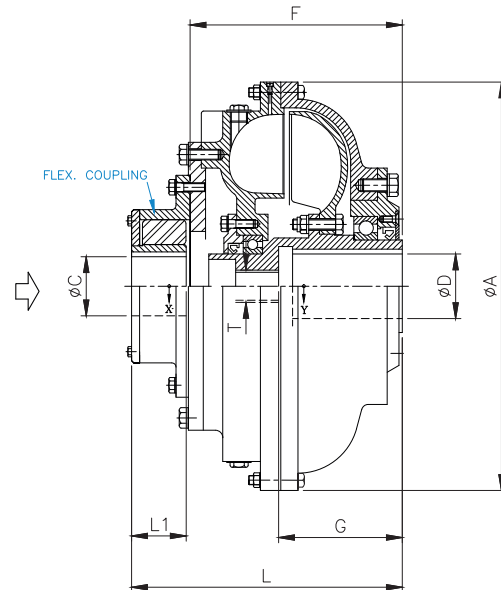
SFC / AFC

Size	Maximum Operating KW rating at Various operating speeds						
	580	720	870	960	1200	1450	1750
46	0.96	1.8	3	4.3	7.9	15	22.5
51	1.5	2.8	4.7	6.9	11.6	22	33
58	2.8	5.5	9.3	13	23.4	45	67
65	4.8	9.1	15.5	21.8	39	75	112
71	5.5	14.6	24.8	36.1	62.4	120	180
80	16.5	28.5	48.5	76.2	83.2	160	230

Above charts give maximum or limit ratings of the couplings. Use input power and speed for selection of unit size. It is advisable to select a larger size if input power is close to the maximum rating.



HOLLOW SHAFT TRACTION COUPLING

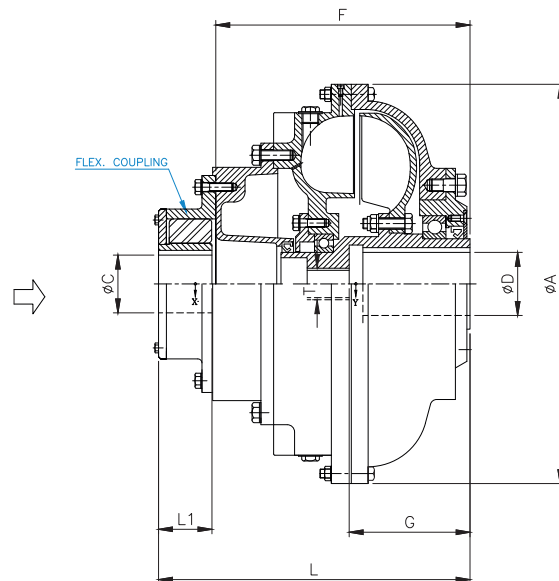


- C&D** – Standard bores with standard keyways – mm
- Q** – Approx max oil quantity – ltr
- W** – Approx total weight of unit (filled weight) – kg
- W1** – Approx total weight of unit (dry weight) – kg
- X** – Weight reaction on driving machine – kg
- Y** – Weight reaction on driven machine (filled weight) – kg
- Z1** – GD² of primary parts – kgm²
- Z2** – GD² of secondary parts – kgm²

CPLG SIZE	A	C		D		F	G	L	T	L1	W	W1	X	Y	Z1	Z2	Q
		(Min.)	(Max.)	(Min.)	(Max.)												
204	237	13	30	20	38	146	80	217	M16x2	27	13.7	12	5	8.7	0.346	0.235	2
266	308	30	55	22	42	172	110	226	M20x2.5	51	21.0	18	7.0	14	0.54	0.270	3.4
290	340	30	55	25	48	184	110	238	M20x2.5	51	25.5	22	8.5	17	0.80	0.298	4
320	380	30	55	32	60	196	115	250	M30x3.5	51	40.5	35	15	25.5	1.35	0.374	6.2
370	434	35	70	32	60	219	140	276	M30x3.5	54	52.4	44	21.5	30.9	2.60	0.627	9.5
410	454	40	75	32	80	248	155	311	M30x3.5	60	87.3	75	25	62.3	4.75	0.876	14
450	521	40	85	32	80	259	170	329	M30x3.5	67	111.8	96	36	75.8	6.80	1.770	18
500	595	55	95	32	90	264	170	353	M30x3.5	86	142.2	118	40	102.2	12.6	2.530	27.6
540	630	55	95	32	90	299	170	388	M30x3.5	86	173.2	144	49	124.2	17.5	3.680	33.2
580	660	55	115	32	110	303	176	401	M30x3.5	95	207.3	170	60	147.3	24	5.560	42.5
620	700	55	115	32	110	327	176	425	M30x3.5	95	258	203	71	187	32	6.350	54.8
660	749	55	115	32	110	334	180	432	M30x3.5	95	297.7	245	85	212.7	37	8.535	60
740	838	55	115	32	145	403	240	501	M30x3.5	95	355.2	285	95	260.2	65	17.85	80
810	914	70	140	40	145	492	305	611	M36x4	114	386.6	290	105	281.6	102	27.25	110
910	1032	70	140	50	190	498	285	617	48x8 TRAP.	114	554.7	430	245	309.7	198	38.15	142
1040	1162	80	170	60	190	526	315	659	48x8 TRAP.	127	629.6	454	308	321.6	275	66.50	200
1150	1300	80	190	60	190	504	315	690	48x8 TRAP.	180	1085	850	340	718	280	69	208



HOLLOW SHAFT FLUID COUPLING WITH STANDARD DELAY CHAMBER

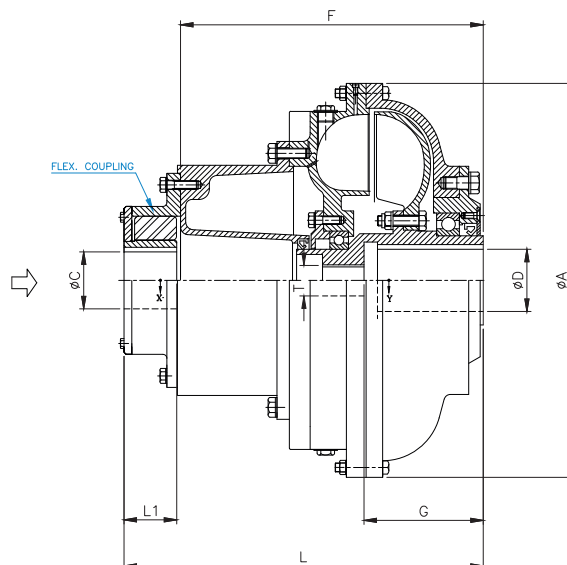


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X – Weight reaction on driving machine – kg
Y – Weight reaction on driven machine (filled weight) – kg
Z1 – GD^2 of primary parts – kgm^2
Z2 – GD^2 of secondary parts – kgm^2

CPLG SIZE	A	C		D		F	G	L	T	L1	W	W1	X	Y	Z1	Z2	Q
		(Min.)	(Max.)	(Min.)	(Max.)												
290	340	30	55	25	48	215	110	270	M20x2.5	51	28.0	24	9	19.0	0.95	0.298	4.5
320	380	30	55	32	60	242	115	296	M30x3.5	51	44.3	38	15	29.3	1.48	0.374	7.2
370	434	35	70	32	60	280	140	338	M30x3.5	54	58.0	48.5	20	38	2.80	0.627	10.8
410	454	40	75	32	80	319	155	383	M30x3.5	60	95.8	80	25	70.8	4.95	0.876	15.8
450	521	40	85	32	80	339	170	409	M30x3.5	67	124.0	106	36	88.0	7.10	1.770	20.5
500	595	55	95	32	90	337	170	426	M30x3.5	86	162.0	135	40	122.0	13.2	2.530	30.8
540	630	55	95	32	90	363	170	452	M30x3.5	86	187.3	154	49	138.3	21.5	3.68	38
580	660	55	115	32	110	357	176	455	M30x3.5	95	226.3	185	60	166.3	36.5	5.560	47
620	700	55	115	32	110	385	176	483	M30x3.5	95	283	224	71	212	38	6.35	59
660	749	55	115	32	110	416	180	514	M30x3.5	95	319.7	260	85	234.7	40	8.535	68
740	838	55	115	32	145	515	240	613	M30x3.5	95	383.2	305	95	288.2	68	17.85	89
810	914	70	140	40	145	531	305	650	M36x4	114	420.4	315	105	315.4	107	27.25	120
910	1032	70	140	50	190	618	285	737	48x8 TRAP.	114	595.2	460	245	350.2	205	38.15	154
1040	1162	80	170	60	190	662	315	795	48x8 TRAP.	127	705.4	514	308	397	290	66.50	218
1150	1300	80	190	60	190	664	315	850	48x8 TRAP.	180	1192	954	340	852	308	69	238



HOLLOW SHAFT FLUID COUPLING WITH WIDER DELAY CHAMBER

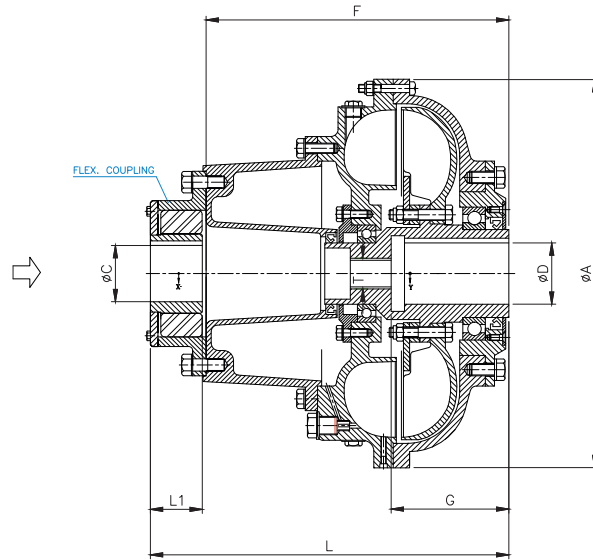
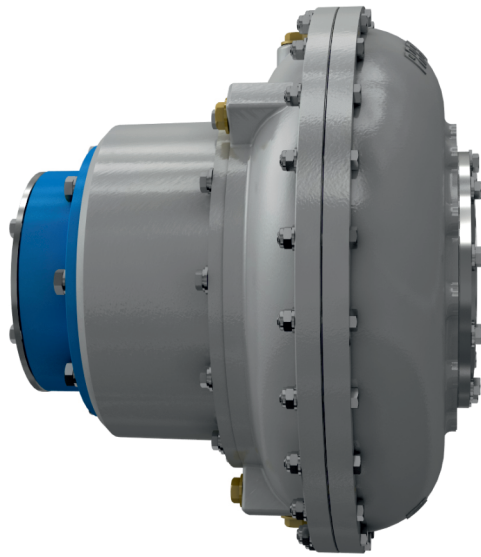


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Z1 – GD^2 of primary parts – kgm^2
Z2 – GD^2 of secondary parts – kgm^2

CPLG SIZE	A	C		D		F	G	L	T	L1	W	W1	X	Y	Z1	Z2	Q
		(Min.)	(Max.)	(Min.)	(Max.)												
290	340	30	55	25	48	265	110	320	M20x2.5	51	32.9	29	9	24.0	1.10	0.298	4.5
320	380	30	55	32	60	296	115	350	M30x3.5	51	47.3	41	15	32.3	1.68	0.374	7.2
370	434	35	70	32	60	316	140	374	M30x3.5	54	72.8	63.3	21.3	51.5	3.12	0.627	10.8
410	454	40	75	32	80	377	155	441	M30x3.5	60	98.9	85	25	73.9	5.15	0.876	15.8
450	521	40	85	32	80	402	170	472	M30x3.5	67	134.0	116	36	98.0	7.4	1.770	20.5
500	595	55	95	32	90	402	170	491	M30x3.5	86	172.0	145	40	132.0	13.8	2.530	30.8
540	630	55	95	32	90	433	170	522	M30x3.5	86	211.4	178	49	162.4	23.5	4.10	38
580	660	55	115	32	110	441	176	539	M30x3.5	95	241.3	200	60	181.3	32.5	5.560	47
620	700	80	115	32	110	468	315	1010	M30x3.5	95	293.5	238	72	221.5	39.5	72	62
660	749	55	115	32	110	478	180	576	M30x3.5	95	334.7	275	85	249.7	43	8.535	68
740	838	55	115	32	145	610	240	708	M30x3.5	95	403.2	325	95	308.2	72	17.85	89
810	914	70	140	40	145	605	305	724	M36x4	114	435.4	330	105	330.4	112	27.25	120
910	1032	70	140	50	190	764	285	883	48x8 TRAP.	114	875.2	740	245	630.2	215	38.15	154
1040	1162	80	170	60	190	813	315	946	48x8 TRAP.	127	1181	990	340	841	308	66.50	218
1150	1300	80	190	60	190	824	315	946	48x8 TRAP.	180	1314	974	340	974	325	69	270



HOLLOW SHAFT SUPER SOFT FLUID COUPLING



C&D – Standard bores with standard keyways – mm

Q – Approx max oil quantity – ltr

W – Approx total weight of unit (filled weight) – kg

W1 – Approx total weight of unit (dry weight) – kg

X – Weight reaction on driving machine – kg

Y – Weight reaction on driven machine (filled weight) – kg

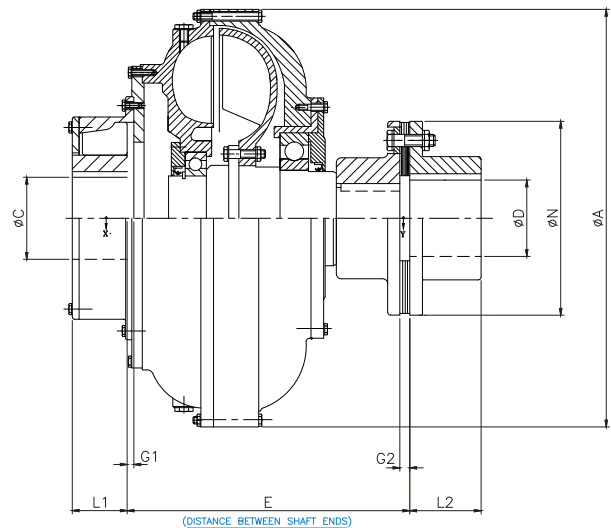
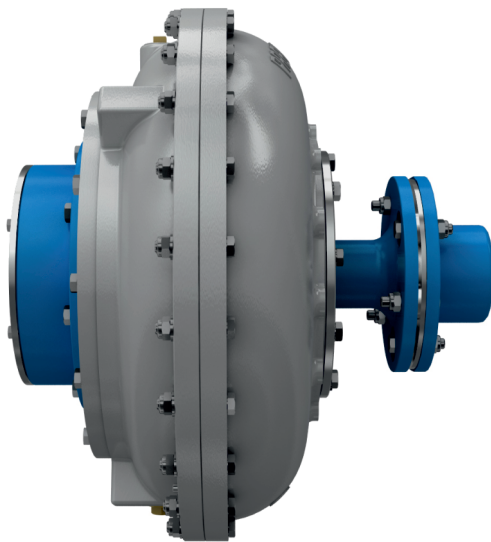
Z1 – GD² of primary parts – kgm²

Z2 – GD² of secondary parts – kgm²

CPLG SIZE	A	C		D		F	G	L	T	L1	W	W1	X	Y	Z1	Z2	Q
		(Min.)	(Max.)	(Min.)	(Max.)												
290	340	30	55	25	48	265	110	320	M20x2.5	51	32.9	29	9	24.0	1.10	0.298	4.5
320	380	30	55	32	60	296	115	350	M30x3.5	51	47.3	41	15	32.3	1.68	0.374	7.2
370	434	35	70	32	60	316	140	374	M30x3.5	54	72.8	63.3	21.3	51.5	3.12	0.627	10.8
410	454	40	75	32	80	377	155	441	M30x3.5	60	98.9	85	25	73.9	5.15	0.876	15.8
450	521	40	85	32	80	402	170	472	M30x3.5	67	134.0	116	36	98.0	7.4	1.770	20.5
500	595	55	95	32	90	402	170	491	M30x3.5	86	172.0	145	40	132.0	13.8	2.530	30.8
540	630	55	95	32	90	433	170	522	M30x3.5	86	211.4	178	49	162.4	23.5	4.10	38
580	660	55	115	32	110	441	176	539	M30x3.5	95	241.3	200	60	181.3	32.5	5.560	47
620	700	55	115	32	110	468	176	566	M30x3.5	95	293.5	238	72	221.5	39.5	72	62
660	749	55	115	32	110	478	180	576	M30x3.5	95	334.7	275	85	249.7	43	8.535	68
740	838	55	115	32	145	610	240	708	M30x3.5	95	403.2	325	95	308.2	72	17.85	89
810	914	70	140	40	145	605	305	724	M36x4	114	435.4	330	105	330.4	112	27.25	120
910	1032	70	140	50	190	764	285	883	48x8 TRAP.	114	875.2	740	245	630.2	215	38.15	154
1040	1162	80	170	60	190	813	315	946	48x8 TRAP.	127	1181	990	340	841	308	66.50	218
1150	1300	80	190	60	190	824	315	1010	48x8 TRAP.	180	1314	974	340	974	325	69	270



SOLID SHAFT TRACTION FLUID COUPLING



C&D – Standard bores with standard keyways – mm

Q – Approx max oil quantity – ltr

W – Approx total weight of unit (filled weight) – kg

W1 – Approx total weight of unit (dry weight) – kg

X – Weight reaction on driving machine – kg

Y – Weight reaction on driven machine (filled weight) – kg

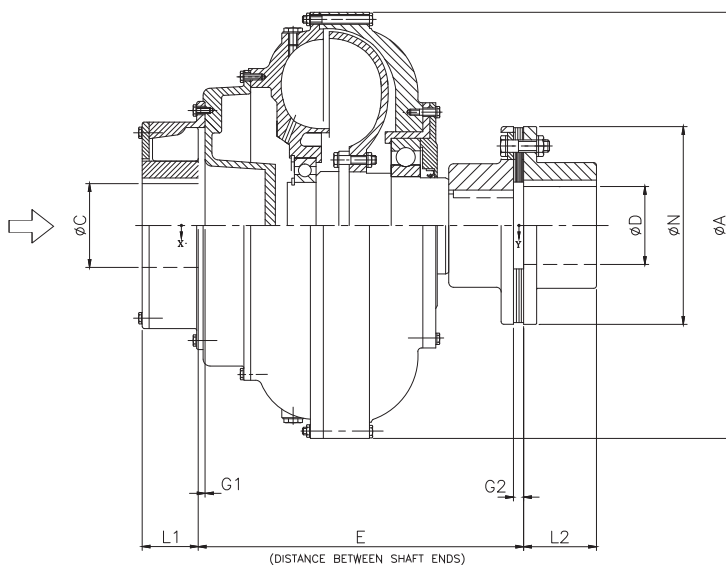
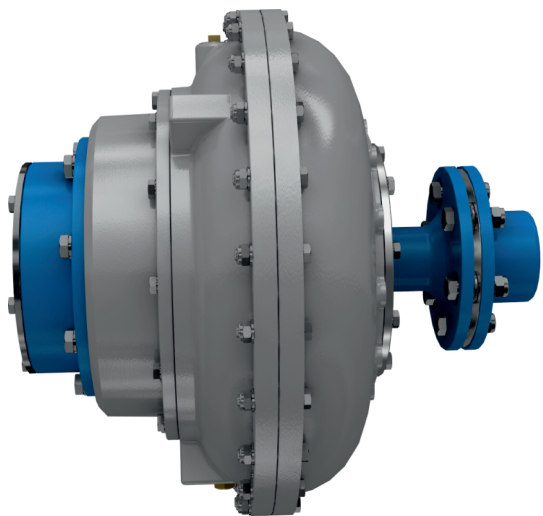
Z1 – GD^2 of primary parts – kgm²

Z2 – GD^2 of secondary parts – kgm²

CPLG SIZE	A	C		D		E	G1	G2	L1	L2	N	W	W1	X	Y	Z1	Z2	Q
		(Min.)	(Max.)	(Min.)	(Max.)													
290	340	30	55	12.7	55	258	3.2	9.5	51	51	165	39.9	36	27.9	12	0.95	0.325	4.5
320	380	30	55	12.7	55	265	3.2	9.5	51	51	165	53.3	47	37.1	16.2	1.48	0.415	7.2
370	434	35	70	19	70	294	3.2	12.7	54	67	191	81.4	72	57.1	24.3	2.80	0.690	10.8
410	454	40	75	19	70	321	3.2	12.7	60	67	191	109.8	96	84.8	25	4.95	0.975	15.8
450	521	40	85	25.4	76	350	3.2	12.7	67	70	222	148.0	130	111.0	37	7.10	2.565	20.5
500	595	55	95	25.4	76	368	3.2	12.7	86	70	222	200.0	173	157.0	43	13.2	3.4	30.8
540	630	55	95	25.4	76	411	3.2	12.7	86	70	222	223.0	195	177	46	20.2	4.1	32
580	660	55	115	25.4	100	452	3.2	19	95	95	260	268.2	245	221.2	65	36.5	7.0	47
620	700	55	115	25.4	100	467	3.2	19	95	95	260	293.8	246.4	224.8	69	37.2	8.5	54
660	749	55	115	25.4	100	468	3.2	19	95	95	260	380.7	321	289.7	91	40.0	10.26	68
740	838	55	115	38.1	115	526	3.2	22	95	114	324	443.1	365	343.1	100	68	19.85	68
810	914	70	115	38.1	115	644	3.2	22	95	114	324	754.3	649	550.3	204	107	31.5	120
910	1032	70	140	50.8	150	655	4.8	22	114	140	381	950.2	815	700.2	250	205	43	154
1040	1162	80	170	50.8	150	698	6.4	22	127	140	381	1246.4	1055	906.4	340	290	78.8	218



SOLID SHAFT STANDARD DELAY CHAMBER FLUID COUPLING



C&D – Standard bores with standard keyways – mm

Q – Approx max oil quantity – ltr

W – Approx total weight of unit (filled weight) – kg

W1 – Approx total weight of unit (dry weight) – kg

X – Weight reaction on driving machine – kg

Y – Weight reaction on driven machine (filled weight) – kg

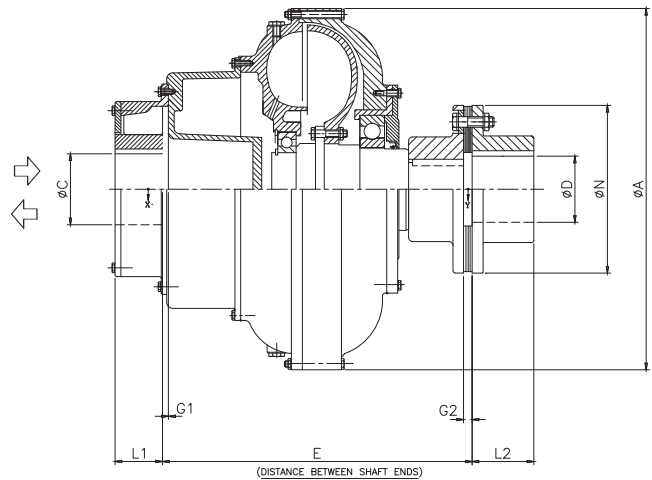
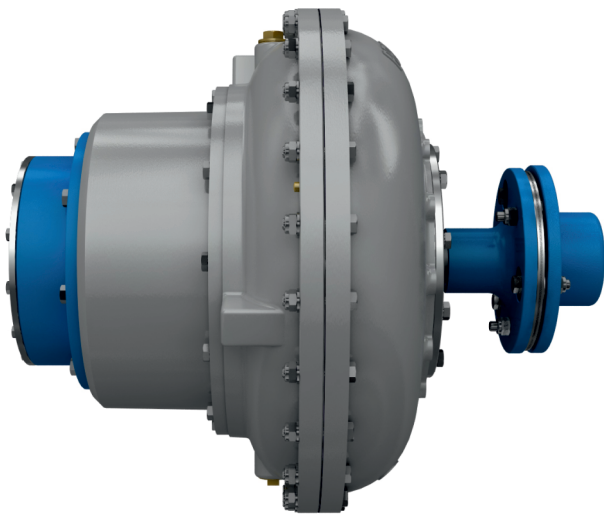
Z1 – GD^2 of primary parts – kgm^2

Z2 – GD^2 of secondary parts – kgm^2

CPLG SIZE	A	C		D		E	G1	G2	L1	L2	N	W	W1	X	Y	Z1	Z2	Q
		(Min.)	(Max.)	(Min.)	(Max.)													
290	340	30	55	12.7	55	289	3.2	9.5	51	51	165	39.9	36	27.9	12	0.95	0.325	4.5
320	380	30	55	12.7	55	312	3.2	9.5	51	51	165	53.3	47	37.1	16.2	1.48	0.415	7.2
370	434	35	70	19	70	355	3.2	12.7	54	67	191	81.4	72	57.1	24.3	2.80	0.690	10.8
410	454	40	75	19	70	392	3.2	12.7	60	67	191	109.8	96	84.8	25	4.95	0.975	15.8
450	521	40	85	25.4	76	430	3.2	12.7	67	70	222	148.0	130	111.0	37	7.10	2.565	20.5
500	595	55	95	25.4	76	442	3.2	12.7	86	70	222	200.0	173	157.0	43	13.2	3.4	30.8
540	630	55	95	25.4	76	475	3.2	12.7	86	70	222	228.3	195	185.3	43	25.2	4.5	38
580	660	55	115	25.4	100	506	3.2	19	95	95	260	286.2	245	221.2	65	36.5	7.0	47
620	700	55	115	25.4	100	528	3.2	19	95	95	260	329.8	278	264.8	65	38.2	8.5	59
660	749	55	115	25.4	100	550	3.2	19	95	95	260	380.7	321	289.7	91	40.0	10.26	68
740	838	55	115	38.1	115	631	3.2	22	95	114	324	443.1	365	343.1	100	68	19.85	89
810	914	70	115	38.1	115	730	3.2	22	95	114	324	754.3	649	550.3	204	107	31.5	120
910	1032	70	140	50.8	150	768	4.8	22	114	140	381	950.2	815	700.2	250	205	43	154
1040	1162	80	170	50.8	150	804	6.4	22	127	140	381	1246.4	1055	906.4	340	290	78.8	218



SOLID SHAFT WIDER DELAY CHAMBER FLUID COUPLING

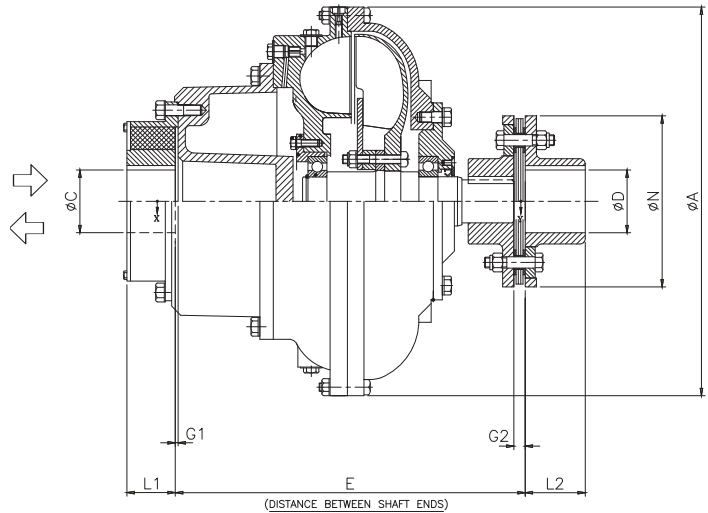
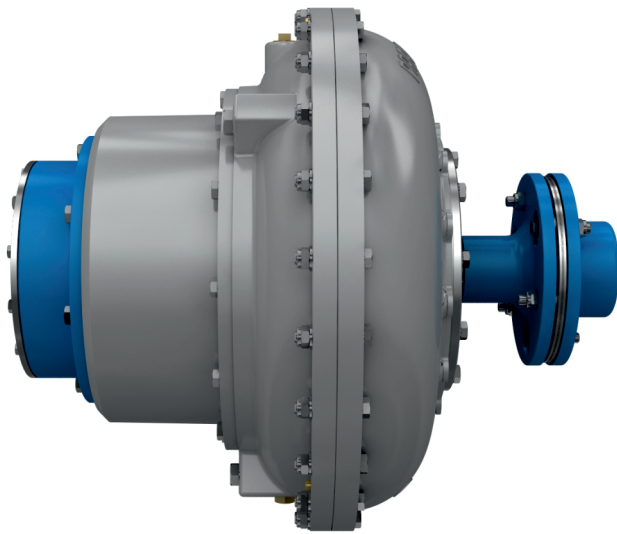


- C&D** – Standard bores with standard keyways – mm
Q – Approx max oil quantity – ltr
W – Approx total weight of unit (filled weight) – kg
W1 – Approx total weight of unit (dry weight) – kg
X – Weight reaction on driving machine – kg
Y – Weight reaction on driven machine (filled weight) – kg
Z1 – GD^2 of primary parts – kgm^2
Z2 – GD^2 of secondary parts – kgm^2

CPLG SIZE	A	C		D		E	G1	G2	L1	L2	N	W	W1	X	Y	Z1	Z2	Q
		(Min.)	(Max.)	(Min.)	(Max.)													
290	340	30	55	12.7	60	339	3.2	9.5	51	51	165	40.9	37	28.9	12	1.15	0.325	4.5
320	380	30	55	12.7	60	366	3.2	9.5	51	51	165	55.3	49	39.1	16.2	1.60	0.415	7.2
370	434	35	70	19	70	391	3.2	12.7	54	67	191	83.4	74	59.1	24.3	3.01	0.690	10.8
410	454	40	75	19	70	450	3.2	12.7	60	67	191	111.8	98	86.8	25	5.15	0.975	15.8
450	521	40	85	25.4	76	493	3.2	12.7	67	70	222	148.0	130	111.0	37	7.30	2.565	20.5
500	595	55	95	25.4	76	507	3.2	12.7	86	70	222	202.0	175	159.0	43	13.5	3.4	30.8
540	630	55	95	25.4	76	547	3.2	12.7	86	70	222	260.7	223	211.7	49	26.8	7.0	43
580	660	55	115	25.4	100	590	3.2	19	95	95	260	288.2	247	223.2	65	36.8	7.0	47
620	700	55	115	25.4	100	611	3.2	19	95	95	260	356.4	302	284.4	72	39.2	9.3	62
660	749	55	115	25.4	100	612	3.2	19	95	95	260	382.7	323	291.7	91	40.3	10.26	68
740	838	55	115	38.1	115	726	3.2	22	95	114	324	446.1	368	346.1	100	70	19.85	68
810	914	70	115	38.1	115	644	3.2	22	95	114	324	754.3	649	550.3	204	107	31.5	120
910	1032	70	140	50.8	150	655	4.8	22	114	140	381	953.2	818	703.2	250	208	43	154
1040	1162	80	170	50.8	150	955	6.4	22	127	140	381	1249.4	1055	909.4	340	295	78.8	218



SOLID SHAFT SUPER SOFT START FLUID COUPLING

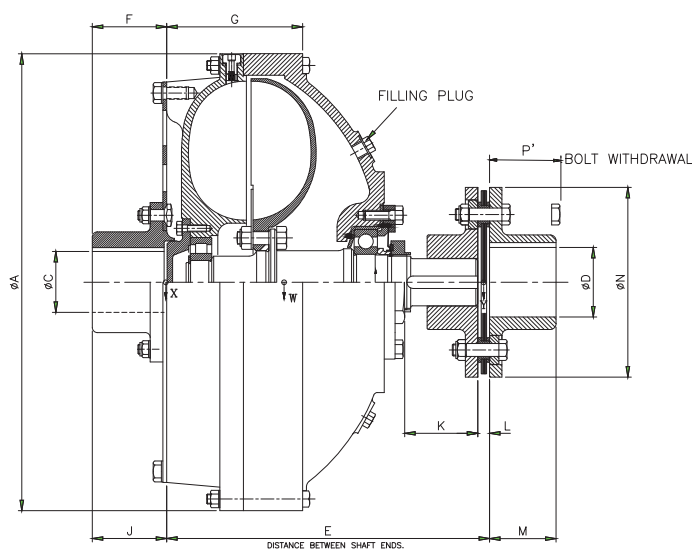
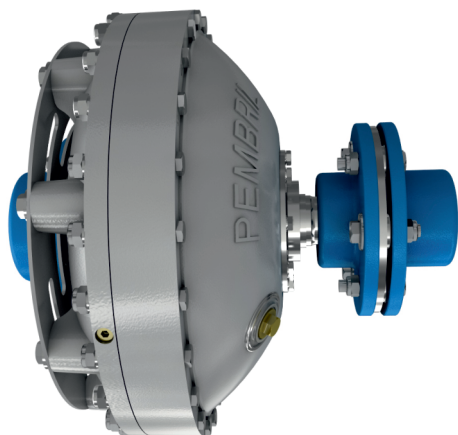


- C&D** – Standard bores with standard keyways – mm
Q – Approx max oil quantity – ltr
W – Approx total weight of unit (filled weight) – kg
W1 – Approx total weight of unit (dry weight) – kg
X – Weight reaction on driving machine – kg
Y – Weight reaction on driven machine (filled weight) – kg
Z1 – GD^2 of primary parts – kgm^2
Z2 – GD^2 of secondary parts – kgm^2

CPLG SIZE	A	C		D		E	G1	G2	L1	L2	N	W	W1	X	Y	Z1	Z2	Q
		(Min.)	(Max.)	(Min.)	(Max.)													
290	340	30	55	12.7	55	339	3.2	9.5	51	51	165	40.9	37	28.9	12	1.15	0.325	4.5
320	380	30	55	12.7	55	366	3.2	9.5	51	51	165	55.3	49	39.1	16.2	1.60	0.415	7.2
370	434	35	70	19	70	391	3.2	12.7	54	67	191	83.4	74	59.1	24.3	3.01	0.690	10.8
410	454	40	75	19	70	450	3.2	12.7	60	67	191	111.8	98	86.8	25	5.15	0.975	15.8
450	521	40	85	25.4	76	493	3.2	12.7	67	70	222	148.0	130	111.0	37	7.30	2.565	20.5
500	595	55	95	25.4	76	507	3.2	12.7	86	70	222	202.0	175	159.0	43	13.5	3.4	30.8
540	630	55	95	25.4	76	547	3.2	12.7	86	70	222	260.7	223	211.7	49	26.8	7.0	43
580	660	55	115	25.4	100	590	3.2	19	95	95	260	288.2	247	223.2	65	36.8	7.0	47
620	700	55	115	25.4	100	611	3.2	19	95	95	260	356.4	302	284.4	72	39.2	9.3	62
660	749	55	115	25.4	100	612	3.2	19	95	95	260	382.7	323	291.7	91	40.3	10.26	68
740	838	55	115	38.1	115	726	3.2	22	95	114	324	446.1	368	346.1	100	70	19.85	89
810	914	70	115	38.1	115	783	3.2	22	95	114	324	757.3	652	553.3	204	110	31.5	120
910	1032	70	140	50.8	150	914	4.8	22	114	140	381	953.2	818	703.2	250	208	43	154
1040	1162	80	170	50.8	150	955	6.4	22	127	140	381	1249.4	1058	909.4	340	295	78.8	218



TRACTION FLUID COUPLING

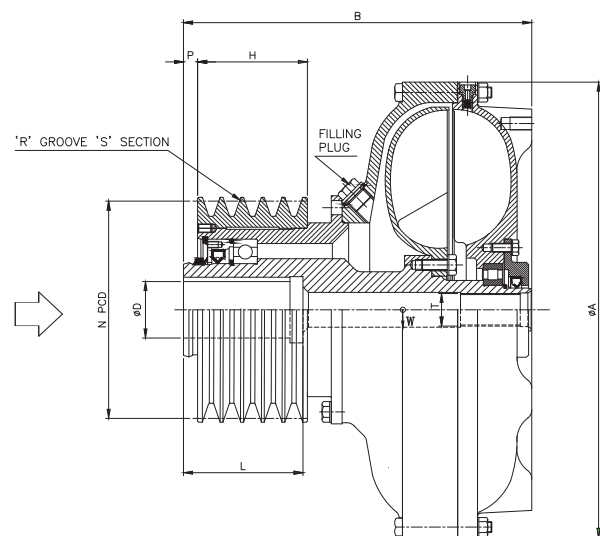
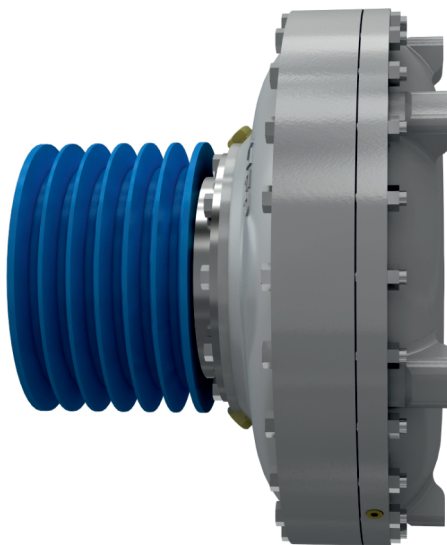


- C&D** – Standard bores with standard keyways - mm
- W** – Approx total weight of unit (filled weight) – kg
- W1** – Approx total weight of unit (dry weight) – kg
- X** – Weight reaction on driving machine – kg
- Y** – Weight reaction on driven machine (filled weight) – kg
- Z1** – GD^2 of primary parts – kgm^2
- Z2** – GD^2 of secondary parts – kgm^2

CPLG SIZE	A	C		D		F	F	G	J	K	L	M	N	P	Q	W	W1	X	Y	Z1	Z2
		(Min.)	(Max.)	(Min.)	(Max.)																
8	237	12.7	42	9.5	35	165	46	68	44	35	6.4	32	111	35	1.7	13.2	11.7	8.2	5	0.246	0.037
9.25	268	12.7	48	12.7	48	194	44	73	41	41	9.5	40	146	46	2.6	17.7	15.4	11.3	6.4	0.332	0.109
10.5	308	12.7	48	12.7	48	210	44	87	41	44	9.5	40	146	46	3.7	22.2	18.9	14.1	8.1	0.540	0.210
11.5	333	19	60	12.7	55	232	52	93	51	54	9.5	51	165	57	4.6	35	30.9	23	12	0.75	0.298
12.75	368	19	60	12.7	55	262	52	110	51	54	9.5	51	165	57	6.8	41	35.0	26	15	1.38	0.374
14.5	419	25.4	80	19	70	287	70	119	67	57	12.7	67	191	64	10.2	57.6	48.6	36.3	21.3	2.53	0.627
16.25	454	25.4	80	19	70	335	70	141	67	76	12.7	67	191	64	13.6	74	62.0	49	25	4.2	0.876
17.75	502	25.4	85	25.4	76	354	92	138	89	94	12.7	70	222	76	17	106	91.0	69.2	36.8	6.4	1.770
20	578	25.4	85	25.4	76	390	92	148	89	95	12.7	70	222	76	26	142	119.1	99	43	11.5	2.530
23	660	31.7	110	25.4	100	457	117	165	114	117	19	95	260	105	40	207	171.8	142	65	23	5.560
26	749	31.7	110	25.4	100	492	117	195	114	117	19	95	260	105	57	272	221.9	181	91	38	8.500
29	838	31.7	130	38.1	115	552	137	197	133	130	22	114	324	140	78	358	289.5	258	100	65	17.80
32	914	31.7	130	38.1	115	587	137	219	133	130	22	114	324	140	106	520	426.9	316	204	95	27.00
36	1032	38.1	150	50.8	150	626	165	256	165	156	22	140	381	140	136	679	559.6	420	259	182	43.00
41	1162	38.1	150	50.8	150	660	165	278	165	159	22	140	381	140	205	952	772.0	605	347	316	78.00



FLUID COUPLING WITH 'V' GROOVE PULLEY



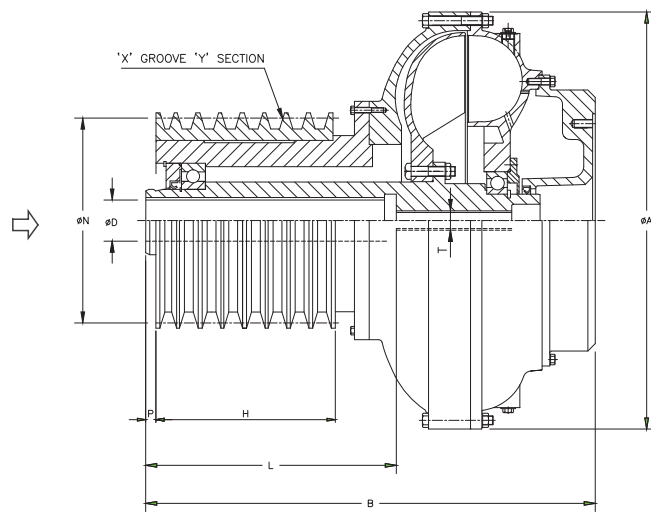
- D** – Standard bores with standard keyways – mm
- Q** – Approx max oil quantity – ltr
- W** – Approx total weight of unit (filled weight) – kg
- W1** – Approx total weight of unit (dry weight) – kg
- R** – No. of grooves in pulley
- S** – Standard pulley section
- Z1** – GD^2 of primary parts – kgm^2
- Z2** – GD^2 of secondary parts – kgm^2

CPLG SIZE	A	B	D		H	L	N	P	Q	T	W	W1	R	S	GD ²	
			(Min.)	(Max.)											Z1	Z2
8	237	169	20	28	36	60	145	8	1.7	M16x2	11.26	9.77	2	SP A	0.087	0.194
9	268	192	22	42	48	110	165	12.5	2.5	M20x2.5	15.80	13.61	2	SP B	0.179	0.282
10	308	209	22	42	67	110	175	9	3.7	M20x2.5	22.62	19.37	3	SP B	0.310	0.490
11	333	237	22	48	82	110	170	8.5	4	M20x2.5	30.91	27.4	4	SP B	0.498	0.702
12	368	272	22	60	82	140	200	13	5.7	M20x2.5	43.87	38.87	4	SP B	0.624	0.880
14	419	320	32	60	101	140	200	13	8.5	M30x3.5	58.81	51.35	5	SP B	1.127	2.030
16	454	396	32	80	162	140	250	15	12.5	M30x3.5	91.72	80.75	6	SP C	1.436	4.150
17	502	402	32	80	162	140	250	15	16	M30x3.5	107.65	93.6	6	SP C	2.370	6.350
20	595	487	40	80	212	170	250	15	20	M36x4	152.56	135	8	SP C	3.180	11.45

Note : Larger sizes 23 can be offered on request



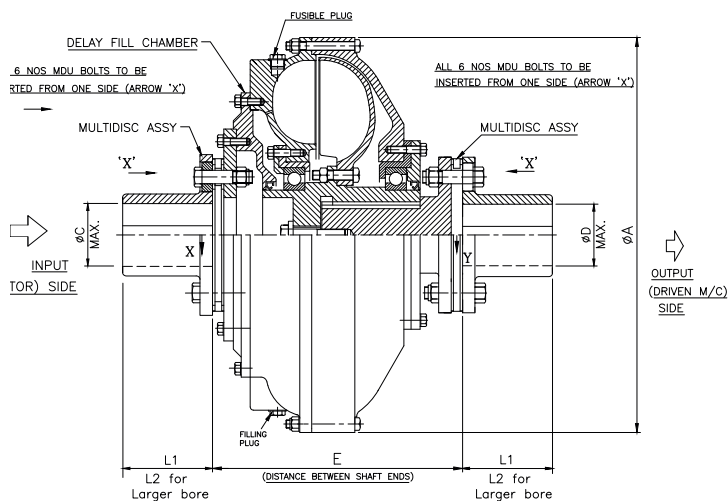
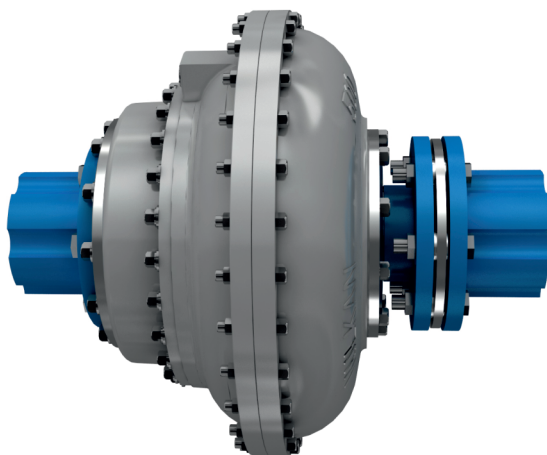
FLUID PULLEY WITH DELAY CHAMBER



- D** – Standard bores with standard keyways – mm
- Q** – Approx max oil quantity – ltr
- W** – Approx total weight of unit (filled weight) – kg
- W1** – Approx total weight of unit (dry weight) – kg
- R** – No. of grooves in pulley
- Z1** – GD^2 of primary parts – kgm^2
- Z2** – GD^2 of secondary parts – kgm^2

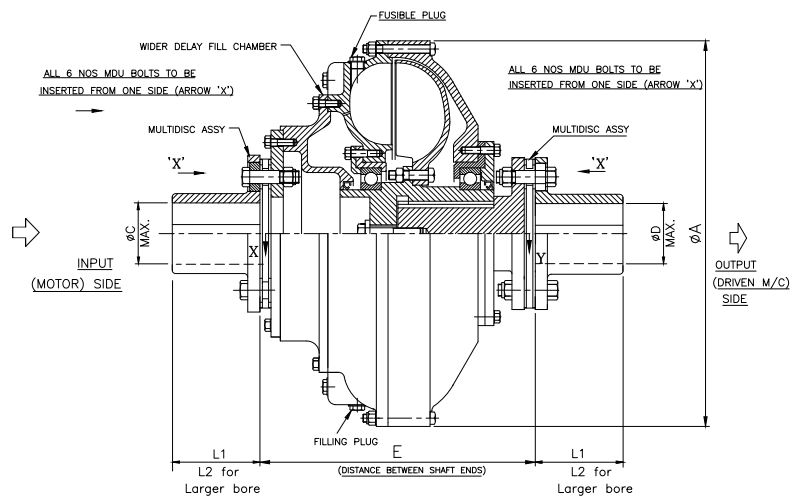
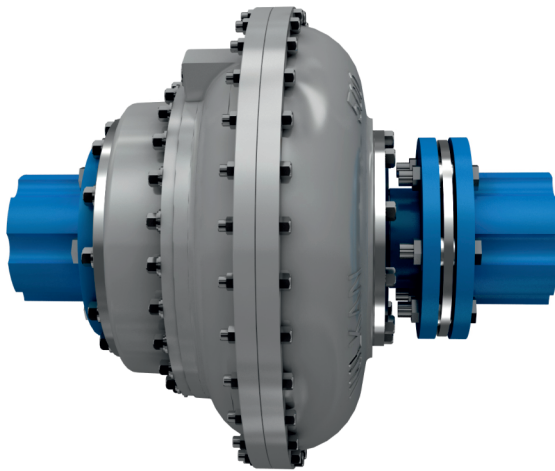
CPLG SIZE	A	B	D		H	L	N	P	Q	T	W	W1	R	GD^2	
			(Min.)	(Max.)										Z1	Z2
290	340	304	25	48	82	110	170	4.5	4.5	M20x2.5	48	44.05	4	0.380	0.990
320	380	335	40	60	82	140	200	7	7.2	M36x4	50	43.68	4	0.410	1.98
370	434	393	40	60	101	140	200	5.5	10.8	M36x4	64.72	55.24	5	0.825	3.025
410	454	498	40	80	162	140	250	15	15.8	M36x4	102	88.13	6	1.120	5.045
450	521	500	40	80	162	170	250	15	20.5	M36x4	118	100.0	6	2.050	7.550
500	595	575	40	80	212.5	170	250	15	30.8	M36x4	164	136.9	8	2.860	13.60

Note : Larger sizes 540 & 580 can be offered on request



- C&D** – Maximum bores with standard hubs – mm
- C1&D1** – Maximum bores with larger shaft diameters on request - mm
- W** – Approx total weight of unit with oil (filled weight) – kg
- W1** – Approx total weight of unit (dry weight) – kg
- X** – Weight reaction on driving machine – kg
- Y** – Weight reaction on driven machine (filled weight) – kg
- Z1** – GD^2 of primary parts – kgm^2
- Z2** – GD^2 of secondary parts – kgm^2

CPLG SIZE	A	C & D			C1 & D1		E	W	W1	X	Y	Q	Z1	Z2
		(Min.)	(Std)	L1	(Max.)	L2								
290	340	12.7	55	51	65	75	260	25.5	22	15.9	10	4.5	1.20	0.298
320	380	12.7	55	51	65	75	270	53.3	47	37.1	16.2	7.2	1.48	0.415
370	434	19	70	67	76	75	281	81.4	72	57.1	24.3	10.8	2.8	0.69
410	454	25.4	76	70	90	80	319	109.8	96	84.8	25	15.8	4.95	0.975
450	521	25.4	100	95	130	125	370.5	148.0	130	111.0	37	20.5	7.10	2.56
500	595	25.4	100	95	130	125	370.5	200.0	173	157.0	43	30.8	13.2	3.4
580	660	25.4	100	95	130	125	418.5	286.2	245	221.2	65	47	36.5	7
660	749	38.1	115	114	140	185	469	380.7	321	289.7	91	68	40	10.26
740	838	38.1	115	114	140	185	525.5	443.1	365	343.1	100	89	68	19.85

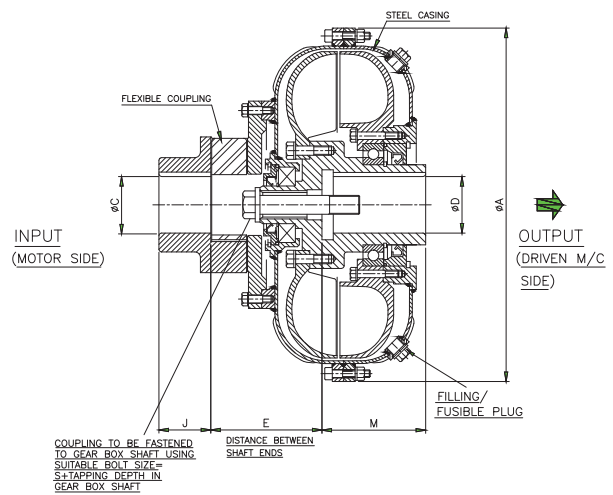


- C&D** – Maximum bores with standard hubs – mm
- C1&D1** – Maximum bores with larger shaft diameters on request – mm
- W** – Approx total weight of unit (filled weight) – kg
- W1** – Approx total weight of unit (dry weight) – kg
- X** – Weight reaction on driving machine – kg
- Y** – Weight reaction on driven machine (filled weight) – kg
- Z1** – GD^2 of primary parts – kgm^2
- Z2** – GD^2 of secondary parts – kgm^2

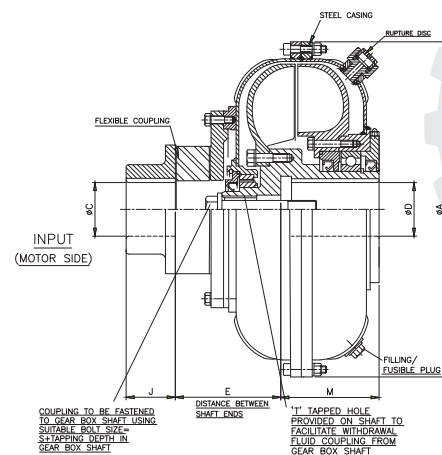
CPLG SIZE	A	C & D			C1 & D1		E	L1	L2	W	W1	X	Y	Q	Z1	Z2
		(Min.)	(Std)	L1	(Max.)	L2										
290	340	12.7	55	51	65	75	320	75	75	31.9	28	14.9	17	4.5	1.5	0.40
320	380	12.7	55	51	65	75	330	75	75	71.6	65.3	28.6	43	7.2	1.6	0.43
370	434	19	70	67	76	75	351.5	75	75	88.2	79	29.7	58.5	10.5	2.8	0.69
410	454	25.4	76	70	90	80	397	80	80	117.8	104	32	85.8	15.8	4.95	0.975
450	521	25.4	100	95	130	125	455.5	125	125	156.7	142.3	34.9	121.8	16.5	7.10	2.56
500	595	25.4	100	95	130	125	513.5	125	125	207.0	180	39.2	167.8	30.8	13.2	3.4
580	660	25.4	100	95	130	125	418.5	150	150	293.2	252	59.2	234	47	36.5	7
660	749	38.1	115	114	140	185	579	185	185	389.6	336.5	83.6	306	60.5	40	10.26
740	838	38.1	115	114	140	185	652.5	185	185	451.1	373	100	351.1	89	68	19.85
810	914	38.1	115	114	140	185	748.5	185	185	573.3	468	108.3	465	120	112	27.25
910	1032	50.8	150	140	175	240	748.5	240	240	949.7	818	246.7	703	150	205	43
1040	1162	50.8	150	140	175	240	819	240	240	1231.4	1040	340	891.4	218	290	78.8



OIL FILL STEEL CASE FLUID COUPLING TYPE SFC



AQUA FILL STEEL CASE FLUID COUPLING TYPE AFC

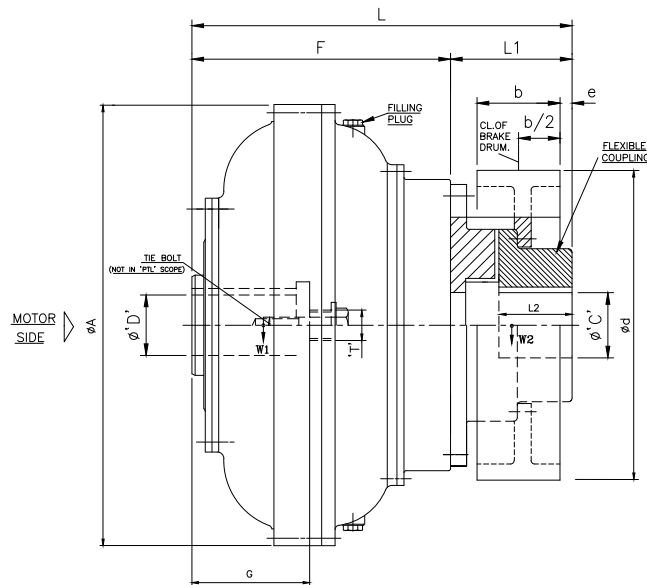
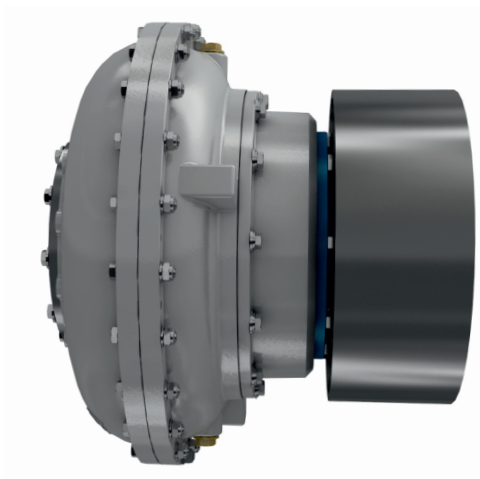


CPLG SIZE	A	C		D		E	J	M	S	T	W	W1	X	Y	Q	GD ²	
		(Min.)	(Max.)	(Min.)	(Max.)											Z1	Z2
46	350	25	60	22	42	138	55	80	83	M20x2.0	34.4	30	11.3	23	5	0.248	1.7
51	375	25	60	32	60	138	55	90	83	M30x3.5	48.8	41	16.1	32.7	8.9	0.324	2.4
58	418	30	80	32	60	170	70.5	90	106	M30x3.5	58.9	51	19.4	39.5	9	0.448	3.1
65	475	35	100	32	80	209	90	120	103	M30x3.5	74.8	62.9	24.7	50.1	13.5	0.840	4.8
71	513	35	100	32	80	205	90	140	115	M30x3.5	98.9	84	32.6	66.3	17	1.352	7.5
80	584	35	95	35	95	200	90	170	95	M30x3.5	153.9	124.9	50.7	103.2	33	2.242	12.2

Note : Larger sizes 90 & 96 can be offered on request



HOLLOW SHAFT FLUID COUPLING WITH BRAKE DRUM



C&D – Standard bores with standard keyways – mm

W – Approx total weight of unit (filled weight) – kg

d – Standard brake drum diameter – mm

b – Standard brake drum width - mm

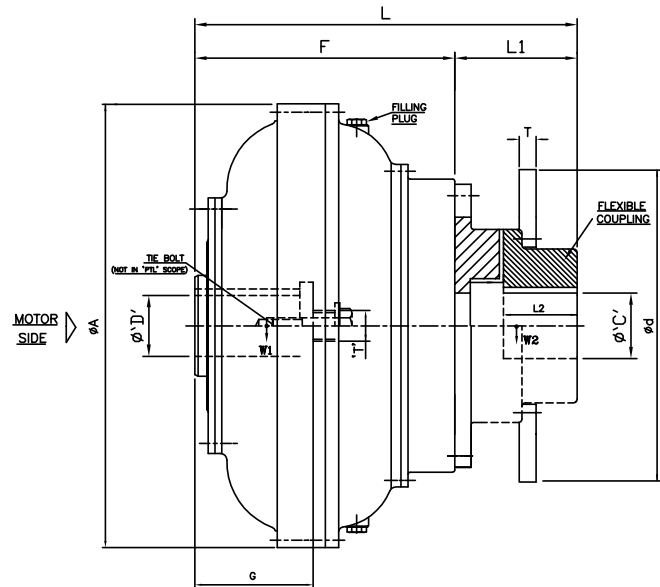
Coupling Size	A	C (Max)	D (Max)	G	T	Brake Drum d x b	BR-HTC						BR-DFC						BR-WDFC / BR-PSS-H				
							F	L	L1	L2	e	W	F	L	L1	L2	e	W	F	L	L1	L2	e
290	340	60	48	110	M20x2.5	250 x 95	167	292	114	57	4	26	215	329	114	57	4	28.5	265	379	114	57	4
						300 x 140																	
						315 x 140																	
320	380	60	60	115	M30x3.5	250 x 95	187	341	134	70	0	41.2	242	376	134	70	0	45.2	296	430	134	70	0
						300 x 140																	
						315 x 140																	
370	434	60	60	140	M30x3.5	250 x 95	209	376	147	85	0	53.3	280	427	147	85	30	59.3	316	463	147	85	30
						300 x 140																	
						315 x 140																	
410	454	60	80	155	M30x3.5	300 x 140	233	418	172	110	0	89	319	491	172	110	0	95.8	377	549	172	110	0
						400 x 170																	
450	521	95	80	170	M30x3.5	300 x 140	248	429	165	80	30	114	339	504	165	80	0	151	402	567	165	80	0
						400 x 170																	
500	595	95	90	170	M30x3.5	400 x 170	248	450	187	100	5	149	337	524	187	100	25	165.8	402	589	187	100	25
						500 x 220																	
540	630	95	90	170	M30x3.5	400 x 170	284	536	233	150	40	175	363	600	237	150	40	187	433	670	237	150	40
						500 x 220																	
580	660	95	110	176	M30x3.5	400 x 170	294	459	156	100	0	212	357	513	156	100	0	234	441	597	156	100	0
						500 x 220																	

Notes:

- Larger coupling sizes can be offered on request
- Other brake drum sizes can be offered on request



HOLLOW SHAFT COUPLING WITH BRAKE DISC



- C&D** – Standard bores with standard keyways – mm
W – Approx total weight of unit (filled weight) – kg
d – Standard brake disc diameter – mm
t – Standard brake disc width – mm

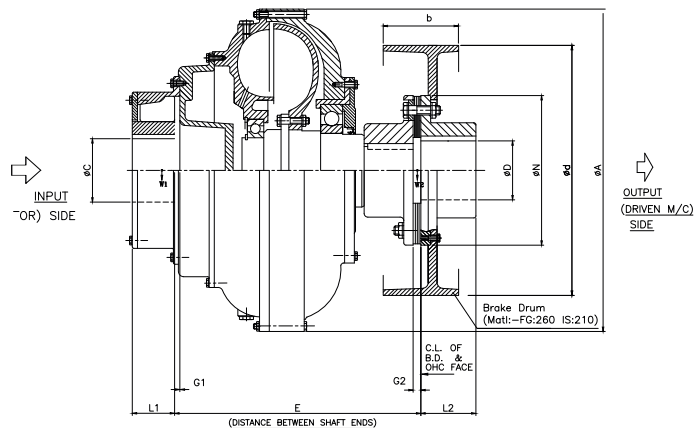
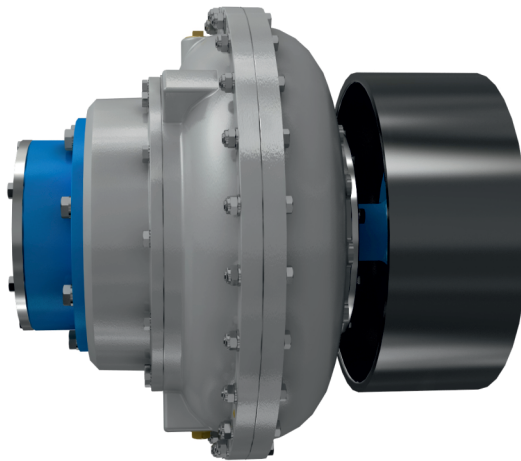
Coupling Size	A	C (Max)	D (Max)	G	T	Brake Disc d x t	BD-HTC					BD-DFC					BD-WDFC / PSS-H				
							F	L	L1	L2	W	F	L	L1	L2	W	F	L	L1	L2	W
290	340	60	48	110	M20x2.5	250 x 30	167	292	114	57	26	215	329	114	57	29	265	379	114	51	33
320	380	60	60	115	M30x3.5	315 x 30	187	341	134	70	41	242	376	134	70	45	296	430	134	51	47
370	434	60	60	140	M30x3.5	400 x 30	209	361	132	70	53	280	412	132	70	59	316	448	132	67	73
410	454	60	80	155	M30x3.5	315 x 30	233	378	132	70	89	319	451	132	70	96	377	509	132	67	99
						400 x 30															
450	521	95	80	170	M30x3.5	500 x 30	248	438	174	89	114	339	513	174	89	151	402	576	174	70	134
500	595	95	90	170	M30x3.5	560 x 30	248	439	176	89	149	337	513	176	89	166	402	578	176	70	172
						630 x 30															
540	630	95	90	170	M30x3.5	710 x 30	284	536	233	150	175	363	600	237	150	187	433	670	237	150	219
						800 x 30															
580	660	95	110	176	M30x3.5	800 x 30	294	509	206	150	212	357	563	206	150	234	441	647	206	95	241

Notes:

- Larger coupling sizes can be offered on request
- Other brake disc sizes can be offered on request



SOLID SHAFT COUPLING WITH BRAKE DRUM



- C&D** – Maximum standard bores with standard keyways – mm
W – Approx total weight of unit (Filled weight) – kg
d – Standard brake drum diameter – mm
b – Standard brake drum width – mm

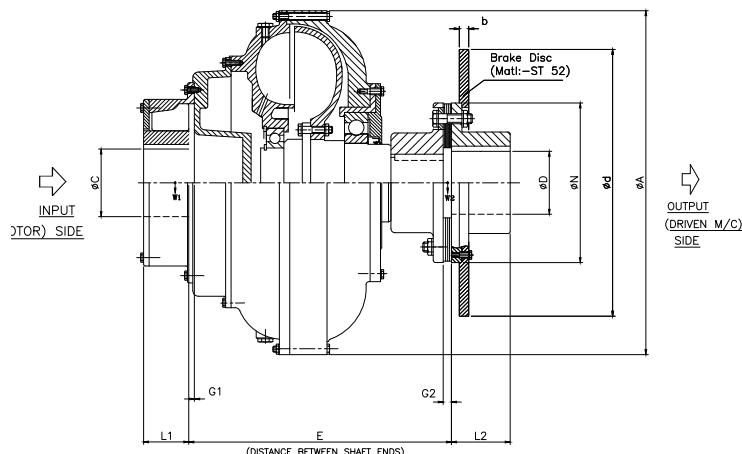
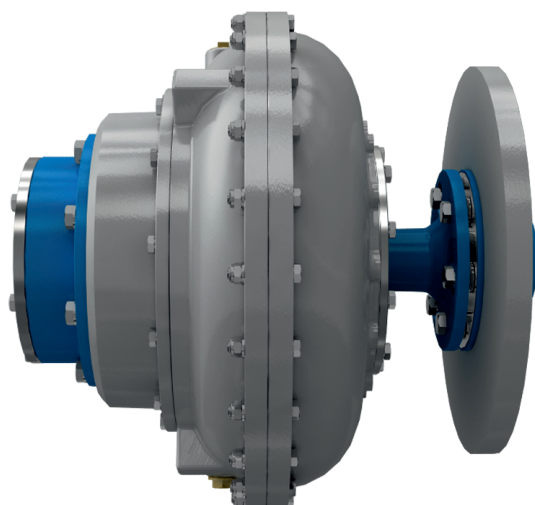
Coupling Size	A	C (Max)	D (Max)	L1	N	Brake Drum d x b	L2	BR-SSTC		BR-SDFC		BR-SWDFC / BR PSS-S	
								E	W	E	W	E	W
290	340	55	55	51	165	250 x 95	51	258	39.9	289	36	339	37
320	380	55	55	51	165	300 x 140	80	265	53.3	312	47	366	49
						315 x 140	80						
						400 x 170	110						
370	434	70	70	54	191	315 x 140 400 x 170 500 x 220	80 110 140	294	81.4	355	72	391	74
410	454	75	70	60	191			321	109.8	392	96	450	98
450	521	85	76	67	222			350	148	430	130	493	130
500	595	95	76	86	222			368	200	442	173	507	175
540	630	95	76	86	222			411	223	475	195	547	223
580	660	115	100	95	260			452	286.2	506	245	590	247
660	749	115	100	95	260	500 x 220	140	468	380.7	550	321	612	323
740	838	115	115	95	324	600 x 260	170	526	443.1	631	365	726	368
810	914	115	115	95	324	710 x 260	170	644	754.3	730	649	783	652

Notes:

- Larger coupling sizes can be offered on request
- Other brake drum sizes can be offered on request



SOLID SHAFT COUPLING WITH BRAKE DISC



- C&D** – Maximum standard bores with standard keyways – mm
W – Approx total weight of unit (Filled weight) – kg
d – Standard brake disc diameter – mm
t – Standard brake disc width – mm

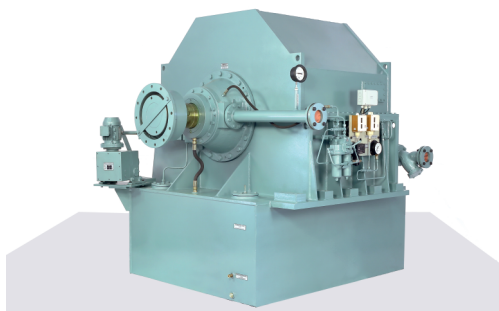
Coupling Size	A	C (Max)	D (Max)	L1	N	Brake Disc d x t	L2	BD-SSTC		BD-SDFC		BD-SWDFC / BD-PSS-S	
								E	W	E	W	E	W
290	340	55	55	51	165	250 X 30 315 X 30 400 X 30	51	258	39.9	289	36	339	37
320	380	55	55	51	165		51	265	53.3	312	47	366	49
370	434	70	70	54	191		67	294	81.4	355	72	391	74
410	454	75	70	60	191		67	321	109.8	392	96	450	98
450	521	85	76	67	222	315 X 30 400 X 30 500 X 30	70	350	148	430	130	493	130
500	595	95	76	86	222		70	368	200	442	173	507	175
540	630	95	76	86	222		70	411	223	475	195	547	223
580	660	115	100	95	260		95	452	286.2	506	245	590	247
660	749	115	100	95	260	560 X 30 630 X 30 710 X 30	95	468	380.7	550	321	612	323
740	838	115	115	95	324		114	526	443.1	631	365	726	368
810	914	115	115	95	324		114	644	754.3	730	649	783	652

Notes:

- Larger coupling sizes can be offered on request
- Other brake disc sizes can be offered on request



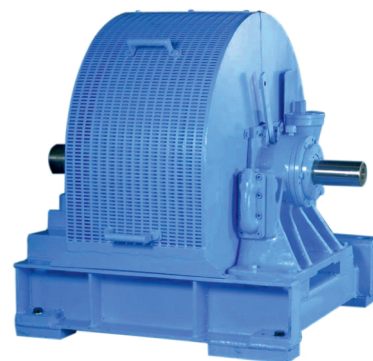
PREMIUM VARIABLE SPEED FLUID COUPLING TYPE PST



Sizes:	370 to 1320
Input Speed:	500 to 3600 rpm
Max Power:	80 to 11000 kW
Speed control:	20 to 100% (centrifugal m/cs); 33 to 100% (constant torque m/cs)
Actuators :	Electric / Pneumatic / Manual
Applications :	Industrial Pumps, Industrial Fans, Conveyors, Crushers, Dryers,

PREMIUM VARIABLE SPEED FLUID COUPLING TYPE SCR

Sizes:	14 to 46 ;	Type: 24R, 24X, 25W, 25B, 26B
Input Speed:	500 to 1800 rpm	
Max Power:	8 to 2760 kW	
Speed control:	20 to 100% (centrifugal m/cs); 33 to 100% (constant torque m/cs)	
Actuators :	Electric / Pneumatic / Manual	
Applications :	Industrial Pumps, Industrial Fans, Conveyors, Crushers, Dryers, Centrifuges, Ball mills, Hammer mills etc.	



PREMIUM SOLENOID VALVE OPERATED DRAIN TYPE FLUID COUPLING TYPE PSV



Sizes:	480, 530, 610 & 710
Input Speed:	960 to 3000 rpm
Max Power:	80 to 1080 kW
Drive:	Diesel Engine. Connected through SAE flange
Applications :	Mobile Crushers, wood chippers, grinders, shredders etc.

PREMIUM ALUMINIUM CASE FLUID COUPLINGS WITH WATER AS WORKING FLUID

Sizes	: 290 to 1040
Dimensions	: Same as PSS-H & PSS-S with oil Normal drinking water can be used mixed with phosphate ester (5-10%)
Advantages	: Environment friendly Lower operation and maintenance cost. Higher heat transfer capacity. Higher power transmission capacity



APSS-H



APSS-S



PREMIUM

Premium Transmission Pvt. Ltd.

IOI

บริษัท ไอโอไอ ยูนิเวอร์แซล จำกัด
IOI UNIVERSAL COMPANY LIMITED

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