MOVICON

GEAR
COUPLINGS



GEAR COUPLINGS



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01. INTRODUCTION

The MOVICON Gear Couplings are manufactured in MOVICON's state of the art technology manufacturing plant on precision CNC machines. The new series of Gear Couplings has a technology superiority compared with the other gear couplings available in the market.

The usage of high quality material and workmanship is a built-in-feature of MOVICON Gear Couplings.

WHY A GEAR COUPLING ?

A Gear Coupling is used to join two rotating shafts for efficient transmission of mechanical power.

Although the shafts are accurately aligned at the time of installation, it is likely that during the operation the alignment may get disturbed due to setting of foundation, thermal expansion, shaft deflection, wearing out of other parts, improper maintenance and many more reasons.
Due to this unavoidable misalignment occurring during the operation, a gear coulping provides a better solution to compensate or minimise the effect of misalignment.

The Gear Couplings are therefore ideally suited for wide range of application in the entire field of drive technology.

MISALIGNMENT

The main function of any Gear Coupling is not only to connect two rotating shafts but also to accommodate the misalignments of the connecting shafts following three types of misalignment:

A. RADIAL

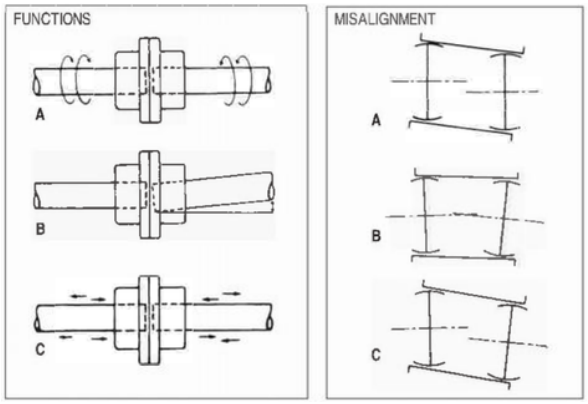
When axes of connected shafts are parallel but not in the same straight line.

B. ANGULAR

When axes of connected shafts intersect at center point of the coupling but not in a straight line.

C. COMBINED RADIAL AND ANGULAR

When the axes of connected shafts do not intersect at the center point of the coupling and are not parallel.



Besides the three types of misalignment named above, the MOVICON Gear Coupling also permits axial movement of the shaft.

CAUTION

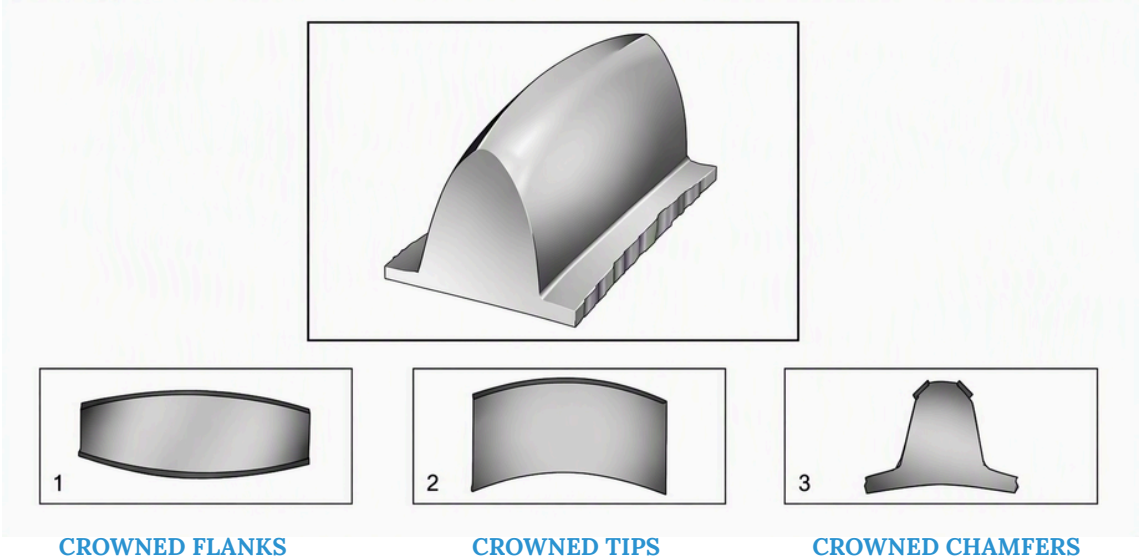
Normally permissible angular misalignment of MOVICON gear coupling is ± 0.75° for each half. However, it does not mean that the misalignment should be permitted to this limit from the initial installation. Since in case of misalignment occurring during operation the gear coupling takes care of it without undue damage to the connected equipment, however the coupling's life may reduce due to relative motion between hub teeth and housing teeth causing fast wearing out of teeth.

It is therefore extremely important to align the interconnecting shafts precisely during initial installation.

01. INTRODUCTION

FEATURES OF MOVICON GEAR COUPLINGS

MOVICON Gear Couplings consists of hubs with multi crowned teeth at flank, tip and chamfering on teeth.



CROWNED FLANKS

Flanks of the teeth are crowned so that tooth thickness is greatest at that center of the tooth.
This assures a larger contact area per tooth for higher torque requirements and puts more teeth in contact for a given angle.
Actual tooth loading takes place near the center of the tooth face where tooth thickness is greatest. Crowned flanks also eliminate end-of-tooth loading, provide optimum load distribution, and accommodate all types of misalignment with minimum backlash.

CROWNED TIPS

Tips of teeth are crowned.
The crowned tip contacts the root of internal gear teeth in the external sleeve, accurately piloting the sleeve with true concentric ball-and-socket action.
This allows minimum diametral sleeve clearance and centers the sleeve physically to assure good dynamic balance characteristics under various loading and misalignment conditions.

CROWNED CHAMFERS

Faces of the teeth adjacent to the tips are chamfered to eliminate interference with the sleeve tooth fillets.
This allows the true involute flanks of the gear teeth to be in contact with the sleeve teeth and assures freedom to misalign.

The hub teeth are manufactured on CNC machines. The hub is the heart of any gear coupling and a superior design and tooth profile of the hub enables the gear couplings to operate satisfactorily under all operating conditions with increased reliability and long life.

The multi crowned teeth also reduce the alignment adjustment and improve the load carrying capacity of the teeth. The backlash between the teeth is minimal due to the multi-crown tooth design. This is where MOVICON Gear Couplings score over other gear couplings available in the market.

MOVICON Gear Coupling is a simple, compact and light unit for transmitting the same power when compered to the couplings of similar capacity available in the market. It is manufactured out of tested quality forged carbon steel and passes a number of quality checks.

Each half of the MOVICON Gear Coupling is interchangeable with any other half, of same size of coupling.

02. ORDERING INFORMATION & SELECTION

ORDERING INFORMATION

WHEN ORDERING, SPECIFY FOLLOWING INFORMATION

1. Quantity and delivery requirements.
2. Shaft or bore sizes and keyway dimensions. Give exact dimensions with tolerances.
3. Load - Horsepower and/or torque at a specific RPM. State normal and maximum conditions.
4. Speed - minimum, normal and maximum.
5. Application - type of driver and driven equipment.
6. Coupling series, type and size.
7. Space limitations - envelope dimensions, shaft extensions and shaft spacing.
8. Unusual misalignment conditions.
9. Modifications - tapered bores, special keys, hub cut off, counterbores or others.
10. Unusual operating conditions ambient temperatures and atmospheres.

SELECTION

1. **Obtain shaft sizes:** Compare shaft sizes of driving and driven equipment with listed maximum bores of desired series or type coupling to determine "tentative" coupling size.
2. **Compute effective kW/rpm or torque to be transmitted:** Select a service factor from adjacent table.

   Determine

   $$\text{kW/rpm} = \frac{\text{kW TRANSMITTED X SERVICE FACTOR}}{\text{rpm}}$$

   or determine Torque daNm as

   $$\text{Torque (effective) daNm} = \frac{\text{955 X kW TRANSMITTED X SERVICE FACTOR}}{\text{rpm}}$$

   Confirm "tentative" coupling size or increase to a size which has a kW/rpm torque rating equal to or greater than value computed above.

3. **Check maximum speed of application:** Refer to maximum speed ratings. These speeds are given only as a guide since the maximum speed depends on the system characteristics.
4. **Check space limitations:** Dimensions of the selected coupling should be compared with space provided in the application to assure proper clearances. Shaft extensions, separation, and clearances to align coupling should be checked.

03. SERVICE FACTOR

Driven machines	Daily duty (h)		
	8	16	24
Lifts			
Freight elevators normal duty	1.25	1.35	1.50
Freight elevators heavy duty	1.35	1.50	1.70
elevators	1.35	1.50	
Excavators and stackers			
Bucket excavators (fixed chain)	1.40	1.50	1.70
Bucket chain excavators (loose chain)	1.25	1.35	1.50
Travels (track)	1.40	1.40	1.40
Travels (rail)	1.40	1.40	1.40
Bucket wheel stackers			
Bucket wheels	1.40	1.50	1.60
(Clearing/lime/coal)			
Slew drives	1.25	1.30	1.40
Winches	1.25	1.30	1.40
Mining, rock, earth industry			
Jaw crushers			1.60
Pit fans			1.40
Cone crushers			1.60
Chain tramways			1.40
Rotary crushers			1.60
Jolting machines			1.50
Scale breakers			1.60
Wagon pushers			1.40
Crushing rolls			1.50
Chemical industry			
Agitators, constant density	1.00	1.00	1.10
Agitators, viscous liquids	1.10	1.25	1.35
Wire pulls	1.25	1.35	1.50
Rotary drums			
Rotary kilns	1.10	1.25	1.35
Cooling drums	1.10	1.25	1.35
Drying drums	1.10	1.25	1.35
Threshers	1.10	1.25	1.35
Conveying plants			
Shaft sinking machines	1.35	1.50	1.70
Bucket belts	1.10	1.25	1.25
Rubber belt conveyers light	1.00	1.10	1.10
Rubber belt conveyers heavy	1.10	1.25	1.25
Band bucket elevators	1.00	1.10	1.10
Trolley conveyers	1.10	1.25	1.25
Coilers	1.25	1.25	1.25
Bucket chain conveyers	1.25	1.35	1.35
Apron feeds	1.25	1.35	1.35
Screw conveyers	1.10	1.25	1.35
Trough chain conveyers	1.10	1.25	1.35
Blowers, fans, generators			
Axial blowers	1.00	1.10	1.25
Rotary piston blowers	1.10	1.25	1.35
Radial blowers	1.00	1.10	1.25
Exhaust fans, ind.-drft fans	1.10	1.25	1.35
Turbo blowers	1.00	1.10	1.25
Light generators	1.00	1.00	1.10
Generators, pulsating load	1.10	1.25	1.35
Welding generators	1.35	1.40	1.60
Rubber and plastics machines			
Extruders	1.25	1.35	1.50
Rubber calenders	1.25	1.35	1.50
Rubber kneading machines	1.25	1.35	1.50
Rubber rolling machines	1.25	1.35	1.50
Mixers	1.25	1.35	1.35

Driven machines	Daily duty (h)		
	8	16	24
Wood working machinery			
Decorating drums	1.25	1.35	1.35
Frames	1.10	1.10	1.25
Iron and steel industry			
Blast furnace blowers	1.35	1.35	1.35
Inclined skip hoists for blast furnaces	1.50	1.50	1.60
Cranes			
Travels	1.10	1.25	1.35
Hoists	1.25	1.35	1.50
Slews	1.25	1.30	1.40
Winches	1.25	1.30	1.40
Metal working			
Bending machines			1.35
Sheet straightening machine			1.40
Crank presses			1.50
Shears			1.35
Forging presses			1.50
Punches			1.50
Mixers			
Mixers, liquids	1.00	1.00	1.10
Mixture semiliquid	1.10	1.25	1.35
Mixture granular material	1.10	1.25	1.35
Concrete mixers	1.10	1.25	1.35
Mills			
Hammer mills			2.00
Ball mills			1.90
Pendulum mills			1.90
Impact mills			2.00
Roll mills			1.90
Roll crushers			1.90
Oil industry			
Filter presses			1.35
Pipeline pumps			1.35
Scavenging pump			1.35
Paper machines			
Couchers	1.35	1.50	1.50
Horizontal rollers	1.35	1.50	1.60
Calenders	1.35	1.50	1.50
Glue presses	1.35	1.50	1.60
Wet ends	1.35	1.50	1.50
Wet presses	1.35	1.50	1.50
Suction formers	1.35	1.50	1.50
Suction rollers	1.35	1.50	1.50
Dry glazing calenders	1.35	1.50	1.60
Dry cylinders	1.35	1.50	1.60
Reversing suction presses	1.35	1.50	1.50
Presses			
Folding presses	1.40	1.40	1.50
Briquetting presses	1.40	1.40	1.50
Eccentric presses	1.40	1.40	1.50
Forging presses	1.40	1.40	1.50
Brick presses	1.40	1.40	1.50
Pumps			
Centrifugal pumps, liquids	1.00	1.00	1.10
Centrifugal pumps semiliquids	1.10	1.10	1.25
Piston pumps (U1:100-200)	1.25	1.35	1.50
Piston pumps (U<100)	1.40	1.50	1.60
Cargo pumps	1.15	1.25	1.35
Propeller pumps	1.25	1.35	1.50
Sand pumps	1.15	1.25	1.35

Driven machines	Daily duty (h)		
	8	16	24
Pump			
Rotary pumping plants	1.35	1.50	1.60
Shaking machines	1.35	1.50	1.60
Swing sieves	1.10	1.25	1.35
Textile industry			
Bobbin winding machine	1.10	1.25	1.35
Printing and dyeing machines	1.10	1.25	1.35
Tan liquor vessels	1.10	1.25	1.35
Calenders	1.10	1.25	1.35
Willowing machines	1.10	1.25	1.35
Looms	1.10	1.25	1.35
Compressors, vents			
Rotary piston compressors (U1:100-200)	1.35	1.50	1.60
Rotary piston compressors (U<100)	1.40	1.60	1.60
Vent N/n <0.05	1.00	1.00	1.10
Vent N/n >0.05-0.1	1.00	1.10	1.25
Vent N/n >0.1	1.10	1.15	1.35
Rolling mills			
Working roller tables			
Strip reels			1.60
Sheet shears			1.60
Sheet manipulators			1.35
Bloom conveying plants	1.80	1.90	1.90
Wire reels			1.35
Capstan handles			1.50
Revolving turrets, cont. casting			1.25
De-scaling crushers			1.40
Lifting tables			1.35
Walking beam conveyers			1.50
Chain transporters			1.40
Billet shears			1.50
Cooling beds			1.25
Straightening presses			1.70
Roll straighteners	1.35	1.60	1.60
Plate trimming shears			1.40
Winding turret			1.25
Winding tractors			1.25
Cropping shears			1.50
Rope tractors			1.40
S-roller high speed			1.25
S-rolls, low speed			1.10
Roller transporters			1.35
Positioning and tilting mech.	1.60	1.90	1.90
Hot and cold saws			1.50
Live rollertables			1.35
Machine tools			
Turning movement	1.10	1.25	1.35
Planing machines metal	1.25	1.35	1.50
Horizontal saw-mills	1.35	1.50	1.60
Wood grinding machines	1.25	1.35	1.50
Centrifuges	1.25	1.35	1.50
Tackles	1.25	1.30	1.40

Lifting hole
The hubs of the couplings from size MED 1600 onwards are supplied with lifting holes to facilitate lifting of the coupling.

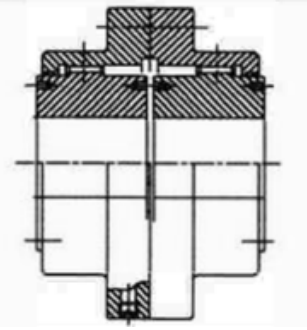
Lubrication
Each coupling half is provided with grease nipple/plug on the housing from where grease can be filled directly. The couplings are supplied with some quality of grease to facilitate assembly. It is recommended to fill the required quality and quantity of grease before putting the coupling in operation.

Special protection
All the components of MOVICON Gear Couplings are applied with a special rust preventive oil coating. Besides all the bolts and nuts are zmc/cadmium plated to give protection from rust and corrosion.

03. TYPES OF GEAR COUPLINGS

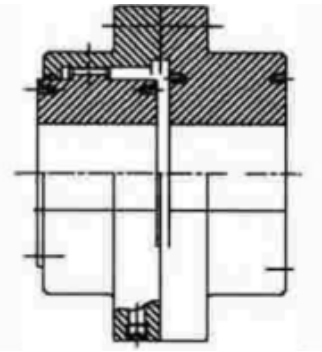
TYPE MED

With double housing:
The couplings are available with bore limitations up to 540 mm and torque ratings up to 110000 daNm.



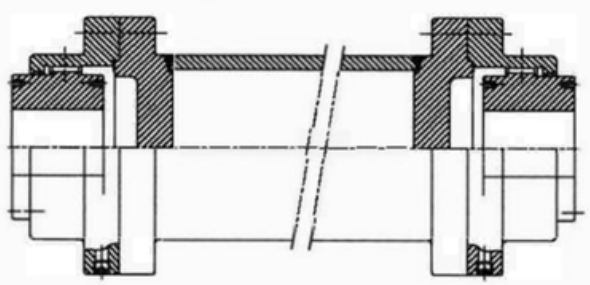
TYPE MER

With one end rigid:
The couplings are available with bore limitations up to 370 mm one side and 410 mm on rigid end and torque ratings up to 45000 daNm.



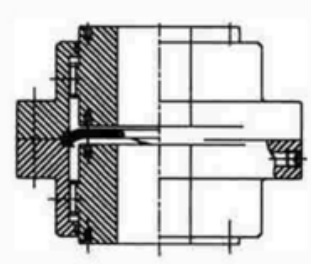
TYPE MET

With spacer:
The couplings are available with bore limitations up to 540 mm and torque ratings up to 110000 daNm.



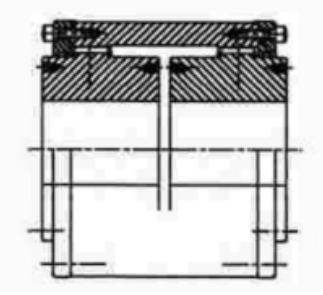
TYPE MEV

For vertical application:
The couplings are available with bore limitations up to 275 mm and torque ratings up to 17400 daNm.



TYPE MES

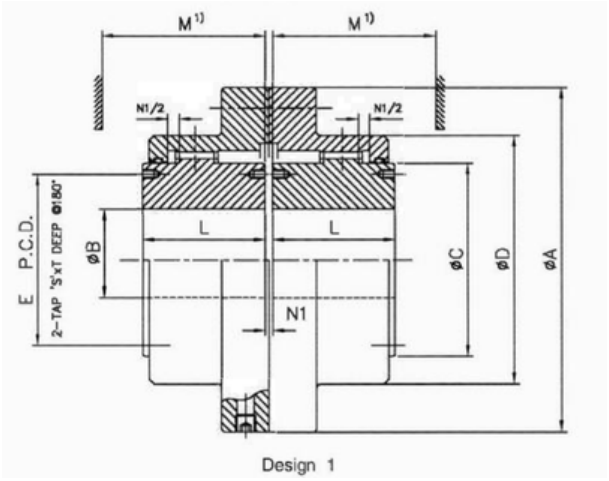
With single housing:
The couplings are available with bore limitations from 40 mm to 275 mm and torque ratings from 1600 daNm to 17400 daNm.



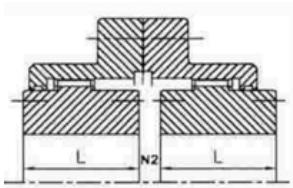
04. TECHNICAL SPECIFICATION

TYPE MED

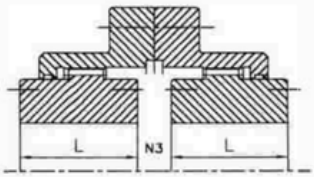
MULTI CROWNED TOOTHED COUPLINGS FOR SHAFT CONNECTIONS



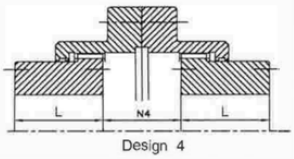
Design 1



Design 2



Design 3



Design 4

SIZE TkN CONTINUOUS	Tk max shock	PkN / n conti.	DIAMETER						LENGTH						TAPPING		MISALIGNMENT		WEIGHT	MOMENTS OF INERTIA	MAXIMUM ADM. SPEED
			A	B PILOT	B MIN	B MAX	C	D	L	M1	N1	N2	N3	N4	E	SxT					
daNm	daNm	kW/rpm	mm						mm						mm		Degree	± mm	kg	J (kgm2)	1/min
MED 130	260	0.136	111	10	15	45	67	80	43	74	3	12	21	43	-	-	2x0.75	0.35	4	0.005	7000
MED 280	560	0.293	141	15	20	60	87	103.5	50	84	3	9	15	45	-	-	2x0.75	0.4	7	0.015	6200
MED 500	1000	0.534	171	25	30	75	106	129.5	62	105	3	17	31	63	-	-	2x0.75	0.5	14	0.039	5660
MED 1000	2000	1.047	210	30	36	95	130	156	76	123	5	17	29	74	-	-	2x0.75	0.6	25	0.101	5100
MED 1600	3200	1.675	234	35	40	110	151	181	90	148	5	19	33	86	130	M8x12	2x0.75	0.7	37	0.188	4700
MED 2200	4400	2.304	274	50	55	130	178	209	105	172	6	23	40	103	155	M8x12	2x0.75	0.9	60	0.431	4350
MED 3200	6400	3.351	312	60	65	155	213	247	120	198	6	24	42	116	185	M10x15	2x0.75	1.0	90	0.845	4000
MED 4500	9000	4.712	337	75	80	175	235	273	135	215	8	29	50	130	205	M12x18	2x0.75	1.1	118	1.322	3800
MED 6200	12400	6.492	380	85	90	195	263	307	150	241	8	32	56	144	226	M16x24	2x0.75	1.2	169	2.450	3600
MED 8400	16800	8.796	406	95	100	215	266	338	175	279	8	39	70	170	250	M16x24	2x0.75	1.4	224	3.720	3450
MED 11500	23000	12.042	444	115	120	240	316	368	190	304	8	46	84	188	276	M16x24	2x0.75	1.5	277	5.390	3300
MED 17400	34800	18.221	506	145	150	275	372	426	220	339	10	42	74	204	330	M20x30	2x0.75	1.7	414	10.88	3060

1 Space required to change the seal

2 Keyways according to DIN 6885 part-1

3 Maximum angular misalignment per coupling half ±0.75°

4 Weight and moment of inertia based on pilot bore condition

5 Continuous torque rating subject to accurate alignment of connecting shafts

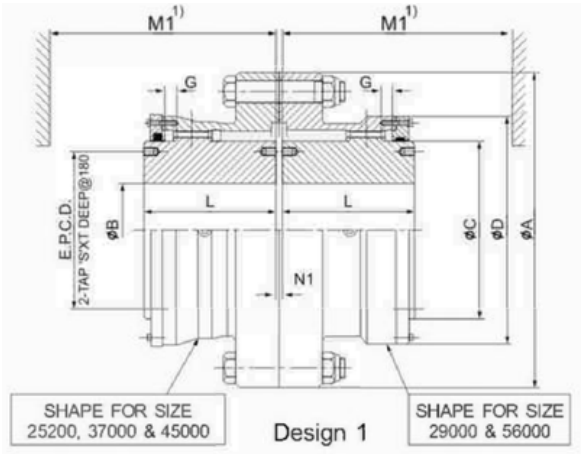
6 For additional size requirements please get in touch with our sales engineers

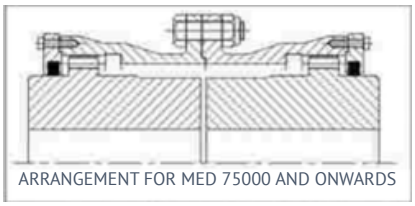
In accordance with our established policy to constantly improve our products, the specifications contained herein are subject to change without notice.

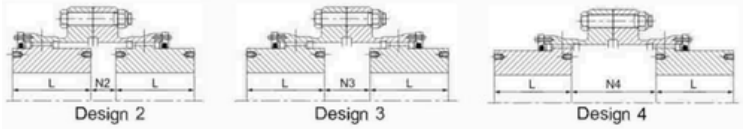
04. TECHNICAL SPECIFICATION

TYPE MED SUPER SERIES

MULTI CROWNED TOOTHED COUPLINGS FOR SHAFT CONNECTIONS







SIZE TkN CONTINUOUS	Tk max shock	PkN / n conti.	DIAMETER						LENGTH						TAPPING		MISALIGNMENT		WEIGHT	MOMENTS OF INERTIA	MAXIMUM ADM. SPEED
			A	B			C	D	L	M1	N1	N2	N3	N4	E	SxT					
				PILOT	MIN	MAX															
daNm	daNm	kW/rpm	mm						mm						mm		Degree	± mm	kg	J (kgm2)	1/min
MED 25200	50400	26.39	632	155	160	310	422	550	280	335	15	119	223	346	360	M20x30	2x0.75	1.8	670	26.75	1830
MED29000	58000	30.366	640	195	200	320	432	518	292	324	13	33	53	256	380	M20x30	2x0.75	2.1	760	31	1800
MED37000	47000	38.746	715	205	210	355	472	616	310	370	20	133	246	383	410	M24x40	2x0.75	2.2	930	48	1460
MED45000	90000	47.123	750	225	230	370	502	648	330	395	20	144	268	408	435	M24x40	2x0.75	2.2	1110	65.8	1395
MED456000	112000	58.639	804	275	280	450	594	682	350	379	13	61	109	335	544	M24x40	2x0.75	2.7	1532	105	1300
MED75000	150000	78.539	910	285	290	480	620	812	410	485	25	121	217	*	560	M36x55	2x0.75	3.0	2180	198	1000
MED90000	180000	94.247	980	315	320	515	670	860	430	510	25	102	179	*	585	M36x55	2x0.75	3.0	2520	265	940
MED110000	220000	115.19	1020	325	330	540	700	908	450	16	25	97	169	*	615	M36x55	2x0.75	4.0	2910	333	900

1 Space required to change the seal

2 Keyways according to DIN 6885 part-1

3 Maximum angular misalignment per coupling half ±0.75°

4 Weight and moment of inertia based on pilot bore condition

5 Continuous torque rating subject to accurate alignment of connecting shafts

6 For additional size requirements please consult our sales engineers

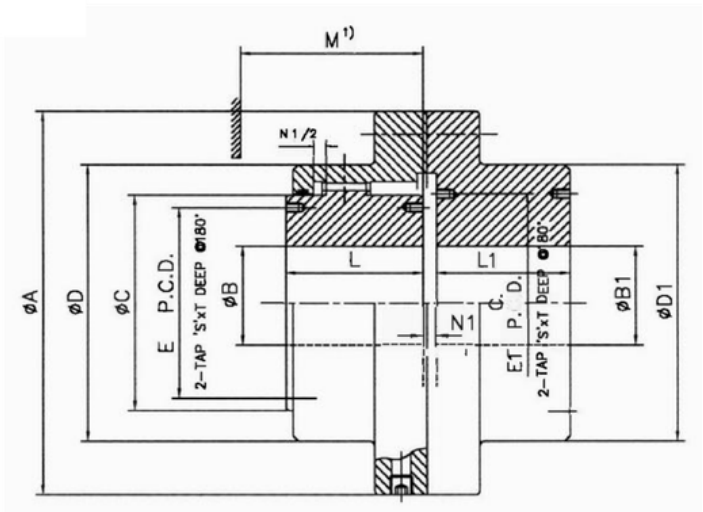
7 For * marked dimensions, please get in touch

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04. TECHNICAL SPECIFICATION

TYPE MER

MULTI CROWNED TOOTHED COUPLINGS FOR SHAFT CONNECTIONS



SIZE TkN CONTINUOUS	Tk max shock	PkN / n conti.	DIAMETER										LENGTH				TAPPING			MISALIGNMENT	WEIGHT	MOMENTS OF INERTIA	MAXIMUM ADM. SPEED
			A	B			B1			C	D	D1	L	L1	M1	N1	E	E1	SxT				
				PILOT	MIN	MAX	PILOT	MIN	MAX														
daNm	daNm	kW/rpm	mm										mm				mm			Degree	kg	J (kgm2)	1/min
MER 130	260	0.136	111	10	15	45	10	15	56	67	80	80	43	40	74	5	-	-	-	0.75	4	0.005	7000
MER 280	560	0.293	141	15	20	60	15	20	75	87	103.5	103.5	50	47	84	5	-	-	-	0.75	8	0.015	6200
MER 500	1000	0.524	171	25	30	75	25	30	95	106	129.5	126	62	58	105	5	-	-	-	0.75	14	0.039	5650
MER 1000	2000	1.047	210	30	35	95	30	35	110	130	156	152	76	74	123	6	-	-	-	0.75	26	0.102	5100
MER 1600	3200	1.675	234	35	40	110	35	40	130	151	181	178	90	87	148	6	130	155	M8x12	0.75	38	0.196	4700
MER 2200	4400	2.304	274	50	55	130	50	55	155	178	209	208	105	101	172	6.5	155	180	M8x12	0.75	61	0.450	4350
MER 3200	6400	3.351	312	60	65	155	60	65	180	213	247	245	120	113	193	6.5	185	210	M10x15	0.75	91	0.871	4000
MER 4500	9000	4.712	337	75	80	175	75	80	200	235	273	270	135	129	215	8	205	236	M12x18	0.75	120	1.368	3800
MER 6200	12400	6.492	380	85	90	195	85	90	230	263	307	305	150	150	241	8	228	265	M16x24	0.75	175	2.586	3600
MER 8400	16800	8.796	405	96	100	215	95	100	260	296	338	330	175	175	279	8	250	290	M16x24	0.75	232	3.910	3460
MER 11500	23000	12.042	444	115	120	240	115	120	280	316	368	362	190	190	304	10	275	320	M16x24	0.75	287	5.655	3300
MER 17400	34800	18.221	506	145	150	275	145	150	330	372	426	416	220	220	339	13	330	370	M20x30	0.75	430	11.5	3050

1 Space required to change the seal

2 Keyways according to DIN 6885 part-1

3 Maximum angular misalignment per coupling half ±0.75°

4 Weight and moment of inertia based on pilot bore condition

5 Continuous torque rating subject to accurate alignment of connecting shafts

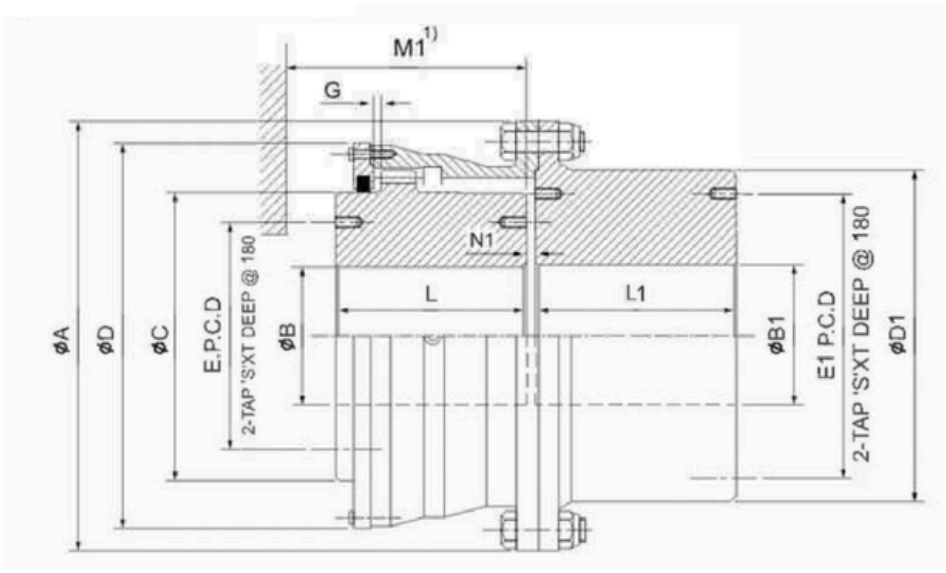
6 For additional size requirements please get in touch with our sales engineers

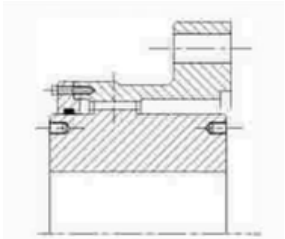
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04. TECHNICAL SPECIFICATION

TYPE MER SUPER SERIES

MULTI CROWNED TOOTHED COUPLINGS FOR SHAFT CONNECTIONS




SHAPE OF GEAR HALF FOR COUPLING SIZE 29000

SIZE TkN CONTINUOUS	Tk max shock	PkN / n conti.	DIAMETER										LENGTH					TAPPING			MISALIGNMENT	WEIGHT	MOMENTS OF INERTIA	MAXIMUM ADM. SPEED
			A	B			B1			C	D	D1	L	G	L1	M1	N1	E	E1	SxT				
				PILOT	MIN	MAX	PILOT	MIN	MAX															
daNm	daNm	kW/rpm	mm										mm					mm			Degree	kg	J (kgm2)	1/min
MER 25200	50400	26.39	632	155	160	310	155	160	340	422	550	470	280	10	290	335	12	360	395	M20x30	0.75	706	26.17	1830
MER 29000	58000	30.366	640	195	200	320	195	200	366	432	518	512	292	6.5	292	324	14.5	380	455	M20x30	0.75	820	33.53	1880
MER 37000	74000	38.746	715	206	210	355	205	210	380	472	616	535	310	12	310	370	16.5	410	445	M24x40	0.75	984	48.26	1460
MER 45000	90000	47.123	750	225	230	370	225	230	410	502	648	570	330	11.5	330	395	16.5	435	480	M24x40	0.75	1170	64.04	1395

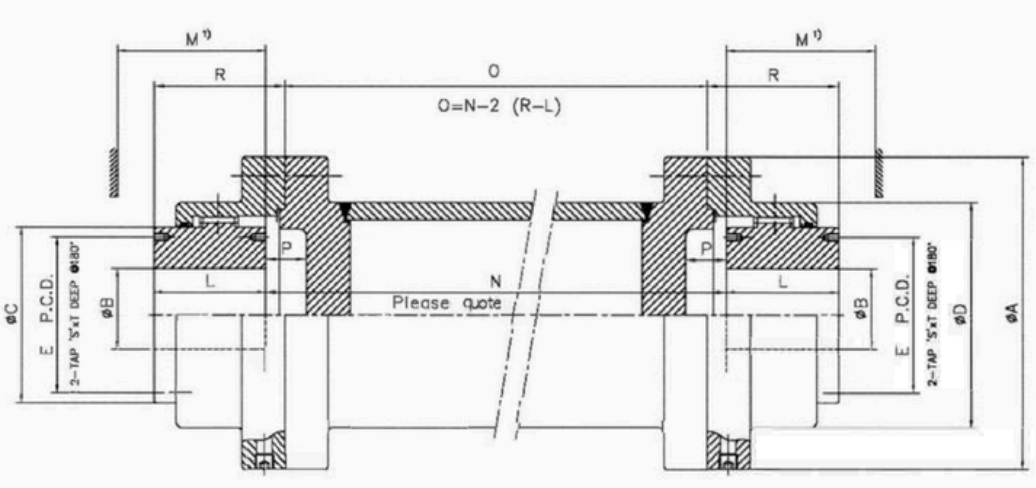
1. Space required to change the seal
2. Keyways according to DIN 6885 part-1
3. Maximum angular misalignment per coupling half ±0.75°
4. Weight and moment of inertia based on pilot bore condition
5. Continuous torque rating subject to accurate alignment of connecting shafts
6. For additional size requirements please consult our sales engineers
7. For * marked dimensions, please get in touch

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04. TECHNICAL SPECIFICATION

TYPE MET

MULTI CROWNED TOOTHED COUPLINGS FOR SHAFT CONNECTIONS



SIZE TkN CONTINUOUS	Tk max shock	PkN / n conti.	DIAMETER						LENGTH				TAPPING		MISALIGNMENT		WEIGHT	MOMENTS OF INERTIA	MAXIMUM ADM. SPEED
			A	B			C	D	L	M1	P	R	E	SxT					
				PILOT	MIN	MAX													
daNm	daNm	kW/rpm	mm						mm				mm		Degree	± mm	kg	J (kgm2)	1/min
MET 130	260	0.136	111	10	15	45	67	80	43	74	16	53.5	-	-	0.75	1.5	4	0.005	LIMITED BY THE CRITICAL SPEED AND WEIGHT OF THE INTERMEDIATE HOLLOW SHAFT
MET 280	560	0.293	141	15	20	60	87	103.5	50	84	13	57.5	-	-	0.75	1.5	8	0.015	
MET 500	1000	0.524	171	25	30	75	106	129.5	62	104	20	77.5	-	-	0.75	1.5	14	0.039	
MET 1000	2000	1.047	210	30	35	95	130	156	76	123	20	90.5	-	-	0.75	2.5	25	0.101	
MET 1600	3200	1.675	234	35	40	110	151	181	90	148	22	106.5	130	M8x12	0.75	2.5	37	0.188	
MET 2200	4400	2.304	274	50	55	130	178	209	105	172	25	125	156	M8x12	0.75	3	60	0.431	
MET 3200	6400	3.351	312	60	65	155	213	247	120	192	25	141	185	M10x15	0.75	3	90	0.845	
MET 4500	9000	4.712	337	75	80	175	235	273	135	216	31	160	205	M12x18	0.75	4	118	1.322	
MET 6200	12400	6.492	380	85	90	195	263	307	150	241	33	178	226	M16x24	0.75	4	168	2.450	
MET 8400	16800	8.796	405	96	100	215	286	338	175	279	40	210	250	M16x24	0.75	4	224	3.720	
MET 11500	23000	12.042	444	115	120	240	316	368	190	304	47	232	276	M16x24	0.75	4	277	5.390	
MET 17400	34800	18.221	506	145	150	275	372	426	220	339	42	330	330	M20x30	0.75	5.5	414	10.88	

1 Space required to change the seal

2 Keyways according to DIN 6885 part-1

3 Maximum angular misalignment per coupling half ±0.75°

4 Weight and moment of inertia without intermediate hollow shaft

5 Continuous torque rating subject to accurate alignment of connecting shafts

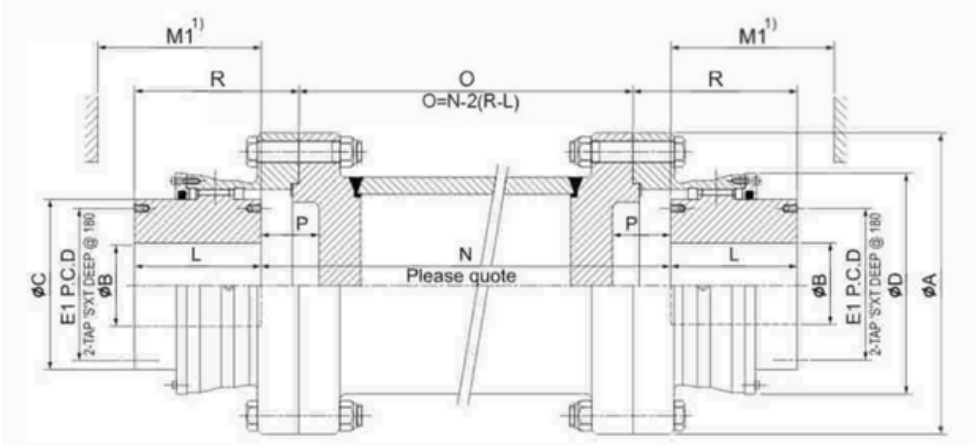
6 For additional size requirements please get in touch with our sales engineers

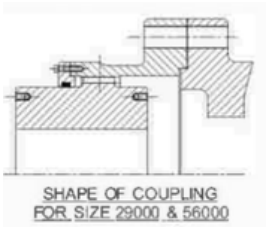
In accordance with our established policy to constantly improve our products, the specifications contained herein are subject to change without notice.

04. TECHNICAL SPECIFICATION

TYPE MET SUPER SERIES

MULTI CROWNED TOOTHED COUPLINGS FOR SHAFT CONNECTIONS





SIZE TkN CONTINUOUS	Tk max shock	PkN / n conti.	DIAMETER						LENGTH				TAPPING		MISALIGNMENT		WEIGHT	MOMENTS OF INERTIA	MAXIMUM ADM. SPEED
			A	B			C	D	L	M1	P	R	E	SxT					
				PILOT	MIN	MAX													
daNm	daNm	kW/rpm	mm						mm				mm		Degree	± mm	kg	J (kgm2)	1/min
MET 25200	50400	26.39	632	155	160	310	422	550	280	335	119	391.5	360	M20x30	0.75	10	670	26.75	LIMITED BY THE CRITICAL SPEED AND WEIGHT OF THE INTERMEDIATE HOLLOW SHAFT
MET 29000	58000	30.366	640	196	200	320	432	518	292	324	33	318.5	380	M20x30	0.75	6.5	760	31	
MET 37000	74000	38.746	715	205	210	355	472	616	310	370	133	433	410	M24x40	0.75	12	930	48	
MET 45000	90000	47.123	750	225	230	370	502	648	330	395	144	464	435	M24x40	0.75	11.5	1110	65.8	
MET 56000	112000	58.639	804	275	280	450	594	682	350	379	61	404.5	544	M24x40	0.75	6.5	1532	105	
MET 75000	150000	78.539	910	285	290	480	620	812	410	485	121	521.5	550	M36x55	0.75	10.5	2180	198	
MET 90000	180000	94.247	980	315	320	515	670	860	430	510	102	523.5	585	M36x55	0.75	15.5	2520	265	
MET 110000	220000	115.19	1020	325	330	540	700	908	450	530	97	539.5	615	M36x55	0.75	16	2910	333	

1 Space required to change the seal

2 Keyways according to DIN 6885 part-1

3 Maximum angular misalignment per coupling half ±0.75°

4 Weight and moment of inertia without intermediate hollow shaft

5 Continuous torque rating subject to accurate alignment of connecting shafts

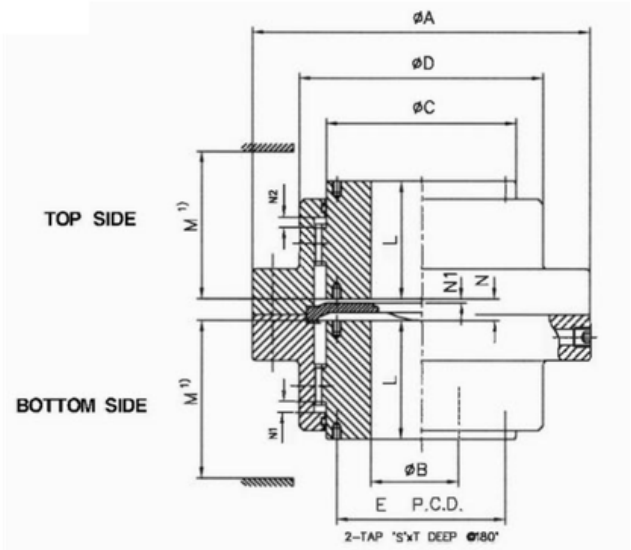
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04. TECHNICAL SPECIFICATION

TYPE MEV

MULTI CROWNED TOOTHED COUPLINGS FOR SHAFT CONNECTIONS



SIZE TkN CONTINUOUS	Tk max shock	PkN / n conti.	DIAMETER						LENGTH					TAPPING		MISALIGNMENT		WEIGHT	MOMENTS OF INERTIA	MAXIMUM ADM. SPEED
			A	B PILOT	B MIN	B MAX	C	D	L	M1	N	N1	N2	E	SxT	∠	⫫			
daNm	daNm	kW/rpm	mm						mm					mm		Degree	± mm	kg	J (kgm2)	1/min
MEV 130	260	0.136	111	10	15	45	67	80	43	74	8	1.5	5.5	-	-	2x0.75	0.35	4.5	0.0057	5000
MEV 280	560	0.293	141	15	20	60	87	103.5	50	84	5	1.5	5.5	-	-	2x0.75	0.4	8.5	0.017	4400
MEV 500	1000	0.524	171	25	30	75	106	129.5	62	105	12.5	1.5	6	-	-	2x0.75	0.5	15	0.043	4000
MEV 1000	2000	1.047	210	30	35	95	130	156	76	123	11	2.5	8.5	-	-	2x0.75	0.6	26	0.110	3600
MEV 1600	3200	1.675	234	35	40	110	151	181	90	148	13	2.5	8.5	130	M8x12	2x0.75	0.7	39	0.206	3350
MEV 2200	4400	2.304	274	50	55	130	178	209	105	172	14	3	12	155	M8x12	2x0.75	0.9	61	0.461	3100
MEV 3200	6400	3.351	312	60	65	155	213	247	120	193	15	3	12	185	M10x15	2x0.75	1.0	93	0.935	2800
MEV 4500	9000	4.712	337	75	80	175	235	273	135	215	17	4	16	205	M12x18	2x0.75	1.1	122	1.454	2700
MEV 6200	12400	6.492	380	85	90	195	263	307	150	241	20	4	16	226	M16x24	2x0.75	1.2	175	2.710	2550
MEV 8200	16800	8.796	405	95	100	215	286	338	175	279	27	4	16	250	M16x24	2x0.5*	0.9	236	4.320	2450
MEV 11500	23000	12.042	444	115	120	240	316	368	190	304	34	4	16	276	M16x24	2x0.5*	1.0	295	6.480	2300
MEV 17400	34800	18.221	506	145	150	275	372	426	220	339	28	5	20	330	M23x30	2x0.5*	1.1	430	11.0	2150

1 **Space required to change the seal**

2 **Keyways according to DIN 6885 part-1**

3 **Maximum angular misalignment per coupling half ±0.75°**

4 **Weight and moment of inertia based on pilot bore condition**

5 **Continuous torque rating subject to accurate alignment of connecting shafts**
*maximum angular misalignment per coupling half ±0.5°

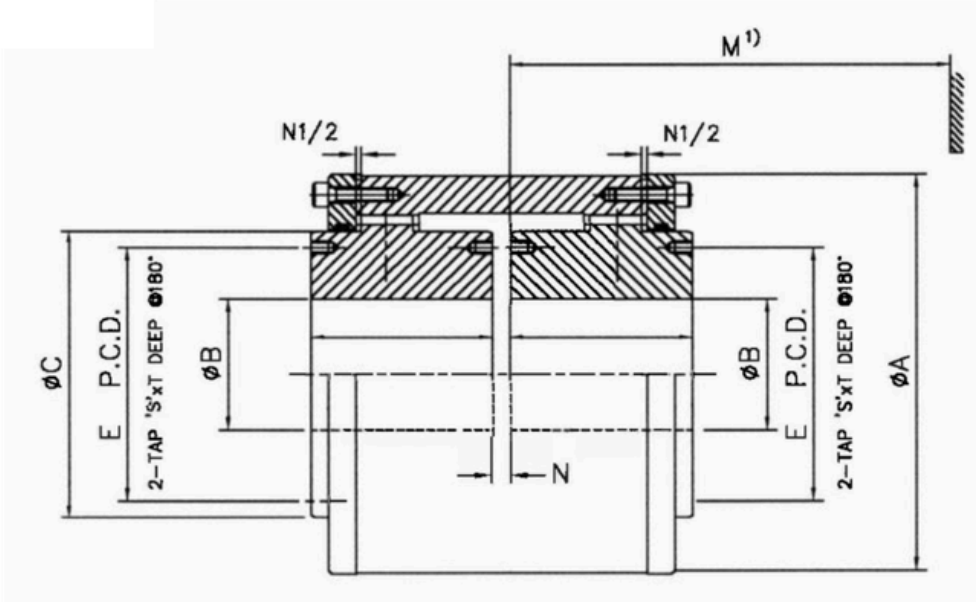
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04. TECHNICAL SPECIFICATION

TYPE MES

MULTI CROWNED TOOTHED COUPLINGS FOR SHAFT CONNECTIONS



SIZE TkN CONTINUOUS	Tk max shock	PkN / n conti.	DIAMETER					LENGTH			TAPPING		MISALIGNMENT		WEIGHT	MOMENTS OF INERTIA	MAXIMUM ADM. SPEED
			A	B			C	L	M1	N	E	SxT					
				PILOT	MIN	MAX											
daNm	daNm	kW/rpm	mm					mm			mm		Degree	± mm	kg	J (kgm2)	1/min
MED 1600	3200	1675	186	35	40	110	151	90	218	5	130	M8x12	2x0.75	0.7	34	0.158	4700
MES 2200	4400	2304	216	50	55	130	178	105	257	6	155	M8x12	2x0.75	0.9	52	0.332	4350
MES 3200	6400	3351	254	60	65	155	213	120	289	6	185	M10x15	2x0.75	1.0	82	0.738	4000
MES 4500	9000	4712	282	75	80	175	235	135	325	8	205	M12x18	2x0.75	1.1	112	1.255	3800
MES 6200	12400	6492	317	85	90	195	263	150	358	8	226	M16x24	2x0.75	1.2	154	2.197	3600
MES 8400	16800	8796	346	95	100	215	286	175	419	8	25	M16x24	2x0.75	1.4	209	3.510	3450
MES 11500	23000	12042	376	115	120	240	316	190	459	8	276	M16x24	2x0.75	1.5	264	5.352	3300
MES 17400	34900	18221	436	145	150	275	372	220	513	10	330	M20x30	2x0.75	1.7	398	11.0	3050

1 Space required to change the seal

2 Keyways according to DIN 6885 part-1

3 Maximum angular misalignment per coupling half ±0.75°

4 Weight and moment of inertia based on pilot bore condition

5 Continuous torque rating subject to accurate alignment of connecting shafts

6 For additional size requirements please get in touch with our sales engineers

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For additional information or further details please get in touch with us:

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movicon-solutions.com

Details and dimensions are subject to change without prior notice.