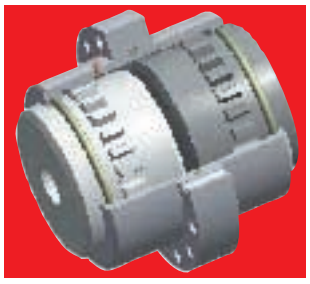
ISO 9001
DNV
ACCREDITED BY ENAC
CERTIFICATED FIRM

couplings

JAURE®

Crowned tooth gear couplings
model MT



JAURE's MT Series: a New Crowned - Tooth Gear coupling

Jaure´s competence in power transmission systems is based on more than 40 years of experience in the development and manufacture of couplings and other power transmission elements.
This is particularly testified by the most extensive supply of gear couplings all over the world, being one of the world's leaders in the fields of power transmission.
Computer-aided designs and the latest manufacturing CNC machines and testing equipment ensure that our products always reflect the state of the art of drive components.
This know-how enable us to introduce the new crowned tooth gear couplings JAURE's MT series.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Improvements and general features

The new MT series excels thanks to technical and production improvements based on our mentioned experience and thus gives:

• **Very large torque capacity**, without the sacrifice in safety factors or life expectancy.
• **Higher permissible additional loads**, an important feature for applications with large starting torque, or large short-circuit conditions.
• **Larger than usual hub bores**, which allows more favourable size selection of the coupling for a certain shaft diameter. This also means that you can select a most economical coupling for your particular application.
• **DNV Type Approval certificates** for our standard MT range certify that our MT gear couplings are found to comply with DET NORSKE VERITAS´rules for classification of ships and Mobile Offshore Units, High Speed and Light Crafts. Our couplings are accepted both for the main propulsion and auxiliary equipment.
• **A Real Complete Range**, offers a comprehensive and simplified selection of crowned tooth gear couplings of widely varying range.


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3

Gear couplings to cover all different industrial applications needs. Even though most applications can use standard couplings, there are numerous applications that are unique, and require special solutions. However, our final target is always to provide our customers with the best technical solutions at optimum economy, offering the:

Highest quality

The design, manufacturing and sales of all of our gear couplings and drive components are integrated into our Quality System, according to UNE-EN-ISO 9001: 94 certified by DET NORSKE VERITAS (DNV). This Quality Policy covers all the different departments at JAURE.

Inventory of standard products and of materials. Quick Service.

In order to provide the quickest delivery, we maintain an ample inventory of standard components and of special materials required for most special orders. Our inventory includes our basic designs (MT, MTX, MTD, MTN, etc.) for all sizes up to 260 mm. bores. However, we also stock semi-finished material to manufacture larger sizes or special designs on a quick turnaround. Even couplings subjected to acceptance by different classification societies like LRS, GL, DNV, BV and RINA to mention some of them, are not except from this. Our stock of components and materials allow us to offer the most rapid delivery, the quickest service and support in case of a break down or event of coupling damage.


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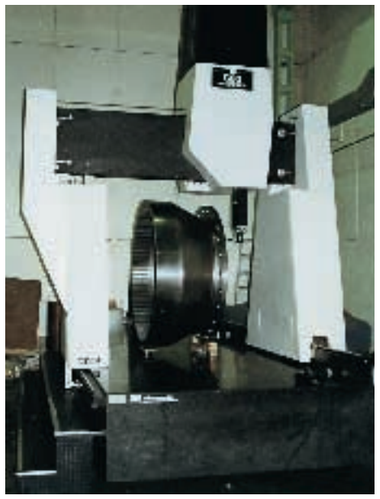
Compliance with AGMA standard. Interchangeability.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Jaure´s line of MT couplings complies with AGMA standard related to flange and bolt holes. We can therefore supply couplings for replacement of competitor products manufactured to AGMA standards. Not only that, our couplings are interchangeable with other manufacturer products, but also our inventory ensures quick delivery at competitive prices. (See the table of MT flange dimensions based on AGMA standards on **page 24**).

Special designs

Both modified standard types and special designs are available in any required size irrespective of quantity.
Modified types essentially consists of elements of the basic series which have been slightly changed or equipped with additional components. On the other hand, pure special designs are normally unique designs to a certain application. Jaure´s Engineering Department closely cooperates with customer's engineers to create the best product for their needs.
A few examples of our special designs and custom-made solutions are shown on **page 25**.
Maybe the best example of special designs are the roll mill drives known as "spindles" in the jargon (spindle gear couplings). These components must be designed and manufactured so they will be prepared to cope with:
-The extremely reduced space in diameter with regard to the power to be transmitted.
-The great shaft-to-shaft span, which can be as much as 7 meters.
- High angular misalignment ability (up to about 4°) under rated torque.
- High angular misalignment (up to about 6°) when unloaded.
- The need for safe and special sealing joint systems, that can retain the lubricant and prevent the entrance of contaminants even under very severe conditions.
These special couplings are made of highly alloyed steels, and the teeth are both through hardened and superficially treated (either by nitriding, carburizing or induction hardening) and include special systems of floating joints.
Jaure´s Engineering Department will be glad to work with you to design couplings to fit your most demanding applications.


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1. Partial workshop view.
2. Gear hobbing machine.
3. Gear shaping machine.
4. Couplings ready for expedition.
5. Inventory of standard components.
6. ISO 9001 certified firm & Type Approvals from DNV.
7. Gear sleeve inspection.
8. View of JAURE´s facilities.

Summary of Contents

Coupling Description

The MT gear coupling is a steel double-jointed coupling. The coupling is flexible to accomodate misalignment, but torsionally stiff.

It is formed by two Item 1 hubs which engage a flanged sleeve with internal straight parallel teeth. Item 2-3 (4-5). As a result of the teeth curvature, if shafts misalignment occurs, the hubs can oscillate in the flanged sleeve. It is nearly impossible to have corner pressure on the teeth or stiffness on the coupling parts, because the coupling acts as a double joint.

High pressure grease lubrication supplied by centrifugal force is provided for diminished teeth friction and wearing. Good sealing is achieved with toroidal gaskets.

The teeth are machined with precision gear machines in a process which guarantees uniform contact on all the teeth.

Curved face teeth couplings are flexible enough to compensate all types of misalignments and axial movements.

Three types of misalignment must be effectively accommodated by a flexible coupling.

1. Parallel Offset – axes of connected shafts are parallel, but not in the same straight line.

2. Angular – axes of shafts intersect at center point of coupling, but not in the same straight line

3. Combined Angular Offset – axes of shafts do not intersect at point of coupling and are not parallel.

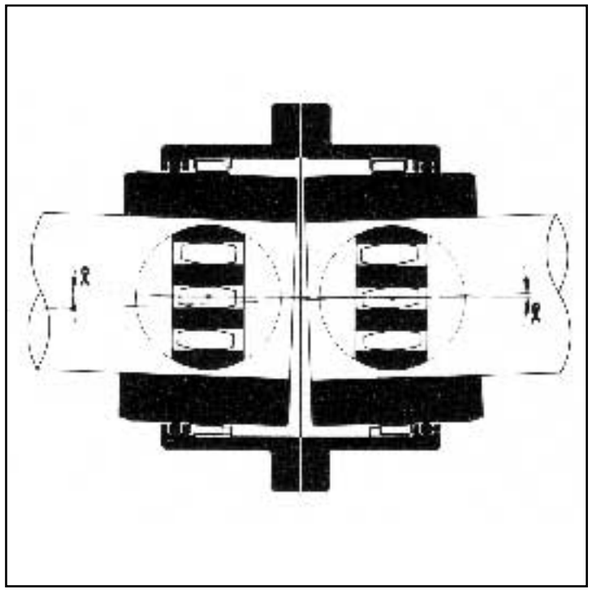


Fig. 1: Detail of the crowned tooth with angular misalignment.

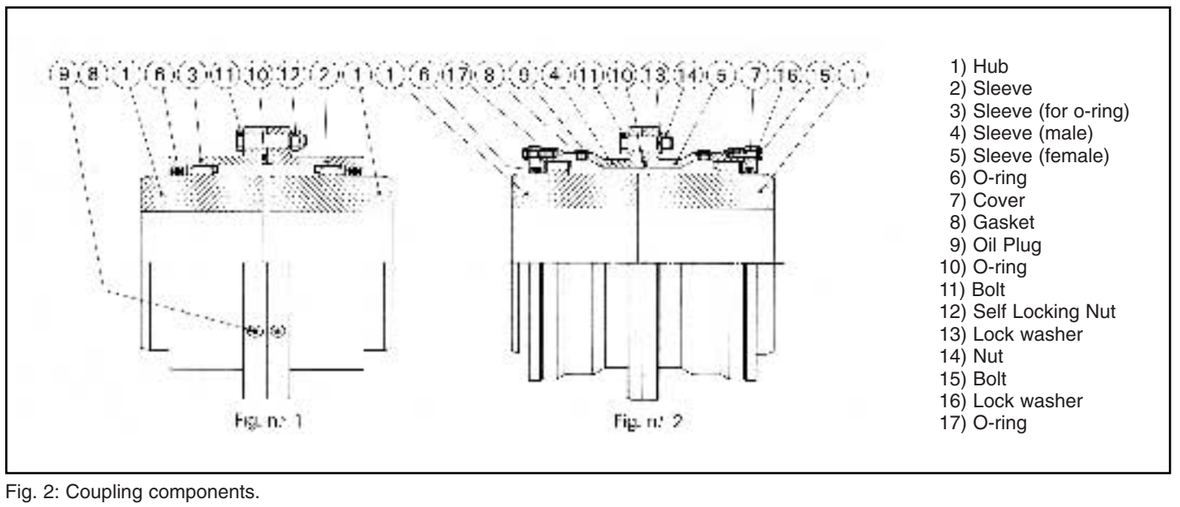


Fig. 2: Coupling components.

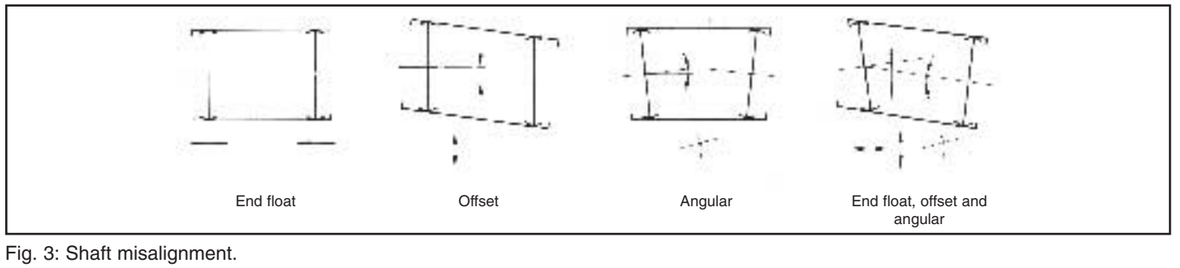


Fig. 3: Shaft misalignment.

Coupling Selection

Coupling size for a certain drive depends not only on the drive unit power and speed but also on the angular misalignment an the type of machines to be coupled.

When couplings are well aligned, every tooth transmits equally the torque.

If there is an angular shaft misalignment the tooth pressure is uneven, reducing the capacity of the coupling.

The power rating of our couplings have been calculated for an 0°30' angle for each coupling half. The allowed capacity is ±1° for each half. In special cases and according to specific demands higher-angular misalignment can be allowed.

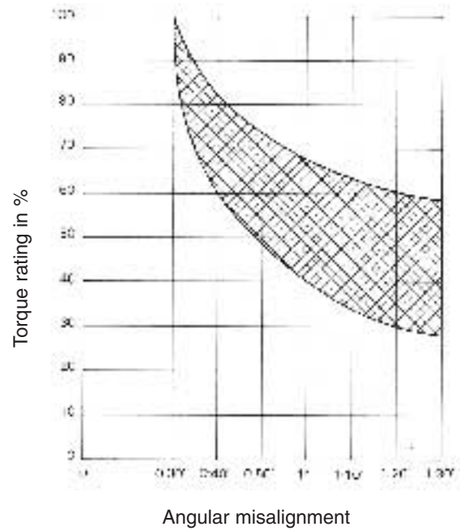


Fig. 4: Power vs. misalignment.

In Fig. Nº 4 we give you a statistic curve example of the power diminishing while the misalignment of shaft increases. For 1° the power capacity is reduced by 60% approximately. This rate varies according to the rotation speed.

Selection of size

1) Estimated nominal torque T_N (Nm)

$$T_N = 9550 \frac{P_N}{n} K$$

P_N = Max. actual power in (Kw)
n = Coupling speed in (r.p.m.)
K = Service factor

Alternatively, multiply max. torque (Nm) by service factor and choose in both cases a listed coupling size with a higher rating, or respectively higher torque rating.

2) Should driven shafts be larger in diameter than the max. admissible bore for the chosen coupling, select the next larger size.

3) When using keyway system, verify pressure stresses on it in order to decide if more than one key or longer hubs are necessary.

4) Listed speeds are max. values for unbalanced couplings. For higher operation speed, the coupling must be dynamically balanced. Consult our technical department in this case.

Coupling Selection

5) Recommended Service Factors (S.F.):
In order to provide for the dynamic torque which must be transmitted, it may be necessary to increase the horsepower to be transmitted by a factor which will allow for momentary increases in torque due to the characteristics of the equipment. The service factors shown in the table below provide a basis for estimating this allowance for specific combination of connected equipment.

These factors are derived from lengthy field experience with average applications and they are to be considered as a general guide. For conditions not covered by the table, good judgement must be exercised and a factor selected by referring to the type of equipment most closely related to the type of application being considered, or by detailed analysis of the dynamics of the equipment.

Example:

Find a coupling to connect a gearbox with the drum of a conveyor (not uniformly loaded)
Motor power P_N = 30 Kw.
Drum speed n = 100 r. p. m.
Gearbox shaft d_1 = 80 mm.
Drum - side shaft d_2 = 100 mm.

Solution:

Service factor K = 1,4 $\quad T_N = 9550 \frac{30}{100} 1,4 = 4010$ Nm

As drum - side shaft d_2 = 100 mm. we are forced to select coupling size MT - 100.
Resulting service factor is:

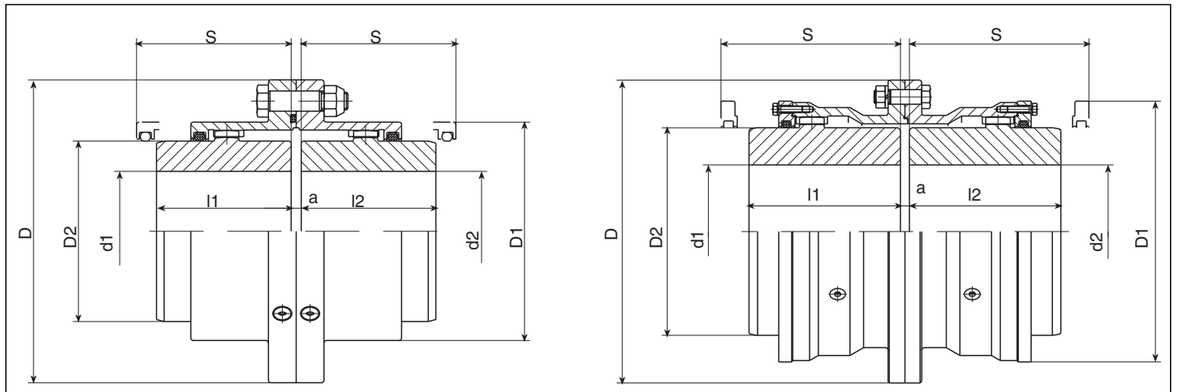
$$K = \frac{11700}{4010} = 2,9$$

Service factor

LOAD TYPE	DUTY FEATURES	DRIVEN EQUIPMENT	TYPE DRIVER		
			Electric motor or Turbine	Hidraulic motor	Reciprocating Engine
UNIFORM	Continuous duty without overloads or shocks. Occasional starts-up	Electric generators Centrifugal pumps Light fans	1	1,25	1,5
LIGHT	Continuous duty with light overloads and shocks for a short time and not frequently.	Multistage centrifugal blowers Reciprocating pumps Large fans (heavy duty) Agitators for liquids Agitators for solids Textile machinery Machine tools Conveyor belts Elevators	1,4	1,75	2
MEDIUM	Intermittent duty with frequent light shocks, medium overloads for a short time.	Reciprocating compressors Cranes (travel or trolley motion) Hoisting equipment Calenders for rubber and plastic Flattening machines Rolling mill drives Non-reversing cold rolling mills	1,8	2	2,25
HEAVY	Duty with very high and frequent shocks. Frecuent reversal of the load. High safety degree.	Bridge cranes for steel industry Mixers for rubber and plastic Cranes (heavy duty) Pulp grinders Marine drives Equipment for passengers transport Mine fans Mill delivery and runout tables Non-reversing cold rolling mills	2,2	2,5	2,75
EXTRA HEAVY	Extremely high shocks and overloads with frequent and momentary reversals.	Reversing cold mills Hot rolling mills Reversing rolling mill drives Heavy duty in steel industry Slitting machines Grinders Shear and croppers Stone crushers	2,5	3	3,5

Coupling Types

Type MT Basic design



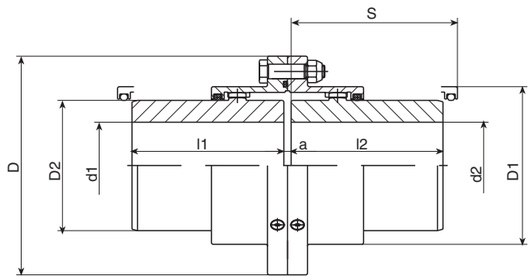
Size MT 42-260 — Size MT 280-800

Size	(1) P_N (KW) / n	(2) T_N Nominal	Max.Speed N max.(3)	DIMENSIONS (mm.)								J (6) (7)	Weight(7)	Lubricant
		Nm	r.p.m.	(4) d_1 - d_2 max.	(4) d_1 - d_2 min.	D	D_1	D_2	l_1 - l_2	a	S (5)	Kgm²	Kg.	Kg.
42	0.107	1.025	8.600	44	13	116	80	60	55	6	75	0,0055	5	0,04
55	0.225	2.150	6.600	58	16	152	100	79	70	6	90	0,021	10	0,06
70	0.440	4.200	5.600	75	20	178	125	101	80	6	108	0,048	17	0,17
90	0.754	7.200	4.700	95	25	213	148	124	95	8	124	0,125	28	0,24
100	1.225	11.700	4.200	105	30	240	173	143	105	8	136	0,200	40	0,36
125	1.80	17.200	3.600	130	35	279	204	170	120	8	158	0,48	65	0,50
145	2.88	27.500	3.150	150	45	318	242	205	135	10	172	0,93	95	0,70
165	3.98	38.000	2.860	165	55	346	268	216	150	10	192	1,55	134	1,30
185	5.36	51.200	2.580	190	60	389	302	250	170	10	210	2,70	185	1,75
205	7.05	67.300	2.320	210	70	425	327	275	185	12	230	4,10	240	2,2
230	9.21	88.000	2.200	230	100	457	354	300	200	12	250	5,55	273	2,8
260	14.08	134.500	2.000	260	115	527	410	340	230	12	280	9,15	412	4,5
280	18.85	180.000	1.800	280	140	540	465	370	250	16	300	14,83	525	3,0
310	26.2	250.000	1.600	310	160	585	505	410	270	16	320	22,30	750	3,6
345	33.5	320.000	1.500	345	180	650	548	450	290	16	340	36,78	890	4,8
370	41.8	400.000	1.400	370	210	690	588	490	325	20	370	52,6	1.275	5,0
390	53.4	510.000	1.300	390	230	760	640	520	345	20	400	78,8	1.390	9,0
420	69.1	660.000	1.200	420	250	805	690	560	365	20	420	110,8	1.660	9,8
460	81.7	780.000	1.100	460	275	850	730	600	400	20	450	152,4	2.010	11,5
500	104.7	1.000.000	1.050	500	300	930	780	650	410	25	490	213,8	2.460	11,5
550	125.7	1.200.000	950	550	325	995	850	710	430	25	520	309,8	3.070	14,5
590	167.5	1.600.000	900	590	350	1.055	910	760	470	25	550	422	3.410	23
620	188.5	1.800.000	850	620	375	1.140	970	810	500	30	600	677	4.550	23
650	199.0	1.900.000	800	650	400	1.190	1.020	840	520	30	630	762	5.035	30
680	219.9	2.100.000	750	680	425	1.250	1.080	890	540	30	650	850	6.270	36
730	277.3	2.600.000	700	730	450	1.300	1.150	950	570	30	680	1.210	6.910	38
800	397.9	3.800.000	660	800	475	1.420	1.270	1.050	600	30	725	1.620	9.750	46

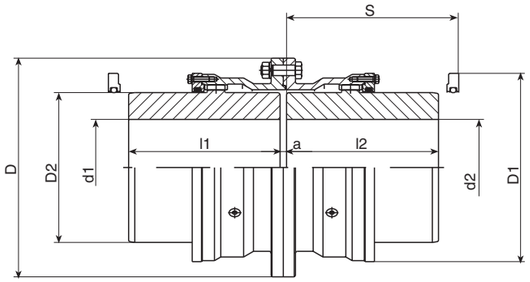
(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) Clearence to align coupling hubs and replacement of sealing rings.
(6) $GD^2 = 4J$.
(7) J and Weight are given for maximum bore.

Coupling Types

Type MTCL Longer hubs



Size MTCL 42-260



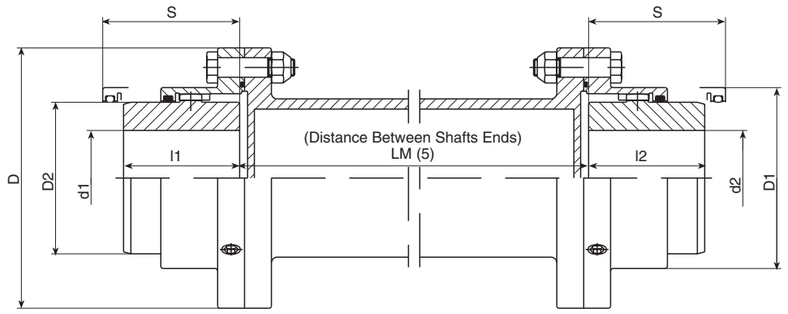
Size MTCL 280-800

Size	(1) P_N (KW) / n	(2) T_N Nominal	Speed (3) N max.	DIMENSIONS (mm.)								J (6)	Weight	Lubricant
		Nm	r.p.m.	$d_1 - d_2$ (4) max.	$d_1 - d_2$ (4) min.	D	D_1	D_2	$l_1 - l_2$	a	S (5)	Kgm^2	Kg.	Kg.
42	0.107	1.025	8.600	44	13	116	80	60	110	6	130	0,066	7,1	0,04
55	0.225	2.150	6.600	58	16	152	100	79	110	6	130	0,021	12,9	0,06
70	0.440	4.200	5.600	75	20	178	125	101	140	6	170	0,057	24,0	0,17
90	0.754	7.200	4.700	95	25	213	148	124	170	8	200	0,152	41,6	0,24
100	1.225	11.700	4.200	105	30	240	173	143	170	8	200	0,242	55,6	0,36
125	1.80	17.200	3.600	130	35	279	204	170	210	8	250	0,596	95,7	0,50
145	2.88	27.500	3.150	150	45	318	242	205	250	10	290	1,242	152	0,70
165	3.98	38.000	2.860	165	55	346	268	216	250	10	290	1,884	188	1,30
185	5.36	51.200	2.580	190	60	389	302	250	310	10	350	3,54	286	1,75
205	7.05	67.300	2.320	210	70	425	327	275	310	12	350	5,20	349	2,2
230	9.21	88.000	2.200	230	100	457	354	300	350	12	400	7,40	421	2,8
260	14.08	134.500	2.000	260	115	527	410	340	440	12	490	13,4	677	4,5
280	18.85	180.000	1.800	280	140	540	465	370	440	16	490	20,2	800	3,0
310	26.2	250.000	1.600	310	160	585	505	410	440	16	490	29,5	1.048	3,6
345	33.5	320.000	1.500	345	180	650	548	450	560	16	610	53,4	1.456	4,8
370	41.8	400.000	1.400	370	210	690	588	490	560	20	610	72,8	1.843	5,0
390	53.4	510.000	1.300	390	230	760	640	520	700	20	760	99,1	1.990	9,0
420	69.1	660.000	1.200	420	250	805	690	560	700	20	760	160	2.697	9,8
460	81.7	780.000	1.100	460	275	850	730	600	860	20	940	240	3.622	11,5
500	104.7	1.000.000	1.050	500	300	930	780	650	860	25	940	332	3.304	11,5
550	125.7	1.200.000	950	550	325	995	850	710	860	25	940	470	5.182	14,5
590	167.5	1.600.000	900	590	350	1.055	910	760	860	25	940	614	5.598	23
620	188.5	1.800.000	850	620	375	1.140	970	810	1.000	30	1.100	994	7.728	23
650	199.0	1.900.000	800	650	400	1.190	1.020	840	1.000	30	1.100	1.110	8.263	30
680	219.9	2.100.000	750	680	425	1.250	1.080	890	1.000	30	1.100	1.272	9.738	36
730	277.3	2.600.000	700	730	450	1.300	1.150	950	1.000	30	1.100	1.723	10.620	38
800	397.9	3.800.000	660	800	475	1.420	1.270	1.050	1.000	30	1.100	2.338	14.074	46

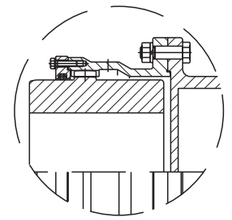
(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) Clearence to align coupling hubs and replacement of sealing rings.
(6) GD^2 = 4J.

Coupling Types

Type MTX with spacer



Size MTX 42-260



Size MTX 280-800

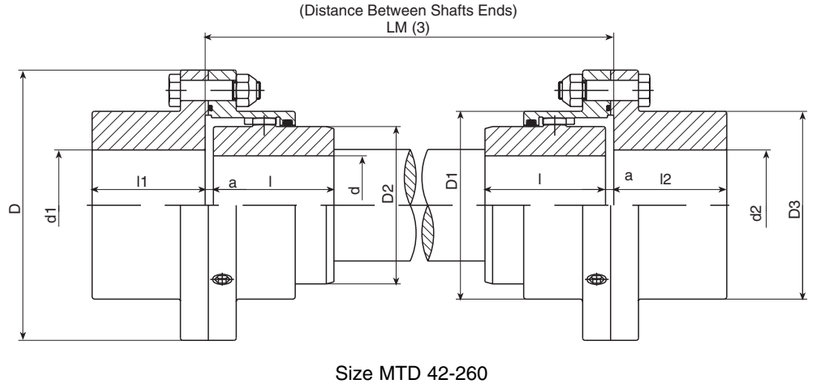
Size	(1) P_N (KW) / n	(2) T_N Nominal	Max.Speed N max.	DIMENSIONS (mm.)							J (6)	Weight (7)	Lubricant
		Nm	r.p.m.(3)	$d_1 - d_2$ max.	$d_1 - d_2$ min.	D	D_1	D_2	$l_1 - l_2$	S (4)	Kgm^2	Kg.	Kg.
42	0.107	1.025		44	13	116	80	60	55	75	0,0055	5	0,04
55	0.225	2.150		58	16	152	100	79	70	90	0,021	10	0,06
70	0.440	4.200		75	20	178	125	101	80	108	0,048	17	0,17
90	0.754	7.200		95	25	213	148	124	95	124	0,125	28	0,24
100	1.225	11.700		105	30	240	173	143	105	136	0,200	40	0,36
125	1.80	17.200		130	35	279	204	170	120	158	0,48	65	0,50
145	2.88	27.500		150	45	318	242	205	135	172	0,93	95	0,70
165	3.98	38.000		165	55	346	268	216	150	192	1,55	134	1,30
185	5.36	51.200		190	60	389	302	250	170	210	2,70	185	1,75
205	7.05	67.300		210	70	425	327	275	185	230	4,10	240	2,2
230	9.21	88.000		230	100	457	354	300	200	250	5,55	273	2,8
260	14.08	134.500		260	115	527	410	340	230	280	9,15	412	4,5
280	18.85	180.000		280	140	540	465	370	250	300	14,83	525	3,0
310	26.2	250.000		310	160	585	505	410	270	320	22,30	750	3,6
345	33.5	320.000		345	180	650	548	450	290	340	36,78	890	4,8
370	41.8	400.000		370	210	690	588	490	325	370	52,6	1.275	5,0
390	53.4	510.000		390	230	760	640	520	345	400	78,8	1.390	9,0
420	69.1	660.000		420	250	805	690	560	365	420	110,8	1.660	9,8
460	81.7	780.000		460	275	850	730	600	400	450	152,4	2.010	11,5
500	104.7	1.000.000		500	300	930	780	650	410	490	213,8	2.460	11,5
550	125.7	1.200.000		550	325	995	850	710	430	520	309,8	3.070	14,5
590	167.5	1.600.000		590	350	1.055	910	760	470	550	422	3.410	23
620	188.5	1.800.000		620	375	1.140	970	810	500	600	677	4.550	23
650	199.0	1.900.000		650	400	1.190	1.020	840	520	630	762	5.035	30
680	219.9	2.100.000		680	425	1.250	1.080	890	540	650	850	6.270	36
730	277.3	2.600.000		730	450	1.300	1.150	950	570	680	1.210	6.910	38
800	397.9	3.800.000		800	475	1.420	1.270	1.050	600	725	1.620	9.750	46

The max. r.p.m. speed is limited by weight and critical speed of spacer.

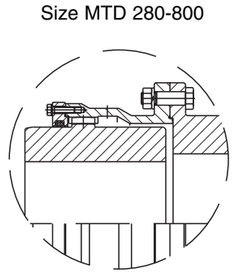
(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) See page 28 for critical speed of spacer.
(4) Clearence to align coupling hubs and replacement of sealing rings.
(5) Distance to be specified by the customer. **LM is distance between shafts ends, not between flanges.**
(6) GD^2 = 4J. Without spacer.
(7) Without spacer.

Coupling Types

Type MTD with floating shaft



Size MTD 42-260



Size MTD 280-800

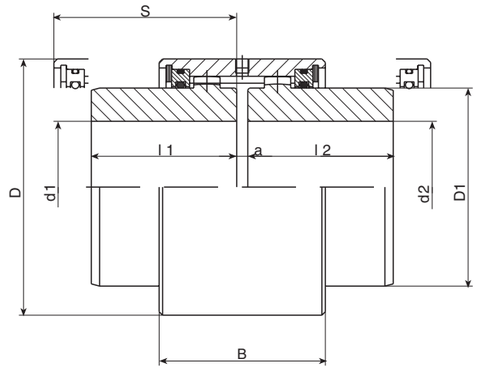
Size	(1) P_N (KW) / n	(2) T_N Nominal	Max Speed N max.	DIMENSIONS (mm.)									J (5)	Weight (6)	Lubricant
		Nm		d (4)		(4) d_1-d_2	D	D_1	D_2	D_3	l_1 - l_2	a	Kgm²	Kg.	Kg.
				max.	min.	max.									
42	0.107	1.025		44	13	55	116	80	60	80	55	7	0,01195	11	0,04
55	0.225	2.150		58	16	70	152	100	79	100	70	7	0,0443	22	0,06
70	0.440	4.200		75	20	90	178	125	101	125	80	7	0,100	36	0,17
90	0.754	7.200		95	25	105	213	148	124	148	95	8	0,248	60	0,24
100	1.225	11.700		105	30	120	240	173	143	173	105	8	0,426	100	0,36
125	1.80	17.200		130	35	145	279	204	170	204	120	8	1,000	138	0,50
145	2.88	27.500		150	45	170	318	242	205	242	135	10	1,94	205	0,70
165	3.98	38.000		165	55	190	346	268	216	268	150	10	3,14	280	1,30
185	5.36	51.200		190	60	215	389	302	250	302	170	10	5,70	400	1,75
205	7.05	67.300		210	70	230	425	327	275	327	185	11	8,56	510	2,2
230	9.21	88.000		230	100	250	457	354	300	354	200	11	11,45	590	2,8
260	14.08	134.500		260	115	290	527	410	340	410	230	12	21,23	890	4,5
280	18.85	180.000		280	140	290	540	465	370	410	250	14	28,53	1.045	3,0
310	26.2	250.000		310	160	350	585	505	410	460	270	14	43,94	1.430	3,6
345	33.5	320.000		345	180	380	650	548	450	500	290	16	71,20	1.770	4,8
370	41.8	400.000		370	210	410	690	588	490	540	325	18	103,40	2.390	5,0
390	53.4	510.000		390	230	450	760	640	520	590	345	18	140	2.590	9,0
420	69.1	660.000		420	250	480	805	690	560	630	365	18	216	3.344	9,8
460	81.7	780.000		460	275	520	850	730	600	680	400	18	300	4.075	11,5
500	104.7	1.000.000		500	300	560	930	780	650	730	410	22	420	4.930	11,5
550	125.7	1.200.000		550	325	600	995	850	710	790	430	22	608	6.120	14,5
590	167.5	1.600.000		590	350	650	1.055	910	760	850	470	22	850	7.190	23
620	188.5	1.800.000		620	375	680	1.140	970	810	890	500	25	1.140	9.014	23
650	199.0	1.900.000		650	400	710	1.190	1.020	840	930	520	25	1.470	10.135	30
680	219.9	2.100.000		680	425	770	1.250	1.080	890	1.010	540	25	1.820	12.400	36
730	277.3	2.600.000		730	450	810	1.300	1.150	950	1.060	570	25	2.430	13.960	38
800	397.9	3.800.000		800	475	900	1.420	1.270	1.050	1.170	600	25	3.500	18.800	46

The max. r.p.m. speed is limited by weight and critical speed of floating shaft. Please consult JAURE.

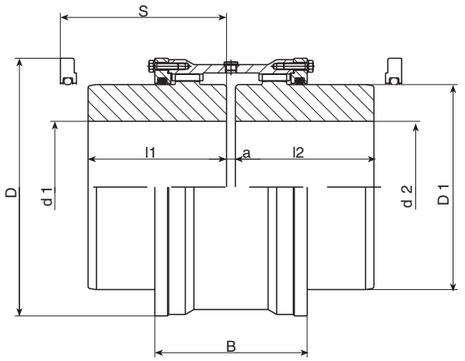
(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Distance to be specified by the customer. **LM is distance between shafts ends, not between flanges.**
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) GD² = 4J. Without shaft.
(6) Without shaft.
The coupling is supplied with a sealing compound on the intermediate shaft keyways.

Coupling Types

Type MTS with continuous sleeve



Size MTS 35-260



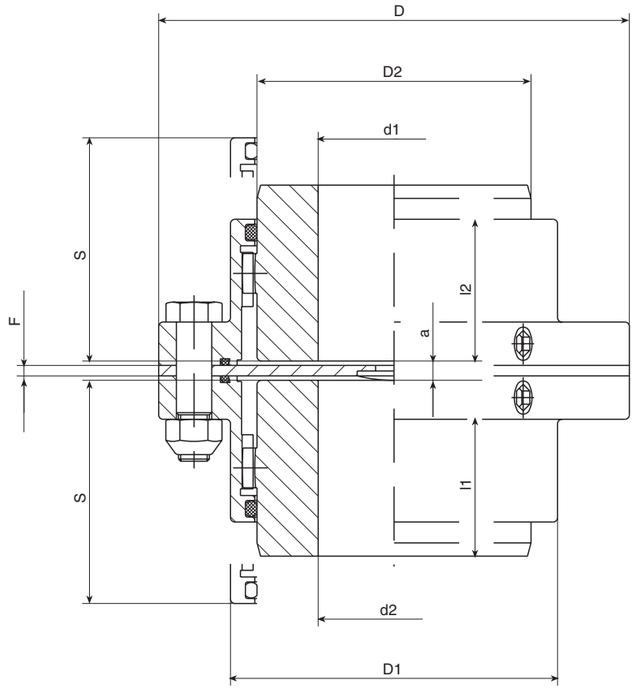
Size MTS 280-800

Size	(1) P_N (KW) / n	(2) T_N Nominal	Speed N max.(3)	DIMENSIONS (mm.)							J (6)	Weight	Lubricant
		Nm	r.p.m.	d_1 - d_2 (4)		D	D_1	l_1 - l_2	a	S (5)	B	Kgm²	Kg.	Kg.
				max.	min.									
35	0.080	760	9.000	35	12	78	52	45	4	80	66	0,0018	2,52	0,010
42	0.107	1.025	8.600	44	13	86	60	55	6	94	76	0,0032	3,75	0,014
55	0.225	2.150	6.600	58	16	105	79	70	6	100	80	0,0086	7,12	0,020
70	0.440	4.200	5.600	75	20	140	101	80	6	130	106	0,0342	15,26	0,050
90	0.754	7.200	4.700	95	25	164	124	95	8	145	116	0,0753	24,8	0,070
100	1.225	11.700	4.200	105	30	185	143	105	8	150	120	0,129	34	0,085
125	1.80	17.200	3.600	130	35	215	170	120	8	165	130	0,268	52,6	0,115
145	2.88	27.500	3.150	150	45	255	205	135	10	195	150	0,631	86	0,16
165	3.98	38.000	2.860	165	55	280	216	150	10	215	170	0,952	108	0,30
185	5.36	51.200	2.580	190	60	317	250	170	10	245	190	1,830	162	0,40
205	7.05	67.300	2.320	210	70	345	275	185	12	275	210	2,865	211	0,50
230	9.21	88.000	2.200	230	100	374	300	200	12	295	226	4,225	256	0,60
260	14.08	134.500	2.000	260	115	414	340	230	12	355	266	7,50	366	1,25
280	18.85	180.000	1.800	280	140	465	370	250	16	345	275	11,12	446	3,50
310	26.2	250.000	1.600	310	160	505	410	270	16	375	295	16,21	558	3,90
345	33.5	320.000	1.500	345	180	548	450	290	16	400	315	25,00	712	4,80
370	41.8	400.000	1.400	370	210	588	490	325	20	450	350	37,50	906	6,00
390	53.4	510.000	1.300	390	230	640	520	345	20	480	370	53,25	1.100	8,80
420	69.1	660.000	1.200	420	250	690	560	365	20	510	390	77,5	1.360	9,50
460	81.7	780.000	1.100	460	275	730	600	400	20	560	430	114	1.715	11,0
500	104.7	1.000.000	1.050	500	300	780	650	410	25	570	440	146	1.958	12,5
550	125.7	1.200.000	950	550	325	850	710	430	25	600	460	218	2.464	17
590	167.5	1.600.000	900	590	350	910	760	470	25	660	500	308	3.050	22
620	188.5	1.800.000	850	620	375	970	810	500	30	700	530	430	3.720	24
650	199.0	1.900.000	800	650	400	1.020	840	520	30	730	550	532	4.160	30
680	219.9	2.100.000	750	680	425	1.080	890	540	30	755	574	668	4.720	38
730	277.3	2.600.000	700	730	450	1.150	950	570	30	800	604	922	5.730	42
800	397.9	3.800.000	660	800	475	1.270	1.050	600	30	850	634	1.455	7.520	50

(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) Clearence to align coupling hubs and replacement of sealing rings.
(6) GD² = 4J.

Coupling Types

Type MTV for vertical installation

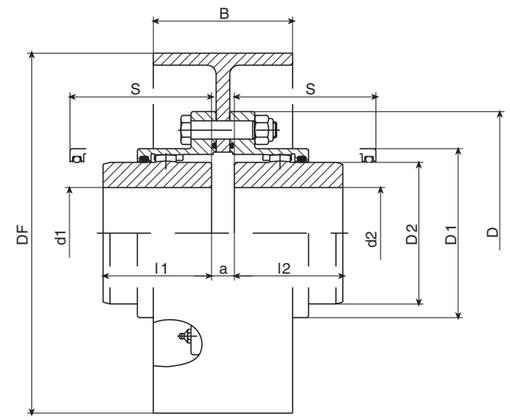


Size	(1) P_N (KW) / n	(2) T_N Nominal	Speed (3) N max.	DIMENSIONS (mm.)									J (6)	Weight
		Nm	r.p.m.	d_1 - d_2 (4) max.	d_1 - d_2 (4) min.	D	D_1	D_2	l_1 - l_2	a	S (5)	F	Kgm^2	Kg.
42	0.107	1.025	8.600	44	13	116	80	60	55	8	75	3	0,006	5
55	0.225	2.150	6.600	58	16	152	100	79	70	8	90	3	0,021	10
70	0.440	4.200	5.600	75	20	178	125	101	80	8	108	3	0,048	17
90	0.754	7.200	4.700	95	25	213	148	124	95	9	124	3	0,125	29
100	1.225	11.700	4.200	105	30	240	173	143	105	9	136	3	0,20	44
125	1.80	17.200	3.600	130	35	279	204	170	120	12	158	5	0,48	68
145	2.88	27.500	3.150	150	45	318	242	205	135	13	172	5	0,90	100
165	3.98	38.000	2.860	165	55	346	268	216	150	13	192	5	1,45	134
185	5.36	51.200	2.580	190	60	389	302	250	170	14	210	5	2,70	190
205	7.05	67.300	2.320	210	70	425	327	275	185	16	230	6	4,15	255
230	9.21	88.000	2.200	230	100	457	354	300	200	16	250	6	5,60	285
260	14.08	134.500	2.000	260	115	527	410	340	230	16	280	6	9,35	420

(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) Clearence to align coupling hubs and replacement of sealing rings.
(6) GD^2 = 4J.
For lubricant quantity and method for MTV, please consult JAURE.

Coupling Types

Type MTF with intermediate brake drum

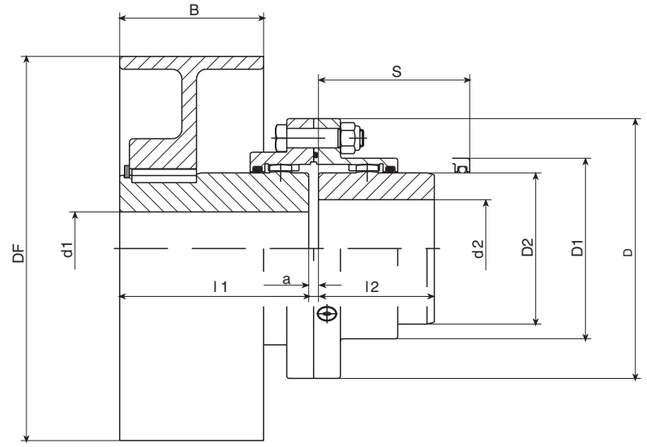


Size	(1) P_N (KW) / n	(2) T_N Nominal	Speed N max.(3)	DIMENSIONS (mm.)										J (6)	Weight	Lubricant
		Nm	r.p.m.	d_1 - d_2 (4) max.	d_1 - d_2 (4) min.	D	D_1	D_2	l_2 - l_1	a	S (5)	DF	B	Kgm^2	Kg.	Kg.
42	0.107	1.025	2.850	44	13	116	80	60	55	16	75	200	75	0,045	10	0,04
55	0.225	2.150	2.850	58	16	152	100	79	70	16	90	200	75	0,054	14	0,06
			2.300							16		250	95	0,110	18	
			1.800							18		315	118	0,340	24	
70	0.440	4.200	2.300	75	20	178	125	101	80	16	108	250	95	0,120	24	0,17
			1.800							18		315	118	0,360	31	
			1.650							18		350	130	0,500	35	
			1.450							22		400	150	0,96	42	
90	0.754	7.200	1.800	95	25	213	148	124	95	20	124	315	118	0,41	42	0,24
			1.650							22		350	130	0,56	46	
			1.450							22		400	150	1,00	56	
100	1.225	11.700	1.800	105	30	240	173	143	105	20	136	315	118	0,45	54	0,36
			1.650							22		350	130	0,60	59	
			1.450							22		400	150	1,10	69	
			1.300							22		450	170	1,55	74	
125	1.80	17.200	1.450	130	35	279	204	170	120	22	158	400	150	1,40	93	0,50
			1.300							22		450	170	2,00	98	
			1.150							22		500	190	2,95	113	
145	2.88	27.500	1.150	150	45	318	242	205	135	25	172	500	190	3,40	143	0,70
			1.100							25		530	195	4,15	153	
			1.000							28		630	236	8,45	193	
165	3.98	38.000	1.150	165	55	346	268	216	150	25	192	500	190	3,9	182	1,30
			1.100							25		530	195	4,6	192	
			1.000							28		630	236	9,0	232	
			800							28		710	265	15,8	277	

(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) Clearence to align coupling hubs and replacement of sealing rings.
(6) GD^2 = 4J.

Coupling Types

Type MTFE with side brake drum

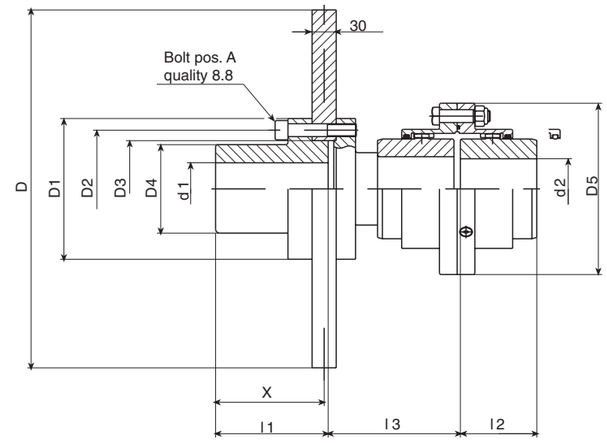


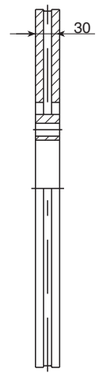
Size	(1) P_N (KW) / n	(2) T_N Nominal	Speed N max.(3)	DIMENSIONS (mm.)											J (6)	Weight	Lubricant
		Nm	r.p.m.	d_1 - d_2 (4) max.	d_1 - d_2 (4) min.	D	D_1	D_2	l_1	l_2	a	S (5)	DF	B	Kgm²	Kg.	Kg.
42	0.107	1.025	2.850	44	13	116	80	60	95	55	6	75	200	75	0,046	12	0,04
55	0.225	2.150	2.850	58	16	152	100	79	115	70	6	90	200	75	0,055	17	0,06
			2.300						125				250	95	0,113	22	
			1.800						140				315	118	0,353	35	
70	0.440	4.200	2.300	75	20	178	125	101	130	80	6	108	250	95	0,140	28	0,17
			1.800						145				315	118	0,380	42	
			1.650						145				350	130	0,530	46	
			1.450						160				400	150	1,00	57	
90	0.754	7.200	1.800	95	25	213	148	124	155	95	8	124	315	118	0,44	53	0,24
			1.650						155				350	130	0,60	57	
			1.450						170				400	150	1,07	71	
100	1.225	11.700	1.800	105	30	240	173	143	155	105	8	136	315	118	0,51	65	0,36
			1.650						155				350	130	0,66	69	
			1.450						170				400	150	1,13	84	
			1.300						180				450	170	1,60	94	
125	1.80	17.200	1.450	130	35	279	204	170	200	120	8	158	400	150	1,45	108	0,50
			1.300						210				450	170	2,03	119	
			1.150						220				500	190	3,00	129	
145	2.88	27.500	1.150	150	45	318	242	205	220	135	10	172	500	190	3,50	159	0,70
			1.100						220				530	195	4,35	171	
			1.000						250				630	236	8,75	221	
165	3.98	38.000	1.150	165	55	346	268	216	235	150	10	192	500	190	4,3	198	1,30
			1.100						235				530	195	5,1	211	
			1.000						265				630	236	9,5	260	
			800						280				710	265	16,5	312	

(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) Clearence to align coupling hubs and replacement of sealing rings.
(6) GD² = 4J.

Coupling Types

Type MTFS with brake disc





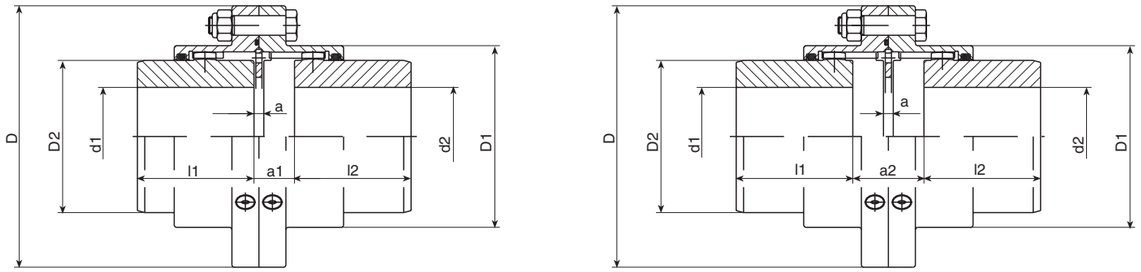
Optional:
Self Ventilated disc

Size	T_N Nominal	Speed N max.(1)	DIMENSIONS (mm.)												Bolt Data pos. A		J (3)	Weight(3)	Lubricant
	Nm	r.p.m.	d_1(2) max.	d_2 (2) max.	D	D_1	D_2	D_3	D_4	D_5	l_1	l_2	l_3	X	Z-M	Nm	Kgm²	Kg.	Kg.
55	2.150	3.000	50	58	315	124	105	85	82	152	107	70	117	102	9-M10	49	0,23	32	0,06
		2.700	60		355	145	125	105	100		107		117	102	9-M12	86	0,37	38	
		2.400	70		395	165	140	115	110		107		117	102	9-M14	135	0,54	46	
		2.100	70		445	175	146	120	112		140		117	135	12-M16	210	0,82	51	
70	4.200	1.900	70	75	395	165	140	115	110	178	107	80	117	102	9-M14	135	0,56	53	0,17
		2.100	70		445	175	146	120	112		140		130	135	12-M16	210	0,87	57	
		1.900	100		495	218	190	160	155		140		145	135	12-M18	290	1,42	81	
		1.800	100		550	218	190	160	155		140		145	135	12-M18	290	1,88	88	
90	7.200	2.100	70	95	445	175	146	120	112	213	140	95	145	135	12-M16	210	0,95	71	0,24
		1.900	100		495	218	190	160	155		140		164	135	12-M18	290	1,47	94	
		1.800	100		550	218	190	160	155		140		164	135	12-M18	290	1,92	103	
		1.500	105		625	238	205	170	168		140		164	135	12-M20	410	3,33	130	
100	11.700	1.900	100	105	495	218	190	160	155	240	140	105	180	135	12-M18	290	1,57	109	0,36
		1.800	100		550	218	190	160	155		140		180	135	12-M18	290	1,97	117	
		1.500	105		625	238	205	170	168		140		180	135	12-M20	410	3,43	140	
		1.300	120		705	268	230	195	190		140		180	135	12-M22	550	5,73	171	
125	17.200	1.500	105	130	625	238	205	170	168	279	140	120	196	135	12-M20	410	3,73	166	0,50
		1.300	120		705	268	230	195	190		140		196	135	12-M22	550	5,93	194	
		1.200	135		795	300	260	220	216		140		196	135	12-M24	710	9,42	241	
145	27.500	1.500	105	150	625	238	205	170	168	318	140	135	223	135	12-M20	410	4,13	200	0,70
		1.300	120		705	268	230	195	190		140		223	135	12-M221	550	6,23	236	
		1.200	135		795	300	260	220	216		140		223	135	12-M24	710	9,82	275	
165	38.000	1.300	120	165	705	268	230	195	190	346	140	150	238	135	12-M22	550	6,88	271	1,30
		1.200	135		795	300	260	220	216		140		238	135	12-M24	710	10,32	315	

(1) Consult JAURE for couplings operating at higher speeds.
(2) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(3) GD² = 4J. (Values with solid disc.)

Coupling Types

Type MTCO with extended sleeve

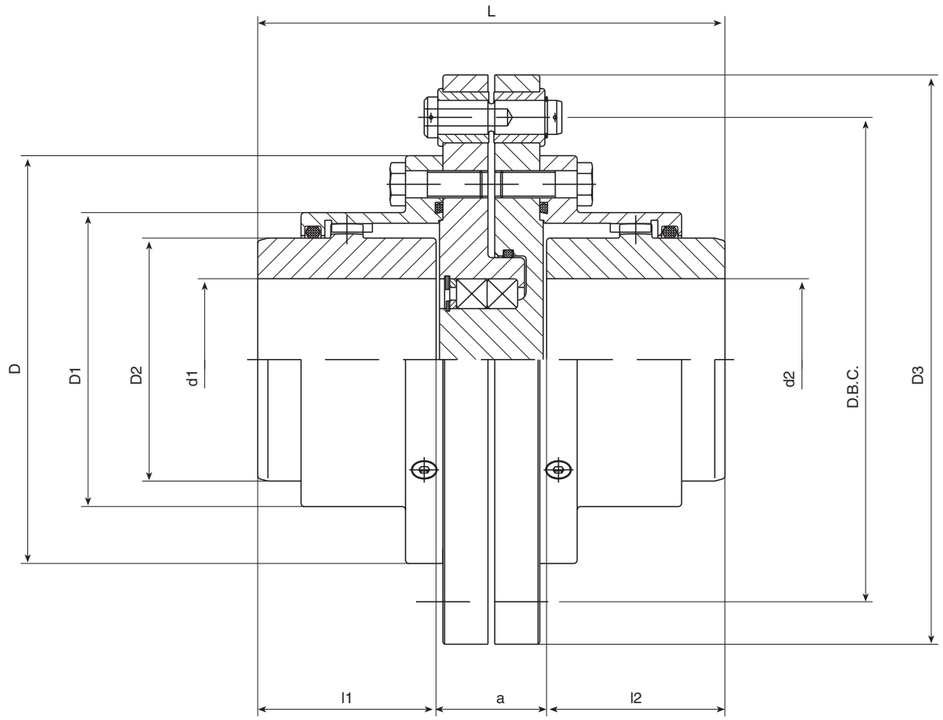


Size	(1) P_N (KW) / n	(2) T_N Nominal	Speed (3) N max.	DIMENSIONS (mm.)									J (5)	Weight	Lubricant
		Nm	r.p.m.	d_1 - d_2 (4) max.	d_1 - d_2 (4) min.	D	D_1	D_2	l_1 - l_2	a	a_1	a_2	Kgm²	Kg.	Kg.
42	0.107	1.025	8.600	44	13	116	80	60	55	6	16	26	0,0055	5	0,04
55	0.225	2.150	6.600	58	16	152	100	79	70	6	21	36	0,021	10	0,06
70	0.440	4.200	5.600	75	20	178	125	101	80	6	26	46	0,048	17	0,17
90	0.754	7.200	4.700	95	25	213	148	124	95	8	33	58	0,125	28	0,24
100	1.225	11.700	4.200	105	30	240	173	143	105	8	48	88	0,200	40	0,36
125	1.80	17.200	3.600	130	35	279	204	170	120	8	50	92	0,48	65	0,50
145	2.88	27.500	3.150	150	45	318	242	205	135	10	56	102	0,93	95	0,70
165	3.98	38.000	2.860	165	55	346	268	216	150	10	66	122	1,55	134	1,30
185	5.36	51.200	2.580	190	60	389	302	250	170	10	78	146	2,70	185	1,75
205	7.05	67.300	2.320	210	70	425	327	275	185	12	90	168	4,10	240	2,20
230	9.21	88.000	2.200	230	100	457	354	300	200	12	96	180	5,55	273	2,80
260	14.08	134.500	2.000	260	115	527	410	340	230	12	112	212	9,15	412	4,50

(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) GD^2 = 4J.

Coupling Types

Type MTB shear pin type

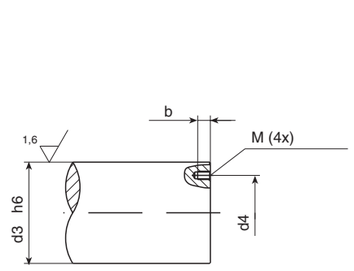


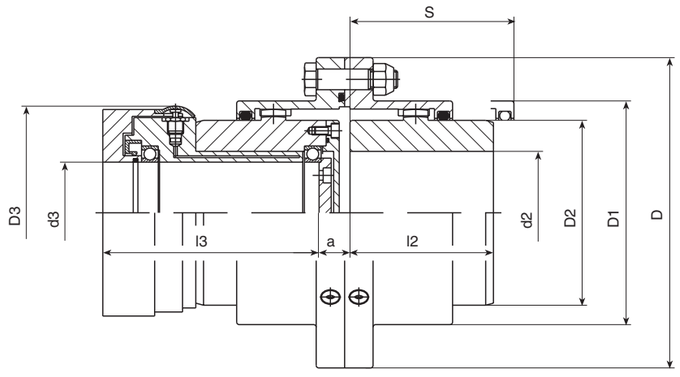
Size	(1) P_N (KW) / n	(2) T_N Nominal	Speed (3) N max.	DIMENSIONS (mm.)												J (5)	Weight	Lubricant
		Nm	r.p.m.	d_1 - d_2 (4) max.	d_1 - d_2 (4) min.	D	D_1	D_2	D_3	l_1 - l_2	L	a	D.B.C.			Kgm²	Kg.	Kg.
55	0.225	2.150	4.400	58	16	152	100	79	220	70	182	42	185			0,082	20	0,06
70	0.440	4.200	4.000	75	20	178	125	101	250	80	202	42	215			0,15	30	0,17
90	0.754	7.200	3.500	95	25	213	148	124	285	95	232	42	250			0,30	45	0,24
100	1.225	11.700	3.000	105	30	240	173	143	335	105	275	65	285			0,79	82	0,36
125	1.80	17.200	2.600	130	35	279	204	170	370	120	305	65	320			1,36	116	0,50
145	2.88	27.500	2.400	150	45	318	242	205	410	135	337	67	360			2,26	158	0,70
165	3.98	38.000	2.200	165	55	346	268	216	435	150	367	67	385			3,24	205	1,30
185	5.36	51.200	1.800	190	60	389	302	250	520	170	424	84	450			6,76	305	1,75
205	7.05	67.300	1.700	210	70	425	327	275	560	185	456	86	490			9,56	380	2,2
230	9.21	88.000	1.600	230	100	457	354	300	590	200	486	86	520			12,28	428	2,8
260	14.08	134.500	1.500	260	115	527	410	340	660	230	546	86	590			19,68	605	4,5

(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) GD^2 = 4J.

Coupling Types

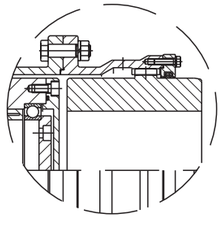
Type MTST-B with Safeset® safety element





Size MTST-B 70/60-260/190

Size MTST-B 280/200-310/220



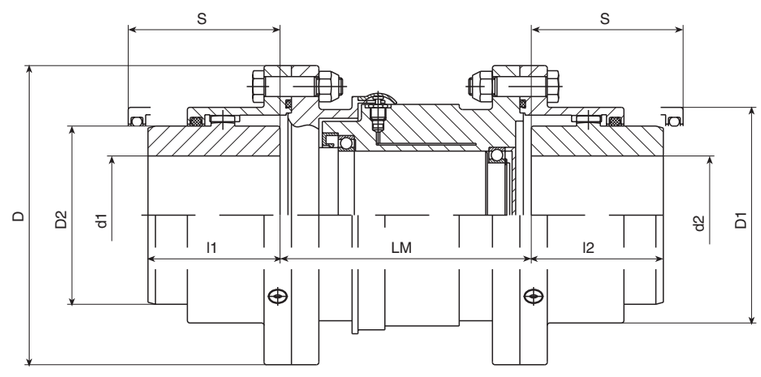
Size	T Torque Range	DIMENSIONS (mm.)													J (3)	Weight	Lubricant
	Nm	d_3	l_3	d_2 (1) max.	d_2 (1) min.	D	D_1	D_2	l_2	a	S (2)	d_4	M	b	Kgm^2	Kg.	Kg.
70/60	1.800-3.600	60	137	75	20	178	125	101	80	15	108	40	M6	13	0,060	21,9	0,17
90/70	3.000-6.000	70	150	95	25	213	148	124	95	18	124	50	M6	13	0,145	34,6	0,24
100/80	3.900-7.800	80	166	105	30	240	173	143	105	18	136	50	M6	13	0,225	47,6	0,36
125/90	5.000-10.000	90	184	130	35	279	204	170	120	22	158	65	M8	18	0,517	74,2	0,50
145/100	7.500-15.000	100	206	150	45	318	242	205	135	25	172	70	M8	18	0,995	109	0,70
145/110	10.000-20.000	110	208	150	45	318	242	205	135	25	172	80	M8	18	1,025	11	0,70
165/120	13.000-25.000	120	237	165	55	346	268	216	150	26	192	90	M8	18	1,670	153	1,30
185/130	17.000-33.000	130	250	190	60	389	302	250	170	26	210	100	M8	18	2,84	206	1,75
185/140	20.000-40.000	140	261	190	60	389	302	250	170	26	210	105	M10	23	2,89	209	1,75
205/150	23.000-46.000	150	275	210	70	425	327	275	185	28	230	115	M10	23	4,33	267	2,20
230/160	36.000-71.000	160	300	230	100	457	354	300	200	28	250	120	M10	23	5,87	305	2,80
230/170	39.000-78.000	170	300	230	100	457	354	300	200	30	250	130	M10	23	5,92	307	2,80
260/180	49.000-98.000	180	300	260	115	527	410	340	230	30	280	135	M10	23	9,61	450	4,50
260/190	63.000-126.000	190	350	260	115	540	465	340	230	30	280	145	M10	23	9,81	462	3,00
280/200	70.000-140.000	200	350	280	140	585	505	370	250	34	300	150	M10	23	15,58	578	3,00
310/220	85.000-170.000	220	350	310	160	650	548	410	270	34	320	175	M10	23	23,23	807	3,60

(1) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(2) Clearence to align coupling hubs and replacement of sealing rings.
(3) $GD^2 = 4J$.

Safeset® is a trade mark from Voith.

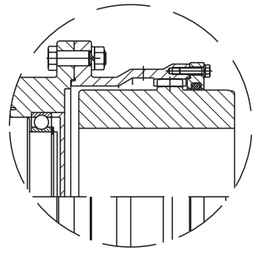
Coupling Types

Type MTSR-P with Safeset® safety element



Size MTSR-P 42-260

Size MTSR-P 280-345



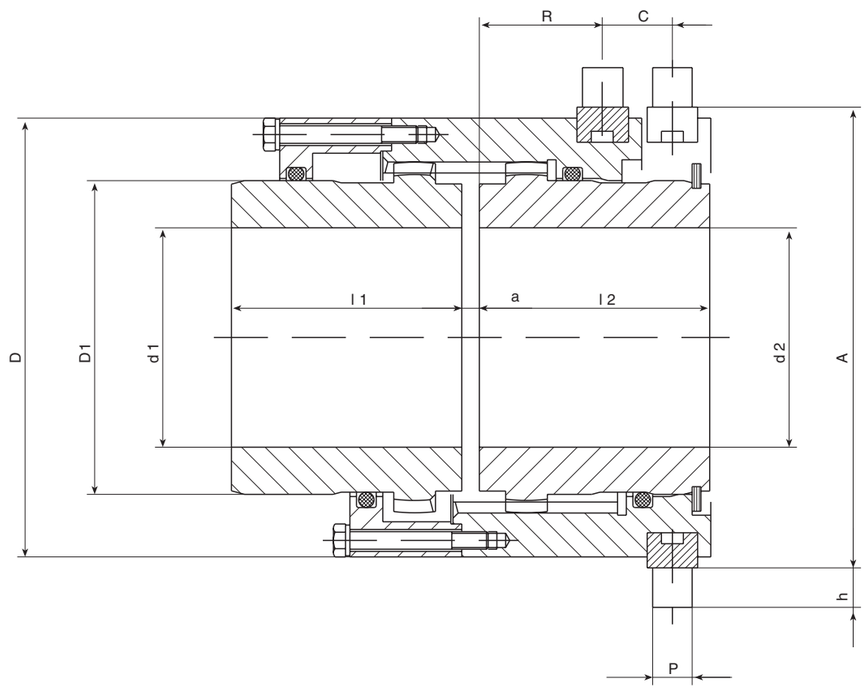
Size	T Torque Range	DIMENSIONS (mm.)								J (3)	Weight	Lubricant
	Nm	d_1 - d_2 (1) max.	d_1 - d_2 (1) min.	D	D_1	D_2	l_1 - l_2	LM	S (2)	Kgm^2	Kg.	Kg.
42	700-1500	44	13	116	80	60	55	111	75	0,075	14	0,04
55	1.600-.3200	58	16	152	100	79	70	121	90	0,046	24	0,06
70	2.900-5.800	75	20	178	125	101	80	119	108	0,104	39	0,17
90	5.400-10.800	95	25	213	148	124	95	143	124	0,262	67	0,24
100	8.200-16.400	105	30	240	173	143	105	169	136	0,432	92	0,36
125	12.600-25.200	130	35	279	204	170	120	181	158	0,989	150	0,50
145	20.500-41.000	150	45	318	242	205	135	203	172	1,969	230	0,70
165	28.000-56.000	165	55	346	268	216	150	209	192	2,979	286	1,30
185	39.000-78.000	190	60	389	302	250	170	216	210	5,624	425	1,75
205	58.000-116.000	210	70	425	327	275	185	252	230	8,442	536	2,20
230	111.000-222.000	230	100	457	354	300	200	342	250	12,473	700	2,80
260	142.000-284.000	260	115	527	410	340	230	321	280	21,587	1.017	4,50
280	200.000-390.000	280	140	540	465	370	250	401	300	32,200	1.365	3,00
310	244.000-488.000	310	160	585	505	410	270	401	320	47,246	1.613	3,60
345	290.000-580.000	345	180	650	548	450	290	403	340	79,371	2.140	4,80

(1) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(2) Clearence to align coupling hubs and replacement of sealing rings.
(3) $GD^2 = 4J$.

Safeset® is a trade mark from Voith.

Coupling Types

Type MTES disengaging coupling

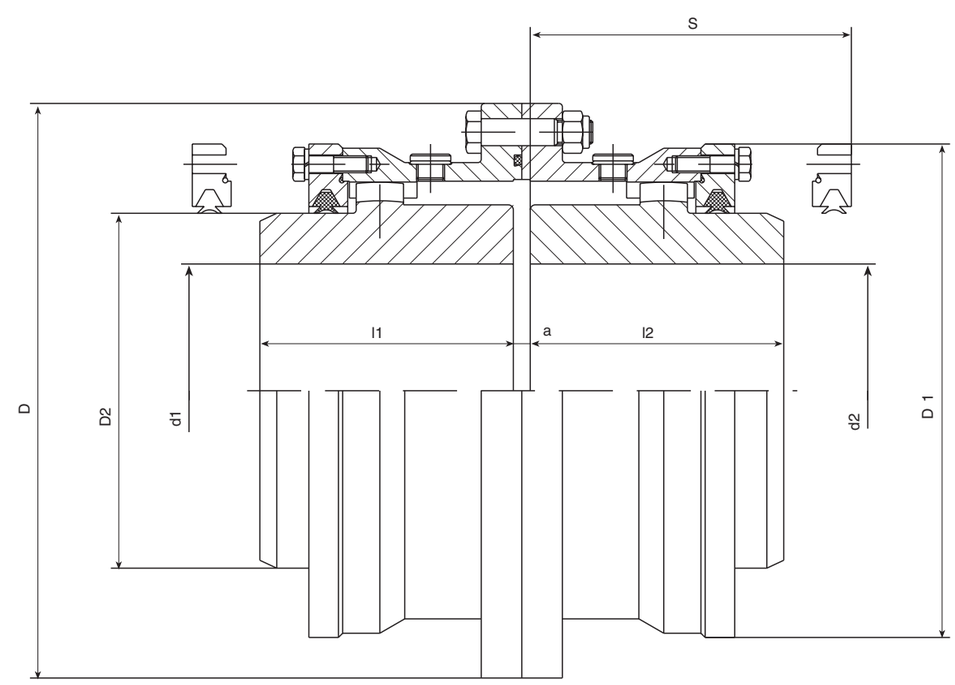


Size	(1) P_N (KW) / n	(2) T_N Nominal	Speed (3) N max.	DIMENSIONS (mm.)												J (5)	Weight	Lubricant
		Nm	r.p.m.	d_1 - d_2 (4) max.	d_1 - d_2 (4) min.	D	D_1	l_1	l_2	a	A	h	P	R	C	Kgm^2	Kg.	Kg.
42	0.107	1.025	3.000	44	13	100	60	55	55	6	104	12	12	24	18	0,006	4,5	0,04
55	0.225	2.150	2.500	60	16	120	79	70	70	6	124	14	14	33	20	0,016	7,8	0,05
70	0.440	4.200	2.000	75	20	150	101	80	80	6	154	16	16	40	25	0,048	14,5	0,14
90	0.754	7.200	1.700	95	25	177	124	95	95	8	187	16	16	50	28	0,103	22	0,2
100	1.225	11.700	1.500	105	30	200	143	105	105	8	210	18	18	56	32	0,19	32	0,24
125	1.80	17.200	1.300	130	35	226	170	120	120	8	240	20	20	62	35	0,33	42	0,33
145	2.88	27.500	1.150	150	45	264	205	135	135	10	280	20	20	70	40	0,70	65	0,45
165	3.98	38.000	1.050	165	55	290	216	150	150	10	300	22	22	72	42	1,09	82	0,8
185	5.36	51.200	950	190	60	325	250	170	170	10	330	24	24	77	44	1,90	115	1,0
205	7.05	67.300	850	210	70	353	275	185	185	12	368	26	26	81	48	2,75	140	1,2
230	9.21	88.000	800	230	100	377	300	200	200	12	390	26	26	86	52	3,75	165	1,4
260	14.08	134.500	700	260	115	435	340	230	230	12	450	30	30	102	60	7,66	252	2,7
280	18.85	180.000	650	280	140	470	370	250	250	16	485	30	30	102	60	11,05	315	3,0

(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
In case pulling holes are used verify page 29 for maximum shaft diameter.
(5) GD^2 = 4J.

Coupling Types

Type MTN with covers



Size	(1) P_N (KW) / n	(2) T_N Nominal	Speed (3) N max.	DIMENSIONS (mm.)							J (6)	Weight	Lubricant
		Nm	r.p.m.	d_1 - d_2 (4) max.	d_1 - d_2 (4) min.	D	D_1	D_2	l_1 - l_2	a	S(5)	Kgm^2	Kg.	Kg.
42	0.136	1.300	6.950	48	13	145	113	65	55	6	80	0,0175	7,3	0,07
55	0.262	2.500	6.150	60	16	164	126	80	70	6	90	0,0275	10,4	0,10
70	0.450	4.300	5.480	70	20	184	147	95	80	6	100	0,0475	15	0,12
90	0.733	7.000	4.580	85	25	220	176	112	95	8	130	0,1150	26	0,22
100	1.215	11.600	4.200	100	30	240	200	135	105	8	140	0,200	36	0,30
125	1.990	19.000	3.730	120	35	270	230	160	120	8	150	0,325	52	0,40
145	2.827	27.000	3.250	140	45	310	256	185	135	10	160	0,675	72	0,60
165	4.084	39.000	2.965	160	55	340	292	210	150	10	190	1,250	107	1,00
185	5.654	54.000	2.650	180	60	380	315	230	170	10	210	1,975	145	1,10
205	7.225	69.000	2.490	200	70	405	340	255	185	12	230	2,80	185	1,60
230	10.262	98.000	2.265	220	100	445	377	290	200	12	250	4,60	250	2,00
260	13.612	130.000	2.060	250	115	490	415	320	230	12	280	7,3	325	1,30

(1) P_N = Nominal Power in (Kw); n = r.p.m.
(2) T_N = Nominal Torque in Nm; During start up the coupling can be loaded at 200% of nominal torque capacity.
(3) Consult JAURE for couplings operating at higher speeds.
(4) Max. admissible bore for couplings with DIN 6885/1 keys. For other types of keys or connections please consult JAURE.
(5) Clearence to align coupling hubs and replacement of sealing rings.
(6) GD^2 = 4J.

Equivalences between New MT Gear coupling and previous JAURE Gear couplings Series.

MT	HA	MS	MN
42	**10**	5	5
55	**15**	10	10
70	**20**	20	20
90	**25**	35	35
100	**30**	60	60
125	**35**	105	105
145	**40**	150	150
165	**45**	210	210
185	**50**	325	325
205	**55**	430	430
230	**60**	600	600
260	**70**	800	800
280		1.150	1.150
310		1.500	
345		2.100	
370		2.650	
390		3.400	
420		4.200	
460		5.250	
500		6.500	

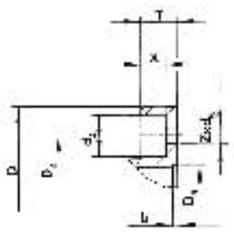
- MT: with covers from 260 upwards.
- MS: without covers from MS-5 up to MS-325.
- MN: with covers for all sizes (MN=MS from MS-430 upwards).
- **HA according to AGMA standard for Flange dimensions.**
- **MT according to AGMA standard from size 42 up to 260 included (except type MTN).**

Flange dimensions (mm.) A.G.M.A. standard

Size	D	D_3	U = Quantity	d_3	T	D_4	Z = Quantity	d_4	d_5	X	D_5 (H7)	b
42	116	95.25	6	6.5	14	95.25	6	14	6.5	9	73	2
55	152	122.23	8	9.5	19	122.23	8	21	9.5	12.5	92	2.5
70	178	149.22	6	12.75	19	147.63	10	21	9.5	12.5	117	2.5
90	213	180.97	6	16	22	177.8	10	27	12.75	14	142	2.5
100	240	206.37	8	16	22	203.2	12	27	12.75	14	164	2.5
125	279	241.3	8	19	29	235.74	12	33.5	16	19.5	190	2.5
145	317.5	279.4	8	19	29	269.88	14	33.5	16	19.5	225	4.5
165	346	304.8	10	19	29	298.5	14	33.5	16	19.5	250	5
185	389	342.9	8	22.25	38	334.96	14	40	19	23.5	280	5
205	425	368.3	14	22.25	38	366.71	16	40	19	23.5	308	6
230	457	400	14	22.25	26	-	-	-	-	-	340	6
260	527	463.5	16	25.5	29	-	-	-	-	-	396	6

Sizes above MT-260 are not according to AGMA standard.

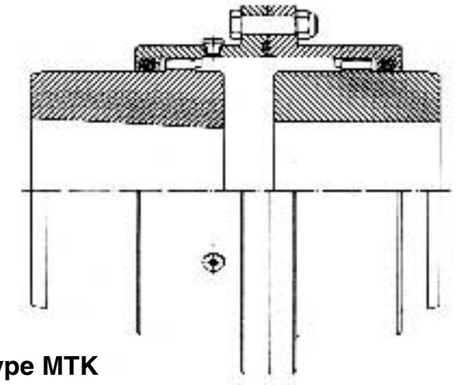
Flange for shrouded bolts.



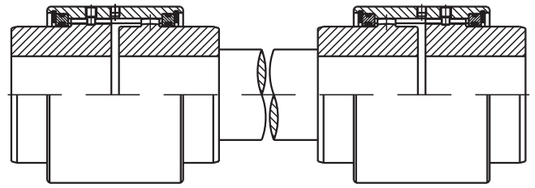
Flange for exposed bolts.

Special designs

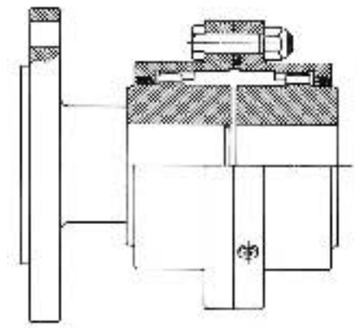
Here below are some standard and special coupling paterns manufactured by us. Do not hesitate consulting us for any coupling solution. Our Engineering Department is at your service.



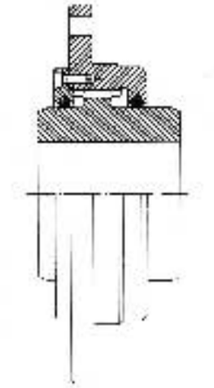
Type MTK
Mill Motor Coupling



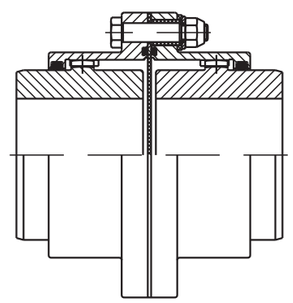
Type MTSD
Horizontal Floating shaft



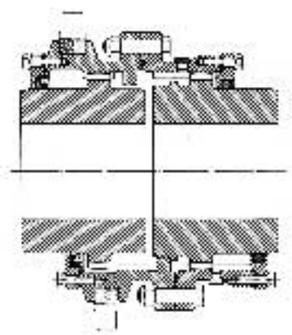
Type MTP
With Flange



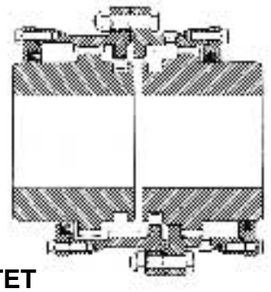
Type TE
Gear Coupling for lifting gear drums



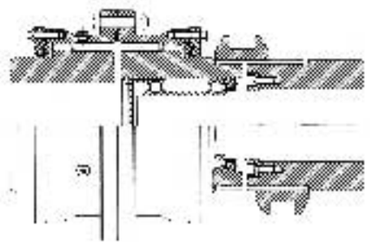
Type MTAE
With Electrical insulation



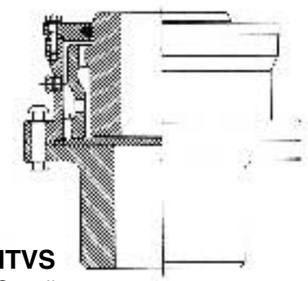
Type MTEN
Disengaging Coupling



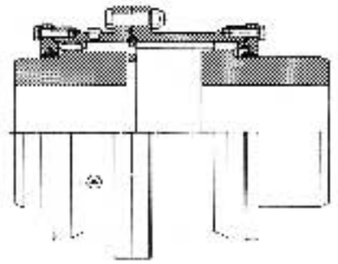
Type MTET
Disengaging Coupling



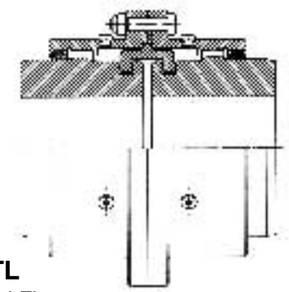
Type MTEL
Disengaging Coupling



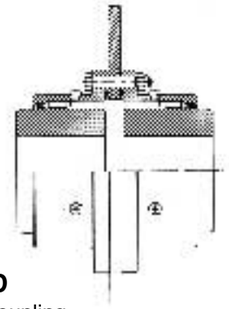
Type MTVS
Vertical Coupling



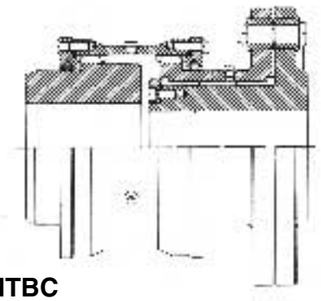
Type MTCO special
Telescopic Coupling



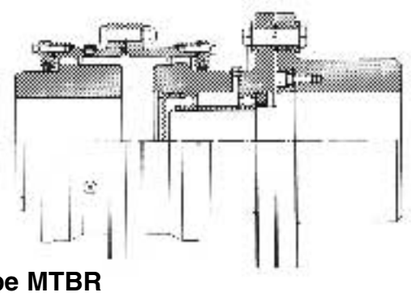
Type MTL
Limited end Float



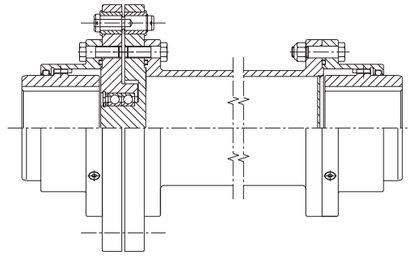
Type MTFD
Disk Brake Coupling



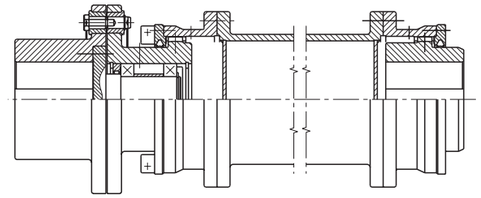
Type MTBC
Shear pin Coupling



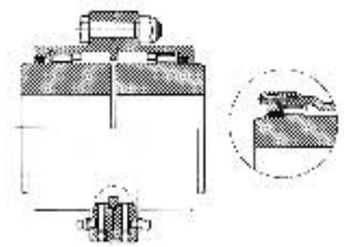
Type MTBR
Shear pin Coupling



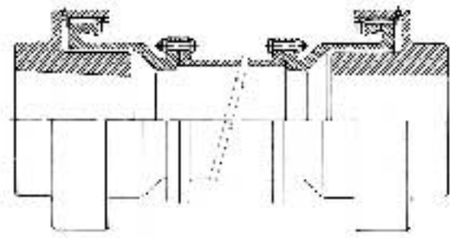
Type MTBX
Spacer Shear pin Coupling



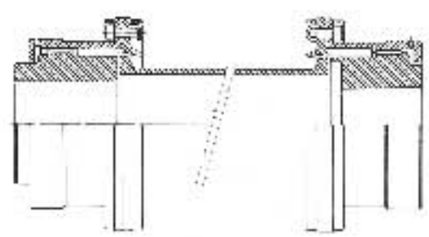
Type MTBRX
Spacer Shear pin Coupling



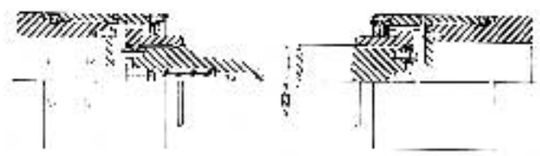
Type SID
Metallurgy Standard (F)



Type AVLE
High Speed Oil Lubrication

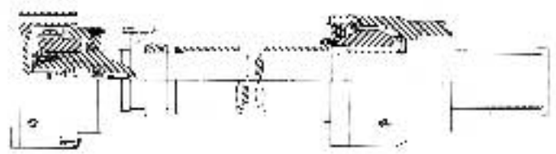


Type AVLI
High Speed Oil Lubrication



Type ALT
Spindle Coupling (Rolling Mill)

Type ALD
Spindle Coupling (Rolling Mill)



Type ALST
Telescopic Spindle Coupling (Rolling Mill)

Recommendations for shaft/bore fits

The following recommendations, according to ISO, are given for shaft/bores fits.

TYPE OF FIT	SHAFT TOLERANCES	BORE TOLERANCES
Interference fits with parallel key	h 6	S 7
	k 6	M 7
	m 6	K 7
	n 6	J 7
	p 6	H 7
Shrink fits* without parallel key	u 6	H 7
	v 6	
	x 6	

* The stresses on hub must be checked.

For other types of connections please consult our technical department.

Critical Speeds

Critical speeds for spacer MTX coupling.

In order to check the critical speed of the spacer the following formula must be applied:

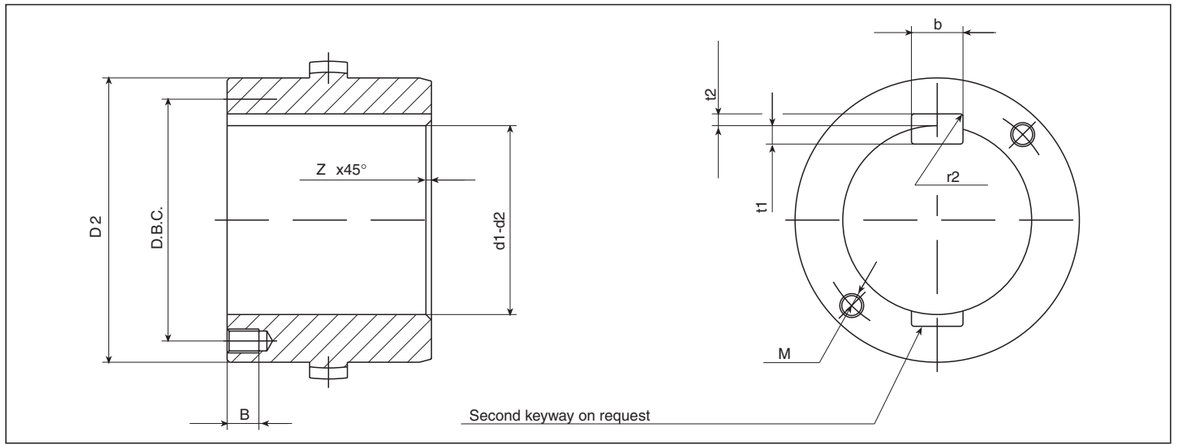
$$N = 1{,}195 \times 10^{8} \frac{\sqrt{do^2 + di^2}}{L^2}$$

Where,

N = critical speed for the spacer coupling (rpm)
L = spacer length (mm)
do = Outside diameter of steel tube (mm)
di = Inside diameter of steel tube (mm)

In order to avoid any lateral vibrations due to the spacer, the running speed must be at least 20% lower than the critical speed.

Keyway and puller hole data



Size		Puller hole data				
	D_2	d_1 - d_2 max.	D. B. C.	M	B	Z
42	60	42	51	M6	9	1
55	79	55	67	M8	12	2
70	101	70	85	M10	15	2
90	124	85	105	M12	18	2
100	143	100	122	M14	21	2
125	170	120	145	M16	24	3
145	205	145	175	M16	24	3
165	216	155	185	M20	30	3
185	250	175	212	M20	30	3
205	275	195	235	M20	30	3
230	300	205	248	M24	36	4
260	340	240	290	M24	36	4
280	370	240	305	M30	45	4
310	410	260	335	M30	45	4
345	450	285	370	M30	45	4
370	490	310	400	M36	54	4
390	520	350	435	M36	54	4
420	560	380	470	M42	63	5
460	600	410	505	M42	63	5
500	650	440	545	M42	63	5
550	710	470	590	M48	72	5
590	760	510	635	M48	72	6
620	810	550	680	M48	72	6
650	840	580	710	M48	72	6
680	890	610	750	M56	84	8
730	950	640	795	M56	84	8
800	1.050	720	885	M56	84	8

Keyway acc. to DIN-6885/1					
d_1 . d_2 above - to	b (1)	t_1	t_2	r_2	Key
8-10	3	1.8	1.4	0.08-0.16	3 x 3
10-12	4	2.5	1.8	0.16-0.25	4 x 4
12-17	5	3	2.3	0.16-0.25	5 x 5
17-22	6	3.5	2.8	0.16-0.25	6 x 6
22-30	8	4	3.3	0.25-0.4	8 x 7
30-38	10	5	3.3	0.25-0.4	10 x 8
38-44	12	5	3.3	0.25-0.4	12 x 8
44-50	14	5.5	3.8	0.25-0.4	14 x 9
50-58	16	6	4.3	0.25-0.4	16 x 10
58-65	18	7	4.4	0.4-0.6	18 x 11
65-75	20	7.5	4.9	0.4-0.6	20 x 12
75-85	22	9	5.4	0.4-0.6	22 x 14
85-95	25	9	5.4	0.4-0.6	25 x 14
95-110	28	10	6.4	0.4-0.6	28 x 16
110-130	32	11	7.4	0.7-1.0	32 x 18
130-150	36	12	8.4	0.7-1.0	36 x 20
150-170	40	13	9.4	0.7-1.0	40 x 22
170-200	45	15	10.4	0.7-1.0	45 x 25
200-230	50	17	11.4	1.2-1.6	50 x 28
230-260	56	20	12.4	1.2-1.6	56 x 32
260-290	63	20	12.4	1.2-1.6	63 x 32
290-330	70	22	14.4	2-2.5	70 x 36
330-380	80	25	15.4	2-2.5	80 x 40
380-440	90	28	17.4	2-2.5	90 x 45
440-500	100	31	19.5	2-2.5	100 x 50

(1) The tolerance zone for the hub keyway width b for parallel keys is ISO P9.

Pulling holes are supplied optionally. Please verify maximum bore (d_1 - d_2) when pulling holes are used..

Installation and Maintenance Instructions

(See coupling parts in page 6)

1. INSTALLATION.

1.1 Ensure that all the parts are clean.
1.2 Apply a light coat of grease to the O-rings (6) and install them in the sleeves (2,3 or 4,5) grooves.
1.3 Apply grease on the sleeves (2,3 or 4,5) teeth . Place the sleeves on the shafts , avoid damage of the O-rings (6).
1.4 For sizes larger than MT-260 place only the covers (7) on the shafts, after the O-rings or seals (6) were greased or placed in the cover (7) grooves.
1.5 Heat the hubs (1) to 110º C prior to installing. Do not use an open flame burner.
1.6 Install hubs (1) on their respective shafts with the longest chamfer hub end towards the machine bearing (See detail A). Hub faces have to be flush with shaft end. In case of doubt , please contact us.
1.7 Install units to be connected in place and and check the spacing "a" between hubs. See Fig.6 on Page 31 or approved drawing for correct hub spacing "a" , according to coupling type. In case of doubt , please contact us.
1.8 Align the two shafts , check alignment using a dial indicator. Alignment precision depends on running speed. (See Fig.8 on Page 32).
1.9 Allow the hubs (1) to cool before installing the sleeves (2, 3 or 4, 5) over the hubs. Apply grease on coupling hub (1) teeth before installing the sleeves (2, 3 or 4, 5).
1.10 Bolt up the sleeves with the recommended tightening torque (See Fig.6 on Page 31), after installing the O-ring (10) in place. Using grease on the O-ring is recommended. Make sure that flange lubrication holes, after mounting, are 90º angle to each other.
1.11 Remove both plugs (9) on the sleeve (2,3 or 4,5). As an approximate method proceed as follows : Turn the coupling so that the flange lubrication holes are in 130, 430 ,730, 1030 watch position. Take away the 130 and 730 plugs (9) and pump grease into the 130 holes, until grease leaks out from the lower 730 (See detail B). During this process it is recommended to remove the 1030 plug to vent the interior. For grease quality and more accurate quantity see Fig.7 on Page 31. If running conditions are different than the ones given in Fig.7 Page 31, consult us. For types , MTD, MTSR-P, MTX, MTXL, it is necessary to lubricate each half coupling separately. For type MTV consult us for lubrication.

2. MAINTENACE.

Every 3000 working hours. If longer periods are needed , contact us.
Proceed as mentioned under 1.11.

3. DISASSEMBLY AND INSPECTION.

Every 8000 working hours.
3.1 Before moving the sleeves, clean the hub surfaces near the O-rings (6) of rust or dirt.
3.2 Remove bolts (11) and the O-ring (10).
3.3 Control gearing and sealing.
3.4 Control alignment.
3.5 Use new grease.

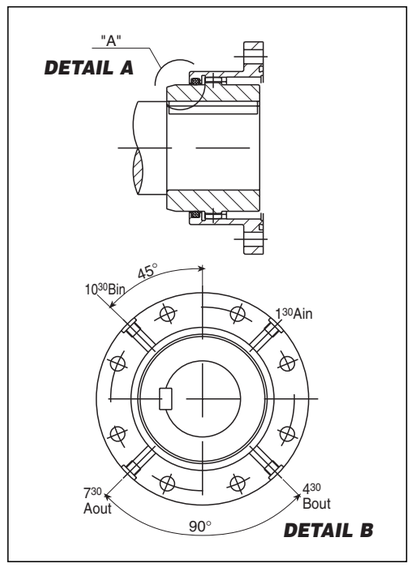


Fig. 5

Gap spacing "a" and flange bolt tightening torque

Fig. 6

Size	a (mm.)	Size	a (mm.)	Size	a (mm.)
MT-42	6±1	MT-205	12±3	MT-460	20±4
MT-55	6±1	MT-230	12±3	MT-500	25±4
MT-70	6±2	MT-260	12±3	MT-550	25±4
MT-90	8±2	MT-280	16±3	MT-590	25±4
MT-100	8±2	MT-310	16±3	MT-620	30±6
MT-125	8±2	MT-345	16±3	MT-650	30±6
MT-145	10±2	MT-370	20±4	MT-680	30±6
MT-165	10±3	MT-390	20±4	MT-730	30±6
MT-185	10±3	MT-420	20±4	MT-800	30±6

Size	Tightening Torque[1)]	Size	Tightening Torque[1)]	Size	Tightening Torque[1)]
MT-42	8	MT-205	325	MT-460	760
MT-55	20	MT-230	325	MT-500	1.140
MT-70	68	MT-260	565	MT-550	1.140
MT-90	108	MT-280	375	MT-590	1.140
MT-100	108	MT-310	375	MT-620	1.800
MT-125	230	MT-345	660	MT-650	1.800
MT-145	230	MT-370	660	MT-680	1.800
MT-165	230	MT-390	760	MT-730	1.800
MT-185	325	MT-420	760	MT-800	1.800

[1)] Tightening torque is given for dry tightening, if lubrication is used please consult JAURE.

Recommended Lubricants & Quantity

Fig. 7

NORMAL SPEED AND DUTY		NORMAL SPEED AND HEAVY DUTY SERVICE	
Amoco	Amoco coupling grease	Klüber	Klüberplex GE 11-680
Castrol	Spheerol BN 1	Texaco	Coupling grease KP 0/1 K-30
Cepsa-Krafft	KEP 1		
Esso-Exxon	Unirex RS 460, Pen-0- Led EP		
Fina	Ceran EP-0		
Klüber	Klüberplex GE 11-680	HIGH SPEED[1)]	
Mobil	Mobilgrease XTC,	Amoco	Coupling grease
	Mobiltemp SHC 460 spezial	Esso-Exxon	Unirex RS-460
Shell	Shell Malleus GL-95	Klüber	Klüberplex GE 11-680
Texaco	Coupling grease KP 0/1 K-30	Mobil	Mobilgrease XTC
Verkol	Verkol 320-1 Grado 1	Texaco	Coupling grease KP 0/1 K-30

[1]High speed is considered for periheral velocity above 80 meters / second.

Greases to be used between 0 º C and 70 º C.
Couplings are supplied with protective grease **but not** with working grease.
The teeth mesh has to be cleaned from any protective oil or grease prior to mounting.
Before mounting , approx. 70 % of grease quantity shall be hand packed between hub and sleeve teeth and surrounding area. After mounting , the remaining (30%) of the grease shall be pumped into the flange lubrication holes.
For speeds below 300 r.p.m consult our Technical Dep.
At high temperature, low speed and reversing drive, more frequent lubrication is needed than the one recommended in these instructions.
Overfilling the coupling with grease may result in equipment damage.

Recommended Lubricants & Quantity (cont.)

Fig. 7 (cont.)

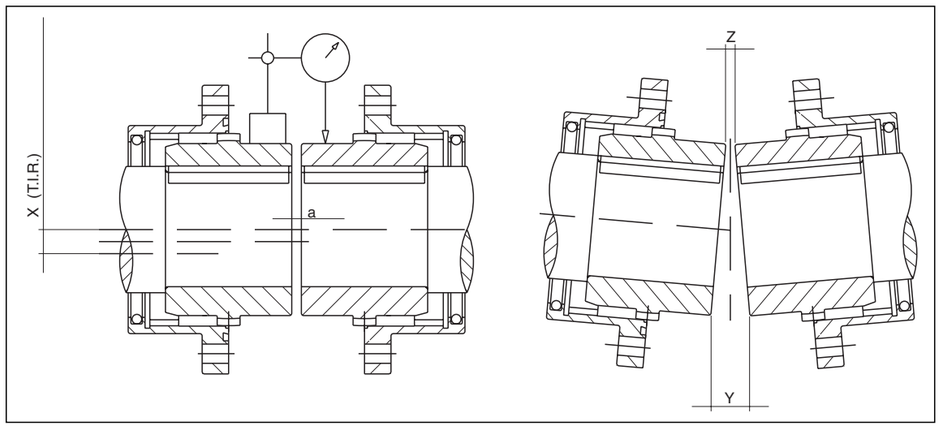
Size	[2]Qty (kg)	Size	[2]Qty (kg)	Size	[2]Qty (kg)
MT-42	0.04	**MT-205**	2.2	**MT-460**	11.5
MT-55	0.06	**MT-230**	2.8	**MT-500**	11.5
MT-70	0.17	**MT-260**	5.4	**MT-550**	14.5
MT-90	0.24	**MT-280**	3.0	**MT-590**	23
MT-100	0.36	**MT-310**	3.6	**MT-620**	23
MT-125	0.50	**MT-345**	4.8	**MT-650**	30
MT-145	0.70	**MT-370**	5.0	**MT-680**	36
MT-165	1.30	**MT-390**	9.0	**MT-730**	38
MT-185	1.75	**MT-420**	9.8	**MT-800**	46

[2]Quantity per complete coupling fot MT, MTL, MTK, MTBR, MTFD, MTFS, MTFE, MTF.

For types MTD, MTX, MTXL, MTBRX, add the given quantity divided by 2 at each half. Ex. MTX-125: 0,25 kg at each half.
For types MTS, MTCO, vertical couplings and disengaging couplings consult our Technical Dep.

Alignment precision

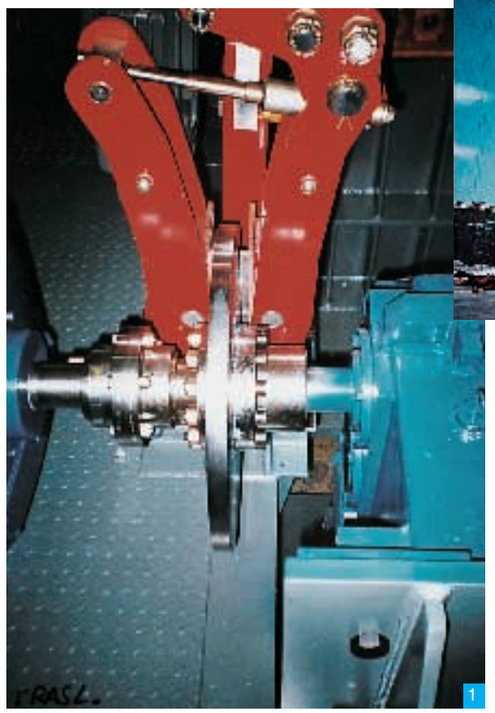
Fig. 8



Types	Speed r.p.m.									
MT	0 - 250		250 - 500		500 - 1000		1000 - 2000		2000 - 4000	
	X max. (mm.)	(Y-Z) mm.	X max. (mm.)	(Y-Z) mm.	X max. (mm.)	(Y-Z) mm.	X max. (mm.)	(Y-Z) mm.	X max. (mm.)	(Y-Z) mm.
42 - 90	0.25	0.25	0.25	0.25	0.25	0.25	0.15	0.20	0.08	0.10
100 - 185	0.50	0.60	0.50	0.60	0.25	0.35	0.15	0.20	0.08	0.10
205 - 420	0.90	1.00	0.50	0.75	0.25	0.35	0.15	0.20	-	-
420 - 800	1.50	1.50	1.00	1.00	0.50	0.50	-	-		

A better alignment than the one given in this table will increase coupling life and reduce the reaction forces in shafts and bearings.

Applications



1 & 2 Brake disc gear coupling MTFS in a crane application.

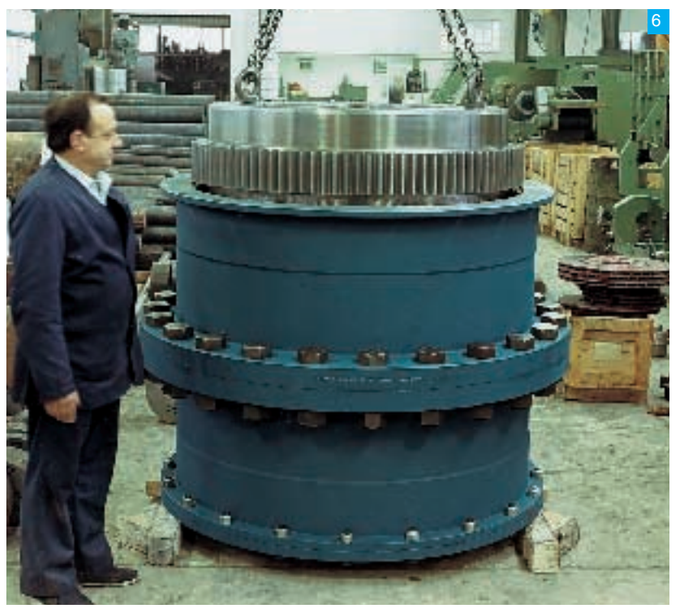
3 Special MT-460 for a dredger pump.

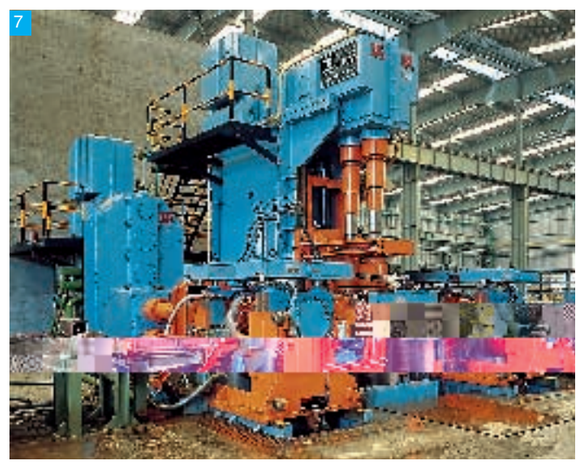
4 MT-550 for Mining Equipment.

5 Construction & Maintenance of Spindle Gear Couplings.

6 SID-650 for Rolling Mill (MT equivalent size bigger than MT-800).

7 Vertical & horizontal spindle gear couplings for rolling mill stands.





Applications

1 Special MTFS-125 couplings for windmills.

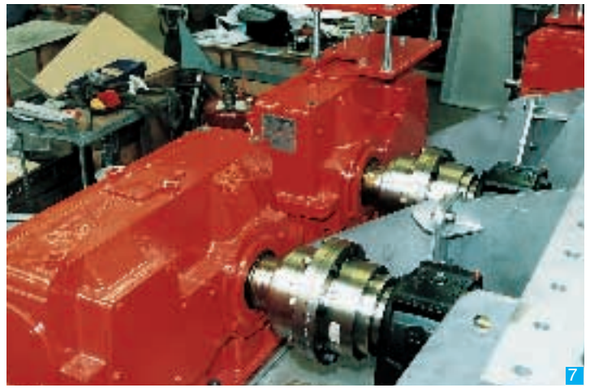
2 Safety gear coupling, type MT-345-SE 30 (disengaging torque 265 KNm)

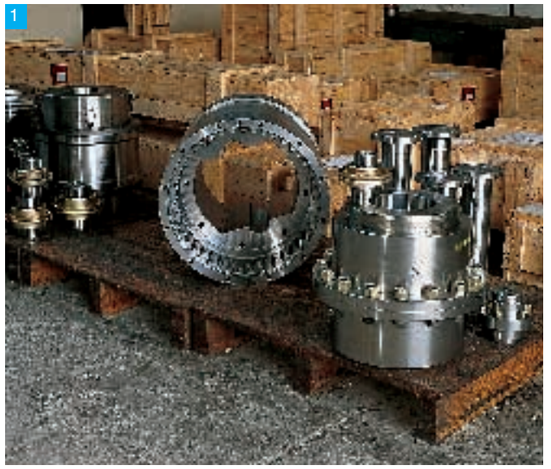
3 Special MT coupling for Marine Applications.

4 Machining of gear rims for Windmills.

5 & 6 Traction gear coupling, Model FE-255 for Railway application.

7 MT gear couplings for screw conveyors.





1 Special finish bore available: flat surfaces, hidraulic shrink fit, splines, tangencial keyways.

2 & 3 Special MTXL-125 induction hardened coupling with spacer for compressors.

4 Alloyed steel and nitrided MT-460

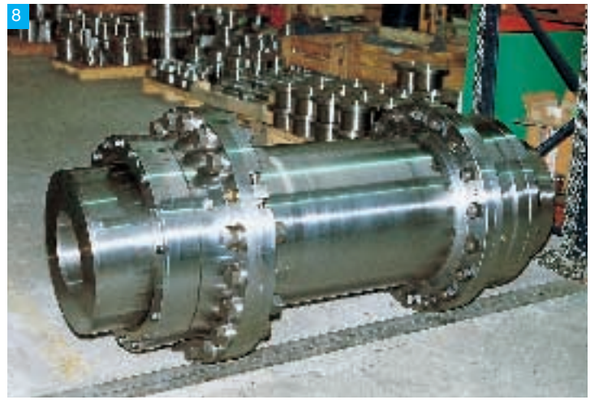
5 Torsion shaft MT coupling & special MT for Paper Industry.

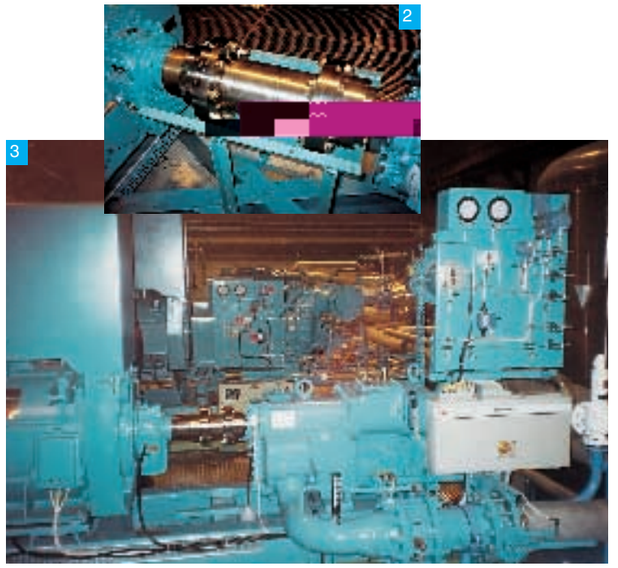
6 Spacers for MTX-550 and gear hub.

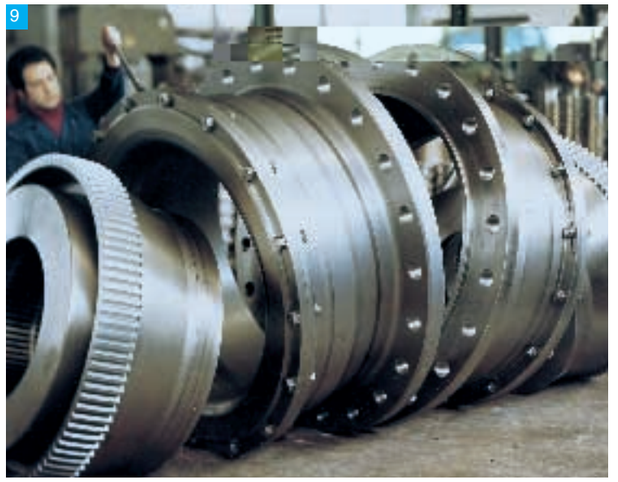
7 Production of standard MT series.

8 Special MTX-420 with spacer & angular adjustment positioning.

9 Big gear coupling (o.d. > Ø 1800 mm) for steel plant converter.





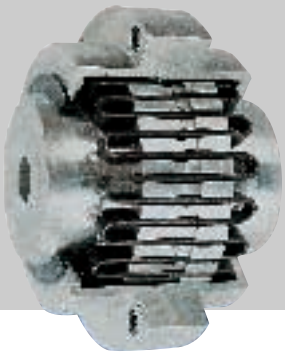


JAURE, S.A. Couplings and transmission elements.

MT crowned tooth gear coupling.

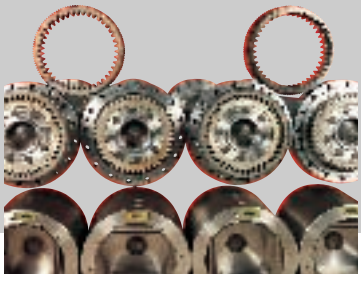
LAMIDISC® all steel disc coupling.

Barrel coupling TCB®.

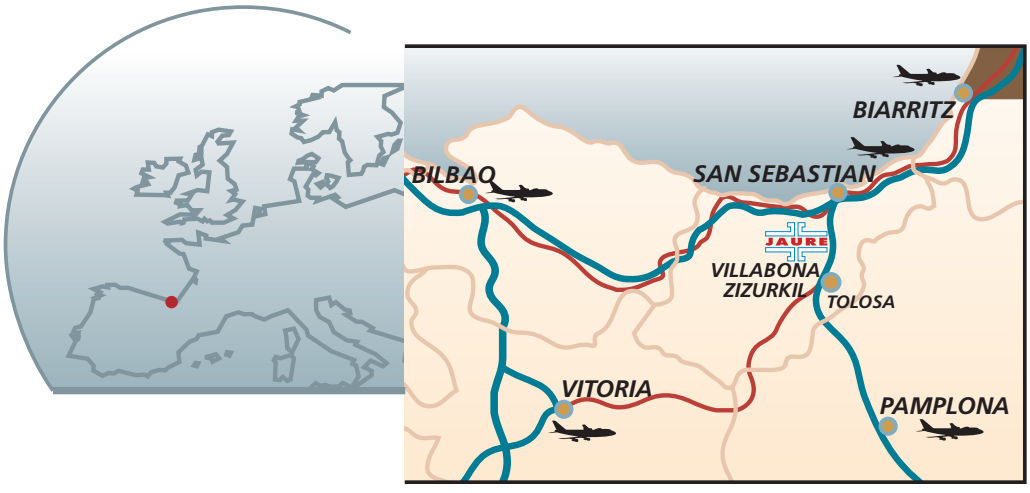


RECORD Flexible Spring Coupling.

JAUFLEX® Flexible elastic coupling.



Gear spindles for rolling mills.



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