escogear couplings

Riddhi Engineering Company
www.couplings-mounts.com
sales@riddhiengineeringco.com
+91 74900 32784

DATA SHEETS – EFG /EHG/ ERR

Riddhi Engineering Company
www.couplings-mounts.com
sales@riddhiengineeringco.com
+91 74900 32784

Riddhi Engineering Company
www.couplings-mounts.com
sales@riddhiengineeringco.com
+91 74900 32784

Why Escogear ?

High Torque and Misalignment capacity

Thanks to the patented escogear **Multicrown** profile ,the optimised coupling design and the standard use of 12.9 quality bolts, the Escogear couplings offer the user a **very high torque capacity.**
This means that for a given torque a smaller coupling can be used which results in more efficient machine design and performance. Furthermore, this high torque is available at **important angular misalignment.**

Transparent coupling selection

The torque capacity of a gear type coupling strongly depends on the angular misalignment to which it is subjected: the higher the misalignment, the lower the torque capacity. It is clear that this relationship can and will cause problems in coupling selection because misalignment during operation is almost impossible to predict. Escogear couplings of the EFG type are equipped with Esco **Multicrown tooth form.** Thanks to this quite unique design, the escogear has a torque capacity that is practically independent of the angular misalignment .Therefore ,coupling selection is **easy** and mistakes are avoided : long coupling life is guaranteed.

High precision Gearing

Pitch error in the gearing of coupling can strongly affect, the load distribution between the teeth can be strongly influenced. In some cases, the maximum load applied on the teeth can be twice the value of the load calculated. The consequence will be higher surface and root stresses and coupling failure might be the result. Thanks to the high precision manufacturing process and equipment on which all escogear couplings are manufactured, and the sophisticated quality control, pitch error is minimized and the best possible gear quality level and life time can be guaranteed.

Reduced backlash

One of the consequences of the **Multicrown** design is that the necessary backlash between the teeth can be reduced to an absolute minimum. This will reduce the impact loads in start/stop and reversing torque applications. As a result, the teeth can be designed with a larger section and the root stresses will be reduced. Thanks to this feature the escogear couplings are ideal for use in presses, mills, punching machines, portal cranes etc...

Perfect gear top centring

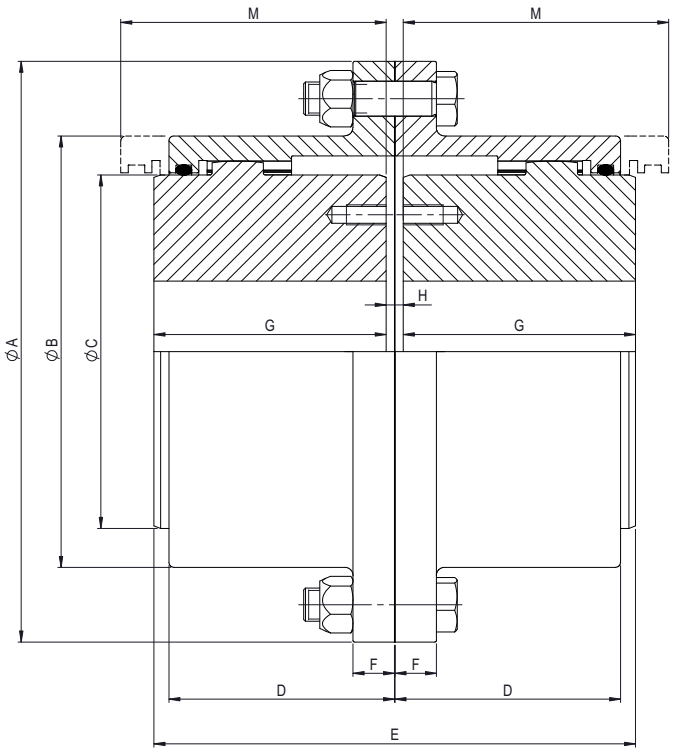
Gear type couplings require, in order to operate, a "clearance" between the top of each hub tooth and the root of the sleeve teeth. Due to this clearance, the sleeve cannot be perfectly centred on the hubs. This will create vibrations in applications where the load constantly changes from no load to full load (e.g. portal cranes). These vibrations will of course influence the operation of the connected equipment. Thanks to special design and machining techniques, Esco is able to pilot the top of each hub tooth into the root of the sleeve teeth. By doing so, the sleeve will remain perfectly centred on the hub and vibrations will be avoided.

Excellent protection of components

In order to guarantee optimum operation, all escogear couplings are protected with special surface treatment or coating. All bolts are coated with Geomet and the nuts are zinc plated which gives an excellent corrosion resistance and makes disassembly possible, even after numerous years of service life. Furthermore, all the steel components are protected with a special coating to improve their corrosion resistance.

Riddhi Engineering Company
www.couplings-mounts.com
sales@riddhiengineeringco.com
+91 74900 32784

FULL GEAR FLEXIBLE COUPLING - EFG – SERIES

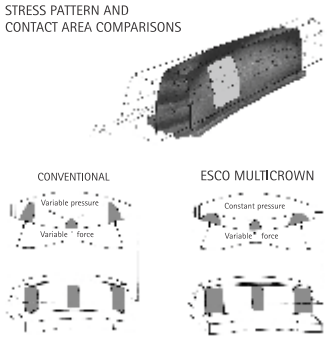


LOWER STRESSES

THE ESCO MULTICROWN tooth form is a curve with constantly changing radii of curvature. The tooth contact area under misaligned conditions has a much larger radius of curvature than conventional crowning. The contact area therefore is larger thus reducing the surface stresses.

LESS BACKLASH

The ESCO MULTICROWN tooth design requires less backlash for a given angle of misalignment than the conventional crowning, thus reducing shocks in reversing application.



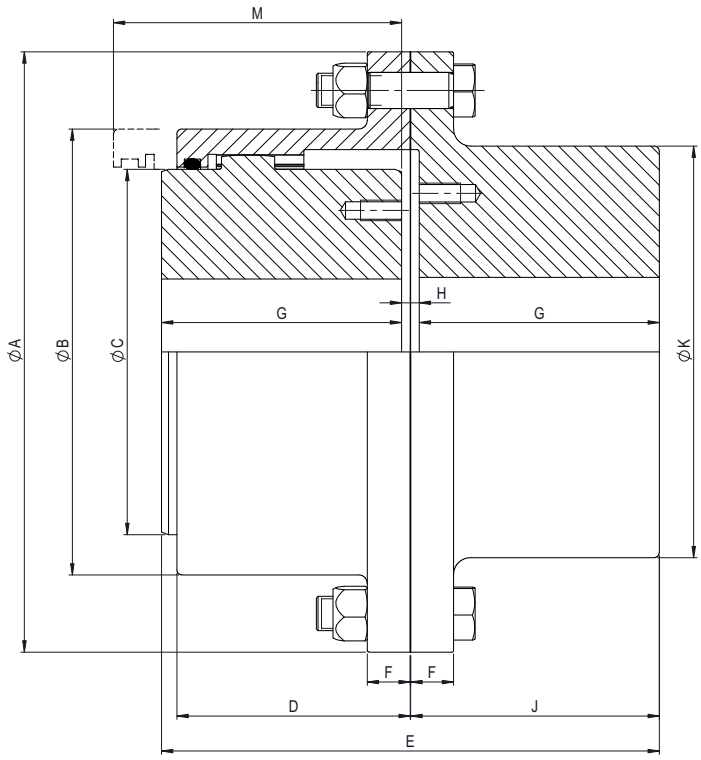
TECHANICAL DATA

Sizes, EFG	Max. Bore mm	Pilot Bore mm	Torque Capacity		Max. Speed RPM	Max. Misalignment Degree	WT. (Pilot Bore) Kg	Inertia Kg.m²	DIMENSIONS IN MM								
			Nominal (Tn) Nm	Peak (Tp) Nm					A	B	C	D	E	F	G	H	M
101	45	15	1300	2600	7000	2 x 0.75°	9.1	0.03	170	90	67	49	115	17	55	5	65
102	60	25	2800	5600	6200	2 x 0.75°	15.1	0.05	185	125	87	62	145	17	70	5	80
103	75	35	5000	10000	5650	2 x 0.75°	25.8	0.12	220	150	106	78	175	20	85	5	105
104	95	45	10000	20000	5100	2 x 0.75°	40.0	0.22	250	175	130	96	215	20	105	5	125
105	110	55	16000	32000	4700	2 x 0.75°	57.8	0.45	290	200	151	106	230	25	110	10	140
106	130	70	22000	44000	4350	2 x 0.75°	80.6	0.76	320	230	178	118	260	25	125	10	155
107	155	85	32000	64000	4000	2 x 0.75°	111.5	1.28	350	260	213	136	290	25	140	10	175
108	175	100	45000	90000	3800	2 x 0.75°	151.8	2.11	380	290	235	147	320	26	155	10	190
109	195	120	62000	124000	3600	2 x 0.75°	197.6	3.53	430	330	263	156	340	26	165	10	205
110	215	135	84000	168000	3450	2 x 0.75°	283.8	6.73	490	390	286	171	370	26	180	10	220
111	240	155	115000	230000	3300	2 x 0.75°	415.0	12.69	545	445	316	192	410	30	200	10	240
112	275	175	174000	348000	3050	2 x 0.75°	620.8	22.40	590	490	372	231	490	30	240	10	280

Riddhi Engineering Company
www.couplings-mounts.com
sales@riddhiengineeringco.com
+91 74900 32784

esco

HALF GEAR FLEXIBLE COUPLINGS - EHG – SERIES



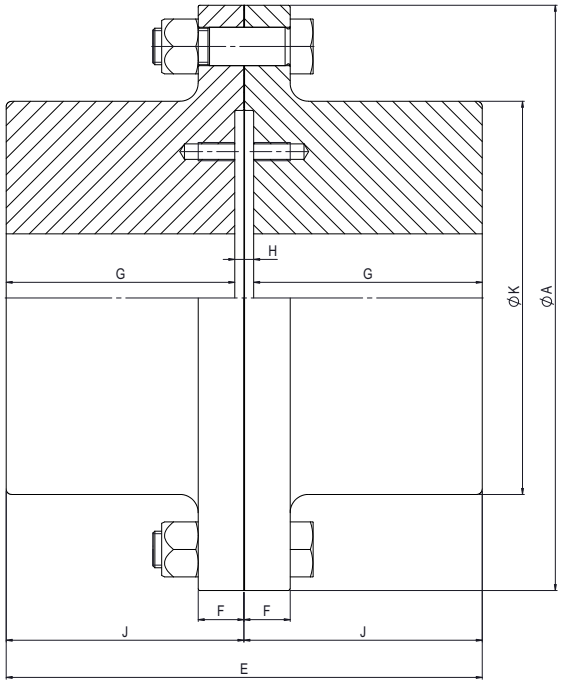
TECHANICAL DATA

Sizes, EHG	Max. Bore mm		Pilot Bore mm	Torque Capacity		Max. Speed RPM	Max. Misalignment Degree	WT. (Pilot Bore) Kg	Inertia Kg m²	DIMENSIONS IN MM									
	GEAR	RIGID		Nominal (Tn) Nm	Peak (Tp) Nm					A	B	C	D	E	F	G	H	J	K
101	45	60	15	1300	2600	7000	0.75°	9.4	0.02	170	90	67	49	115	17	55	5	57.5	85
102	60	75	25	2800	5600	6200	0.75°	14.9	0.04	185	125	87	62	145	17	70	5	72.5	110
103	75	90	35	5000	10000	5650	0.75°	25.3	0.11	220	150	106	78	175	20	85	5	87.5	130
104	95	110	45	10000	20000	5100	0.75°	40.3	0.21	250	175	130	96	215	20	105	5	107.5	160
105	110	130	55	16000	32000	4700	0.75°	58.7	0.45	290	200	151	106	230	25	110	10	115	185
106	130	150	70	22000	44000	4350	0.75°	82.0	0.76	320	230	178	117	260	25	125	10	130	215
107	155	170	85	32000	64000	4000	0.75°	110.3	1.24	350	260	213	134	290	25	140	10	145	240
108	175	200	100	45000	90000	3800	0.75°	155.5	2.16	380	290	235	147	320	26	155	10	160	285
109	195	220	120	62000	124000	3600	0.75°	200.8	3.54	430	330	263	156	340	26	165	10	170	315
110	215	260	135	84000	168000	3450	0.75°	291.3	6.79	490	390	286	171	370	26	180	10	185	370
111	240	280	155	115000	230000	3300	0.75°	422.0	12.10	545	445	316	192	410	30	200	10	205	380
112	275	310	175	174000	348000	3050	0.75°	578.5	21.80	590	490	372	231	490	30	240	10	245	420

Riddhi Engineering Company
www.couplings-mounts.com
sales@riddhiengineeringco.com
+91 74900 32784

esco

RIGID COUPLINGS - ERR – SERIES



TECHANICAL DATA

Sizes, ERR	Max. Bore mm	Pilot Bore mm	Torque Capacity		DIMENSIONS IN MM						
	RIGID		Nominal (Tn) Nm	Peak (Tp) Nm	A	E	F	G	H	J	K
101	60	15	1300	2600	170	115	17	55	5	57.5	85
102	75	25	2800	5600	185	145	17	70	5	72.5	110
103	90	35	5000	10000	220	175	20	85	5	87.5	130
104	110	45	10000	20000	250	215	20	105	5	107.5	160
105	130	55	16000	32000	290	230	25	110	10	115	185
106	150	70	22000	44000	320	260	25	125	10	130	215
107	170	85	32000	64000	350	290	25	140	10	145	240
108	200	100	45000	90000	380	320	26	155	10	160	285
109	220	120	62000	124000	430	340	26	165	10	170	315
110	260	135	84000	168000	490	370	26	180	10	185	370
111	280	155	115000	230000	545	410	30	200	10	205	380
112	310	175	174000	348000	590	490	30	240	10	245	420

Other coupling types available

Escogear CST / CST...M

Escogear FST

Escodisc DLC / DMU / DPU

Escogear NST

Riddhi Engineering Company
www.couplings-mounts.com
sales@riddhiengineeringco.com
+91 74900 32784

Escoflex A-R-S-T
Esconyl A-B-C

Escorail FTRN /FTRNO

Escospeed DHSU - GHS