



Why choose an IsoFlex GEARguard coupling?

IsoFlex flexible couplings provide a sacrificial link that is designed to fail before any gearbox damage occurs. IsoFlex couplings assist engine mounts to do their job by allowing controlled engine movement to isolate vibration and helping to alleviate thrust-induced drive line misalignment. They are designed to cover a large percentage of Twin Disc and ZF Generation gearboxes, plus many other boxes on the market.

## BENEFITS

- ➔ Constructed of a special engineering polymer, which is highly resistant to oil, fuel and water.
- ➔ Larger couplings are fitted with steel pilots.
- ➔ Couplings are fitted with internal hex-shaped fittings.
- ➔ Coupling isolates drive line vibration, propeller pulse and gear chatter.
- ➔ Coupling is designed to fail on impact or overload.
- ➔ IsoFlex provides a simple, step-by-step measurement guideline that takes the guesswork out of choosing the right coupling for each application.

## FEATURES

- ➔ Enhances drive bearing service life by reducing wear, resulting in lower long-term cost of ownership.
- ➔ Prevents distortion from thermal expansion, maximizes dimensional stability and minimizes run-out.
- ➔ The possibility of inserts turning in the coupling is minimized.
- ➔ Results in a quieter and smoother operating experience, with less equipment fatigue, maintenance and associated noise.
- ➔ Saves the driveline and mounts from damage in many cases.
- ➔ Easy to install: No cutting is required, and vessel can remain in the water.

## TORQUE

For the GEARguard coupling to work correctly, it must first be strong enough to meet the torque rating of your installation. That is, it must be able to carry the torque loads generated by the engine/transmission during normal operation. Before installing any drive line coupling, you should first determine the "maximum allowable" torque rating of your engine/transmission. Published documentation for torque rating usually states the most conservative continuous torque rating. However, IsoFlex suggests that you take the time to calculate the rating for your specific installation.

Please use the formulae below to complete this calculation, noting the result in Nm.

$$\text{Torque (Nm)} = \frac{(\text{Engine power in BHP} \times 7124 \times \text{gearbox ratio})}{\text{Engine RPM}}$$

Once you have identified maximum output torque for your application, see the definitions below to determine which description of normal operation best fits your vessel.

### PLEASURE CRAFT

Planing hulls where full throttle operation is less than 5% of total operational time. Couplings for these vessels are rated to operate at 85% of maximum allowable working torque.

### MEDIUM DUTY CRAFT

Pleasure or commercial craft (planing, semidisplacement or multi-hulls) such as patrol boats, charter fishing boats, etc. Couplings for these vessels are rated to operate at 75% of maximum allowable working torque.

### HEAVY DUTY CRAFT

Commercial craft (heavy displacement, semidisplacement or multi-hulls in commercial operation) such as trawlers, ferries, etc. Couplings for these vessels are rated to operate at 50% of maximum allowable working torque.



## ISOFLEX - 4 BOLD - DIMENSIONS

GEARBOX FLANGE DETAILS			COUPLINGS DETAILS					TORQUE in N.m			Cross Reference R&D	Reference
Flange Ø	Drilling register	Drilling dimension	Type	Register Ø	Ext. Ø	Int. Ø	Thic-kness	Heavy Duty	Medium Duty	Pleasure		
101.6	78	10 mm	F	50	125	35	25	500	750	850	910-043	<b>IFC4200-90</b>
101.6	82.55	3/8"	F	63.5	125	35	25	500	750	850	910-001 910-005 910-014 910-055	<b>IFC4300-95</b>
120	100	10 mm	F	65	145	50	25	500	750	850	910-012	<b>IFC4400-95</b>
127	107.95	7/16"	F	63.5	150	45	28.6	675	1000	1150	910-009 910-034 910-037 910-044	<b>IFC4500-95</b>
127	107.95	7/16"	F	63.5	150	45	28.6	1180	1770	2000	910-029 910-057	<b>IFC4500-HT</b>
127	107.95	7/16"	F	63.5	150	45	28.6	435	650	740		<b>IFC4550-95</b>
127	107.95	7/16"	F	63.5	150	45	28.6	900	1350	1530		<b>IFC4550-HT</b>
100	80	10 mm	M	60	125	35	25	375	560	640	910-007 910-019 910-020 910-059	<b>IFC4600-95</b>
118	95.25 (Rect)	7/16"	F	69.85	135	50	32	600	900	1000		<b>IFC4700-95</b>
95	79.38 (Rect)	3/8"	F	60.33	125	35	25	310	465	525		<b>IFC4800-95</b>
142.98	120.65 (Rect)	1/2"	F	95.25	175	50	36.5	1200	1800	2000		<b>IFC4900-95</b>



Other dimensions on request

## ISOFLEX - 6 BOLD - DIMENSIONS

GEARBOX FLANGE DETAILS			COUPLINGS DETAILS					TORQUE in N.m			Cross Reference R&D	Reference
Drilling register	Drilling dimension	Type	Register Ø	Ext. Ø	Int. Ø	Thic-kness	Heavy Duty	Medium Duty	Pleasure			
127	98.43	7/16"	M	63.5	150	50	31.75	925	1375	1575	900-003 910-052	<b>IFC6000-95</b>
127	98.43	7/16"	M	63.5	150	50	31.75	1350	2020	2350		<b>IFC6000-HT</b>
146	120.65	1/2" UNC	M	76.2	160	60	38.10	2500	3750	4250	910-025 910-054	<b>IFC6100-95</b>
146	120.65	1/2" UNC	F	76.2	160	60	38.10	2500	3750	4250		<b>IFC6125-95</b>
146	120.65	16 mm SHCS	M	76.2	160	60	38.10	2500	3750	4250	910-006 910-026 910-033	<b>IFC6150-95</b>
184	152.40	16 mm SHCS	M	95.25	212	73	38.10	3600	5400	6120		<b>IFC6300-95</b>
184	152.40	16 mm SHCS	M	95.25	212	73	38.10	3600	5400	6120		<b>IFC6300-IV</b>
184	152.4	16 mm SHCS	M	95.25	195	73	38.10	3000	4500	5100	910-017 910-018 910-039 910-040	<b>IFC6400-95</b>



GEARBOX FLANGE DETAILS				COUPLINGS DETAILS				TORQUE in N.m			Cross Reference R&D	Reference
Flange Ø	Drilling register	Drilling dimension	Type	Register Ø	Ext. Ø	Int. Ø	Thic-kness	Heavy Duty	Medium Duty	Pleasure		
184	152.40	16 mm SHCS	M	95.25	212	73	38.10	4400	6600	7480		<b>IFC6400-HT</b>
	260	3/4" UNC	M	170	330	95	45	8950	13400	Utiliser Medium		<b>IFC6500-95</b>
	205	16mm SHCS	M	130	260	95	38.10	6000	9000	Utiliser Medium		<b>IFC6600-95</b>



Other dimensions on request



## ISO FLEX - 8 BOLD - DIMENSIONS

GEARBOX FLANGE DETAILS				COUPLINGS DETAILS				TORQUE in N.m			Cross Reference R&D	Reference
Flange Ø	Drilling register	Drilling dimension	Type	Register Ø	Ext. Ø	Int. Ø	Thic-kness	Heavy Duty	Medium Duty	Pleasure		
228.6	190.5	16 mm SHCS	M	152.40	275	95	38.10	6850	10275	Utiliser Medium	910-046 910-048	<b>IFC8100-95</b>
228.6	190.5	16 mm SHCS	M	152.40	275	95	38.10	8500	12750	Utiliser Medium		<b>IFC8100-HT</b>
228.6	190.5	16 mm SHCS	M	152.40	242	95	38.10	4500	6750	Utiliser Medium	910-022 910-050	<b>IFC8200-95</b>
228.6	190.5	16 mm SHCS	M	152.40	242	95	38.10	7900	11850	Utiliser Medium		<b>IFC8200-HT</b>
184	152.40	16 mm SHCS	M	95.25	195	73	38.10	3000	4500	5100		<b>IFC8300-95</b>
240	200	16 mm SHCS	M	110.01	275	75	38.10	7000	10500	Utiliser Medium		<b>IFC8400-95</b>
240	200	16 mm SHCS	M	110.01	275	75	38.10	10500	15750	Utiliser Medium		<b>IFC8400-HT</b>
266.7	222.25	3/4" UNC	M	127	315	75	45.00	8500	12750	Utiliser Medium	910-024	<b>IFC8534-95</b>
	230	20 mm	M	150.01	315	100	45.00	8650	12975	Utiliser Medium		<b>IFC8600-95</b>
	228.6	3/4" UNC	M	152.4	300	95	45.00	8650	12975	Utiliser Medium		<b>IFC8690-95</b>
	241.30	3/4" UNC	M	152.4	300	95	45.00	9000	13500	Utiliser Medium	910-051	<b>IFC8695-95</b>
279.4	241.30	3/4" UNC	M	152.4	300	95	45.00	13350	20100	Utiliser Medium		<b>IFC8695-HT</b>
	280	7/8" UNC	F	200	355	75	50.00	10000	15000	Utiliser Medium		<b>IFC8700-95</b>
460	340	1" UNC	M	180.01	455	130	60.00	22500	33750	Utiliser Medium		<b>IFC8800-95</b>



Other dimensions on request

Nous pouvons également vous indiquer le modèle correspondant à votre inverseur.. Toutefois il est très important de faire attention à l'application afin de choisir le couple transmissible correct.