

HYDRAULIC PUMP FLANGE MOUNTING KITS



THE COMPLETE 'ONE STOP' DRIVE SOLUTION FOR ALL TYPES OF DIESEL-DRIVEN PLANT AND EQUIPMENT

CENTAFLEX COUPLINGS



CENTAFLEX K SERIES Nominal Torque 400 to 5,200Nm

This coupling has a very high torsional stiffness and consequently limited misalignment capacity, but substantial 'end-float' is permissible. It is designed for installations where the hydraulic pump is flange mounted onto the diesel engine. Precision machined, hub-mounted radial dogs engage with a moulded, shock resistant, temperature stabilised polyamide flywheel flange. Operating at speeds below critical vibration levels, it will withstand temperatures from -40°c to +150°c.



CENTAFLEX KE SERIES Nominal Torque 250 to 650Nm

A single piece, torsionally-stiff coupling that is quicker and easier to assemble than the 2-piece CF-K. Designed for use with diesel-driven hydrostatic transmissions with flange-mounted pumps, the CF-KE is a highly cost-effective way of connecting the engine to the pump. The coupling is supplied preassembled, as a single piece unit, which is bolted to the flywheel with the splined pump shaft simply plugged into the hub, providing economical, maintenance-free performance. Temperature range -40°c to +150°c.



CENTAFLEX H SERIES Nominal Torque 100 to 4000Nm

A specially designed coupling with high torsional stiffness for drives where the diesel engine and hydraulic pump are flange mounted onto the diesel engine. Operating at speeds below critical vibration levels, it accepts limited misalignment and axial 'end-float'. The oil resistant 'Hytrel' elastomer elements withstand ambient temperatures from -50°c to +150°c.



COMPONENTS

All Centa pump mounting

kits are specified to meet

The latest pump mounting

kits are designed for ease

and speed of fitting; their

flexible couplings makes

assembly much simpler.

They are lightweight in

performance.

necessary.

structure yet very strong

Housing plate extension rings are included where

and provide highly efficient

integration with single piece

your specific needs.

KIT

CENTAFLEX A SERIES Nominal Torque 10 to 12,5000Nm

A backlash-free flexible coupling used where the diesel engine and hydraulic pump are mounted separately, or where the pump is flange mounted onto the engine and where installation and operational requirements call for angular and radial misalignment ability, together with torsional deflection capacity. Temperature range -45°c to +90°c.



2-PIECE HYDRAULIC PUMP MOUNTING PLATE

Lighter and easier to fit to all types of diesel engine, the Twin Plate Mounting Plate is designed for use with CENTAFLEX K and CENTAFLEX KE couplings, particularly when fitting hydraulic pumps to ancillary plant and equipment. Based on the original Centa pump mounting plate which relied on thicker and heavier steel, this new design is made from a much thinner steel plate, without any loss of strength or efficiency. It is easier to fit as it requires only 4 bolts to fix, where the original version needed 8 or 12. It is compatible with all types of diesel engine.



HYDRAULIC PUMP MOUNTING KITS

Centa supplies pump mounting kits for any combination of diesel engine and hydraulic pump. This may be achieved by a standard 'off the shelf' kit, by a 'fast track' pre-designed kit supplied to order or by a specially designed kit where the pump/engine is non-SAE, or not of standard dimensions or configuration, e.g., the integrated Kubota Super 3 diesel. From European 4-bolt gear pumps to variable swash plate pumps with SAE 2- or 4-bolt flanges, Centa can supply accurately machined components for straight forward, problem-free assembly.



Centa belt boxes are designed in various ratios for use in a variety of drive applications.



ALL FNGINF MAKES COVERED

Centa has supplied hydraulic pump drives up to 10,000Nm (approximately 2000Kw) for all makes of diesel engine, including:

 Lombardini Cummins ICB

Deutz

- Perkins John Deere Volvo
- Kubota VM • Hatz • Liser-Peter • Yanmar Isuzu

Centa also covers most construction engineering, mechanical handling, agricultural and transport applications.



CENTAFLEX K SERIES Size Nm Nm RPM SAE 6.5 SAE 7.5 CF-K-100 SAE 8 400 1000 5000 SAF 10 SAE 11.5 SAE 10 SAE 11.5 CF-K-125 800 2000 4500 SAE 11.5 CF-K-150 1200 3000 4000 SAF 14 SAE 11.5 CF-K-200 2600 6500 3000 SAE 14

ALL THE ABOVE SIZES ARE AVAILABLE WITH UNIVERSAL ELEMENTS THAT CAN BE ADAPTED TO SUIT MOST NON-SAE FLYWHEELS

5200

13000

3000

SAE 11.5

SAE 14

CF-K-200D

CF-KE-88

CF-KE-89

CENTAFLEX KE SERIES TK_N TK MAX Size F/W Nm Nm CF-KF-93 SAF 6.5 250 500 CF-KE-94 SAE 7.5 300 600 CF-KE-96 SAE 8 400 800 CF-KE-97 SAE 10 500 1000 CF-KE-98 SAF 11.5 650 1300 NON-SAE FOR VARIOUS ENGINE FLYWHEELS CF-KE-85 200 400 CF-KF-86 500 250

400

600

800

1200

CENTAFLEX H SERIES STANDARD RANGE								
Size	F/W	TK N Nm	TK MAX Nm	Max Speed RPM				
8		100	280	6500				
16		200	560	5500				
25		350	875	5000				
30	SAE 10	500	1400	4000				
50	SAE 11.5	800	2000	4000				
90		950	2200	4000				
110		1200	2500	4000				
140	SAE 11.5 SAE 14	1600	4000	3600				
160		2000	4000	3600				
400		4000	10000	2500				

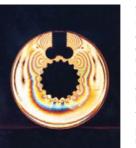


Photo-elastic photograph showing CENTALOC lamping principle

Spline Shaft Clamping Hub

CENTALOC®

Spline shaft wear caused by misalignment and movement between shaft and hub, reinforced by alternating positive and negative torques from diesel engine drives, can be totally eliminated by the CENTALOC Spline Shaft Clamping Hub. Splined shaft replacement, owing to distortion and fretting damage and the associated stress on bearings and seals, is no longer an inevitable maintenance cost.

The CENTALOC system is simply an axial slot positioned tangentially just outside the hub bore. One or more radial set screws exert an opening force on the axial slot, which translates into a clamping force locking the hub securely around the splined shaft, as the stress pattern on the image demonstrates. Providing that torque recommendations are adhered to, loosening the set screws will immediately release the hub for disassembly. The set screws never touch the shaft so there are no dents or burrs on the spline profile.



CENTAMAX COUPLINGS FOR SPLITTER GEARBOX DRIVES

Centa also supplies a range of Splitter Boxes. Details on request.

STANDARD & STOCKED COMPONENTS								
COUPLING HUB BORES								
European		Group 2	4 bolt taper shaft					
		Group 3	4 bolt taper shaft					
SAE	16 / 32 DP		9 tooth spline					
			11 tooth spline					
			13 tooth spline					
			15 tooth spline					
			21 tooth spline					
			23 tooth spline					
			27 tooth spline					
SAE	12 / 24 DP		14 tooth spline					
			17 tooth spline					
SAE	8/16 DP		13 tooth spline					
			15 tooth spline					
DIN	5480		30 x 2 x 14					
			35 x 2 x 16					
			40 x 2 x 18					

	SAE FLYWHEEL HOUSING				
	5	4	3	2	1
6.5					
7.5	•				
8		•			
10		•	•		
11.5			•	•	
14					•
	7.5 8 10 11.5	5 6.5 7.5 8 10 11.5	7.5 • • 10 11.5	HOUSIN 5 4 3 6.5	HOUSING 5 4 3 2 6.5

Stocked components include SAE flywheel housings, CENTAFLEX K/ KE Series couplings and steel adaptor plate drives machined to European Group 2 and 3, 4-bolt flanges SAE B 2-bolt and SAE C 2 and 4-bolt flanges. Standard components supplied to order include housing plates SAE 6 to SAE 0 and flywheel drives up to SAE 24. Taper, parallel and most SAE/DIN spline hydraulic pump shafts can be

There are **over 10 million** Centa couplings in service and a further 1/2 million are sold every year!









Modern, extensive in-house capacity to provide you with:

- Manufactured products
- From stock assembly
- Distribution
- UK wide service and maintenance



Couplings for All Applications

From design to delivery, Centa is your partner in every aspect of your power transmission requirements, for complete driveline systems that are sound, reliable and problem free.

Compensate for Cumulative Misalignment

Couplings designed to handle angular and radial misalignment and axial end-float (either singly or in combination) caused by operational wear or installation requirements. All forms of torsional stress can be minimised by specifying the appropriate Centa coupling.

Worldwide Product Support

A product support service covering all aspects of installation, operation, maintenance and replacement parts is available throughout Europe and in most countries worldwide.

Competitive Pricing

Modern manufacturing methods combined with continuous large volume production ensures that our prices are highly competitive for both 'one-offs' and batch production.

All Operational Demands Met

Centa couplings incorporate flexible elements with varying degrees of torsional stiffness having linear or progressive characteristics. This, together with misalignment capacity, allows most deflection and torsional stress conditions to be accommodated. Designs, using simple machined hubs and flanges, allow special requirements to be catered for. Diesel engine flywheel or power take-off mountings, electric or hydraulic motor and other shaft-to-shaft connections catered for.

Rapid Delivery

Production schedules are organised to give fast order turnaround allied with the ability to 'slot in' urgently needed components to meet critical situations.

Centa Gears

Centa also supplies an extensive range of Gears and Gearboxes for all applications.



www.centa-uk.co.uk

Centa Transmissions Ltd Thackley Court Thackley Old Road Shipley Bradford BD18 1BW

T: +44 (0) 1274 531034 E: post@centa-uk.co.uk W: www.centa-uk.co.uk

