UNEFLEX® Tyre coupling Eco range Eco New







Principle

This coupling eliminates misalianment with the simplicity and safety of a rubber tyre

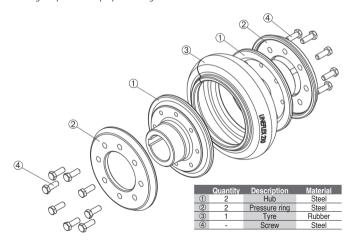
Advantaaes

- Maintenance-free: no routine maintenance or lubrication reauired
- Designed for quick and easy installation and replacement of components without moving the hubs or realigning the driver or driven equipment, reducing downtime.
- High misalianment capabilities; compensates for extremely large angular, axial and radial misalianments
- Vibration dampening and shock absorption; due to its quick smoothing qualities, provides damping properties to the torsional vibration induced in the system by cyclic variation of the twisting moment and shocks induced by the fast load variation, protecting the entire system



Application

- For difficult alianments characteristics
- Ideal for applications with vibration and thermal expansion
- With high response to torque peaks and great shocks



UNEFLEX® Tyre coupling **Eco range** Solution New York Property States of the Coupling **Eco range** Solution New York Property States of the Coupling **Eco range** Solution New York Property States of the Coupling **Eco range** Solution New York Property States of the Coupling **Eco range** Solution New York Property States of the Coupling Solution New



Full coupling

- Rubber tyre coupling

- Eliminates misalignment with the simplicity and safety of a rubber tyre

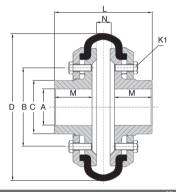
Material

Hubs: steel

Tread: fabric-reinforced natural rubber

- Operating temperature: -20°C to +80°C

- Sold pre-bored, to be bored by yourself





DISCOUNTS

1+ Disc. List -5% On request

				Moment Tightening					
	Nominal	Max	Max	Axial	Radial	Angular		of	torque
	torque	torque	speed	max	max	max	Relative	inertia	screw K1
Part numbers	(Nm)	(Nm)	(RPM)	(mm)	(mm)	(°)	damping	(kg.m²)	(Nm)
UFX2-203R	50	150	5000	1,00	0,75	2	1,2	0,0019	4
UFX6-206R	100	300	5000	1,50	1,00	2	1,2	0,0043	6
UFX16-210R	200	600	4000	2,00	1,30	2	1,2	0,124	15
UFX40-214R	400	1200	4000	2,50	1,60	2	1,2	0,0347	20
UFX63-218R	800	2400	3000	3,00	2,00	2	1,2	0,118	25

Part numbers full coupling	ØD	ØВ	øс	ØA pilot bore	ØA max	L	М	N	K1	Mass (kg)	Prid eac	
UFX2-203R	104		40	10	28		30	8	6xM6	1,15	249,8	0 €
UFX6-206R	136	68	55	10	38	110	45	8	8xM6	2,50	264,9	2€
UFX16-210R	178	88	70	15	48	130	50	19	8xM8	5,40	354,7	2€
UFX40-214R	210	116	92	15	65	160	65	20	12xM8	9,50	460,1	4€
UFX63-218R	263	140	107	25	75	190	75	24	8xM12	17.50	805.5	6€

Dimensions in mm





Spare tyre UNEFLEX® coupling Eco range Spare tyre UNEFLEX® coupling



IJFX

Mounting and spare tyres

- Tyre for UNEFLEX coupling

- Replacement of the tyre without moving the machines
- Material Fabric-reinforced natural rubber (R arrangement))

Assembly

To assemble the Uneflex coupling, mount the hubs 1 together with the pressure rings (2) on the shaft ends and alian the system parts.

The distance between the hubs "N" must be the one indicated on the data sheet

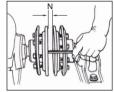
The tyre 3 is mounted on the coupling hubs, fitted to provide the smallest possible aap between its faces. For large couplings, before tightening the pressure rings, it is recommended to use clamping bands to fit the tyre. The tyre is secured with the

prescribed wrench torque by means of the pressure ring and the screws (4)

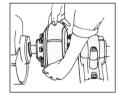
The fixation must be always carried out tightening two diametrally opposite screws in cyclic order, retightening the bolts after the first tightening as the rubber settles.

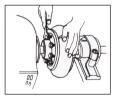
For replacing the tyre, only loosen the screws, until the tyre can be withdrawn











DISCOUNTS

	~~.		
Qty	1+	2+	4+
Disc.	List	-5%	On request

Part numbers tyre only	For coupling UFX	Price each
TYRE-203R	UFX2-203R	53,63 €
TYRE-206R	UFX6-206R	62,49 €
TYRE-210R	UFX16-210R	70,01 €
TYRE-214R	UFX40-214R	87,68 €
TYRE-218R	UFX63-218R	115,28 €

Dimensions in mm



UNEFLEX® Tyre coupling **Eco** range

€ Eco New

Torque and calculation

Selection procedure

In order to design a coupling for a system, the following equation is used to determine the rated torque TN of the application:

Proctor [kW]

 $T_N [Nm] = \frac{Pmotor [kW]}{n [rpm]}$.9549.S

T_N = Application rated torque [Nm] T_{MAX} = Application peak torque [Nm] P = Rated power of drive [kW] n = Rated speed of engine [tr/min]

S = Service factor

The permissible rated torque T_{KN} of the coupling has to correspond at least to the rated torque TN of the application.

The permissible maximum torque T_{kmax} of the coupling has to correspond at least to the peak torque T_{MAX} of the application.

Check that the coupling can accommodate required bores and rated speed.

Service factor

The service factor S is obtained according to the following table, from the driver type of motor and the driven machine aroup in which the couplina will be installed

the arriven machine group in which the coupling								
Driver motor type	Driven machine group No.							
Driver illotor type		Ш	Ш	IV	٧			
Electric motor Steam turbine	1,0	1,5	2,0	2,5	3,0			
Gas machine Hydraulic turbine Diesel 4-6 cylinders	1,5	2,0	2,5	3,0	3,2			
Diesel 2-3 cylinders 4 Stroke motor	2,2	2,5	2,8	3,2	3,5			
Diesel 1-2 cylinders	2,6	2,8	3,0	3,5	4,0			

Group I: Continual load machines: such as generators, small fans

Group II: Variable load machines: such as small elevators, generators, winches

Group III: Normal size to heavy machinery: such as mechanical mixers, cutters, brick presses

Group IV: Heavy machinery: such as dredge control mechanism, sand and paper grinders, compound mills

Group V: Heavy machinery of variable power consumption such as large drilling installations, roller tables for mills

Torque and misalignement









Damping

Storage and maintenance

In order to ensure a long-life cycle of the rubber element, it is fundamental to store the tyre protecting it against ozone, light (specially ultra violet rays), heat and oxygen, in a room with a relative humidity of less than 65% with a storage temperature range between +10°C and +25°C and without storing in the same room disinfectants, acids, chemicals and other similar substances that may cause a depreciation of the tyres.

Further details of the guideline for rubber product storage can be found in the standard ISO 2230. The coupling design allows a perfect inspection of the transmission tyre without dismantling the coupling, so a periodical visual inspection is recommended.



Our other products



Short swivel head, Short



Miniature motorised actuator 1A, 1 amper



Worm and wheel set, Non hardened steel



Washer - DIN125, Brass



Die cast zinc clamping lever - female, Zamak



Swivel castor with central hole, Steel rubber - with double brake



Swivel castor with double brake, Stainless steel -Polyamide



Worm and wheel gear reducer, up to 980 Nm



Adjustable Stainless steel cam lever, Male



Square tube connector, Fixed angle



Connecting plate for RPP type timing belts, RPP8



Accessory for adjustment slidesystem, 30

Complementary products



Spare tyre UNEFLEX® coupling, range