



## DOCUMENTATION SHEET

Propulsion Equipment

Type SMART-LINK flexible coupling

# SMART-LINK Flexible Coupling

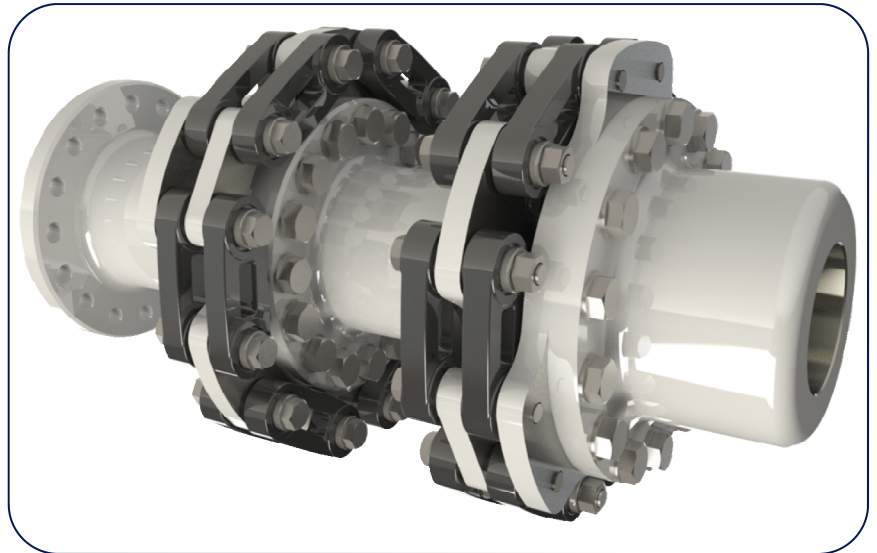


### Introducing the new SMART-LINK flexible coupling

The Rubber Design SMART-LINK flexible coupling ( Stable Movement, Axial, Radial, Torsional ) is a newly developed coupling using rubber torque-links with interior cord inlays. The high degree of allowable displacements and associated low stiffnesses makes the SMART-LINK flexible coupling particularly suitable for the application with soft mounted flexible systems.

### General

Rubber torque-links with interior cord inlays form the basis of our new SMART-LINK flexible coupling design. The torque-links accommodate movement in all directions, making the coupling exceptionally tolerant of relative propeller shaft displacements in combination with flexible mounted propulsion system and providing controlled damping of torsional vibration excitation. The SMART-LINK flexible coupling is specifically designed for usage between the propeller shaft with a separate thrust bearing and the gearbox. The double row torque-link design has an optimal torque capacity versus the smallest possible outside diameter. The SMART design of the coupling results in the smallest possible build-in length with maximum flexibility. A special center-ring device ensures no imbalance occurs during the lifecycle of the coupling and has no impact on the acoustic properties.

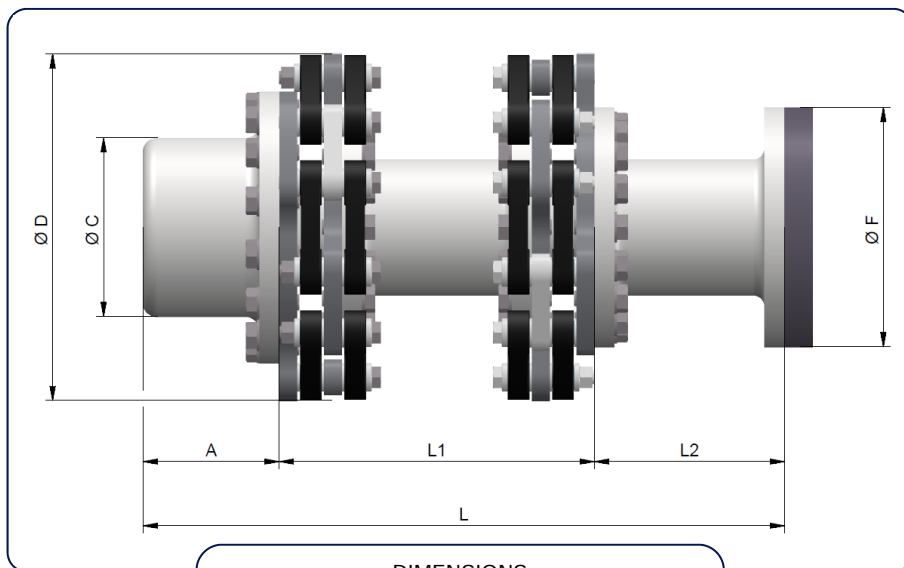


### Features of the SMART-LINK flexible coupling

- From 24.5 kNm to 394.7 kNm torque capacity , divided in five standard sizes
- Coupling can be supplied with class certification. ( e.g. Lloyd 's register , ABS, DNV-GL )
- High alignment tolerances allowed
- High operation angle/displacements allowed
- Steel parts are supplied with corrosion-resistant protection for improved service life
- Special center-ring device for imbalance reduction occurring during lifecycle of the coupling
- Designed for the smallest possible build-in length

### Advantages of the SMART-LINK flexible coupling

- Reduction of torque fluctuations
- Damping of torsional vibrations
- Reduction of resonance symptoms
- Excellent isolation of structure-borne noise
- Designed for the best possible torque versus diameter
- Designed for the lowest possible weight per torque
- Smaller build-in length required



DIMENSIONS

	Dimensions [mm]							Max. Nom. Torque**	Maximum Torque	Max Speed
	A	C	D	L1*	L2	F	L	[kNm]	[kNm]	[rpm]
SL 211	245	250	485	440	To be determined	To be determined	A + L1 + L2	32,6	81,5	2500
SL 212	290	280	625	450				59,0	147,6	2200
SL 213	295	350	675	480				79,7	199,3	2100
SL 214	350	380	800	515				115,5	288,9	1900
SL 215	440	470	920	530				157,9	394,7	1800

CHARACTERISTICS

\* L1 is noted as the minimum build-in length , longer intermediate shafts can be supplied by Rubber Design.

\*\* Based on a safety factor of 2,5.

## Engineering

CAD drawings ( 2D/3D ) of the SMART-LINK flexible couplings are available in different formats so that this geometry can be easily imported into the CAD drawing of the complete propeller shaft installation.

## Classification

All SMART-LINK flexible couplings can be delivered with the required classification approval for example Lloyd ' s register , ABS , DNV-GL.

## Specification

The SMART-LINK flexible couplings are manufactured in steel with a protective coating. The coupling will maintain drive in the event of exceeding the maximum torque due to additional safety factor on the torque-links. All SMART-LINK flexible couplings can be supplied with an adaptor flange and/or adaptor shaft, to fit all available reduction gearbox brands worldwide.

## Remarks

It is our intention to maintain the excellent standard of our products. Modifications and improvements may be made from time to time and it is therefore advisable to contact us before ordering.

# SMART-LINK Flexible Coupling

Rubber Design B.V.  
Industrieweg 21  
2995BE Heerjansdam  
The Netherlands  
Phone: +31 (0) 78 677 87 78  
Fax: +31 (0) 78 677 10 38  
Email: [info@rubberdesign.nl](mailto:info@rubberdesign.nl)  
Web: [www.rubberdesign.nl](http://www.rubberdesign.nl)