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## **D2C - Designed to Customer**

The guiding principle of Designed to Customer is the recipe for success behind REICH. In addition to the catalogue products, we supply our customers with couplings developed to their specific requirements. The designs are mainly based on modular components to provide effective and efficient customer solutions. The special nature of our close cooperation with our partners ranges from; consulting, development, design, manufacture and integration to existing environments, to customer-specific production, logistics concepts and after-sales service - worldwide.

This customer-oriented concept applies to both standard products and production in small batch sizes.

The company policy at REICH embraces, first and foremost, principles such as customer satisfaction, flexibility, quality, prompt delivery and adaptability to the requirements of our customers.

REICH supplies not only a coupling, but a solution:: Designed to Customer - SIMPLY POWERFUL.





## **Coupling Information**

**04** General Technical Description

05 Advantages

06 General Technical Data

06 Flexible Coupling Elements

## **Dimension Tables**

**07** Type MMS-HS

# **MULTI MONT SELLA -HighSpeed**

General Technical Description

## **MULTI MONT SELLA - HighSpeed**

## Flexible Claw Coupling

The torsionally flexible MULTI MONT SELLA couplings (short form: MMS) have been built in series since 1958. This pluggable claw coupling, successfully proven over many years has been continually updated to meet technical developments.

In consistently following the principle of providing the best for the customer, D2C - Designed to Customer, REICH has developed a flexible MULTI MONT SELLA - HighSpeed coupling series (short form: MMS-HS).

Today's drive solutions such as industrial gearboxes and vehicle transmissions, and e-mobility largely owe their tremendously high efficiency and long service life to the test benches on which they are developed and tested prior to their first series application.

Test benches for drives place extremely high requirements on the components incorporated into them. The proper functioning of the test bench depends on their reliability and efficiency. REICH takes particular pride in the further development of its proven MULTI MONT SELLA claw coupling into a high speed product.

The latest development and calculation tools including, for example, an FEM-optimized design, and the results of trial runs on in-house test benches and in the field, were implemented into the development process.

The MULTI MONT SELLA product line offers a large variety of different types so that a suitable coupling is available for almost every type of power transmission requirement.

The coupling is fitted with a separately screwed-on retaining cap which encloses the periphery of the rubber elements. This screwed connection is not involved in torque transmission. The elements can be easily replaced radially with no need for axial movement of the coupled machine components after loosening and sliding back the retaining cap.



## **MULTI MONT SELLA - HighSpeed**

## Advantages

#### Salient features and advantages of MULTI MONT SELLA - HighSpeed claw coupling:

- High speeds
- Maintenance-free
- Shock and vibration damping
- Compensation of axial, radial and angular displacements
- Ease of assembly and alignment
- Simple radial element replacement by sliding back the retaining cap
- Fail-safe operation and high overload capability
- High-strength aluminium
- Low weight
- Adaptable to almost any mounting situation

# **MULTI MONT SELLA-HighSpeed**

General Technical Data



Standard Type									
Coupling size	Nominal torque	Maximum torque	Dynamic torsional stiffness $\mathtt{C}_{Tdyn}$				Rel. damping	Maximum speed	
	T <sub>KN</sub>	T <sub>K max</sub>	[10 <sup>3</sup> Nm/rad]			Ψ	n <sub>max</sub>		
	[Nm]	[Nm]	0.25 T <sub>KN</sub>	0.5 T <sub>KN</sub>	0.75 T <sub>KN</sub>	1.0 T <sub>KN</sub>	-	[min <sup>-1</sup> ]	
MMS - HS 63	630	800	7	10	25	60	1.0	20 000	
MMS - HS 100	1250	1500	15	25	55	120	1.0	16 000	
MMS - HS 160	2000	3000	25	35	90	190	1.0	10 000	
MMS - HS 250	3 000	4000	35	55	130	280	1.0	8 0 0 0	

Technical data for the standard element version SN

### Flexible coupling element

Material designation	Code	Permissible temperature range		Feature	
			Shortly		
Natural/synthetic caoutchouc Hardness range: 75 – 80° Shore A	SN	-40 °C to 80 °C	90 °C	excellent abrasion resistance	

General technical data for MULTI MONT SELLA couplings with NBR elements on request. Other rubber materials and other shore hardnesses can also be supplied on request.

### **Balancing**

The MULTI MONT SELLA - HighSpeed couplings are balanced as standard with a balancing grade of G 2.5/4000 min<sup>-1</sup> according to DIN ISO 21940. If vibrations occur, we recommend carrying out an operational balancing.

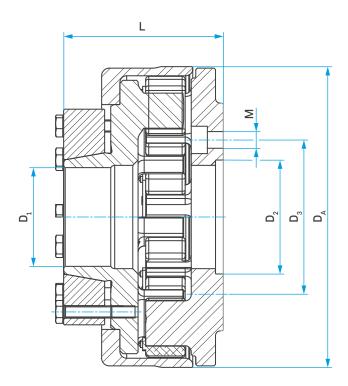
### **Technical Note**

The technical data applies only to the complete coupling or the corresponding coupling elements. It is the customer's/user's responsibility to ensure there are no inadmissible loads acting on any of the components. In particular, existing connections, e.g. bolted connections, must be checked with regard to the torques to be transmitted. If necessary, further measures, such as additional reinforcement with pins, may be necessary. It is the customer's/ user's responsibility to make sure the dimensioning of the shaft and keyed or other connection, e.g. shrinking or clamping connection, is correct. All components that can rust are protected against corrosion as standard.

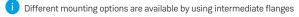
REICH have an extensive range of couplings and coupling systems to cover nearly every drive configuration. Customized solutions can be developed and manufactured even in small batches or as prototypes. In addition calculation programs are available for all necessary dimensioning.

# **MULTI MONT SELLA-HighSpeed**

Type MMS - HS



Coupling details									
Coupling size	D <sub>A</sub>	D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>		L	Mass moment of inertia	Weight	
		H7	H7				J total	m <sub>total</sub>	
	[mm]	[mm]	[mm]	[mm]	M*)	[mm]	[kgm <sup>2</sup> ]	[kg]	
MMS - HS 63	176	65	75	101.5	M10	90	0.015	4.0	
MMS - HS 100	196	65	75	101.5	M10	105	0.030	6.3	
MMS - HS 160	230	90	140	196	M16	140	0.079	11.4	
MMS - HS 250	257	90	140	196	M16	140	0.106	13.1	



<sup>\*)</sup> Optionally with counterbore or thread

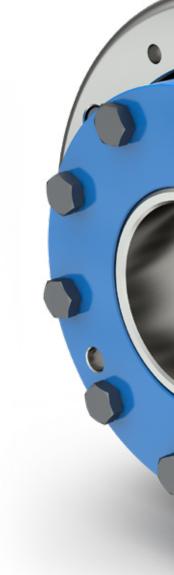
<b>₩</b> Or	Ordering example							
Coupling s	size	Element version	Flange version	Flange connections	Length			
MMS - HS	3 100	.SN.	F1.	120.	90			

Coupling designation: MMS - HS 100.SN. F1. 120. 90



## **MULTI MONT SELLA - HighSpeed**

SIMPLY POWERFUL. -



#### **Industrial solutions:**

Power generation

Mobile applications

Test benches

Pumps & compressors

Industry

Ship & port engineering

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The present MULTI MONT SELLA - HighSpeed catalogue edition renders parts of the previous MULTI MONT SELLA - HighSpeed catalogues obsolete. All dimensions in millimetres. We reserve the right to change dimensions and/or design without prior notice. Texts and illustrations, dimensional and performance data have been compiled with the utmost care. There is no guarantee, however, that the information is accurate; in particular, there is no guarantee that products will match the illustrations in terms of technology, colour, shape and configuration or that the products will correspond to the proportions of the illustrations. We also reserve the right to make changes due to printing errors or mistakes.