

Dipl.-Ing. Herwarth Reich GmbH



# MMS\_HighSpeed\_ Claw coupling



Your drive is our strength. Your strength is our drive.











### **General technical description**

Reich has been manufacturing MULTI MONT couplings in series production since 1958. These long-proven pluggable claw couplings have been constantly upgraded to the latest state of the art.

Reich, consistently following the principle of providing the best for the customer, D2C - Designed to Customer, has developed a flexible MMS-HighSpeed coupling series.

Today's drive solutions such as industrial gearboxes and vehicle transmissions, and the e-mobility largely owe their tremendously high efficiency and long service life to 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 therein. The proper functioning of the test bench depends on their reliability and efficiency. REICH-KUPPLUNGEN 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 versatile MULTI MONT coupling range comprises a large variety of different types so that a suitable coupling is available for almost any type of power transmission requirement.

#### Essential features and advantages of the MM claw coupling:

- High speeds
- Maintenance-free
- Shock and vibration damping
- Compensation of axial, radial and angular offsets
- Easy assembly and alignment thanks to the plug-in type design
- Simple radial element replacement by sliding back the retaining cap
- Fail-safe operation and high overload capability
- High-strength aluminum
- · Low weight
- Adaptable to almost any mounting situation

The coupling features a separately bolted-on retaining cap which encloses the periphery of the rubber elements. This bolted 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.



## **D2C - Designed to Customer**

The principle of Designed to Customer describes the recipe for success of REICH-KUPPLUNGEN: Utilizing our product knowledge, our customers are supplied with couplings which are developed and tailor-made to their specific requirements. The designs are mainly based on modular components

to provide effective and efficient customer solutions. The unique form of close cooperation with our partners includes consultation, design, calculation, manufacture and integration into existing environments. Adapting our manufacturing to customer-specific production and utilizing global logistics concepts provides better after sales service - worldwide. This customer-oriented concept applies to both standard products and production in small batch sizes.

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

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

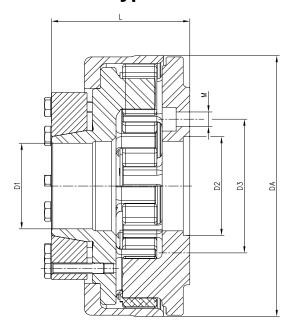
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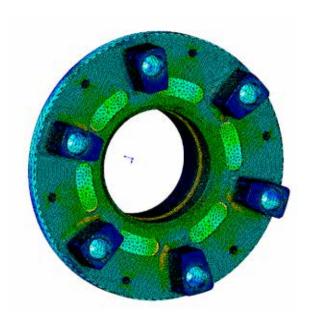
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The present Multi Mont Sella HighSpeed renders parts of the The reproduction, distribution and utilization of this document as previous Multi Mont Sella HighSpeed catalogues obsolete. well as the communication of its contents to others without explicit All dimensions in millimeters. We reserve the right to change dimensions and/or design details without prior notice.



# Standard type





## **Technical Details**

| Coupling<br>size | Nominal<br>torque<br>T <sub>KN</sub><br>Nm | Maximum<br>torque<br>T <sub>Kmax</sub><br>Nm | Dynamic torsional stiffness  C <sub>Tdyn</sub> 10 <sup>3</sup> Nm/rad |                     |                      |                     | Rel. damping coefficient Ψ | Maximum<br>speed<br>n <sub>max</sub> |
|------------------|--|--|---|---------------------|----------------------|---------------------|----------------------------|--------------------------------------|
|                  | 1 1111                                     | I WIII                                       | 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                        | 20000                                |
| MMS - HS 100     | 1250                                       | 1500   | 15  | 25                  | 55                   | 120                 | 1.0                        | 16000                                |
| MMS - HS 160     | 2000                                       | 3000   | 25  | 35                  | 90                   | 190                 | 1.0                        | 10000                                |
| MMS - HS 250     | 3000                                       | 4000   | 35  | 55                  | 130                  | 280                 | 1.0                        | 8000                                 |

#### Flange couplings

The use of intermediate flanges allows for various attachment solutions.

| Coupling size | D <sub>A</sub> | D <sub>1</sub><br>H <sub>7</sub><br>mm | D <sub>2</sub><br>H <sub>7</sub><br>mm | D <sub>3</sub> | M *) | L<br>mm | Mass moment<br>of inertia<br>J total<br>kgm <sup>2</sup> | Weight<br>m<br>total<br>kg |
|---------------|----------------|--|--|----------------|------|---------|--|----------------------------|
| MMS - HS 63   | 176            | 65                                     | 75                                     | 84             | M8   | 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

