



MULTI MONT SELLA - HighSpeed

Flexible claw coupling

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SIMPLY **POWERFUL.**





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**.

D2C
Designed to Customer

MULTI MONT SELLA - HighSpeed

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General Technical Description

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Flexible claw coupling

The torsionally flexible MULTI MONT SELLA couplings (abbreviation: 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.

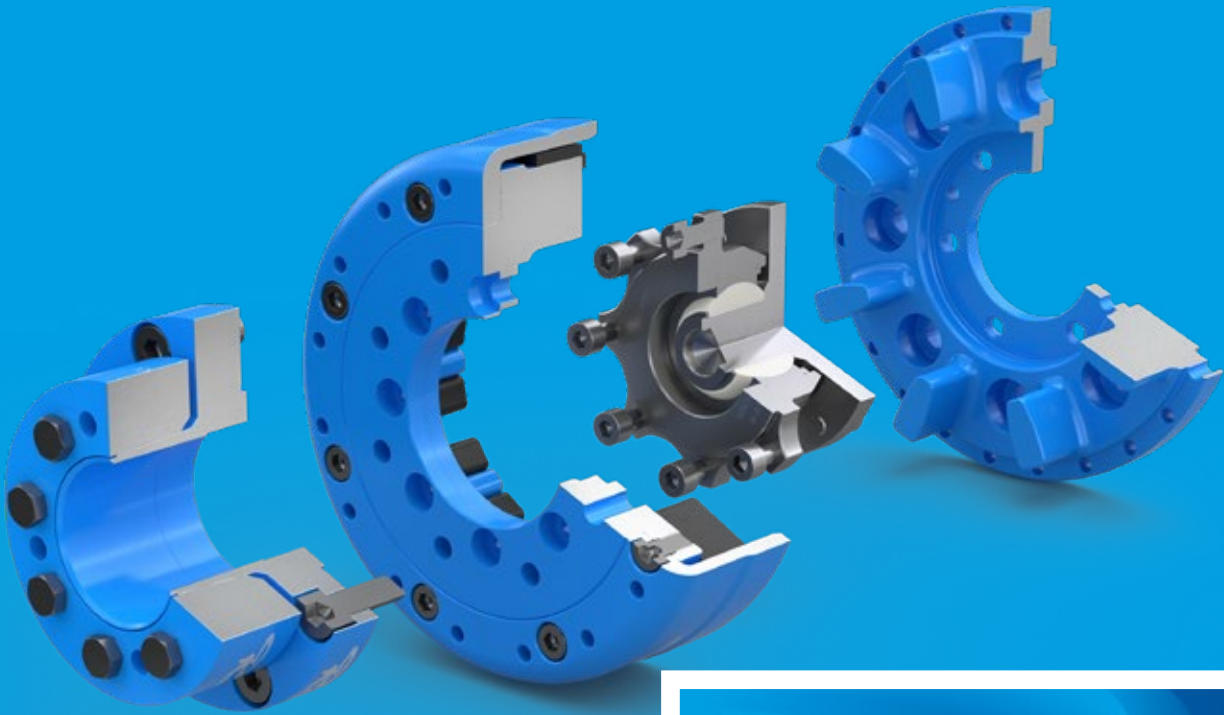
The latest development and calculation tools including, for example, an FEM-optimized design, and the results of trial runs on in-house test benches and in the field, were implemented into the development process.

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 that fully encloses the circumferential edge 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.

→ NEW

With the latest generation of the MMS-HS, a modular system has been developed to meet the ever-increasing customer demands. This allows us to react flexibly and quickly to customer requirements. Furthermore, this generation is equipped with 8 coupling elements enabling a higher torque capacity with a smaller, more compact design.



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Nominal torques from 420 Nm to 12 000 Nm

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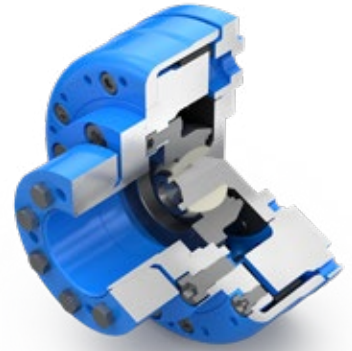
Advantages and Uses

Key features and benefits of the MULTI MONT SELLA - HighSpeed coupling:

→ High speeds	→ Large field of application
→ Maintenance-free	→ Little effort during the period of use You reduce downtimes. Less maintenance for optimised operating costs
→ Damping of impacts and vibrations Quiet operation	→ Increased productivity of your system through extended maintenance intervals. More accurate measurement results
→ Compensation of axial, radial and angular misalignments	→ Your system achieves a high level of operational stability with reduced loads, thereby increasing your productivity.
→ Easy to assemble and align. Sliding back the retaining cap for radial change of elements	→ Fast installation, short repair times resulting in high cost-effectiveness
→ Fail-safe and high overload capacity	→ Emergency operation can be provided for your machine or system. This prevents sudden shutdowns.
→ High-strength aluminium	→ Low weight. Lower life cycle costs (cost-effectiveness)
→ Diverse designs achievable with modular construction	→ Large field of application Customised and cost-effective solutions

MULTI MONT SELLA - HighSpeed

General Technical Data



Standard Design

Coupling size	Nominal torque T_{KN} [Nm]	Maximum torque $T_{K max}$ [Nm]	Dynamic torsional rigidity $C_{T dyn}$ [10^3 Nm/rad]				Rel. damping ψ -	Maximum speed n_{max} [min ⁻¹]
			0.25 T_{KN}	0.5 T_{KN}	0.75 T_{KN}	1.0 T_{KN}		
MMS - HS 28	420	750	9	15	35	55	2.0	28500
MMS - HS 48	750	950	13	25	48	85	2.0	25000
MMS - HS 68	1050	1400	40	50	87	125	2.0	20000
MMS - HS 108	1500	1800	38	60	170	270	2.0	18000
MMS - HS 168	2600	3500	60	100	275	435	2.0	15000
MMS - HS 258	3750	4850	80	145	410	650	2.0	12000
MMS - HS 408	7500	9750	175	290	680	1060	2.0	10000
MMS - HS 638	12000	14500	290	460	1160	1610	2.0	8000

i Technical data for the standard element version UN

Flexible coupling elements

Material designation	Code	Permissible temperature range		Feature
			shortly	
Natural/synthetic caoutchouc Hardness range: 80–90° Shore A	UN	-40 °C to 80 °C	90 °C	excellent abrasion resistance increased torque transmission capacity

i 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⁻¹ according to DIN ISO 21940. If vibrations occur, we recommend carrying out an operational balancing.

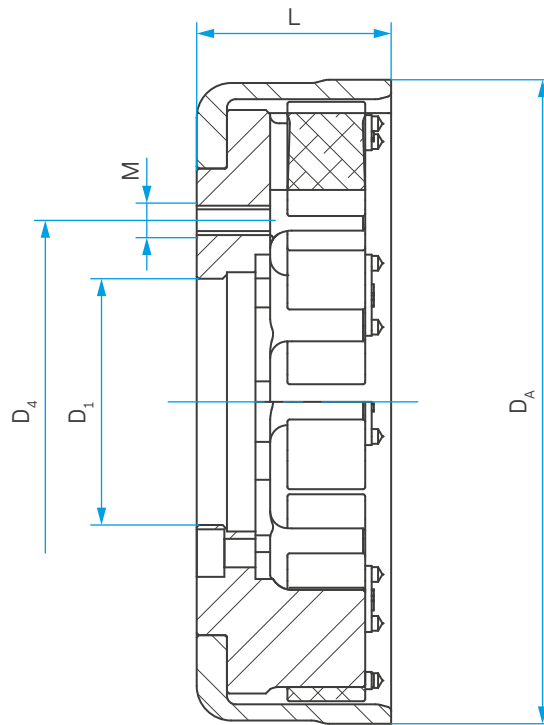
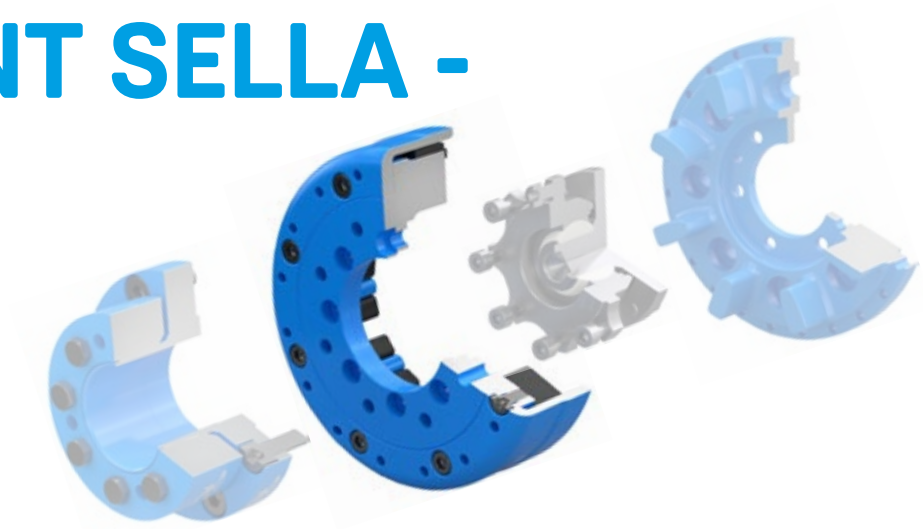
General Technical Information

The technical data applies only to the complete coupling or the corresponding coupling elements. It is the customer/user's responsibility to ensure that 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/user's responsibility to make sure that the dimensioning of the

shaft and key and/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. Customised solutions can be developed and manufactured even in small batches or as prototypes. In addition calculation programs are available for all necessary dimensioning.

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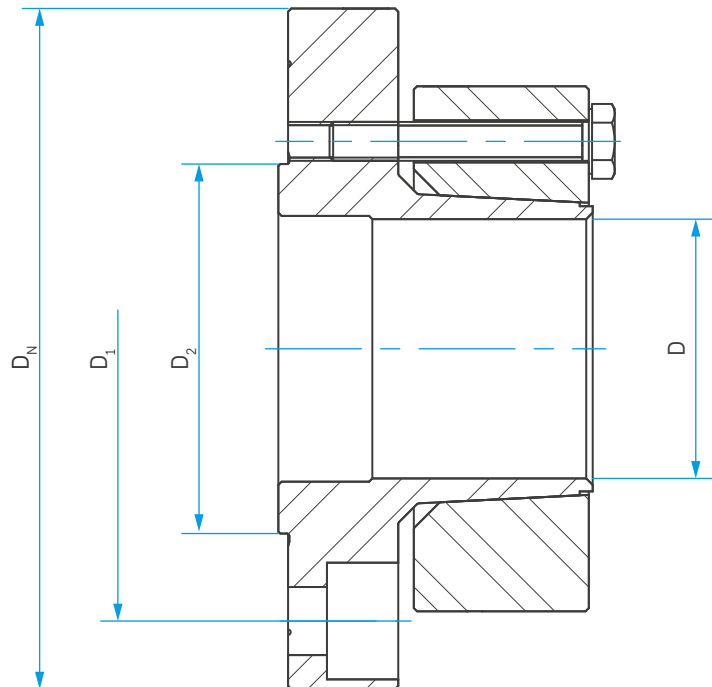
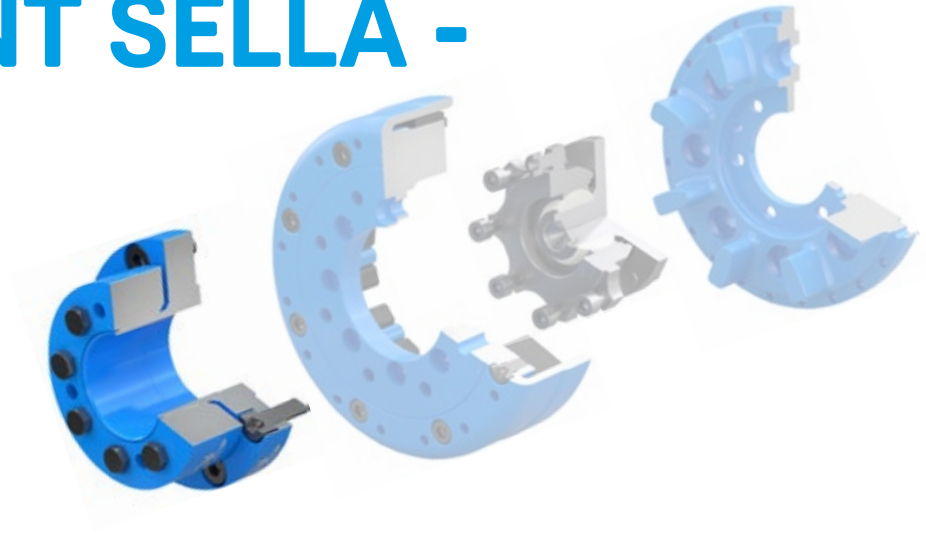
Coupling details

Coupling size without clamping set and bearing unit, without measuring flange adapter	D_A [mm]	D_1 H7 [mm]	D_4 [mm]	$M^*)$ Z=8	L [mm]	Mass moment of inertia J_{total} [kgm ²]	Weight m_{total} [kg]
MMS - HS 28	137	57	84	M8	39	0.002	0.69
MMS - HS 48	149	57	84	M8	45	0.003	0.96
MMS - HS 68	176	75	101.5	M12	49	0.008	1.70
MMS - HS 108	198	90	130	M12	56	0.014	2.38
MMS - HS 168	230	90	130	M12	72	0.031	3.81
MMS - HS 258	257	90	130	M16	75	0.055	5.46
MMS - HS 408	287	110	155.5	M14	83	0.090	7.22
MMS - HS 638	326	140	196	M16	91	0.173	10.4

i Different mounting options are available by using intermediate flanges

*) Optionally with through holes or threads

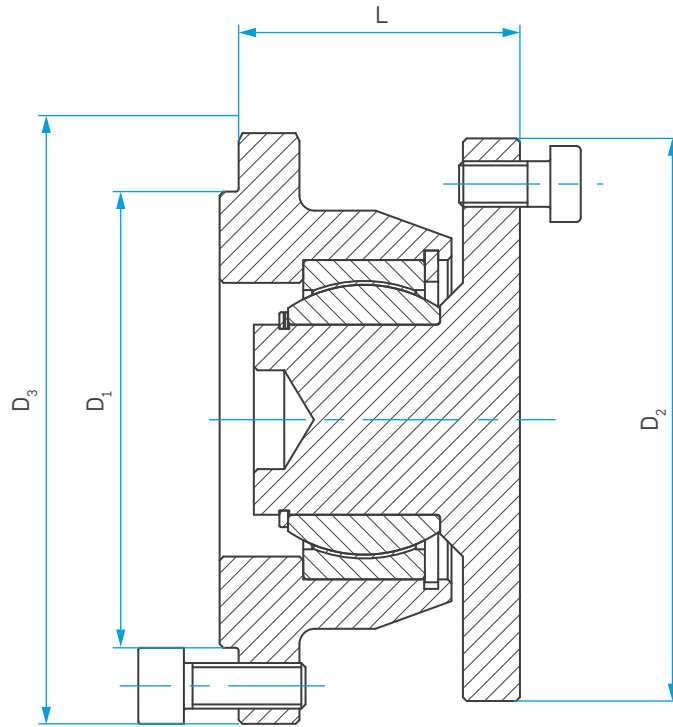
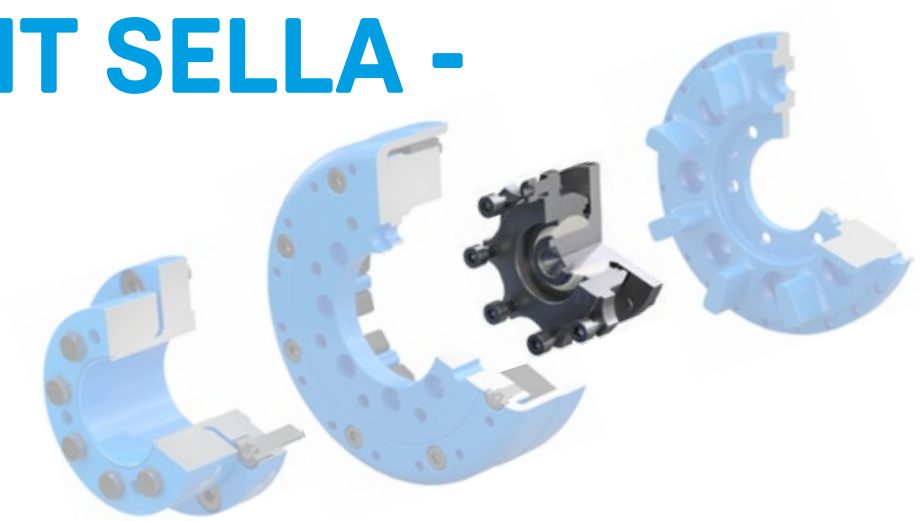
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REICH - clamping sets

Coupling size	Clamping set	D_N [mm]	D_1 [mm]	D_2 g6 [mm]	D min./max. [mm]	Mass moment of inertia $J_{max. D}$ [kgm ²]	Weight $m_{max. D}$ [kg]
MMS - HS 28	RS 100	100	84	57	20 - 45	0.001	0.76
MMS - HS 48							
MMS - HS 68	RS 120	120	101.5	75	40 - 70	0.004	1.4
MMS - HS 108	RS 150	150	130	90	50 - 90	0.009	2.3
MMS - HS 168							
MMS - HS 258							
MMS - HS 408	RS 180	180	155.5	110	60 - 105	0.018	3.3
MMS - HS 638	RS 225	225	196	140	60 - 120	0.043	5.7

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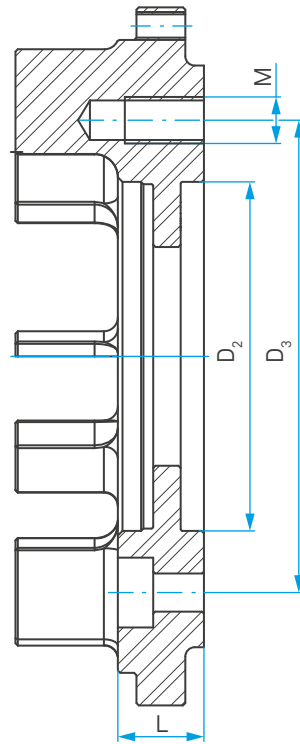
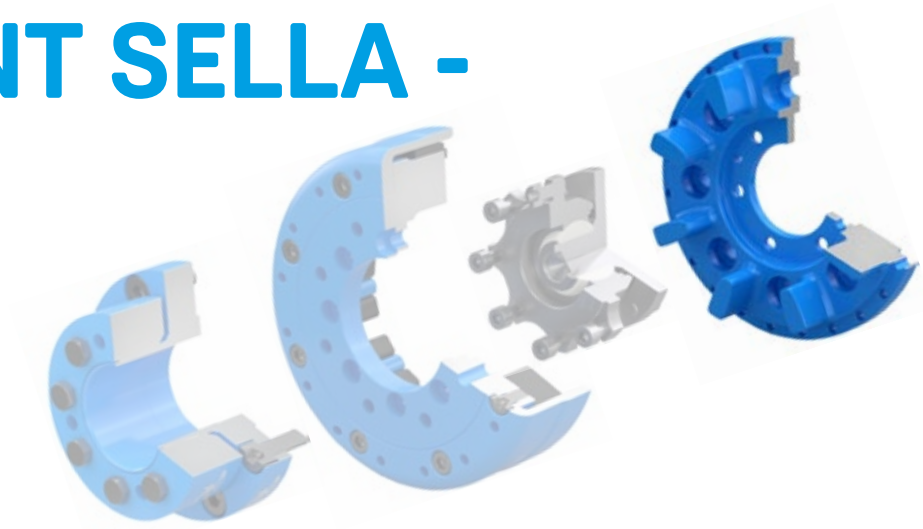


Bearing units

Coupling size	D ₁ h7 [mm]	D ₂ h7 [mm]	D ₃ [mm]	L [mm]	Mass moment of inertia J _{total} [kgm ²]	Weight m _{total} [kg]
MMS - HS 28	57	58	78	37	0.0002	0.37
MMS - HS 48	60	74	80	37	0.0005	0.78
MMS - HS 68	60	74	80	37	0.0005	0.90
MMS - HS 108	65	74	90	37	0.0005	0.78
MMS - HS 168	80	100	113	49	0.0026	2.06
MMS - HS 258	80	100	113	49	0.0026	2.06
MMS - HS 408	90	110	130	64	0.0054	3.30
MMS - HS 638	90	110	130	64	0.0054	3.30

i Standard versions come as spherical bearings (SP). Also available as slide bearings (GL) on request

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Measuring flange adapter

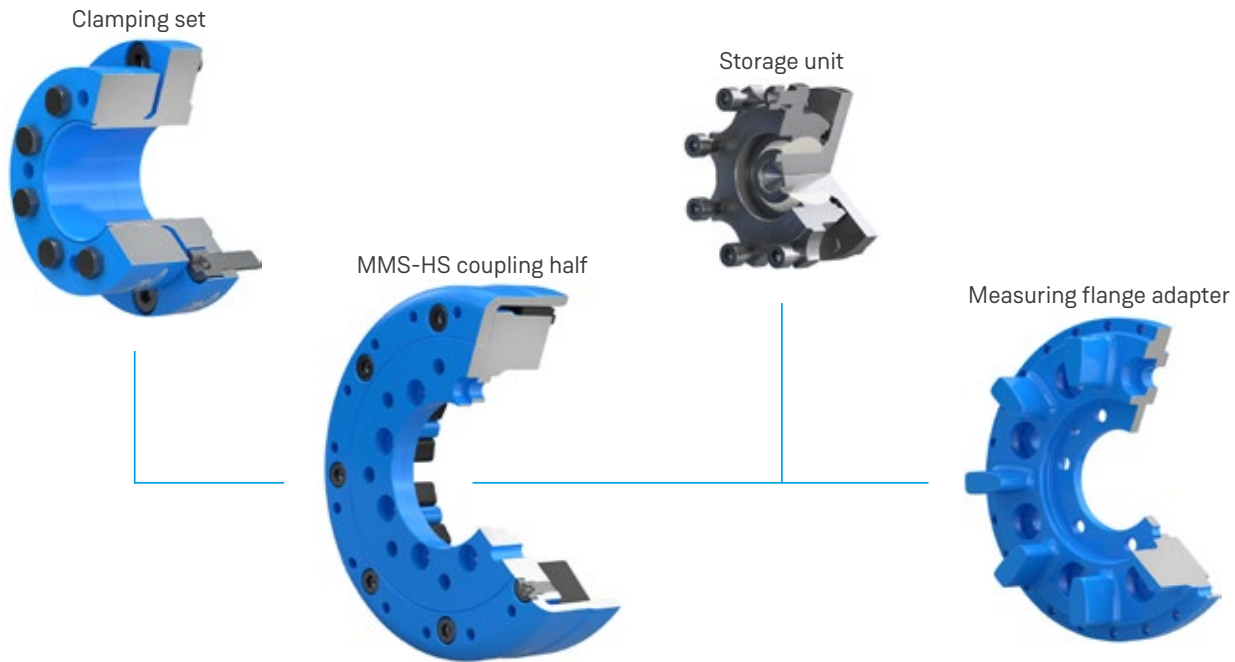
Coupling size	D ₂ H7 [mm]	D ₃ [mm]	M*) Z=8	L [mm]	Mass moment of inertia J _{total} [kgm ²]	Weight m _{total} [kg]
MMS - HS 28	75	101.5	M10	16	0.0012	0.44
MMS - HS 48	75	101.5	M10	18.5	0.0021	0.65
MMS - HS 68	75	101.5	M12	18	0.0045	1.12
MMS - HS 108	90	130	M12	21	0.0077	1.50
MMS - HS 168	90	130	M12	27	0.0172	2.50
MMS - HS 258	110	155.5	M16	28	0.0292	3.31
MMS - HS 408	110	155.5	M16	28	0.049	4.62
MMS - HS 638	140	196	M16	28	0.089	6.30

i Different mounting options are available by using intermediate flanges

*) Optionally with through holes or threads

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MMS - HS modular system



Clamping set ordering example

Clamping set size	Shaft diameter
RS 120	Ø 50

Clamping set designation: RS 120 - 50

Coupling half ordering example

Coupling size	Element version	Flange version
MMS - HS 68	UN	DIN 120

Coupling half: MMS - HS 68 .UN. 120

Bearing unit ordering example

Coupling size	Storage unit
MMS - HS 68	Spherical bearing SP

Bearing unit: MMS - HS 68 - SP

Measuring flange adapter ordering example

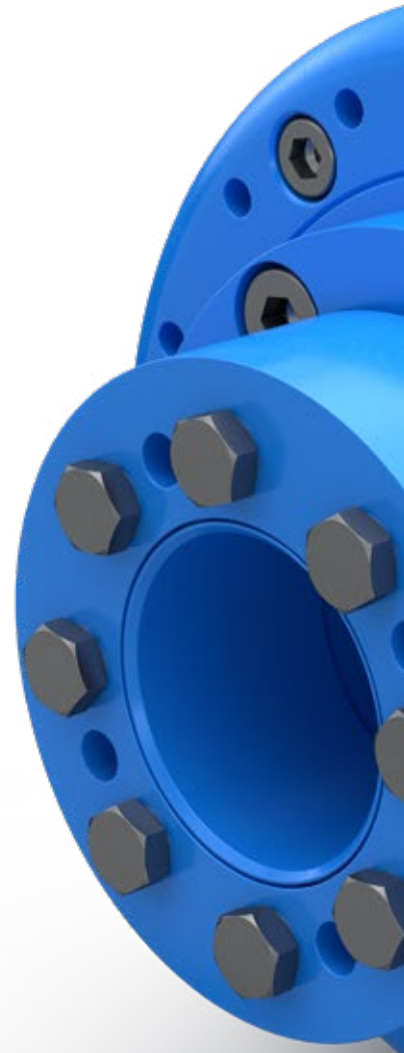
Coupling size	Flange version
MMS - HS 68	DIN 120

Measuring flange adapter: MMS - HS 68 - 120



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Industrial solutions:

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- 🚛 Mobile applications
- 💡 Test benches
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