



DELLNER BUBENZER

PRODUCT TYPE

COUPLINGS

2023

**PRODUCT DATA SHEET
CATALOG**



WELCOME TO DELLNER BUBENZER



DELLNER BUBENZER is a global leader in the design and manufacture of braking systems. Our unrivaled braking equipment offers customized stop-action solutions for a wide variety of industries from sea to sky, and everything in between.

For decades DELLNER BUBENZER products have been recognized worldwide as innovative braking solutions that are precision engineered to meet the highest quality standards.

GLOBAL STRENGTH, LOCAL COMMITMENT

Our global team of experts instill trust in our customers, develop and innovate with the latest technology, and provide strength in our product and personalized service.

Anchored by integrity and committed to sustaining our industry-leading product offering, our diverse community of extremely talented people around the world are committed to serving local customers.

The performance of our products and the satisfaction of our customers is our priority. DELLNER BUBENZER customers trust our commitment to excellence and recognize the value of our investment in our **Worldwide Service Network**.



PREVENTATIVE SERVICE

INSPECTION &
MAINTENANCE

REPAIRS

TRAINING



REACTIVE SERVICE

TECHNICIANS
ON CALL

24/7 TECHNICAL
SUPPORT



LIFE CYCLE MANAGEMENT

CUSTOMIZED
SERVICE CONTRACTS

RETROFITTING

ORIGINAL
SPARE PARTS

THE HIGHEST STANDARDS FOR MAXIMUM PERFORMANCE

DELLNER BUBENZER's innovative braking solutions and products are meticulously tested at our state-of-the-art research and development center. Our rigorous testing process proves and validates our research while ensuring maximum effectiveness, efficiency, and our shared client commitment to safety.

DELLNER BUBENZER's product standards are beyond meeting the Association for Iron & Steel Technology (AIST) criteria and the rigid requirements of Deutsches Institut für Normung e.V. (DIN). With a wide range of high capacity and high performance disc and drum brakes designed to operate in severe duty applications, our research, development, and testing center continuously validates our product performance and integrity.

Our commitment to research, development, and testing is the trustworthy foundation of DELLNER BUBENZER.



ENGINEERING

- ▶ DELLNER BUBENZER's trusted team of expert engineers rely on decades of experience to deliver superior products and braking systems for a multitude of industry-specific applications.
- ▶ From full braking system design to the assessment and optimization of existing solutions, DELLNER BUBENZER's engineers offer a full suite of services including 3D conceptualization, technical documentation, customized testing, and development of prototypes.



BRAKING SYSTEM DESIGN

- ▶ DELLNER BUBENZER's provides turn-key solutions for complete braking system design for static and dynamic applications.
- ▶ Upon review of input data, our engineers and product specialists evaluate system requirements, determine quantity, size and distribution of system components, perform 3D modeling for system design and/or adjustments, and deliver a complete global FEM model to ensure proper load management and system performance.



CLIMATE TESTING

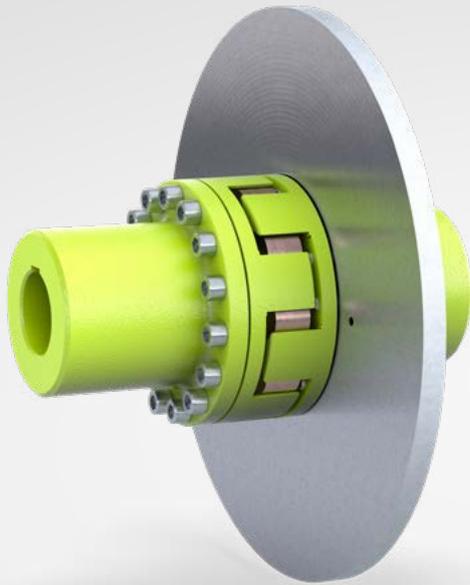
- ▶ All products designed and manufactured by DELLNER BUBENZER endures in-depth climate and pressure performance testing to satisfy a stringent set of requirements for optimal performance, durability and safety.
- ▶ DELLNER BUBENZER conducts performance testing on one of the industry's largest test benches to ensure each product is prepared to meet the most rigorous demands within the world's harshest climates.

> PRODUCT TYPE

COUPLINGS



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K

These couplings are for use in application with high dynamic loads. Damping of peak torques and vibrations as well as electrical insulation between motor and gearbox are further reasons for the use of this coupling type. The standard material of the elastic intermediate ring Polyurethane (Vulkollan) is suitable for a temperature range of -35°C up to +80°C. For a short time -40°C up to +100°C.

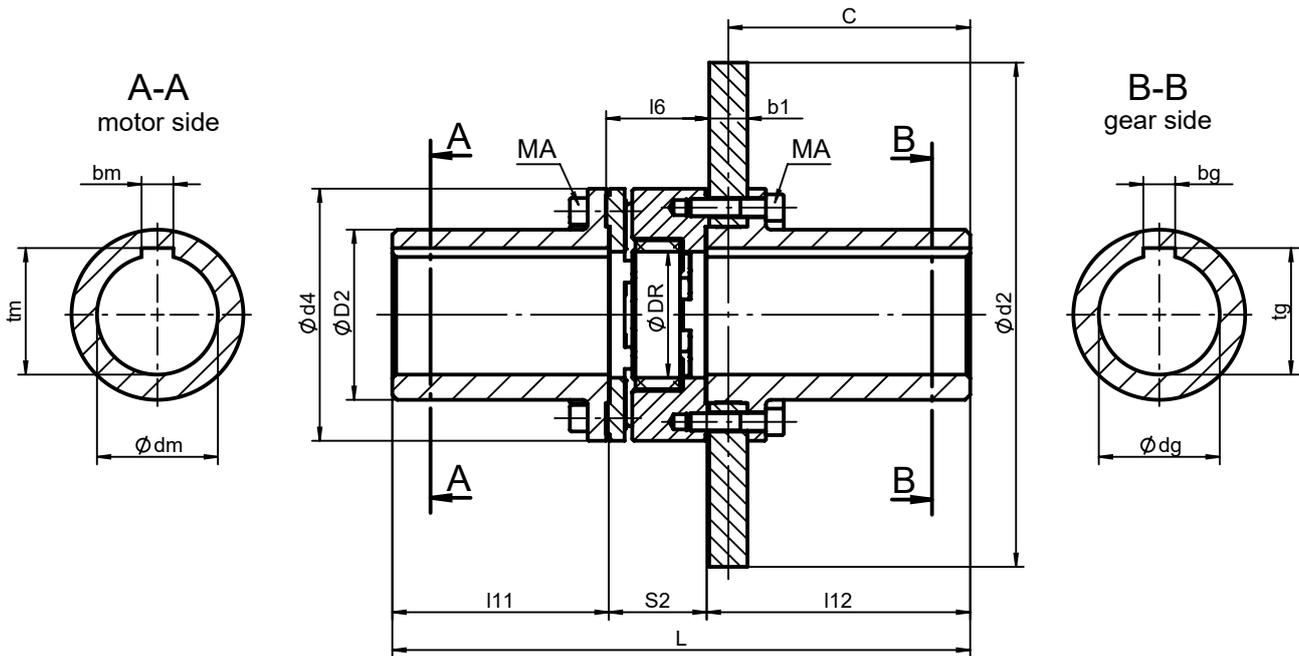
TORSIONAL FORCE: 40050 Nm

MAIN FEATURES:

- Steel coupling, torsionally elastic and bullet-proof (fail safe)
- Torque transmission via elastic intermediate ring
- Replacement of the elastic intermediate ring or the brake disc without moving any equipment
- Arrangement of the brake drum on the gear side to allow the brake torque to be maintained when the motor is disengaged
- Vast selection of coupling sizes and brake disc diameters

OPTIONS:

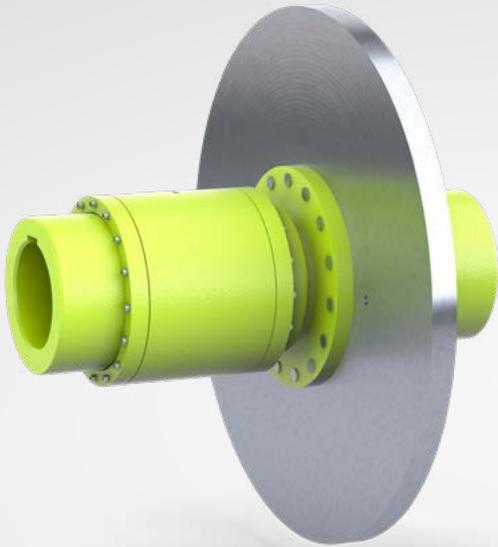
- Coupling hubs finish bored and keywayed acc. to DIN 6885
- Coupling hubs unbored
- Coupling hubs pilot bored
- Coupling dynamically balanced according to DIN ISO 21940-11 Grade: G 2.5; G 6.3
- Coupling hubs in special lengths
- Coupling hubs in special material
- Test certificate DIN EN 10204-3.1



All dimensions in mm
Alterations reserved without notice

Coupling K		100	125	145	170	200	230	260	300	360	400
M_{Br} max.	Nm	585	1110	1800	2850	4950	7740	11940	17550	29100	40050
T_{KN} (VK60D)	Nm	195	370	600	950	1650	2580	3980	5850	9700	13350
d_m max. + d_g max.	mm	45	55	65	75	95	110	125	140	160	160
D_2	mm	70	80	92	110	135	160	180	200	225	225
d_R	mm	42	55	66	90	100	115	150	162	215	250
d_4	mm	105	126	145	170	200	230	260	300	360	400
L	mm	293,5	299,5	344,5	374,5	454	458,5	518,5	535,5	627,5	627,5
l_{11}	mm	110	110	110	140	170	170	210	210	250	250
l_{12}	mm	131,5	131,5	166,5	166,5	207	207,5	212,5	212,5	252,5	252,5
l_b	mm	55 +2	61 +2,5	71 +2,5	71 +3	81 +3	86 +3,5	101 +4	118 +4	130 +4	130 +4
S_2	mm	52	58	68	68	77	81	96	113	125	125
C ($b_1 = 20 / 30 / 40$ mm)	mm	120/-/-	120/115/-	-/150/-	-/150/-	-/190/-	-/190/-	-/195/-	-/195/-	-/235/230	-/235/230
M_A (DIN EN ISO 4762-8.8; $\mu=0,12$)	Nm	25	49	84	84	132	132	206	410	710	710
Brake disc diameter $d \times b$ (mm)	250 x 20	kg	14	Weight of the coupling with steel brake disc							
	n_{max} 6800 min ⁻¹	kgm ²	0,068	Moment of inertia							
	280 x 20		16	19							
	n_{max} 6100 min ⁻¹		0,103	0,112							
	315 x 20			21							
	n_{max} 5400 min ⁻¹			0,169							
	355 x 30			32	36						
	n_{max} 4800 min ⁻¹			0,384	0,401						
	400 x 30				42	48	60				
	n_{max} 4300 min ⁻¹				0,626	0,655	0,742				
	450 x 30				50	56	68				
	n_{max} 3800 min ⁻¹				0,982	1,009	1,096				
	500 x 30					65	77	90	110		
	n_{max} 3400 min ⁻¹					1,503	1,590	1,731	1,993		
	560 x 30						89	102	122		
	n_{max} 3000 min ⁻¹						2,414	2,555	2,817		
	630 x 30							117	137	163	
n_{max} 2700 min ⁻¹							3,915	4,176	4,675		
710 x 30								157	183		
n_{max} 2400 min ⁻¹								6,395	6,894		
800 x 30									208	294	
n_{max} 2200 min ⁻¹									10,466	11,971	
900 x 30										325	342
n_{max} 1950 min ⁻¹										17,670	18,425
1000 x 30										360	377
n_{max} 1750 min ⁻¹										25,622	26,326

Weights and moments of inertia are not binding, referring to the max. finish bore for the sizes 100 to 300 respectively for a finish bore of 120 mm for the sizes 360 and 400.



KBT

These couplings are for use in machinery where a torsionally rigid torque is required, especially on frequently varying loads and speeds.

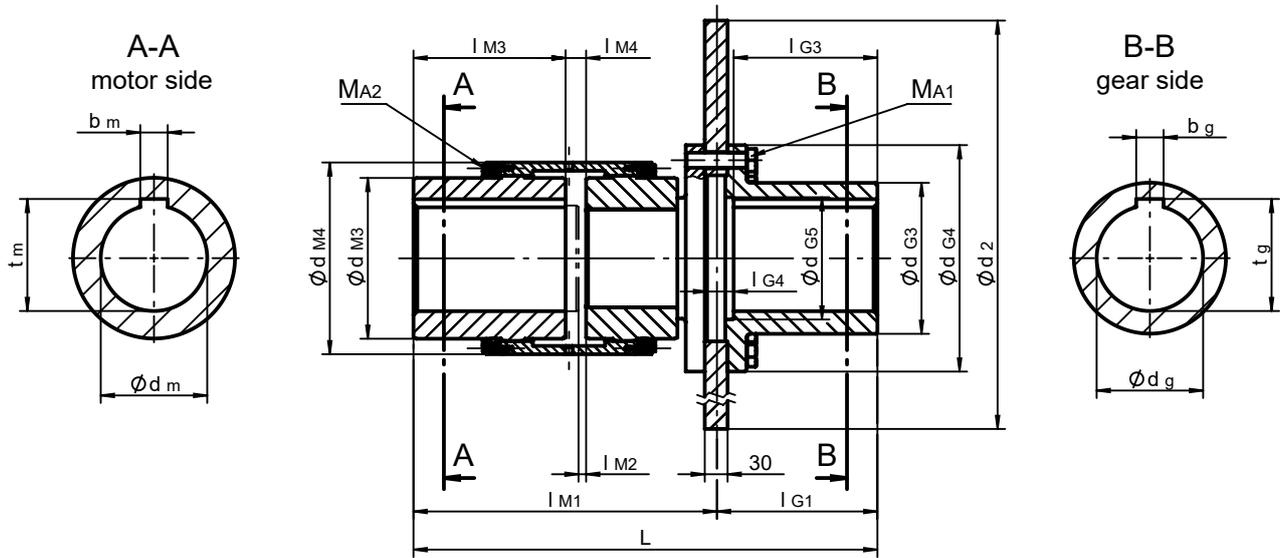
TK_{MAX} : 46000 Nm

MAIN FEATURES:

- Steel coupling with special tooth pattern
- Torque transmission via internal geared sleeve and external geared hubs
- Replacement of the brake disc or the seals without moving any equipment
- High temperature resistance
- Low wear
- Arrangement of the brake drum on the gear side to allow the brake torque to be maintained when the motor is disengaged
- Vast selection of coupling sizes and brake disc diameters

OPTIONS:

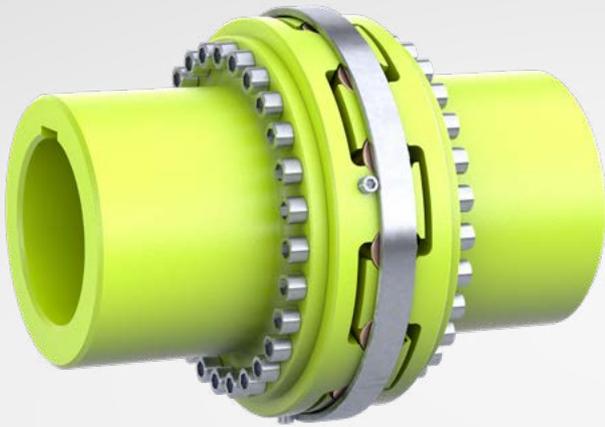
- Coupling hubs finish bored and keywayed acc. to DIN 6885
- Coupling hubs unbored
- Coupling hubs pilot bored
- Coupling dynamically balanced according to DIN ISO 21940-11 Grade: G 2.5; G 6.3
- Hubs in special dimensions
- Hubs in special material
- Test certificate DIN EN 10204-3.1



All dimensions in mm
Alterations reserved without notice

Coupling KBT		065	08	09	11	13	15	17	19		
M_{Br} max.	Nm	2000	4000	5000	9250	15250	27500	36500	46000		
T_{KN}	Nm	800	1600	2000	3700	6100	11000	14600	18400		
d_g max.	mm	55	75	90	110	120	140	160	195		
d_{G3}	mm	85	110	130	160	180	200	225	265		
d_{G4}	mm	145	170	200	230	260	300	360	400		
d_{G5} max.	mm	68	88	105	130	140	162	184	225		
d_m max.	mm	70	85	95	110	130	155	175	195		
d_{M3}	mm	100	118	130	151	178	213	235	263		
d_{M4}	mm	140	153,5	161	186	216	254	282	317		
L	mm	365	430	500	515	545	580	660	705		
l_{G1}	mm	150	150	190	190	195	195	235	235		
l_{G3}	mm	127	127	167	167	172	172	212	212		
l_{G4}	mm	35	35	35	35	35	35	35	35		
l_{M1}	mm	215	280	310	325	350	385	425	470		
l_{M2} min.	mm	7	10	10	10	10	10	10	10		
l_{M3}	mm	110	140	146	165	170	190	200	220		
l_{M4}	mm	12	30	17	19	23	24	29	32		
M_{A1} (DIN 931-10.9; $\mu=0,12$)	Nm	125	125	310	310	310	610	960	960		
M_{A2} (DIN 912-12.9; $\mu=0,08$)	Nm	-	8	8	8	8	8	13	13		
Brake disc diameter d2 x b1 (mm)	355 x 30	kg	39,5	Weight							
	n_{max} 4800 min ⁻¹	kgm ²	0,405	Moment of inertia							
	400 x 30		45,8	54	67,6						
	n_{max} 4300 min ⁻¹		0,63	0,665	0,735						
	450 x 30		53,6	61,8	75,4						
	n_{max} 3800 min ⁻¹		0,986	1,019	1,089						
	500 x 30			70,5	84,1	100					
	n_{max} 3400 min ⁻¹			1,513	1,583	1,722					
	560 x 30				95,8	111,7	154,8				
	n_{max} 3000 min ⁻¹				2,406	2,545	2,884				
	630 x 30				111,1	127	170,2	189			
	n_{max} 2750 min ⁻¹				3,766	3,904	4,243	4,718			
	710 x 30					146,7	189,9	208,7	262,9	324,7	
n_{max} 2400 min ⁻¹					6,124	6,462	6,937	7,967	9,538		
800 x 30						214,8	233,7	287,8	349,7		
n_{max} 2200 min ⁻¹						10,034	10,509	11,539	13,11		
900 x 30								319,1	380,9		
n_{max} 1950 min ⁻¹								17,202	18,773		

Weights and moments of inertia
are not binding, referring to the
max. finish bore.



KH

These couplings are for use in application with high dynamic loads. Damping of peak torques and vibrations as well as electrical insulation between motor and gearbox are further reasons for the use of this coupling type. The standard material of the elastic intermediate ring Polyurethane (Vulkollan) is suitable for a temperature range of -35°C up to $+80^{\circ}\text{C}$. For a short time -40°C up to $+100^{\circ}\text{C}$.

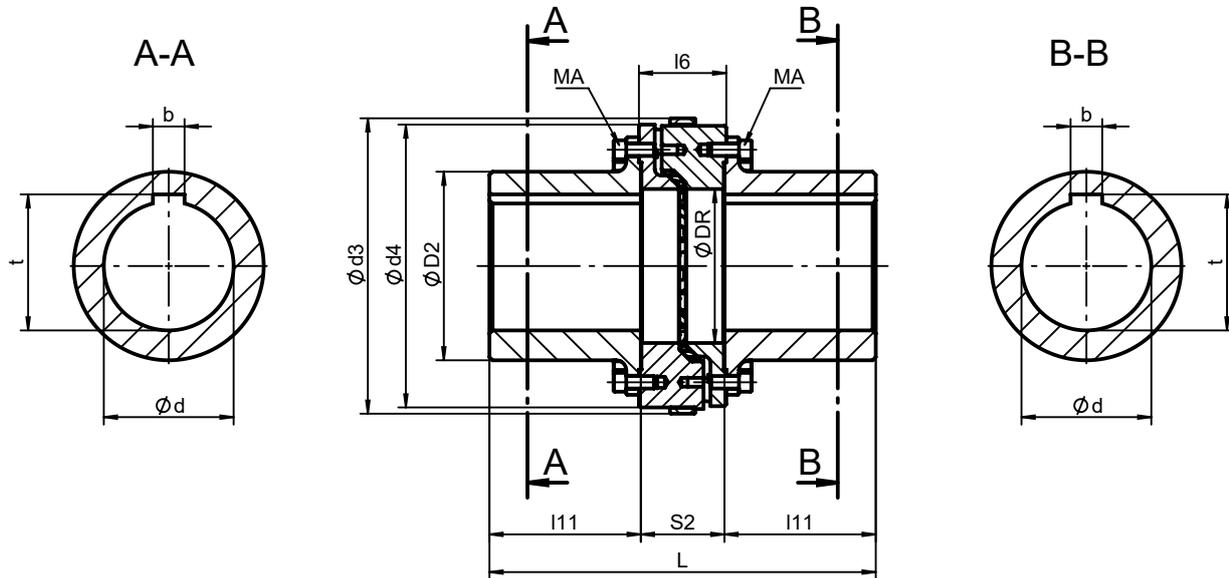
TK_{MAX} : 62000 Nm

MAIN FEATURES:

- Steel coupling, torsionally elastic and bullet-proof (fail safe)
- Torque transmission via elastic buffers
- Buffer elements can be radially replaced by pushing back the retaining ring without moving any equipment
- Elastic ring provides superb electrical insulating characteristics (e.g. prevents leaking currents)

OPTIONS:

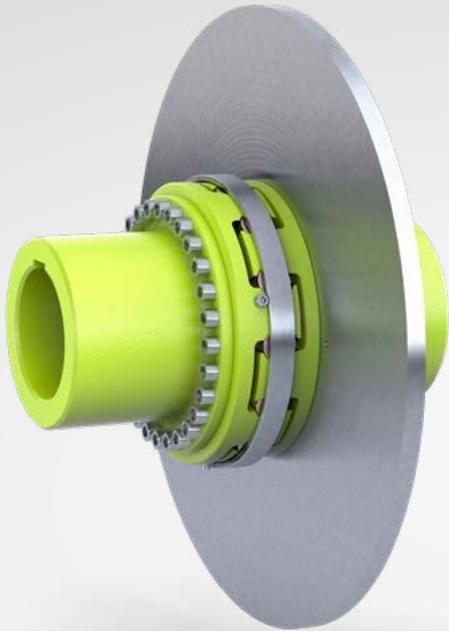
- Coupling hubs finish bored and keywayed acc. to DIN 6885
- Coupling hubs unbored
- Coupling hubs pilot bored
- Coupling dynamically balanced according to ISO 1940 Grade: G 2.5; G 6.3
- Coupling hubs in special lengths
- Coupling hubs in special material
- Test certificate DIN EN 10204-3.1



Coupling KH (size = d ₄)		300	400	450
T _{Kmax} (VKW)	Nm	17500	48000	62000
T _{KN} (VKW)	Nm	7800	21000	27000
n _{max.}	min ⁻¹	3300	2450	2200
d max.	mm	110	190	205
D ₂	mm	170	280	300
D _R	mm	138	204	245
d ₃	mm	320	420	470
L	mm	625	610	610
l ₁₁	mm	253,5	239	239
l ₆	mm	124	138	138
S ₂	mm	118	132	132
M _A (DIN EN ISO 4762-10.9; μ=0,12)	Nm	225	440	440
Weight	kg	98	210	242
Moment of inertia	kgm ²	3,010	4,061	5,679

Weights and moments of inertia of the coupling are not binding, referring to the max. finish bore!

All dimensions in mm
Alterations reserved without notice



KHD

These couplings are for use in application with high dynamic loads. Damping of peak torques and vibrations as well as electrical insulation between motor and gearbox are further reasons for the use of this coupling type. The standard material of the elastic intermediate ring Polyurethane (Vulkollan) is suitable for a temperature range of -35°C up to +80°C. For a short time -40°C up to +100°C.

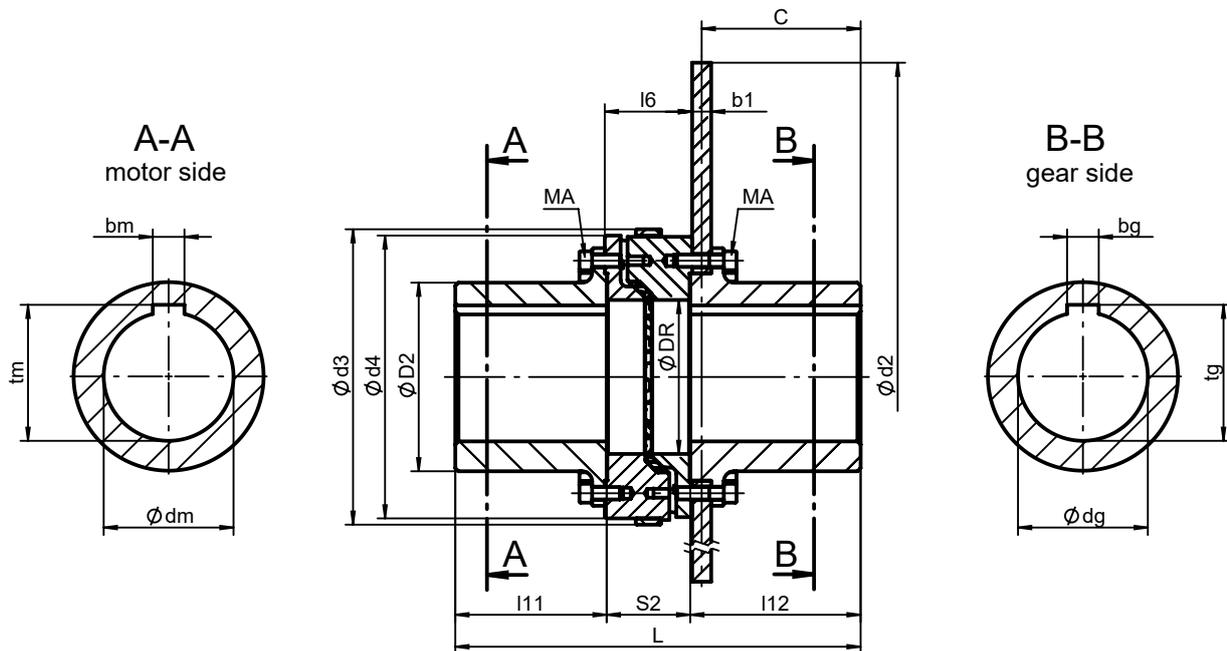
TK_{MAX} : 62000 Nm

MAIN FEATURES:

- Steel coupling, torsionally elastic and bullet-proof (fail safe)
- Torque transmission via elastic buffers
- Buffer elements can be radially replaced by pushing back the retaining ring without moving any equipment
- Arrangement of the brake drum on the gear side to allow the brake torque to be maintained when the motor is disengaged
- Elastic buffers provide superb electrical insulating characteristics (e.g. prevents leaking currents)

OPTIONS:

- Coupling hubs finish bored and keywayed acc. to DIN 6885
- Coupling hubs unbored
- Coupling hubs pilot bored
- Coupling dynamically balanced according to DIN ISO 21940-11 Grade: G 2.5; G 6.3
- Coupling hubs in special lengths
- Coupling hubs in special material
- Test certificate DIN EN 10204-3.1



Coupling KHD (size = d_4)		300	400	450
M_{Br} max.	Nm	17500	48000	62000
T_{KN} (VKW)	Nm	7800	21000	27000
d_m max. / d_g max.	mm	110	190	205
D_2	mm	170	280	300
D_R	mm	138	204	245
d_3	mm	320	420	470
L ($b_1 = 30\text{mm} / 40\text{mm}$)	mm	627,5	640 / 650	640 / 650
l_{11}	mm	256,5	239	239
l_{12} ($b_1 = 30\text{mm} / 40\text{mm}$)	mm	253	269 / 279	269 / 279
l_6	mm	124	138	138
S_2	mm	118	132	132
C ($b_1 = 30\text{mm} / 40\text{mm}$)	mm	235 / 230	251 / 256	251 / 256
M_A (DIN EN ISO 4762-10.9; $\mu=0,12$)	Nm	225	440	440
Brake disc diameter $d_2 \times b_1$ (mm)	800 x 30 $n_{max.} 2200 \text{ min}^{-1}$	209	320	
		7,690	13,428	
	900 x 30 $n_{max.} 1950 \text{ min}^{-1}$	240	351	
		10,781	19,091	
	1000 x 30 $n_{max.} 1750 \text{ min}^{-1}$	275	386	417
		14,734	26,991	28,592
	1250 x 30 $n_{max.} 1400 \text{ min}^{-1}$			520
				61,705
	800 x 40 $n_{max.} 2200 \text{ min}^{-1}$	245	355	
		9,729	16,526	
	900 x 40 $n_{max.} 1950 \text{ min}^{-1}$	287	397	
		13,511	24,076	
1000 x 40 $n_{max.} 1750 \text{ min}^{-1}$	333	444	476	
	18,785	34,610	36,230	
1250 x 40 $n_{max.} 1400 \text{ min}^{-1}$			614	
			80,381	

Weight $\frac{\text{kg}}$
Moment of inertia $\frac{\text{kgm}^2}$

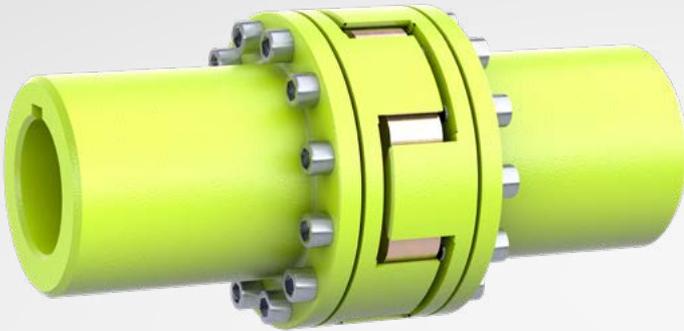
Weights and moments of inertia of the coupling with steel brake disc are not binding, referring to the max. finish bore!

All dimensions in mm
Alterations reserved without notice

KL

These couplings are for use in application with high dynamic loads. Damping of peak torques and vibrations as well as electrical insulation between motor and gearbox are further reasons for the use of this coupling type. The standard material of the elastic intermediate ring Polyurethane (Vulkollan) is suitable for a temperature range of -35 °C up to +80 °C. For a short time -40 °C up to +100 °C.

TK_{MAX} : 40500 Nm

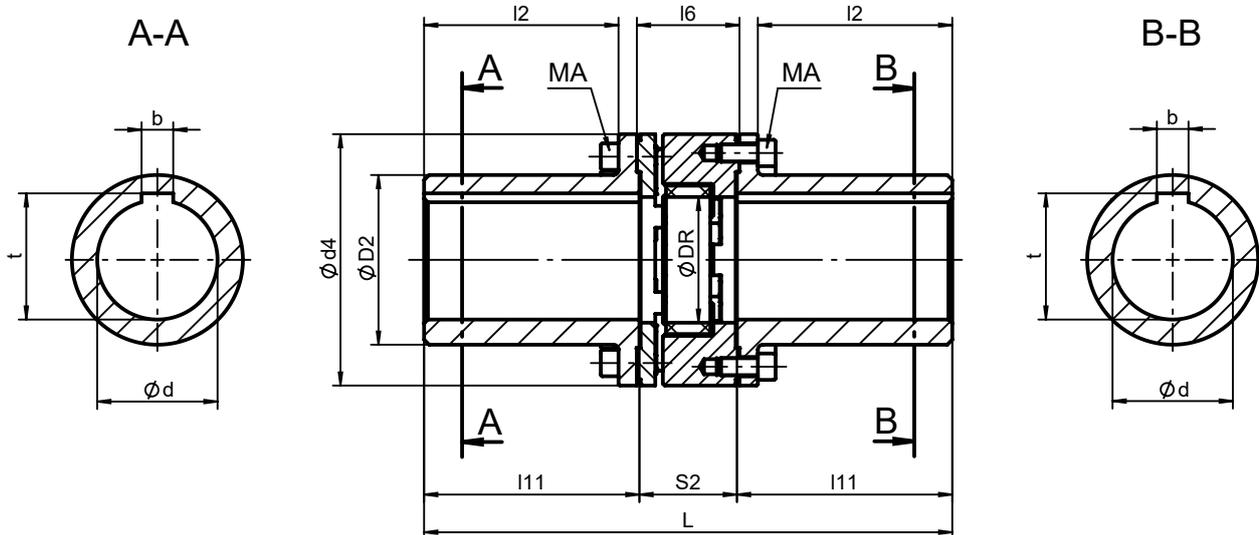


MAIN FEATURES:

- Steel coupling, torsionally elastic and bullet-proof (fail safe)
- Torque transmission via elastic intermediate ring
- Replacement of the elastic intermediate ring without moving any equipment
- Transmits rotating power from one shaft to another while accommodating misalignment between the two shafts
- Elastic ring provides superb electrical insulating characteristics (e.g. prevents leaking currents)

OPTIONS:

- Coupling hubs finish bored and keywayed acc. to DIN 6885
- Coupling hubs unbored
- Coupling hubs pilot bored
- Coupling dynamically balanced according to DIN ISO 21940-11 Grade: G 2.5; G 6.3
- Coupling hubs in special lengths
- Coupling hubs in special material
- Test certificate DIN EN 10204-3.1



All dimensions in mm
 Alterations reserved without notice

Weights and moments of inertia are not binding, referring to the max. finish bore for the sizes 145 to 300 respectively for a finish bore of 120 mm for the sizes 360 and 400.

Coupling KL (size = d_4)		145	170	200	230	260	300	360	400
T_{Kmax} (VK60D)	Nm	1800	2850	4950	7740	11940	17550	29100	40050
T_{KN} (VK60D)	Nm	600	950	1650	2580	3980	5850	9700	13350
n_{max}	min ⁻¹	5250	4500	3750	3250	3000	2500	2150	1900
d max.	mm	65	75	95	110	125	140	160	160
D_2	mm	92	110	135	160	180	200	225	225
D_R	mm	66	90	100	115	150	162	215	250
L	mm	288	348	417	421	516	533	625	625
l_2	mm	93,5	123,5	153,5	150	185,5	183,5	220,5	220,5
l_6	mm	71 +2,5	71 +3	81 +3	86 +3,5	101 +4	118 +4	130 +4	130 +4
l_{11}	mm	110	140	170	170	210	210	250	250
S_2	mm	68	68	77	81	96	113	125	125
M_A (DIN 912-8.8; $\mu=0,12$)	Nm	84	84	132	132	206	410	710	710
Weight	kg	12,9	20	32,4	46	70	97,3	183,9	201,5
Moment of inertia	kgm ²	0,034	0,069	0,157	0,299	0,585	1,098	2,568	3,422



KLST

These couplings are for use in application with high dynamic loads. Damping of peak torques and vibrations as well as electrical insulation between motor and gearbox are further reasons for the use of this coupling type. The standard material of the elastic intermediate ring Polyurethane (Vulkollan) is suitable for a temperature range of -35°C up to $+80^{\circ}\text{C}$. For a short time -40°C up to $+100^{\circ}\text{C}$.

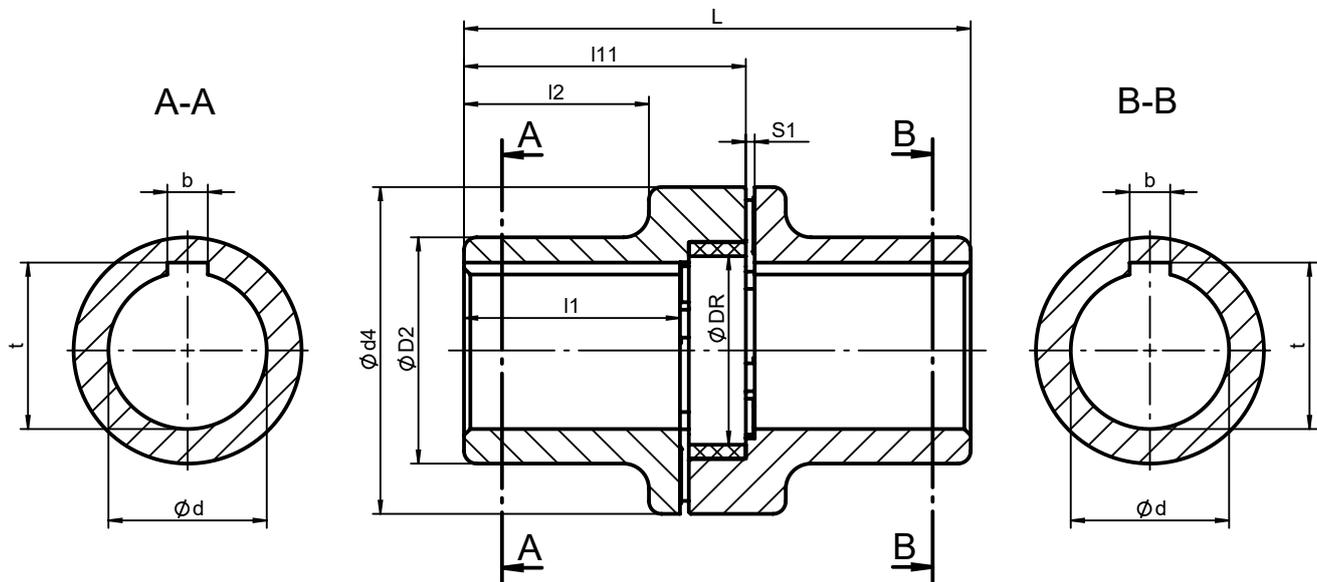
TK_{MAX} : 7950 Nm

MAIN FEATURES:

- Steel coupling, torsionally elastic and bullet-proof (fail safe)
- Torque transmission via elastic intermediate ring
- Transmits rotating power from one shaft to another while accommodating misalignment between the two shafts
- Elastic ring provides superb electrical insulating characteristics (e.g. prevents leaking currents)

OPTIONS:

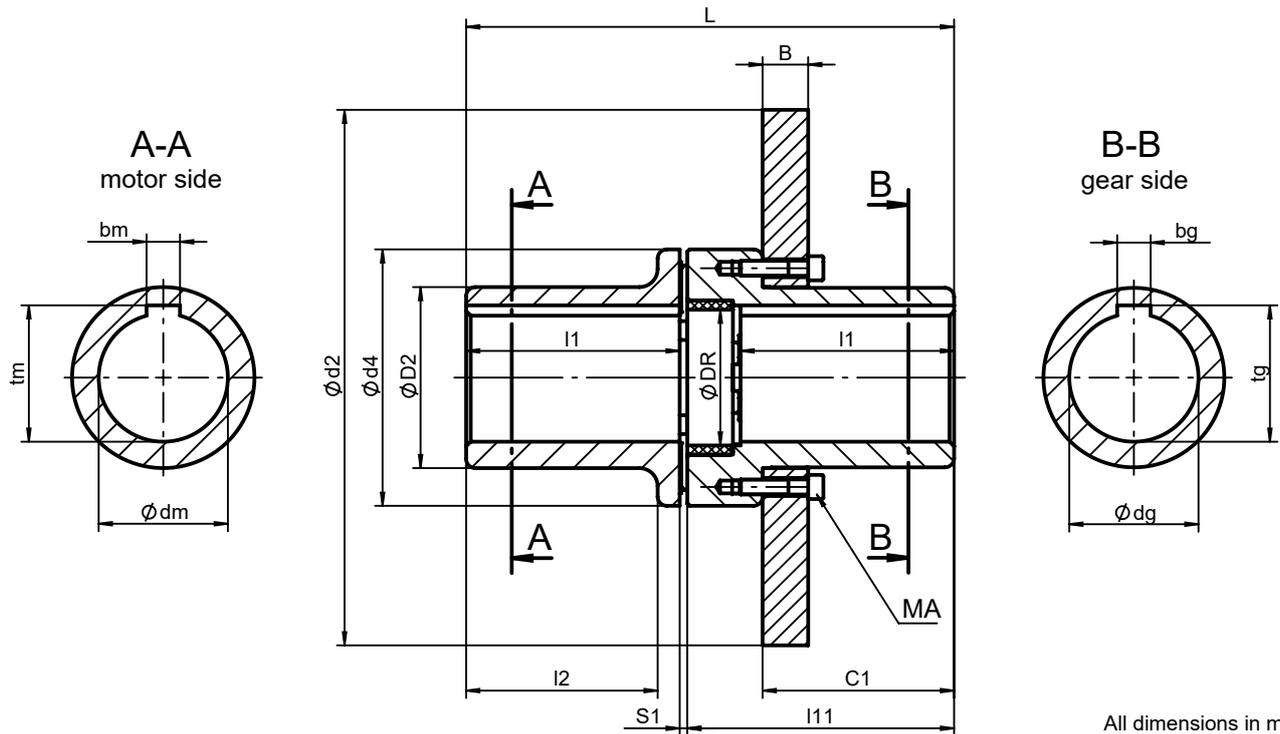
- Coupling hubs finish bored and keywayed acc. to DIN 6885
- Coupling hubs unbored
- Coupling hubs pilot bored
- Coupling dynamically balanced according to DIN ISO 21940-11 Grade: G 2.5; G 6.3



All dimensions in mm
Alterations reserved without notice

Weights and moments of inertia are not binding, referring to the max. finish bore!

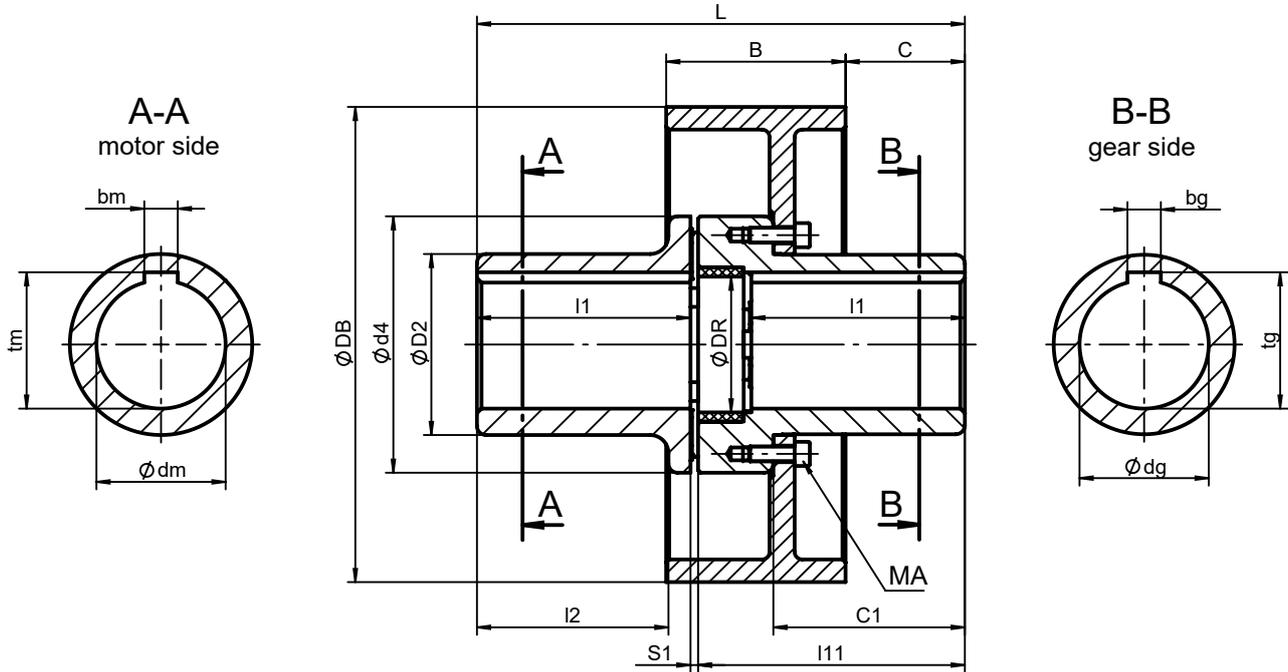
Coupling KLST		100	125	145	170	200	230	260
T_{Kmax} (VKR)	Nm	390	750	1200	1900	3300	5150	7950
T_{KN} (VKR)	Nm	130	250	400	630	1100	1700	2650
n_{max}	min ⁻¹	7250	6000	5250	4500	3750	3250	3000
d max.	mm	42	55	65	85	95	105	125
D_2	mm	65	85	95	120	135	150	180
D_R	mm	42	55	66	90	100	115	150
d_4	mm	105	126	145	170	200	230	260
L	mm	187	253	259	321	328	390	400
l_1	mm	80,5	110,5	110,5	140,5	140	170	170,5
l_2	mm	68,5	98	97	126	124	151	146
l_{11}	mm	103,5	139	144,5	175,5	181,5	212,5	222,5
S_1	mm	3,0 +2,0	3,5 +2,5	4,0 +2,5	5,0 +3,0	6,5 +3,0	7,5 +3,0	7,0 +4,0
Weight	kg	4,1	8,1	10,3	17,0	23,9	35,5	52,4
Moment of inertia	kgm ²	0,005	0,014	0,025	0,058	0,112	0,208	0,426



All dimensions in mm
Alterations reserved without notice

Coupling KLST-BS		100	125	145	170	200	230	260
M_{Br} max. at max. disc- ϕ	Nm	260	310	730	1350	2650	3800	7950
T_{KN} (VKR)	Nm	130	250	400	630	1100	1700	2650
n_{max} at max. disc- ϕ	min ⁻¹	6800	4800	3800	3400	3000	2700	2400
d_m max. + d_g max.	mm	42	55	65	85	95	105	125
D_2	mm	65	85	95	120	135	150	180
D_R	mm	42	55	66	90	100	115	150
d_4	mm	105	126	145	170	200	230	260
L	mm	187	253	259	321	328	390	400
l_1	mm	80,5	110,5	110,5	140,5	140	170	170,5
l_2	mm	68,5	98	97	126	124	151	146
l_{11}	mm	103,5	139	144,5	175,5	181,5	212,5	222,5
C_1	mm	70,5	99,5	98	127,5	125,5	153	148,5
S_1	mm	3,0 +2,0	3,5 +2,5	4,0 +2,5	5,0 +3,0	6,5 +3,0	7,5 +3,0	7,0 +4,0
M_A (DIN 912-8.8; $\mu=0,12$)	Nm	24	24	48	48	84	84	206
Brake disc diameter $d_2 \times B$ (mm)	250 x 20	kg 11,1	14,7	Weight of the coupling with steel brake disc				
		kgm ² 0,065	0,073	Moment of inertia				
	315 x 20		19,3					
			0,164					
	355 x 30		29,7	31,6				
			0,377	0,388				
	400 x 30			37,8	43,5	49,3		
				0,611	0,639	0,688		
	450 x 30			45,7	51,3	57,1		
				0,965	0,993	1,042		
500 x 30				60,0	65,9	75,5	90,1	
				1,487	1,536	1,618	1,813	
560 x 30					77,6	87,2	101,8	
					2,360	2,442	2,636	
630 x 30						102,5	117,1	
						3,802	3,996	
710 x 30							136,8	
							6,215	

Weights and moments of inertia are not binding, referring to the max. finish bore!



All dimensions in mm
Alterations reserved without notice

Coupling KLST-BT		100	125	145	170	200	230	260
M _{Br} max. at max. drum-Ø	Nm	260	310	730	1350	2650	3800	7950
T _{KN} (VKR)	Nm	130	250	400	630	1100	1700	2650
d _m max. + d _g max.	mm	42	55	65	85	95	105	125
D ₂	mm	65	85	95	120	135	150	180
D _R	mm	42	55	66	90	100	115	150
d ₄	mm	105	126	145	170	200	230	260
L	mm	187	253	259	321	328	390	400
l ₁	mm	80,5	110,5	110,5	140,5	140	170	170,5
l ₂	mm	68,5	98	97	126	124	151	146
l ₁₁	mm	103,5	139	144,5	175,5	181,5	212,5	222,5
C ₁	mm	70,5	99,5	98	127,5	125,5	153	148,5
S ₁	mm	3,0 +2,0	3,5 +2,5	4,0 +2,5	5,0 +3,0	6,5 +3,0	7,5 +3,0	7,0 +4,0
M _A (DIN 912-8.8; μ=0,12)	Nm	24	24	48	48	84	84	206
Brake drum diameter DB x B (mm)	200 x 75 n _{max.} 2870 min ⁻¹	mm	45	74	70,5	C		
		kg	8,8	12,7	14,9	Weight		
	250 x 95 n _{max.} 2300 min ⁻¹	kgm ²	0,041	0,050	0,061	Moment of inertia of the coupling with brake drum		
					62,5	92,5		
					19,4	25,7		
	315 x 118 n _{max.} 1820 min ⁻¹				0,136	0,167		
						78,5	79,5	
	400 x 150 n _{max.} 1440 min ⁻¹					35,1	41,1	
						0,403	0,452	
							67,5	96
500 x 190 n _{max.} 1150 min ⁻¹						57,7	68,2	
						1,154	1,242	
							85	82,5
							95,5	110,8
							3,167	3,370

Weights and moments of inertia are not binding, referring to the max. finish bore!



KST

These couplings are for use in application with high dynamic loads. Damping of peak torques and vibrations as well as electrical insulation between motor and gearbox are further reasons for the use of this coupling type. The standard material of the elastic intermediate ring Polyurethane (Vulkollan) is suitable for a temperature range of -35°C up to $+80^{\circ}\text{C}$. For a short time -40°C up to $+100^{\circ}\text{C}$.

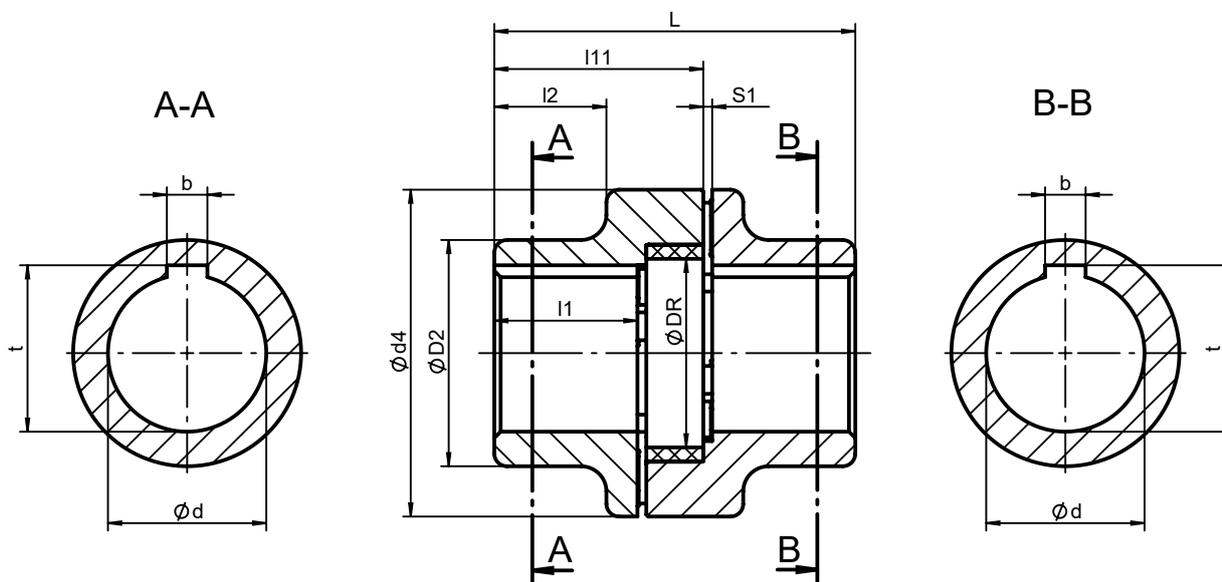
TK_{MAX} : 7950 Nm

MAIN FEATURES:

- Steel coupling, torsionally elastic and bullet-proof (fail safe)
- Torque transmission via elastic intermediate ring
- Transmits rotating power from one shaft to another while accommodating misalignment between the two shafts
- Elastic ring provides superb electrical insulating characteristics (e.g. prevents leaking currents)

OPTIONS:

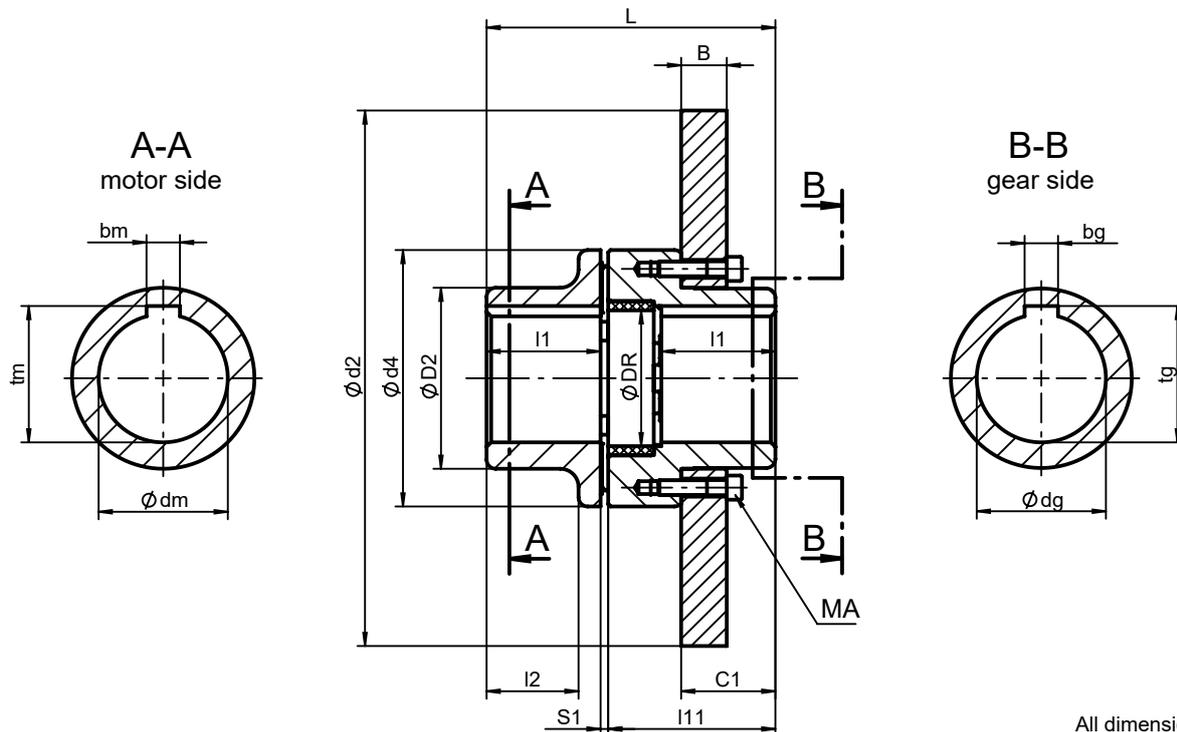
- Coupling hubs finish bored and keywayed acc. to DIN 6885
- Coupling hubs pilot bored
- Coupling dynamically balanced according to DIN ISO 21940-11 Grade: G 2.5; G 6.3



All dimensions in mm
Alterations reserved without notice

Weights and moments of inertia are not binding, referring to the max. finish bore!

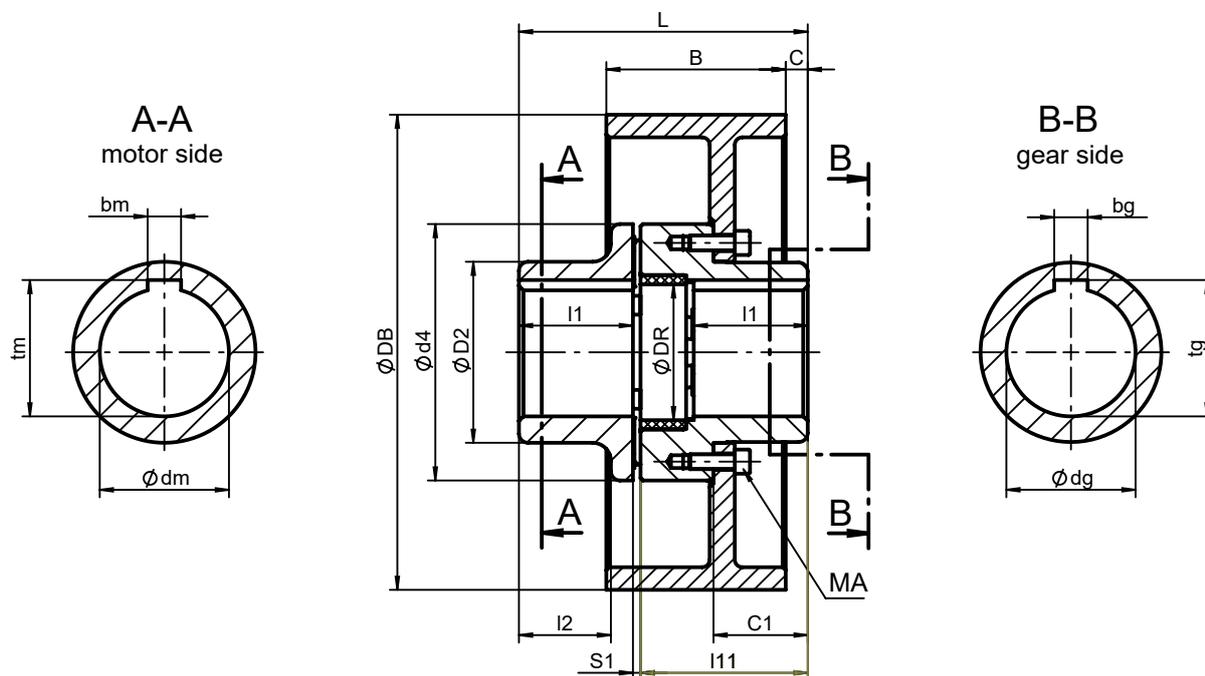
Coupling KST		100	125	145	170	200	230	260
T_{Kmax} (VKR)	Nm	390	750	1200	1900	3300	5150	7950
T_{KN} (VKR)	Nm	130	250	400	630	1100	1700	2650
$n_{max.}$	min ⁻¹	7250	6000	5250	4500	3750	3250	3000
d max.	mm	42	55	65	85	95	105	125
D_2	mm	65	85	95	120	135	150	180
D_R	mm	42	55	66	90	100	115	150
d_4	mm	105	126	145	170	200	230	260
L	mm	125	145	160	190	245	270	285
l_1	mm	49,5	56,5	61	75	98,5	110	113
l_2	mm	37,5	44	47,5	60,5	82,5	91	88,5
l_{11}	mm	72,5	85	95	110	140	152,5	165
S_1	mm	3,0 +2,0	3,5 +2,5	4,0 +2,5	5,0 +3,0	6,5 +3,0	7,5 +3,0	7,0 +4,0
Weight	kg	3,1	5,4	7,5	11,3	19,3	27,2	40,7
Moment of inertia	kgm ²	0,004	0,011	0,020	0,043	0,096	0,173	0,355



All dimensions in mm
Alterations reserved without notice

Coupling KST-BS		100	125	145	170	200	230	260	
M_{Br} max. at max. disc-Ø	Nm	260	310	730	1350	2650	3800	7950	
T_{KN} (VKR)	Nm	130	250	400	630	1100	1700	2650	
n_{max} at max. disc-Ø	min ⁻¹	6800	4800	3800	3400	3000	2700	2400	
d_m max. + d_g max.	mm	42	55	65	85	95	105	125	
D_2	mm	65	85	95	120	135	150	180	
D_R	mm	42	55	66	90	100	115	150	
d_4	mm	105	126	145	170	200	230	260	
L	mm	125	145	160	190	245	270	285	
l_1	mm	49,5	56,5	61	75	98,5	110	113	
l_2	mm	37,5	44	47,5	60,5	82,5	91	88,5	
l_{11}	mm	72,5	85	95	110	140	152,5	165	
C_1	mm	39,5	45,5	48,5	62	84	93	91	
S_1	mm	3,0 +2,0	3,5 +2,5	4,0 +2,5	5,0 +3,0	6,5 +3,0	7,5 +3,0	7,0 +4,0	
M_A (DIN 912-8.8; $\mu=0,12$)	Nm	24	24	48	48	84	84	206	
Brake disc diameter $d_2 \times B$ (mm)	250 x 20	kg	10,1	12,0	Weight				
		kgm ²	0,064	0,070	Moment of inertia of the coupling with steel brake disc				
	315 x 20			16,5					
				0,161					
	355 x 30			27,0	28,8				
				0,374	0,383				
	400 x 30				35,0	37,8	44,7		
					0,606	0,624	0,672		
	450 x 30				42,9	45,6	52,5		
					0,960	0,978	1,026		
500 x 30					54,3	61,3	67,2	78,4	
					1,472	1,520	1,583	1,742	
560 x 30						73,0	78,9	90,1	
						2,344	2,407	2,565	
630 x 30							94,2	105,4	
							3,767	3,925	
710 x 30								125,1	
								6,144	

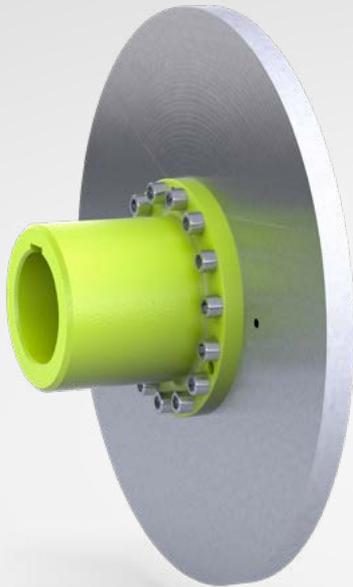
Weights and moments of inertia are not binding, referring to the max. finish bore!



All dimensions in mm
Alterations reserved without notice

Coupling KST-BT			100	125	145	170	200	230	260	
M_{Br} max. at max. drum-Ø	Nm		260	310	730	1350	2650	3800	7950	
T_{KN} (VKR)	Nm		130	250	400	630	1100	1700	2650	
d_m max. + d_g max.	mm		42	55	65	85	95	105	125	
D_2	mm		65	85	95	120	135	150	180	
D_R	mm		42	55	66	90	100	115	150	
d_4	mm		105	126	145	170	200	230	260	
L	mm		125	145	160	190	245	270	285	
l_1	mm		49,5	56,5	61	75	98,5	110	113	
l_2	mm		37,5	44	47,5	60,5	82,5	91	88,5	
l_{11}	mm		72,5	85	95	110	140	152,5	165	
C_1	mm		39,5	45,5	48,5	62	84	93	91	
S_1	mm		3,0 +2,0	3,5 +2,5	4,0 +2,5	5,0 +3,0	6,5 +3,0	7,5 +3,0	7,0 +4,0	
M_A (DIN 912-8.8; $\mu=0,12$)	Nm		24	24	48	48	84	84	206	
Brake drum diameter DB x B (mm)	200 x 75 $n_{max.}$ 2870 min ⁻¹	mm	14	20	21	C				
		kg	7,8	10,0	12,1	Weight				
		kgm ²	0,040	0,047	0,056	Moment of inertia of the coupling with brake drum				
	250 x 95 $n_{max.}$ 2300 min ⁻¹				13	27				
					16,6	20,0				
					0,131	0,152				
	315 x 118 $n_{max.}$ 1820 min ⁻¹					13	38			
						29,4	36,5			
						0,388	0,436			
	400 x 150 $n_{max.}$ 1440 min ⁻¹						26	36		
						53,1	59,9			
						1,138	1,207			
500 x 190 $n_{max.}$ 1150 min ⁻¹							25	25	25	
							87,2	99,1	99,1	
							3,132	3,299	3,299	

Weights and moments of inertia are not binding, referring to the max. finish bore!



N

The Hub with Brake Disc Type N + NX is appropriate for all drives, where the brake is not located between motor and gearbox, like brake installation on the second gear box shaft or at the motor end shaft.

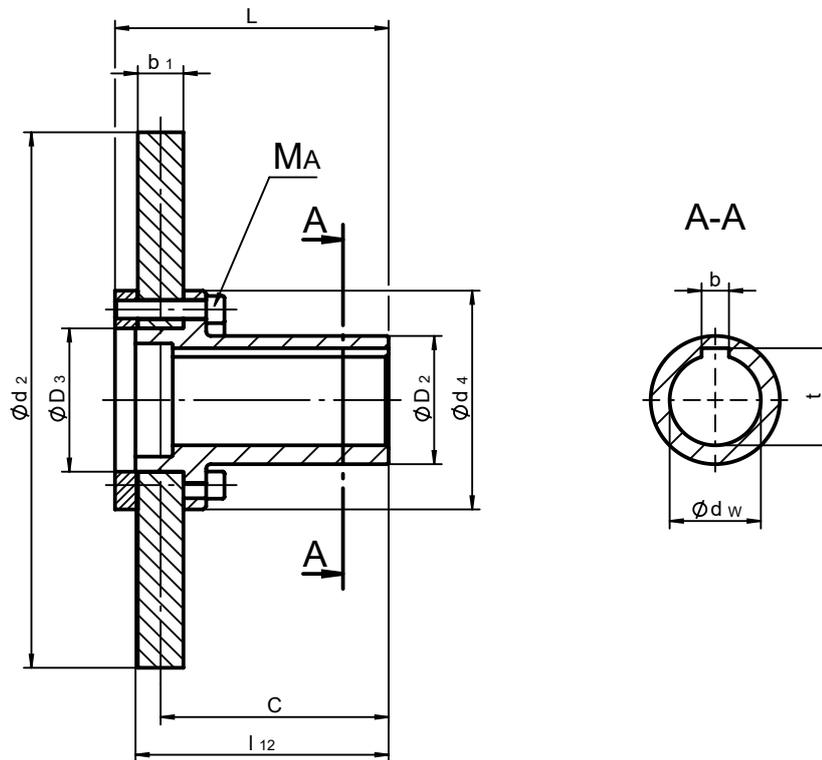
TK_{MAX} : 40050 Nm

MAIN FEATURES:

- Hub/disc combination for easy exchange of brake disc (type N)
- High accident prevention by fastening ring, no rotating nuts (type N)
- Exchange of brake disc without removing the hub (type N)
- Simple, one-piece design with 20 mm brake disc thickness for SB8.11 + SB17 series brakes (type NX)

OPTIONS:

- Hubs finish bored and keywayed acc. to DIN 6885
- Hubs pilot bored
- Hubs with brake disc, dynamically balanced according to DIN ISO 21940-11 Grade: G 2.5; G 6.3
- Hubs in special dimensions
- Hubs in special material
- Test certificate DIN EN 10204-3.1



All dimensions in mm
Alterations reserved without notice

Hub N (size = d ₄)		145	170	200	230	260	300	360	400					
M _{Br} max.	Nm	1800	2850	4950	7740	11940	17550	29100	40050					
d _w max.	mm	65	75	95	110	125	140	160	160					
D ₂	mm	92	110	135	160	180	200	225	225					
D ₃	mm	95	120	140	170	200	220	260	300					
L	mm	180	180	220	220	230	230	275	275					
l ₁₂	mm	166,5	166,5	207	207,5	212,5	212,5	252,5	252,5					
C (b ₁ = 30 / 40 mm)	mm	150 / -	150 / -	190 / -	190 / -	195 / -	195 / -	235 / 230	235 / 230					
M _A (DIN EN ISO 4762-8.8; μ=0,12)	Nm	84	84	132	132	206	410	710	710					
Brake disc diameter d ₂ x b ₁ (mm)	35 x 30	kg	28	Weight of the hub with steel brake disc										
	n _{max} 4800 min ⁻¹	kgm ²	0,378	Moment of inertia										
	400 x 30		35	37	44									
	n _{max} 4300 min ⁻¹		0,603	0,612	0,653									
	450 x 30		42	45	52									
	n _{max} 3800 min ⁻¹		0,959	0,973	1,011									
	500 x 30			54	60	67	77							
	n _{max} 3400 min ⁻¹			1,469	1,506	1,571	1,682							
	560 x 30				72	79	89							
	n _{max} 3000 min ⁻¹				2,335	2,399	2,51							
	630 x 30					95	105	109						
	n _{max} 2700 min ⁻¹					3,768	3,879	4,081						
710 x 30						124	128							
n _{max} 2400 min ⁻¹						6,112	6,213							
800 x 30							153	189						
n _{max} 2200 min ⁻¹							9,808	10,456						
900 x 30		Weights and moments of inertia are not binding, referring to the max. finish bore.							221	232				
n _{max} 1950 min ⁻¹													16,123	16,473
1000 x 30													257	267
n _{max} 1750 min ⁻¹							24,075	24,424						



NX

The Hub with Brake Disc Type N + NX is appropriate for all drives, where the brake is not located between motor and gearbox, like brake installation on the second gear box shaft or at the motor end shaft.

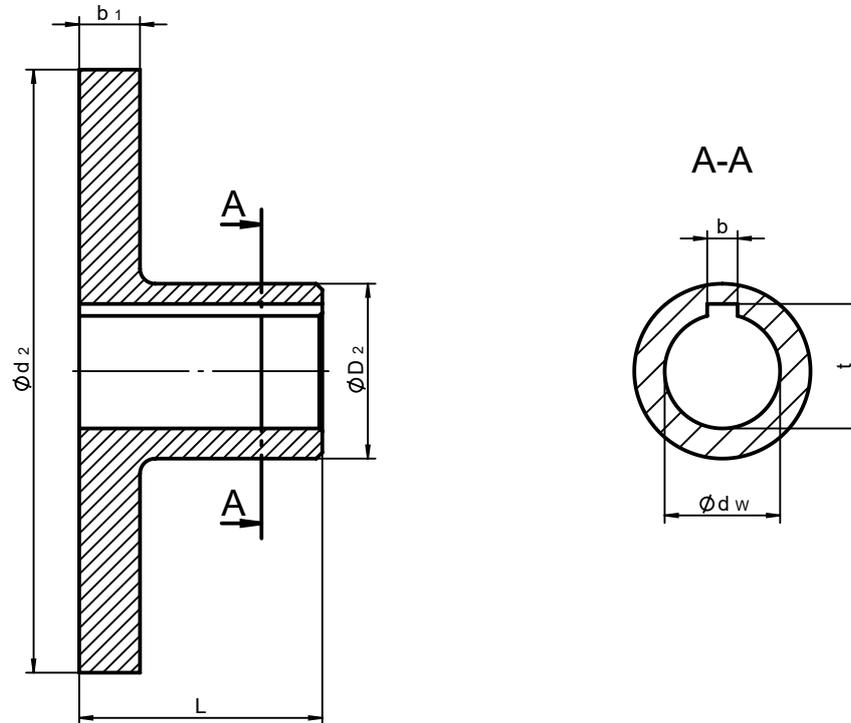
TORSIONAL FORCE: 40050 Nm

MAIN FEATURES:

- Hub/disc combination for easy exchange of brake disc (type N)
- High accident prevention by fastening ring, no rotating nuts (type N)
- Exchange of brake disc without removing the hub (type N)
- Simple, one-piece design with 20 mm brake disc thickness for SB8.11 + SB17 series brakes (type NX)

OPTIONS:

- Hubs finish bored and keywayed acc. to DIN 6885
- Hubs unbored
- Hubs pilot bored
- Hubs with brake disc, dynamically balanced according to DIN ISO 21940-11 Grade: G 2.5; G 6.3
- Hubs in special dimensions
- Hubs in special material
- Test certificate DIN EN 10204-3.1



* Higher speeds possible by using sintered linings

All dimensions in mm
Alterations reserved without notice

Hub N (size = d ₄)			58	64	74	84	92	100	114
L	mm		80	110	110	110	140	140	140
d _w max.	mm		38	42	48	55	60	65	70
	Thermal capacity kW								
Brake disc diameter d ₂ x b ₁ (mm)	200 x 20 n _{max.} 3500 min ⁻¹	344	5,6	6,2	kg	Weight of the hub with brake disc			
			0,025	0,026	kgm ²	Moment of inertia			
	225 x 20 n _{max.} 3300 min ⁻¹	399	7,0	7,5	8,1	8,6	9,3	10,9	
			0,040	0,040	0,041	0,042	0,045	0,047	
	250 x 20 n _{max.} 3000 min ⁻¹	474	8,5	9,0	9,6	10,1	10,8	12,4	14,0
			0,060	0,061	0,062	0,063	0,066	0,067	0,072
	280 x 20 n _{max.} 2675 min ⁻¹	567	10,5	11,0	11,6	12,2	13,0	14,5	16,2
			0,095	0,096	0,096	0,097	0,100	0,102	0,107
	315 x 20 n _{max.} 2380 min ⁻¹	653	13,2	13,7	14,3	14,9	15,5	17,1	18,7
			0,153	0,153	0,153	0,154	0,157	0,159	0,164
355 x 20 n _{max.} 2100 min ⁻¹	752		17,0	17,6	18,2	18,9	20,5	22,2	
			0,246	0,246	0,274	0,250	0,252	0,257	
400 x 20 n _{max.} 1875 min ⁻¹	863		21,0	21,6	22,2	22,8	24,4	26,0	
			0,396	0,396	0,397	0,400	0,402	0,407	
450 x 20 n _{max.} 1650 min ⁻¹	986				27,0	27,7	28,4	30,0	31,7
					0,634	0,635	0,637	0,639	0,645
500 x 20 n _{max.} 1500 min ⁻¹	1100				33,0	33,7	34,4	36,0	37,7
					0,956	0,966	0,969	0,970	0,976



DELLNER BUBENZER

PRODUCT TYPE

COUPLINGS

2023

**PRODUCT DATA SHEET
CATALOG**