

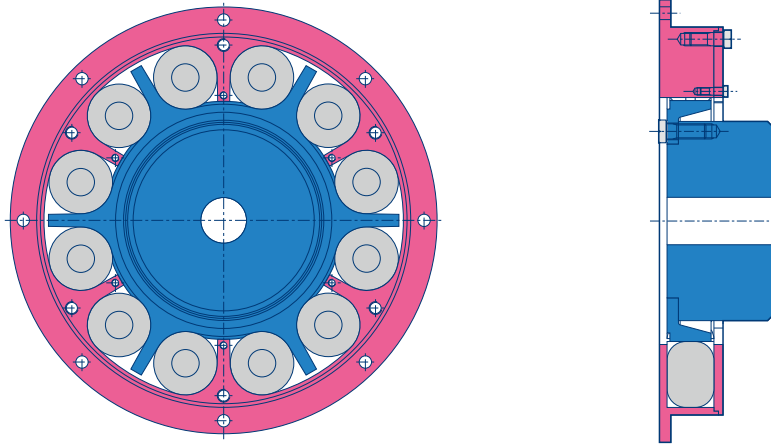


Safe power transfer in small installation spaces Flexible CT-H coupling

CT-H couplings are the only CT coupling type that provides a plug-in connection. They are also heat-resistant up to 130°C. As a result, CT-H couplings are ideally suited for industry drives where the driven machine is directly connected to the engine housing.

Depending on the size, up to 20000 Nm can be safely transferred. In addition, brief shock loads in the driveline are dampened and backlash forces eliminated. They are the fail-safe solution for generator systems, pumps, compressors, fans and blowers.

Coupling parameters



Size	Flange size	Nominal torque	Maximum torque	Vibratory torque	Allowable dissipated heat	Maximum speed	Dynamic magnifier
		T_{KN} (kNm)	T_{Kmax} (kNm)	T_{KW} (kNm)	P_{KW} (W)	(1 rpm)	(M)
6000	18	6.0	18.0	2.0	735	2300	7.5
	21	6.0	18.0	2.0	735	1950	7.5
10000	21	10.0	30.0	3.3	900	1950	7.5
12000	18	12.0	36.0	4.0	1150	2300	7.5
	21	12.0	36.0	4.0	1150	1950	7.5
20000	21	20.0	60.0	6.6	1425	1950	7.5

T_{KN} : Continous transferable torque

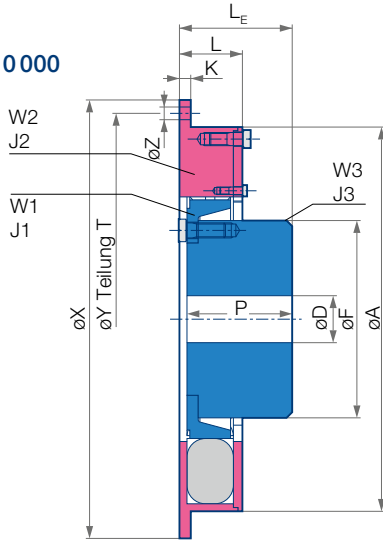
T_{Kmax} : Maximum transferable torque, risingly to be endured at least 10^5 times and alternatingly at least 5×10^4 times

T_{KW} : Torque amplitude, to be continuously endured at 10 Hz and 20°C environment temperature

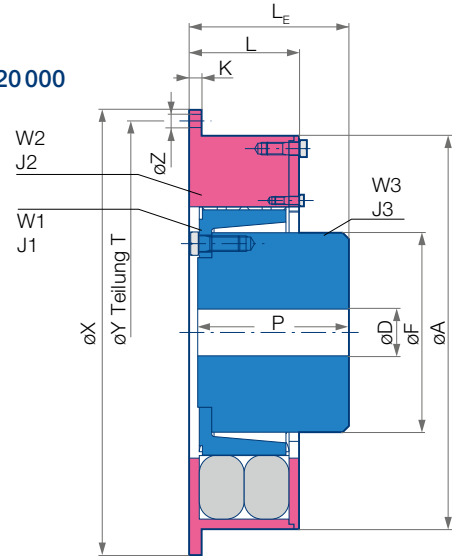
Size	Flange size	Dynamic torsional stiffness C_{Tdyn} (MNm/rad)					Radial stiffness		Axial stiffness	
		10% T_{KN}	25% T_{KN}	50% T_{KN}	75% T_{KN}	100% T_{KN}	No load (N/mm)	at T_{KN} (N/mm)	No load (N/mm)	at T_{KN} (N/mm)
6000	18	0.015	0.040	0.105	0.205	0.335	900	2875	345	1490
	21	0.015	0.040	0.105	0.205	0.335	900	2875	345	1490
10000	21	0.027	0.072	0.188	0.367	0.600	1040	3325	415	1790
12000	18	0.030	0.080	0.210	0.410	0.670	1800	5740	980	4230
	21	0.030	0.080	0.210	0.410	0.670	1800	5740	980	4230
20000	21	0.054	0.143	0.376	0.734	1.200	2080	6640	1150	4770

Dimensions

Size 6 000 – 10 000



Size 12 000 – 20 000



Size	Flange size	Flywheel connection dimensions (mm)					Hub dimensions (mm)								
		SAE J620	X _{g7}	Y _{±0,2}	T _(Stück)	Z	K	D _{min}	D _{max}	F	P	A	L _E	L	L ₂
6000	18		571.5	542.9	6	17.0	16.0	60.0	150.0	256.0	139.0	505.0	150.0	84.0	-
	21		673.1	641.4	12	17.0	16.0	60.0	150.0	256.0	139.0	505.0	150.0	84.0	-
10000	21		673.1	641.4	12	17.0	20.0	60.0	170.0	308.0	166.0	600.0	180.0	103.0	-
12000	18		571.5	542.9	6	17.0	16.0	60.0	150.0	256.0	194.0	505.0	205.0	141.0	-
	21		673.1	641.4	12	17.0	16.0	60.0	150.0	256.0	194.0	505.0	205.0	141.0	-
20000	21		673.1	641.4	12	17.0	20.0	60.0	170.0	308.0	236.0	600.0	250.0	173.0	-

Size	Flange size	Weight (kg)	Inertia (mm)			Allowable misalignment (mm)					Conical (degree)			
			W1	W2	W3	Total	J1	J2	J3	Radial _{Align}		Radial _{Max}	Axial _{Align}	Axial _{Max}
6000	18		16.0	43.2	42.0	101.2	0.26	2.26	0.37	0.40	1.50	1.00	2.50	0.50
	21		16.0	55.1	42.0	113.1	0.26	3.35	0.37	0.40	1.50	1.00	2.50	0.50
10000	21		24.4	77.9	46.7	149.0	0.64	5.39	1.00	0.40	1.50	1.00	2.50	0.50
12000	18		41.7	58.6	65.1	165.4	0.98	2.79	0.58	0.40	1.50	1.00	2.50	0.50
	21		41.7	70.5	65.1	177.3	0.98	3.95	0.58	0.40	1.50	1.00	2.50	0.50
20000	21		56.0	112.1	114.5	282.6	1.92	6.63	1.47	0.40	1.50	1.00	2.50	0.50

Valid for all charts:

When selecting the size, not all catalogue values need necessarily to be observed.

If the catalogue values are exceeded, it is however mandatory to consult Voith.

In the case of the CT-H coupling, the damping effect is achieved by elastomer elements that are compressed under torque. Just like all of our CT couplings, the design of the CT-H is also virtually fail-safe and does not require lubrication. It provides long-term protection against unscheduled downtime.

Components of a CT-H coupling



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