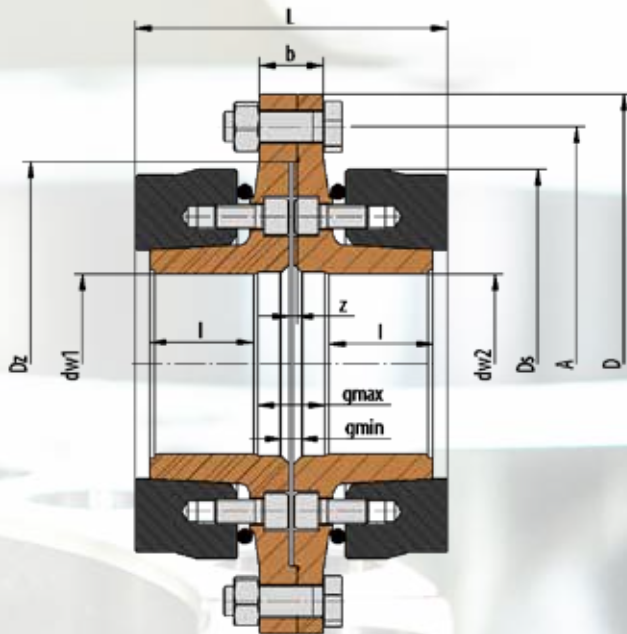


# Rigid Flange Coupling FKE

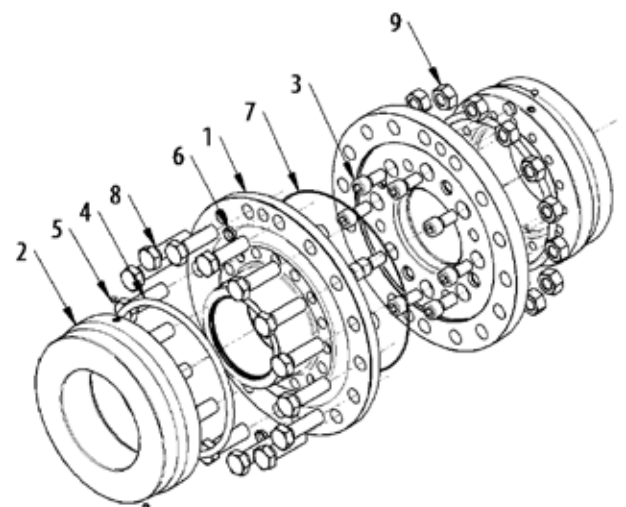


Also available with optional hydraulic clamping tool! (from nominal size 150)

## Used symbols

FKE		Nominal size
$d_w$	[mm]	Shaft diameters
$M_{t_{max}}$	[Nm]	Maximum transmittable torque
$M_{bs_{max}}$	[Nm]	Maximum transferable bending moment (static)
$M_{bd_{max}}$	[Nm]	Maximum transferable bending moment (dynamic)
$D_s$	[mm]	Outer diameter of pressure ring
$Z$	[Stk.]	Number of clamping screws
$S$		Screw size of clamping screws
$M_A$	[Nm]	Required tightening torque for clamping screws
$A$	[mm]	Pitch circle diameter of connecting screws
$D$	[mm]	Outer diameter of the flange coupling
$D_z$	[mm]	Diameter of the flange recess
$L$	[mm]	Width of the flange coupling
$l$	[mm]	Clamping length
$g_{min}$	[mm]	Minimum shaft distance
$g_{max}$	[mm]	Maximum shaft distance
$b$	[mm]	Thickness of flanges
$z$	[mm]	Depth of the recess
$Z_F$	[Stk.]	Number of connecting screws
$S_F$		Screw size of connecting screws
$M_{AF}$	[mm]	Required tightening torque of connecting screws
$n_{max}$	[min <sup>-1</sup> ]	Allowed rotation frequency
$I$	[kgm <sup>2</sup> ]	Moment of inertia
$m$	[kg]	Mass of the complete coupling
$ph$	[bar]	Hydraulic pressure for opt. Clamping tool

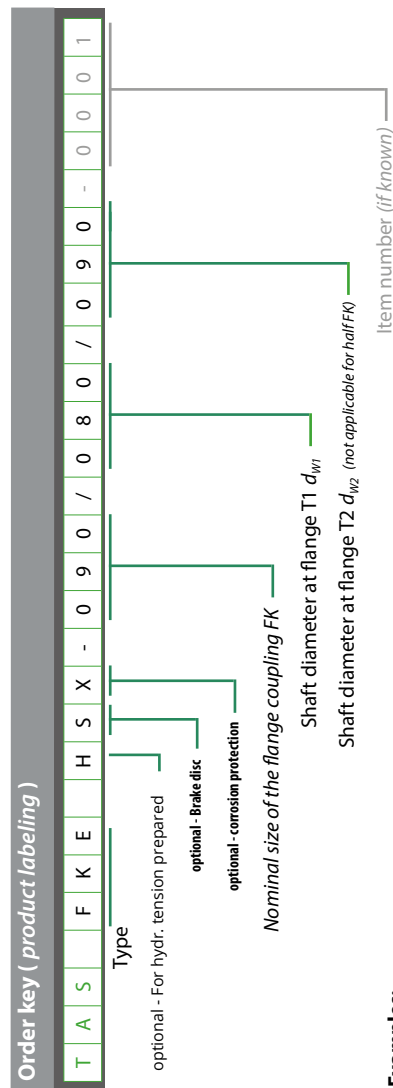
Pos.	Designation
1	Flange
2	Pressure ring
3	Clampingscrews
4	Seal
5	Plug
6	Plug
7	O-Ring
8	Connectingscrews
9	Nut



Size FKE (mm)	Shaft d <sub>sh</sub> (mm)	Moment M <sub>T</sub> (Nm)	Bend stat. M <sub>Bs</sub> (Nm)	Bend dyn. M <sub>Bd</sub> (Nm)	Pressure Ring			Details Coupling										Flange Screws			Further Details			Clampingtool				
					D <sub>s</sub> (mm)	Z (Stk.)	S	M <sub>k</sub> (Nm)	A (mm)	D (mm)	D <sub>Z</sub> (mm)	L (mm)	l (mm)	g <sub>min</sub> (mm)	g <sub>max</sub> (mm)	b (mm)	z (mm)	Z <sub>c</sub> (Stk.)	S <sub>c</sub>	M <sub>k</sub> (Nm)	n <sub>max</sub> (min <sup>-1</sup> )	η* (kgm <sup>-2</sup> )	m* (kg)	ph (bar)				
50	40	1030	412	309	118	6	M8x25	22	170	200	125	111	35	1	27	29	4	6	M12x45	85	3237	0,047	11,5	-				
	50	2100	840	630																								
60	50	1900	760	570	134	8	M8x30	21	190	220	145	123	37	1	33	34	4	6	M16x55	210	2851	0,085	16	-				
	60	3200	1280	690																								
75	65	4800	1920	1440	158	8	M10x30	40	210	240	170	147	46	1	37	34	4	6	M16x55	210	2418	0,14	22,5	-				
	75	7300	2920	2190																								
90	80	9800	3920	2490	200	8	M12x40	75	265	305	215	174	56	2	42	42	5	6	M20x70	420	1910	0,44	44,5	-				
	90	13100	5240	3930																								
100	90	13500	5400	4050	214	9	M12x40	80	286	340	230	188	60	2	46	44	5	5	M24x80	720	1785	0,67	56	-				
	100	17900	7160	5370																								
120	100	24700	9880	7410	276	8	M16x50	200	356	400	300	220	71	2	52	54	5	8	M24x90	720	1384	1,7	105	-				
	120	38700	15480	11610																								
130	110	28700	11480	8610	284	8	M16x50	200	356	400	300	220	71	2	52	54	5	8	M24x90	720	1345	1,75	105	-				
	130	42600	17040	12780																								
150	130	57500	23000	17250	320	8	M20x50	400	420	475	350	264	84	2	66	64	6	10	M30x100	1450	1194	4,2	175	235				
	150	80000	32000	24000																								
165	135	64000	25600	19200	345	8	M24x50	530	440	510	370	296	100	2	66	64	6	14	M30x100	1450	1107	5,6	205	230				
	165	103000	41200	30900																								
180	150	93000	37200	27900	390	8	M24x50	690	475	540	405	312	108	2	66	64	6	16	M30x100	1450	979	8	260	240				
	180	144000	57600	43200																								
200	170	129000	51600	38700	415	8	M27x60	800	500	560	430	350	123	2	70	72	8	16	M30x110	1450	920	10,7	315	245				
	200	190000	76000	57000																								
220	180	156000	62400	46800	445	8	M27x60	860	530	590	460	372	135	2	70	72	8	18	M30x110	1450	858	14	370	240				
	220	250000	100000	75000																								
240	200	205000	82000	61500	467	9	M27x60	870	555	615	485	394	145	2	74	72	8	20	M30x110	1550	818	17,5	420	235				
	240	315000	126000	90000																								
260	220	297000	118800	71400	548	9	M33x65	1720	640	710	570	434	153	2	92	86	8	24	M30x130	1550	697	36,5	660	240				
	260	435000	174000	130500																								
290	240	336000	134400	100800	560	9	M33x65	1720	660	720	590	444	158	2	92	86	8	24	M30x130	1550	682	39	660	225				
	290	519000	207600	155700																								
310	260	462000	184800	138600	615	9	M36x80	2300	735	805	660	482	170	2	102	92	8	28	M30x130	1550	621	63,5	890	240				
	310	697000	278800	178000																								

Size FKE (mm)	Shaft d <sub>W</sub> (mm)	Moment M <sub>Tmax</sub> (Nm)	Bend stat. M <sub>Bsmax</sub> (Nm)	Bend dyn. M <sub>Bddmax</sub> (Nm)	Pressure Ring			Details Coupling							Flange Screws			Further Details		Clampingtool				
					D <sub>S</sub> (mm)	Z (Stk.)	S	M <sub>st</sub> (Nm)	A (mm)	D (mm)	Dz (mm)	L (mm)	I (mm)	g <sub>min</sub> (mm)	g <sub>max</sub> (mm)	b (mm)	z (mm)	Z <sub>F</sub> (Stk.)	S <sub>F</sub>		M <sub>st</sub> (Nm)	n <sub>max</sub> (min <sup>-1</sup> )	I <sup>*</sup> (kgm <sup>2</sup> )	m <sup>*</sup> (kg)
340	290	600000	240000	180000	644	10	M36x80	2300	770	835	690	530	187	2	112	98	10	30	M30 x 130	1550	593	80,5	1020	230
	340	862000	344800	220000																				
380	310	757000	302800	227100	700	12	M36x80	2300	845	920	770	554	194	2	122	118	10	35	M30 x 130	1550	546	118	1250	235
	380	1198000	479200	255000																				
410	350	980000	392000	294000	768	12	M42x110	2700	940	1030	850	616	210	4	144	124	12	32	M36 x 180	2500	497	206	1730	240
	410	1430000	572000	340000																				
440	380	1410000	564000	423000	828	14	M42x110	3000	1000	1100	900	694	245	4	154	128	14	36	M36 x 180	2500	461	302	2250	240
	440	1960000	784000	460000																				
470	410	1680000	672000	504000	900	16	M42x110	3050	1080	1180	980	742	267	4	154	130	14	40	M36 x 180	2500	424	439	2860	235
	470	2300000	920000	690000																				
500	440	1860000	744000	558000	935	16	M42x110	3100	1110	1210	1020	742	267	4	154	130	14	42	M36 x 180	2500	409	496	3000	235
	500	2500000	1000000	750000																				

\* related to nominal size

**Examples:**

- TAS FKE-090/085/095      Flange coupling in nominal size FKE = 090 / dW1 = Ø85 / dW2 = Ø95
- TAS FKE H-090/085/095      Flange coupling with preparation for hydraulic clamping tool in nominal size FKE = 090 / dW1 = Ø85 / dW2 = Ø95
- TAS FKE S-090/085/095      Flange coupling with brake disc in nominal size FKE = 090 / dW1 = Ø85 / dW2 = Ø95
- TAS FKE X-090/085/095      Flange coupling with extended corrosive protection in nominal size FKE = 090 / dW1 = Ø85 / dW2 = Ø95
- TAS FKE HX-090/085/095      Flange coupling with preparation for hydraulic clamping tool with extended corrosive protection in nominal size FKE = 090 / dW1 = Ø85 / dW2 = Ø95

**\*Additional options can be combined as required**