

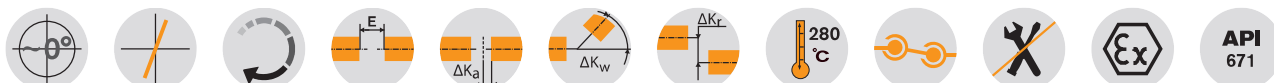
RIGIFLEX®-HP C

High-performance steel lamina couplings

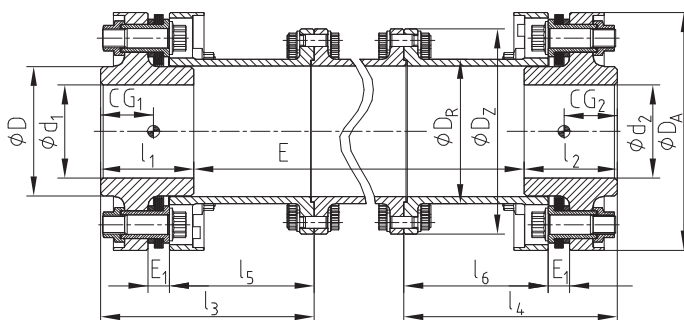
Flange connection



For legend of pictogram please refer to flapper on the cover



Components



RIGIFLEX®-HP type C														
Size	Torques [Nm]		Max. finish bore d ₁ , d ₂	Dimensions [mm]										
	T _{KN}	T _{K max}		D	D _A	D _Z	D _R	E ₁	E	E _{min}	CG ₁ , CG ₂ ²⁾	l ₁ , l ₂	l ₃ , l ₄	l ₅ , l ₆
158	20000	26000	85	119	220	195	135	17	According to customer specification	335	46	85	189	130
168	30000	39000	100	139	255	220	155	23		395	55	100	229	155
188	38000	49400	105	147	265	235	165	23		375	55	105	229	155
208	50000	65000	120	168	298	245	186	23		350	57	120	229	155
228	59000	76700	125	178	315	270	199	33		425	65	125	265	175
248	72000	93600	140	196	335	300	217	33		395	67	140	265	175
278	115000	149500	160	225	380	335	248	33		355	70	160	265	175
318	180000	234000	180	252	445	370	280	48		495	88	180	348	225
358	253000	328900	210	295	500	415	326	48		435	93	210	348	225
388	330000	429000	235	330	545	464	362	48		400	97	235	348	225

Technical data								
Size	Max. speed [rpm]	Perm. displacements			Stiffness figures			
		Angular ¹⁾ ± K _w [°]	Axial ± K _a [mm]	Radial ²⁾ ± K _r [mm]	each lamina set c _t [Nm/rad]	Spacer c _r [Nm · mm/rad]	Coupling complete ²⁾ c _{tE} = 457.2 [Nm/rad]	
158	17300	0.25	3.0	2.30	13.0 · 10 ⁶	839 · 10 ⁶	1.04 · 10 ⁶	
168	14900	0.25	3.0	2.32	18.0 · 10 ⁶	1535 · 10 ⁶	1.79 · 10 ⁶	
188	14400	0.25	3.3	2.37	28.0 · 10 ⁶	1974 · 10 ⁶	2.23 · 10 ⁶	
208	12800	0.25	3.8	2.50	35.0 · 10 ⁶	2876 · 10 ⁶	3.15 · 10 ⁶	
228	12100	0.25	4.0	2.44	39.5 · 10 ⁶	4123 · 10 ⁶	5.06 · 10 ⁶	
248	11400	0.25	4.2	2.58	60.0 · 10 ⁶	5410 · 10 ⁶	5.51 · 10 ⁶	
278	10000	0.25	4.5	2.75	80.0 · 10 ⁶	8592 · 10 ⁶	7.94 · 10 ⁶	
318	8500	0.25	5.2	2.70	105.0 · 10 ⁶	14724 · 10 ⁶	13.00 · 10 ⁶	
358	7600	0.25	6.0	2.96	155.0 · 10 ⁶	26258 · 10 ⁶	20.30 · 10 ⁶	
388	7000	0.25	6.5	3.18	225.0 · 10 ⁶	37596 · 10 ⁶	27.70 · 10 ⁶	

¹⁾ Each lamina set ²⁾ with E=457.2 mm and cylindrical maximum finish bore

Size	Coupling ²⁾		Spacer	
	m [kg]	J [kgm ²]	m _R [kg/mm]	J _R [kgm ² /mm]
158	45	0.274	20.28 · 10 ⁻³	81 · 10 ⁻⁶
168	69	0.577	27.282 · 10 ⁻³	149 · 10 ⁻⁶
188	78	0.711	30.975 · 10 ⁻³	191 · 10 ⁻⁶
208	97	1.081	35.118 · 10 ⁻³	279 · 10 ⁻⁶
228	123	1.561	44.397 · 10 ⁻³	400 · 10 ⁻⁶
248	144	2.109	48.614 · 10 ⁻³	524 · 10 ⁻⁶
278	190	3.542	58.694 · 10 ⁻³	833 · 10 ⁻⁶
318	306	7.792	79.311 · 10 ⁻³	1427 · 10 ⁻⁶
358	405	12.869	104.041 · 10 ⁻³	2545 · 10 ⁻⁶
388	525	19.257	120.151 · 10 ⁻³	3644 · 10 ⁻⁶

$c_{t \text{ total}} = 1 / ((1/c_{tE} = 457.2) + ((E - 457.2 \text{ mm}) / c_{tR}))$
 $m_{\text{total}} = m + m_R \cdot (E - 457.2 \text{ mm})$
 $J_{\text{total}} = J + J_R \cdot (E - 457.2 \text{ mm})$