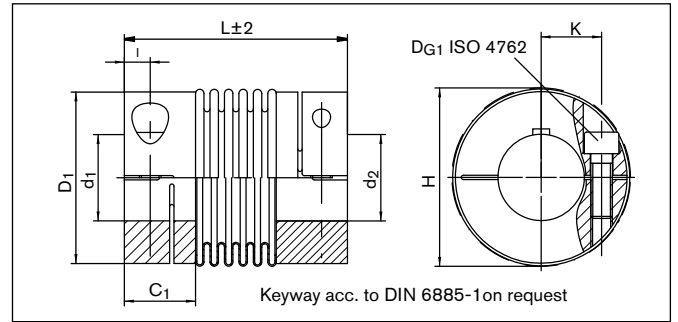
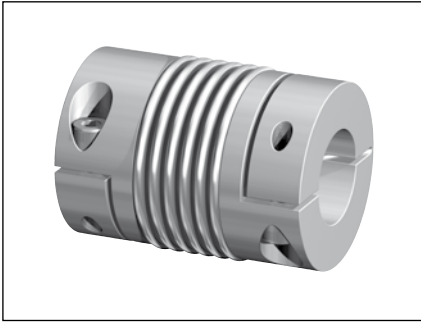


Backlash-free Metal Bellows Coupling

5085 ECOLOC



Sectional view

Dimensions

- L** = Total length of coupling
- D₁** = Outer diameter
- H** = Clearance diameter
- d₁, d_{2min}** = Min. bore diameter

- d₁, d_{2max}** = Max. bore diameter
- C₁** = Guided length shaft bore d₁
- K** = Distance shaft axis - clamping screw axis

- I** = Distance between clamping screw hole and hub end
- D_{G1}** = Thread

Metric dimensions

Size	L±2	D ₁	H	d ₁ /d ₂ min-max	C ₁	K	I	D _{G1}
	mm	mm	mm	mm	mm	mm	mm	mm
0,9	30	16	18	3 - 8	7	5	2	M2
1,5	30	20	21	3 - 10	9	7	3	M2,5
2	42	25	27	3 - 12	11	9	4	M3
4,5	50	33	34	6 - 16	13	12	5	M4
10	57	40	42	6 - 19	14	16	5	M4
18	71	45	47	10 - 25	20	18	6	M5
30	73	55	56	10 - 25	25	20	8	M6
60	89	64	67	14 - 32	29	24	10	M8
150	103	80	84	20 - 40	34	28	12	M10
200	113	90	93	25 - 44	38	31	13	M12
300	115	110	110	32 - 50	38	39	13	M12
500	122	119	122	40 - 60	41	43	15	M14

Moment of inertia and weight (mass) are calculated with reference to the largest bore size.

Bore range

Size	10	11	12	13	14	15	16	17	18	19	20	22	23	24	25	26	27	28	30	31	32	34	35	38	40	42	44	45	48	50	55	60	65	70				
18	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																						
30	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•																			
60					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•															
150																																						
300																																						
500																																						

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Technical Data

T = Transmissible torque at given T_A
 T_{A1} = Tightened torque of clamping screw (D_{G1})
 C_{Tdyn} = Dynamic torsional stiffness
 C_r = Radial spring stiffness

C_a = Axial spring stiffness
 n_{max} = Max. rotation speed
 ΔK_a = Max. permissible axial misalignment
 ΔK_w = Max. permissible angularly misalignment

ΔK_r = Max. permissible radial misalignment
Gw = Weight
J = Total moment of inertia

Technical data

Size	T	T_{A1}	C_{Tdyn}	C_r	C_a	n_{max}	ΔK_a	ΔK_w	ΔK_r	Gw	J
	Nm	Nm	10^3 Nm/rad	N/mm	N/mm	1/min	\pm mm	Degree	mm	kg	10^{-3} Kg m^2
0,9	0,9	0,3	0,3	42	22	15000	0,4	2	0,2	0,011	0,0003
1,5	1,5	0,8	0,7	81	23	15000	0,4	2	0,15	0,024	0,0012
2	2	1	1	46	14	15000	0,5	2	0,25	0,04	0,0028
4,5	4,5	3	4	108	29	15000	0,5	2	0,2	0,078	0,0103
10	10	3	6,7	193	46	15000	0,5	2	0,25	0,13	0,025
18	18	6	6	85	40	12700	0,5	1,5	0,2	0,17	0,06
30	30	12	25	220	30	10200	0,5	1,5	0,2	0,27	0,13
60	60	30	50	330	55	8600	0,5	1,5	0,2	0,47	0,3
150	150	85	100	600	85	6800	0,5	1,5	0,2	1	0,9
200	200	100	120	450	85	6300	0,5	1,5	0,2	1,2	1,5
300	300	120	280	1500	150	5900	0,5	1,5	0,2	1,4	3,2
500	500	190	310	1000	85	4900	1	1,5	0,2	1,8	4,9

Ordering example: 5085 ECOLOC

Type, Size	Bore diameter d_1	Bore diameter d_2	Further details
5085 ECOLOC 2	4	6	*

* Keyway

Characteristics

- Metal Bellows made of stainless steel, hubs made of aluminium
- The shaft tolerance should be within the fit tolerance „g6“ or „h7“
- The contact surfaces have to be free from oil and grease
- Optional designs with keyways DIN 6885-1

Subject to technical changes.