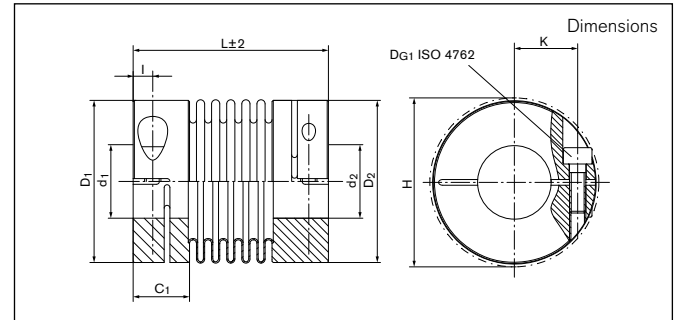


Backlash-free Metal Bellows Couplings

Series DKN



Dimensions

d₁, d_{2min} = Min. bore diameter

d₁, d_{2max} = Max. bore diameter

d₁, d_{2kmin} = Min. bore diameter with keyway

d₁, d_{2kmax} = Max. bore diameter with keyway

C₁ = Guided length in shaft boring d₁

D₁, D₂ = Outer diameter of hub 1, 2

H = Clearance diameter

I = Distance between clamping screw hole and hub end

K = Distance shaft axis - clamping screw axis

L = Total length of coupling

Size	d ₁ ; d ₂ min-max		d _{1k} min-max	d _{2k} min-max	C ₁	D ₁ ; D ₂	H	I	K	L
	Without keyway	With keyway	With keyway	With keyway						
mm										
4	3 - 8	6 - 8	6 - 8	6 - 8	7	16	18	2	5	21/24/28
9	3 - 8	6 - 8	6 - 8	6 - 8	7	16	18	2	5	23/26/30
15	3 - 10	6 - 10	6 - 10	6 - 10	9	20	21	3	7	26/30
20	3 - 14	6 - 14	6 - 14	6 - 14	11	25	27	4	9	32/38/42
45	5 - 17	6 - 17	6 - 17	6 - 17	13	33	34	5	12	41/50
100	5 - 24	6 - 19	6 - 19	6 - 24	14	40	42	5	16	47/57

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

Backlash-free Metal Bellows Couplings
Series DKN
Technical Data

T = Transmissible torque at given T_A
 n_{max} = Max. rotation speed
 C_{Tdyn} = Dynamic torsional stiffness
 C_r = Radial spring stiffness

C_a = Axial spring stiffness
 ΔK_a = Max. permissible axial misalignment
 ΔK_w = Max. permissible angularly misalignment
 ΔK_r = Max. permissible radial misalignment

J = Total moment of inertia
Gw = Weight
 D_{G1} = Thread
 T_{A1} = Tightened torque of clamping screw (D_{G1})

Size	T	n_{max}	C_{Tdyn}	C_r	C_a	ΔK_a	ΔK_w	ΔK_r	J	Gw	D_{G1}	T_{A1}
	Nm	1/min	10^3 Nm/rad	N/mm	mm	mm	Degree	mm	10^{-3} Kgm ²	kg	mm	Nm
4	0,5	15000	0,25/0,19/0,15	128/54/26	18/13/11	0,2/0,3/0,4	1,2/2/2	0,1/0,15/0,2	0,00026	0,005/0,006/0,007	1 x M2	0,3
9	1,1	15000	0,5/0,38/0,3	187/82/42	36/27/22	0,2/0,3/0,4	1,2/2/2	0,1/0,15/0,2	0,00026/0,00029/0,00032	0,006/0,007/0,008	1 x M2	0,3
15	1,75	15000	0,75/0,7	139/81	23/12	0,25/0,4	1,2/2	0,1/0,15	0,0011/0,0012	0,012/0,014	1 x M2,5	0,8
20	2,4	15000	1,5/1,3/1,0	147/96/46	18/14/9	0,3/0,4/0,5	1,2/2/2	0,1/0,2/0,25	0,0025/0,0027/0,0028	0,020/0,022/0,024	1 x M3	1,5
45	5,5	15000	6,5/4	444/108	47/29	0,3/0,5	1,2/2	0,1/0,2	0,0098/0,0103	0,058/0,062	1 x M4	3
100	12	15000	8,1/6,7	361/193	46/34	0,4/0,5	1,2/2	0,15/0,25	0,0231/0,0250	0,060/0,070	1 x M4	3

Bore range / Torque values

Size	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20	Ø21	Ø22	Ø24
4	0,5	0,5	0,5	0,5	0,5	0,5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
9	0,5	0,5	0,5	0,5	0,5	0,5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
15	1,5	1,75	1,75	1,75	1,75	1,75	1,75	1,75	---	---	---	---	---	---	---	---	---	---	---	---	---
20	1,7	2,3	2,4	2,4	2,4	2,4	2,4	2,4	2,4	2,4	2,4	2,4	---	---	---	---	---	---	---	---	---
45	---	---	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5	---	---	---	---	---	---
100	---	---	7	8	9	10,5	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12

Ordering example: DKN

Series/Size	Length	Bore diameter d_1	Bore diameter d_2	Further details
DKN 20	42	6	10	*

* Keyway or stainless steel

Subject to technical changes.