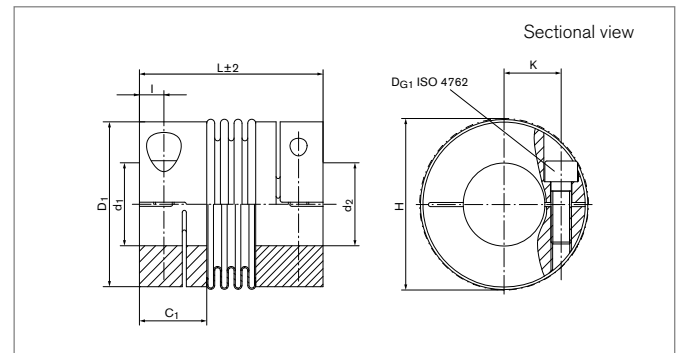


# Metal Bellows Couplings

## RINGFEDER® GWB AKN

Metal bellows coupling with clamping hubs, short length and higher torsional stiffness



Size	L	d <sub>1</sub> ;d <sub>2</sub> min-max	d <sub>1k</sub> ;d <sub>2k</sub> min-max	C <sub>1</sub>	D <sub>1</sub>	H	I	K
	mm	mm	mm	mm	mm	mm	mm	mm
18	63	8 - 26	8 - 26	19,2	45	48	6	18
30	65	10 - 30	10 - 30	24,1	55	56	8	20
60	78	12 - 35	12 - 35	28,6	64	67	10	24
80	90	14 - 42	14 - 42	32,4	80	84	12	28
150	90	14 - 42	14 - 42	32,4	80	84	12	28
200	99	22 - 46	22 - 46	36,9	90	93	13	31
300	104	24 - 60	24 - 60	36,9	110	110	13	39
500	111	35 - 64	35 - 64	40,4	119	122	15	43

Transmission of the couplings transmissible torque T can not longer be guaranteed for certain with borings < d<sub>min</sub>. Types with borings < d<sub>min</sub>, however, can be supplied.

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

Size	T	n <sub>max</sub>	C <sub>r</sub>	C <sub>a</sub>	C <sub>Tdyn</sub>	ΔK <sub>a</sub>	ΔK <sub>w</sub>	ΔK <sub>r</sub>	J	D <sub>G1</sub>	T <sub>A1</sub>	G <sub>w</sub>
	Nm	1/min	N/mm	N/mm	10 <sup>3</sup> Nm/rad	mm	degree	mm	10 <sup>-3</sup> kgm <sup>2</sup>	mm	Nm	kg
18	22	12700	200	50	8	0,5	1,5	0,2	0,05	1 x M5	6	0,133
30	36	10200	720	50	35	0,4	1,0	0,1	0,11	1 x M6	12	0,245
60	75	8600	1100	90	75	0,4	1,0	0,1	0,29	1 x M8	30	0,406
80	95	6800	1200	80	130	0,4	1,0	0,2	0,87	1 x M10	60	0,742
150	180	6800	2000	150	150	0,4	1,0	0,2	0,87	1 x M10	85	0,742
200	240	6300	2500	150	170	0,4	1,0	0,2	1,44	1 x M12	100	1,054
300	360	5900	6300	280	500	0,4	1,0	0,2	3,00	1 x M12	120	1,434
500	600	4900	8800	100	680	0,5	1,0	0,2	4,70	1 x M14	190	1,949

To continue see next page

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### Transmissible torque T [Nm]

Size	Ø8	Ø9	Ø10	Ø11	Ø12	Ø13	Ø15	Ø16	Ø18	Ø20	Ø22	Ø25	Ø28	Ø30	Ø35	Ø40	Ø45	Ø50	Ø55	Ø60	Ø64
18	18	20	22	22	22	22	22	22	22	22	22	22	---	---	---	---	---	---	---	---	---
30	---	---	36	36	36	36	36	36	36	36	36	36	36	36	---	---	---	---	---	---	---
60	---	---	---	---	75	75	75	75	75	75	75	75	75	75	75	---	---	---	---	---	---
80	---	---	---	---	---	---	95	95	95	95	95	95	95	95	95	95	---	---	---	---	---
150	---	---	---	---	---	---	180	180	180	180	180	180	180	180	180	180	---	---	---	---	---
200	---	---	---	---	---	---	---	---	---	---	240	240	240	240	240	240	240	---	---	---	---
300	---	---	---	---	---	---	---	---	---	---	---	360	360	360	360	360	360	360	360	360	---
500	---	---	---	---	---	---	---	---	---	---	---	---	---	---	600	600	600	600	600	600	600

### Explanation

<b>L</b> = Total length	<b>I</b> = Distance between center screw hole and hub end	<b>ΔK<sub>w</sub></b> = Max. permissible angular misalignment
<b>d<sub>1</sub>;d<sub>2min</sub></b> = Min. bore diameter d <sub>1</sub> /d <sub>2</sub>	<b>K</b> = Distance shaft axis - clamping screw axis	<b>ΔK<sub>r</sub></b> = Max. permissible radial misalignment
<b>d<sub>1</sub>;d<sub>2max</sub></b> = Max. bore diameter d <sub>1</sub> /d <sub>2</sub>	<b>T</b> = Transmissible torque at given T <sub>A</sub>	<b>J</b> = Total moment of inertia
<b>d<sub>1k</sub>;d<sub>2kmin</sub></b> = Min. bore diameter d <sub>1</sub> /d <sub>2</sub> with keyway acc. to DIN 6885-1	<b>n<sub>max</sub></b> = Max. rotation speed	<b>n<sub>sc1</sub></b> = Quantity of screws D <sub>G1</sub>
<b>d<sub>1k</sub>;d<sub>2kmax</sub></b> = Max. bore diameter d <sub>1</sub> /d <sub>2</sub> with keyway acc. to DIN 6885-1	<b>C<sub>r</sub></b> = Radial spring stiffness	<b>D<sub>G1</sub></b> = Thread
<b>C<sub>1</sub></b> = Guided length in hub bore	<b>C<sub>a</sub></b> = Axial spring stiffness	<b>T<sub>A1</sub></b> = Tightened torque of clamping screw D <sub>G1</sub>
<b>D<sub>1</sub></b> = Outer diameter	<b>C<sub>Tdyn</sub></b> = Dynamic torsional stiffness	<b>G<sub>w</sub></b> = Weight
<b>H</b> = Clearance diameter	<b>ΔK<sub>a</sub></b> = Max. permissible axial misalignment	

### Ordering example

Series/Size	Bore diameter d <sub>1</sub>	Bore diameter d <sub>2</sub>	Further details
AKN 150	30	35	*

\* Keyway or stainless steel

More information about  
**RINGFEDER® GWB AKN**  
 on [www.ringfeder.com](http://www.ringfeder.com)

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