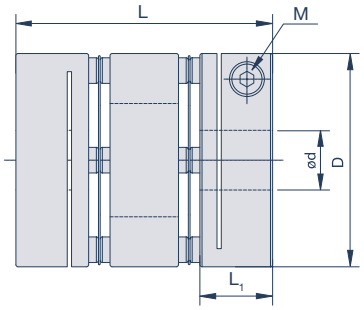
Diskflex ZDC-A | Aluminium compact

Compact Clamping hub version



Specifications

Size	D	L	L_1	M	T_A	max. rpm	T_{KN}	C_T	g	Misalignment		
	mm	mm	mm		Nm	min^{-1}	Nm	Nm/rad	g	angular °	radial mm	axial mm
ZDC16	16	21,2	7,8	M2,5	1	14.000	0,5	200	9	1	0,05	0,2
ZDC19	19	23,3	8,7	M2,6	1	14.000	0,9	300	14	1	0,05	0,2
ZDC22	22,2	25	8,7	M2,6	1	10.000	1,1	400	18	1,5	0,12	0,2
ZDC31	31,8	33,5	11,6	M3	1,7	9.000	3	1.300	52	1,5	0,15	0,4
ZDC35	35	34,6	12,7	M4	3,5	8.500	4	1.500	67	1,5	0,16	0,4
ZDC39	39	39,5	13,7	M4	3,5	8.000	5	1.800	95	1,5	0,18	0,4
ZDC54	54	52,6	19	M5	8	8.000	22	7.000	250	1,5	0,2	0,5

M= Screw size, T_A= Tightening torque, T_{KN}= Nominal torque, C_T= Torsional stiffness, g= Mass

Bore diameters

Size	d (mm)																		
	3	4	5	6	7	8	9	10	11	12	14	15	16	18	19	20	22	24	25
ZDC16	•	•	•																
ZDC19	•	•	•	•															
ZDC22	•	•	•	•	•	•													
ZDC31			•	•	•	•	•	•	•	•	•								
ZDC35			•	•	•	•	•	•	•	•	•	•							
ZDC39			•	•	•	•	•	•	•	•	•	•	•						
ZDC54								•	•	•	•	•	•	•	•	•	•	•	•

Ordering example:
ZDC16 ø3 ø3
Diskflex Size 16, Bore 3 and 3

The various technical parameters play a decisive role in the selection of the Diskflex. Parameters such as maximum speeds, occurring shaft misalignments and drive torque should be taken into account. The required coupling size can be roughly calculated using the following formula:

Serie GDC, ZDC, GDT

$T_{KN} > T_A \times C_S$

The nominal torque T_{KN} of the selected coupling size should be greater than the drive torque T_A in Nm (results from the manufacturer‘s specification of the drive motor) multiplied by the operating factors of the application.

For servo applications, it should be noted that the acceleration torque of these servomotors is many times higher than their rated torques. The design is based on the highest peak torque to be regularly transmitted on the drive side (for servomotors, this is e.g. the maximum acceleration torque in Nm)

Shock factor C_S

	Continuous motion sequence	Dynamic motion sequence with frequent start-stop	Dynamic motion sequence with frequent reversing operation
Factor C_S	1,0	2,0	4,0

Please note the maximum permissible bore diameter and the corresponding displacement capacity for the selected coupling size. These can be found in the table for the corresponding coupling size.

Serie GTR

$T_{KN} > T_A \times C_S \times C_D \times C_T$

Impact factor C_S

	uniform load	non-uniform load	impact load
Factor C_S	1	2	3-4

Direction factor C_D

	continuous, one-sided direction of rotation	alternating direction of rotation, reversing operation
Factor C_D	1,0	1,2

Temperature factor C_T

	Operating temperature <= 150°C	Operating temperature 150°C – 200°C	Operating temperature 200°C - 250°C
Factor C_T	1,0	1,0 - 1,15	1,15 - 1,25

„briefly and concisely ... explained“

OUR PICTOGRAMS

- High temperature resistance
- Vibration damping
- Axially pluggable
- High radial misalignment
- Backlash-free
- Torsionally rigid
- High angular misalignment
- High speeds
- Electrically insulating
- Corrosion resistant