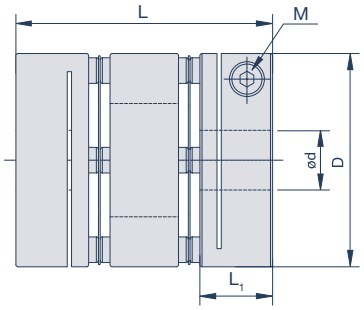
Diskflex GDC-A | Aluminium

Clamping hub version



Specifications

Size	D mm	L mm	L_1 mm	M	T_A Nm	max. rpm min^{-1}	T_{KN} Nm	C_T Nm/rad	g g	Misalignment angular °	radial mm	axial mm
GDC12	12	15,7	5,9	M1,6	0,25	14.000	0,2	85	4	1	0,03	0,08
GDC16	16	23,2	7,8	M2	1	14.000	0,5	200	10	1	0,05	0,2
GDC19	19	26,3	8,7	M2,6	1	14.000	0,9	300	15	1	0,05	0,2
GDC22	22,2	27,2	8,7	M2,6	1	10.000	1,1	400	19	1,5	0,12	0,2
GDC26	26,6	32,5	10,6	M3	1,7	10.000	1,5	600	34	1,5	0,15	0,3
GDC31	31,8	38,5	11,6	M3	1,7	9.000	3	1.300	60	1,5	0,15	0,4
GDC35	35	38,1	12,7	M4	3,5	8.500	4	1.500	75	1,5	0,16	0,4
GDC39	39	45	13,7	M4	3,5	8.000	5	1.800	110	1,5	0,18	0,4
GDC42	42,5	46,2	13,7	M4	3,5	8.000	7	2.000	120	1,5	0,18	0,5
GDC47	47	50	16	M4	3,5	8.000	12	4.000	160	1,5	0,2	0,5
GDC54	54	58,6	19	M5	8	8.000	22	7.000	280	1,5	0,2	0,5
GDC64	64	74,4	26	M6	13	6.500	31	11.000	455	1,5	0,3	0,5
GDC80	80	81,8	29,7	M8	30	6.000	75	20.000	900	2	0,4	0,6
GDC90	94,5	98,9	30,4	M8	30	6.000	150	35.000	1.350	2	0,4	0,8
GDC100	104,5	103,8	30,7	M8	30	6.000	220	50.000	1.700	2	0,4	0,8

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	28	30	32	35	40	45
GDC12	•	•	•																						
GDC16	•	•	•																						
GDC19	•	•	•	•																					
GDC22	•	•	•	•	•	•																			
GDC26		•	•	•	•	•	•	•																	
GDC31			•	•	•	•	•	•	•	•	•														
GDC35			•	•	•	•	•	•	•	•	•	•													
GDC39			•	•	•	•	•	•	•	•	•	•	•												
GDC42				•	•	•	•	•	•	•	•	•	•												
GDC47						•	•	•	•	•	•	•	•	•	•	•									
GDC54								•	•	•	•	•	•	•	•	•	•	•	•						
GDC64										•	•	•	•	•	•	•	•	•							
GDC80												•	•	•	•	•	•	•	•	•	•	•			
GDC90																•	•	•	•	•	•	•	•	•	•
GDC100																•	•	•	•	•	•	•	•	•	•

Ordering example:
GDC16 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