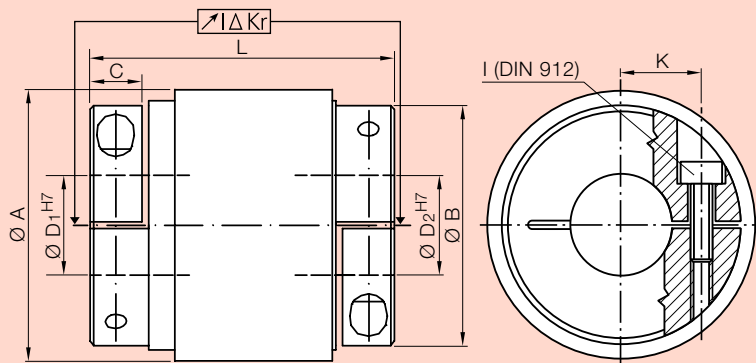


# Permanent Magnetic Synchronous Clutch Series MKD



The coupling consists of two separated halves which have to be supported by the customer!



The permanent magnetic synchronous clutch consists of **two separated halves** which have to be supported by the customer and then are telescoped. In the inner part of the outside hub and on the outside of the inner hub the permanent magnets are attached. The maximum

transmittable torque of the clutch can be changed by modifying the hub submergence. At overload status the clutch will slip through in a **"bucking"** manner, contact free and without any abrasion. The clutch is connected with the shaft by clamping hubs.

## Technical Data Series MKD

Type			2	4	10	18	30	60	150	300
Torque <sup>5)</sup>	(Nm)	T <sub>KN</sub>	1,2 <sup>1) 2)</sup>	2,5 <sup>1) 2)</sup>	5 <sup>1) 2)</sup>	9 <sup>1) 2)</sup>	13 <sup>1) 2)</sup>	30 <sup>1) 2)</sup>	60 <sup>1) 2)</sup>	150 <sup>1) 2)</sup>
Torsional stiffness approx.	(Nm/rad)	C <sub>T dyn</sub>	3	10	25	45	83	250	610	2300
Inertia approx.	outer part	(10 <sup>-3</sup> kgm <sup>2</sup> )	J <sub>out</sub>	0,018	0,038	0,08	0,14	0,21	0,60	1,8
	inner part	(10 <sup>-3</sup> kgm <sup>2</sup> )	J <sub>in</sub>	0,005	0,014	0,04	0,07	0,10	0,30	1,6
Weight approx.	outer part	(kg)	m <sub>out</sub>	0,11	0,15	0,20	0,28	0,35	0,70	1,9
	inner part	(kg)	m <sub>in</sub>	0,07	0,11	0,16	0,23	0,28	0,53	1,4
Max. app. rad. misalignment <sup>3)</sup>	(mm)	ΔK <sub>r</sub>	0,4	0,4	0,4	0,4	0,4	0,4	0,4	0,4
Max. rotating speed	(min <sup>-1</sup> )	n <sub>max</sub>	10000	9000	8000	7000	6000	5000	4000	3000
Tightening torque of retaining screws	(Nm)	MA	2	3	3	6	12	30	50	90

## Dimensions (mm) Series MKD

Type		2	4	10	18	30	60	150	300
L		55	58	58	78	88	107	130	146
Ø A		31	38	46	51	56	67	84	115
Ø B		24	32	40	45	47	57	68	96
C		8,2	10	10	12	15	19,5	21,5	26
Ø D <sub>1</sub> <sup>H7</sup> / Ø D <sub>2</sub> <sup>H7</sup>	min. - max.	3 - 10	6 - 16	6 - 19	10 - 20	10 - 20	14 - 23	20 - 28	32 - 40
I		M3	M4	M4	M5	M6	M8	M10	M12
K		9	11,5	15,5	17,5	16	20	24	32
M	(length of magnets)	20	20	20	30	30	40	50	60

Clamping hubs 2 to 60 made of aluminium  
Clamping hubs 150 and 300 made of steel  
Other material on request

- 1) Other torque values on request
- 2) Torque value adjustable by hub submergence
- 3) Bigger approved misalignment on request
- 4) Axial misalignment changes the submergence and thus the torque; however, axial displacement in one direction is possible without limitations
- 5) Specified torque ± 5% tolerance

## Ordering data

<b>MKD 30</b>	-	<b>15<sup>H7</sup></b>	-	<b>12<sup>H7</sup></b>	-	<b>xx</b>
Type		Bore diameter D <sub>1</sub>		Bore diameter D <sub>2</sub>		Further details e.g. stainless, other torques

## Range of applications

- As safety clutch
- Other applications that require high torque and limited dimensions

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