

Combined B-Axis with Milling-Spindle only

System solutions for mill-applications

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The concept of the 3DC series for mill applications only

Our 3DC series combines the compact design of a milling spindle with the high-torque B-axis. Both axes can be clamped separately from each other, e.g. to carry out a classic turning operation with a fixed tool or the highly effective mill-turning with a rotating tool and if applicable even with the swiveling B-axis.

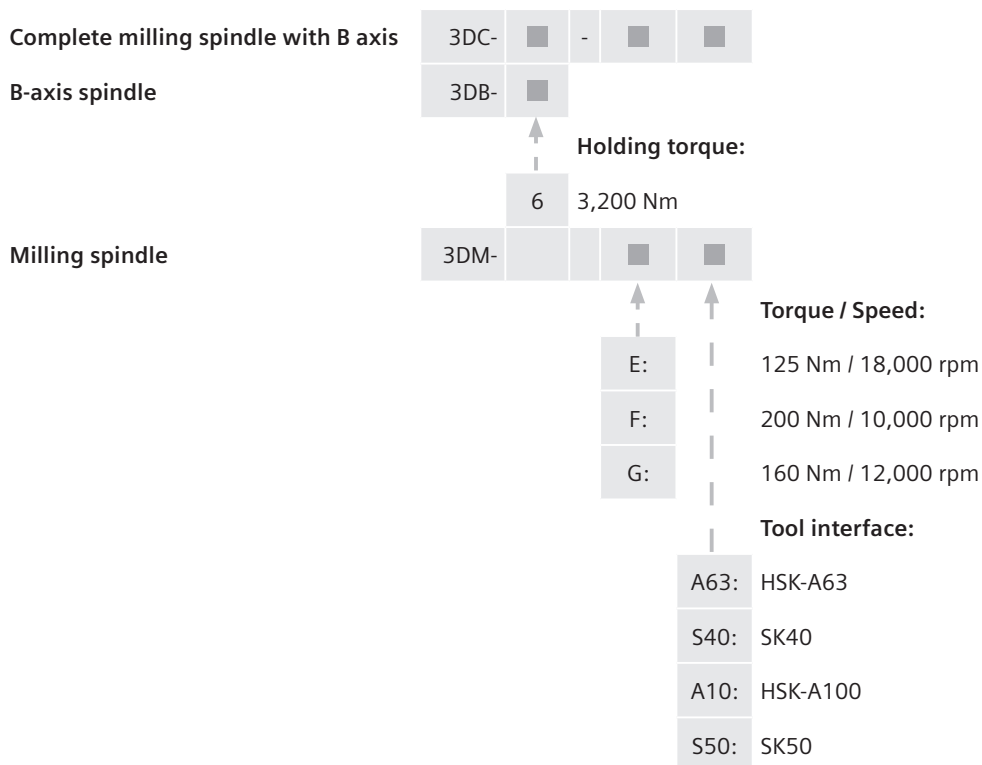
The 3DC series has a modular structure so that various combinations of milling spindles and B-axes are possible. They can be selected according to the application.

The milling spindles 3DM differ in speed, power / torque and tool interface. The B-axis modules 3DB in two sizes differ mainly in the mechanical holding torque. An

index-free clamping system is optionally available. High-torque motor and integrated fail safe function are the principle features of the B-axis.

The Easy Connect principle between the mill-turn spindle and the B-axis 3DB6, in which all media, including power and signals, are coupled directly and without readjustment due to the pre-centering, is very service-friendly and provides a rigid connection. The optional SMI24 (Siemens DRIVE-CLiQ) complements the user-friendliness of our 3DC series.

Classification



Example:

B-axis spindle **3DB-6** with milling spindle **3DM-EA63**

has the complete designation **3DC-6-EA63** (3,200 Nm / 125 Nm, 18,000rpm, HSK-A63)

Milling-Spindle

Milling spindles with high performance motor and shaft clamping function.

The 3DMT milling-turning spindle modules are available in 4 torque classes and with 4 different tool interfaces.



Technical data

Milling spindle	E		F		G
	3DM-E A63	3DM-E S40	3DM-E A10	3DM-F S50	3DM-G A10
Tool interface	HSK-A63	SK40	HSK-A100	SK50	HSK-A100
Maximum speed [rpm]	18,000		10,000		12,000
Rated torque [Nm]	125		200		160
Rated power [kW]	46		56		67
Height [mm]	270				
Width [mm]	270				
Length [mm]	735				757
Internal coolant supply [bar]	80				
Bearing lubrication	Grease				

B-axis

B-axis with torque motor, shaft clamping and fail-safe function.

The 3DB B-axis modules in two sizes differ mainly in the holding torque. An index-free clamping system is optionally available.

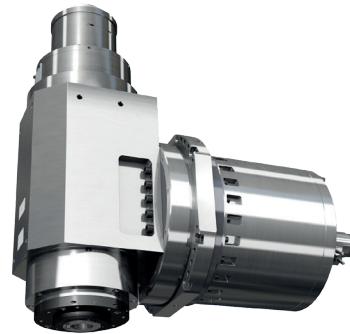


Technical data

B-axis	3DB-6
Holding torque (hydraulic) [Nm]	3,200
Nominal motor torque (electrical) [Nm]	878
Holding torque (fail-safe function) [Nm]	700
Swivelling range [°]	+/-120
Swivelling speed [rpm]	80
Center diameter [mm]	360
Total length [mm]	565

B-Axis completed with milling spindle

The designation of the completed 3DC unit reflects the meaningful combination of the 3DMT and 3DB modules in a plain way.



Possible combinations

Suitable combination of milling spindle and B-axis		Milling spindles Motor torque class			Tool interface
		E (125 Nm, 18,000 rpm)	F (200 Nm, 10,000 rpm)	G (160 Nm, 12,000 rpm)	
B-axis spindles	Size 6 (3,200 Nm)	3DC-6-EA63	-	-	HSK-A63
		3DC-6-ES40	-	-	SK40
		-	3DC-F-FA10	3DC-6-GA10	HSK-A100
		-	3DC-6-FS50	-	SK50

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