

Rotary Modules

Technical Data – Summary Rotary Modules with Intermediate Position

	DM 4 Z-90	DM 4 Z-180	DM 5 Z-90	DM 5 Z-180	DM 6 Z-90	DM 6 Z-180
Angular range of rotation [°]:	0-90°	0-180°	0-90°	0-180°	0-90°	0-180°
Torque M [Nm]:	0,43	0,43	1,08	1,08	3,42	3,42
Axiallast Fa [N]:	50	50	200	200	300	300
Radial moment Mr [Nm]:	2	2	10	10	15	15
Mass moment of inertia [kg cm²]:	0,15	0,15	2	2	5	5
Cylinder diameter:	2xØ10	2xØ10	2xØ14	2xØ14	2xØ25	2xØ25
Air consumption per cycle at 5 bar nominal stroke [NI]:	0,02/0,03	0,03/0,04	0,05/0,06	0,08/0,09	0,15/0,2	0,25/0,3
Weight [kg]:	0,5	0,5	1,1	1,1	2,1	2,1

*permissible mass moment of inertia without external stops at 0.4s/180°

Rotary modules may only be operated with outgoing air choke.

For all modules

Pneumatic connection: M5

Operating pressure: 4-7 bar

Temperature range: 0-60°C

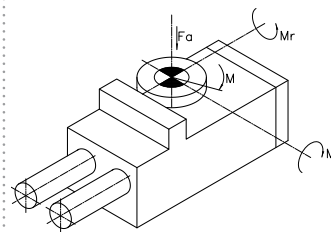
Repeatability: +/- 0,05°

Angular range of rotation:
0-100°
variably adjustable
0-190°
variably adjustable

Rotary Module DM 4/5/6 Z

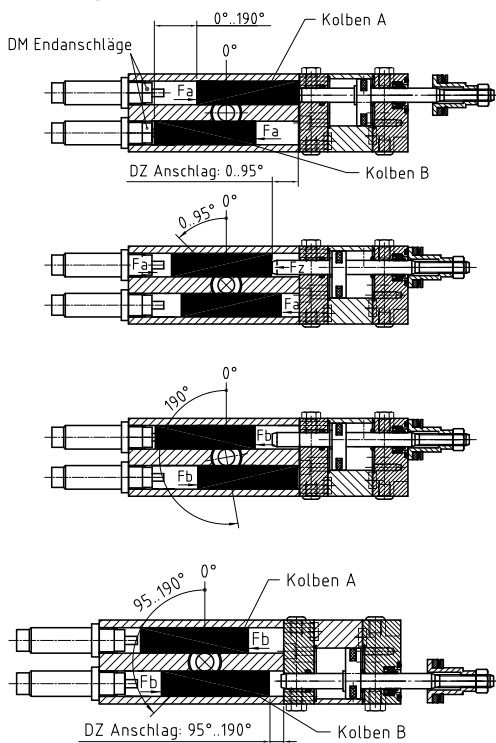


Torques



With the DM Z design, besides the two end positions, an optional intermediate position within the range of rotation can be traversed. The DM rotary modules can also be easily equipped later with the DZ intermediate stop.

Travel diagram



Start position

Rotary table at 0°-position

Intermediate stop back

Force Fa is effective

Intermediate position

Rotary table at intermediate position $\leq 95^\circ$

Intermediate stop forwards

Forces Fa and Fz are effective, $F_z > F_a$

End position

Rotary table at 190°-position

Intermediate stop forwards

Force Fb is effective

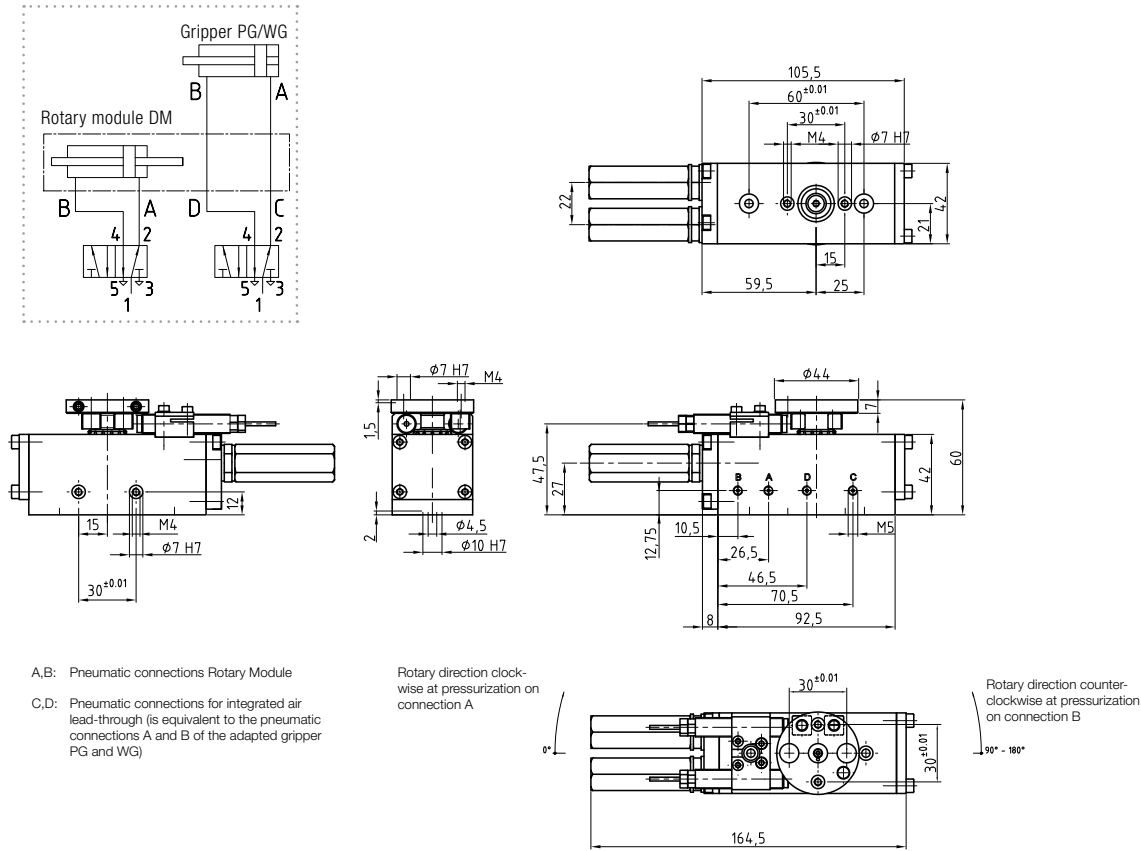
The rotary table can now travel back to the intermediate position or directly (with simultaneous withdrawal of the intermediate stop) to the start position.

If the intermediate position $> 95^\circ$, the intermediate stop is mounted flush with piston B.

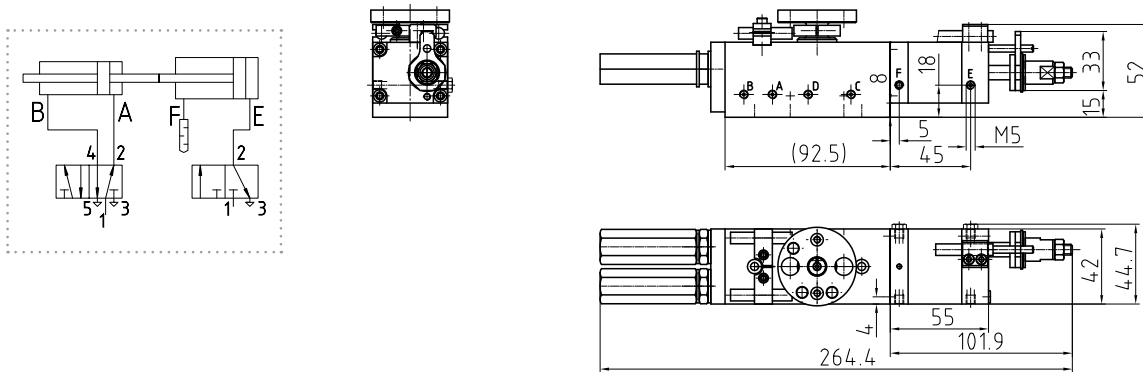
Rotary Modules

DM 5 AE / DM 5 Z – Pneumatic Rotary Modules

Dimensional drawing and pneumatic diagram DM 5 AE



Dimensional drawing and pneumatic diagram DM 5 Z



Designation	Order number	Zubehör	Order number	Options
DM 5-90 AE	300 5291	Centering ring $\phi 7$	300 1521	Grippers see page 98
DM 5 Z-90	300 4999	Centering ring $\phi 10$	300 1522	
DM 5-180 AE	300 5288	Limit switch $\phi 3$ (AE)	300 3162	
DM 5 Z-180	300 5000	Limit switch $\phi 6,5$	300 1845	
incl. 2 hydr. shock absorbers, 2 centering rings $\phi 7$		Shock absorber	300 1390	
		Control cam 0-90°	300 2476	
		Control cam 0-180°	300 2477	
		Intermediate stop DZ 5	300 5252	
		See chapter Accessories		