

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

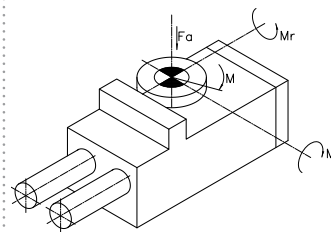
**Repeatability: +/- 0,05°**

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

### Rotary Module DM 4/5/6 Z

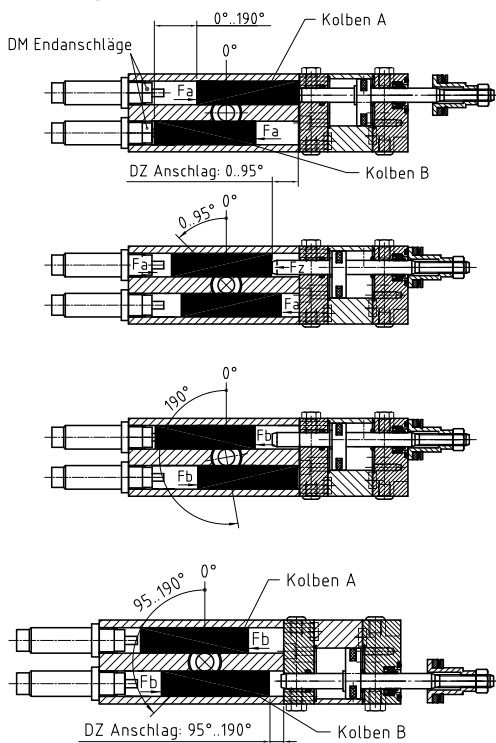


### Torques



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

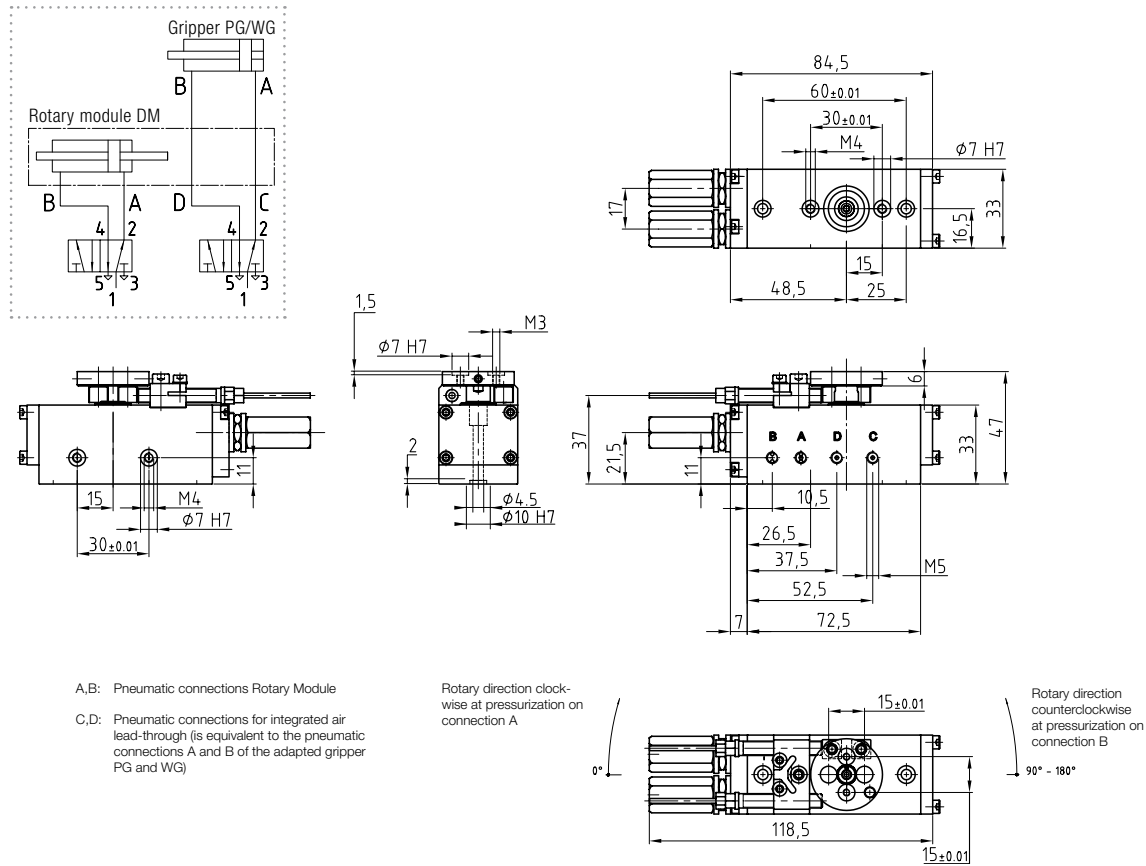
The rotary table can now travel back to the intermediate position or directly (with simultaneous withdrawal of the intermediate stop) to the start position.

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

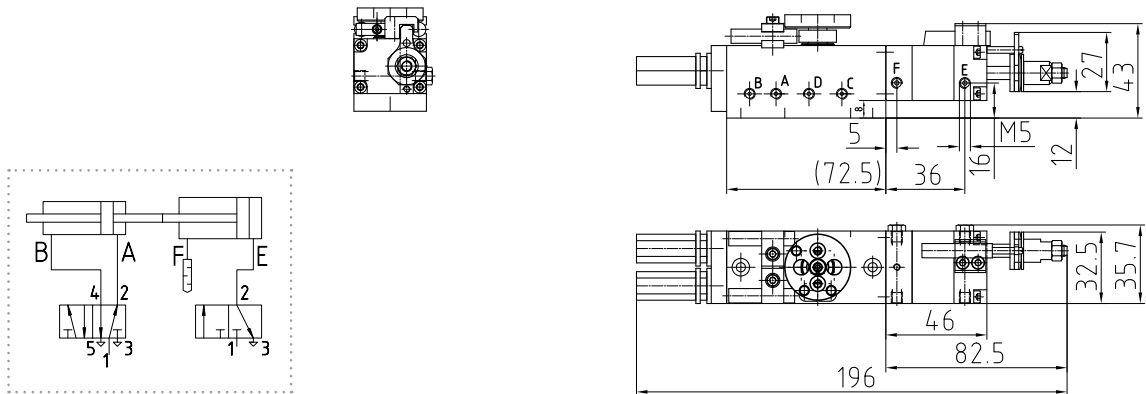
# Rotary Modules

## DM 4 AE / DM 4 Z – Pneumatic Rotary Modules

### Dimensional drawing and pneumatic diagram DM 4 AE



### Dimensional drawing and pneumatic diagram DM 4 Z



Designation	Order number	Accessories	Order number	Options
DM 4-90 AE	300 8989	Centering ring Ø 7	300 1521	Grippers see page 98
DM 4 Z-90	300 4996	Centering ring Ø 10	300 1522	
DM 4-180 AE	300 8990	Limit switch Ø 3 (AE)	300 3162	
DM 4 Z-180	300 4998	Limit switch Ø 6,5	300 1845	
		Shock absorber	300 1391	
		Control cam 0-90°	300 2332	
		Control cam 0-180°	300 2333	
		Intermediate stop DZ 4	300 5253	
		See chapter Accessories		