

**Rotary Vane Actuators
Double Acting
2,5 to 5 Nm
Torque at 6 bar**

- **Angle of rotation infinitely adjustable between 0° to 270°**
- **Two integral proximity sensor housings**
- **Hollow shaft for vacuum and liquid transfer applications**



Technical Data

Medium:

Compressed air, filtered and lubricated

Operation:

Double acting vane type with buffer cushioning

.../24 Rotary actuator with featherkey shaft

.../25 Rotary actuator with hollow shaft

Operating Pressure:

2 to 8 bar

Operating Temperature:

-10°C* to +60°C

*Consult our Technical Service for use below +2°C

Air Connection:

M 5

Rotation Angle:

0 to 270° infinitely adjustable

Materials:

Zinc diecast nickel plated housing, aluminium anodised plate, polyurethane seals and buffer

Ordering Information

To order a Rotary Actuator with hollow shaft for torque up to 5 Nm at 6 bar quote:

M/60231/25

To order a Rotary Actuator with featherkey shaft for torque up to 2,5 Nm at 6 bar quote:

M/60221/24

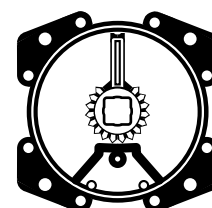
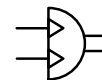
Order proximity sensors separately.

Accessories

Proximity sensors (M/P28473)

See page

N 4.3.071.01

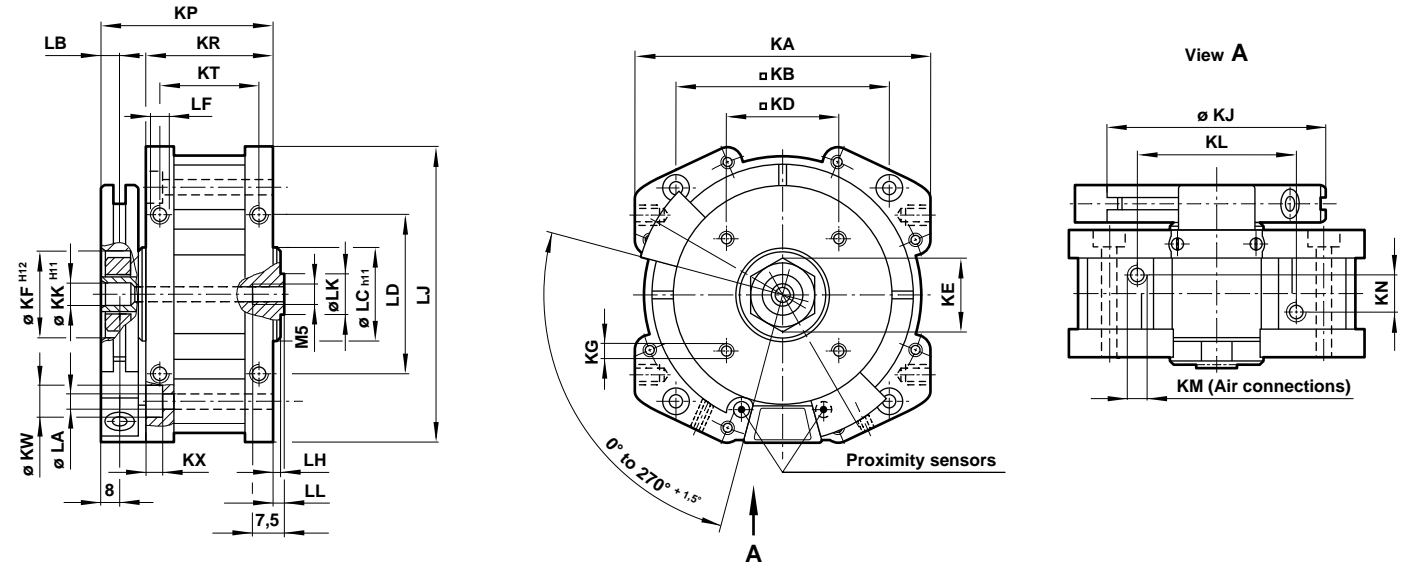




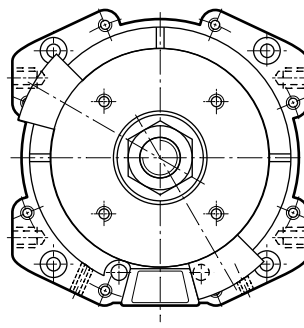
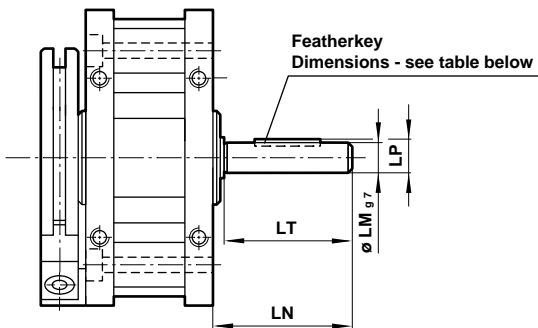
Theoretical Torques • Forces • Air Consumption • Weight

Model	Theoretical torques at 6 bar (Nm)	Maximum forces		Permissible rotation energy (Nm)	Air consumption at 6 bar, 270° (cm ³)	Weight	
		radial (N)	axial (N)			.../24 (kg)	.../25 (kg)
M/60221	2,5	60	30	1,2 x 10 ⁻²	149	0,43	0,40
M/60231	5	80	35	2,2 x 10 ⁻²	293	0,63	0,65

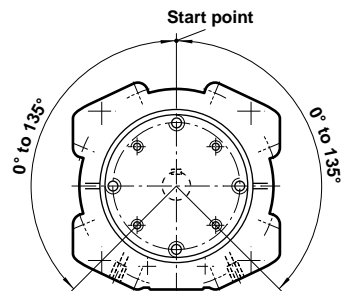
Basic Dimensions .../25



Dimensions .../24



Rotation Start Point



Model	KA	KB	KD	KE	Ø KF H12	KG	KJ	Ø KK H11	KL	KM
M/60221	67	49	19	15	20	M 4	46	3	36	M 5 - 6 deep
M/60231	79	57	30	15	25	M 4	58	3	43	M 5 - 6 deep
Model	KN	KP	KR	KT	Ø KW	KX	Ø LA	LB	LC	LD
M/60221	10	41	29	22,5	7,5	4,5	4,5	5	24	36
M/60231	10	46	34	26,5	7,5	4,5	4,5	5	25	42,5
Model	LF	LH	LJ	Ø LK	LL	LN	LMg 7	LP	LT	Featherkeys
M/60221	M 4 - 6 deep	1,5	67	15,5	2,5	29	10	11,2	25	A 3 h9 x 3 x 18
M/60231	M 5 - 7 deep	2	79	-	-	35,5	12	13,5	32	A 4 h9 x 4 x 25

Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under 'Technical Data'.

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems, or other applications not within published specifications, consult NORGREN.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.