

XtraforsEx

Explosion-proof Servomotors



Features

- ExdIIC certified ATEX (according to standard EN 60079)
- DC and AC brushless series
- Axial magnetic flux
- Low cogging torque

Power

- MS series: Rated torque from 0.60 to 8.19 Nm
- MA series: Rated torque from 1.23 to 13.00 Nm

Executions

- Wide range of standard models
- Customized versions
- Sizes 149.5 to 188.6 mm

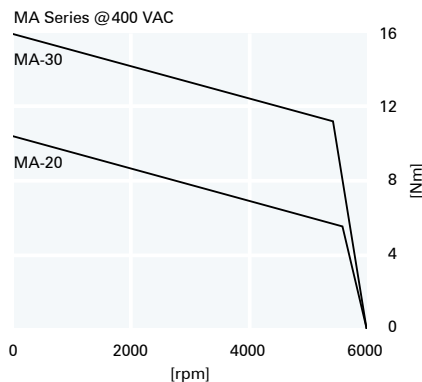
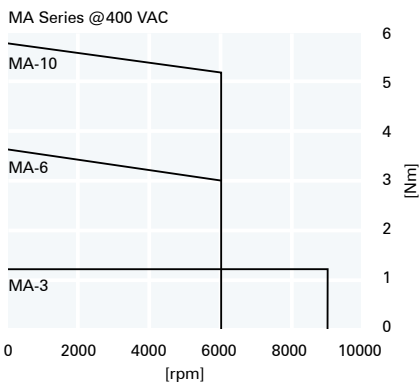
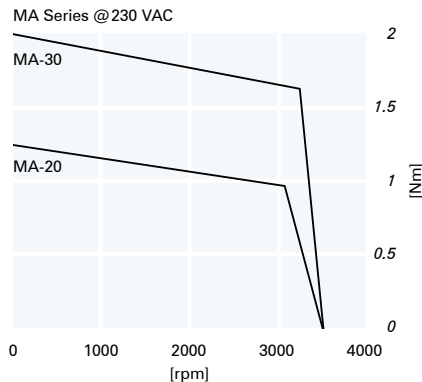
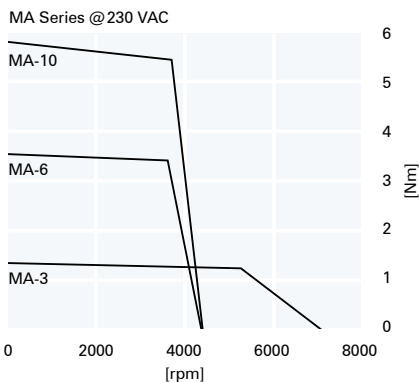
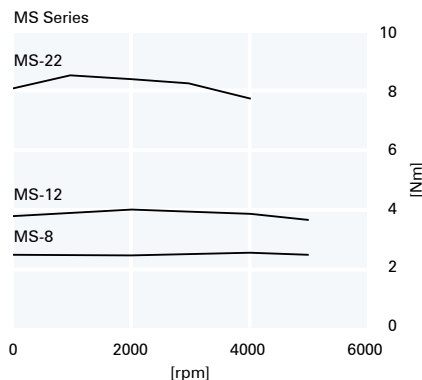
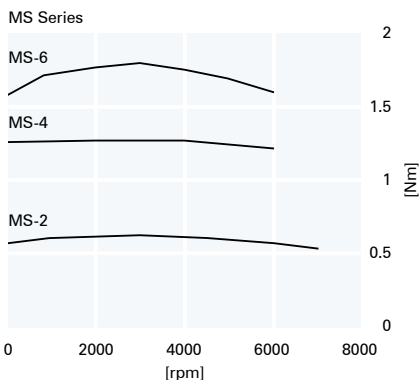
XtraforsEx, explosion-proof Servomotors

The XtraforsEx series are axial airgap AC and DC servomotors housed in an flame-proof enclosure. The motors are ATEX and CE compliant Zone 1 and 21, Gas group IIC (Hydrogen).

Technical data

| | | DC Servomotors | | | | | | AC Servomotors | | | | |
|-------------------|-------|----------------|------|------|------|-------|-------|----------------|------|-------|-------|-------|
| | | MS-2 | MS-4 | MS-6 | MS-8 | MS-12 | MS-22 | MA-3 | MA-6 | MA-10 | MA-20 | MA-30 |
| Rated torque | [Nm] | 0.60 | 1.26 | 1.83 | 2.56 | 3.95 | 8.19 | 1.23 | 3.47 | 5.40 | 7.70 | 13.00 |
| Rated speed | [rpm] | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | 5330 | 3560 | 3650 | 3070 | 3180 |
| Rated current | [ADC] | 6.5 | 7.8 | 10.7 | 10.7 | 14.0 | 16.0 | 2.05 | 3.86 | 6.00 | 7.40 | 13.00 |
| Rated voltage | [VDC] | 39.4 | 67.0 | 67.8 | 89.7 | 106.7 | 181.0 | | | | | |
| Peak speed | [rpm] | 7000 | 6000 | 6000 | 5000 | 4500 | 4000 | | | | | |
| Peak speed@230VAC | [rpm] | | | | | | | 6950 | 4170 | 4170 | 3470 | 3470 |
| Peak speed@400VAC | [rpm] | | | | | | | 9000 | 6000 | 6000 | 6000 | 6000 |

Torque curves



Standard version

- Shaft with keyway
- Round flange (B14)
- Cable connection

AC series

- Resolver feedback
- NTC thermal sensor

Options

- Brake
- Shaft without keyway
- Square flange (B5)

AC series

- Encoder feedback with hall sensors
- Confectioned power and feedback cables
- Low backlash gearboxes adaptation

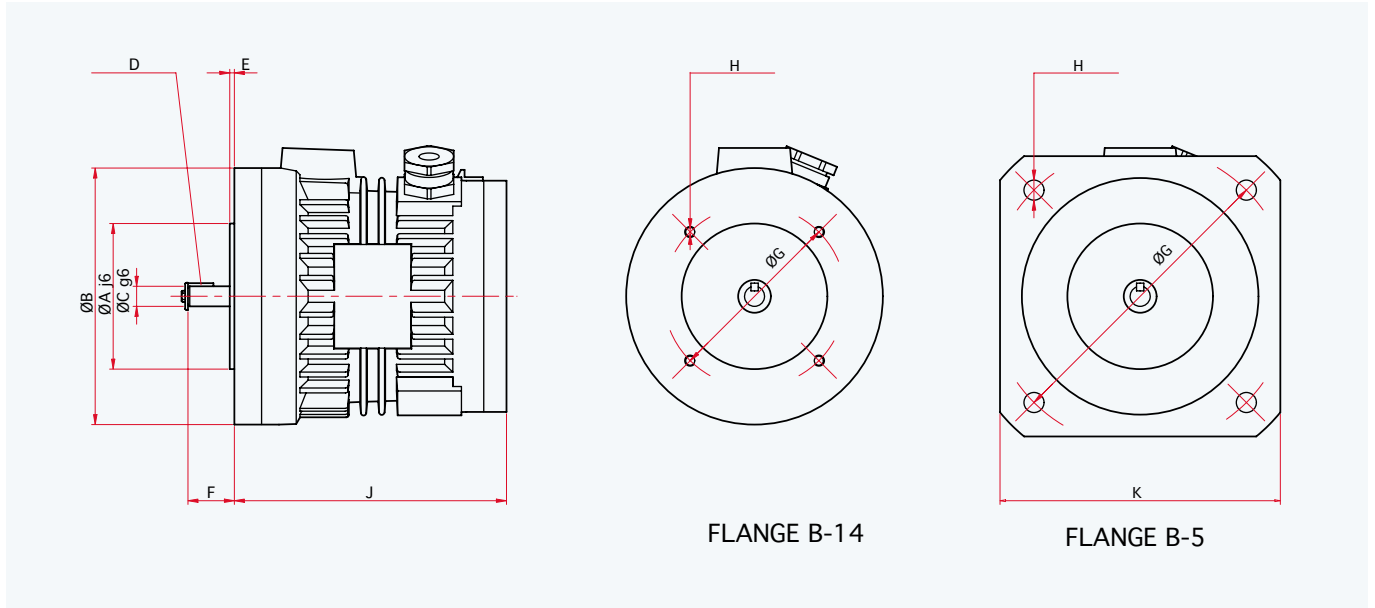
DC series

- Tachogenerator

Customized versions

- Output shaft
- Flange

Mechanical dimensions



| Dimensions [mm] | | Flange | MS-2 | MS-4, -6, -8 | MS-12, -22 | MA-3 | MA-6, -10 | MA-20, -30 |
|-----------------|----------|--------|---------|--------------|------------|---------|-----------|------------|
| A Ø | j6 | B14 | 80 | 95 | 180 | 80 | 95 | 180 |
| | | B5 | 130 | 180 | 250 | 130 | 180 | 250 |
| B Ø | | | 141 | 201 | 262 | 141 | 201 | 262 |
| C Ø | g6 | | 11 | 14 | 24 | 11 | 14 | 24 |
| D | DIN 6885 | | A4x4x14 | A5x5x20 | A8x7x32 | A4x4x14 | A5x5x20 | A8x7x32 |
| E | | | 2.5 | 2.0 | 3.5 | 2.5 | 2.0 | 3.5 |
| F | | | 25.5 | 30.0 | 50.0 | 25.5 | 30.0 | 50.0 |
| G Ø | ±0,1 | B14 | 100 | 115 | 215 | 100 | 115 | 215 |
| | | B5 | 165 | 215 | 300 | 165 | 215 | 300 |
| H | Ø | B14 | 4xM6x8 | 4xM6x10 | 4xM12x14 | 4xM6x8 | 4xM6x10 | 4xM12x14 |
| | | B5 | 4xØ11 | 4xØ11 | 4xØ18 | 4xØ11 | 4xØ11 | 4xØ18 |
| J | | | 149.5 | 159.5 | 188.6 | 149.5 | 159.5 | 188.6 |
| K | | B5 | 154 ± 1 | 201 ± 1 | 284 ± 1.5 | 154 ± 1 | 201 ± 1 | 284 ± 1.5 |

Brakes

| | | MS-2 | MS-4, -6, -8 | MS-12 | MS-22 | MA-3 | MA-6, -10 | MA-20, -30 |
|---------|-------|------|--------------|----------------|-------|------|-----------|----------------|
| Torque | [Nm] | 1.2 | 2.5 | 5.0 | 12.0 | 1.0 | 4.0 | 8.0 |
| Tension | [VDC] | | | 24 (+6% - 10%) | | | | 24 (+6% - 10%) |

Tachogenerators

| Type | | D40 | D40 | D40 | D26 | | | |
|---------|----------|-----|-----|-----|---------|--|--|--|
| Tension | [V/krpm] | | | | 10 ± 5% | | | |

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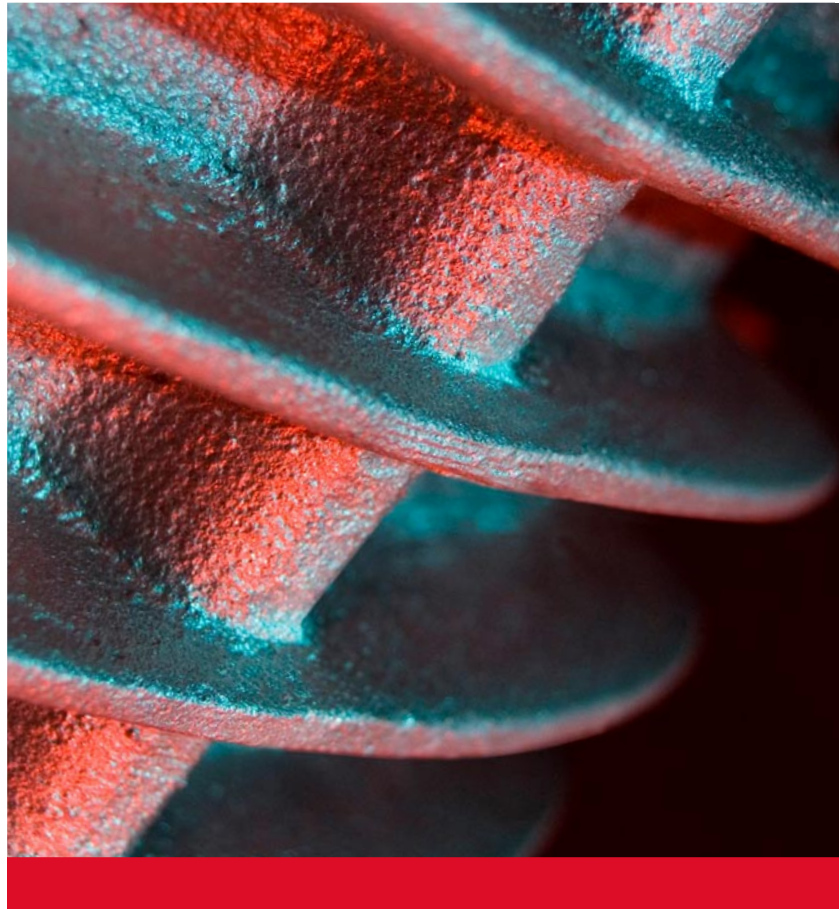
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The Infranor Group

Infranor creates added value for its customers by providing tailor-made motion solutions.

Based on strong working relationships, Infranor offers extensive market know-how, comprehensive engineering skills and a wide range of high-quality products leading to productivity gains and therefore to comparative advantages for its customers in their respective markets.

The Infranor Brand

The Infranor Brand is a synonym for:

- Excellence
- Cooperation
- Added value