



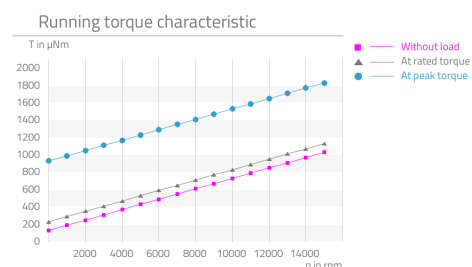
> CoograDrive® Space 8mm - Type 1

Attributes

| Highlights | Description |
|---|---|
| <ul style="list-style-type: none"> ▪ Vacuum suitable lubrication ▪ Transmission ratio optimized to torque ▪ Preloaded ball bearing ▪ Flexible integration ▪ Use of high quality materials | <p>The CoograDrive® Space 8mm - type 1 micro gearbox combines extreme ruggedness with reliability and extremely low weight. It is the ideal solution for applications in extreme environmental conditions and tight space conditions. Because Braycote is used as lubricant for the ball bearings as well as for the gear component set, it can be used in high-vacuum environments. Both the input shaft as well as the output shaft are precisely guided by preloaded ball bearings and thereby allow the application to be directly connected. At the core of this micro gearbox is a low-backlash CoograDrive® gear with a reduction ratio of 80:1.</p> |

Technical parameter

P-029



Technical Supply Specifications: CoograDrive® Space 8mm - Type 1



Micromotion GmbH, Phone: +49 (0) 6431 – 569 18 – 25, E-mail: sales@micromotion.de

| Nr. | Parameter | Symbol | Value | Hint |
|-------|--|--------|-------------------------------------|------|
| P-001 | Vacuum suitable | | HV | |
| P-003 | Ratio | i | 80 : 1 | |
| P-004 | Self-locking | | yes | |
| P-008 | Repeatability unidirectional | | 15 arcmin | |
| P-009 | Repeatability bidirectional | | 45 arcmin | |
| P-010 | Accuracy | | 30 arcmin | |
| P-011 | Transmission accuracy | | 60 arcmin | |
| P-013 | Torsional stiffness | | 3.90 $\frac{\text{Nm}}{\text{rad}}$ | |
| P-014 | Lost motion | | 45 arcmin | |
| P-015 | Backlash | | 20 arcmin | |
| P-016 | Rated torque | T | 10 mNm | |
| P-017 | Peak torque | T | 80 mNm | |
| P-018 | Momentary peak torque | T | 100 mNm | |
| P-021 | Rated input speed | n | 10000 rpm | |
| P-022 | Maximum input speed | n | 30000 rpm | |
| P-023 | Rated output speed | n | 125 rpm | |
| P-024 | Maximum output speed | n | 375 rpm | |
| P-026 | No-load starting torque | T | 195 μNm | |
| P-027 | No-load running torque | T | 130 μNm | |
| P-028 | Rated running torque | T | 1460 μNm | |
| P-034 | Lifetime for rated operation | | 500 h | |
| P-035 | Radial backlash output shaft | | 0 μm | |
| P-036 | Axial backlash output shaft | | 0 μm | |
| P-037 | Radial stiffness | c | 0.87 N/ μm | |
| P-038 | Axial stiffness | c | 18.5 N/ μm | |
| P-039 | Max. radial load on output shaft (non-operating, constant load) | F | 20 N | |
| P-040 | Max. radial load on output shaft (non-operating, impulsive load) | F | 5 N | |
| P-041 | Max. radial load on output shaft (operating, constant load) | F | 3 N | |
| P-042 | Max. radial load on output shaft (operating, impulsive load) | F | 3 N | |
| P-043 | Max. axial load on output shaft (non-operating, constant) | F | 64 N | |
| P-044 | Max. axial load on output shaft (non-operating, impulsive load) | F | 20 N | |

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| Nr. | Parameter | Symbol | Value | Hint |
|-------|---|--------|--|------|
| P-045 | Max. axial load on output shaft (operating, constant load) | F | 185 N | |
| P-046 | Max. axial load on output shaft (operating, impulsive load) | F | 66 N | |
| P-047 | Max. radial load on input shaft (non-operating, constant load) | F | 20 N | |
| P-048 | Max. radial load on input shaft (non-operating, impulsive load) | F | 6 N | |
| P-049 | Max. radial load on input shaft (operating, constant load) | F | 11 N | |
| P-050 | Max. radial load on input shaft (operating, impulsive load) | F | 6 N | |
| P-051 | Max. axial load on input shaft (non-operating, constant load) | F | 49 N | |
| P-052 | Max. axial load on input shaft (non-operating, impulsive load) | F | 15 N | |
| P-053 | Max. axial load on input shaft (operating, constant load) | F | 147.5 N | |
| P-054 | Max. axial load on input shaft (operating, impulsive load) | F | 61 N | |
| P-055 | Moment of inertia | I | $46.01 \cdot 10^{-4}$ gcm ² | |
| P-056 | Weight | m | 3.86 g | |
| P-057 | Min. permissible ambient temperature (non-operating) | T | -80 °C | |
| P-058 | Min. permissible ambient temperature (operating) | T | -10 °C | |
| P-059 | Max. permissible ambient temperature (non-operating) | T | 150 °C | |
| P-060 | Max. permissible ambient temperature (operating) | T | 120 °C | |

Material information

| Nr. | Parameter | Symbol | Value | Hint |
|-------|---------------------------------------|--------|---------------|------|
| P-900 | RoHS compliant | | yes | |
| P-901 | Lubrication of output bearing gearbox | | Braycote601EF | |
| P-902 | Lubrication of input bearing gearbox | | Braycote601EF | |
| P-903 | Lubrication of gear component set | | Braycote601EF | |
| P-908 | Material of gear component set | | NiFe | |
| P-909 | Material of output bearing gearbox | | 1.4108 DIN EN | |
| P-910 | Material of input bearing gearbox | | 1.4108 DIN EN | |

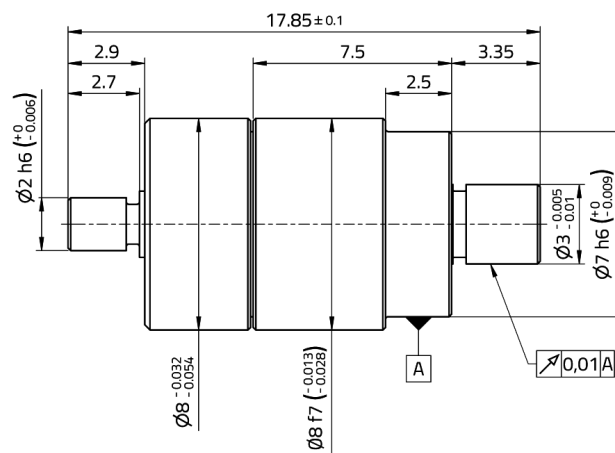
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| Nr. | Parameter | Symbol | Value | Hint |
|-------|---------------------------------|--------|---------------|------|
| P-912 | Material of gearbox output side | | 1.4305 DIN EN | |
| P-913 | Material of gearbox input side | | 1.4305 DIN EN | |

Technical drawing



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