



> CoograDrive® Cryo 8mm - Type 1

Attributes

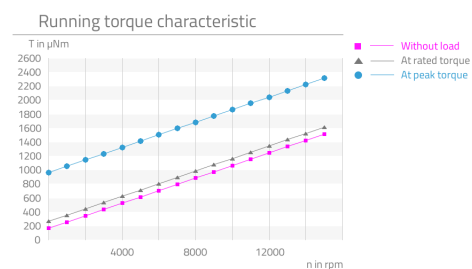
Highlights	Description
<ul style="list-style-type: none"> ▪ Transmission ratio optimized to torque ▪ Dry lubrication due to coatings ▪ Suitable in wide temperature range ▪ Preloaded ball bearing ▪ Use of high quality materials 	<p>Thanks to the dry lubrication and the materials that are used, the extremely compact CoograDrive® Cryo 8mm - type 1 is especially well suited for applications in low temperature ranges. At the heart of this durable micro gearbox is a low-backlash CoograDrive® gear with a reduction ratio of 40:1. The micro gearbox is equipped with a preloaded ball bearing on the input and output side to which the application can be directly connected.</p>

Technical parameter

The stated values are based on calculations and measurements by Micromotion GmbH, carried out according to the current state of the art. You can find our definitions at www.micromotion-drives.com.

For further information please contact sales@micromotion.de.

P-029



Technical Supply Specifications: CoograDrive® Cryo 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		UHV	
P-003	Ratio	i	80 : 1	
P-004	Self-locking		yes	
P-008	Repeatability unidirectional		20 arcmin	
P-009	Repeatability bidirectional		60 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		60 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-023	Rated output speed	n	0 rpm	
P-024	Maximum output speed	n	0 rpm	
P-026	No-load starting torque	T	247.5 μNm	
P-027	No-load running torque	T	165 μNm	
P-028	Rated running torque	T	2145 μNm	
P-034	Lifetime for rated operation		200 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 $\frac{\text{N}}{\mu\text{m}}$	
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 load)	F	64 N	
P-044	Max. axial load on output shaft (non-operating, impulsive load)	F	20 N	
P-045	Max. axial load on output shaft (operating, constant load)	F	185 N	

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Nr.	Parameter	Symbol	Value	Hint
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	$46 * 10^{-4} \text{ gcm}^2$	
P-056	Weight	m	4 g	
P-057	Min. permissible ambient temperature (non-operating)	T	-250 °C	
P-058	Min. permissible ambient temperature (operating)	T	-200 °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		MoS ₂ (drylubrication)	
P-902	Lubrication of input bearing gearbox		MoS ₂ (drylubrication)	
P-903	Lubrication of gear component set		DICRONITE®/MoS ₂ (drylubrication)	
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	

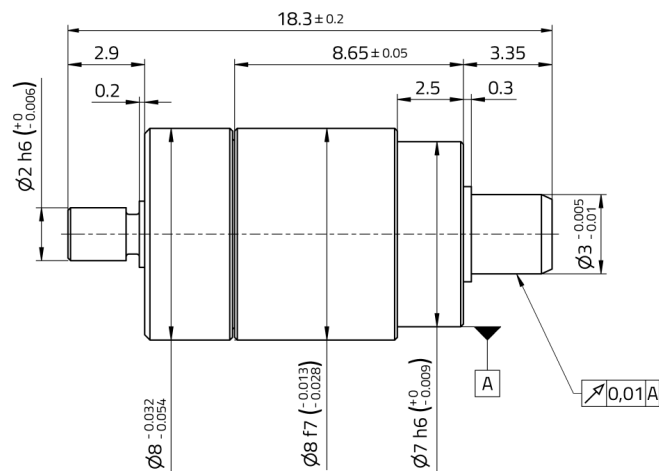
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Nr.	Parameter	Symbol	Value	Hint
P-912	Material of gearbox output side		1.4305 DIN EN	
P-913	Material of gearbox input side		1.4305 DIN EN	

Technical drawing



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