

# Product data sheet

**XP<sup>+</sup>**

Low backlash planetary gearbox



Gearbox data	
Designation:	XP050S-MF1-7-1N1-2S
Gearbox type	XP <sup>+</sup>
Gearbox size	050
Design keyword	Standard
Gearbox variation	Motor attachment gearbox
Gearbox stages	1
Gearbox ratio i	7
Output design	Key
Clamping hub diameter	55 mm
Gearbox backlash	Standard
Gearbox material number	20085329

Motor mounting parts (included in delivery)	
Incl. mounting parts for servo motor	TBD
Adapter plate	Configure with provided cymex <sup>®</sup> 5 file

Order designation
XP050S-MF1-7-1N1-2S / Specify your motor P/N here

Confirm motor compatibility with cymex<sup>®</sup> 5. Download your pre-configured file and base 3D model here!<sup>(d)</sup>

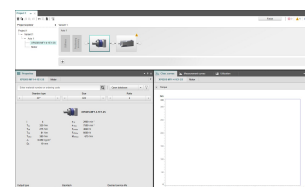


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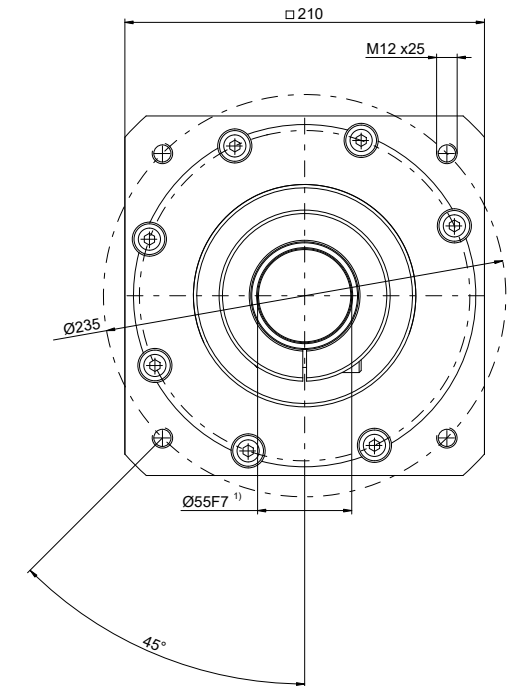
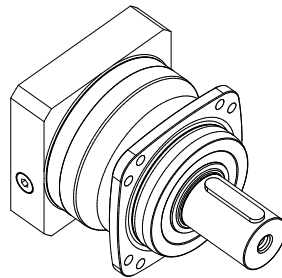




Technical specifications		
Max. output torque (Depending on the specific boundary conditions of the application)	T <sub>2α</sub>	3040 Nm
Max. acceleration torque (max. 1000 cycles per hour)	T <sub>2B</sub>	2280 Nm
Nominal output torque (with n <sub>IN</sub> )	T <sub>2N</sub>	825 Nm
Emergency stop torque (permitted 1000 times during the service life of the gearbox)	T <sub>2Not</sub>	5000 Nm
Nominal input speed (with T <sub>2N</sub> and 20°C ambient temperature) <sup>(a)</sup>	n <sub>1N</sub>	2300 min <sup>-1</sup>
Max. input speed	n <sub>1Max</sub>	4500 min <sup>-1</sup>
Mean no load running torque (with n <sub>1</sub> =3000 min <sup>-1</sup> and 20°C gearbox temp.) <sup>(b)</sup>	T <sub>012</sub>	6.2 Nm
Max. torsional backlash	j <sub>t</sub>	≤ 3 arcmin
Torsional rigidity <sup>(b)</sup>	C <sub>t21</sub>	250 Nm/arcmin
Tilting rigidity	C <sub>2K</sub>	1900 Nm/arcmin
Max. axial force <sup>(c)</sup>	F <sub>2AMax</sub>	17725 N
Max. radial force <sup>(c)</sup>	F <sub>2RMax</sub>	18000 N
Max. tilting moment	M <sub>2KMax</sub>	3256 Nm
Efficiency at full load	η	97 %
Service life (for calculation, see the Chapter "Information" in our product catalogue)	L <sub>h</sub>	> 20000 h
Weight incl. standard adapter plate	m	34 kg
Operating noise (with n <sub>1</sub> =3000 min <sup>-1</sup> no load)	L <sub>PA</sub>	≤ 64 dB(A)
Max. permitted housing temperature		90 °C
Ambient temperature		-15 °C to 40 °C
Lubrication		lubricated for life
Paint		Innovation blue
Protection class		IP 65
Inertia (relates to the drive)	J <sub>1</sub>	40.62 kgcm <sup>2</sup>

New to cymex<sup>®</sup> 5? Learn how to check motor compatibility quickly with a simple tutorial.



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gez/draft		 Massstab Scale <b>auto</b>	 <b>WITTSTEIN</b>	<b>alpha</b>
Datum/date				
Eigentumsvorbehalt nach      Observe copyright note DIN 34 beachten !      according to DIN 34 !				
Benenn. <b>XP 050S-MF1- 7-1N1-2S</b> Descr.				
Kommentar Note <b>Motor specified by user - compatibility check required</b>				
MN	20085329	DIN A3	Ursp./Ref-Drwa:	CAD-Generator V2.0 Blatt/Sheet: 1

nicht vertraulich

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