

# Product data sheet

**XP+**

Low backlash planetary gearbox



Gearbox data	
Designation:	XP040S-MF1-7-1G1-2S
Gearbox type	XP+
Gearbox size	040
Design keyword	Standard
Gearbox variation	Motor attachment gearbox
Gearbox stages	1
Gearbox ratio i	7
Output design	Key
Clamping hub diameter	24 mm
Gearbox backlash	Standard

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

Order designation
XP040S-MF1-7-1G1-2S / Specify your motor P/N here

Technical specifications		
Max. output torque (Depending on the specific boundary conditions of the application)	$T_{2\alpha}$	868 Nm
Max. acceleration torque (max. 1000 cycles per hour)	$T_{2B}$	840 Nm
Nominal output torque (with $n_{IN}$ )	$T_{2N}$	319 Nm
Emergency stop torque (permitted 1000 times during the service life of the gearbox)	$T_{2Not}$	1059 Nm
Nominal input speed (with $T_{2N}$ and 20°C ambient temperature <sup>a)</sup> )	$n_{1N}$	2600 min <sup>-1</sup>
Max. input speed	$n_{1Max}$	5000 min <sup>-1</sup>
Mean no load running torque (with $n_1=3000$ min <sup>-1</sup> and 20°C gearbox temp.) <sup>b)</sup>	$T_{012}$	2.8 Nm
Max. torsional backlash	$j_t$	≤ 3 arcmin
Torsional rigidity <sup>b)</sup>	$C_{t21}$	85 Nm/arcmin
Tilting rigidity	$C_{2K}$	900 Nm/arcmin
Max. axial force <sup>c)</sup>	$F_{2AMax}$	9000 N
Max. radial force <sup>c)</sup>	$F_{2RMax}$	11500 N
Max. tilting moment	$M_{2KMax}$	1635 Nm
Efficiency at full load	$\eta$	97 %
Service life (for calculation, see the Chapter "Information" in our product catalogue)	$L_h$	> 20000 h
Weight incl. standard adapter plate	$m$	17.2 kg
Operating noise (with $n_1=3000$ min <sup>-1</sup> no load)	$L_{PA}$	≤ 62 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)	$J_1$	6.13 kgcm <sup>2</sup>

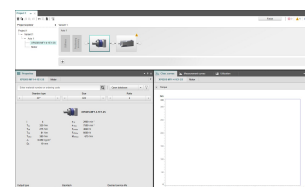
Confirm motor compatibility with cymex® 5. Download your pre-configured file and base 3D model here!<sup>d)</sup>



Don't have cymex® 5? Get your Premium license here!

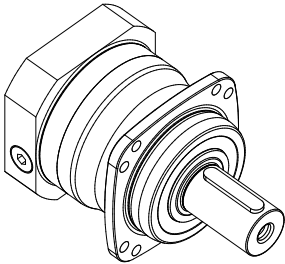
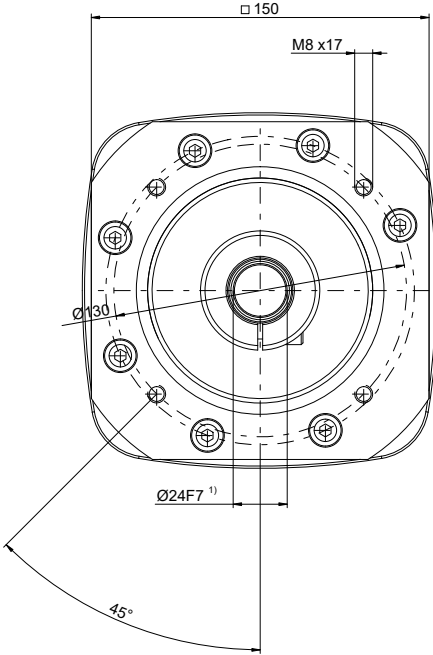
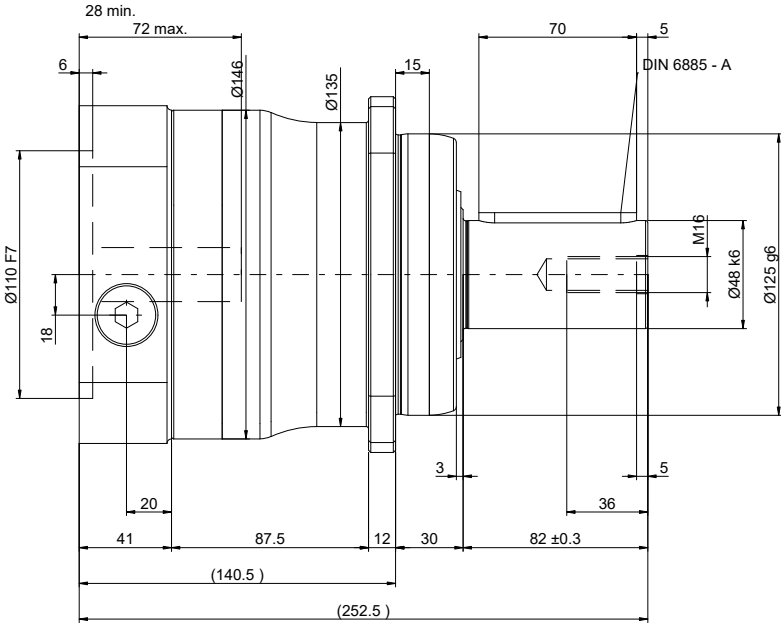
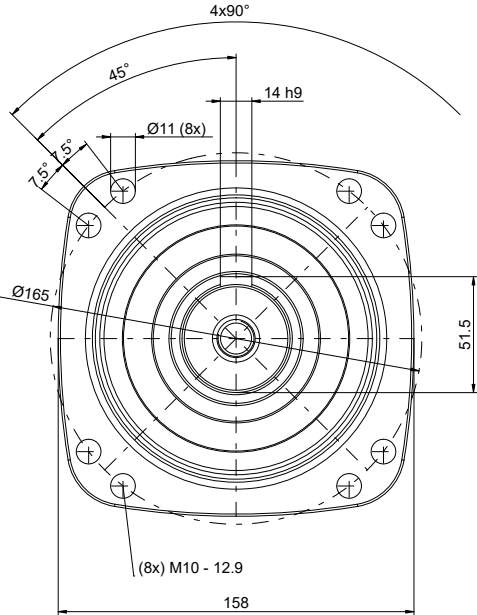


New to cymex® 5? Learn how to check motor compatibility quickly with a simple tutorial.



- a) For higher ambient temperatures, please reduce input speed  
b) Depends on clamping hub diameter  
c) Refers to center of the output shaft or flange  
d) Use cymex® 5 to confirm adapter plate dimensions and motor compatibility

Please note: adapter plate dimensions may vary based on specified motor



1) Motorwellenpassung pruefen / Check motor shaft fit

Technische Aenderungen vorbehalten / Technical modifications reserved

Betriebsanleitung unter [www.wittenstein-alpha.de](http://www.wittenstein-alpha.de) / Operating manual on [www.wittenstein-alpha.de](http://www.wittenstein-alpha.de)

Nicht tolerierte Masse sind Nennmasse / Non-toleranced dimensions are nominal dimensions

gez/draft		Masstab Scale	
Datum/date		auto	
Eigentumsvorbehalt nach DIN 34 beachten !	Observe copyright note according to DIN 34 !		
Benenn. Descr.	XP 040S-MF1- 7-1G1-2S		
Kommentar Note	Motor specified by user - compatibility check required		
MN	DIN A3	Urspr./Ref-Drwg:	CAD-Generator V2.0
			Blatt/Sheet: 1



nicht vertraulich

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Anbauteile / mounting parts		
Adapterplatte adapter plate	MN	TBD
Distanzhülse bushing	MN	