Product data sheet

WITTENSTEIN | alpha

XP+

Low backlash planetary gearbox

Gearbox data	
Designation:	XP010S-MF1-3-1C1-2S
Gearbox type	XP+
Gearbox size	010
Design keyword	Standard
Gearbox variation	Motor attachment gearbox
Gearbox stages	1
Gearbox ratio i	3
Output design	Key
Clamping hub diameter	14 mm
Gearbox backlash	Standard
Gearbox material number	20026511

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

Order designation
XP010S-MF1-3-1C1-2S / Specify your motor P/N here

Confirm motor compatibility with cymex® 5. Download your pre-configured file and base 3D model here![d)]

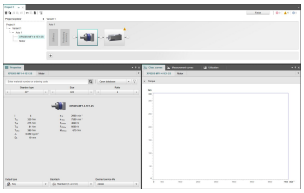
Don't have cymex® 5? Get your Premium license here!

cymex®5 CALCULATE ON THE BEST

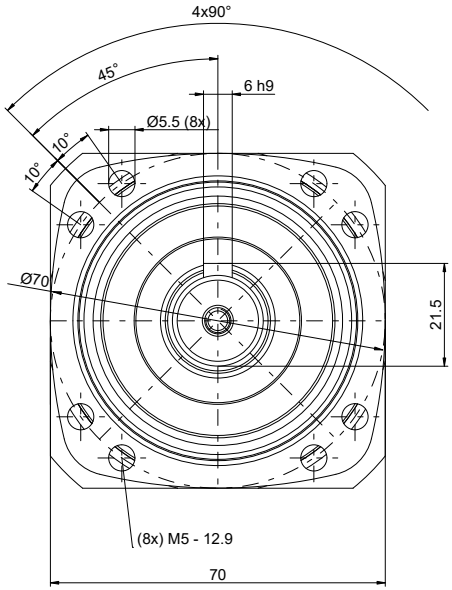
Technical specifications		
Max. output torque (Depending on the specific boundary conditions of the application)	$T_{2\alpha}$	96 Nm
Max. acceleration torque (max. 1000 cycles per hour)	T_{2B}	96 Nm
Nominal output torque (with n_{1N})	T_{2N}	21 Nm
Emergency stop torque (permitted 1000 times during the service life of the gearbox)	T_{2Not}	130 Nm
Nominal input speed (with T_{2N} and 20°C ambient temperature) a)	n_{1N}	3300 min^{-1}
Max. input speed	n_{1Max}	7500 min^{-1}
Mean no load running torque (with n_1=3000 min^{-1} and 20°C gearbox temp.) b)	T_{012}	0.6 Nm
Max. torsional backlash	j_t	≤ 4 arcmin
Torsional rigidity b)	C_{t21}	5 Nm/arcmin
Tilting rigidity	C_{2K}	95 Nm/arcmin
Max. axial force c)	F_{2AMax}	3925 N
Max. radial force c)	F_{2RMax}	3800 N
Max. tilting moment	M_{2KMax}	339 Nm
Efficiency at full load	η	97 %
Service life (for calculation, see the Chapter "Information" in our product catalogue)	L_h	> 20000 h
Weight incl. standard adapter plate	m	1.9 kg
Operating noise (with n_1=3000 min^{-1} no load)	L_{PA}	≤ 59 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	0.31 $kgcm^2$

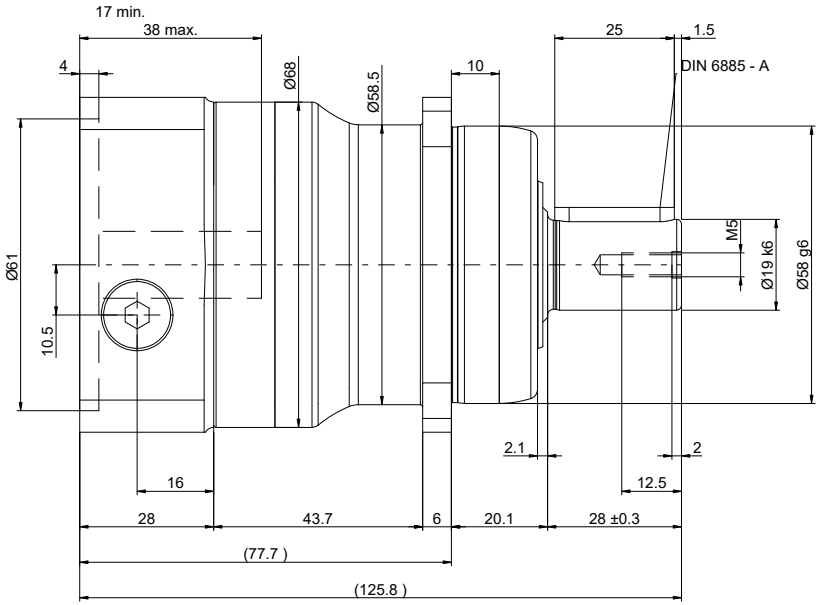
a) For higher ambient temperatures, please reduce input speed
b) Depends on clamping hub diameter
c) Refers to center of the output shaft or flange
d) Use cymex® 5 to confirm adapter plate dimensions and motor compatibility

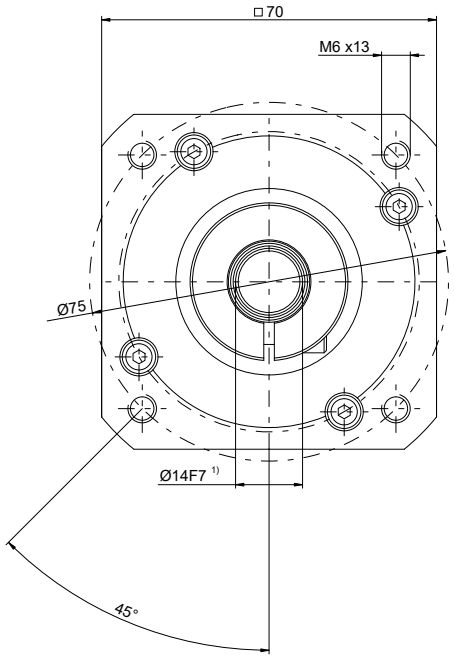
New to cymex® 5? Learn how to check motor compatibility quickly with a simple tutorial.

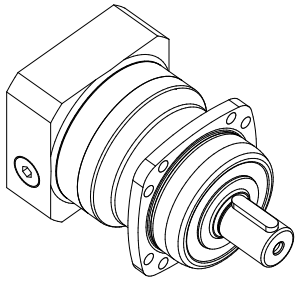


Please note: adapter plate dimensions may vary based on specified motor









1) Motorwellenpassung pruefen / Check motor shaft fit

Technische Aenderungen vorbehalten / Technical modifications reserved

Betriebsanleitung unter www.wittenstein-alpha.de / Operating manual on www.wittenstein-alpha.de

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

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

gez/draft		Massstab Scale	WITTENSTEIN alpha
Datum/date			
Eigentumsvorbehalt nach DIN 34 beachten !	Observe copyright note according to DIN 34 !	auto	
Benenn. Descr.	XP 010S-MF1- 3-1C1-2S		
Kommentar Note	Motor specified by user - compatibility check required		
MN 20026511	DIN A3	Ursp./Ref-Drwg: CAD-Generator V2.0	Blatt/Sheet: 1