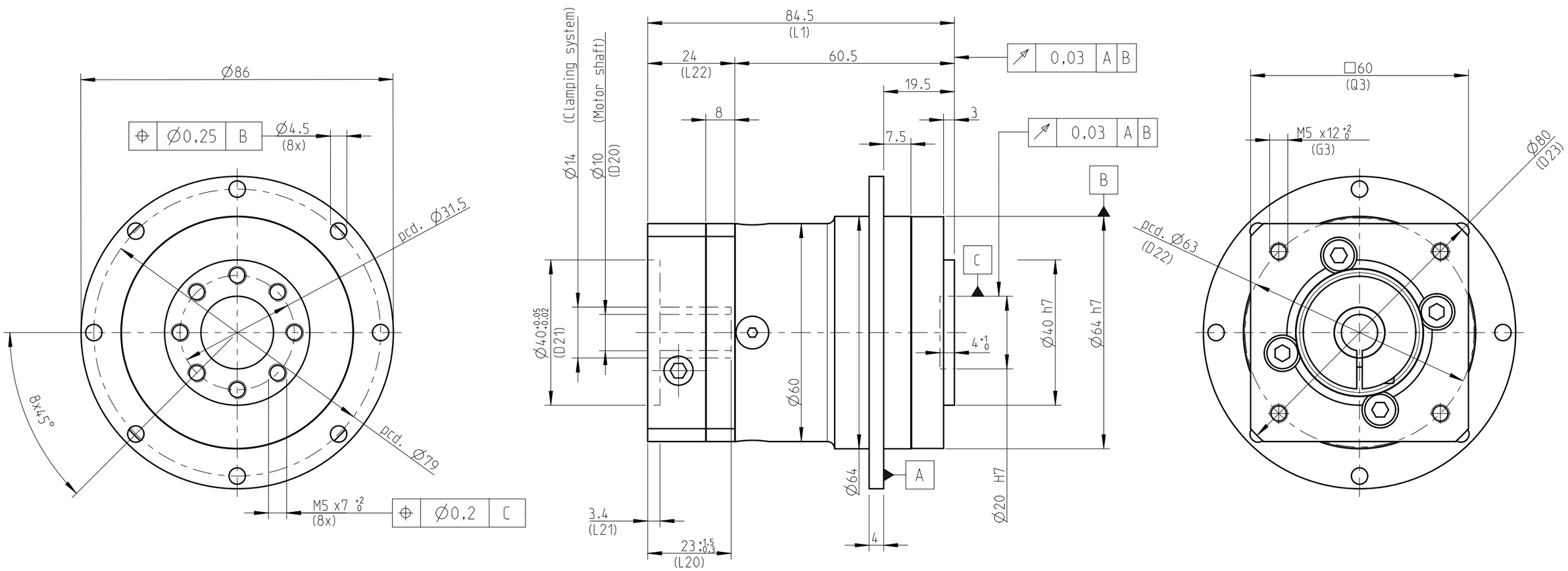
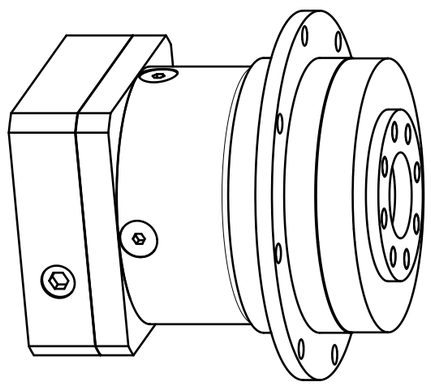


Flange output shaft (similar EN ISO 9409-1)

Materials / Surfaces:
Input flange: Aluminum / untreated
Housing: Steel / heat-treated and post-oxidized (black)
Output flange: Steel / untreated

Hints:
Please pay attention to the operating and mounting instructions.
Subject to modifications.

Variables on the drawing are dependent upon the motor.
The given dimensions are exemplary.



NEUGART	Scale: 9:10	DIN A3	ISO
	Revision status: C from: 02/2022		
	Changed revision status: B from: 09/2020		
General tolerance DIN ISO 2768-cL	PFHE064-bii-SSSD3AD-Y(D20) /(L20)/(D21)/(D22)/B5/(G3)		
Neugart GmbH Keltenstr. 16 D-77971 Kippenheim			Sheet 1/2

General gearbox data	Character	Unit	
Planetary gearbox - gearing type	-	-	Straight teeth
Rotation direction	-	-	Input and output in the same direction
Number of stages	p	-	2-stage
Output shaft bearing	-	-	Inclined roller bearings
Service life (L10h)	t_L	h	30.000
Max. operating temperature	T_{min} / T_{max}	°C	-25 / +90
Protection class	-	-	IP 65
Lubrication (lifetime lubrication)	-	-	Standard lubrication (Klübersynth GE 14-112)
Installation position	-	-	Any
Max. bending moment based on the gearbox input flange (for motor weight) (1)	M_b	Nm	8
Motor shaft concentricity / Coaxiality and axial runout Motor flange	-	mm	0,03 / 0,06 (Measuring methods according to DIN EN 50347)
Required motor shaft tolerance	-	-	j6; k6
Min. permissible motor shaft length	$L_{20\ min}$	mm	14,5
Reference operating mode	-	-	S1
Reference operating factor	K_A	-	1
Reference speed	n_2	rpm	100
Reference ambient temperature	T_{Amb}	°C	20
Radial force for output bearing based on shaft end after L10h=20.000h with Fa=0N	$F_{r\ 20.000h}$	N	2300
Axial force for output bearing based on gearbox axis after L10h=20.000h with Fr=0N	$F_{a\ 20.000h}$	N	2850
Radial force for output bearing based on shaft end after L10h=30.000h with Fa=0N	$F_{r\ 30.000h}$	N	2000
Axial force for output bearing based on gearbox axis after L10h=30.000h with Fr=0N	$F_{a\ 30.000h}$	N	2500
Maximum radial force based on shaft end and T2=0Nm	$F_{r\ Max}$	N	2300
Maximum axial force based on gearbox axis and T2=0Nm	$F_{a\ Max}$	N	2850

(1) Max. motor weight* in kg = $\frac{0,2 \times M_b}{\text{motor length in m}}$

* with symmetrically distributed motor weight
* with horizontal and stationary mounting

Ratio-dependent gearbox data	Character	Unit										
Ratio	bii	-	9	12	15	16	20	25	32	40	64	100
Nominal output torque	T_{2N}	Nm	44	44	44	44	44	40	44	40	18	15
Max. output torque for 30.000 output shaft rotations	T_{2max}	Nm	70	70	70	70	70	64	70	64	29	24
Emergency stop torque permitted 1000 times	T_{2Stop}	Nm	88	88	88	88	88	80	88	80	80	80
Average idle torque for n1=3,000 rpm and 20 °C gearbox temperature	T_0	Nm	0,3	0,25	0,2	0,2	0,2	0,15	0,15	0,15	0,15	0,15
Average thermal input speed at 50% T2N, S1, and T_Amb Operating temperature may not be exceeded!	$n_{1N\ 50\%}$	rpm	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500
Average thermal input speed at 100% T2N, S1, and T_Amb Operating temperature may not be exceeded!	$n_{1N\ 100\%}$	rpm	4500	4500	4500	4500	4500	4500	4500	4500	4500	4500
Max. mechanical input speed Operating temperature may not be exceeded!	$n_{1\ Limit}$	rpm	7500	7500	7500	7500	7500	7500	7500	7500	7500	7500
Torsional backlash based on output shaft	j_t	arcmin	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12
Torsional stiffness based on output shaft	c_g	Nm/arcmin	9,2	10,8	9,6	11,3	11,1	11,5	10,9	11,3	7,3	5
Efficiency at T2N, gearbox temperature 70 °C and n1=1.000rpm	η	%	96	96	96	95	95	95	95	95	91	88
Running noise at n1=3,000 rpm without load at a distance of 1m	Q_g	dB(A)	60	60	60	60	60	60	60	60	60	60
Gearbox weight	m_G	kg	1,35	1,35	1,35	1,35	1,35	1,4	1,4	1,4	1,4	1,45
Mass moment of inertia based on clamping system diameter input	J	kgcm²	0,152	0,144	0,101	0,109	0,098	0,097	0,088	0,087	0,087	0,084

Subject to modifications.

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PFHE064-bii-SSSD3AD-Y(D20)/(L20)/(D21)/(D22)/B5/(G3)

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