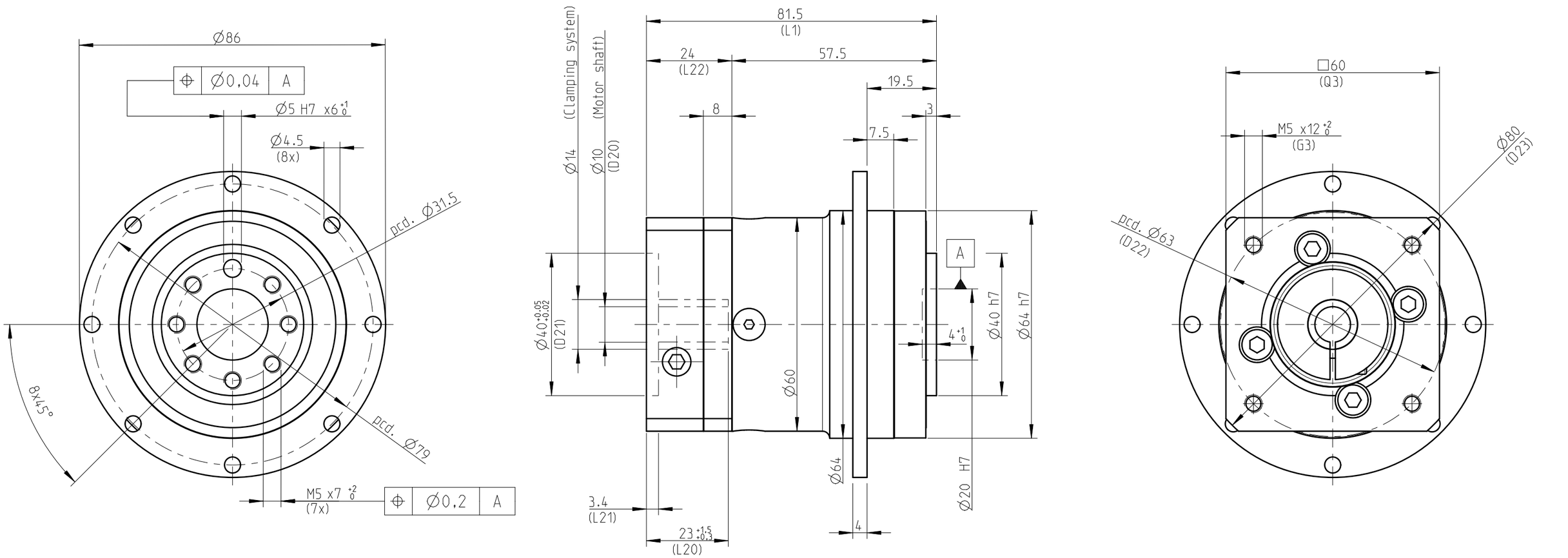


Flange output shaft with dowel hole (ISO 9409-1)

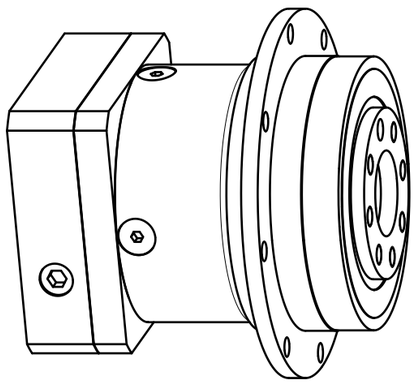
Materials / Surfaces:

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 givdimensions are exemplary.



NEUGART	Scale: 9:10	DIN A3	ISO
	Revision status: I from: 11/2023		
	Changed revision status: H from: 06/2022		
General tolerance DIN ISO 2768-cL	PLFE064-bii-SSSE3AD-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	-	-	Deep groove ball bearing
Service life (L10h)	t_L	h	30.000
Max. operating temperature	T_{min} / T_{max}	°C	-25 / +90
Protection class	-	-	IP 54
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	12
Motor shaft concentricity / Coaxiality and axial runout Motor flange	-	mm	0,03 / 0,06 (Measuring methods according to operating manual)
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	550
Axial force for output bearing based on gearbox axis after L10h=20,000h with Fr=0N	$F_{a\ 20.000h}$	N	1200
Radial force for output bearing based on shaft end after L10h=30,000h with Fa=0N	$F_{r\ 30.000h}$	N	500
Axial force for output bearing based on gearbox axis after L10h=30,000h with Fr=0N	$F_{a\ 30.000h}$	N	1200
Maximum radial force based on shaft end and T2=0Nm	$F_{r\ Max}$	N	900
Maximum axial force based on gearbox axis and T2=0Nm	$F_{a\ Max}$	N	1200

(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	0,15	0,15	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1
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	4400	4500	4500	4500	4500	4500	4500	4500	4500	4500
Max. mechanical input speed Operating temperature may not be exceeded!	$n_{1\ Limit}$	rpm	13000	13000	13000	13000	13000	13000	13000	13000	13000	13000
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	9,5	11,2	9,9	11,7	11,5	11,9	11,2	11,7	7,5	5,1
Efficiency at T2N, gearbox temperature 70 °C and n1=1,000rpm	η	%	96	96	96	95	95	95	94	93	86	79
Running noise at n1=3,000 rpm without load at a distance of 1m	Q_g	dB(A)	58	58	58	58	58	58	58	58	58	58
Gearbox weight	m_G	kg	1,3	1,3	1,3	1,35	1,35	1,35	1,35	1,35	1,35	1,4
Mass moment of inertia based on clamping system diameter input	J	kgcm²	0,151	0,143	0,1	0,108	0,098	0,096	0,087	0,087	0,087	0,084

Subject to modifications.

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PLFE064-bii-SSSE3AD-Y(D20)/(L20)/(D21)/(D22)/B5/(G3)

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