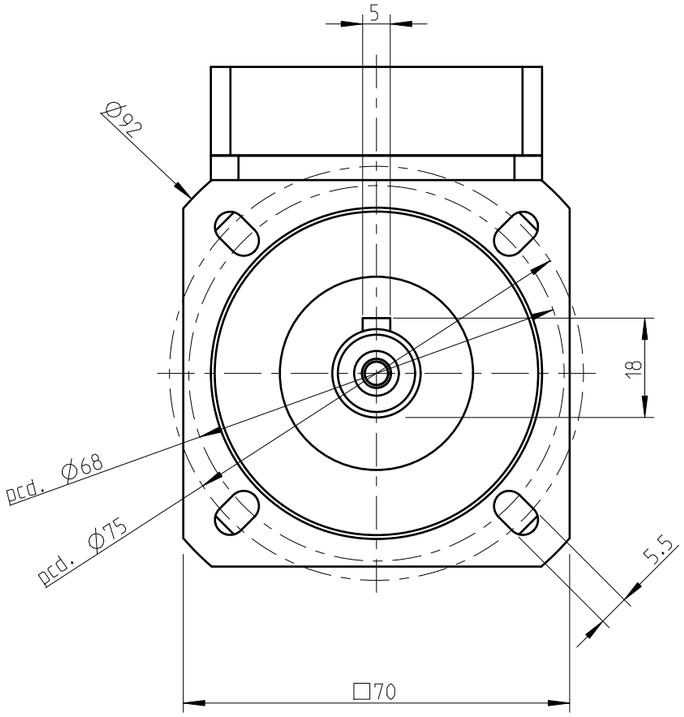
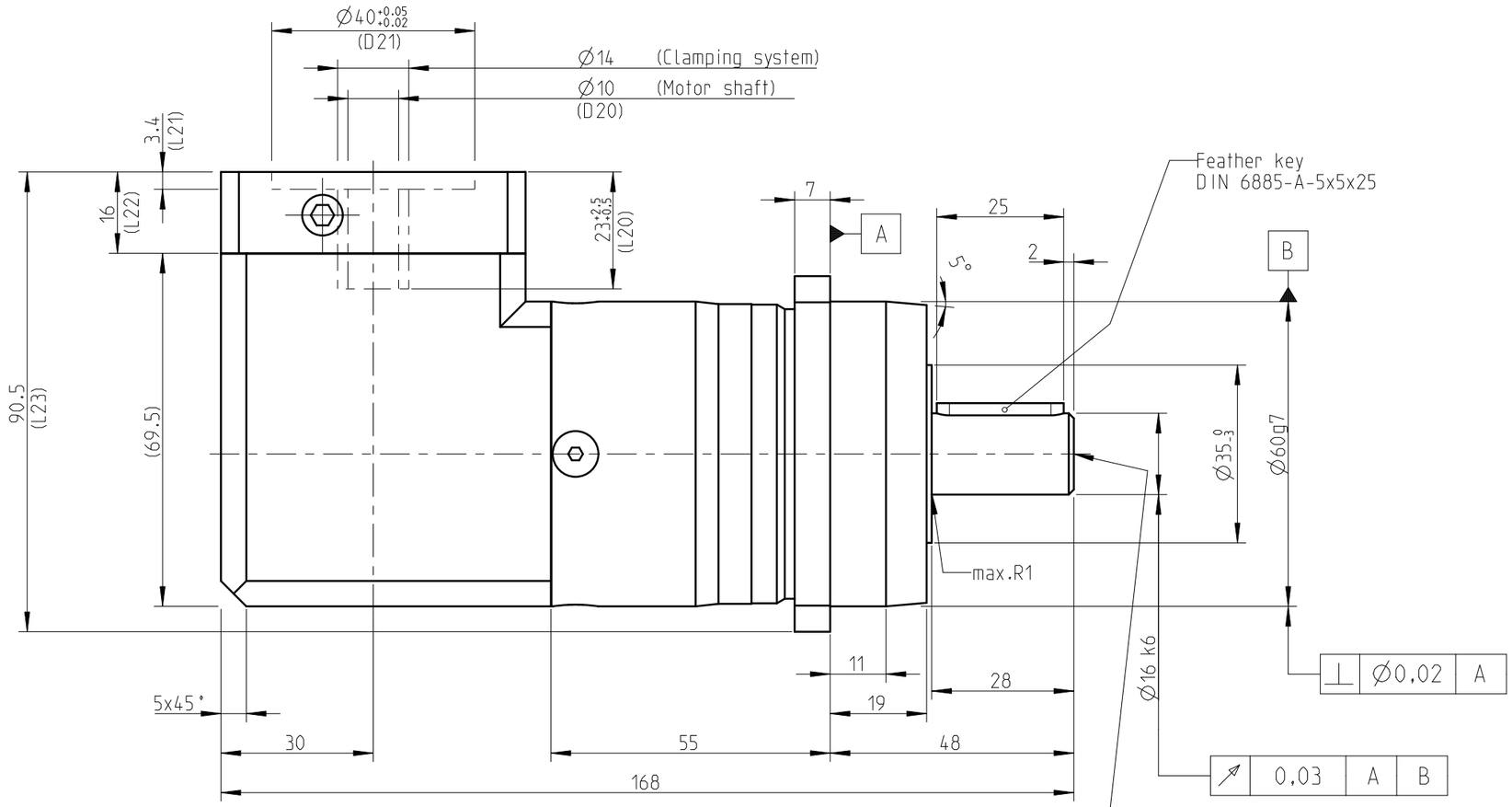
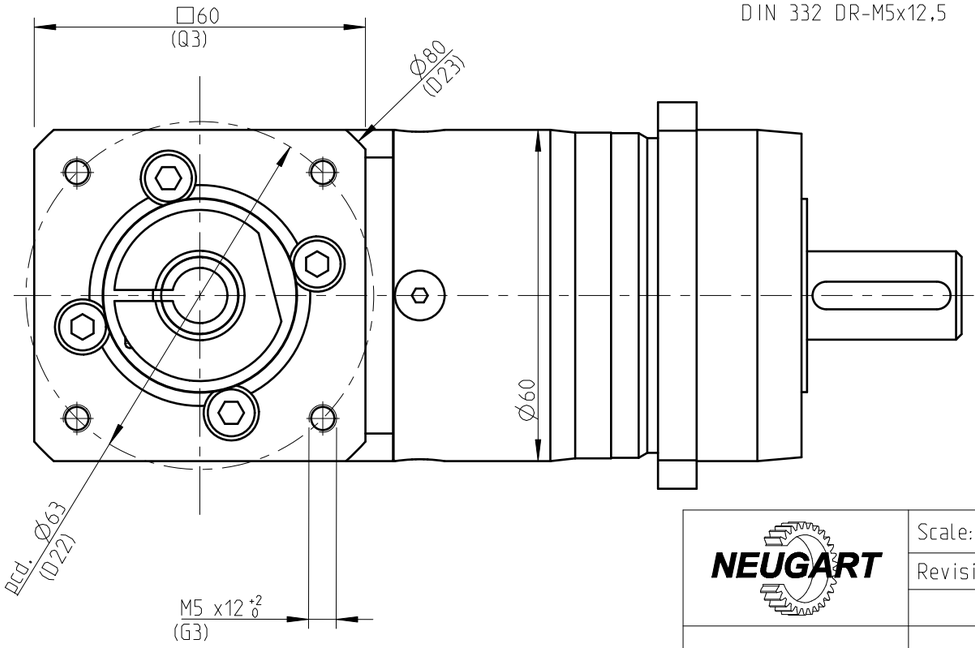


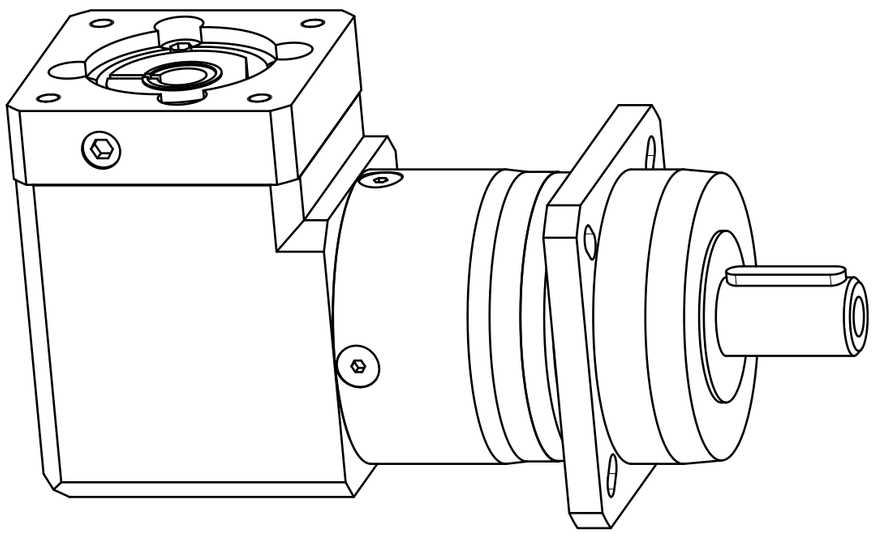




Materials / Surfaces:
Input flange: Aluminum / untreated
Angle housing: Aluminum / untreated
Housing: Steel / heat-treated and post-oxidized (black)
Output flange: Steel / untreated

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.

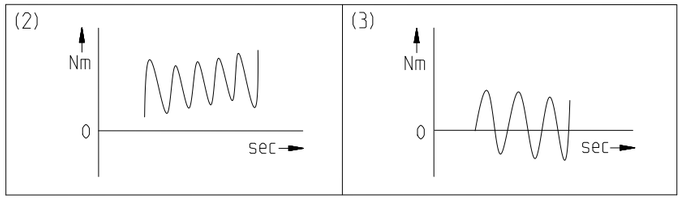


NEUGART	Scale: 9:10	DIN A3	ISO
	Revision status: A from: 05/2022		
General tolerance DIN ISO 2768-cL	WPLHE060-aii-SSSA3AD-Y(D20) /(L20)/(D21)/(D22)/B5/(G3)		
Neugart GmbH Keltenstr. 16 D-77971 Kippenheim			Sheet 1/2

General gearbox data	Character	Unit	
Bevel gearbox - gearing type	-	-	Straight teeth
Rotation direction	-	-	Input and output in the same direction
Number of stages	p	-	1-stage
Output shaft bearing	-	-	Tapered roller bearing
Service life (L10h)	t_L	h	20.000
Max. operating temperature	T_{min} / T_{max}	°C	-25 / +90
Protection class	-	-	IP 65
Right angle gearbox lubrication (lubricated for life)	-	-	Standard lubrication (Klüberplex BEM 34-132)
Planetary gearbox lubrication (lubricated for life)	-	-	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	5
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_{20min}	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 center after L10h=20,000h with Fa=0N	$F_{r\ 20.000h}$	N	3200
Axial force for output bearing based on gearbox axis after L10h=20,000h with Fr=0N	$F_{a\ 20.000h}$	N	4400
Radial force for output bearing based on shaft center after L10h=30,000h with Fa=0N	$F_{r\ 30.000h}$	N	3200
Axial force for output bearing based on gearbox axis after L10h=30,000h with Fr=0N	$F_{a\ 30.000h}$	N	3900
Maximum radial force based on shaft center and T2=0Nm	$F_{r\ Max}$	N	3200
Maximum axial force based on gearbox axis and T2=0Nm	$F_{a\ Max}$	N	4400

(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	aii	-	3	4	5	7	8	10
Nominal output torque No alternating torque (2)	T_{2N}	Nm	14	19	24	25	18	15
Nominal output torque Alternating torque permitted for 10,000,000 load changes (3)	$T_{2N\ 10Mio}$	Nm	14	19	24	25	18	15
Nominal output torque Alternating torque permitted for 100,000,000 load changes (3)	$T_{2N\ 100Mio}$	Nm	14	19	24	25	18	15
Max. output torque for 30,000 output shaft rotations (2)	T_{2max}	Nm	22	30	38	40	29	24
Emergency stop torque permitted 1000 times	T_{2Stop}	Nm	66	86	80	80	80	70
Average idle torque for n1=3,000 rpm and 20 °C gearbox temperature	T_0	Nm	0,65	0,5	0,4	0,35	0,3	0,3
Average thermal input speed at 50% T2N, S1, and T_Amb Operating temperature may not be exceeded!	$n_{1N\ 50\%}$	rpm	2650	3100	3450	4250	4500	4500
Average thermal input speed at 100% T2N, S1, and T_Amb Operating temperature may not be exceeded!	$n_{1N\ 100\%}$	rpm	2250	2550	2750	3450	4200	4500
Max. mechanical input speed Operating temperature may not be exceeded!	$n_{1\ Limit}$	rpm	13000	13000	13000	13000	13000	13000
Torsional backlash based on output shaft	j_t	arcmin	< 16	< 16	< 16	< 16	< 16	< 16
Torsional stiffness based on output shaft	c_g	Nm/arcmin	2	2,7	3,1	3,2	3,2	3
Efficiency at T2N, gearbox temperature 70 °C and n1=1.000rpm	η	%	91	92	92	92	90	88
Running noise at n1=3,000 rpm without load at a distance of 1m	Q_g	dB(A)	70	70	70	70	70	70
Gearbox weight	m_G	kg	2,3	2,3	2,3	2,3	2,3	2,3
Mass moment of inertia based on clamping system diameter input	J	kgcm²	0,419	0,288	0,266	0,246	0,243	0,237

Subject to modifications.

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W PLHE060-aii-SSSA3AD-Y(D20) /(L20)/(D21)/(D22)/B5/(G3)

Revision status: A from: 05/2022