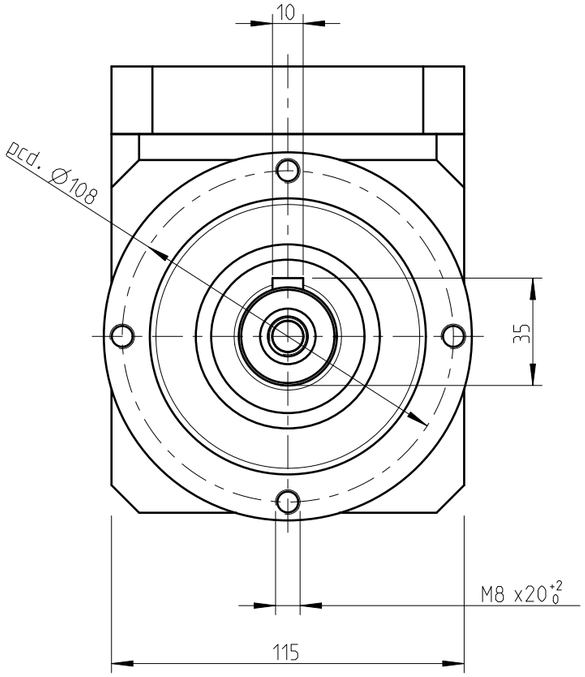
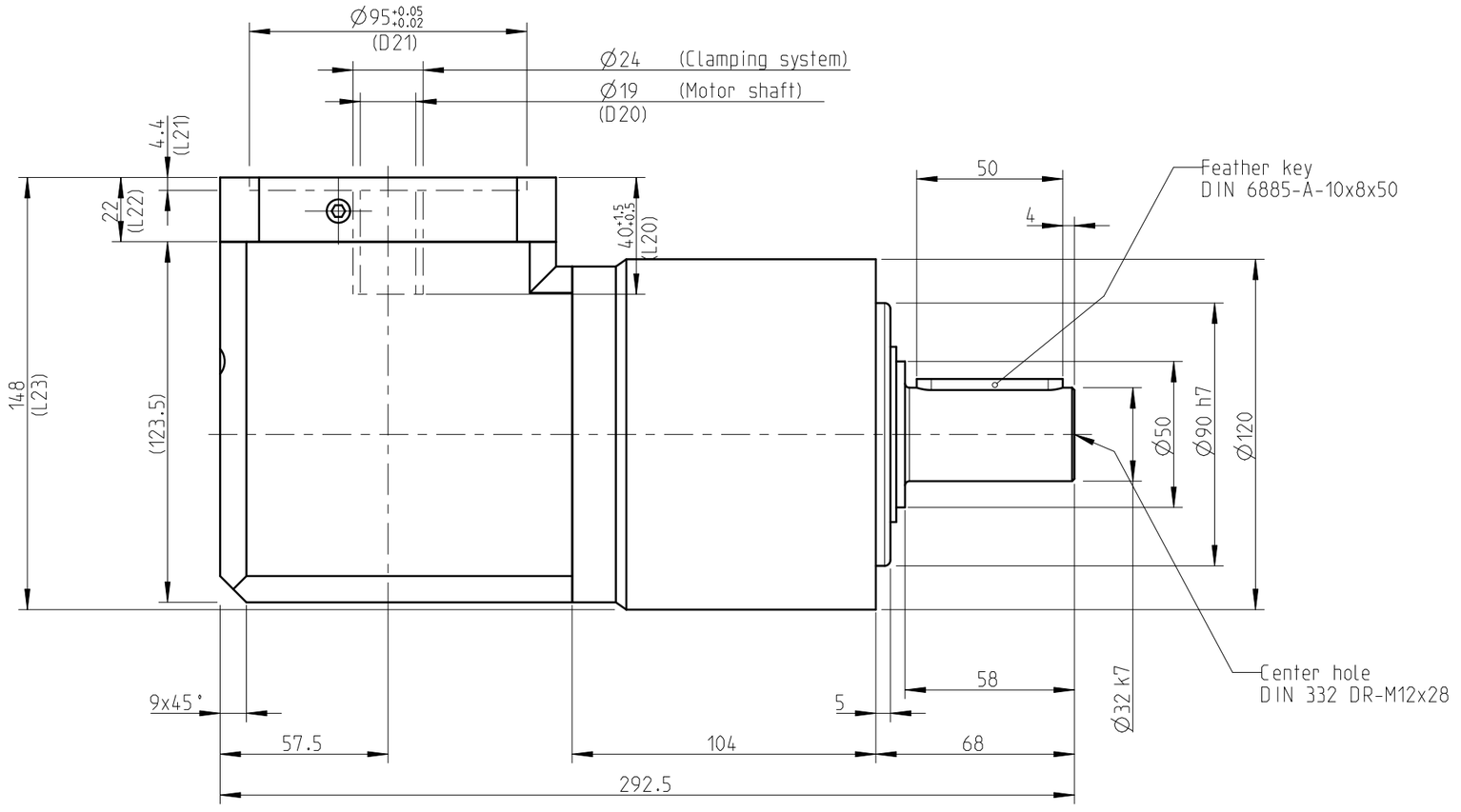
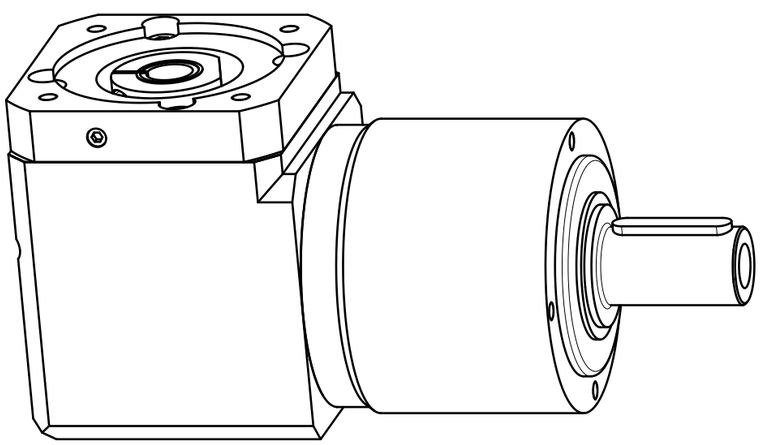


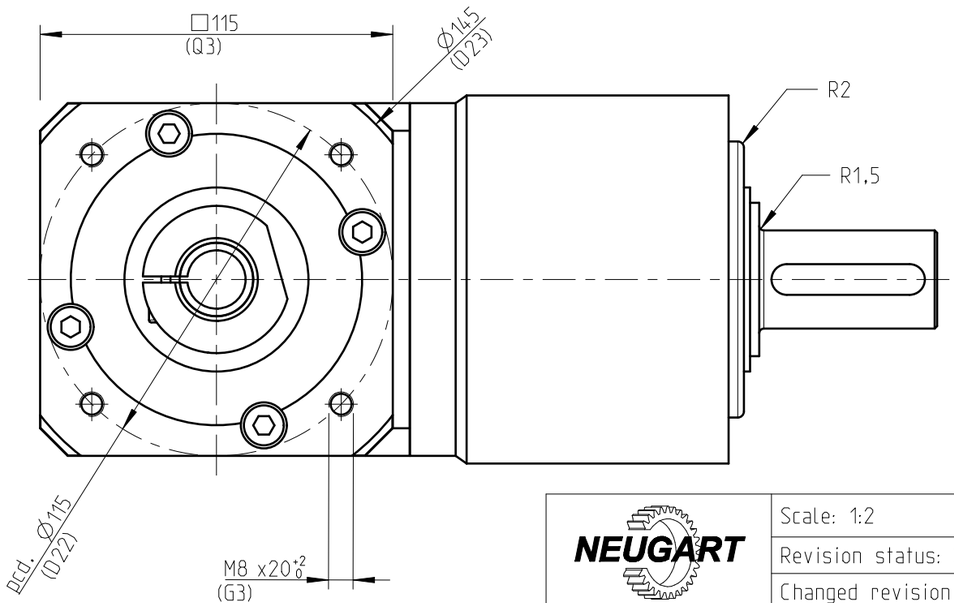


Materials / Surfaces:
Input flange: Aluminum / untreated
Angle housing: Aluminum / untreated
Housing: Steel / heat-treated and post-oxidized (black)
Output flange: Steel / heat-treated and post-oxidized (black)

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.





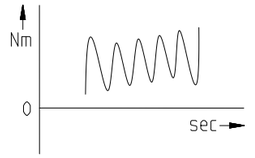
NEUGART	Scale: 1:2	DIN A3	ISO
	Revision status: G from: 09/2022		
	Changed revision status: F from: 02/2022		
General tolerance DIN ISO 2768-cL	WPLPE120-bii-SSSA3AF-Y(D20) /(L20)/(D21)/(D22)/B5/(G3)		
Neugart GmbH Keltenstr. 16 D-77971 Kippenheim			Sheet 1/2

General gearbox data	Character	Unit	
Bevel gearbox - gearing type	-	-	Straight teeth
Rotation direction	-	-	Input and output in the same direction
Number of stages	p	-	2-stage
Output shaft bearing	-	-	Deep groove ball bearing
Service life (L10h)	t_L	h	20.000
Max. operating temperature	T_{min} / T_{max}	°C	-25 / +90
Protection class	-	-	IP 54
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	26
Motor shaft concentricity / Coaxiality and axial runout Motor flange	-	mm	0,04 / 0,08 (Measuring methods according to DIN EN 50347)
Required motor shaft tolerance	-	-	j6; k6
Min. permissible motor shaft length	$L_{20\ min}$	mm	18
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	2500
Axial force for output bearing based on gearbox axis after L10h=20,000h with Fr=0N	$F_{a\ 20.000h}$	N	4000
Radial force for output bearing based on shaft center after L10h=30,000h with Fa=0N	$F_{r\ 30.000h}$	N	2150
Axial force for output bearing based on gearbox axis after L10h=30,000h with Fr=0N	$F_{a\ 30.000h}$	N	3000
Maximum radial force based on shaft center and T2=0Nm	$F_{r\ Max}$	N	4000
Maximum axial force based on gearbox axis and T2=0Nm	$F_{a\ Max}$	N	5900

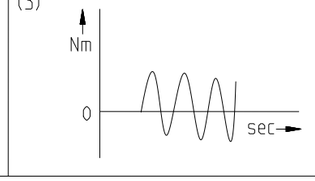
(1) Max. motor weight* in kg = $\frac{0{,}2 \times M_b}{\text{motor length in m}}$

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

(2)



(3)



Ratio-dependent gearbox data	Character	Unit										
Ratio	bii	-	9	12	15	16	20	25	32	40	64	100
Nominal output torque No alternating torque (2)	T_{2N}	Nm	157	195	172	195	195	172	195	172	120	95
Nominal output torque Alternating torque permitted for 10,000,000 load changes (3)	$T_{2N\ 10Mio}$	Nm	157	195	172	195	195	172	195	172	120	95
Nominal output torque Alternating torque permitted for 100,000,000 load changes (3)	$T_{2N\ 100Mio}$	Nm	157	190	172	190	190	172	190	172	120	95
Max. output torque for 30,000 output shaft rotations (2)	T_{2max}	Nm	251	312	275	312	312	275	312	275	192	152
Emergency stop torque permitted 1000 times	T_{2Stop}	Nm	500	520	500	520	520	500	520	500	380	430
Average idle torque for n1=3,000 rpm and 20 °C gearbox temperature	T_0	Nm	1,55	1,45	1,05	1,2	1	1	0,85	0,85	0,85	0,8
Average thermal input speed at 50% T2N, S1, and T_Amb Operating temperature may not be exceeded!	$n_{1N\ 50\%}$	rpm	2950	3050	3450	3450	3500	3500	3500	3500	3500	3500
Average thermal input speed at 100% T2N, S1, and T_Amb Operating temperature may not be exceeded!	$n_{1N\ 100\%}$	rpm	2100	2150	2650	2550	2900	3400	3500	3500	3500	3500
Max. mechanical input speed Operating temperature may not be exceeded!	$n_{1\ Limit}$	rpm	6500	6500	6500	6500	6500	6500	6500	6500	6500	6500
Torsional backlash based on output shaft	j_t	arcmin	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13
Torsional stiffness based on output shaft	c_g	Nm/arcmin	29,5	35,5	35	37,5	38,5	37	39	37	29,5	21
Efficiency at T2N, gearbox temperature 70 °C and n1=1.000rpm	η	%	94	94	93	93	93	91	91	90	84	75
Running noise at n1=3,000 rpm without load at a distance of 1m	Q_g	dB(A)	75	75	75	75	75	75	75	75	75	75
Gearbox weight	m_G	kg	13,4	13,4	13,4	13,4	13,4	13,5	13,5	13,5	13,5	13,7
Mass moment of inertia based on clamping system diameter input	J	kgcm²	3,643	3,557	3,527	3,026	2,848	2,837	2,689	2,685	2,68	2,643

Subject to modifications.

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WPLPE120-bii-SSSA3AF-Y(D20)/(L20)/(D21)/(D22)/B5/(G3)

Revision status: G from: 09/2022