

Engineering motordata (WIN -100030)

DC bus voltage	24 V DC
Nominal AC voltage	17 V AC (rms)
Rated voltage	13 V AC (rms)
Rated power	2.6 kW
Rated speed	3000 rpm
Rated torque	8.40 Nm
Rated current	131.42 A (rms)
Peak torque	31.5 Nm
Peak current	820.9 A (rms)
Stall torque	11.6 Nm
Stall current	172.7 A (rms)
No load speed	4180 rpm
EMF constant ±10%	4.06 V AC (rms) / 1000rpm
Theoretical torque constant ±10%	0.067 Nm / A (rms)
Torque constant ±10% @ rated load	0.064 Nm / A (rms)
Number of poles	10
Electrical time constant	6.67 ms
Winding terminal resistance	0.003 Ω
Rotary field terminal inductance	0.02 mH

Customs info

HS Code	85015220
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Mechanical motor data (setting 5)

Max mechanical speed	9000 rpm
Mech. time constant	0.97 ms
Thermal time constant	30 min
Rotor inertia	8.4 kgcm ²
Protection	IP65
Color	RAL 9005
Cooling	Convection

Sensors

Temperature	PT1000 {PT1000}
Feedback	AD36 (BISS-C) multi-turn, 22+12 bits, 5 VDC

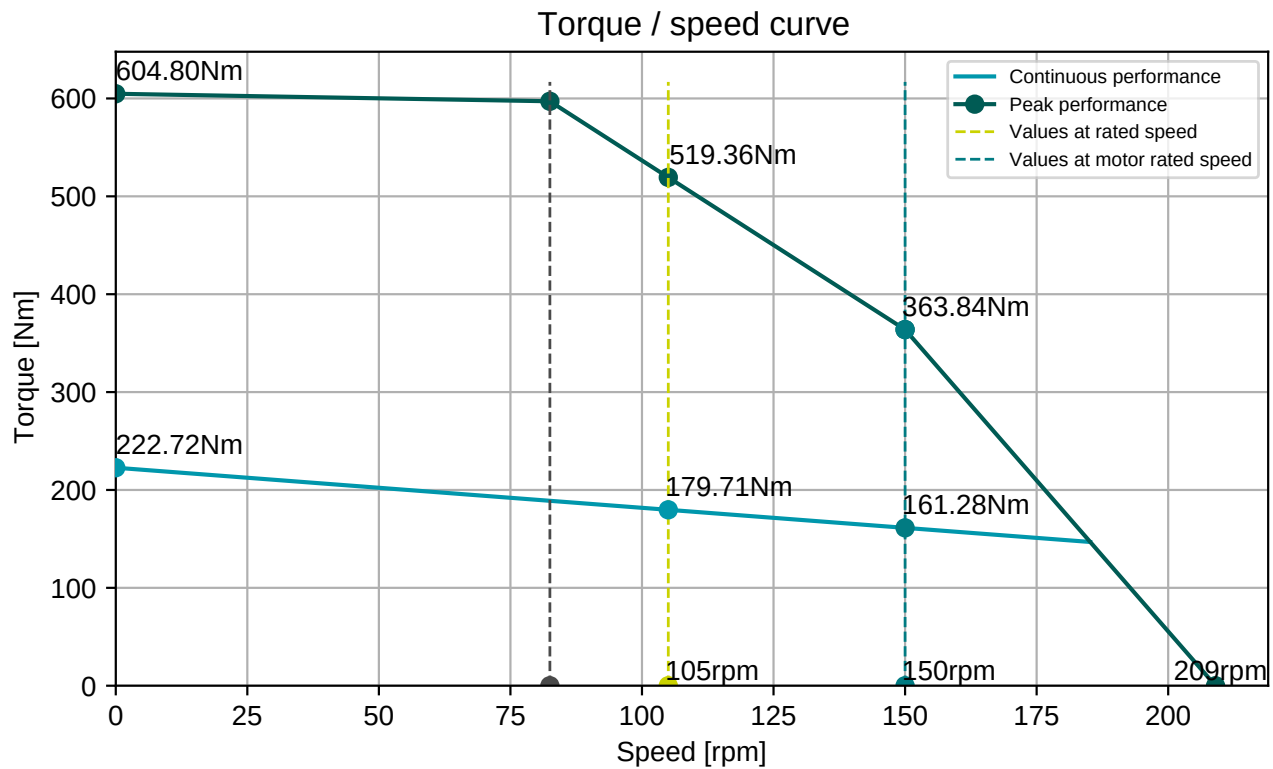
Brake

Braking torque	18.00 Nm
Voltage	24 V DC
Power @20°C	24.0 W
Current @20°C	1.00 A
Inertia	2.00 kgcm ²
Mass	1.80 kg

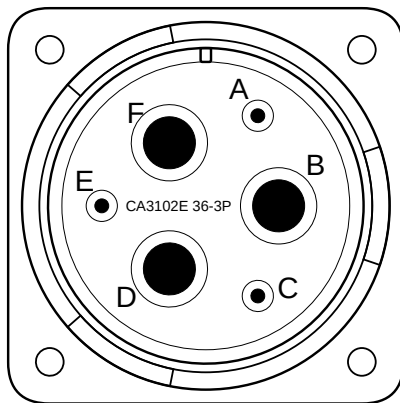
Gearbox engineering data		Gearbox mechanical data	
Gear ratio	20	Radial force for 20'000h	12000 N
Efficiency	96 %*	Radial force for 30'000h	11000 N
Torsional stiffness	223 Nm/arcmin	Max. radial force	12000 N
Number of stages	2	Axial force for 20'000h	8500 N
Rated output torque	500 Nm	Axial force for 30'000h	7500 N
Cycling output torque	1000 Nm	Max. axial force	8500 N
Max output torque	1540 Nm	Tilting moment for 20'000h	1219 Nm
Emergency output torque	2000 Nm	Tilting moment for 30'000h	1117 Nm
Rated input speed	2100 rpm	Max. bending moment	80 Nm
Max input speed	8500 rpm	Output shaft design	Flange
Operating temperature	<-40; 60> °C	Mass	14.81 kg
Max. backlash	< 1 arcmin	Input inertia	2.423 kgcm ²
Service life	20000 h	Protection	IP65

* at rated speed & torque

Lubrication		Actuator data	
Type	Low temperature	Rated speed	105 rpm
Lubricant	Klübersynth GH 6-32	Rated torque	179.71 Nm
		Cycling torque	604.80 Nm
		Peak torque	604.80 Nm
		Emergency stop torque	630.00 Nm
		EMF constant ±10%	81.2 V AC (rms) / 1000rpm
		Torque constant ±10% @ rated load	1.23 Nm / A (rms)
		Output inertia	4329.2 kgcm ²



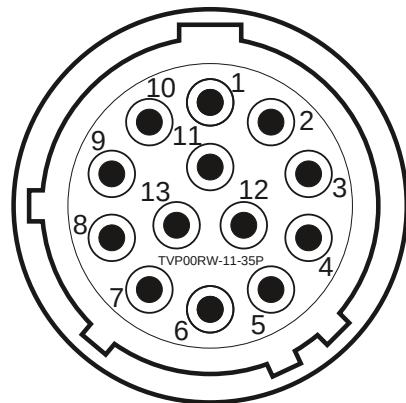
CA3102E36-3P-B-A232-F0



Connector 1 (454)

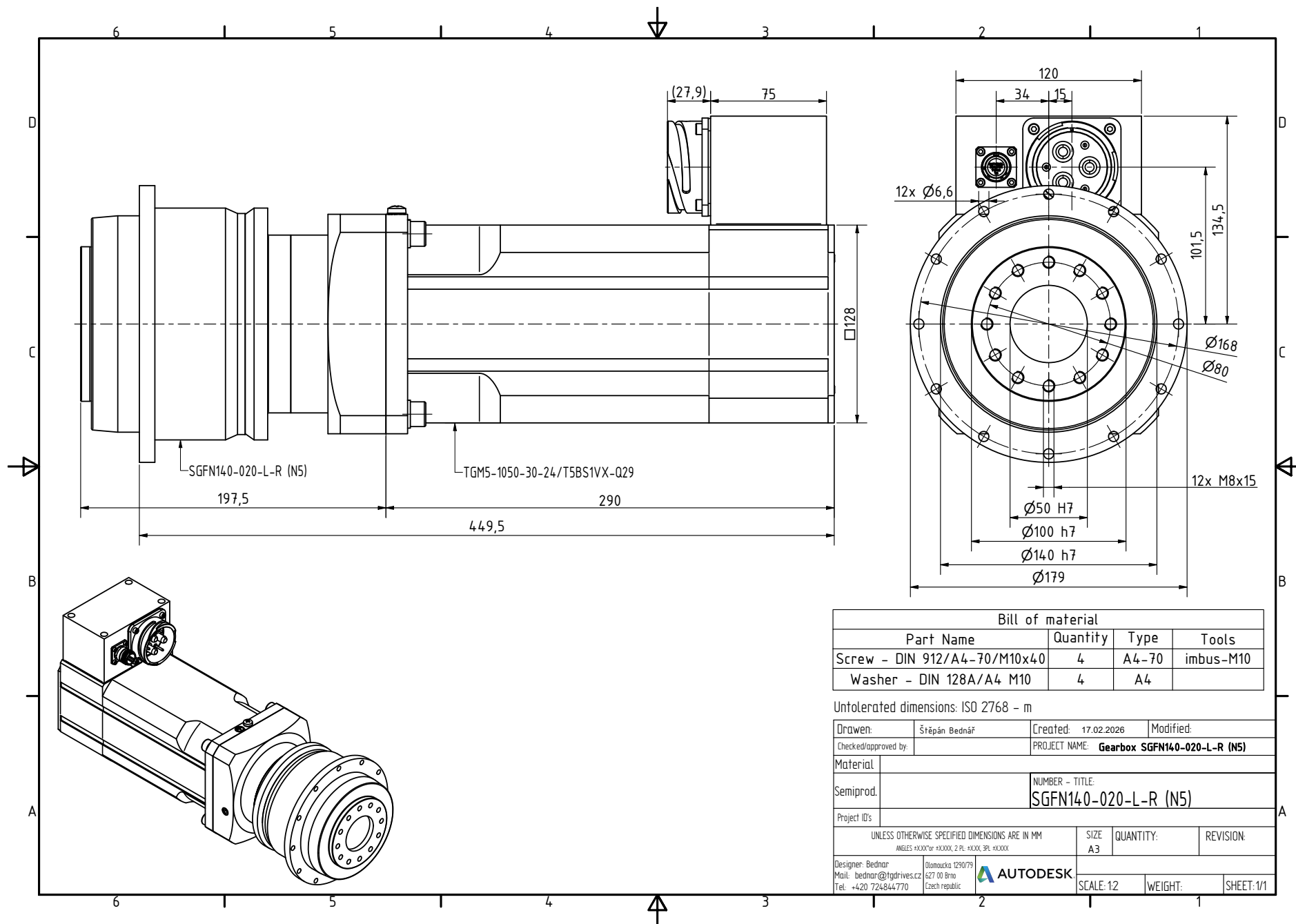
B	U
C	Brake+
D	V
E	Brake-
F	W

TVP00RW-11-35P



Connector 2 (520)

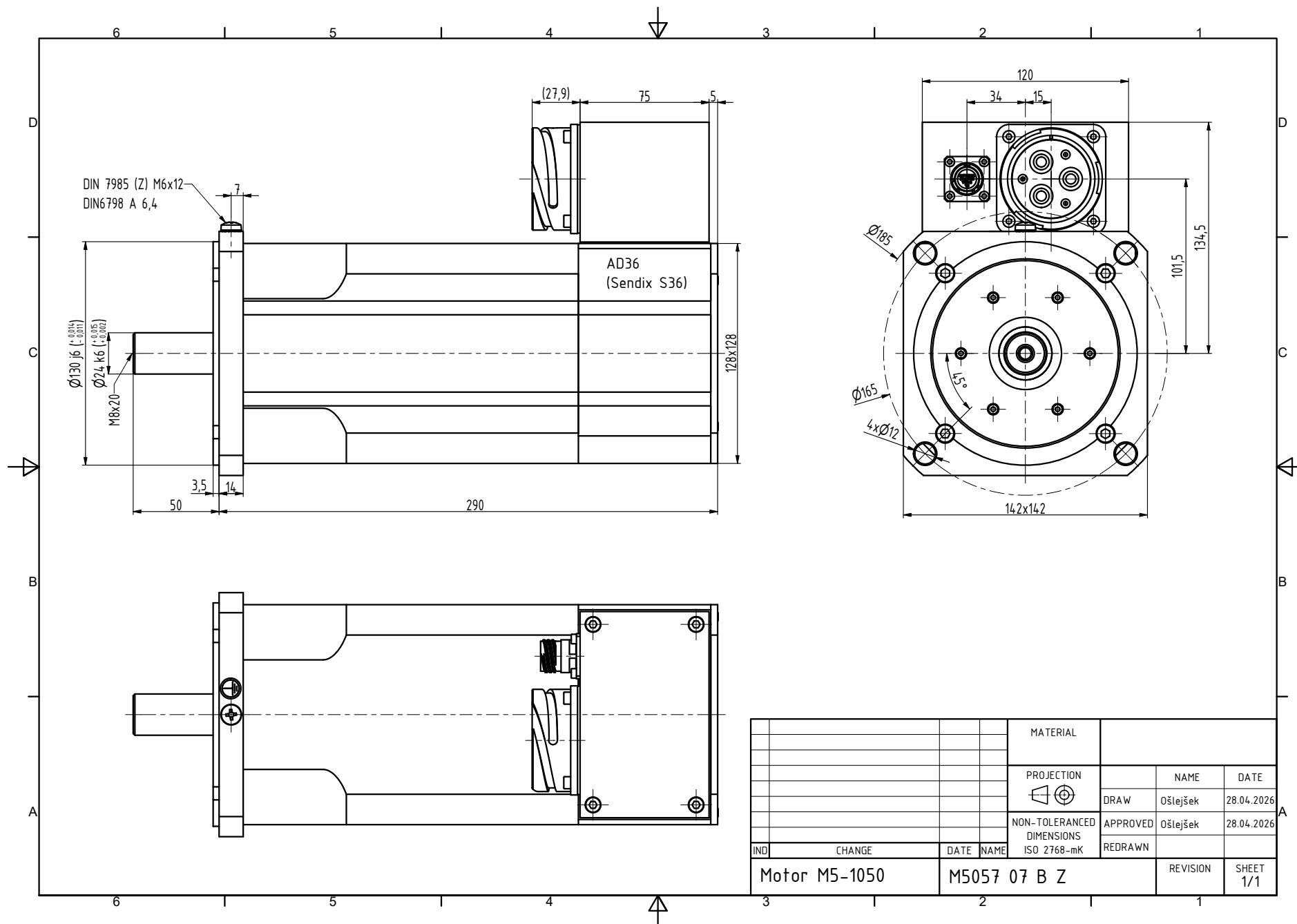
1	Vcc
2	GND
3	DATA
4	DATA-
5	CLOCK
6	CLOCK-
7	Therm+
8	Therm-

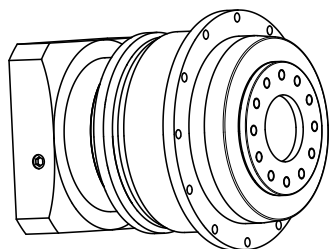
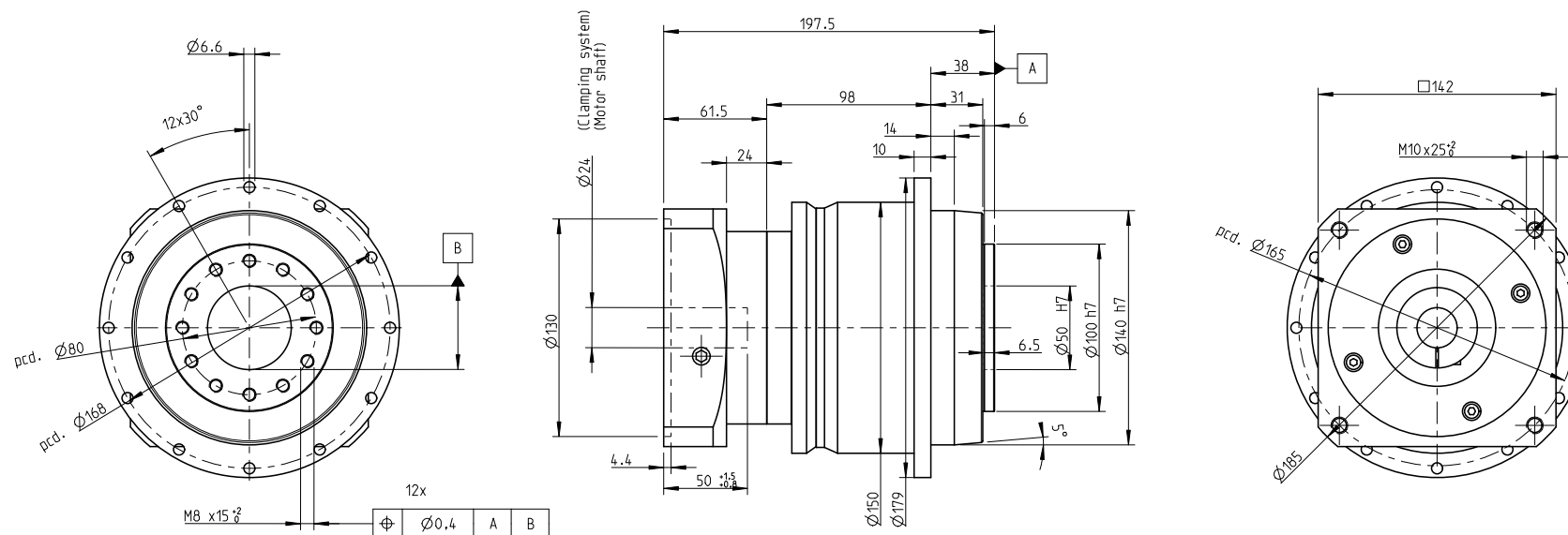


Bill of material			
Part Name	Quantity	Type	Tools
Screw - DIN 912/A4-70/M10x40	4	A4-70	imbus-M10
Washer - DIN 128A/A4 M10	4	A4	

Untolerated dimensions: ISO 2768 - m

Drawn:	Štěpán Bednář	Created: 17.02.2026	Modified:
Checked/approved by:		PROJECT NAME:	Gearbox SGFN140-020-L-R (N5)
Material:			
Semiprod.	NUMBER - TITLE: SGFN140-020-L-R (N5)		
Project ID's			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM ANGLES: x/xx° or x/xx', 2 PL: x/xx, 3 PL: x/xx		SIZE A3	QUANTITY:
		REVISION:	
		SCALE: 1:2	WEIGHT:
		SHEET: 1/1	





INDEX	ZMENA	DATUM	PODPIS		
ZM.MAT.			T.O.	HMOTNOST kg	MEŘ.
ROZM.-POLOT.					
ROZM. ZAR.				ČSN	TR.Č.
VYPR.	NORM. REF.			POZN.	Č. KUSOVNÍKU
PŘEKR.					
TECHNOL.	SCHVÁLIL.	12.9.2020	STARÝ V.	Č.V.	
NÁZEV				TGN5, TGT5, TGH5	
Gearbox SGFN140				Listů	List