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

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	kgcm²
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	kgcm²
Mass	1.80	kg

Gearbox engineering data		
Gear ratio	20	
Efficiency*	96	%
Torsional stiffness	223	Nm/arcmin
Number of stages	2	
Rated output torque	500	Nm
Cycling output torque	1000	Nm
Max output torque	1540	Nm
Emergency output torque	2000	Nm
Rated input speed	2100	rpm
Max input speed	8500	rpm
Operating temperature	<-40; 60>	°C
Max. backlash	< 1	arcmin
Service life	20000	h

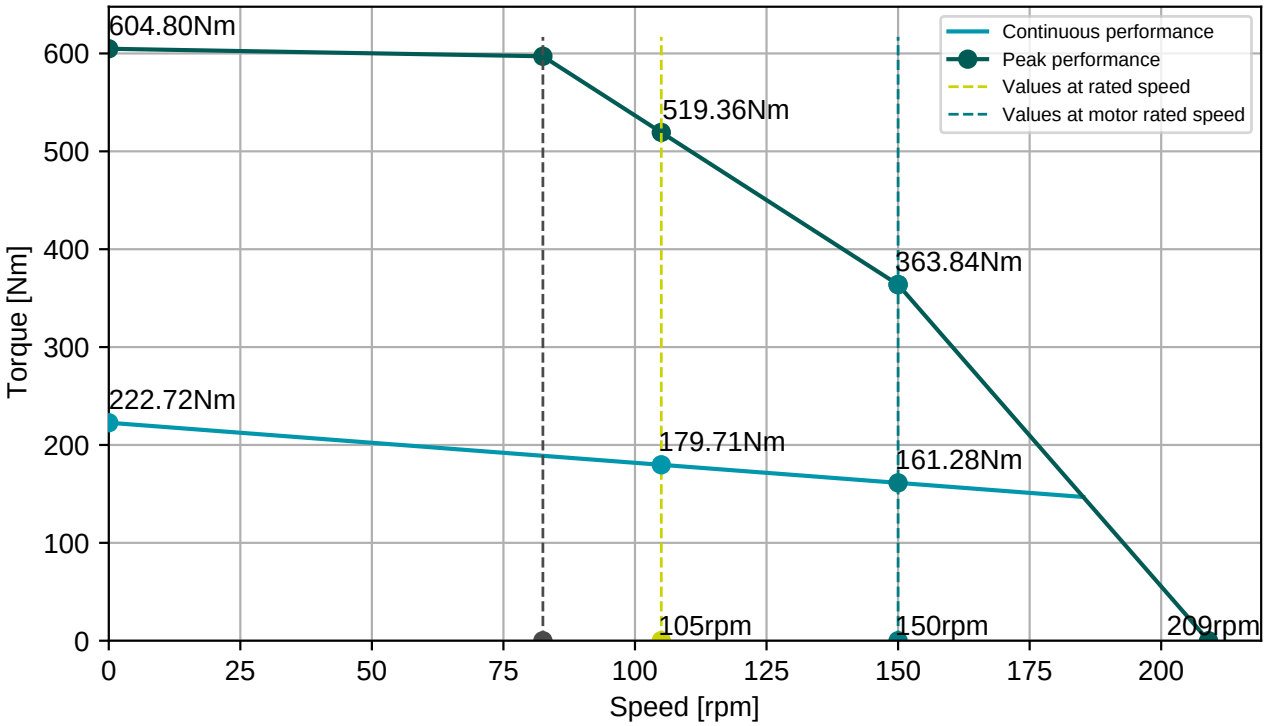
** at rated speed & torque*

Gearbox mechanical data		
Radial force for 20'000h	12000	N
Radial force for 30'000h	11000	N
Max. radial force	12000	N
Axial force for 20'000h	8500	N
Axial force for 30'000h	7500	N
Max. axial force	8500	N
Tilting moment for 20'000h	1219	Nm
Tilting moment for 30'000h	1117	Nm
Max. bending moment	80	Nm
Output shaft design	Flange	
Mass	14.81	kg
Input inertia	2.423	kgcm²
Protection	IP65	

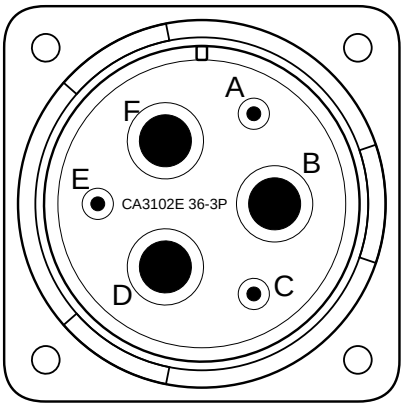
Lubrication	
Type	Low temperature
Lubricant	Klübersynth GH 6-32

Actuator data		
Rated speed	105	rpm
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	kgcm²

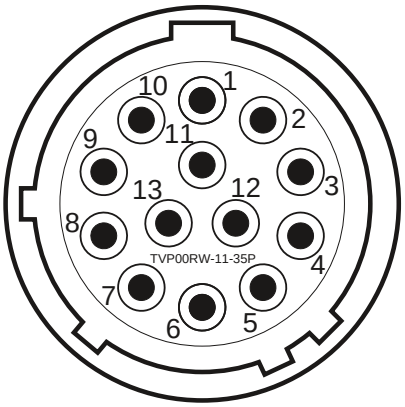
Torque / speed curve



CA3102E36-3P-B-A232-F0

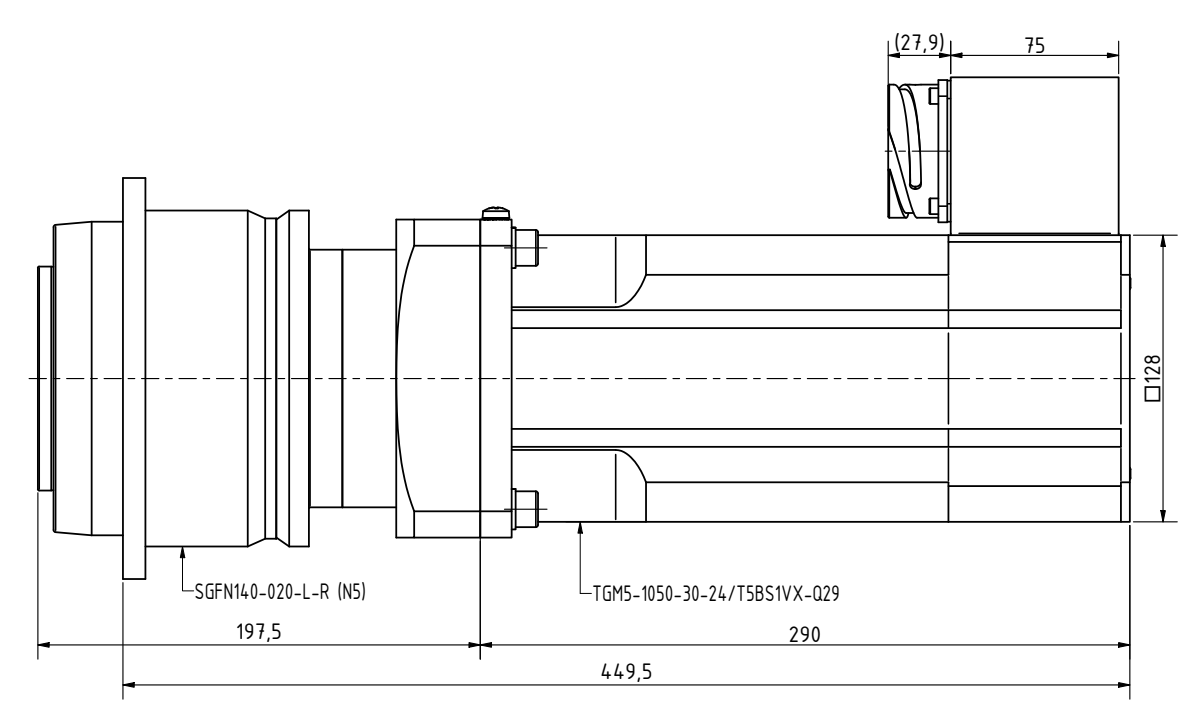


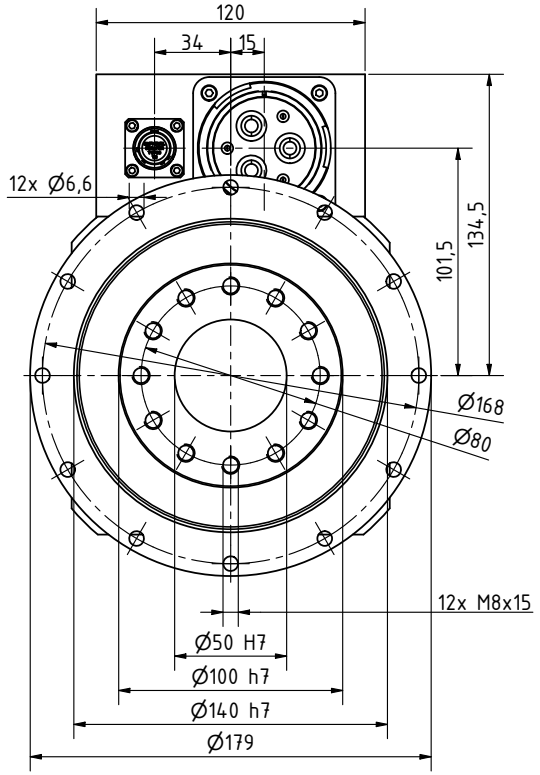
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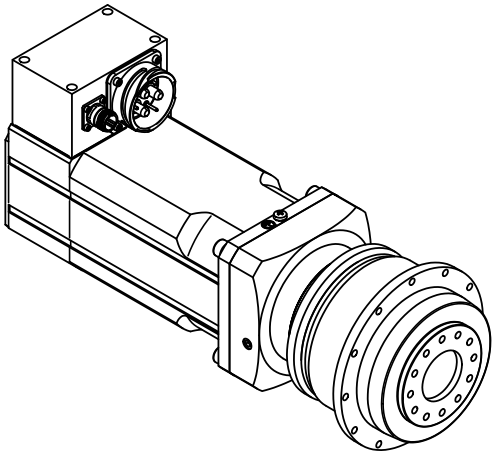


Connector 1 (454)	
B	U
C	Brake+
D	V
E	Brake-
F	W

Connector 2 (520)	
1	Vcc
2	GND
3	DATA
4	DATA-
5	CLOCK
6	CLOCK-
7	Therm+
8	Therm-



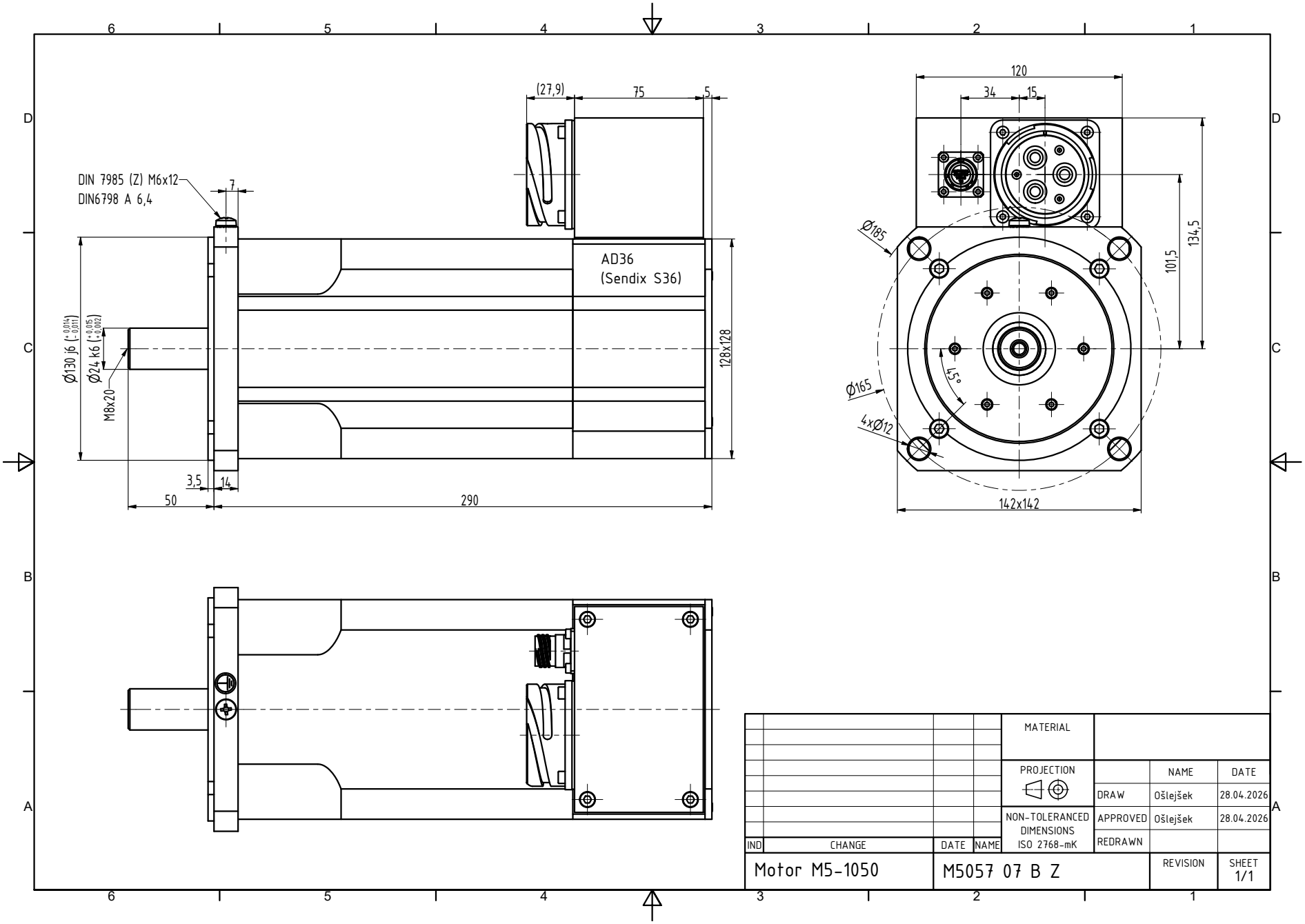


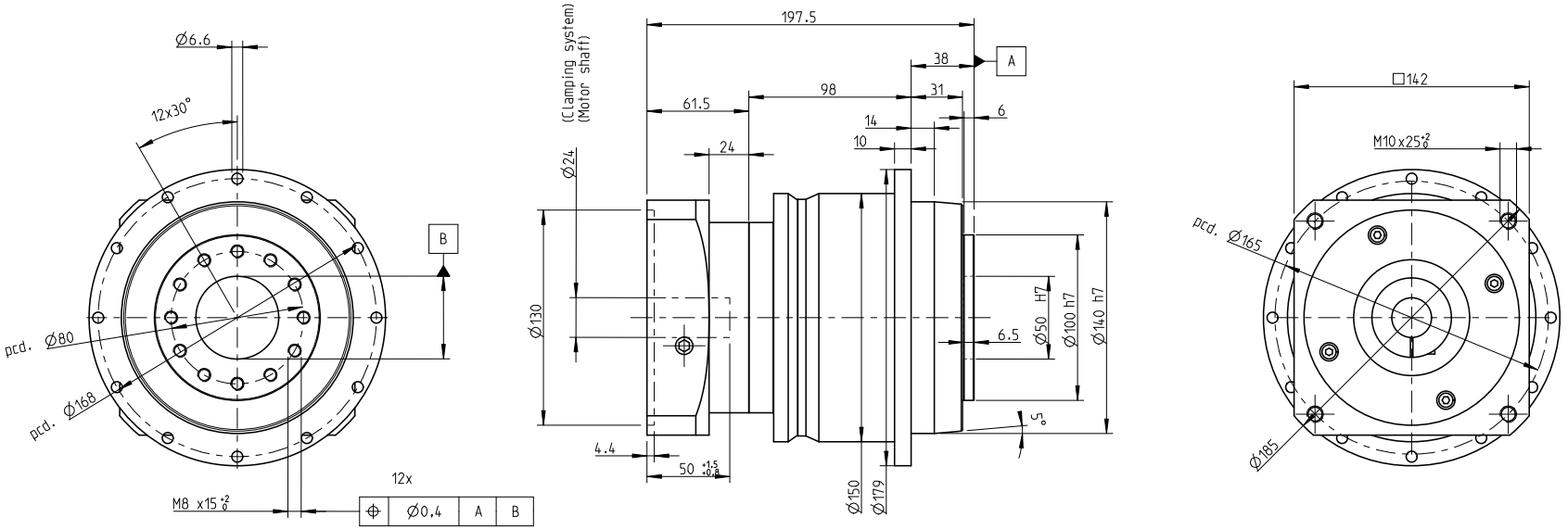


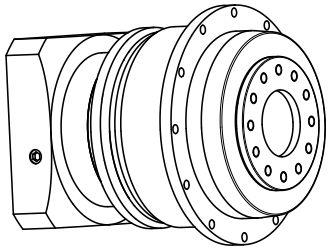
Bill of material			
Part Name	Quantity	Type	Tools
Screw - DIN 912/A4-70/M10x40	4	A4-70	imbus-M10
Washer - DIN 128A/A4 M10	4	A4	

Untolerated dimensions: ISO 2768 - m

Drawen:	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 ±XXX° or ±XXXX, 2 PL ±XXX, 3PL ±XXXX		SIZE A3 / QUANTITY:	REVISION:
Designer: Bednar Mail: bednar@tgdrives.cz Tel: +420 724844770	Olomoucka 1290/79 627 00 Brno Czech republic	AUTODESK	SCALE: 1:2 / WEIGHT: / SHEET: 1/1


DIN 7985 (Z) M6x12
DIN6798 A 6,4
7
(27,9)
75
5
AD36
(Sendix S36)
Ø130 j6 (+0,014 -0,011)
Ø24 k6 (+0,015 +0,002)
M8x20
128x128
3,5
14
50
290
120
34
15
Ø185
101,5
134,5
45°
Ø165
4xØ12
142x142
MATERIAL
PROJECTION
NON-TOLERANCED DIMENSIONS ISO 2768-mK
IND
CHANGE
DATE
NAME
NAME
DATE
DRAW
Ošlejšek
28.04.2026
APPROVED
Ošlejšek
28.04.2026
REDRAWN
Motor M5-1050
M5057 07 B Z
REVISION
SHEET
1/1





INDEX	ZMĚNA	DATUM	PODPIS		
ZM.MAT.			T.O.	HMOTNOST kg	MĚŘ.
ROZM.-POLOT.					
ROZM. ZAŘ.				ČSN	TŘ.Č.
VYPR.	NORM. REF.			POZN.	Č. KUSOVNÍKU
PŘEKR.					
TECHNOL.	SCHVÁLIL.		12.9.2020	STARÝ V.	Č.V.

NÁZEV

Gearbox SGFN140

TGN5, TGT5, TGH5

Listů List