Engineering motordata (WIN 1558)		
DC bus voltage	24	V DC
Nominal AC voltage	17	V AC (rms)
Rated voltage	14	V AC (rms)
Rated power	1.0	kW
Rated speed	3000	rpm
Rated torque	3.20	Nm
Rated current	47.77	A (rms)
Peak torque	11.1	Nm
Peak current	230.8	A (rms)
Stall torque	4.05	Nm
Stall current	57.9	A (rms)
No load speed	4010	rpm
EMF constant ±10%	4.23	V AC (rms) / 1000rpm
Theoretical torque constant ±10%	0.07	Nm / A (rms)
Torque constant ±10% @ rated load	0.07	Nm / A (rms)
Number of poles	10	
Electrical time constant	3.85	ms
Winding terminal resistance	0.013	Ω
Rotary field terminal inductance	0.05	mH

Customs info	
HS Code	85015220

Mechanical motor data (setting 30)		
Max mechanical speed	9000	rpm
Mech. time constant	1.10	ms
Thermal time constant	37	min
Rotor inertia	2.4	kgcm²
Protection	IP67	
Color	EPOX3(RAL9005)	
Cooling	Convection	

Sensors	
Temperature	PT1000 {PT1000}
Feedback	ECN1325 (EnDat 2.2) single-turn, 25 bits

Brake		
Braking torque	5.00	Nm
Voltage	24	V DC
Power @20°C	18.8	W
Current @20°C	0.78	A
Inertia	0.14	kgcm²
Mass	0.90	kg

Gearbox engineering data		
Gear ratio	7	
Efficiency*	95	%
Torsional stiffness	4	Nm/arcmin
Number of stages	1	
Rated output torque	39	Nm
Max output torque	59	Nm
Emergency output torque	80	Nm
Rated input speed	3450	rpm
Max input speed	10000	rpm
Operating temperature	<-40; 50>	°C
Max. backlash	< 3	arcmin
Service life	20000	h

** at rated speed & torque*

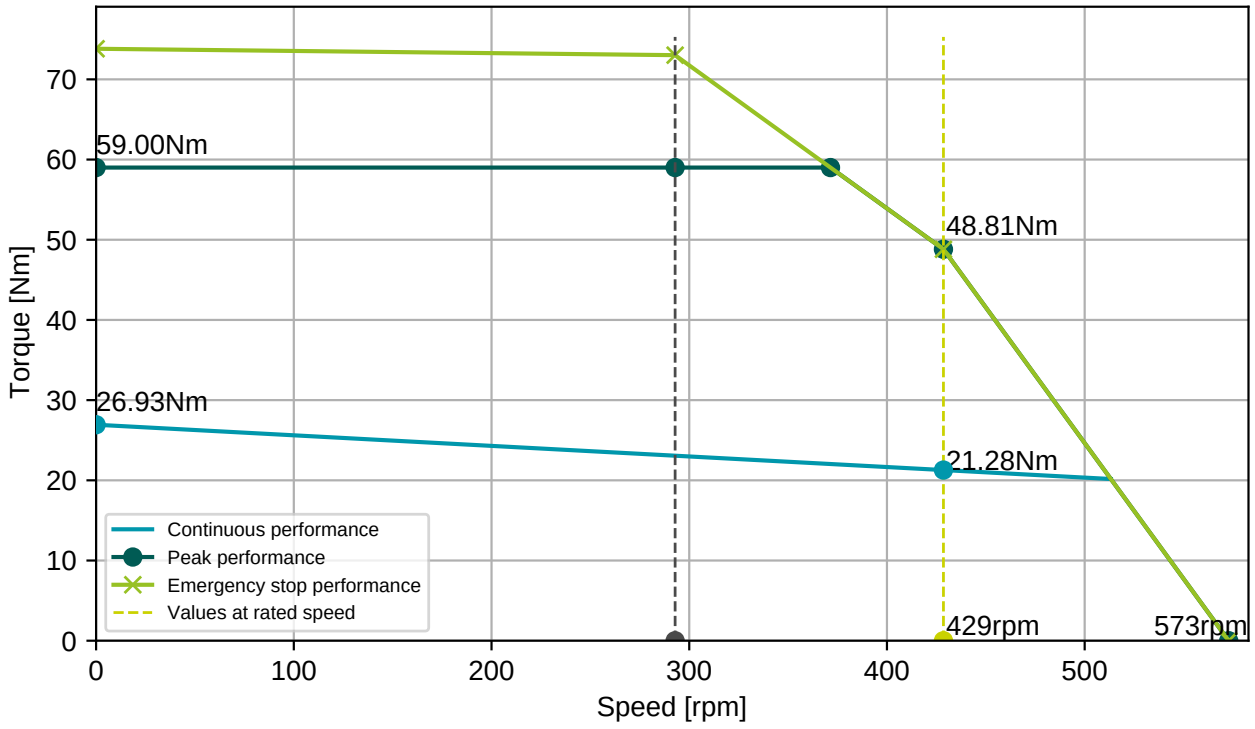
Lubrication	
Type	Low temperature
Lubricant	Klübersynth GH 6-32

Gearbox mechanical data		
Max. radial force*	3200	N
Max. axial force	3400	N
Output shaft design	Shaft key	
Mass	2.6	kg
Input inertia	0.39	kgcm²
Protection	IP65	

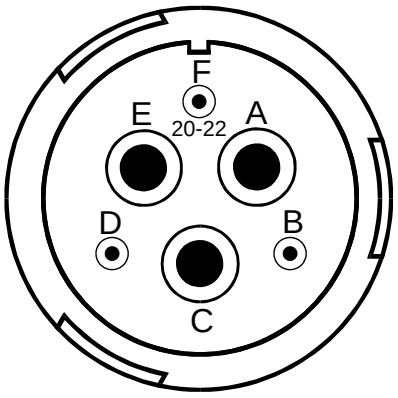
** Defined for point of action at ½ output shaft length*

Actuator data		
Rated speed	429	rpm
Rated torque	21.28	Nm
Peak torque	59.00	Nm
Emergency stop torque	77.70	Nm
EMF constant ±10%	29.6	V AC (rms) / 1000rpm
Torque constant ±10% @ rated load	0.45	Nm / A (rms)
Output inertia	136.7	kgcm²

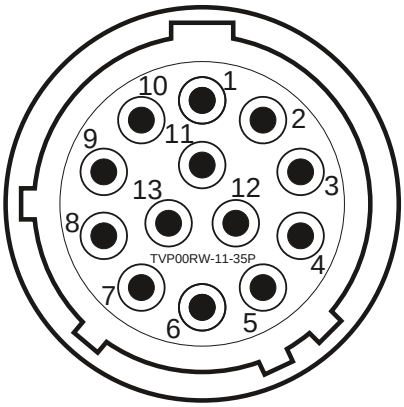
Torque / speed curve



CA3102E20-22P-B-F80-A232

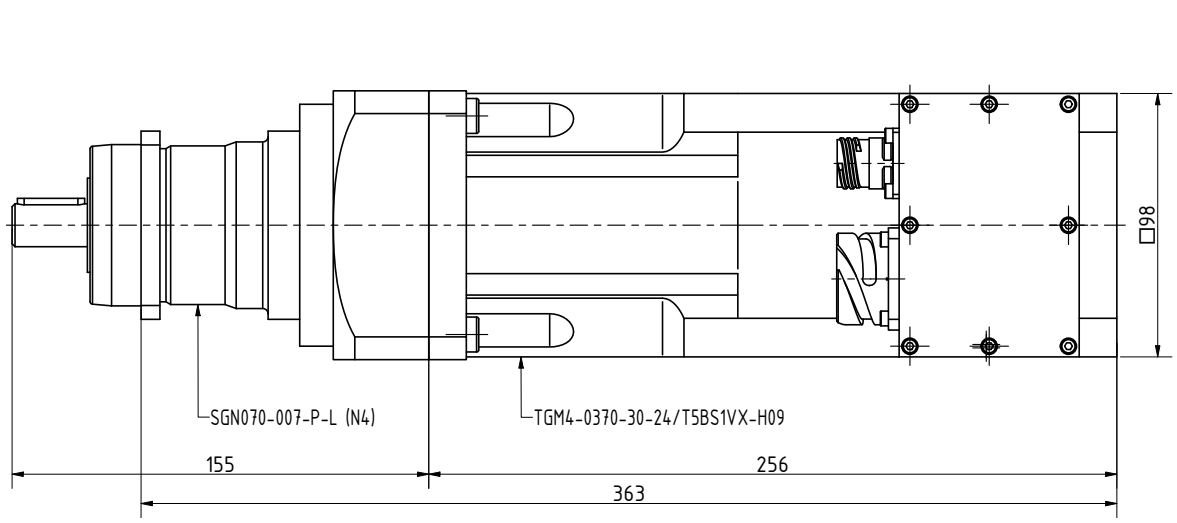


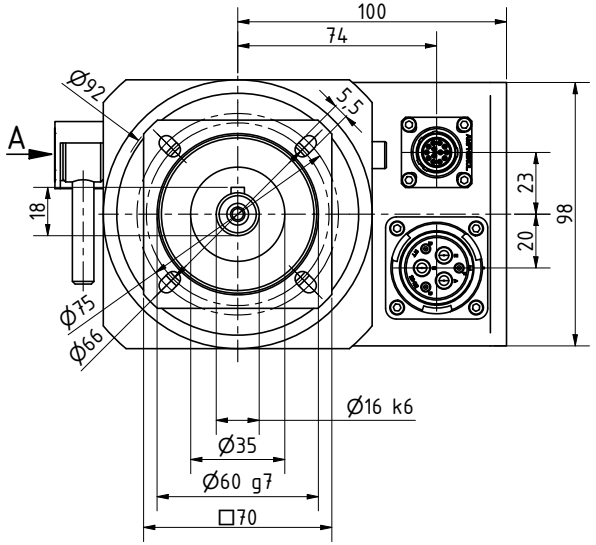
D38999/20ZB35PN

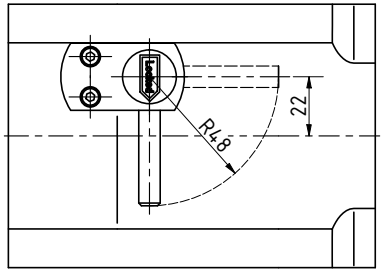


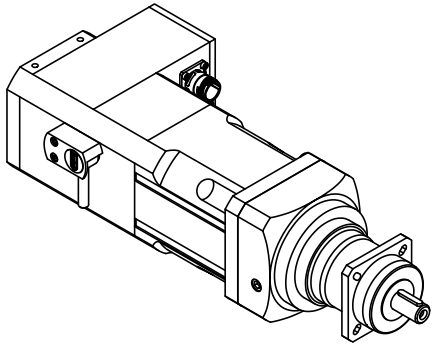
Connector 1 (468)	
A	U
C	V
E	W
F	PE
B	Brake+
D	Brake-

Connector 2 (307)	
1	Vcc (+5V)
2	GND
3	DATA
4	DATA-
5	CLOCK
6	CLOCK-
7	Therm+
8	Therm-
9	Vcc sensor
10	GND sensor





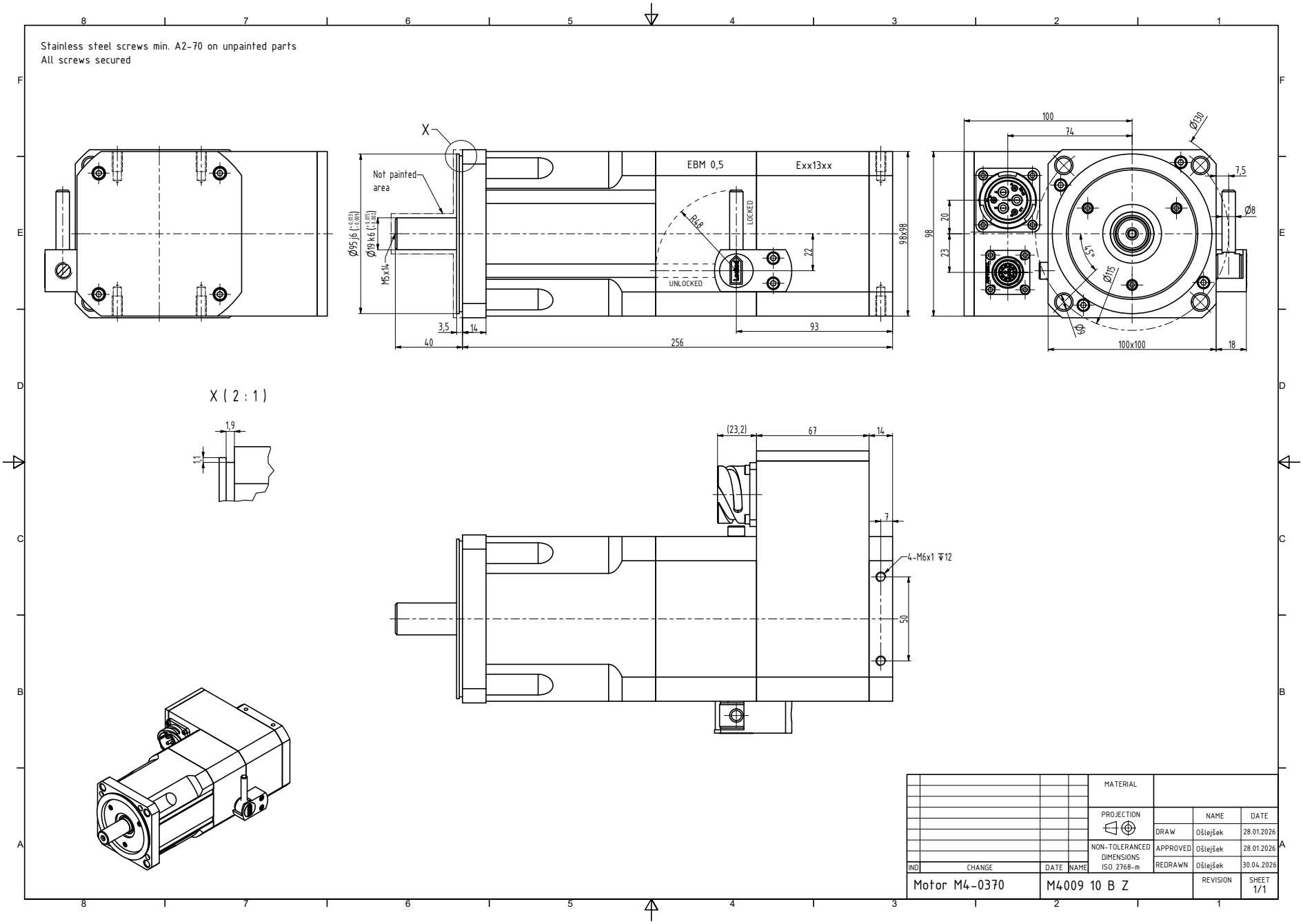


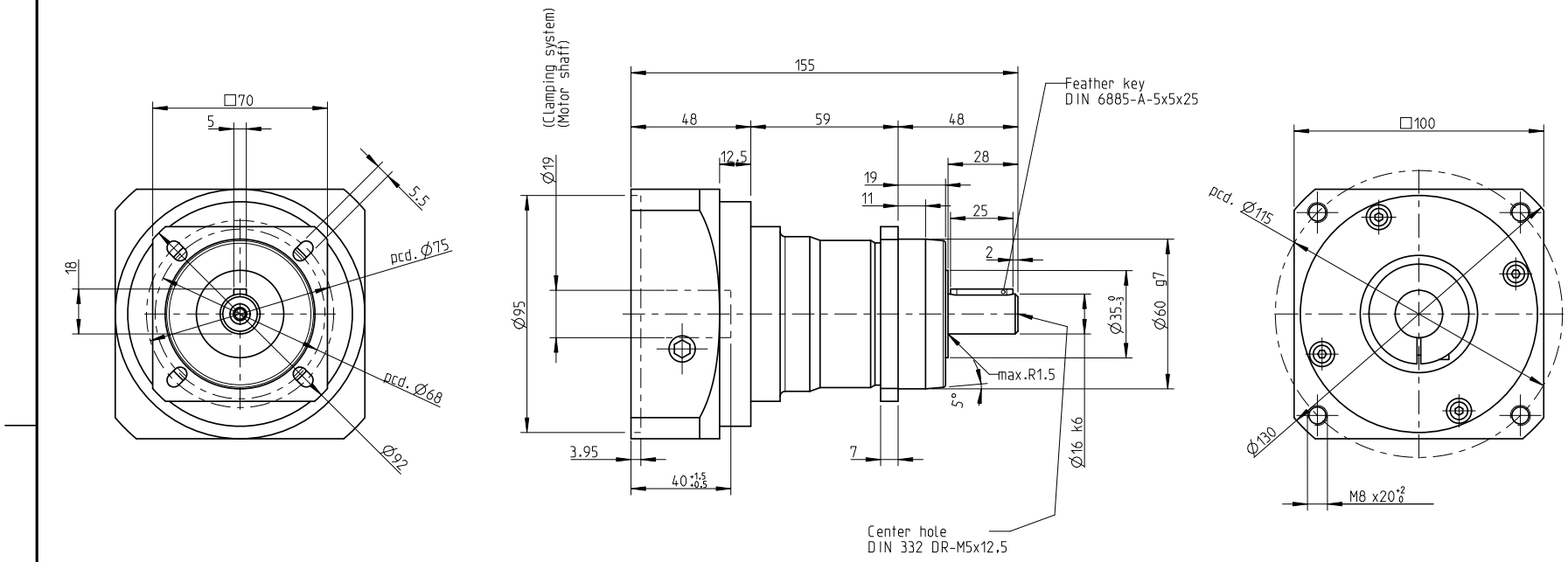


Bill of material			
Part Name	Quantity	Type	Tools
Screw - DIN 912/A4-70/M8x35	4	A4-70	imbus-M8
Washer - DIN 128A/A4 M8	4	A4	

Untolerated dimensions: ISO 2768 - m

Drawen:	Štěpán Bednář	Created: 29.04.2026	Modified:
Checked/approved by:		PROJECT NAME:	
Material			
Semiprod.		NUMBER - TITLE: SGN070-007-P-L (N4)	
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: 3:5 WEIGHT: SHEET: 1/1


Stainless steel screws min. A2-70 on unpainted parts
All screws secured
X
Not painted area
EBM 0,5
Exx13xx
LOCKED
UNLOCKED
R4,8
Ø95 j6
Ø19 k6
M5x14
3,5
14
40
256
93
22
98x98
100
74
Ø30
7,5
Ø8
20
98
23
45°
Ø115
Ø9
100x100
18
X (2 : 1)
1,9
1,1
(23,2)
67
14
7
4-M6x1 ↧12
50
MATERIAL
PROJECTION
NON-TOLERANCED DIMENSIONS ISO 2768-m
IND
CHANGE
DATE
NAME
DRAW Ošlejšek 28.01.2026
APPROVED Ošlejšek 28.01.2026
REDRAWN Ošlejšek 30.04.2026
Motor M4-0370
M4009 10 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 SGN070

TGN4, TGT4, TGH4

Listů List