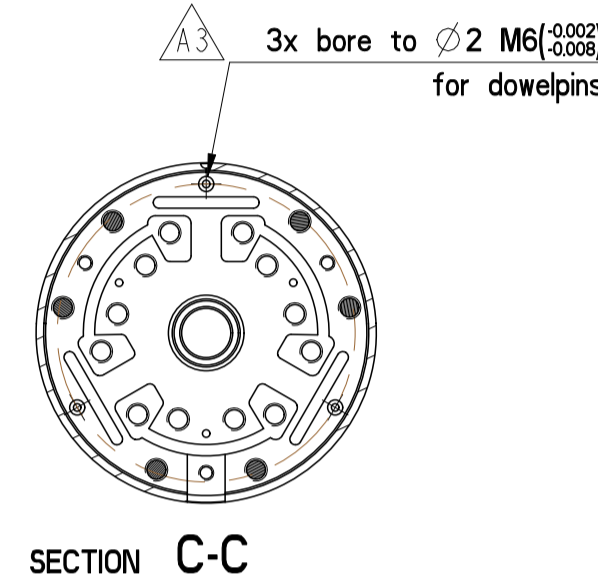
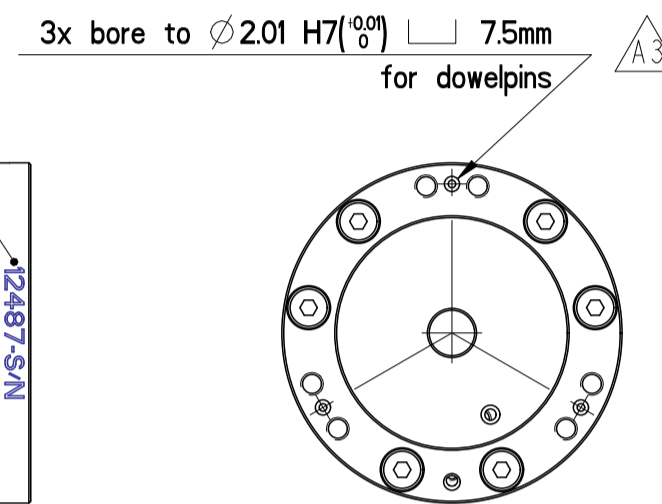
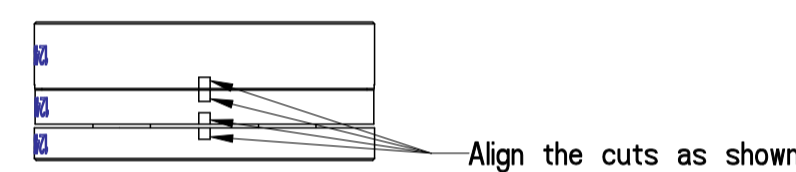
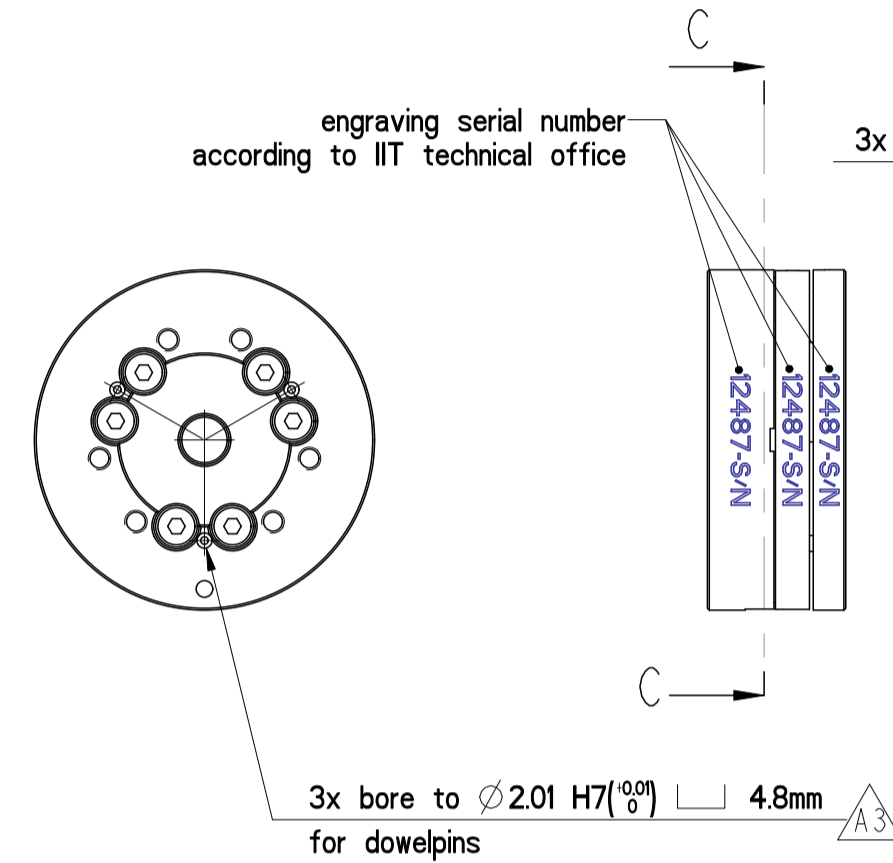
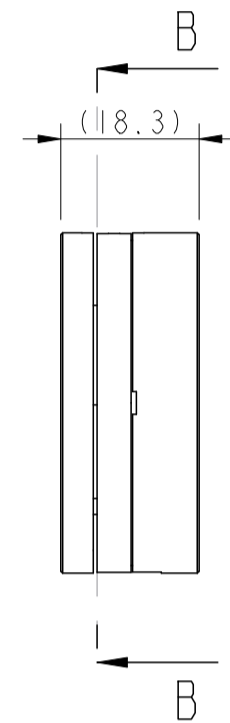
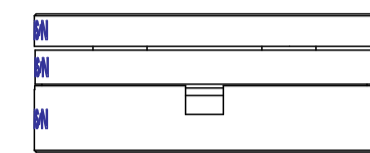
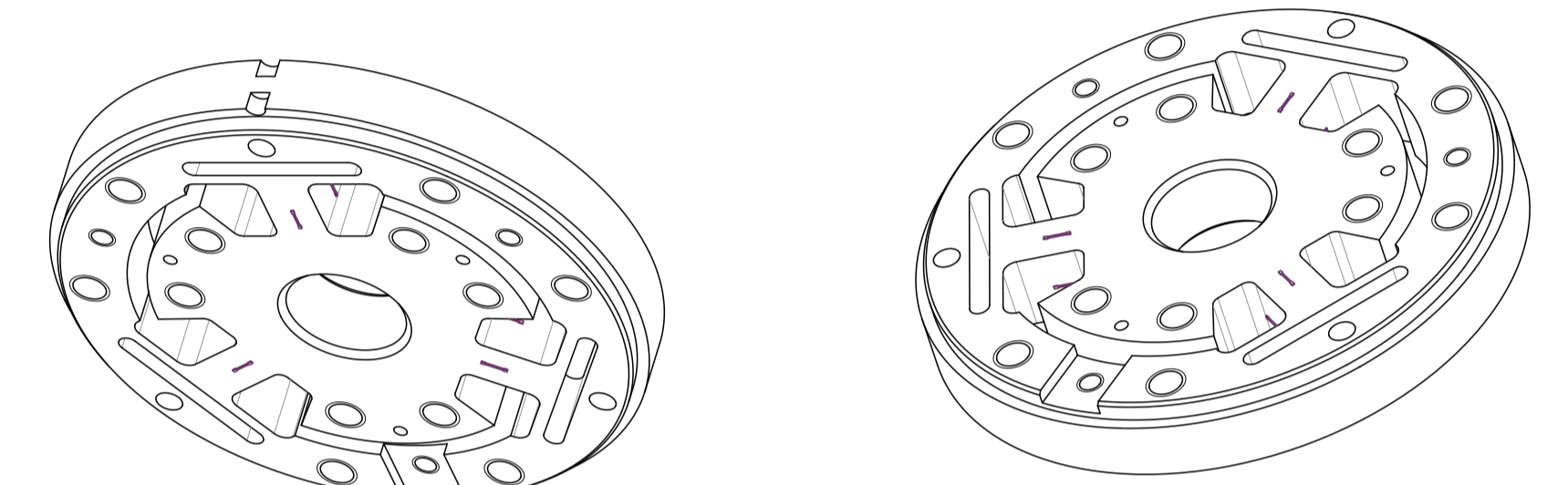


STEP 1
(see specifications 151245)
SCALE 1:1

- NOTES:**
 Steps to be taken before assembling and calibrating the FT sensor. Contact technical office for any information about this procedure.
- You need to pre-assemble the FT sensor with the top and bottom covers, central sensor and screws (as shown in Fig.Step1).
 - Align the holes for dowel pins before tightening the screws of the bottom and top covers.
 - Drill holes of $\varnothing 1.9\text{mm}$ for the dowel pins on IC.008 P.002 and IC.001 P.003 and increase them to $\varnothing 2.01\text{ H7}(\frac{0.01}{0})$. Test the holes using a Dowel pin of size: ISO 2338B n3.
 - Drill holes of $\varnothing 1.9\text{mm}$ for the dowel pins on IC.008 P.001 and increase them to $\varnothing 2\text{ M6}(\frac{0.002}{0.008})$. The pins will be interference fit on this component.
 - **VERY IMPORTANT:** You have to engrave a "part number" - "serial number" on the three parts which were just assembled with the same denominations used in the production department of IIT before you can disassemble it. The part number for this assembly is 12487, about the S/N ask to IIT Production department. Typically, the format is the following: "00000 - S/N000" where the zeroes stand for a 5-digit and a 3-digit numerical code.
 - Send the part IC.008 P.001 for gluing on the strain gauge. (Refer to Fig.STEP 2)
 - Use medium grade (blue type) thread locker on each screw
 - Tightening torque value for V3-10-- -D7984 GC and V3-8-- -D7984 GC: 2 Nm
 - Assemble the FT sensor (as shown in Fig.STEP 3) and calibrate it according to IIT specifications.

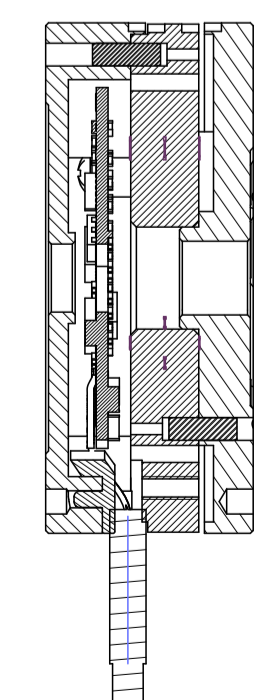
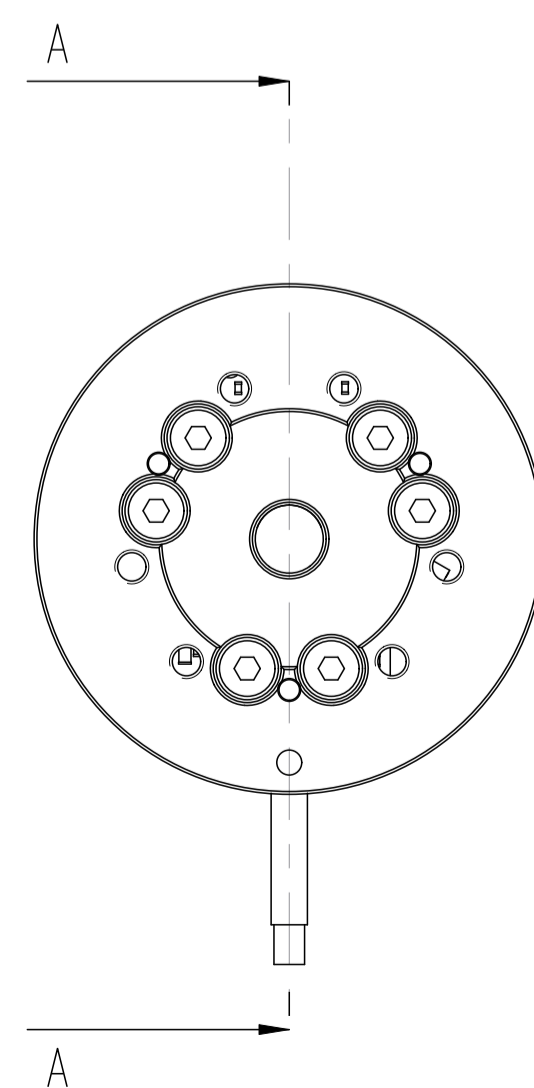
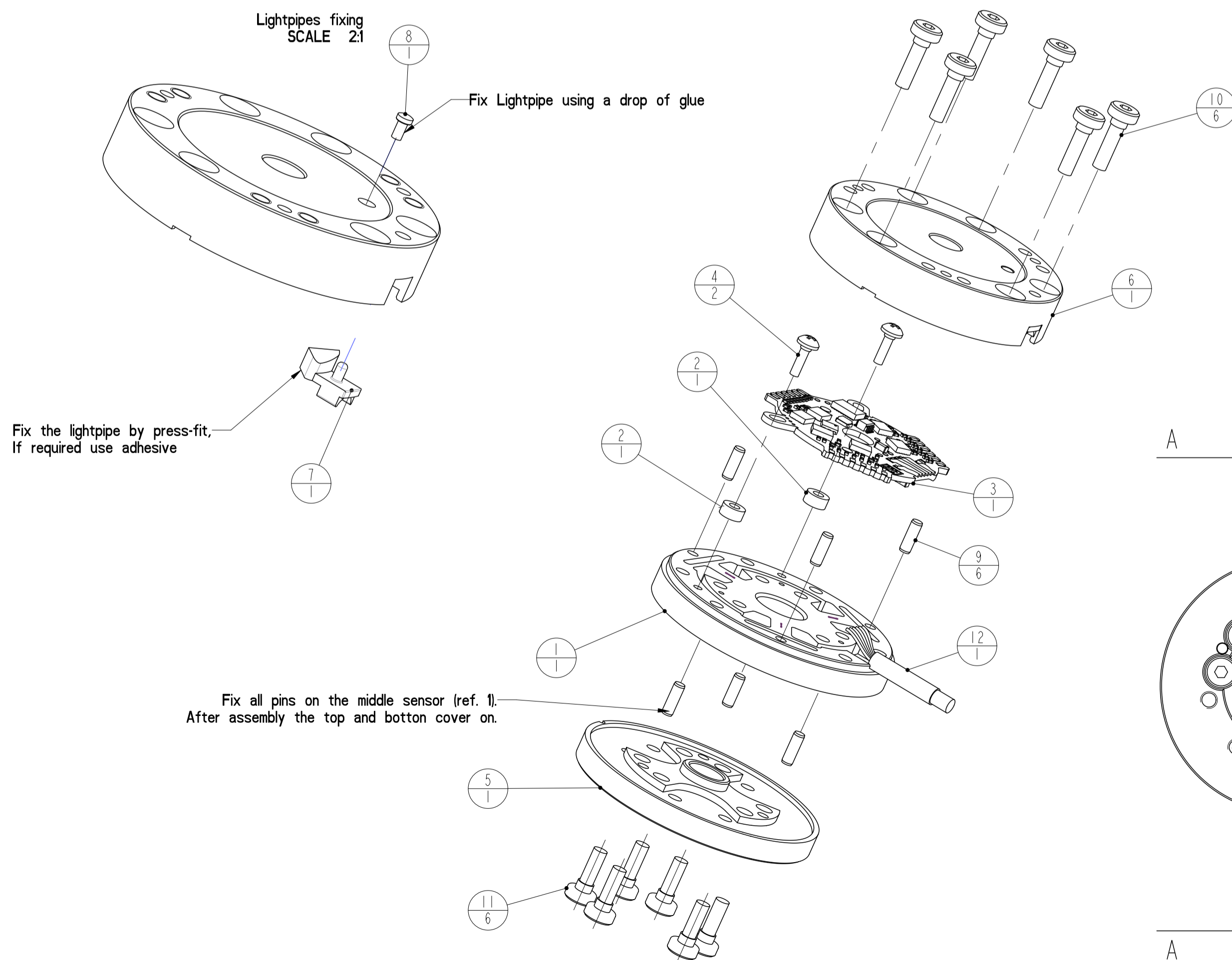


STEP 2
(see specifications 151288 for strain gauge assembly)
SCALE 2:1



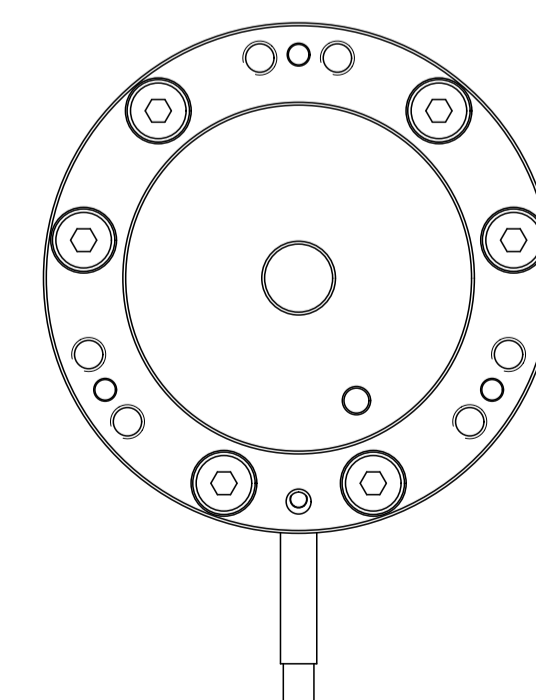
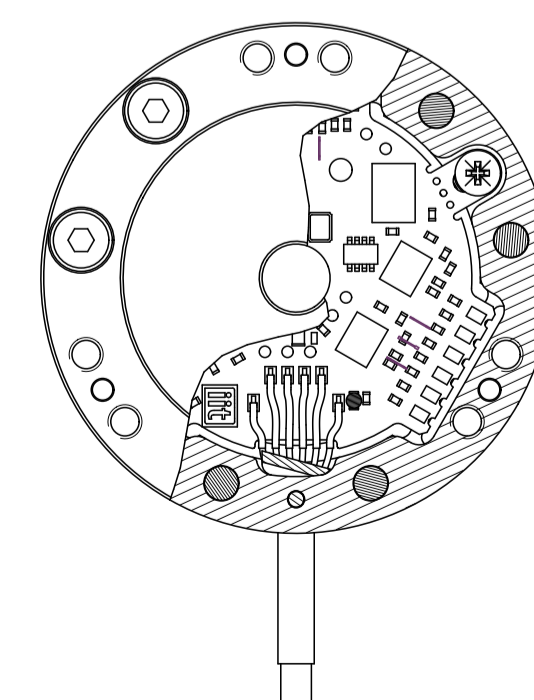
STEP 3
(final assembling)
SCALE 15:1

ATTENTION
 Assembled the dowel pin ref.8
 only in according to technical office.
 Could be required a Sensor without dowel pins



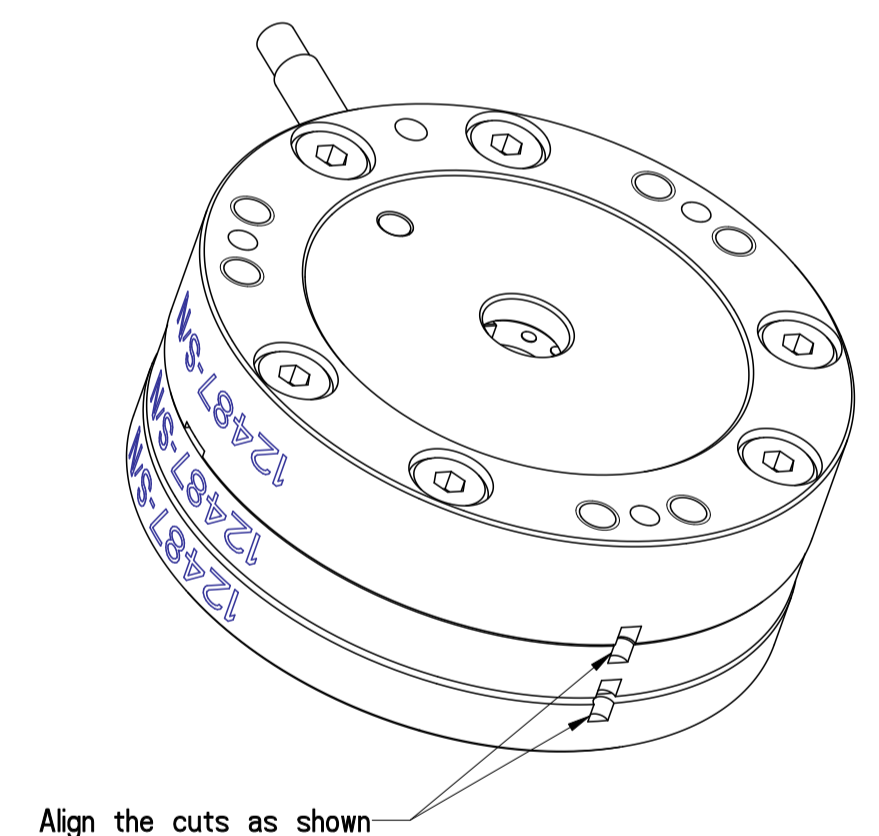
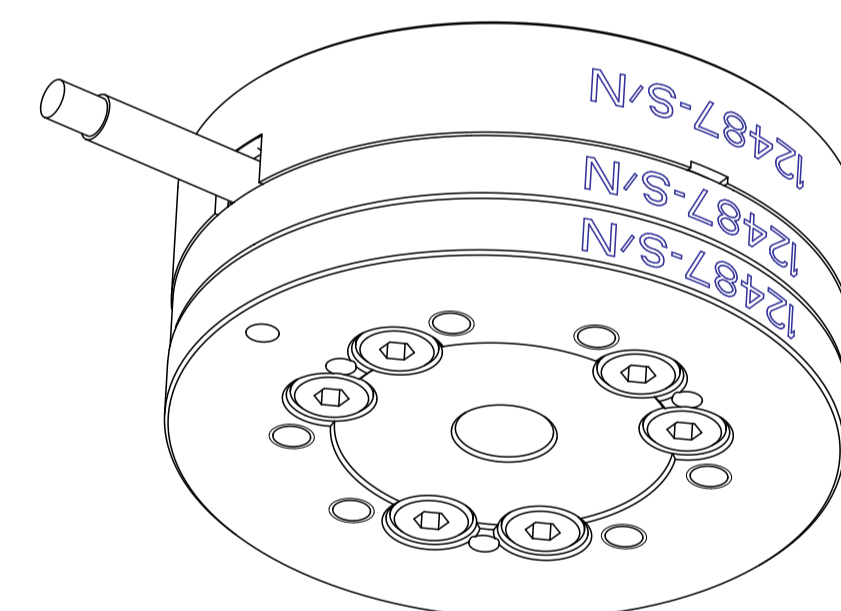
SECTION A-A

SCALE 15:1



SECTION G-G

3D VIEW
SCALE 2:1



Rev.	Reviewer	Description	Zone	Date	Drawn	Checked
A3	IIT	changed dowel pin holes tolerances		11/10/19	Gesino	
A4	IIT	added thread locker indication		22/06/2020	salvi	

POS.	QTY	CODE	DESCRIPTION
12	1	IC_008_A_001_CABLE	Cabling for FTSensor 58
11	6	V3-8-- --D7984_GC	screw M3x8 UNI9327-DIN7984, SS A2, hex. socket thin head cap, fully threaded
10	6	V3-10-- --D7984_GC	screw M3x10 UNI9327-DIN7984, SS A2, hex. socket thin head cap, fully threaded
9	6	S2-6-- --12338_B	Dowel pin $\varnothing 2.0 \times 6$ stainless steel A2, DIN7, ISO2338B, VSM12771, UNI11707
8	1	IC_005_P_007	Lightpipe for hole
7	1	IC_008_P_006	Lightpipe for FTSensor 45
6	1	IC_008_P_002	FT Sensor $\varnothing 45$ mm Bottom Cover
5	1	IC_001_P_003	FT Sensor $\varnothing 45$ mm Top Cover
4	2	V2-6-- --ISO7045_CZ	CROSS RECESSED SCREW ISO7045 M2X6 Z
3	1	STRAIN2_PCA_HR	Strain 2
2	2	IC_005_P_013	Plastic spacer d2/D4 H=2.0mm
1	1	IC_008_R_001	Force torque sensor cell $\varnothing 45$ mm with wiring and strain gages

Issued	Drawn	Checked	Approved	Mass Kg	Rev.
IIT	Savoldi			0.123	A4

Description	Scale	Sheet
FORCE/TORQUESENSOR $\varnothing 45$ mm	1:1	1/1

Drawing code	Date
IC_008_A_001	19-Mar-18

