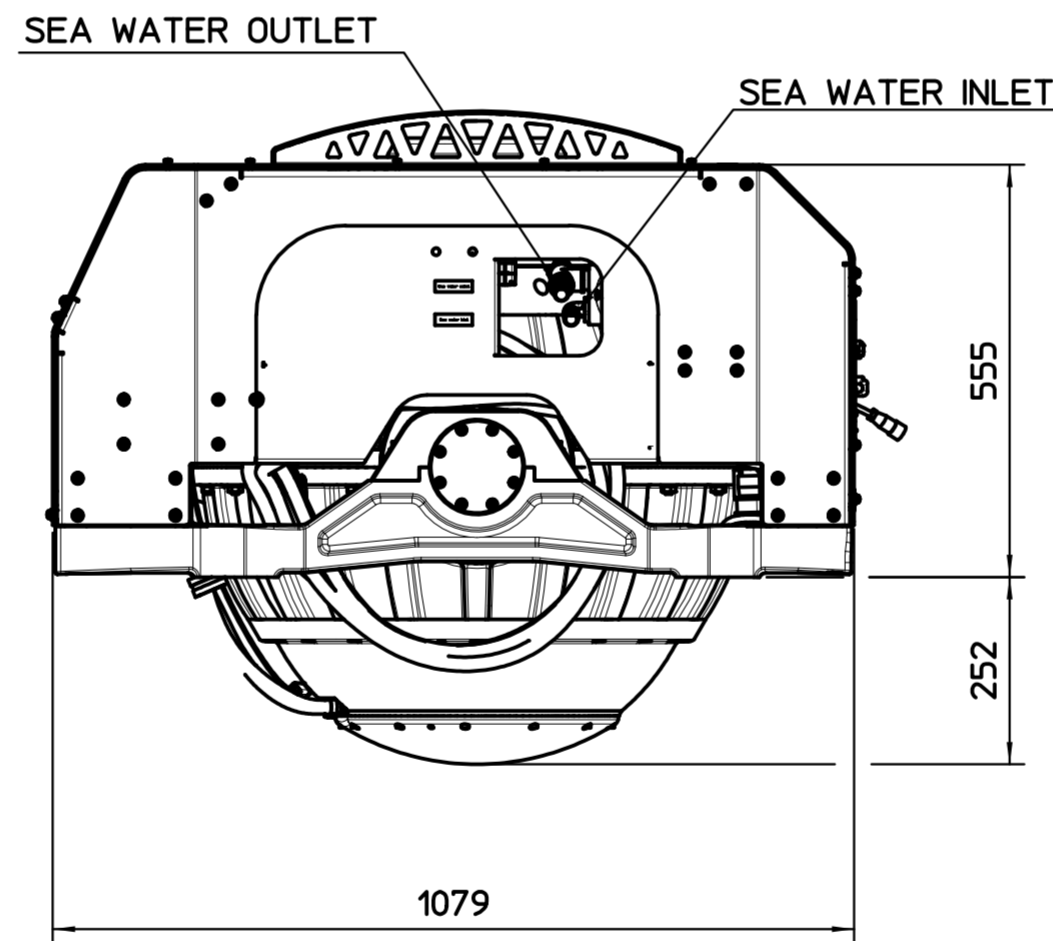
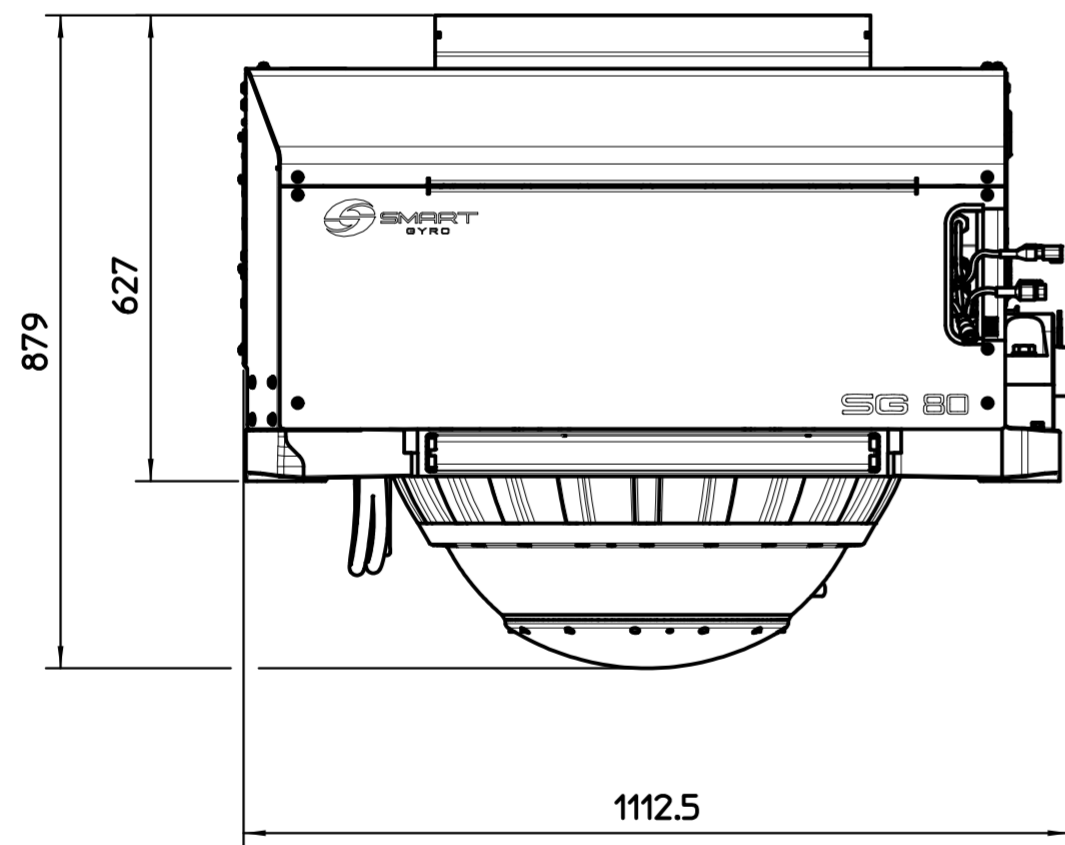
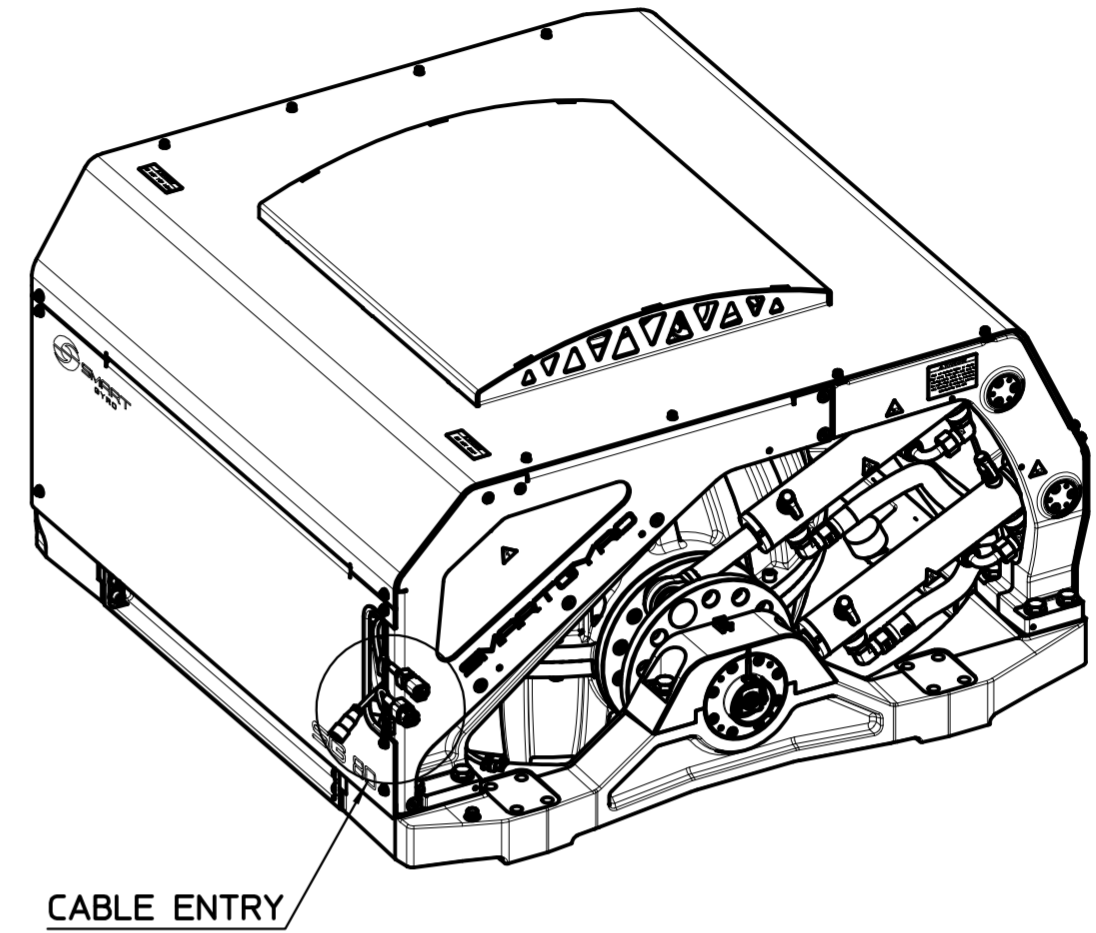
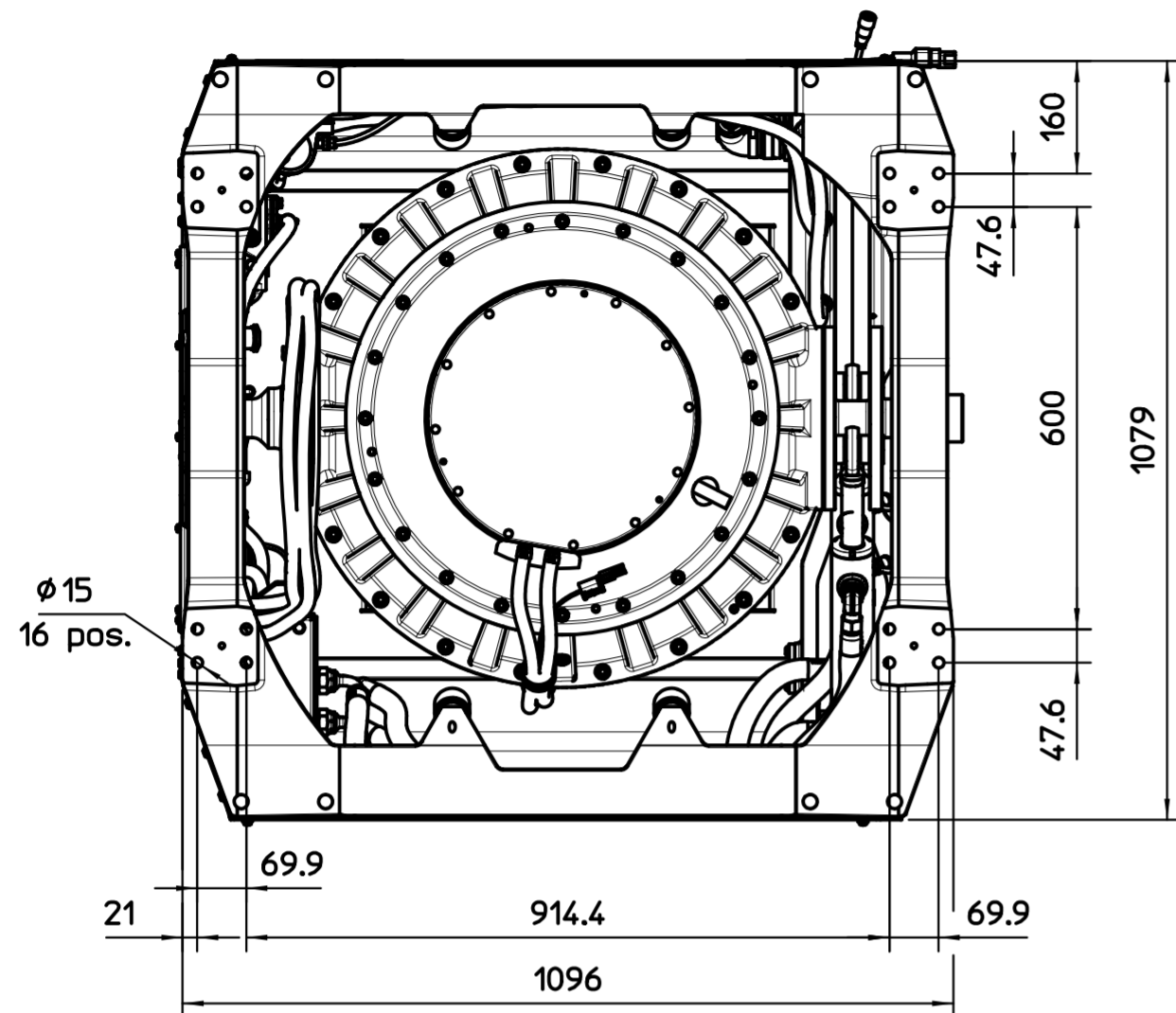
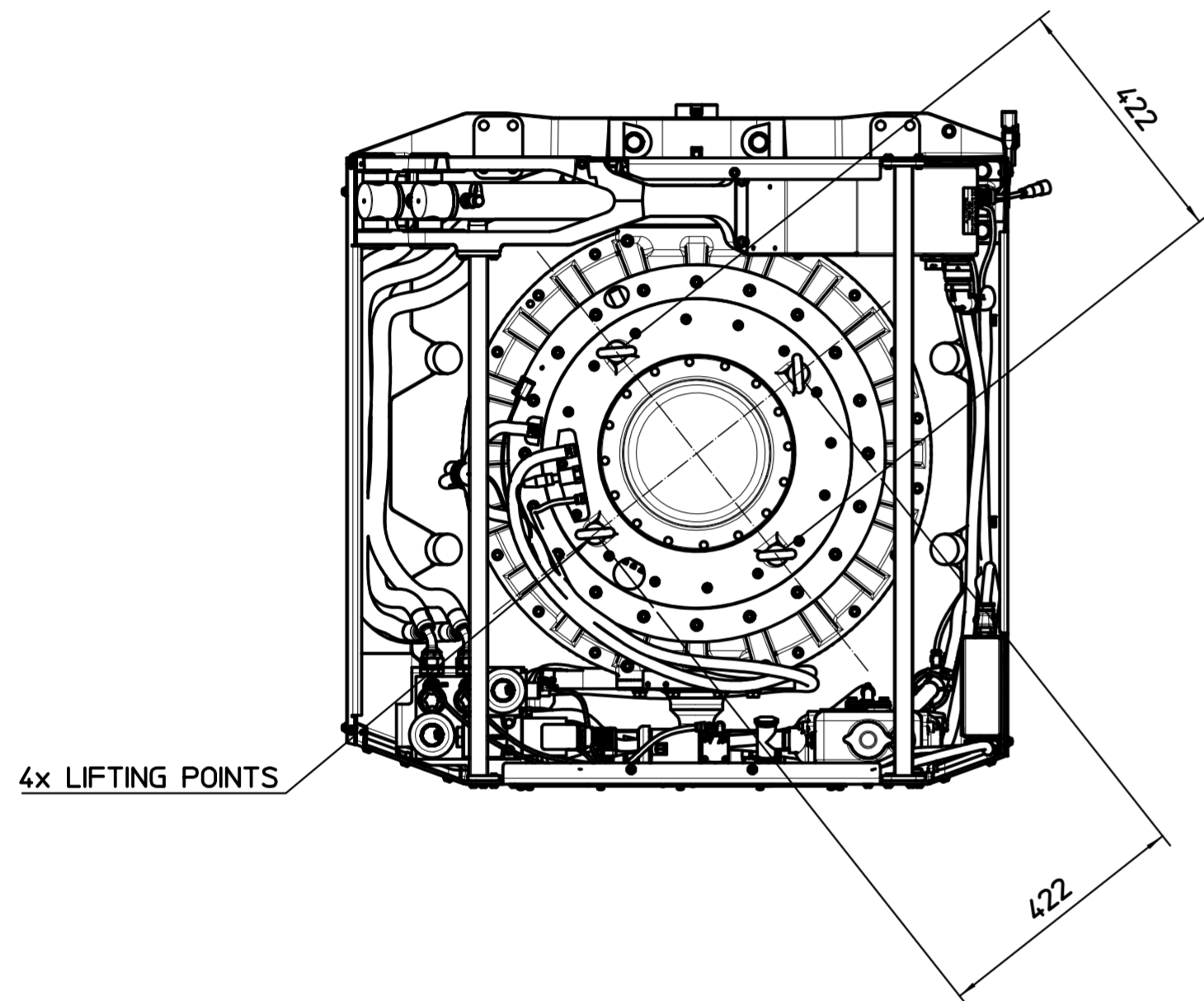


SG80 OUTLINE

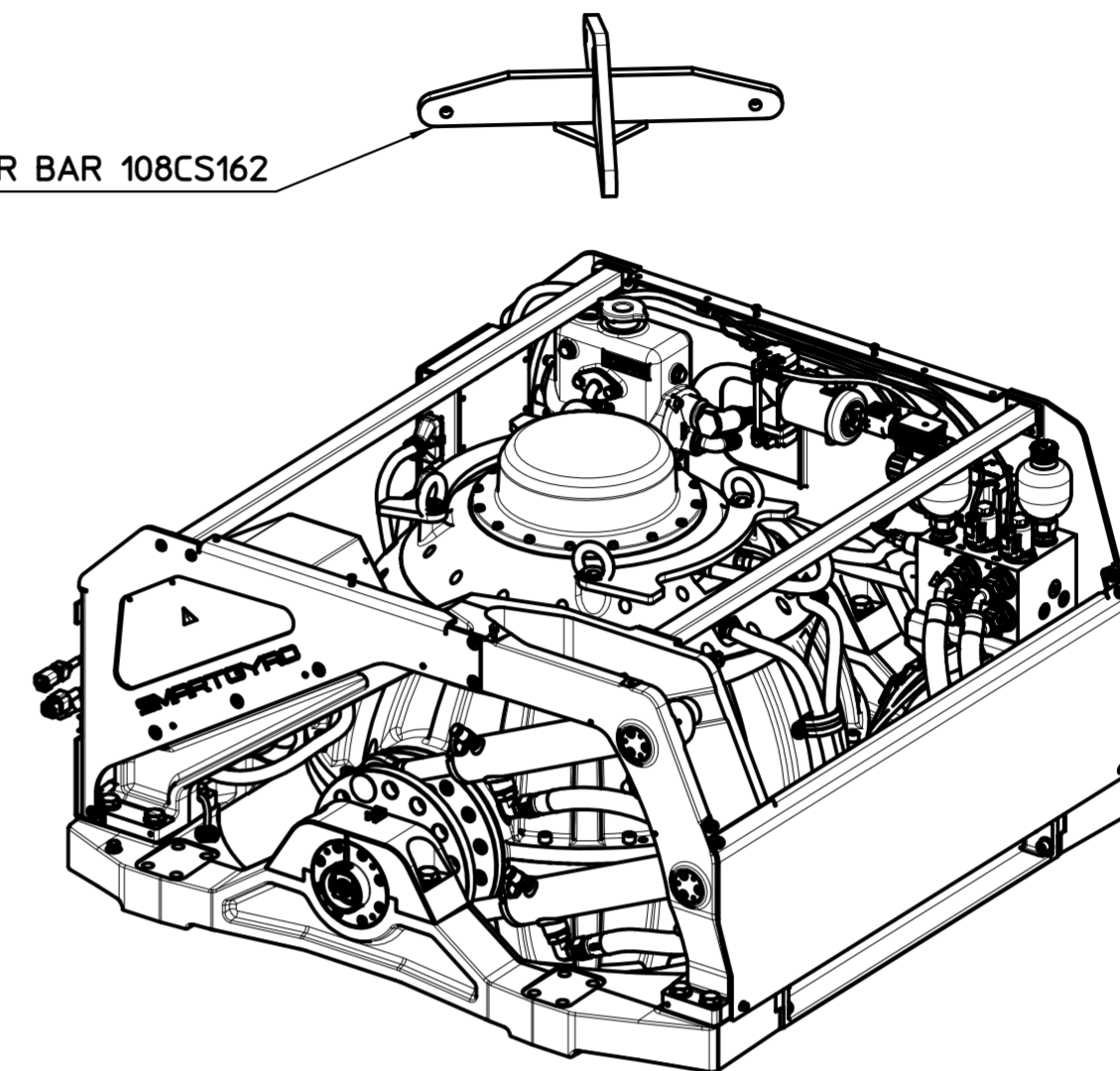


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D	28/09/2021	Reviewed sheet 3	GIANNINI	SALUTARI	-
C	07/05/2021	General review	GIANNINI	SALUTARI	-
B	02/04/2021	General review	GIANNINI	SALUTARI	-
A	25/02/2021	Issue	GIANNINI	SALUTARI	-
FIRMA / SIGN	GIANNINI	SALUTARI	MATERIALE / MATERIAL		
DATA / DATE	08/01/2021	08/01/2021	TRATTAMENTO TERMICO / HEAT TREATMENT		
QUOTE SENZA INDICAZIONE DI TOLLERANZA DIMENSIONS WITHOUT TOLERANCE INDICATIONS ISO 2768-mK			RIVESTIMENTO SUPERFICIALE / SURFACE TREATMENT DENOMINAZIONE / DESCRIPTION SG80 INSTALLATION DETAILS		
SMUSSI NON QUOTATI / NOT DIMENSIONED CHAMFER : 0.3x45° SMUSSI NON QUOTATI / NOT DIMENSIONED CHAMFER : 0.3			FOGLIO / SHEET 1 / 5		
RIPRODUZIONE E/O DIFFUSIONE VIETATA REPRODUCTION AND/OR DISCLOSURE IS FORBIDDEN			DISEGNO NR. / DRAWING NR. 108ID401		
			PESO / WEIGHT (kg)		
			SCALA / SCALE 1 : 10		

SG80 GYRO LIFTING



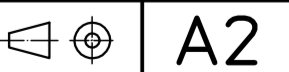
SPREADER BAR 108CS162



NOTES:

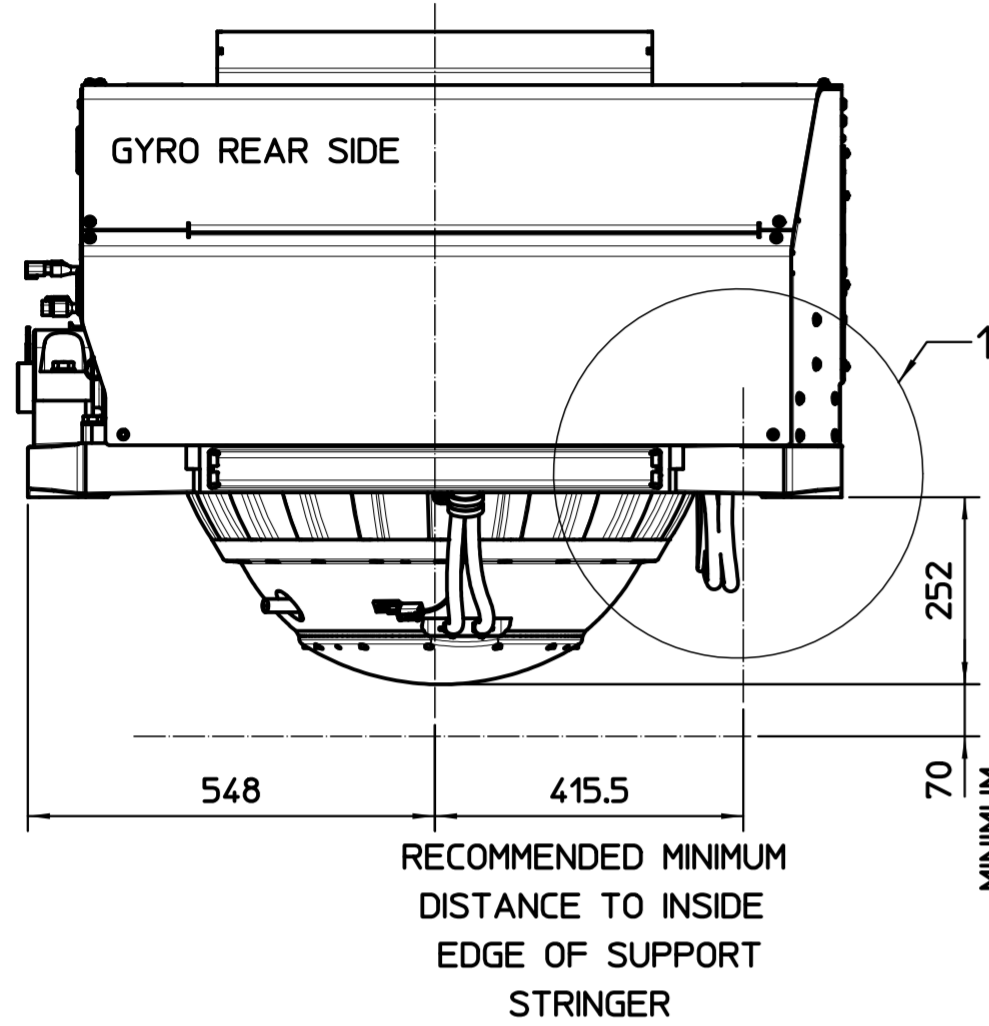
- SG80 assembly weight: 980 Kg
- For vertical lifting use spreader bar 108CS162 or similar tool.
- Ensure to use all of the four eyebolts for gyro lifting and that lifting straps/chains remain vertical during operation.
- The four eyebolts are placed at 90° on the same circumference.

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	DISEGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY	MATERIALE / MATERIAL	
FIRMA / SIGN	GIANNINI	SALUTARI	-	TRATTAMENTO TERMICO / HEAT TREATMENT	
DATA / DATE	08/01/2021	08/01/2021	-	RIVESTIMENTO SUPERFICIALE / SURFACE TREATMENT	
QUOTE SENZA INDICAZIONE DI TOLLERANZA / DIMENSIONS WITHOUT TOLERANCE INDICATIONS			DENOMINAZIONE / DESCRIPTION		
ISO 2768-mK			SG80 INSTALLATION DETAILS		
SMUSI NON QUOTATI / NOT DIMENSIONED CHAMFER : 0.3x45°			RIPRODUZIONE E/O DIFFUSIONE VIETATA / REPRODUCTION AND/OR DISCLOSURE IS FORBIDDEN		
SMUSI NON QUOTATI / NOT DIMENSIONED CHAMFER : 0.3			DISEGNO NR. / DRAWING NR.	FOGLIO / SHEET	PESO / WEIGHT
			108ID401	2 / 5	(kg) 1 : 10

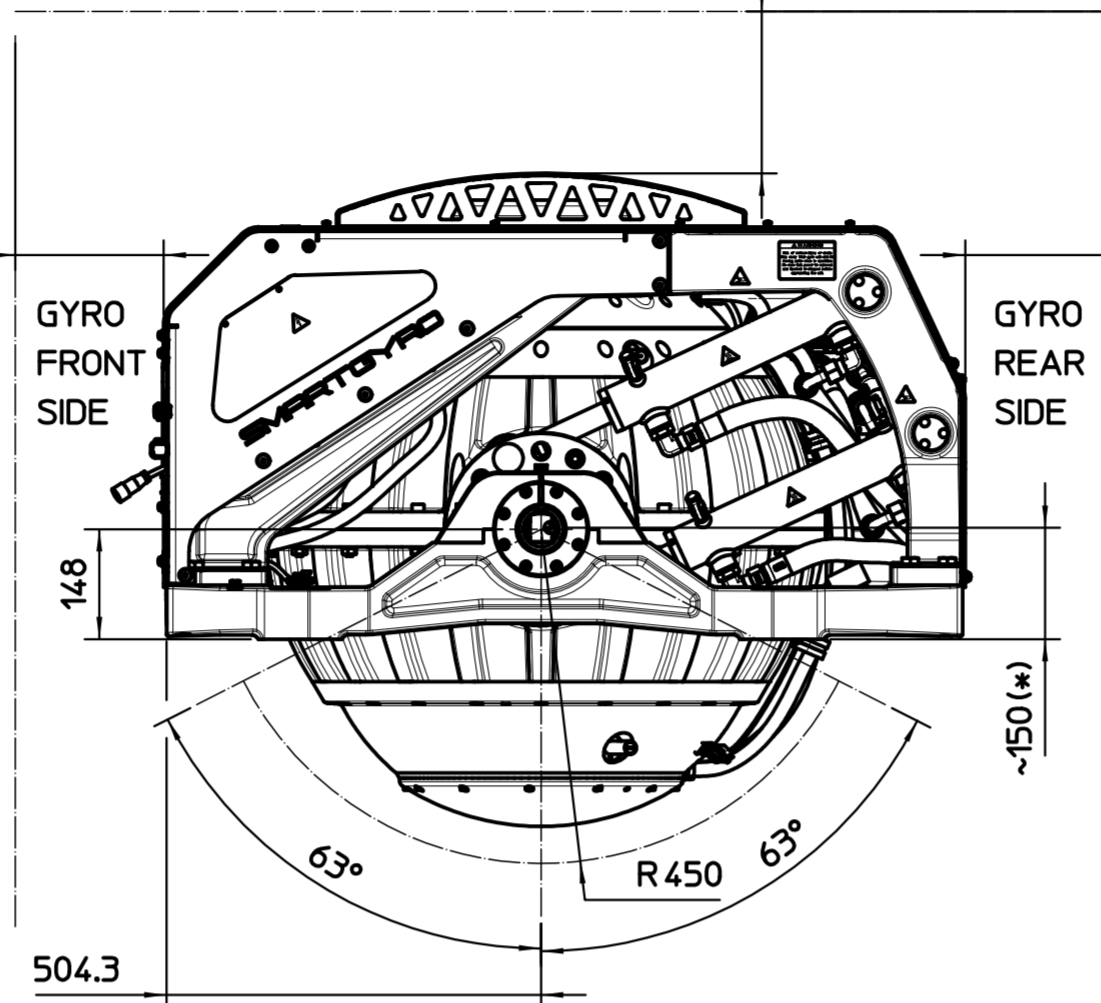


A2

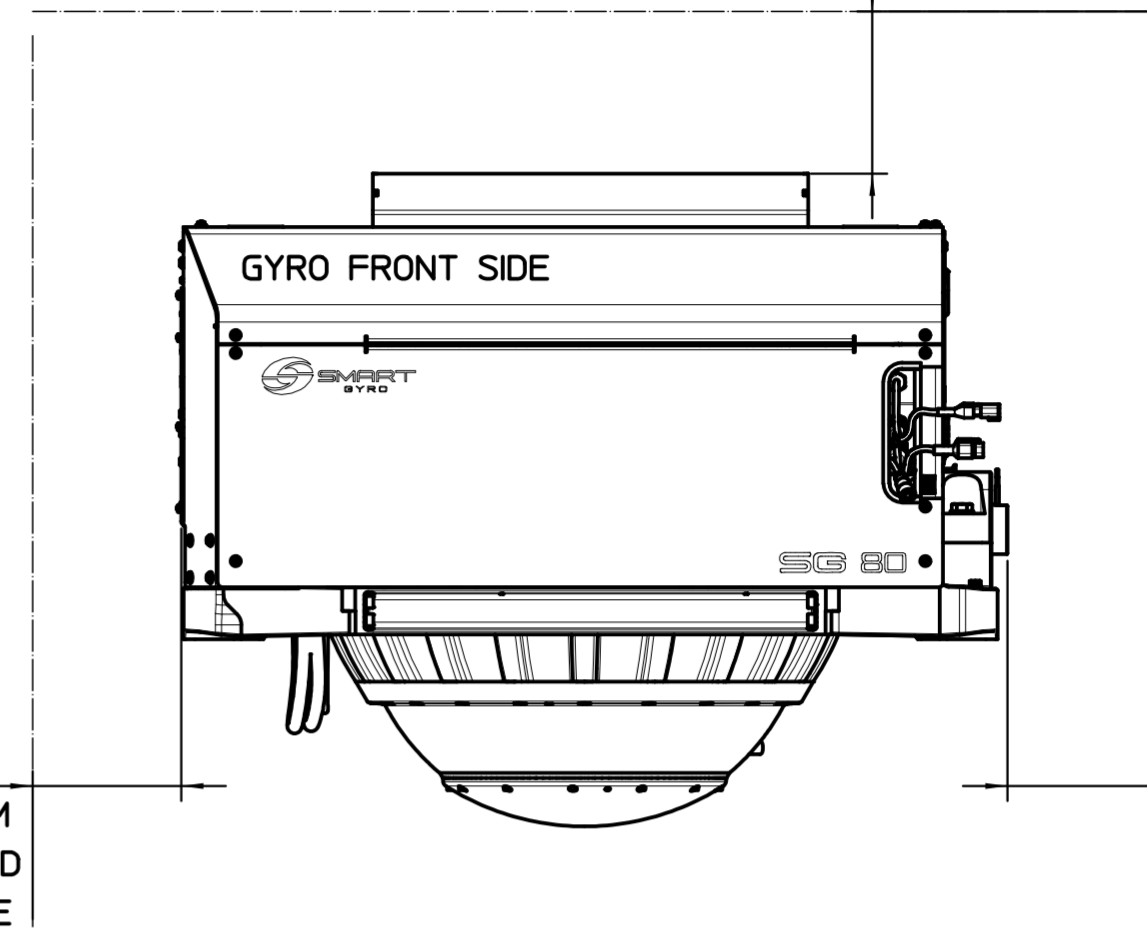
SG80 RECOMMENDED CLEARANCES



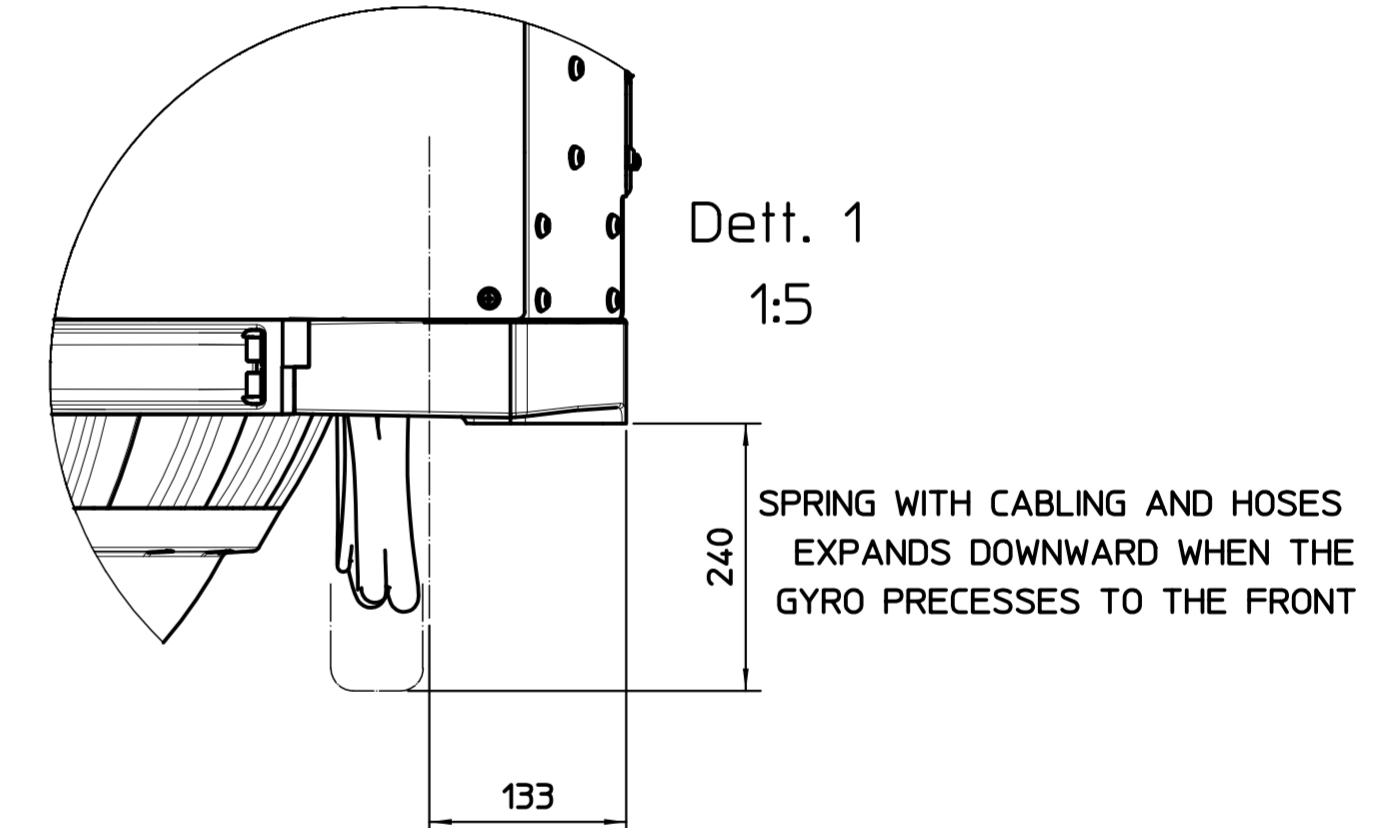
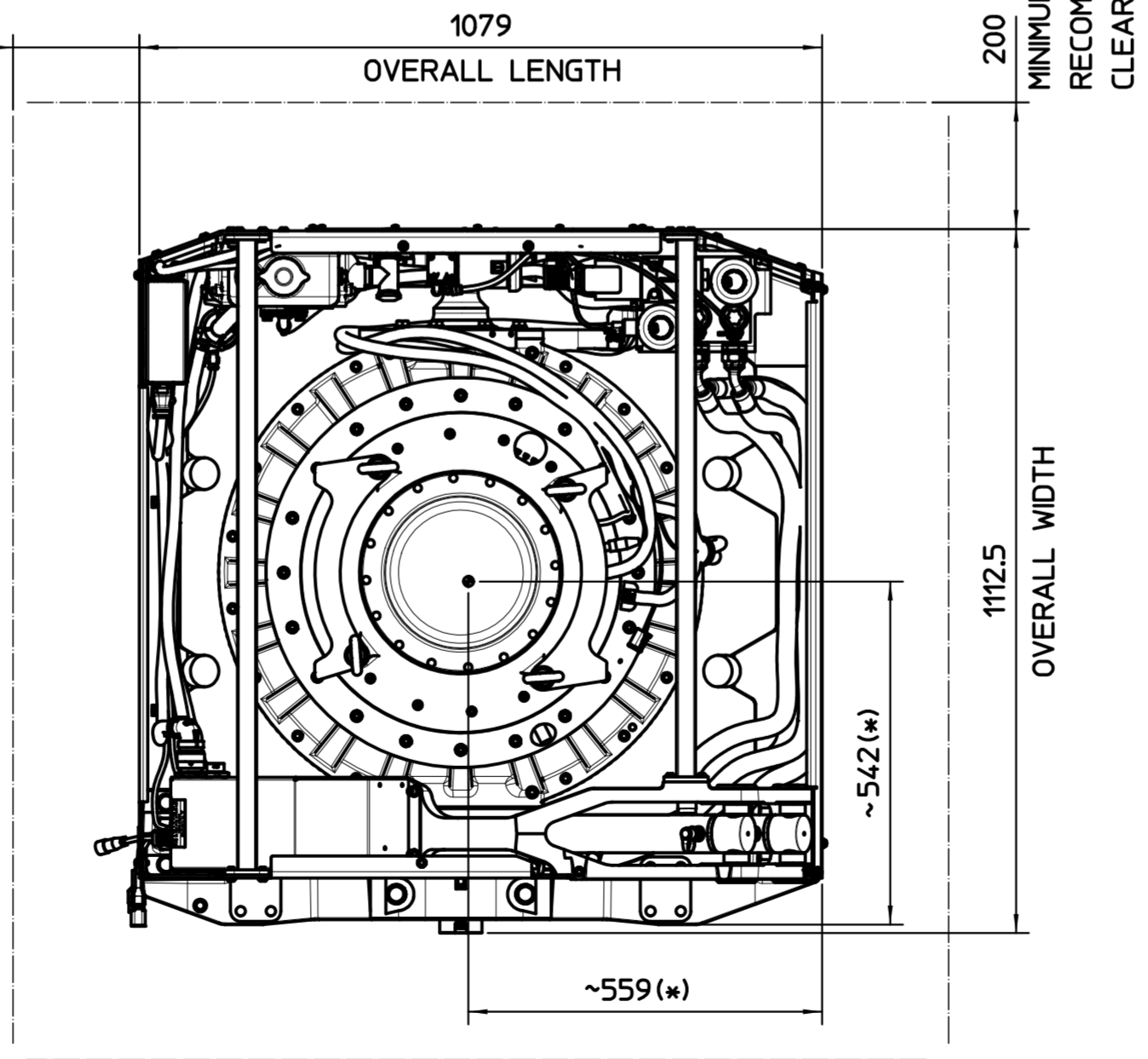
200 MINIMUM RECOMMENDED CLEARANCE



200 MINIMUM RECOMMENDED CLEARANCE



200 MINIMUM RECOMMENDED CLEARANCE

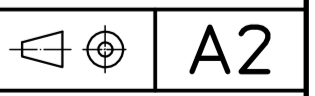


MAXIMUM DISTANCE BETWEEN GYRO BASE FRAME EDGE AND INSIDE EDGE OF SUPPORT STRINGER

ALWAYS ENSURE OVERHEAD ACCESS AND SUFFICIENT CLEARANCE FOR POSSIBLE FUTURE GYRO REMOVAL OR RE-INSTALLATION

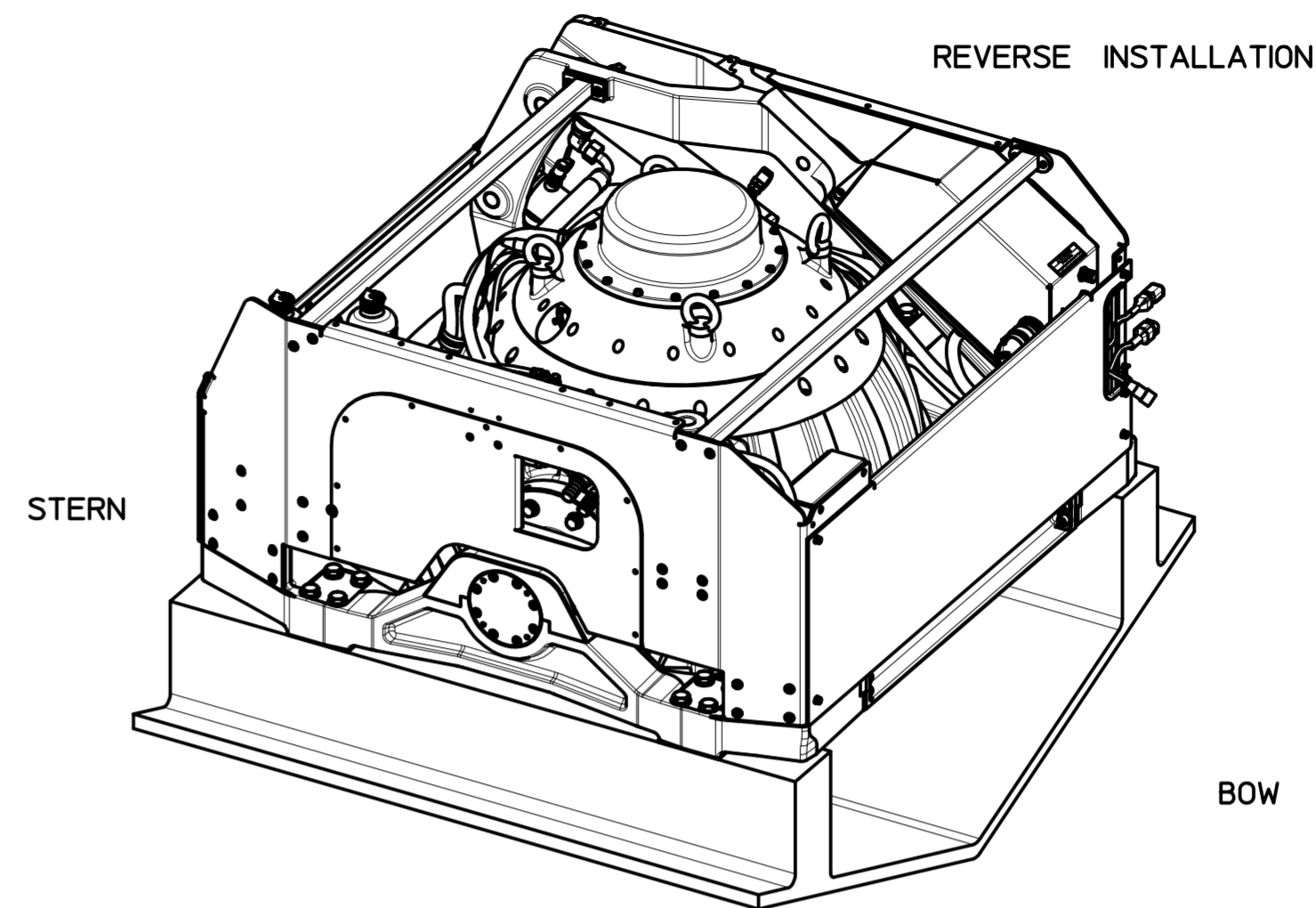
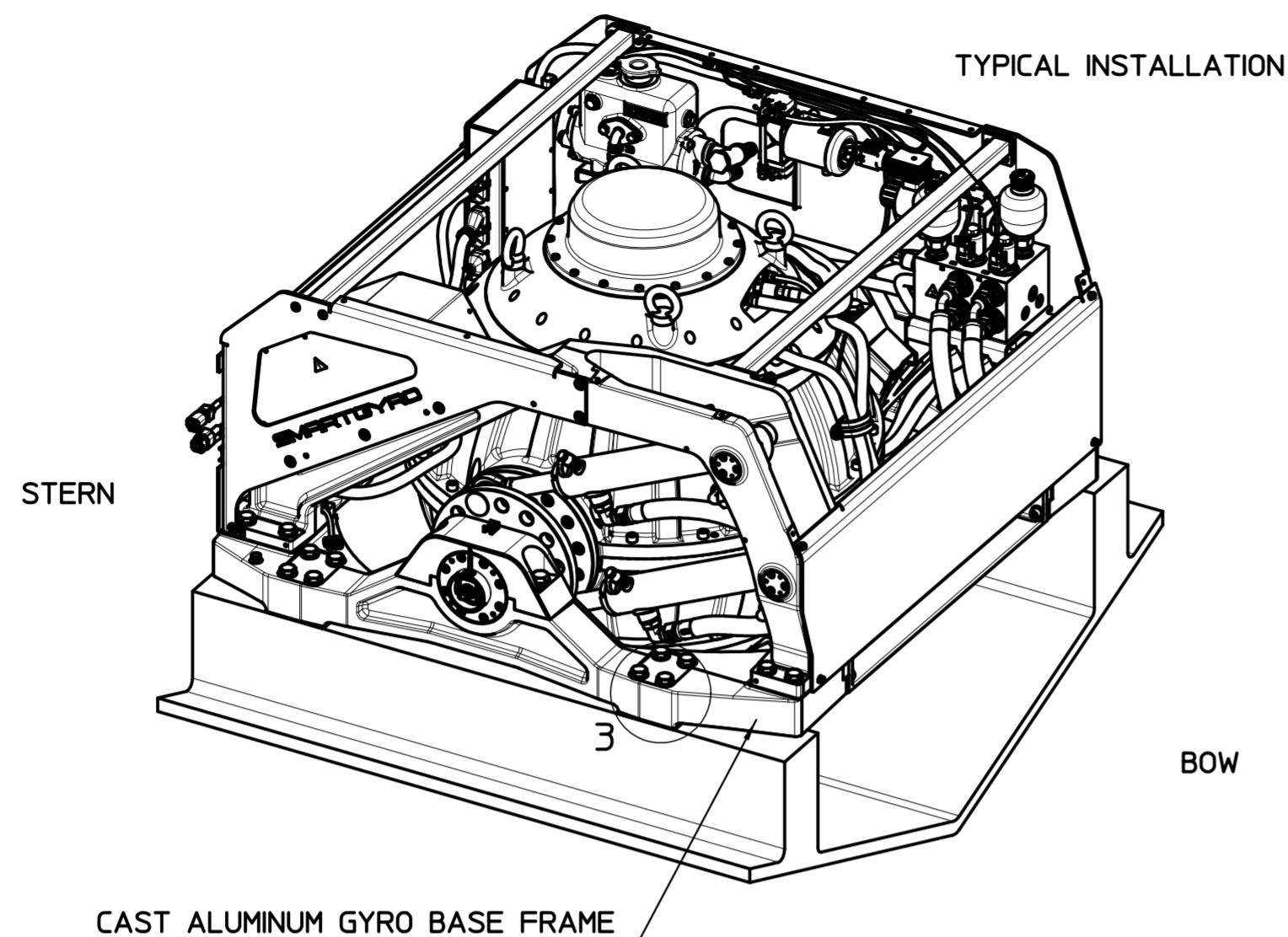
Dimensions with asterisk (*) refer to the position of the center of mass

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GIANNINI			SALUTARI	-	-
DATA / DATE			DEGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY
08/01/2021			08/01/2021	-	-
MATERIALE / MATERIAL			TRATTAMENTO TERMICO / HEAT TREATMENT		
-			-		
QUOTE SENZA INDICAZIONE DI TOLLERANZA / DIMENSIONS WITHOUT TOLERANCE INDICATIONS			RIVESTIMENTO SUPERFICIALE / SURFACE TREATMENT		
ISO 2768-mK			-		
SMUSSI NON QUOTATI / NOT DIMENSIONED CHAMFER : 0.3x45°			-		
SMUSSI NON QUOTATI / NOT DIMENSIONED CHAMFER : 0.3			-		
RIPRODUZIONE E/O DIFFUSIONE VIETATA / REPRODUCTION AND/OR DISCLOSURE IS FORBIDDEN			DISEGNO NR. / DRAWING NR.		
-			108ID401		
-			FOGLIO / SHEET		
-			3 / 5		
-			PESO / WEIGHT		
-			(kg)		
-			SCALA / SCALE		
-			1 : 10		

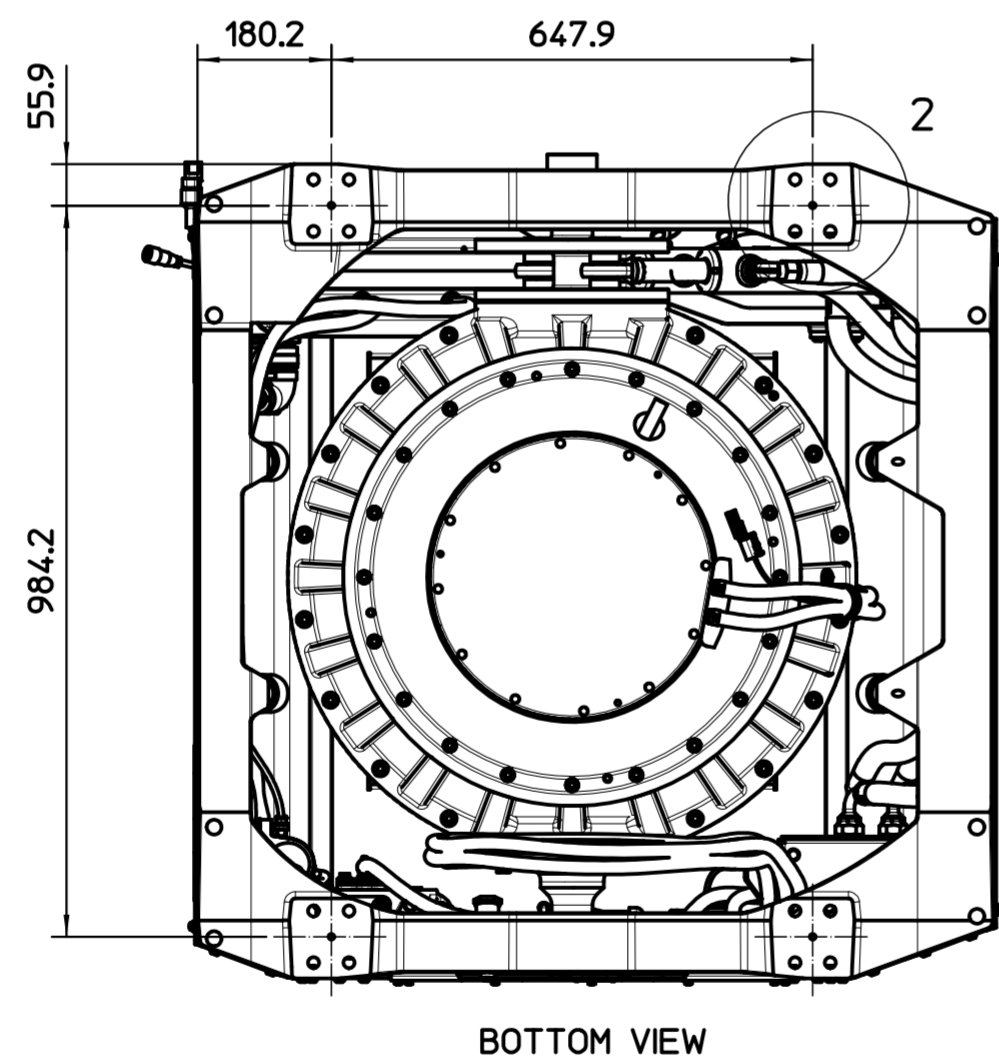


SG80 INSTALLATION DETAILS

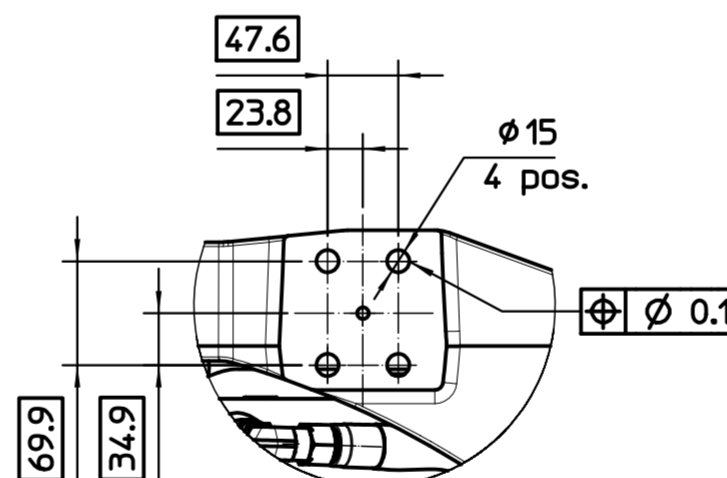
SG80 INSTALLATION MODES



EXTERNAL QUOTES REFERENCED TO THE BASE FRAME

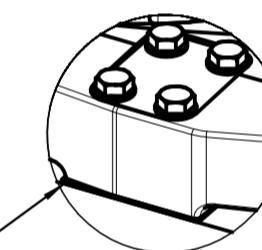


BOTTOM VIEW



Det. 2
1:5

In case of dissimilar metals between gyro base frame and supporting structure use isolation gaskets 108CS159



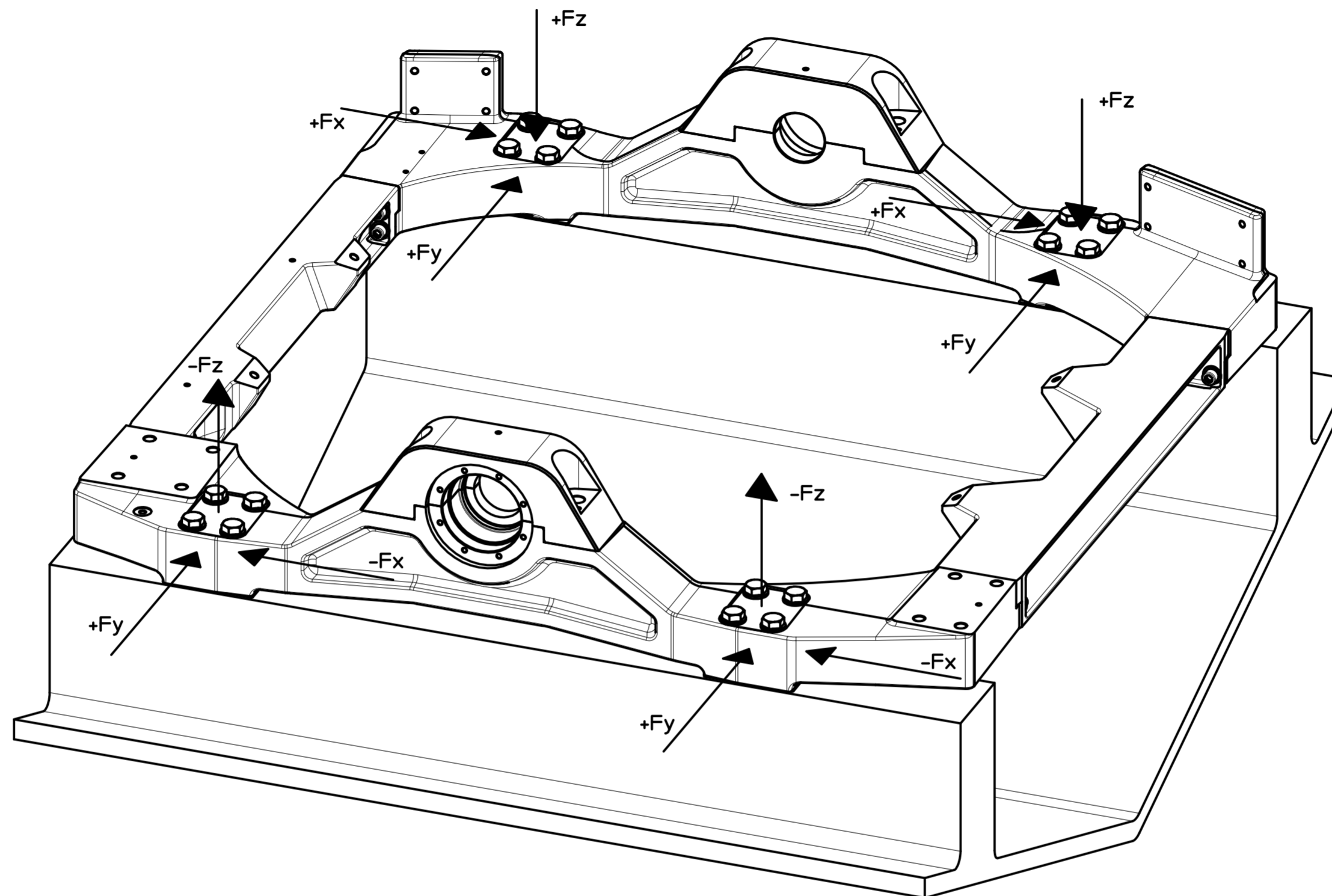
Det. 3
1:5

- SG80 gyro may be mounted in both typical and reverse installation modes, depending on the best accessibility for maintenance and service.
- In case of reverse installation refer to installation manual MSG80 for software setting on control display.
- For the correct positioning of the mounting holes on the supporting structure use the installation kit 108AS157 and follow installation manual MSG80.
- For gyro fixing to the supporting structure use the provided bolts M14 and washers.
- Recommended torque for fixing bolts is 130 Nm.

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	DISEGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY	MATERIALE / MATERIAL	
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			108ID401		
			FOGLIO / SHEET		
			4 / 5		
			PESO / WEIGHT		
			(kg)		
			SCALA / SCALE		
			1 : 10		



SG80 EXERTED LOADS ON HULL STRUCTURE

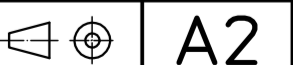


- The SG80 gyro generates moments and forces to the hull structure in roll, pitch and yaw directions.
- Their resulting combined effect can be expressed as forces applied at each of the four mounting points as detailed below.

$F_x = 14000 \text{ N}$
 $F_y = 2000 \text{ N}$
 $F_z = 25000 \text{ N}$

- These forces should be considered as acting simultaneously, fully reversing and applied in a cyclic way that repeats endlessly.

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			FOGLIO / SHEET		
			PESO / WEIGHT		
			SCALA / SCALE		
			108ID401		
			5 / 5		
			(kg)		
			1 : 5		



SG80 INSTALLATION DETAILS