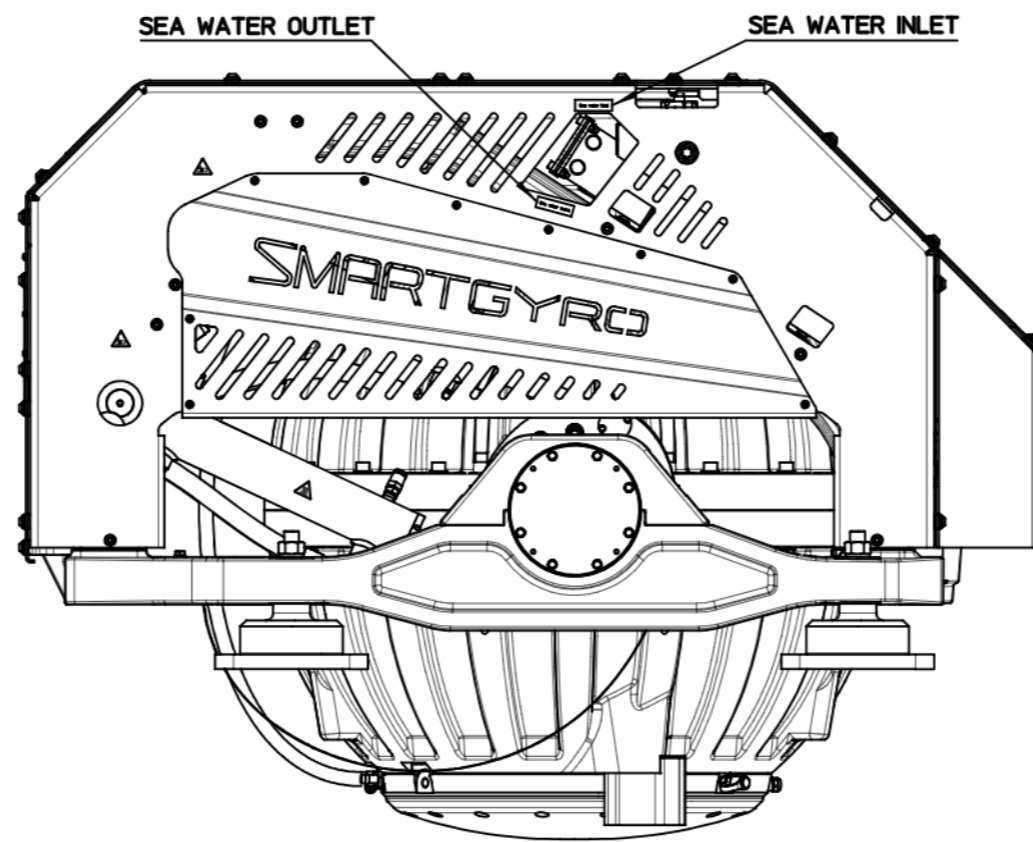
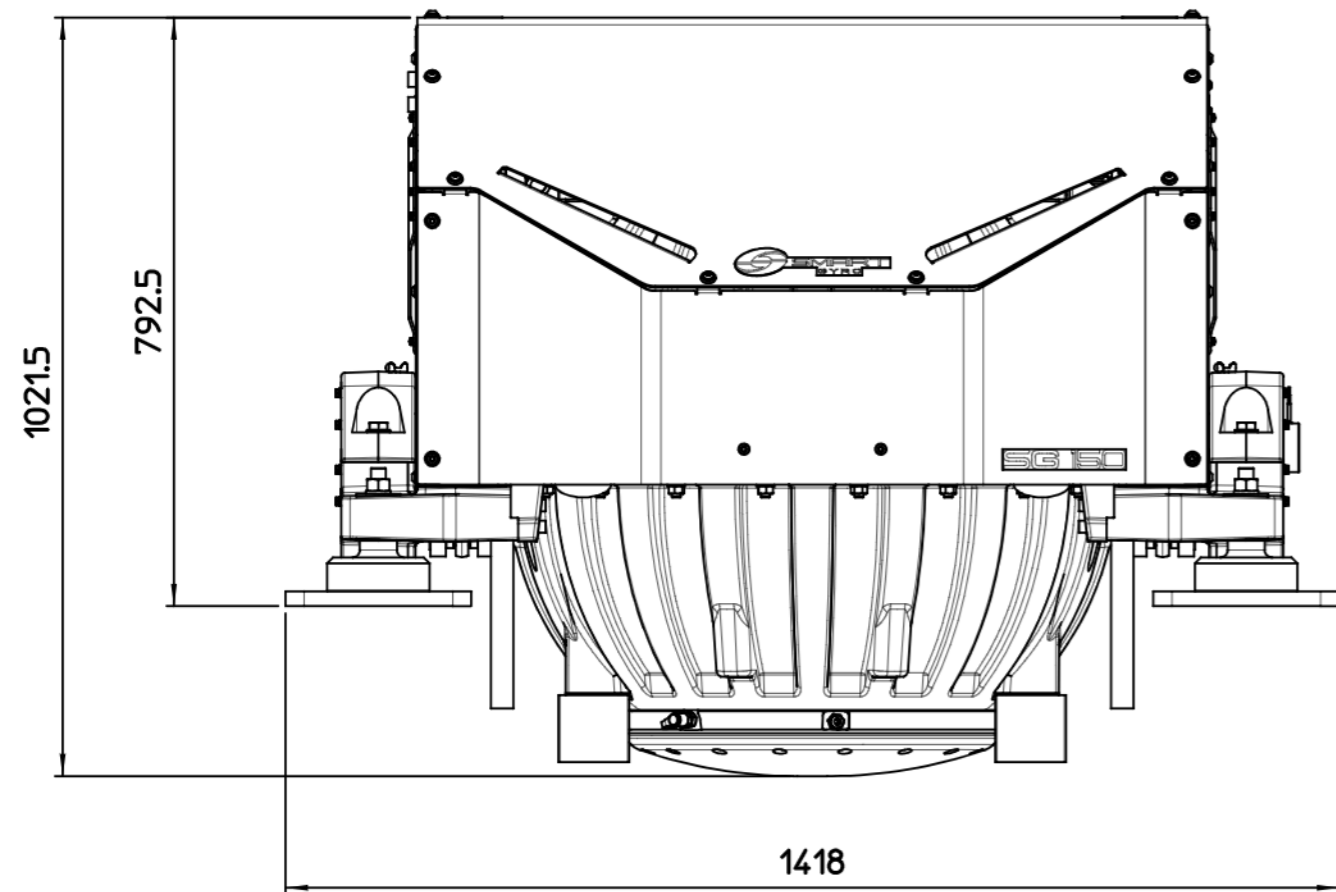
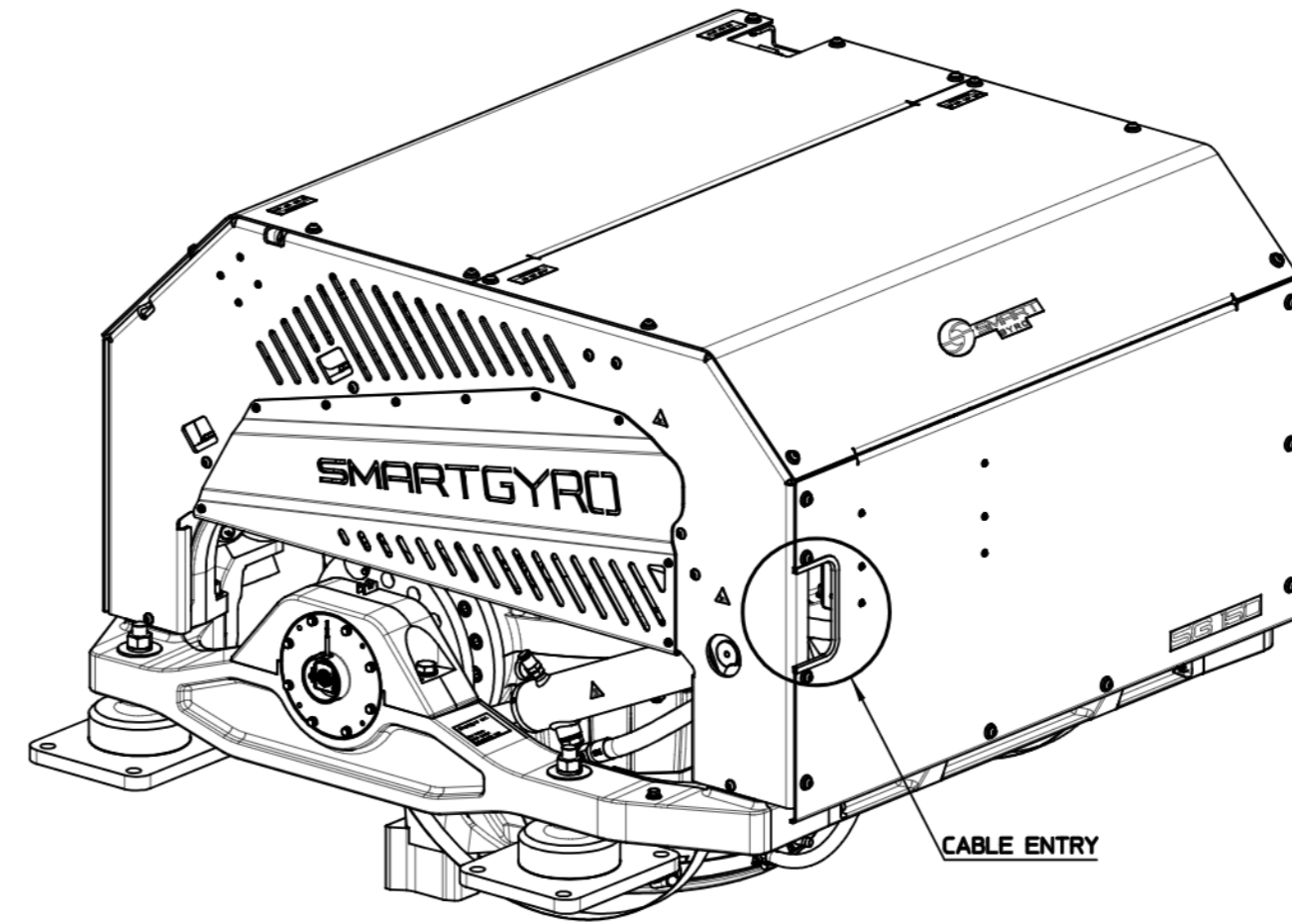
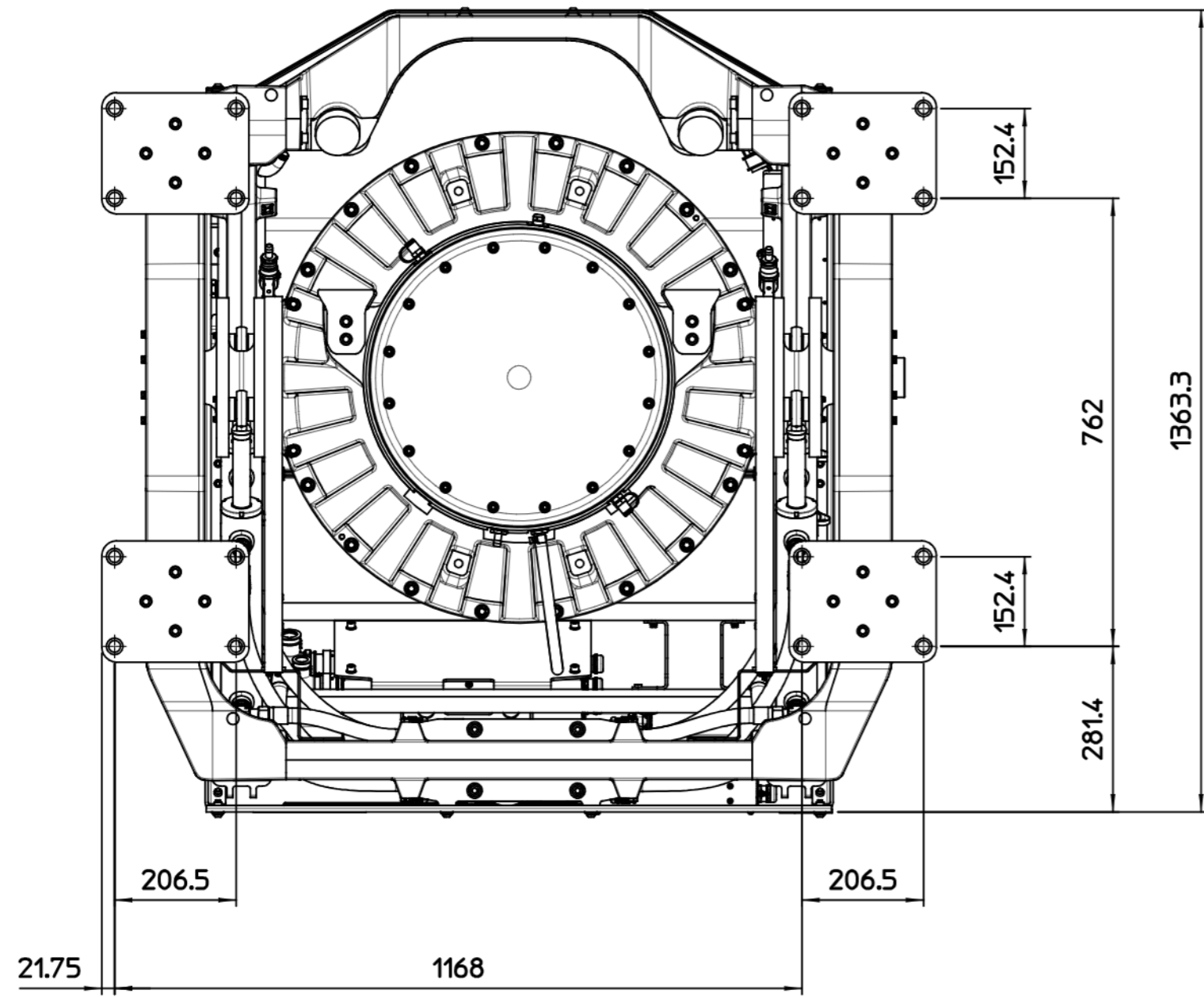
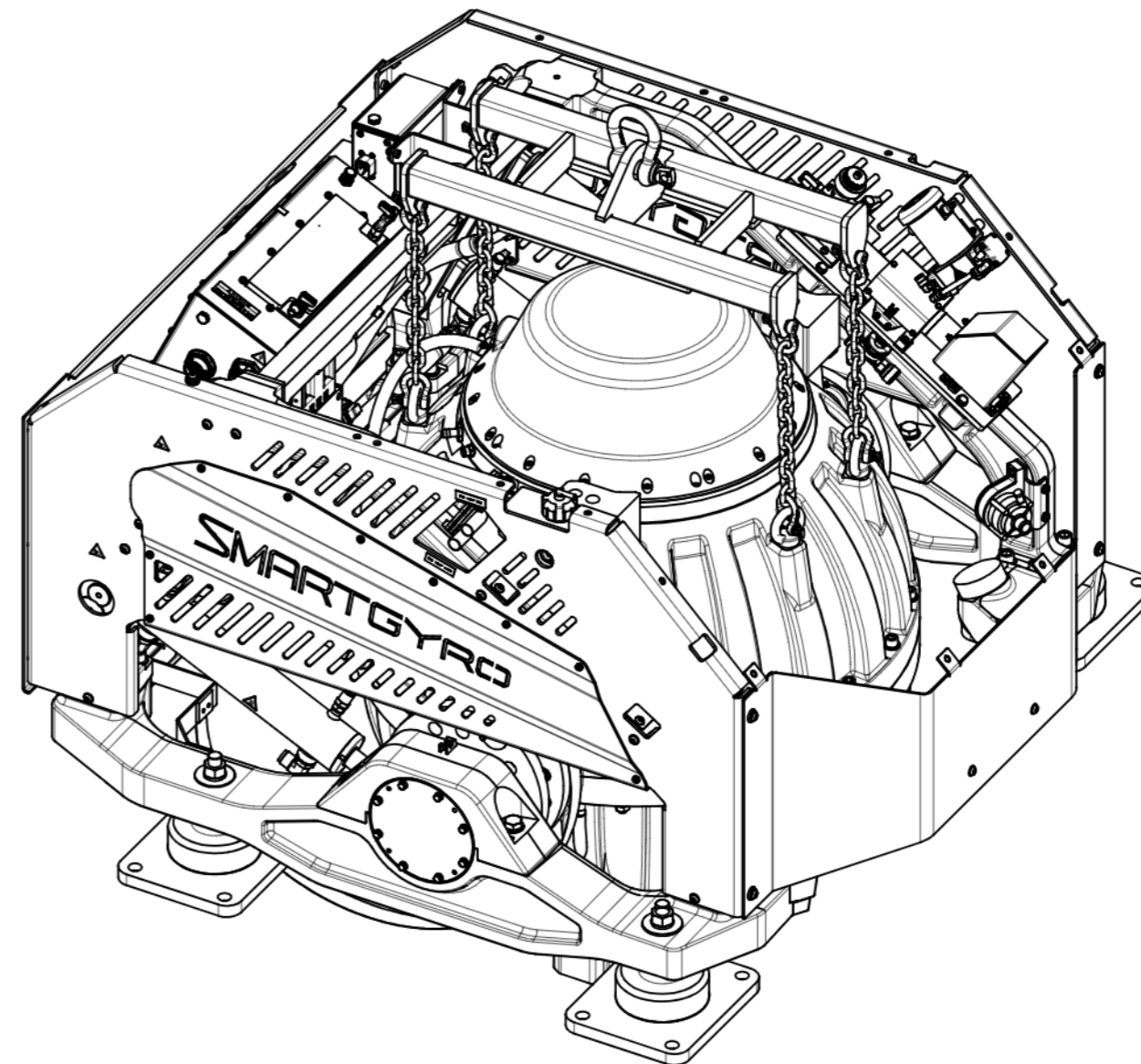
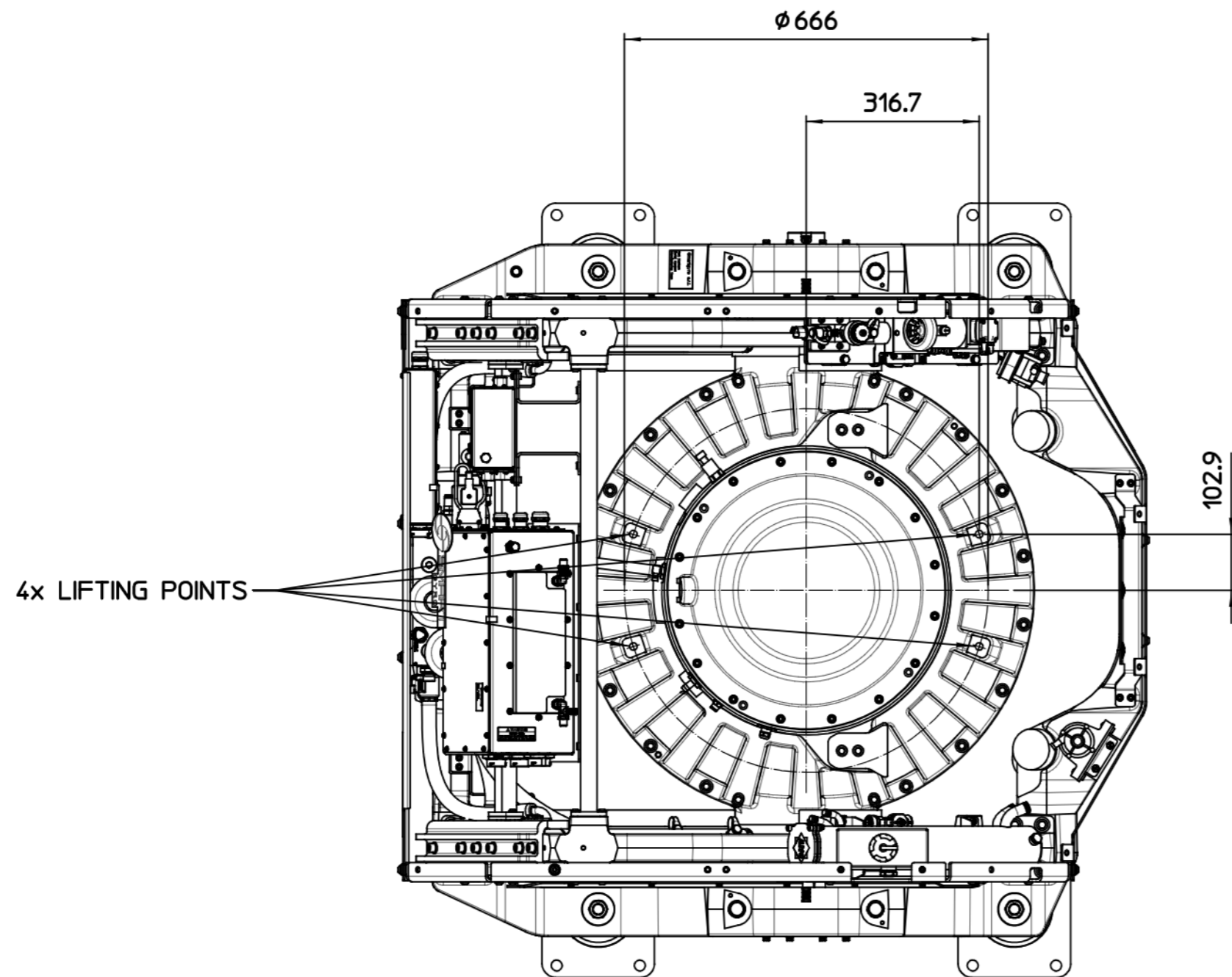


SG150 OUTLINE



REV.	DATA / DATE	DESCRIZIONE REVISIONE / REVISION DESCRIPTION			DISEGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY
		DISEGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY	MATERIALE / MATERIAL		
FIRMA / SIGN	C.NOSEI	F.STIFANI			TRATTAMENTO TERMICO / HEAT TREATMENT		
DATA / DATE	08/05/25	08/05/25			RIVESTIMENTO SUPERFICIALE / SURFACE TREATMENT		
QUOTE SENZA INDICAZIONE DI TOLLERANZA / DIMENSIONS WITHOUT TOLERANCE INDICATIONS					DENOMINAZIONE / DESCRIPTION		
ISO 2768-fH					A2		
SMUSSI NON QUOTATI / NOT DIMENSIONED CHAMFER : 0.3x45°							
RAGGI NON QUOTATI / NOT DIMENSIONED RADIUS : 0.3							
RIPRODUZIONE E/O DIFFUSIONE VIETATA / REPRODUCTION AND/OR DISCLOSURE IS FORBIDDEN					DISEGNO NR. / DRAWING NR. 115ID401 FOGLIO / SHEET 1 / 5 PESO / WEIGHT (kg) 1:10 SCALA / SCALE		

SG150 GYRO LIFTING

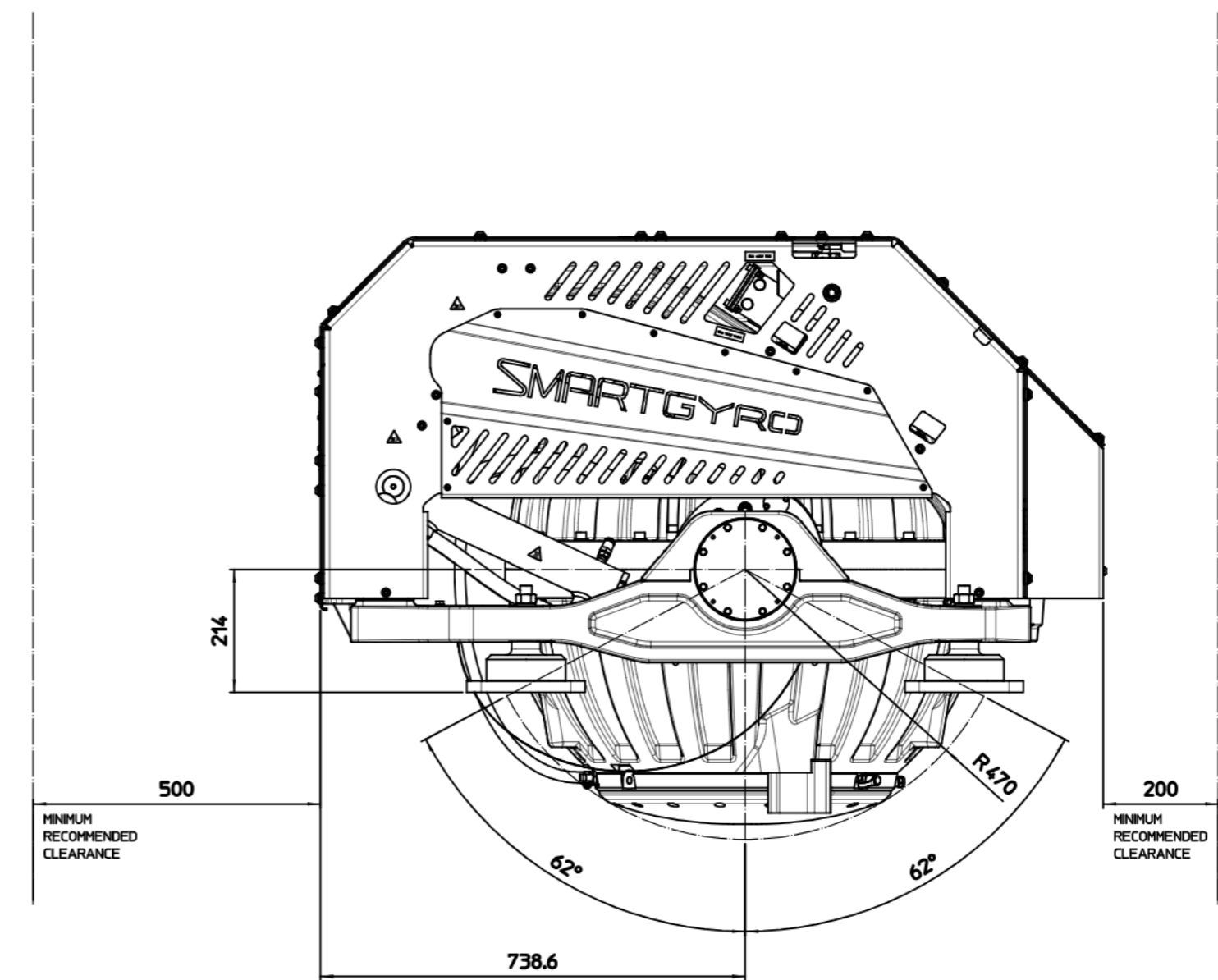
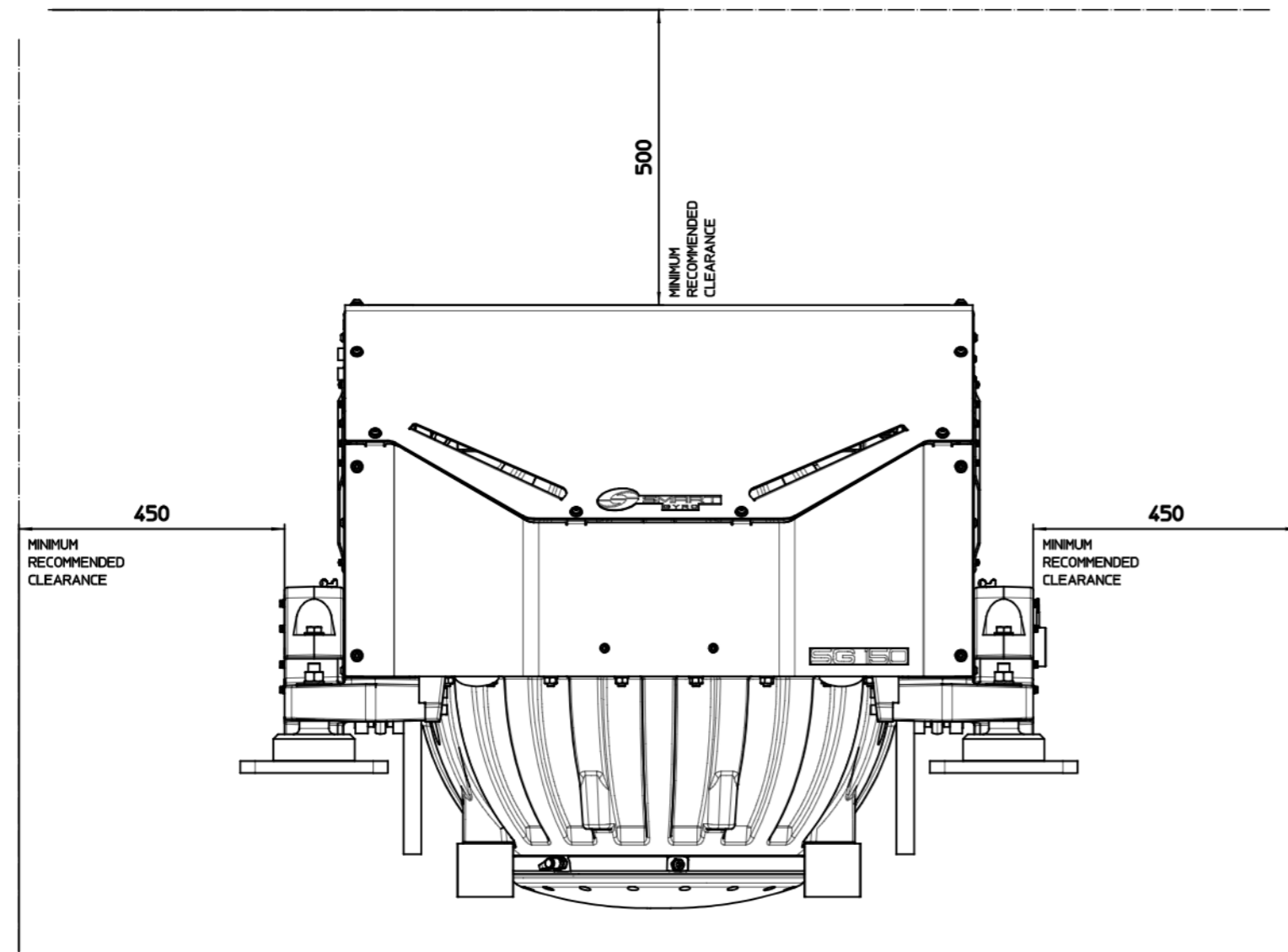


NOTES:

- SG150 assembly weight: 1890 kg
- For vertical lifting use spreader bar 500CS133 or similar tool.
- Ensure to use the eyebolts for gyro lifting and that lifting straps/chains remain vertical during operation.
- [- The eyebolts are placed at 180° on the same circumference.]

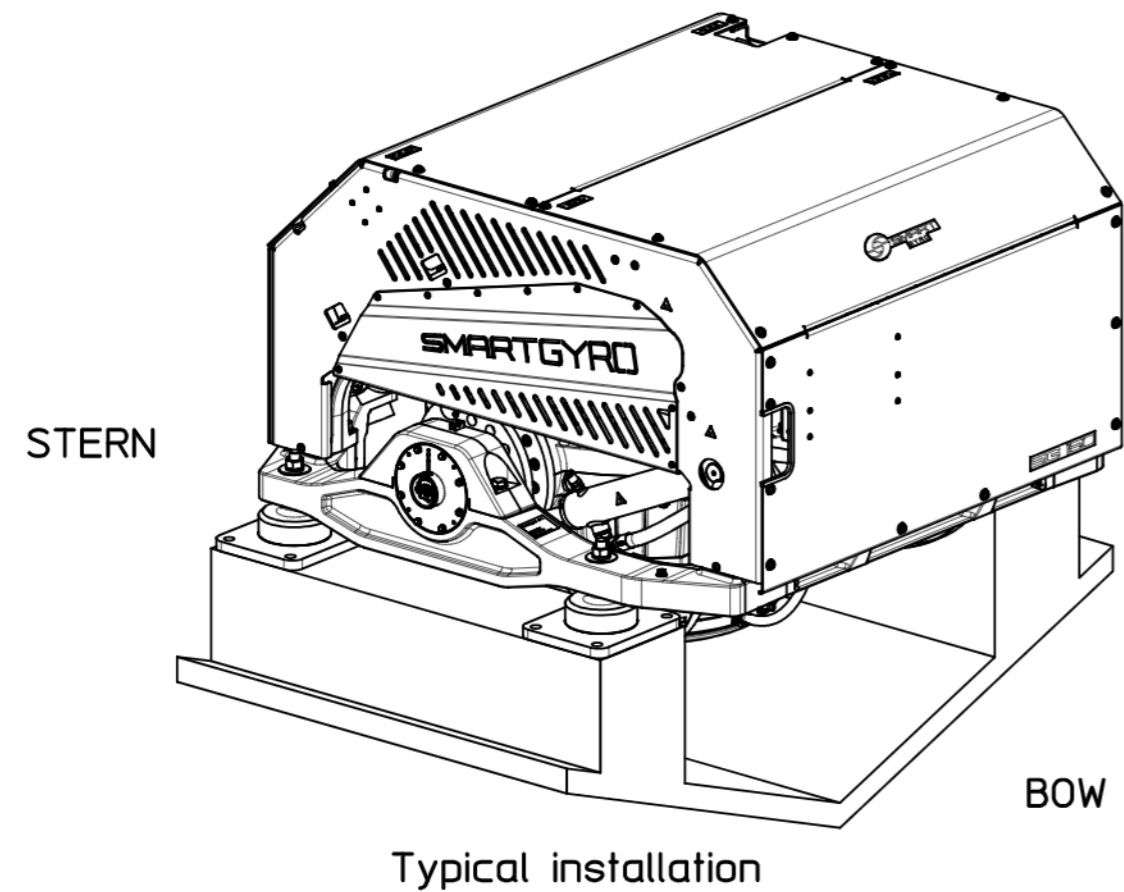
REV.	DATA / DATE	DESCRIZIONE REVISIONE / REVISION DESCRIPTION		DISEGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY
		DISEGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY	MATERIALE / MATERIAL	
FIRMA / SIGN	C.NOSEI	F.STIFANI			TRATTAMENTO TECNICO / HEAT TREATMENT	
DATA / DATE	08/05/25	08/05/25			RIVESTIMENTO SUPERFICIALE / SURFACE TREATMENT	
QUOTE SENZA INDICAZIONE DI TOLLERANZA / DIMENSIONS WITHOUT TOLERANCE INDICATIONS				RIVESTIMENTO SUPERFICIALE / SURFACE TREATMENT		A2
ISO 2768-fH				DENOMINAZIONE / DESCRIPTION		
SMUSSI NON QUOTATI / NOT DIMENSIONED CHAMFER : 0.3x45°				RIPRODUZIONE E/O DIFFUSIONE VIETATA / REPRODUCTION AND/OR DISCLOSURE IS FORBIDDEN		
RAGGI NON QUOTATI / NOT DIMENSIONED RADIUS : 0.3				DISEGNO NR. / DRAWING NR.		
				FOGLIO / SHEET		PESO / WEIGHT
				115ID401		2 / 5
				SCALA / SCALE		1:10
						(kg)

SG150 RECOMMENDED CLEARANCES

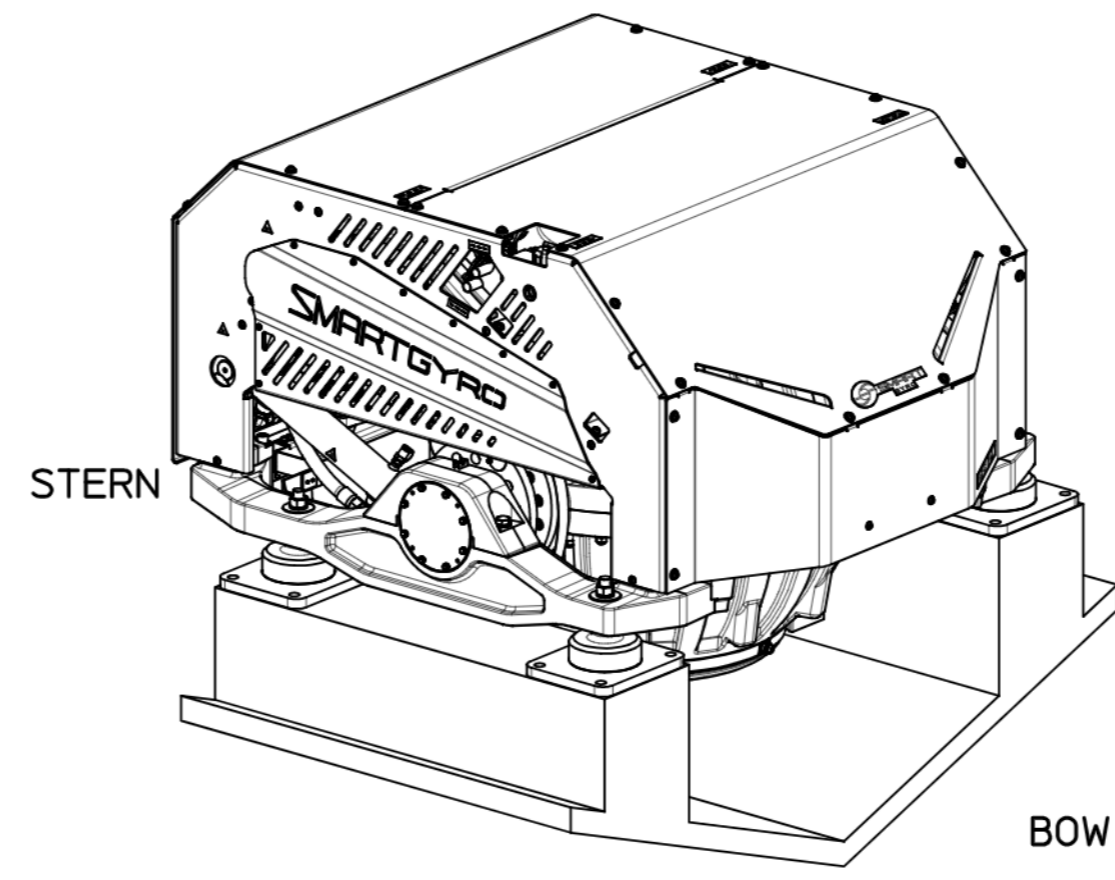


REV.	DATA / DATE	DESCRIZIONE REVISIONE / REVISION DESCRIPTION	DISegnato / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY
DESIGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY	MATERIALE / MATERIAL		
FIRMA / SIGN	C.NOISEI	F.STIFANI	TRATTAMENTO TERMICO / HEAT TREATMENT		
DATA / DATE	08/05/25	08/05/25			
QUOTE SENZA INDICAZIONE DI TOLLERANZA / DIMENSIONS WITHOUT TOLERANCE INDICATIONS		TRATTAMENTO SUPERFICIALE / SURFACE TREATMENT			
ISO 2768-FH		DESCRIZIONE / DESCRIPTION			
<small> RAGGI NON QUOTATI / NOT DIMENSIONED CHAMFER: 0.3x45° RAGGI NON QUOTATI / NOT DIMENSIONED RADIUS: 0.3 </small>		SG150 Installation details			
<small> RIPRODUZIONE E/O DIFFUSIONE VIETATA / REPRODUCTION AND/OR DISCLOSURE IS FORBIDDEN </small>		<small> DISEGNO NR. / DRAWING NR. </small> 115ID401	<small> FOGLIO / SHEET </small> 3 / 5	<small> PESO / WEIGHT </small> kg	<small> SCALA / SCALE </small> 1:7.5

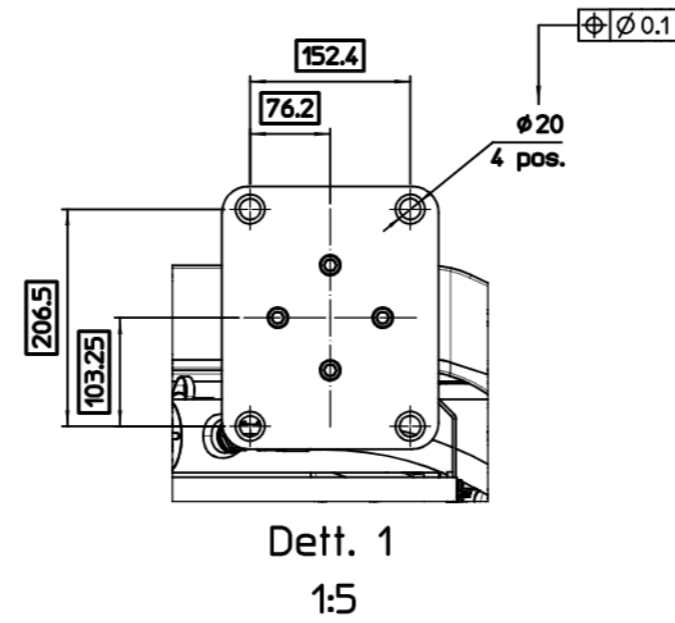
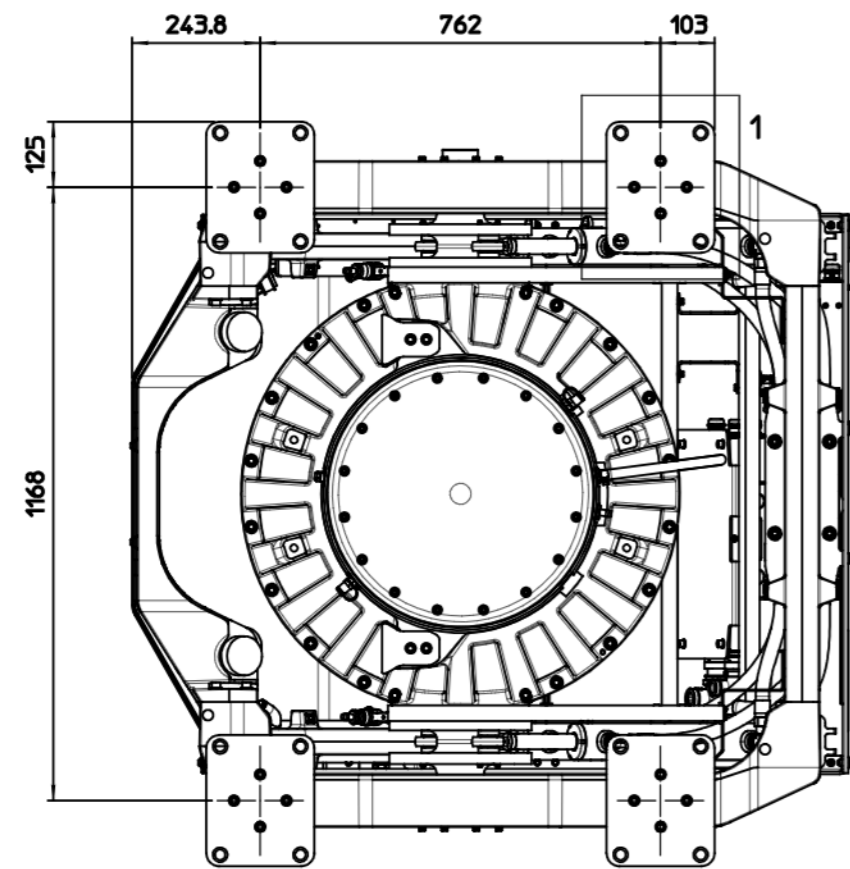
SG150 INSTALLATION MODES



Typical installation



Reverse installation

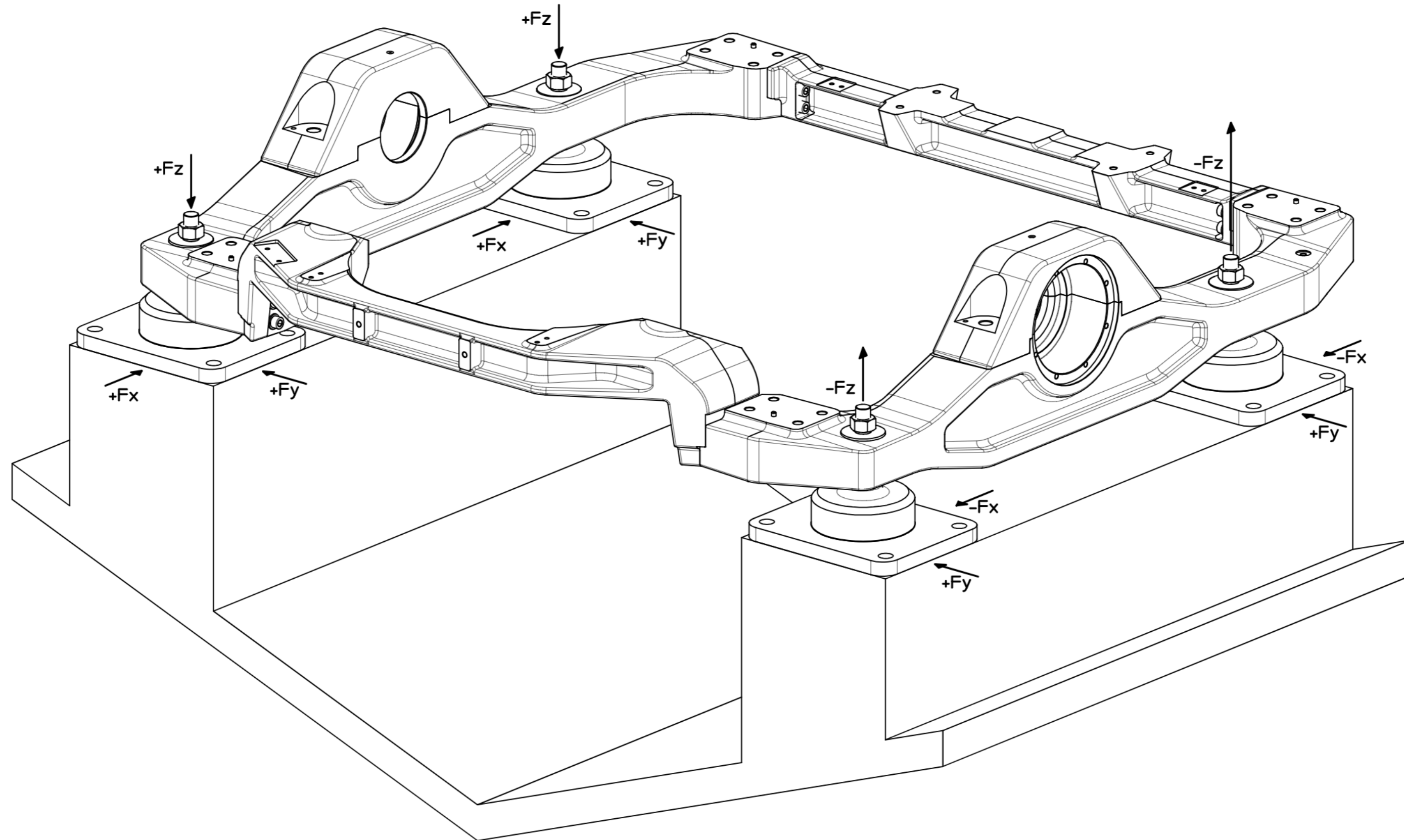


Det. 1
1:5

- SG150 gyro may be mounted typical and reverse installation modes, depending on the best accessibility for maintenance and service.
- In case of reverse installation refer to installation manual MSG150 for software setting on control display.
- For the correct positioning of the mounting holes on the supporting structure use the installation kit 112AS?? and follow installation manual MSG150.
- For gyro fixing to the supporting structure use the provided bolts M14 and washers.
- Recommended torque for fixing bolts in ?? Nm.

REV.	DATA / DATE	DESCRIZIONE REVISIONE / REVISION DESCRIPTION	DISegnato / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY
DESIGNER / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY	MATERIALE / MATERIAL		
FIRMA / SIGN	C.NOSEI	F.STEFANI	TRATTAMENTO TERMICO / HEAT TREATMENT		
DATA / DATE	08/05/25	08/05/25	A1		
QUOTE SENZA INDICAZIONE DI TOLLERANZA DIMENSIONS WITHOUT TOLERANCE INDICATIONS ISO 2768-FH			TRATTAMENTO SUPERFICIALE / SURFACE TREATMENT DESCRIZIONE / DESCRIPTION SG150 Installation details		
SMOSSA NON QUOTATA / NOT DIMENSIONED CHAMFER: 0.3x45° RASO NON QUOTATO / NOT DIMENSIONED RASO: 0.3			DISEGNO NR. / DRAWING NR. 115ID401		
RIPRODUZIONE E/O DIFFUSIONE VIETATA REPRODUCTION AND/OR DISCLOSURE IS FORBIDDEN			FOGLIO / SHEET 4 / 5	PESO / WEIGHT kg	SCALA / SCALE 1:10

SG150 EXERTED LOADS ON HULL STRUCTURE



- The SG150 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 to each of the four mounting points as detailed below.

$F_x = 22'000 \text{ N}$

$F_y = 9'000 \text{ N}$

$F_z = 42'000 \text{ N}$

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

REV.	DATA / DATE	DESCRIZIONE REVISIONE / REVISION DESCRIPTION		DISEGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY
		DISEGNATO / DRAWN BY	VERIFICATO / CHECKED BY	APPROVATO / APPROVED BY	MATERIALE / MATERIAL	
FIRMA / SIGN	C.NOSEI	F.STIFANI			TRATTAMENTO TERMICO / HEAT TREATMENT	
DATA / DATE	08/05/25	08/05/25			RIVESTIMENTO SUPERFICIALE / SURFACE TREATMENT	
QUOTE SENZA INDICAZIONE DI TOLLERANZA / DIMENSIONS WITHOUT TOLERANCE INDICATIONS				DENOMINAZIONE / DESCRIPTION		
ISO 2768-fH				A2		
SMUSI NON QUOTATI / NOT DIMENSIONED CHAMFER : 0.3x45°				RIPRODUZIONE E/O DIFFUSIONE VIETATA / REPRODUCTION AND/OR DISCLOSURE IS FORBIDDEN		
RAGGI NON QUOTATI / NOT DIMENSIONED RADIUS : 0.3				DISEGNO NR. / DRAWING NR.		
				115ID401		
				FOGLIO / SHEET		
				5 / 5		
				PESO / WEIGHT		
				(kg)		
				SCALA / SCALE		
				1:5		



SG150 Installation details