







OWNER:  شرکت سست و سویی توهم ایرایشان (سایه و نقشه)	<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>						EPC CONTRACTOR:  Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT		
	<b>PULSATION DAMPER DETAIL DRAWING FOR EMERGENCY INSTRUMENT AIR COMPRESSOR</b>								
MC :  شرکت سست و سویی توهم ایرایشان (سایه و نقشه)	Project	Area	Phase	Unit	Dis.	Doc.	Seq.	Contract No : 52-98/445	
Owner Document Number: 17811-23D	BU	20	VD	303	ME	DWG	0080	Rev.:	Page
								01	1 of 4

Pulsation dampener calculation with PV ELITE native file shall be sent before next revision of pulsation dampener drawing.

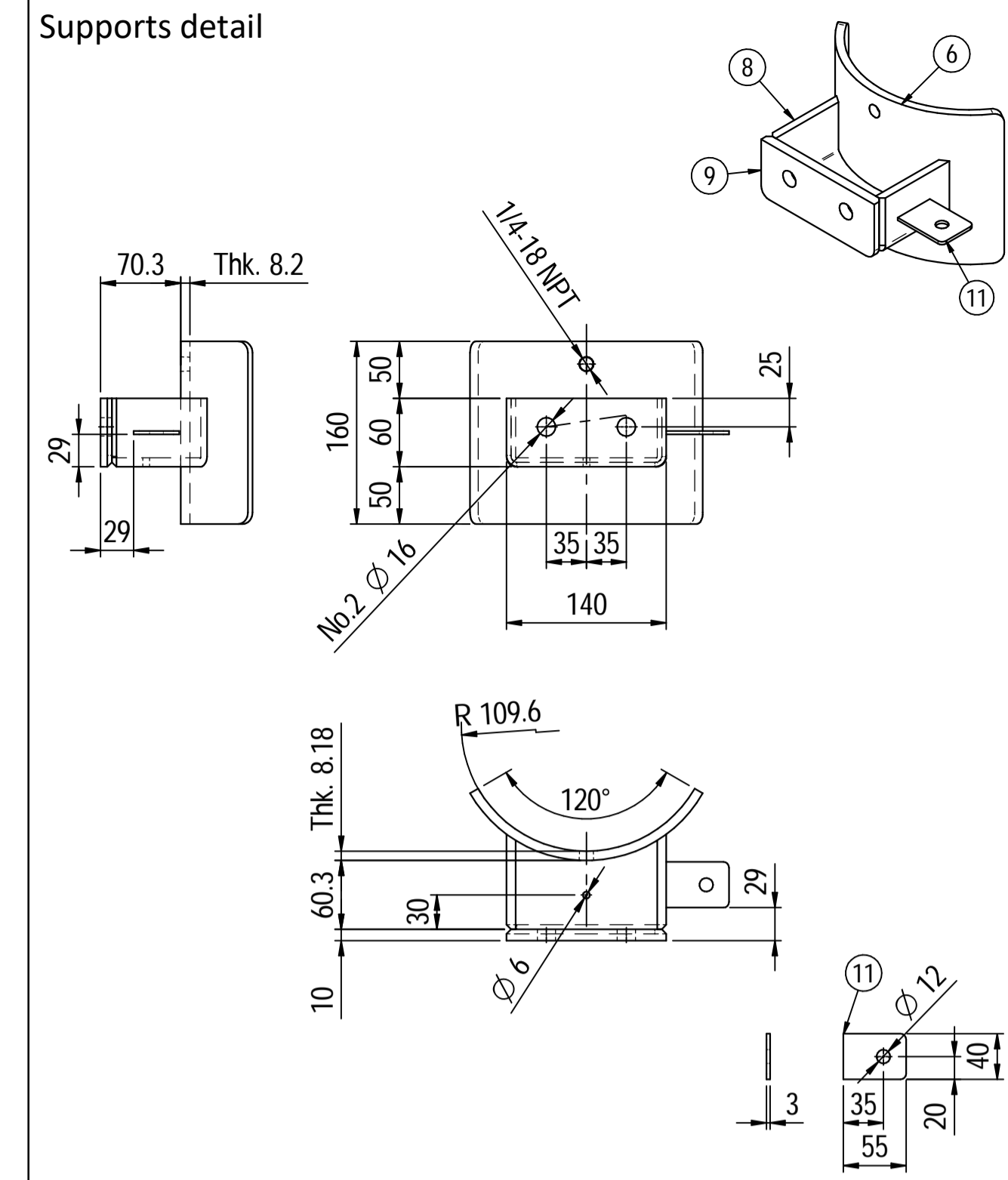
## PULSATION DAMPER DETAIL DRAWING FOR EMERGENCY INSTRUMENT AIR COMPRESSOR

 شرکت سست و سویی توهم ایرایشان (سایه و نقشه)	 Chagalesh-Enerchimi-Steam Joint Venture BUPC-MEG PLANT PROJECT	<b>BUSHEHR PETROCHEMICAL COMPANY MEG PLANT</b>
<b>Document Review</b>		
Issue Purpose:	IFA	
Result Code: AP,AN,CM,RE,NC	AN	
Next Status : IFC,IFA,IFI,AFC,AB	AFC	
Responsible Department	MECHANICAL	
Commented Date	May/02/2022	
<b>Approval or review hereunder shall not be construed to relieve Vendor / Subcontractor of his responsibilities and liability under the contract.</b>		

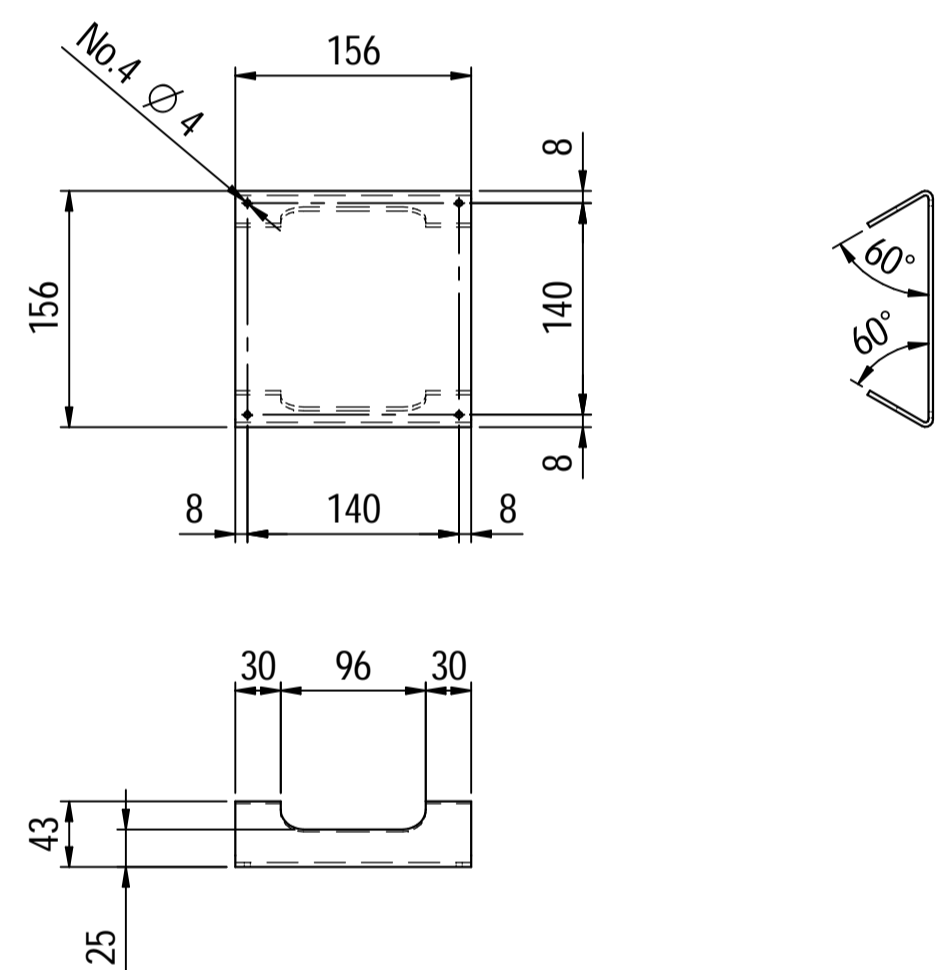
01	26/04/2022	For approval	KP	CL	JR	
00	06/04/2022	For approval	KP	CL	JR	
<b>Rev.</b>	<b>Date</b>	<b>Purpose of Issue</b>	<b>Prepared</b>	<b>Checked</b>	<b>Approved</b>	<b>AC Code</b>
					<b>Class: 1</b>	<b>Phase: P</b>



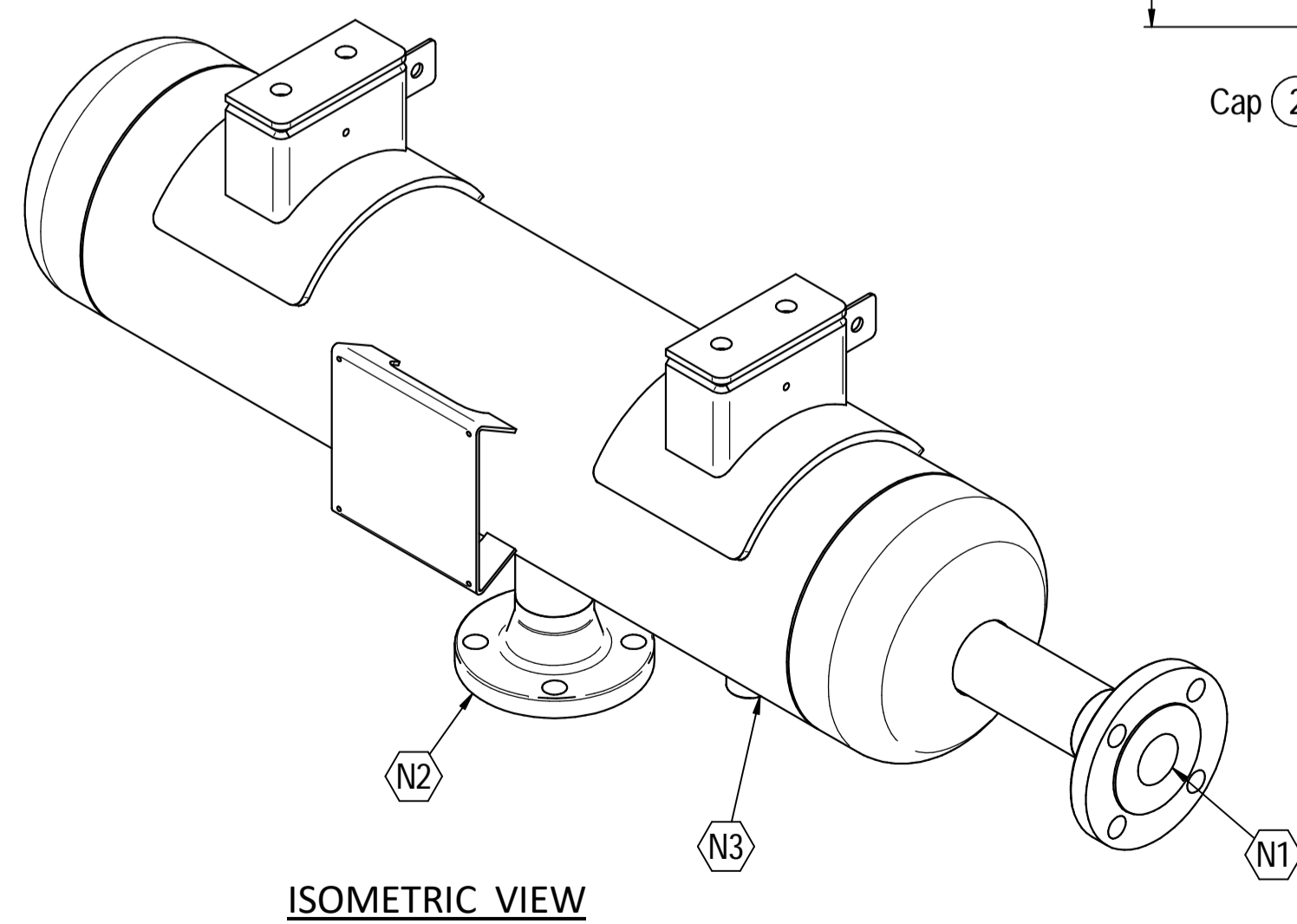
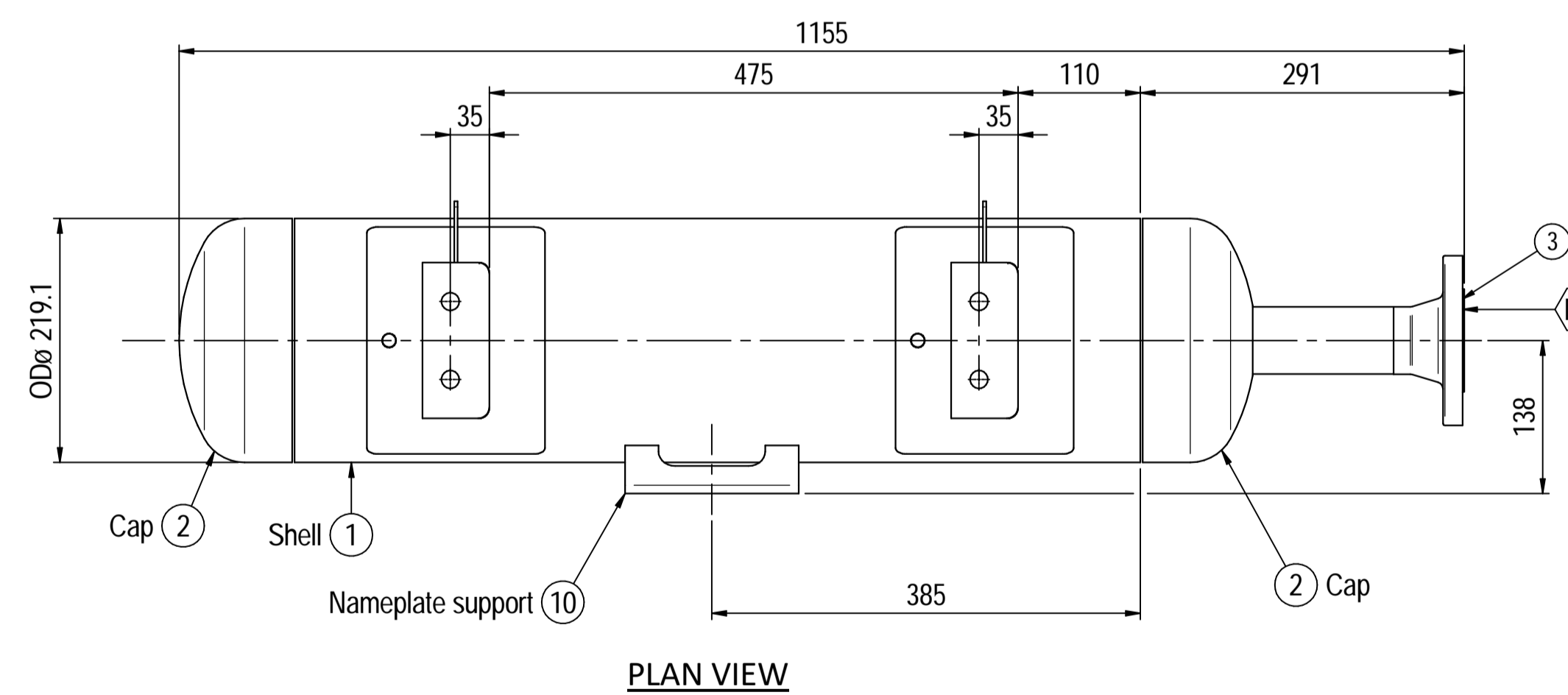
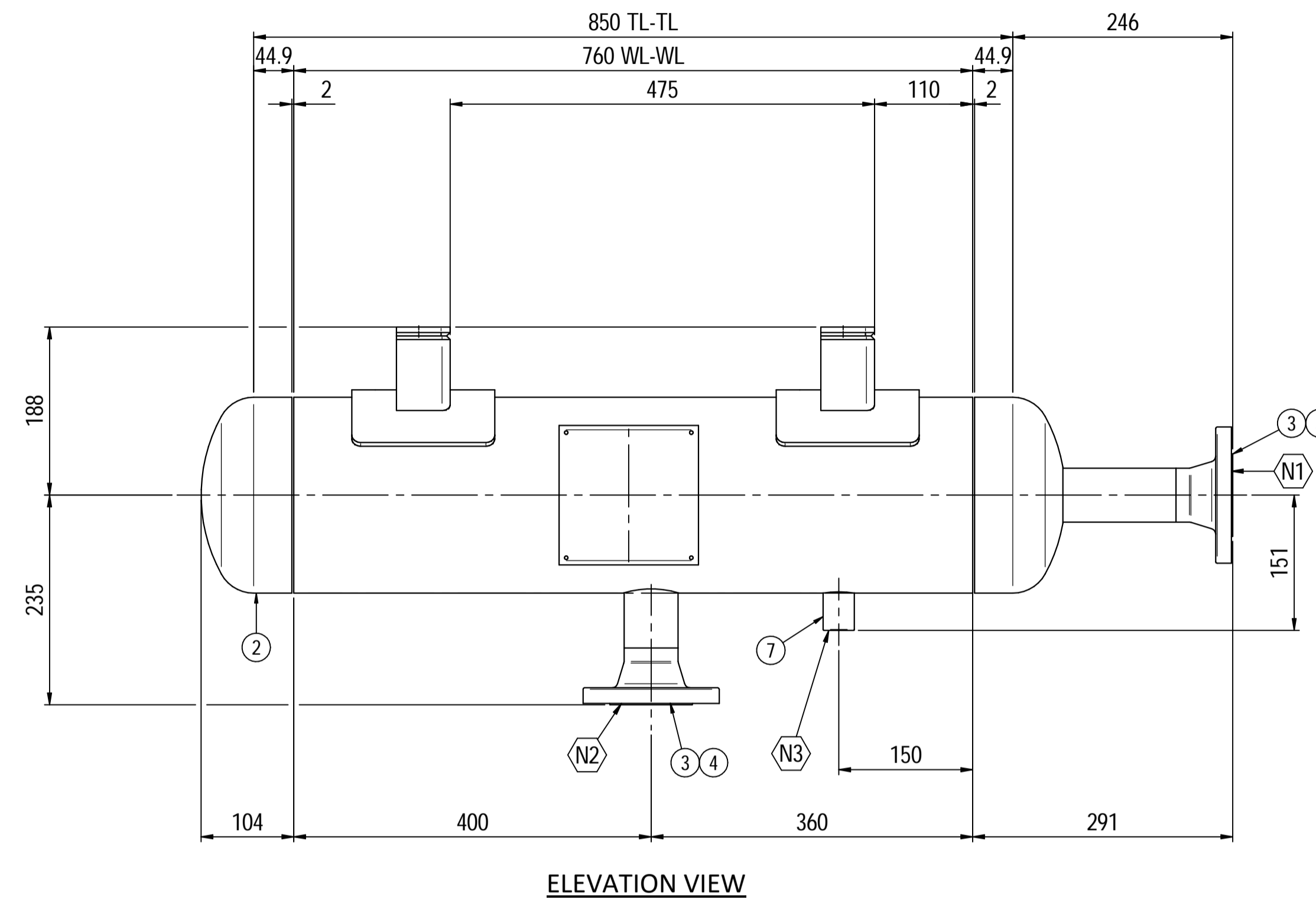
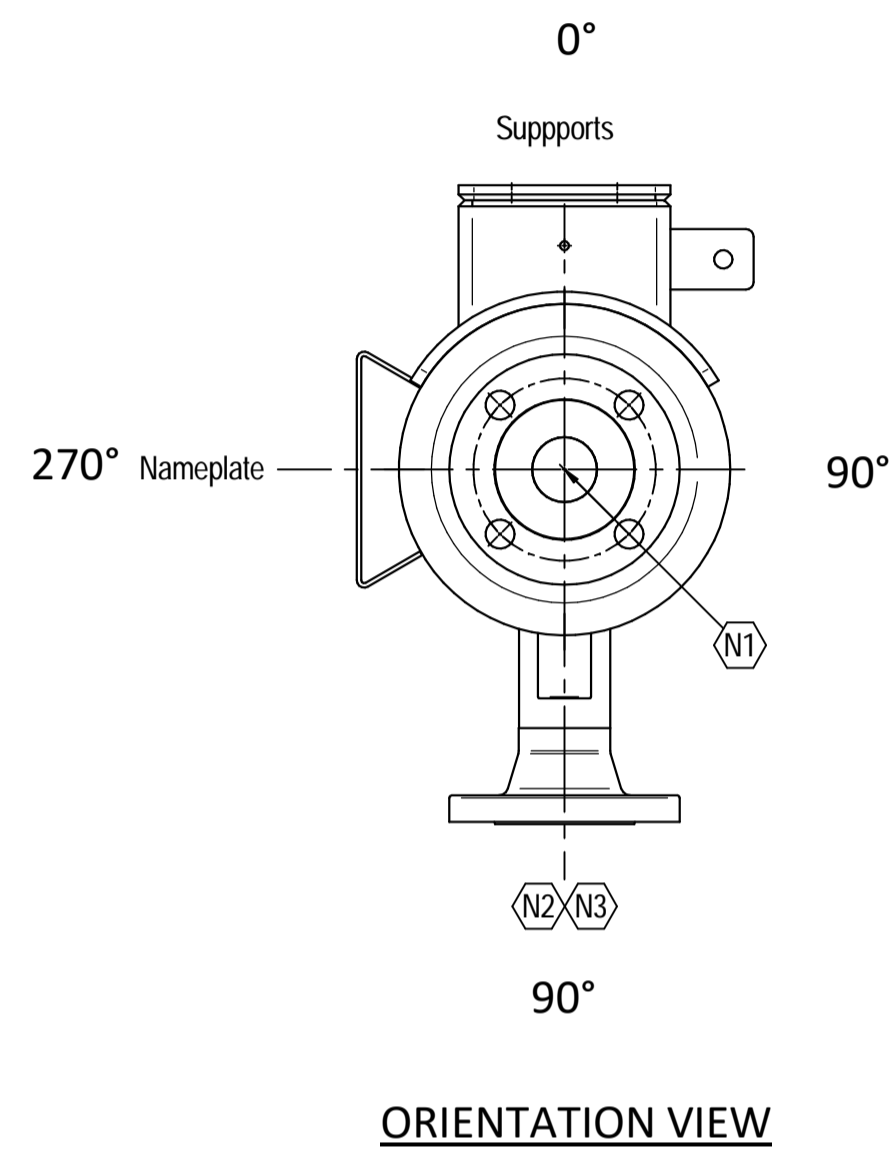
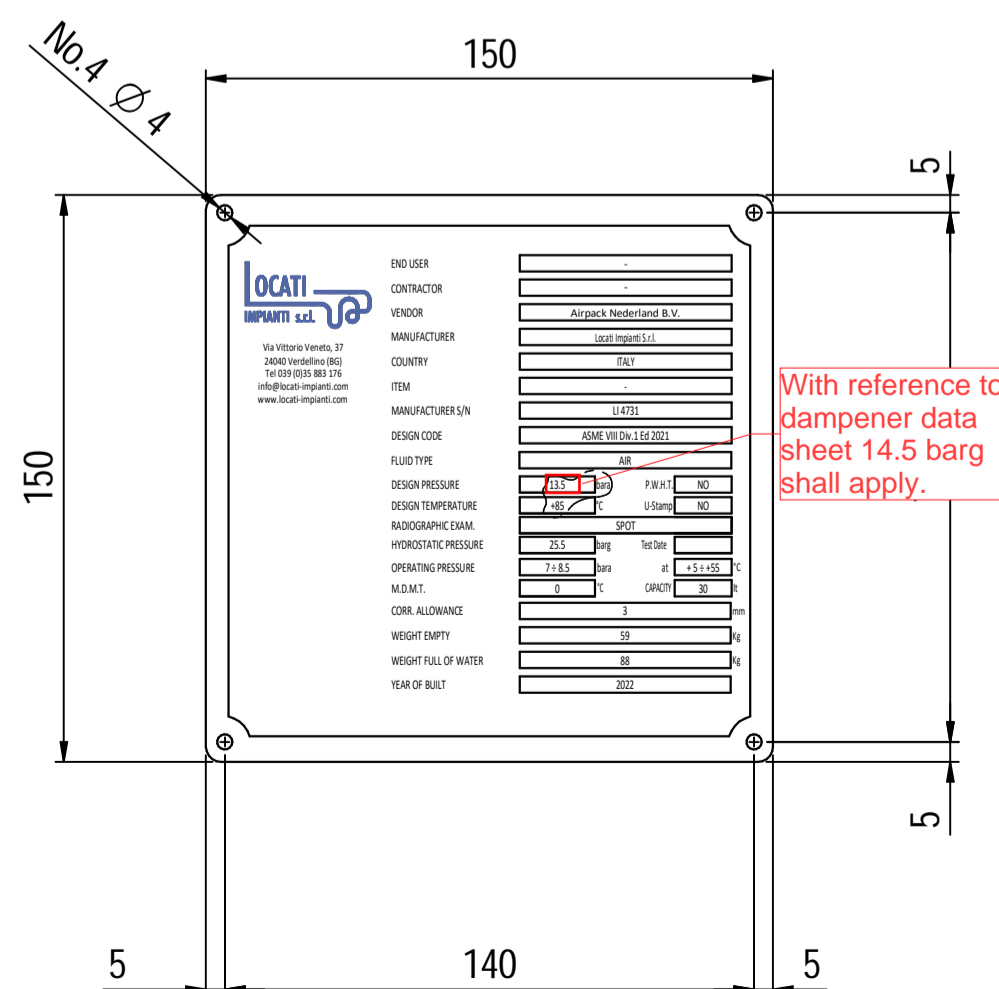
Supports detail



Nameplate detail scale 1:5



Nameplate detail scale 1:2



Material List					
Pos.	Q.ty	Description	Mat.	Cert.	
1	1	Shell by seamless pipe 8" Sch.40 L=760	A106 Gr.B	3.1	
2	2	Cap 8" Sch40	A234 WPB	3.1	
3	2	Flange 2" WN 150# Sch160	SA105	3.1	
4	1	Seamless pipe 2" Sch160 L=74	A106 Gr.B	3.1	
5	1	Seamless pipe 2" Sch160 L=72	A106 Gr.B	3.1	
6	2	Pad by pipe 8" Sch.40	A106 Gr.B	3.1	
7	1	Coupling 1/2" NPT #6000	A105	3.1	
8	2	Plate 83x231 Thk.8	A516 70	3.1	
9	2	Plate 60x140 Thk.10	A516 70	3.1	
10	1	Nameplate support 156x241 Thk.3mm	A516 70	3.1	
11	2	Earthing Plate 55 x 40 Thk.3	A240 TP316L		

Note:  
 1) Governing measurement S.I. unless otherwise specified;  
 2) Flange bolt holes have to be straddled from main vessel center line in plan & vertical & horizontal centreline in elevation;  
 3) Material: certification 3.1 EN 10204;  
 4) All internal edge shall be rounded off;  
 5) Nozzle fittings in accordance with ASME B16.5: 2013;  
 6) Flange fittings in accordance with ASME B16.9: 2012;  
 7) The flange dimensions are in accordance to ASME B16.5: 2013;  
 8) All fillet welds not detailed on "WELDING MAP" or drawing shall have the weld; throated equal to 0,7 times the minimum thickness to be welded;  
 9) All welds are continuous except where indicate;  
 10) See document C220006CLC007 for vessel calculation.

ITEM	QTY	SERVICE	SIZE	O.D.	THK	RATING	TYPE	FACE	O.D.	THK.	Tc
N3	1	DRAIN	1/2"	38.1	8.38	#6000	-	NPT-F	-	-	8.5 ± 10
N2	1	AIR OUTLET	2"	60.3	8.74	#150	WN	RF	-	-	8.5 ± 10
N1	1	AIR INLET	2"	60.3	8.74	#150	WN	RF	-	-	8.5 ± 10

DATI DI PROGETTO / Design data			
FLUIDO	Air	COLLAUDO	Test
STATO FISICO DEL FLUIDO	Gas	NATIONAL BOARD REGISTRATION	Lloyd Register
CODICE DI CALCOLO	ASME VIII Div. 1 Ed. 2021	CANADIAN REGISTER NUMBER	NO
PRESSIONE DI ESERCIZIO	7 + 8.5 bara	SERVIZIO LETALE	NO
PRESSIONE DI PROGETTO	13.5 bara (14 barg)	R-RAY	RT examination
PRESSIONE ESTERNA	NO	LICUIDI PENETRANTI	NO
PRESSIONE DI PROVA IDRAULICA	25.5 barg	Dye penetrant extension	NO
TEMPERATURA DI ESERCIZIO	5 + 55°C	ULTRASUONI	NO
TEMPERATURA DI PROGETTO	85°C	Hydraulic test pressure	NO
SOVRAMEZZA	3 mm	CONTROLLO MAGNETOSCOPICO	NO
CAPACITA'	30 l	Magnetic particle examination	NO
EFFICIENZA GIUNTI	0.85	WELD TEST COUPON	NO
MAWP @ Design Temperature	18.15 barg @ +85°C	PROCEDIMENTO DI SALDATURA	See doc: C220006WBK013
MAWP(EXT)	NO	Welding procedure	
MDMT @ MAWP	0 °C @ 18.15 barg	TIPO DI FONDO	CAP
TRATTAMENTO TERMICO	NO	Head type	
P.W.H.T.	NO	FORMAZIONE FONDO	HOT
IMPACT TEST	NO	Joint efficiency	
		PESO A VUOTO	59 kg
		PESO IN ESERCIZIO	59 kg
		PESO PIENO D'ACQUA	88 kg
		DATI DEL VENTO	
		Wind data	
		DATI SISMICI	
		Seismological data	

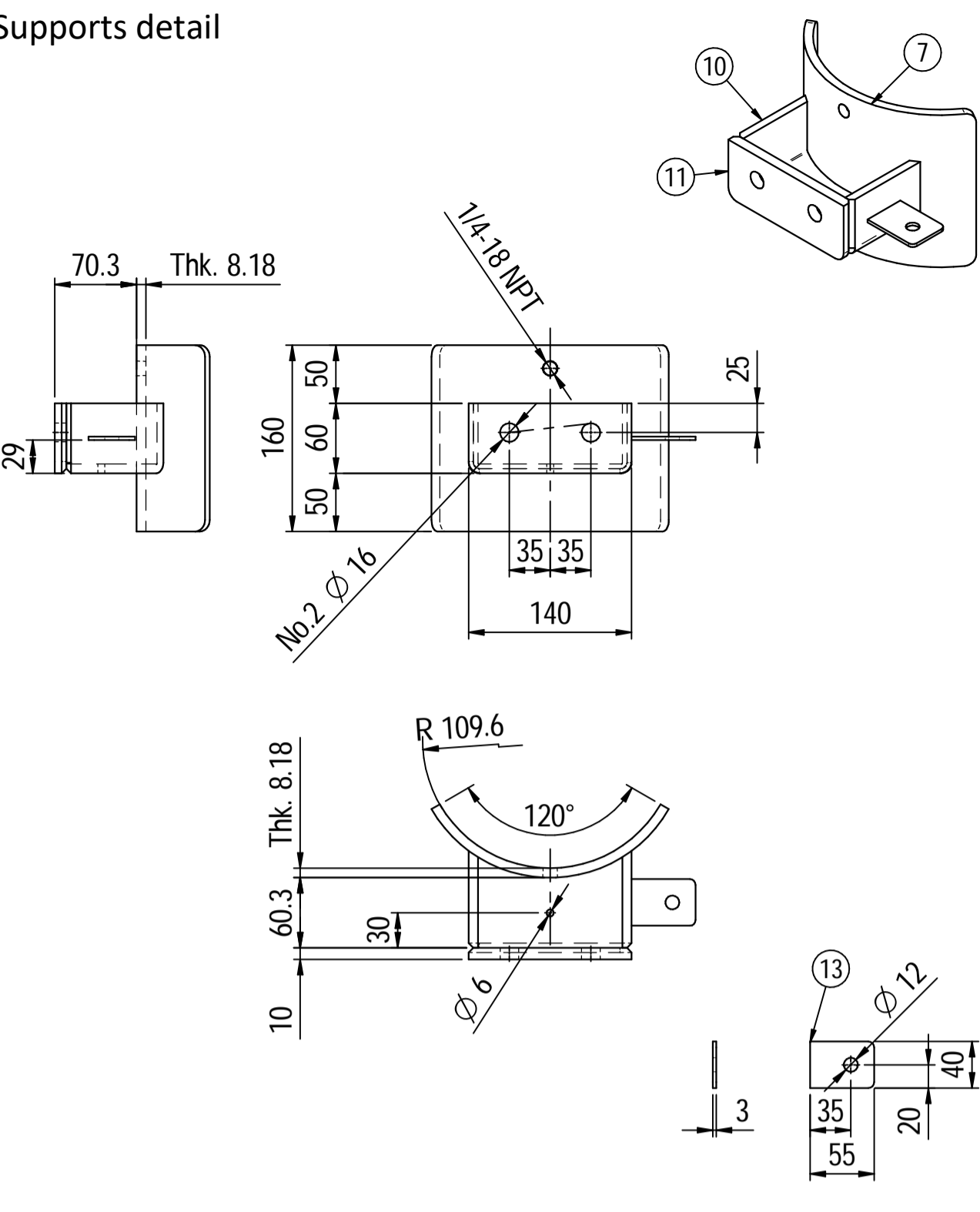
Rev.	Descrizione / Description	Disegnato/Draw	Controllato/Checked	Approvato/Approved	Data/Date
03	Modified as per Client comments	CM	MV	GL	15/04/2022
02	Modified as per Customer comments	CM	MV	GL	02/04/2022
01	Modified earthing lug	CM	MV	GL	25/03/2022
00	FIRST ISSUE	CM	MV	GL	16/03/2022

Oggetto/Object: **PULSATION DAMPER INLET**

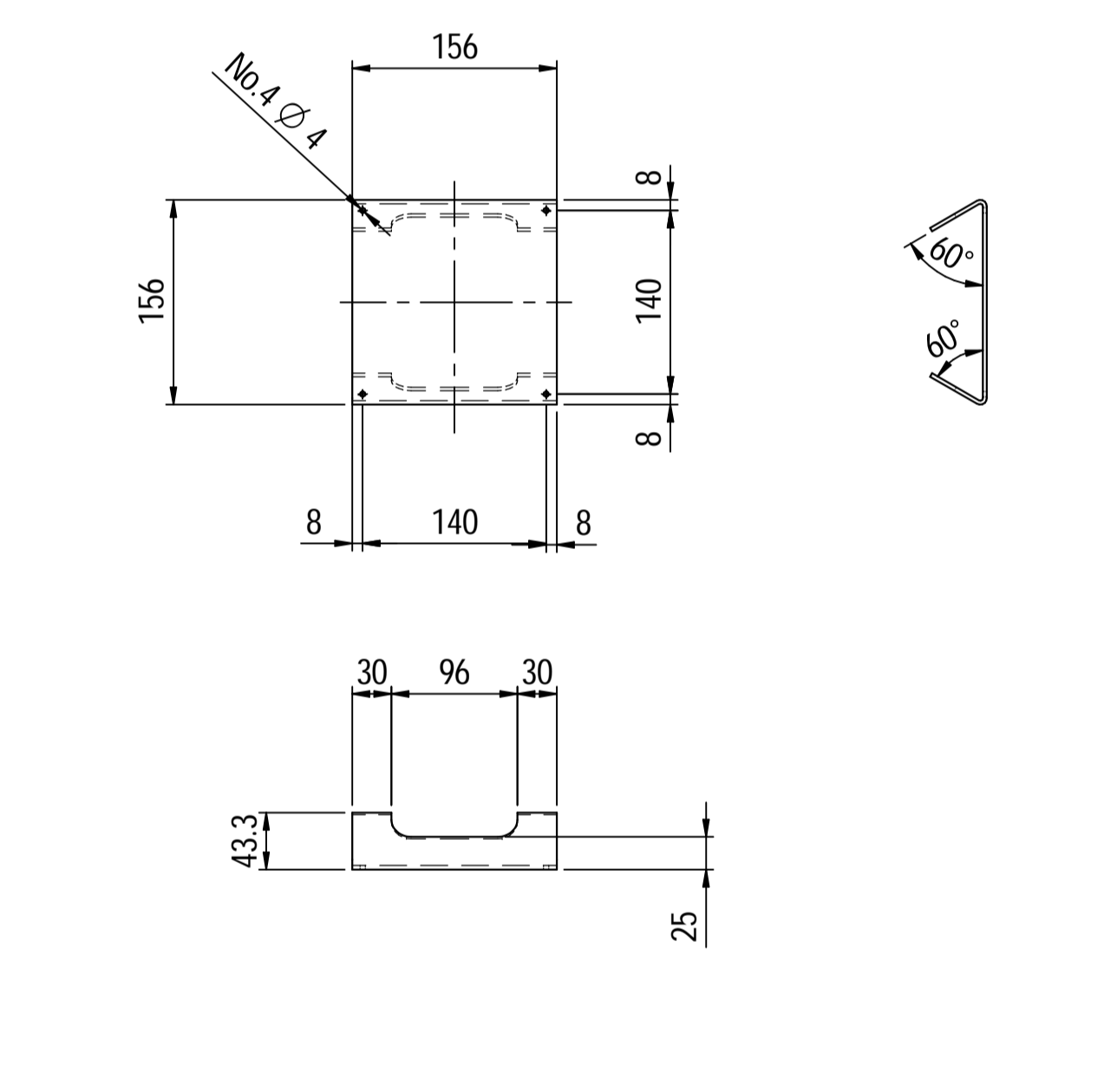
Scala/Scale	1 : 5	Formato/Size	A1
Comm. N°/Job No.	C220006	Foglio/Sheet	1 - 1
Cliente/Customer	Airpack Nederland B.V.		
Ord. No.	18498-VV-0901		
Dis. N°/Dwg No.	C220006DWG001	Rev.	03

LOCATI IMPIANTI s.r.l. Via Vittoria Veneto, 37 34040 Verdello (BS) Italy - P. +39 (0)35 883.176 Fax +39 (0)35 885.035 - e-mail: info@locatiimpianti.com http: www.locatiimpianti.com

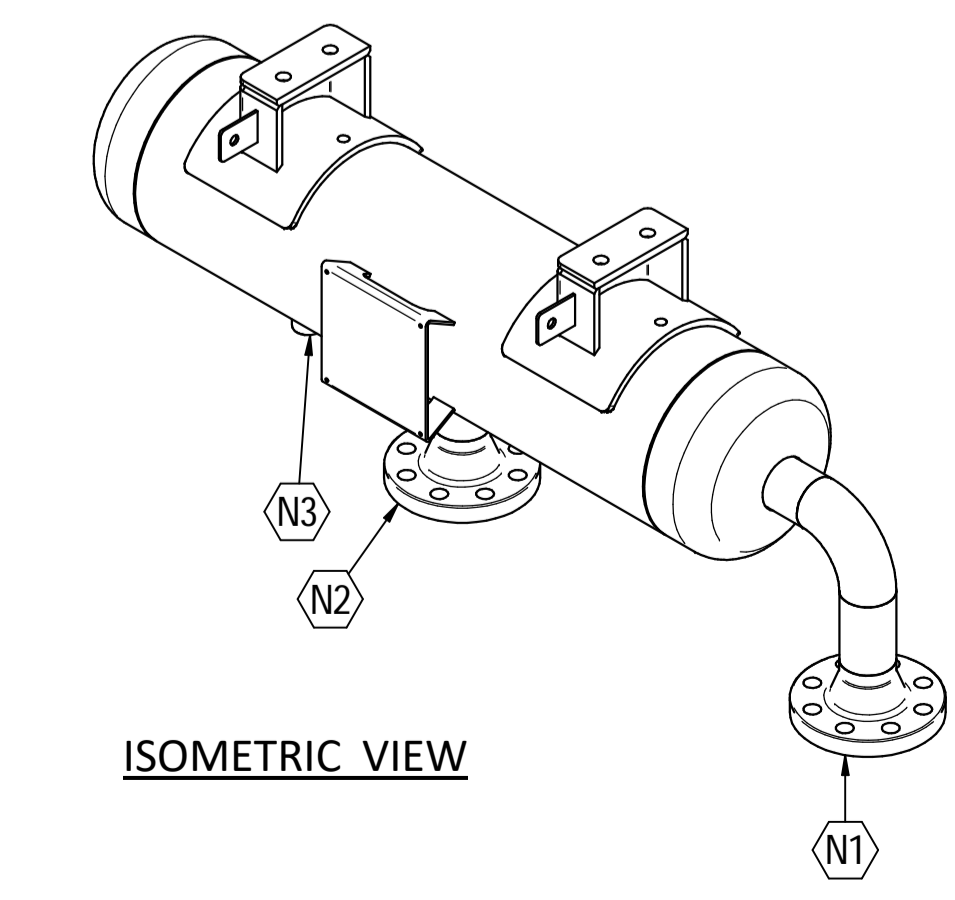
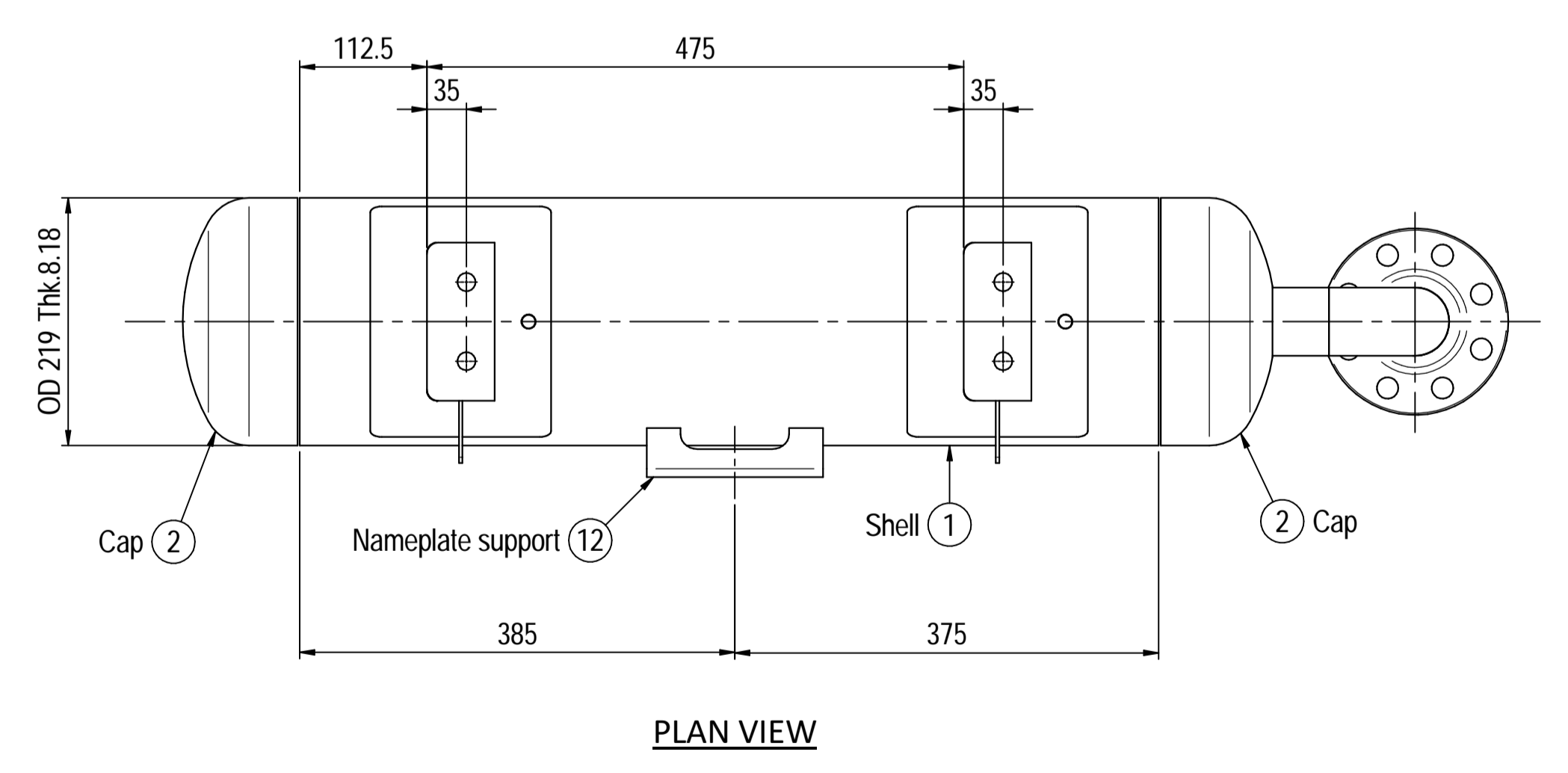
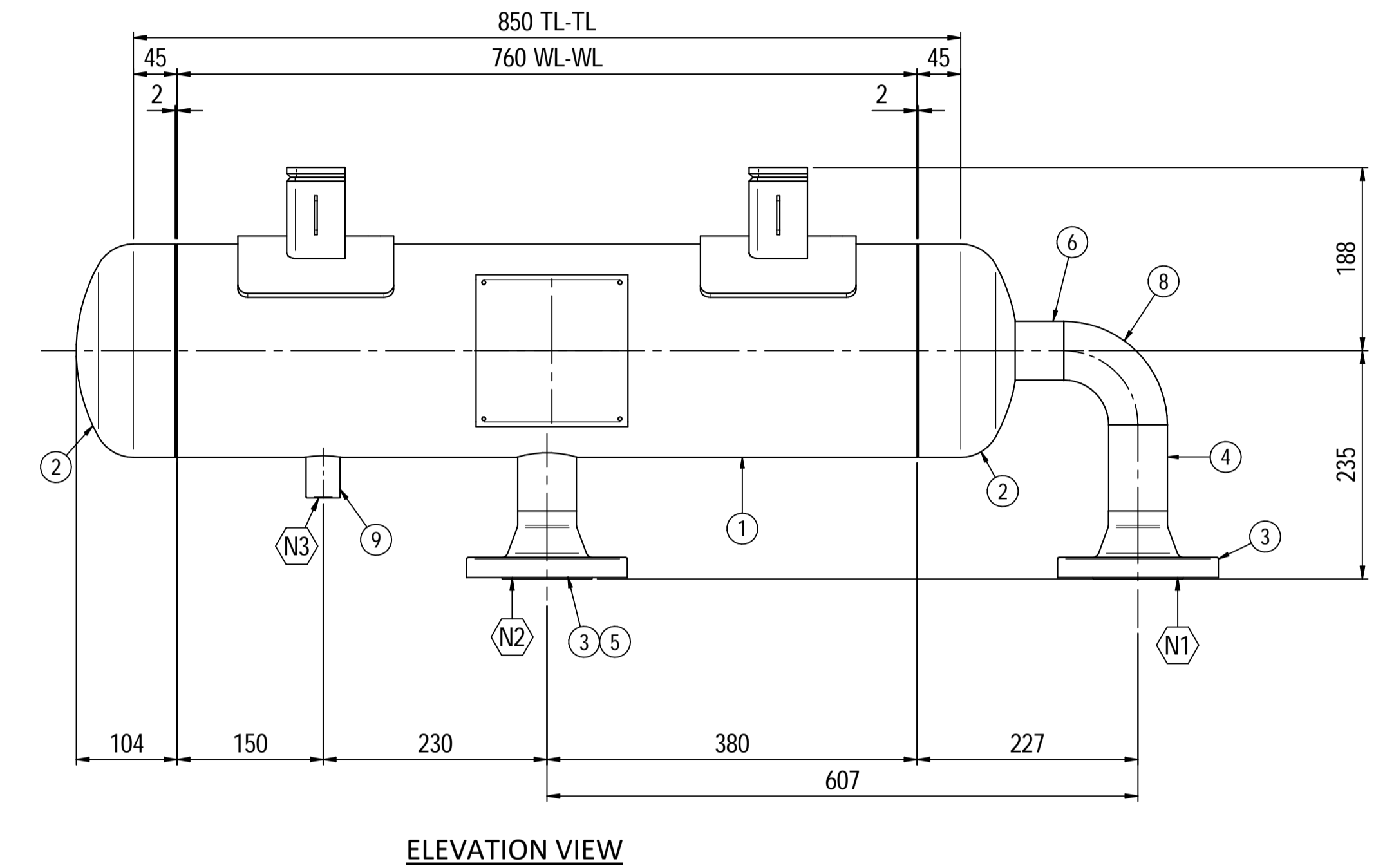
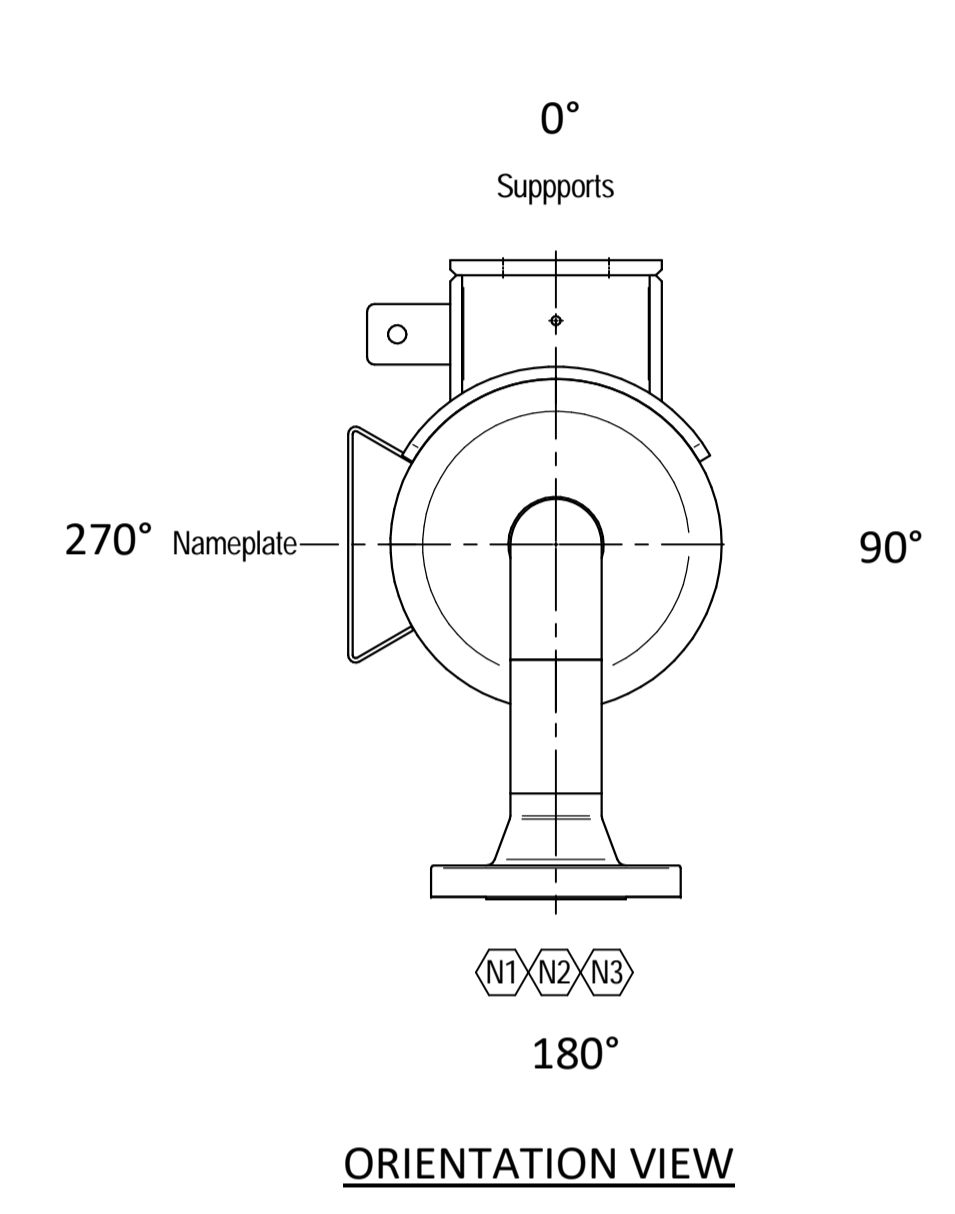
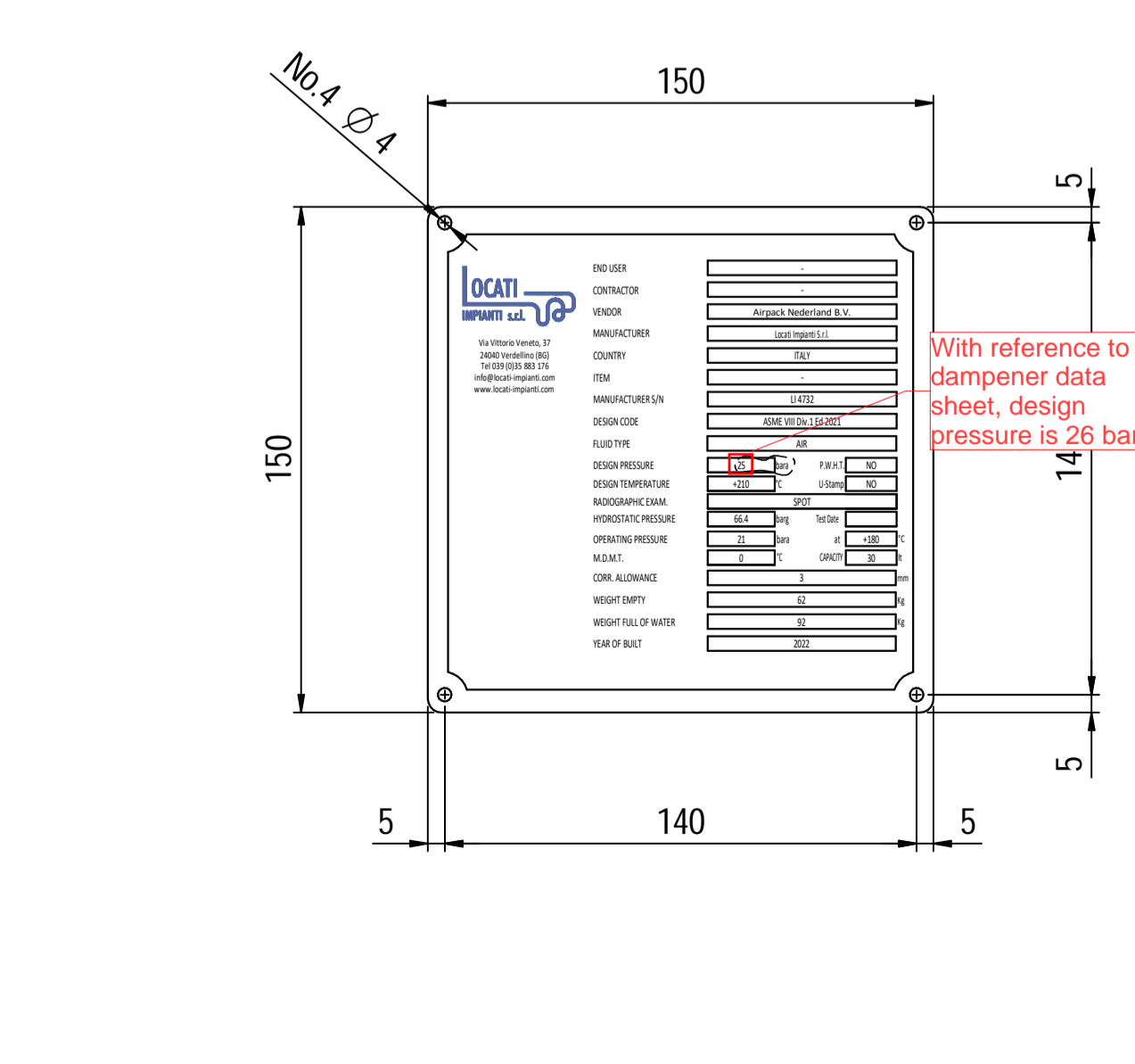
Supports detail



Nameplate support detail scale 1:5



Nameplate detail scale 1:2



Material List					
Pos.	Q.ty	Description	Mat.	Cert.	
1	1	Shell by seamless pipe 8" Sch.40 L=760	SA106 Gr.B	3.1	
2	2	Cap 8" Sch40	A234 WPB	3.1	
3	2	Flange 2" WN #300 RF Sch.160	A105	3.1	
4	1	Seamless pipe 2" Sch160 L=88.5	A106 GrB	3.1	
5	1	Seamless pipe 2" Sch160 L=74	A106 GrB	3.1	
6	1	Seamless pipe 2" Sch160 L=63	A106 GrB	3.1	
7	2	Pad by pipe 8" Sch.40	A106 Gr.B	3.1	
8	1	Seamless elbow 2" 90° LR Sch.160	SA 234 WPB	3.1	
9	1	Coupling 1/2" NPT #6000	A105	3.1	
10	2	Plate 83x231 Thk.8	A516 70	3.1	
11	2	Plate 60x140 Thk.10	A516 70	3.1	
12	1	Nameplate support 156x241 Thk.3mm	A516 70	3.1	
13	2	Earthing Plate 55 x 40 Thk.3	A240 TP316L	3.1	

- Note:
- 1) Governing measurement S.I. unless otherwise specified;
  - 2) Flange bolt holes have to be straddled from main vessel center line in plan & vertical & horizontal centreline in elevation;
  - 3) Material: certification 3.1 EN 10204;
  - 4) All internal edge shall be rounded off;
  - 5) Nozzle fittings in accordance with ASME B16.5: 2013;
  - 6) Flange fittings in accordance with ASME B16.9: 2012;
  - 7) The flange dimensions are in accordance with ASME B16.5: 2013;
  - 8) All fillet welds not detailed on "WELDING MAP" or drawing shall have the weld; throated equal to 0,7 times the minimum thickness to be welded;
  - 9) All welds are continuous except where indicate;
  - 10) See document C220006CLC008 for vessel calculation.

ITEM	QTY	SERVICE	SIZE	PIPE O.D.	THK	RATING	FLANGE TYPE	FACE	O.D.	THK.	PAD	Tc
N3	1	DRAIN	1/2"	38.1	8.38	#6000	-	NPT-F	-	-	-	8.5 ± 10
N2	1	AIR OUTLET	2"	60.3	8.74	#300	WN	RF	-	-	-	8.5 ± 10
N1	1	AIR INLET	2"	60.3	8.74	#300	WN	RF	-	-	-	8.5 ± 10

DATI DI PROGETTO / Design data			
FLUIDO	Air	COLLAUDO	Test
STATO FISICO DEL FLUIDO	Gas	REGISTRATO	Lloyd register
CODICE DI CALCOLO	ASME VIII Div. 1 Ed.2021	CANADIAN REGISTER NUMBER	NO
PRESSIONE DI ESERCIZIO	21 bara	SERVIZIO LETALE	NO
PRESSIONE DI PROGETTO	25 bara (26 barg)	X-RAY	RT examination
PRESSIONE ESTERNA	NO	LICUIDI PENETRANTI	NO
PRESSIONE DI PROVA IDRAULICA	66.4 barg	ULTRASUONI	NO
TEMPERATURA DI ESERCIZIO	+180°C	CONTROLLO MAGNETOSCOPICO	NO
TEMPERATURA DI PROGETTO	+210°C	WELD TESTS	NO
SOVRAMEZZO DI CORROSIONE	3 mm	PROCEDIMENTO DI SALDATURA	See doc: C220006WBK013
CAPACITA'	30 l	TIPO DI FONDO	CAP
EFFICIENZA GIUNTI	0.85	FORMAZIONE FONDO	HOT
MAMP @ Design Temperature	38.66 barg @ +210°C	PESO A VUOTO	63 kg
MAMP(EXT)	NO	PESO IN ESERCIZIO	63 kg
MDMT @ MAMP	0 °C @ 38.66 barg	PESO PIENO D'ACQUA	92 kg
TRATTAMENTO TERMICO	NO	DATI DEL VENTO	-
IMPACT TEST	NO	DATI SISMICI	-

Rev.	Descrizione / Description	Disegnato/Draw	Controllato/Checked	Approvato/Approved	Data/Date
03	Modified as per Client comments	CM	MV	GL	15/04/2022
02	Modified as per Customer comments	CM	MV	GL	02/04/2022
01	Modified earthing lug	CM	MV	GL	25/03/2022
00	FIRST ISSUE	CM	MV	GL	16/03/2022

Objetto/Object: PULSATION DAMPER OUTLET

Scala/Scale	1 : 5	Formato/Size	A1
Comm. N°/Job No.	C220006	Foglio/Sheet	1 - 1
Cliente/Customer	Airpack Nederland B.V.		
Ord. No.	18498-VV-0901		
Dis. N°/Dwg No.	C220006DWG002	Rev.	03