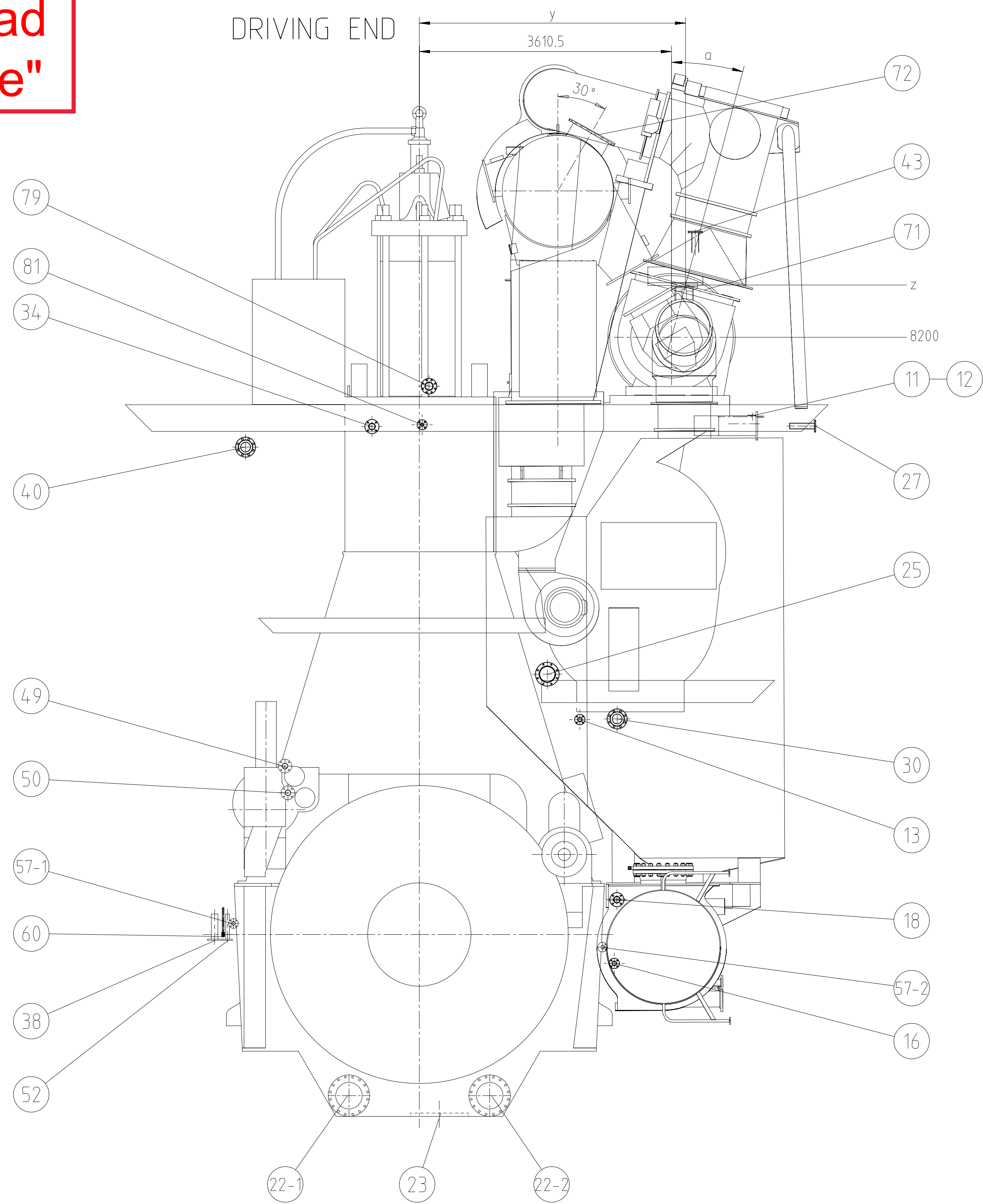
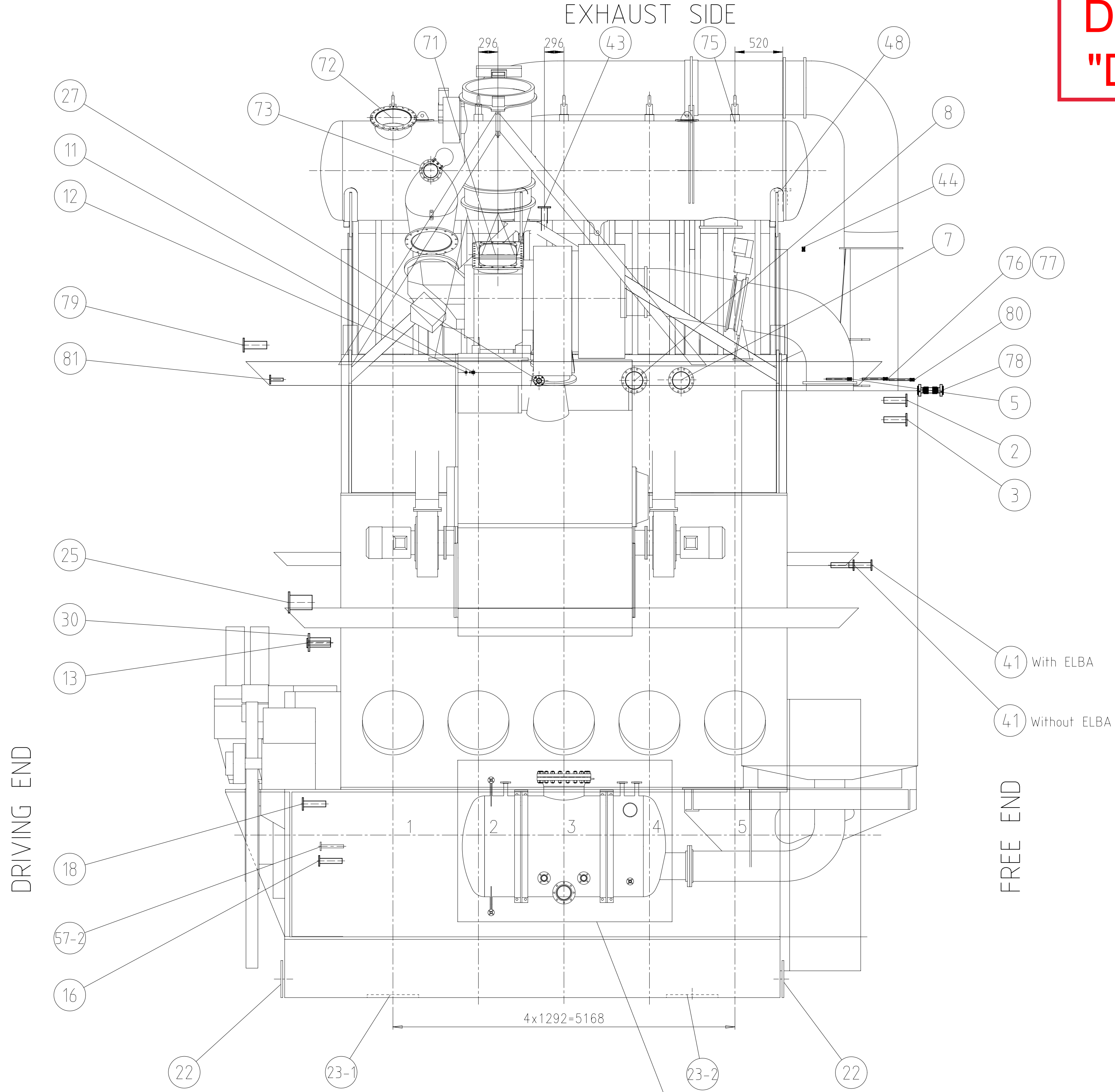



SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
001	1	107.390.729.500	FLANGE DIMENSIONS				0.001
002	1	PAAD147122	FLANGE DIMENSIONS				0.01

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Prod.	5 X72DF-2.1								
Change History									
	-	hle102	ihe003	25.05.2022	CNAA001934	Main Design/Drawing Introduced			-
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved	Activity Code	E C
<div>WIN GD</div> <div>Winterthur Gas & Diesel</div>					PIPE CONNECTION PLAN ICER ON ENGINE				
Bill Of Material					Dimension				
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					[m] [kg]				0.001
					Main Design	Yes	Design Group	8020 Q-Code	XXXXX Standard
					Qty per	Engine	A4	Item ID	PTAA034487 BOM Page/s
									01/01

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GAS OUTLET POSITION 	y	z
0°	3610.5	8920
15°	3799	8895
30°	3975.5	8822
45°	4127	8706

DIMENSIONS FOR REFERENCE ONLY.
TECHNICAL MODIFICATIONS RESERVED.
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PROJECT REQUIREMENTS AND RELATED DETAIL DESIGN
THIS PIPE CONNECTION PLAN MAY NOT BE USED FOR
FINAL DESIGN!

- *1) OPTIONAL EXECUTION (IF REQUIRED)
- *2) STANDARD EXECUTION
PROPOSAL TO DETERMINE FINAL POSITION
IN ACCORDANCE WITH SHIPYARD
- *3) EXTERNAL EXECUTION (IF REQUIRED)
- *5) SEE DAAD116127

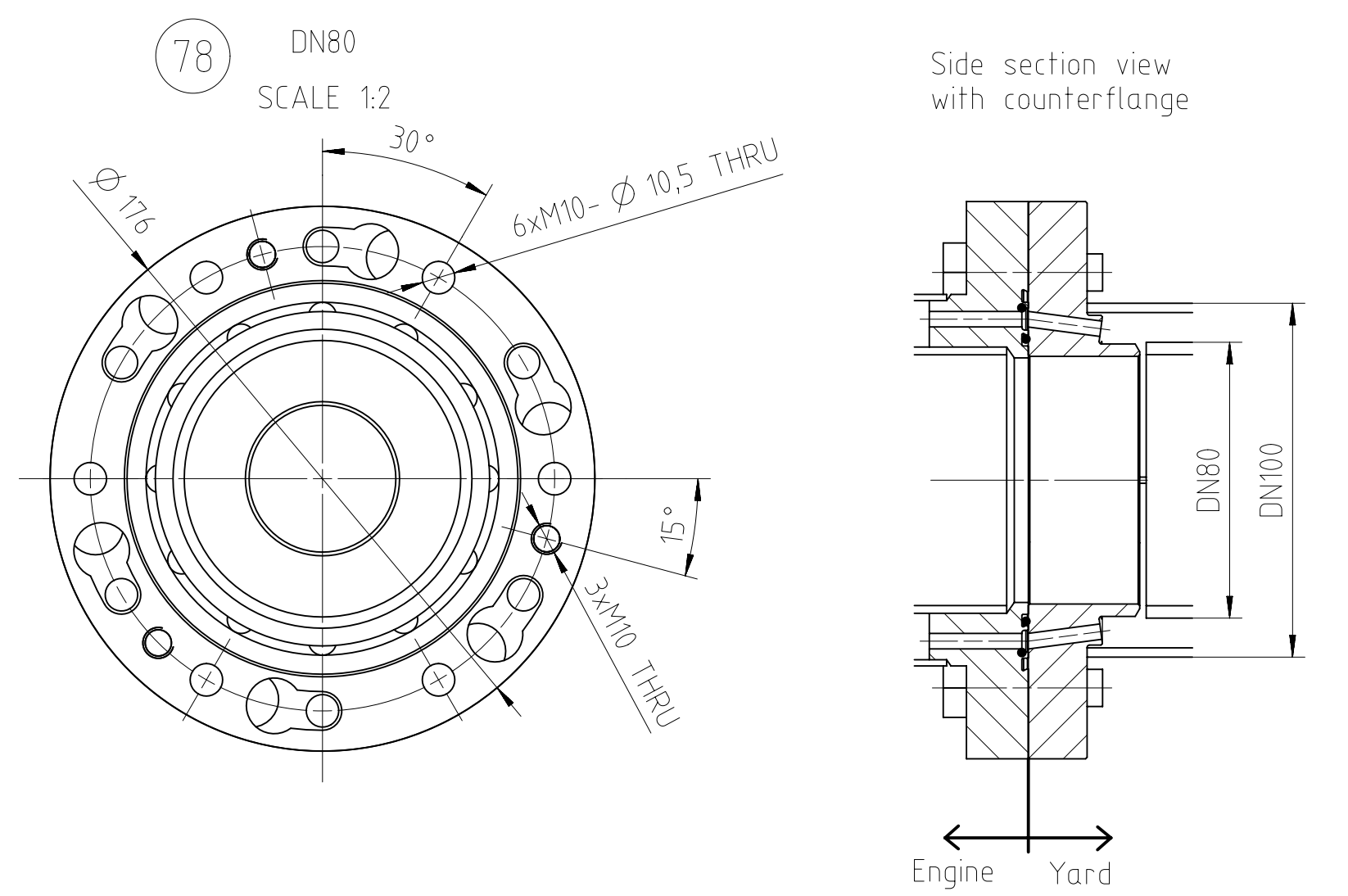
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBO-CHARGER EXHAUST GAS OUTLET, BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

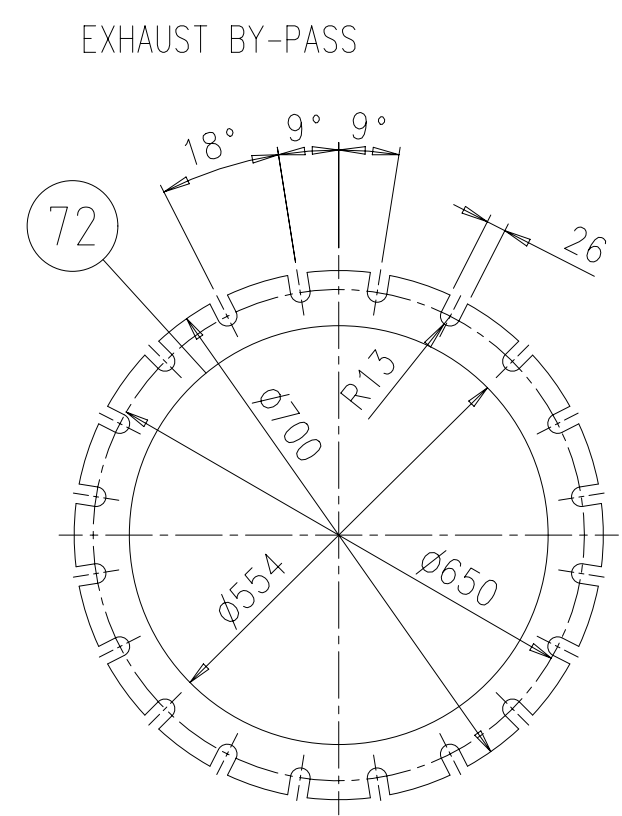
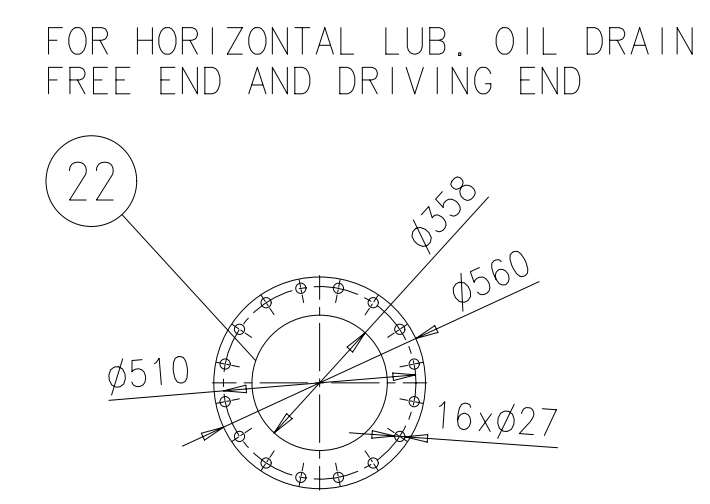
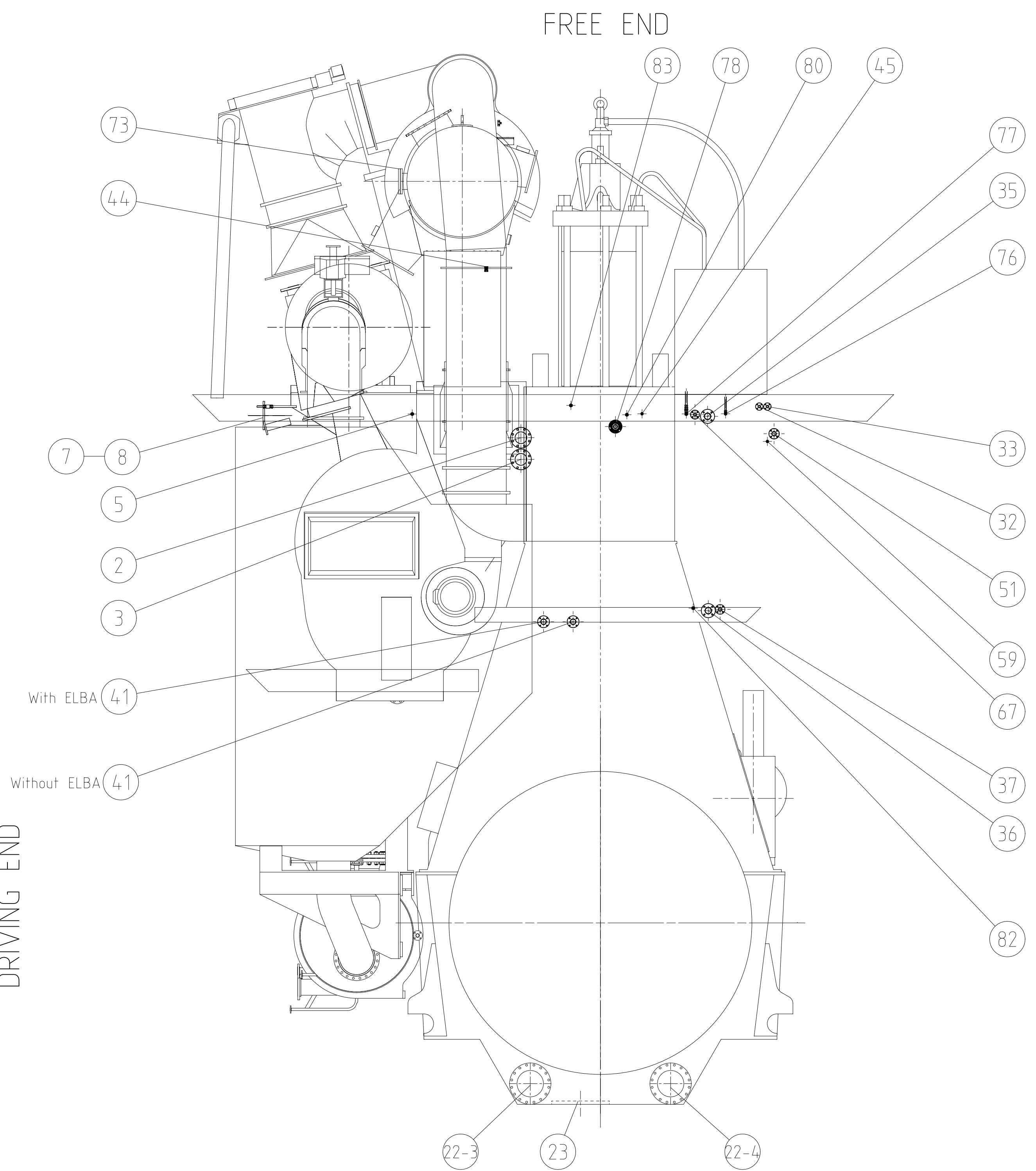
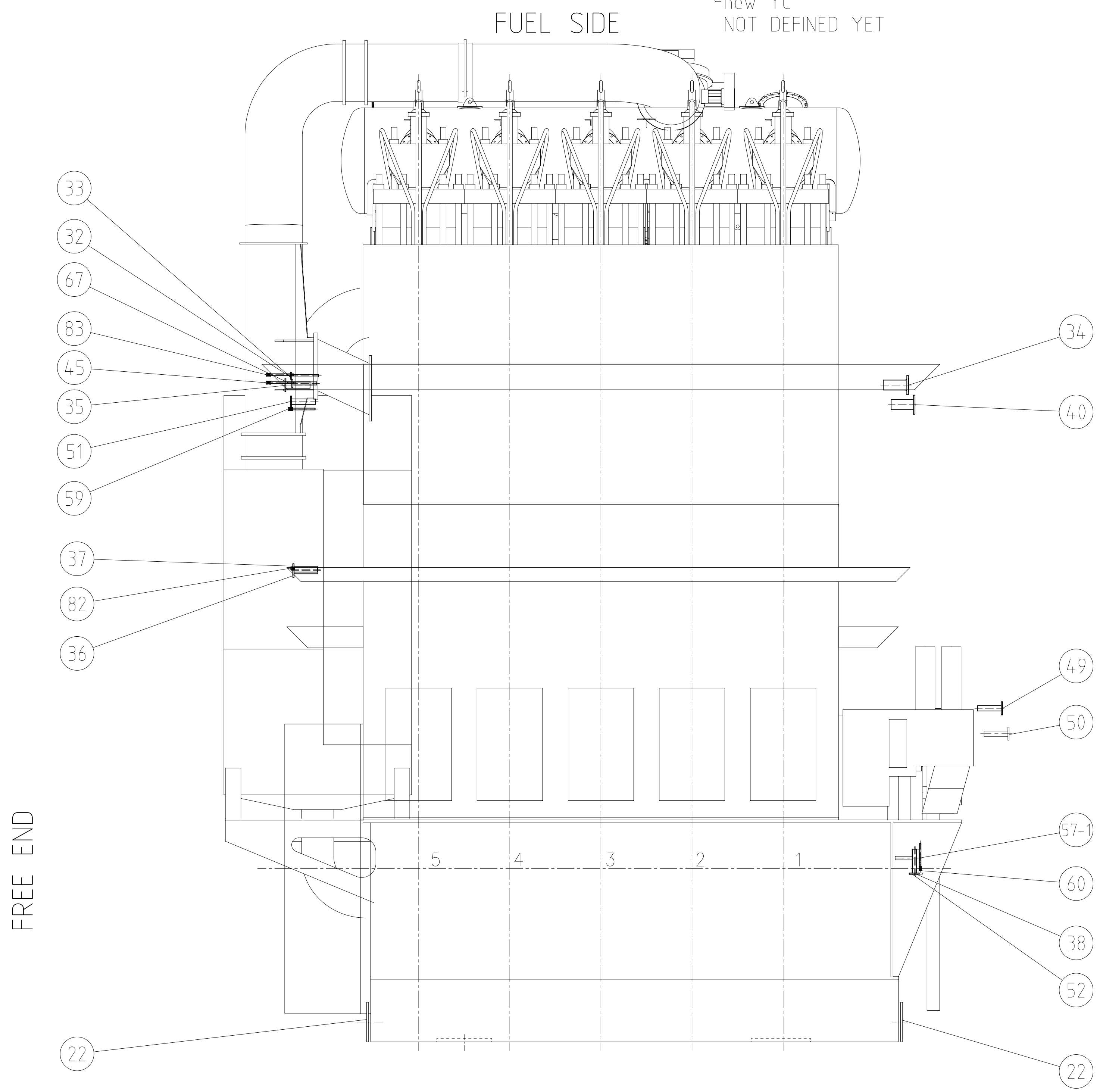
1 x A175-L

DESIGN BASED ON JIS PLATFORM

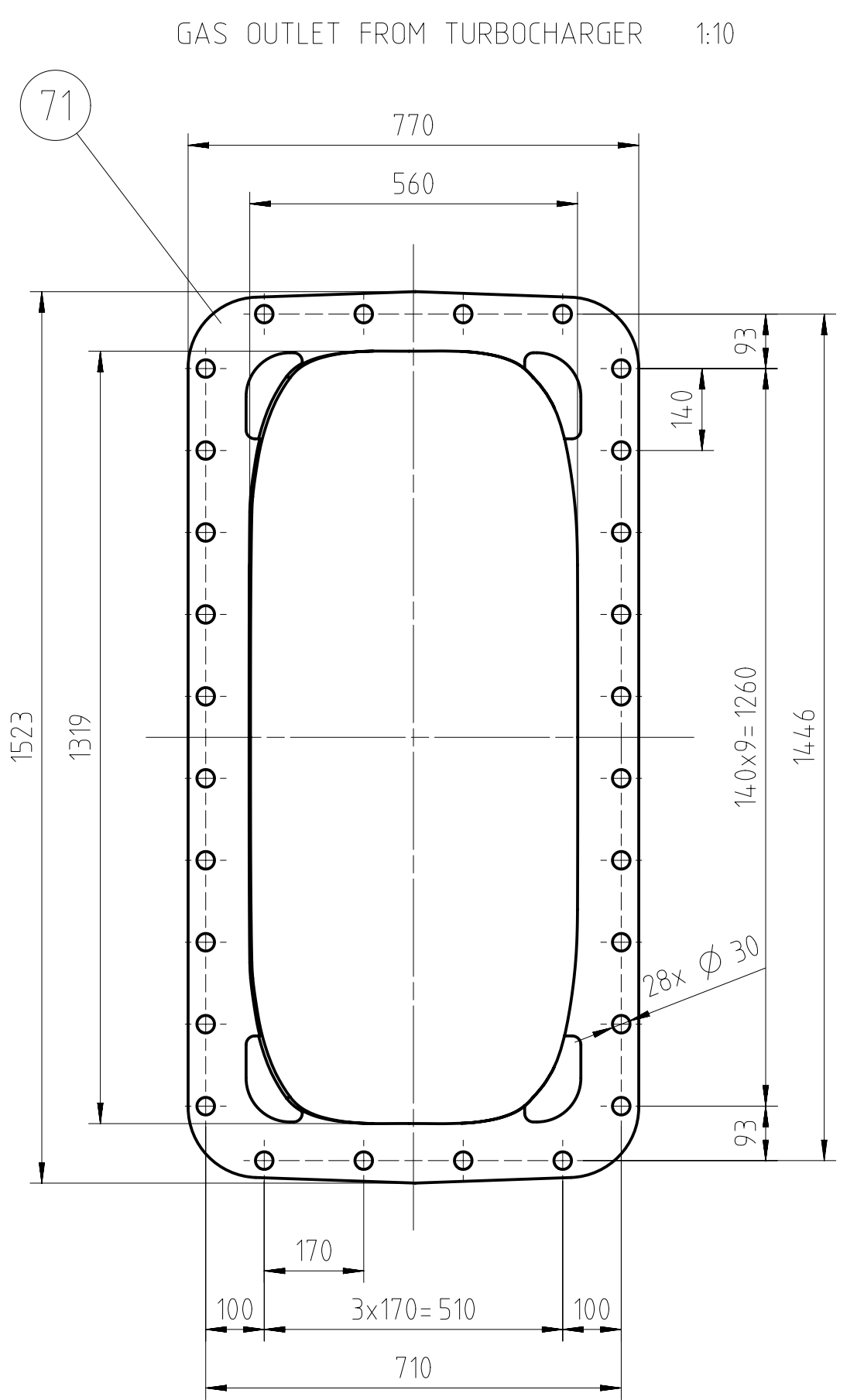
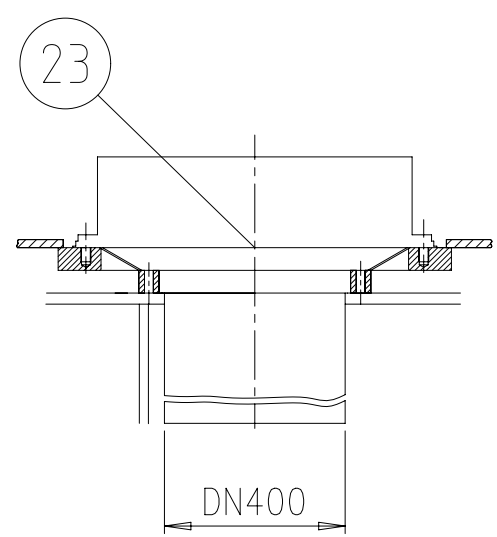
VALID FOR EXECUTION WITH ELBA AND EXECUTION WITHOUT ELBA





CONNECTION PRINCIPLE SEE PARTLIST Pos.002



FOR VERTICAL LUB. OIL DRAIN
SEE GROUP 1110 / 9722



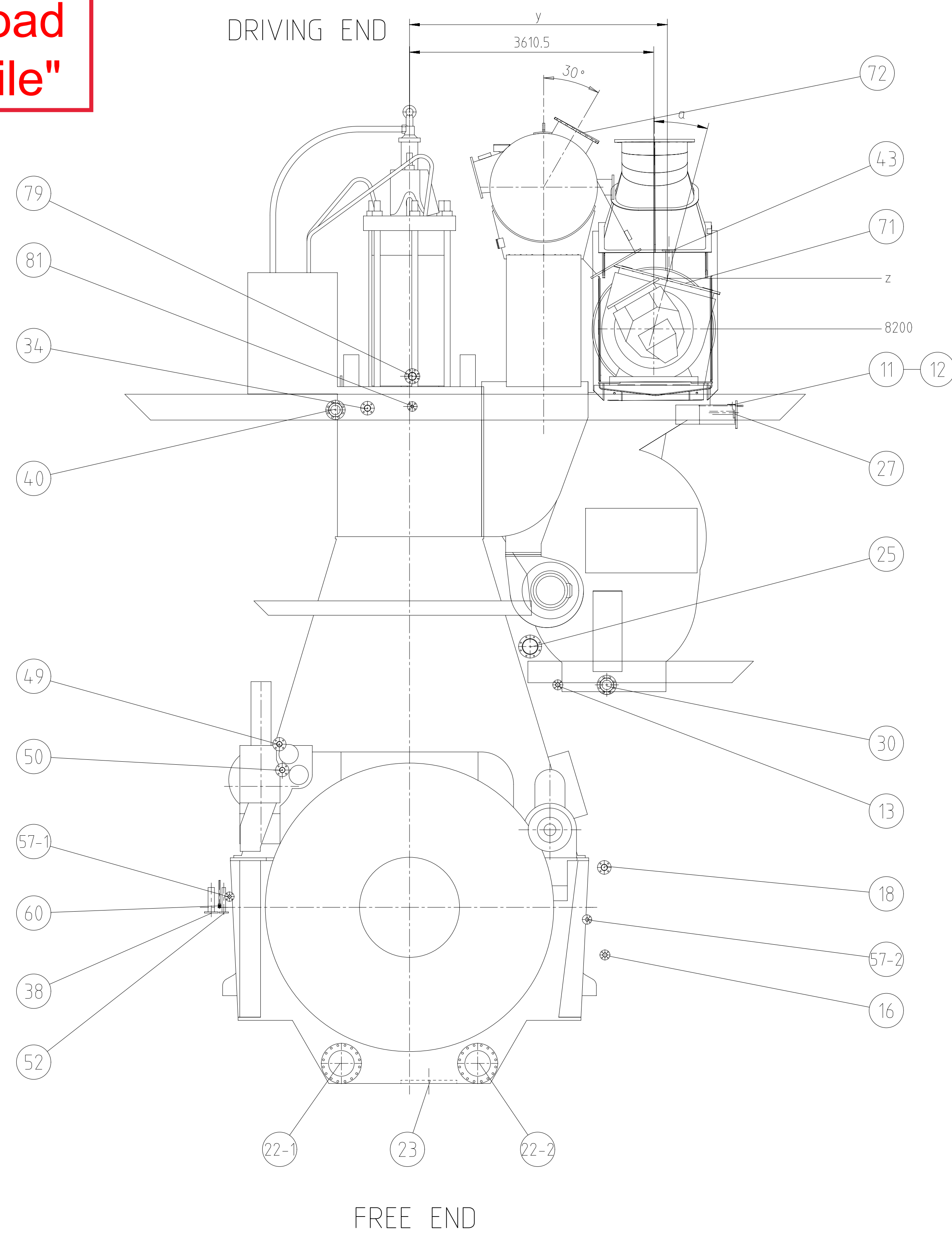
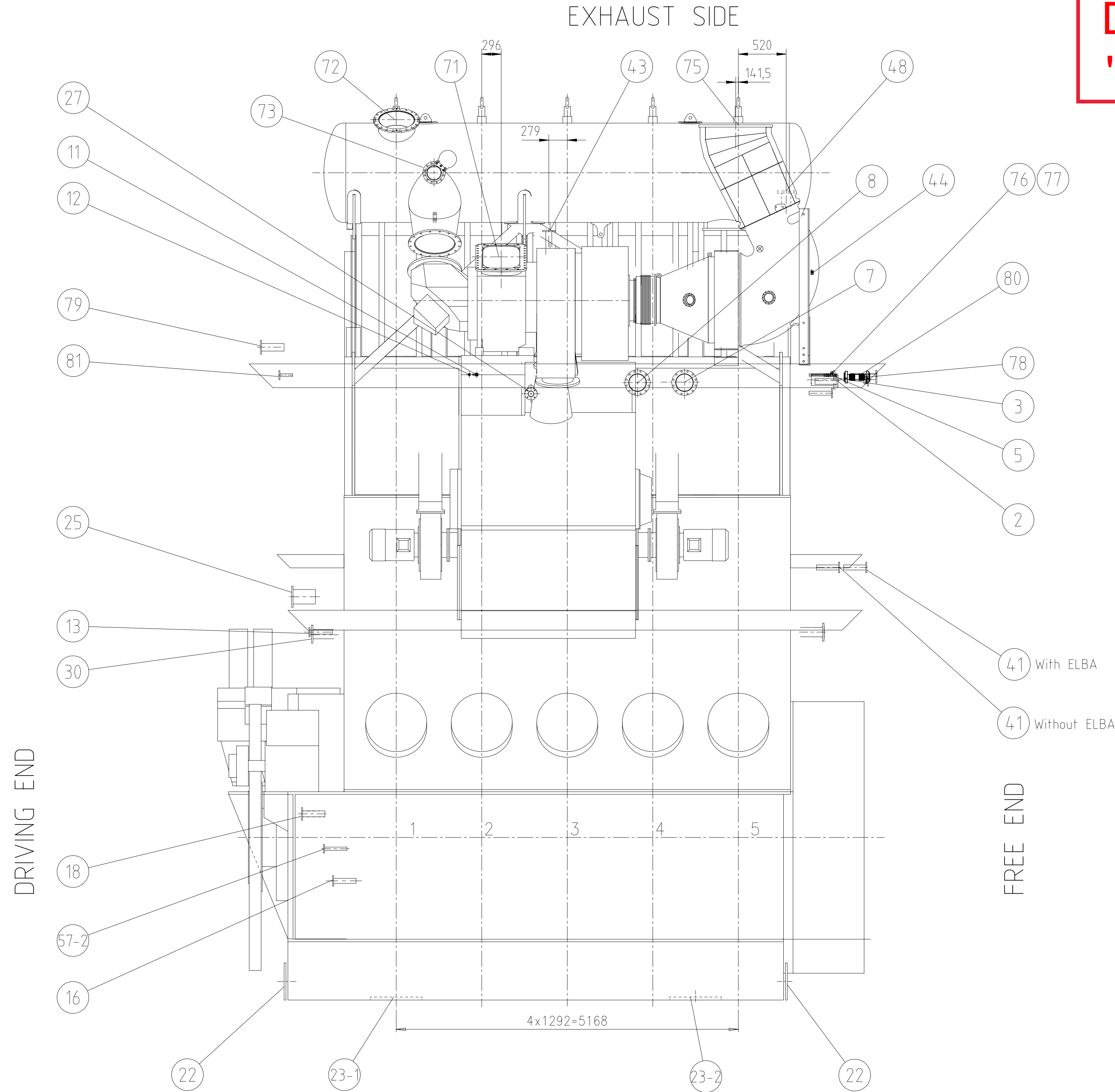
2021		5X72DF-2-1					
Change History							
	Rev	Created	Approved	Change ID	Change Synopsis	Approved	Activity Code
		<h1>PIPE CONNECTION PLAN</h1> <h2>ICER ON ENGINE</h2>					
separate BOM available		Dimension					
Scale: 1:40  NX		Units	[mm]	[kg]	Basic Material		Net Weight
Copyright Winmarine C&D GmbH Ltd. All rights reserved. No liability is accepted for the accuracy of the technical information of the drawings may be used in any way for construction. The drawings are not to be used for construction without the prior written consent of Winmarine C&D GmbH Ltd.		Design	Yes		8020	Q-Code XXXXXX	Standard
		Qty					WDS
		per	Engine	A0	Item ID	PTAA034487	Drawing Page/s
							1/2

SEQ NO	QTY	Item ID	Item Name	Dimension	Standard-ID	Basic Material	Net Weight
001	1	107.390.729.500	FLANGE DIMENSIONS				0.001
002	1	PAAD147122	FLANGE DIMENSIONS				0.01

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Prod.	5 X72DF-2.1						
Change History							
	-	qyi101	ihe003	01.06.2022	CNAA001776	Main Design/Drawing Introduced	- -
	Rev.	Creator	Approver	Approval Date	Change ID	Change Synopsis	Approved Activity Code E C
<div>WIN GD</div> <div>Winterthur Gas & Diesel</div>				PIPE CONNECTION PLAN ICER OFF ENGINE (STD)			
Bill Of Material				Dimension			
Copyright Winterthur Gas & Diesel Ltd. All rights reserved. By taking possession of the document the recipient recognizes and honours these rights. Neither the whole nor any part of this document may be used in any way for construction, fabrication, marketing or any other purpose nor copied in any way nor made accessible to third parties without the previous written consent of Winterthur Gas & Diesel Ltd.				Units	[m] [kg]	Basic Material	Net Weight 0.001
				Main Design	Yes	Design Group 8020 Q-Code XXXXX	Standard WDS
				Qty per	Engine	A4 Item ID PTAA028471	BOM Page/s 01/01

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GAS OUTLET POSITION 	y	z
0°	3610.5	8930
15°	3799	8905
30°	3975.5	8832
45°	4127	8716

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- *3) EXTERNAL EXECUTION (IF REQUIRED)
- *5) SEE DAAD116127

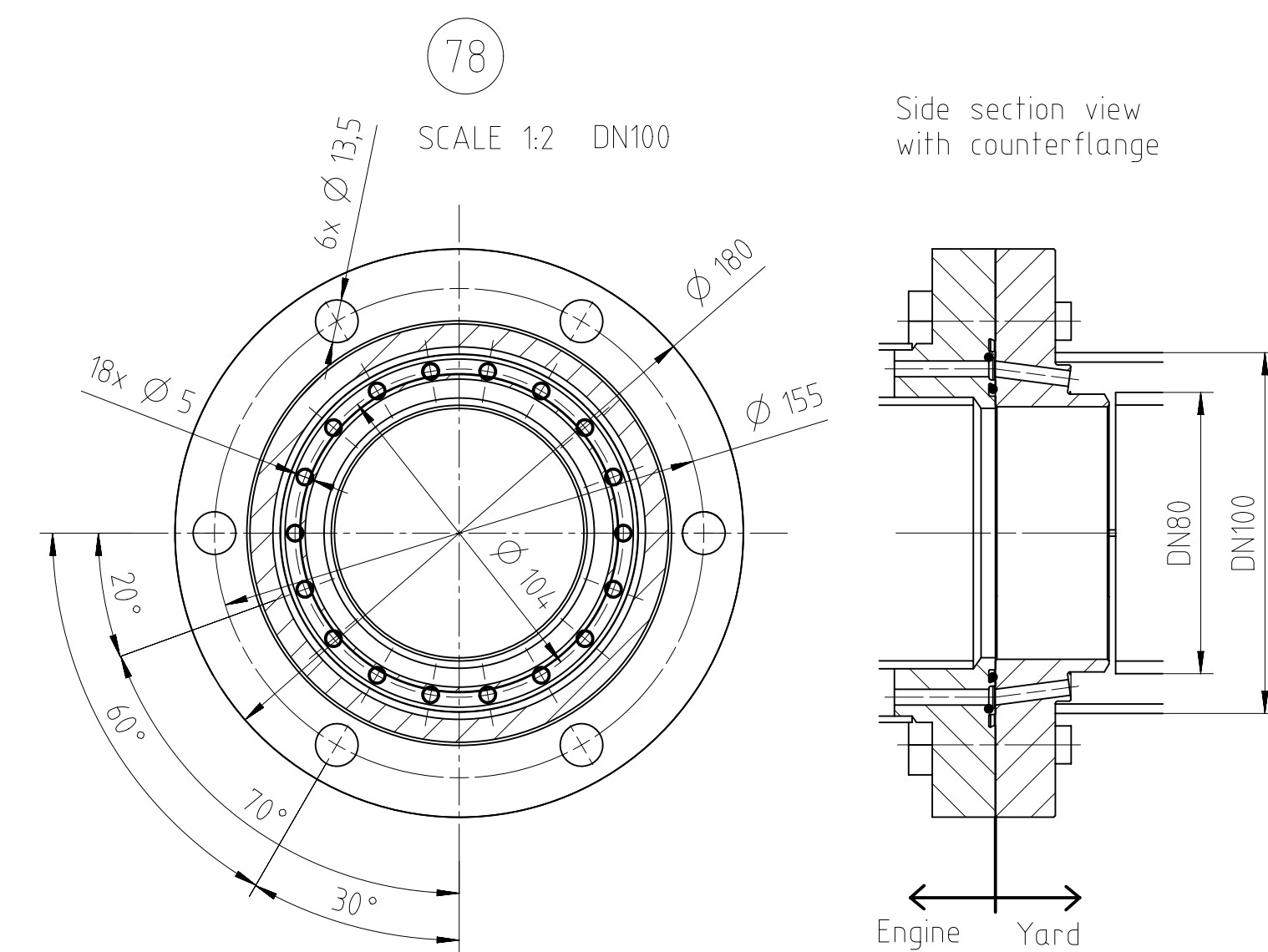
THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBO-CHARGER EXHAUST GAS OUTLET. BLIND FLANGES TO BE DRILLED TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

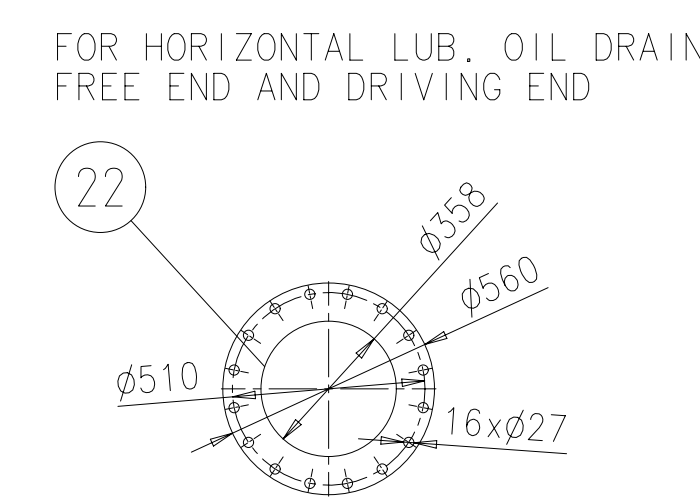
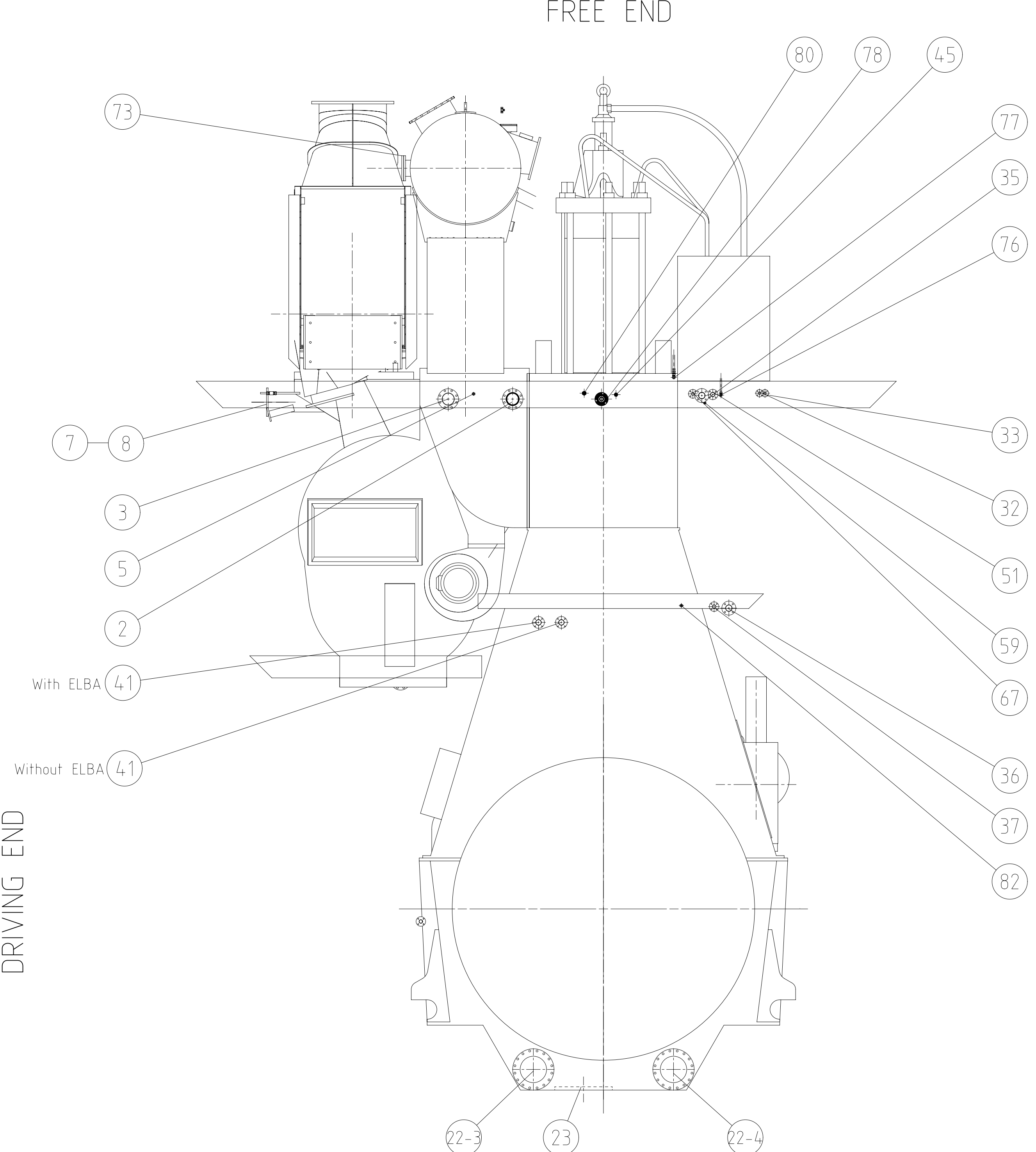
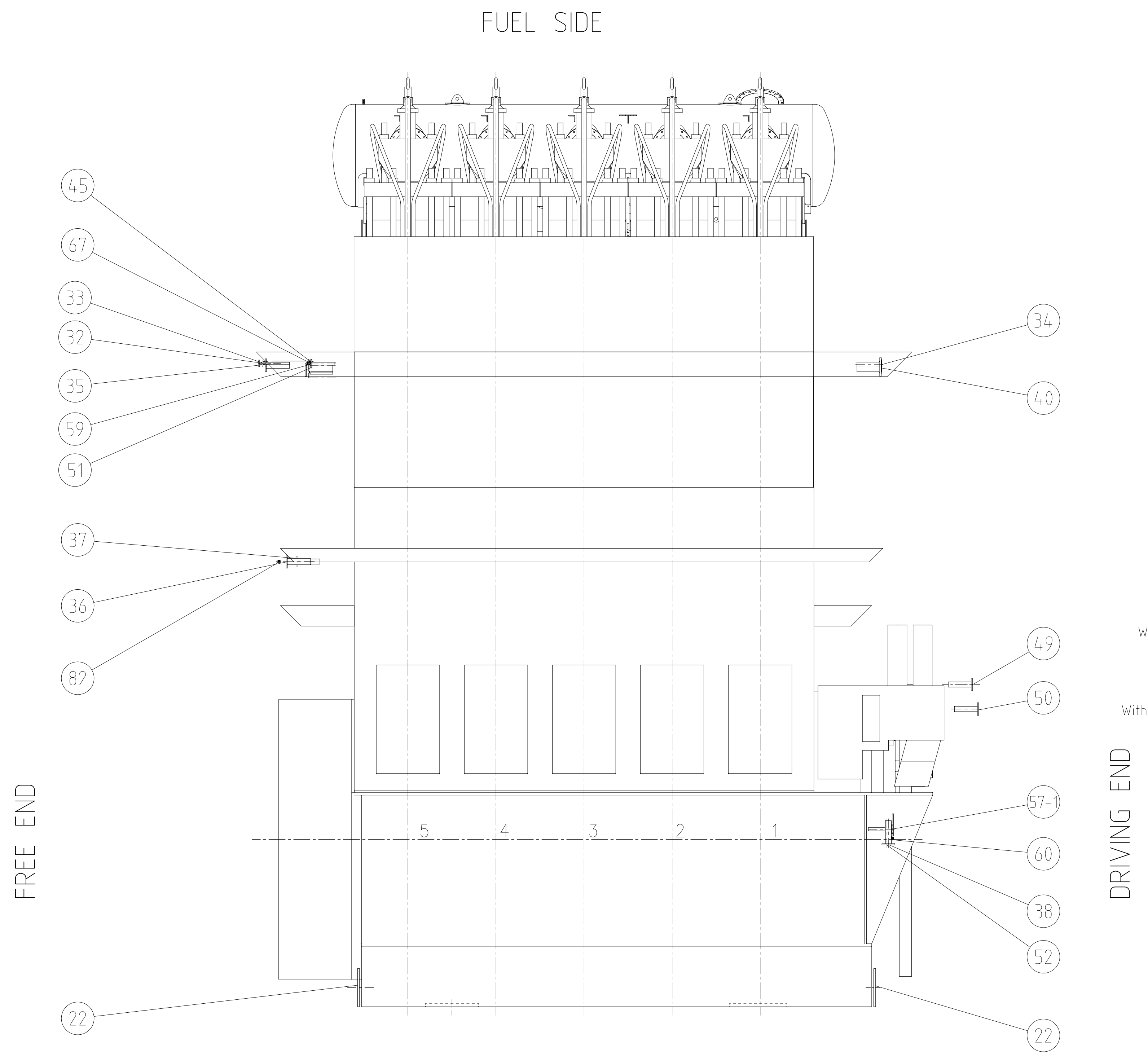
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DESIGN BASED ON JIS PLATFORM

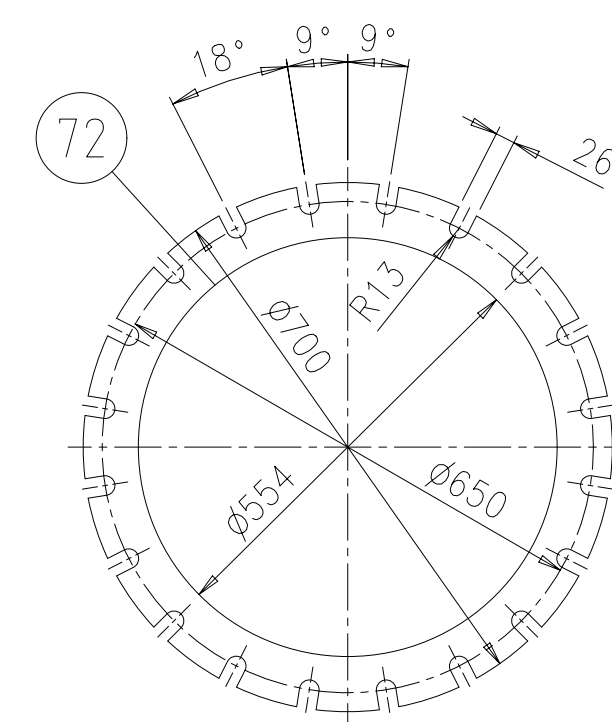
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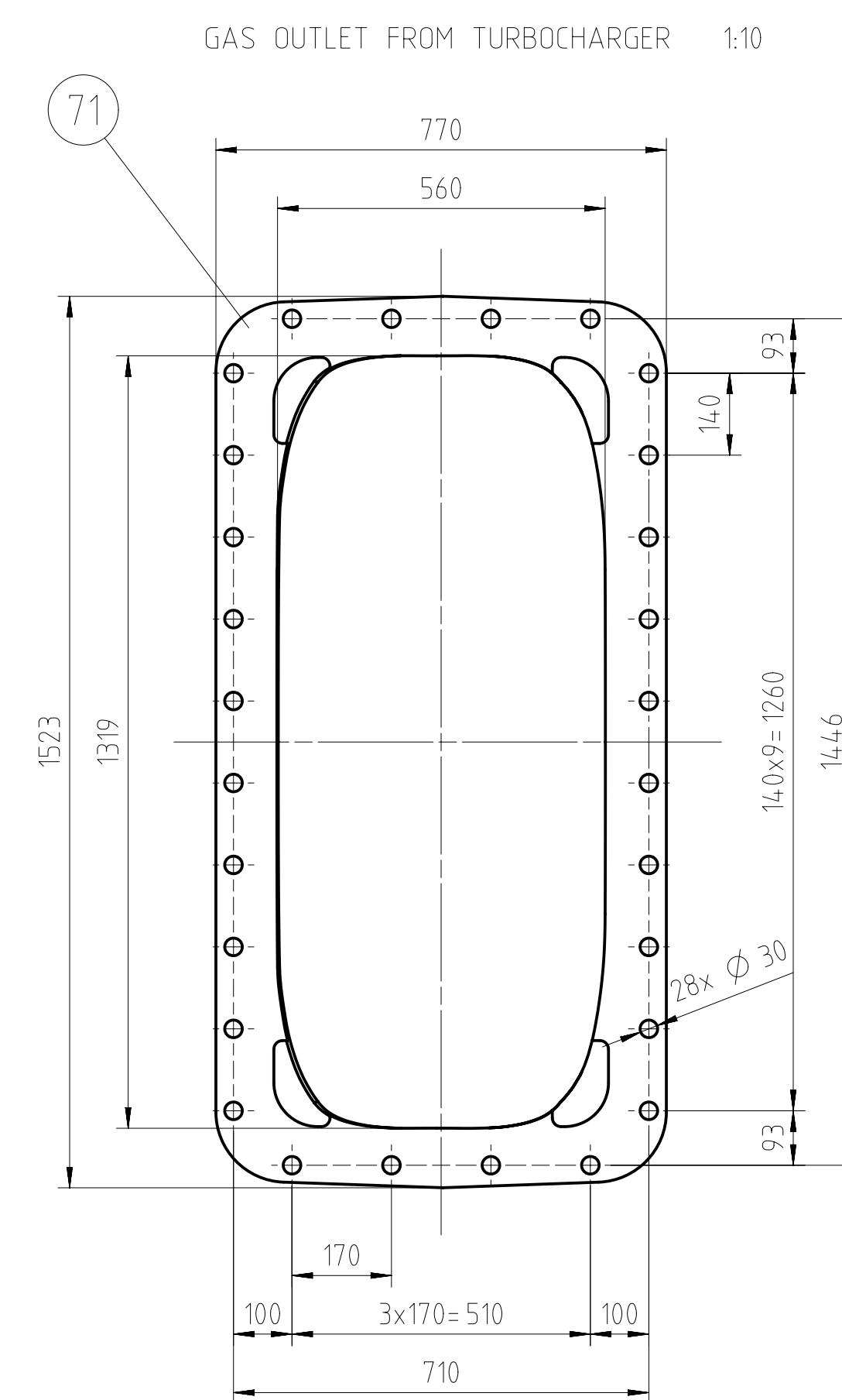
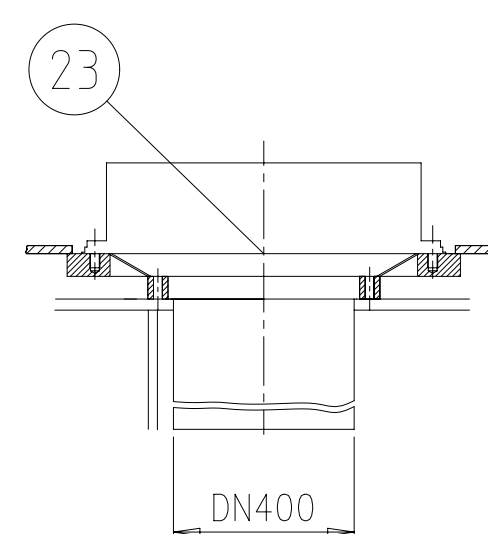
CONNECTION PRINCIPLE SEE PARTLIST Pos.002





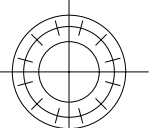
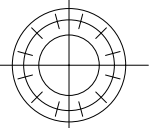
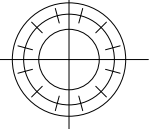
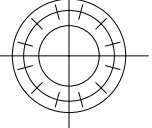
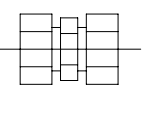
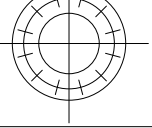
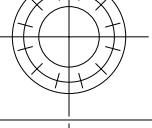
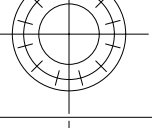
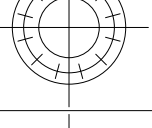
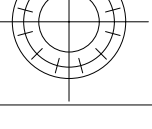
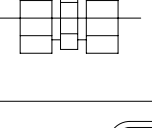
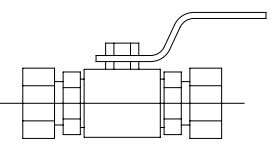
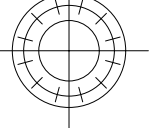
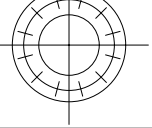
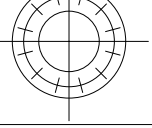
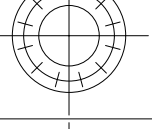
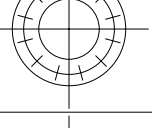
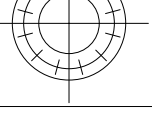
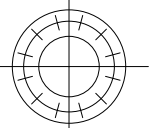
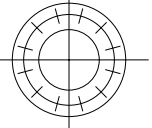
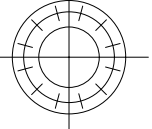
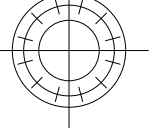
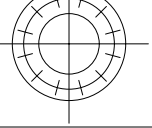
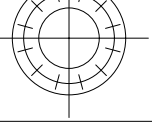
EXHAUST BY-PASS

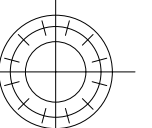
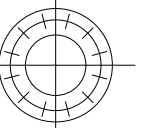
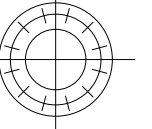
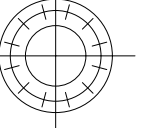
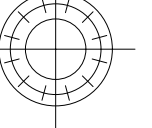
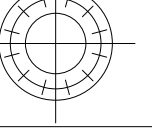
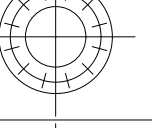
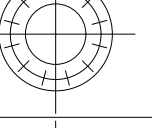
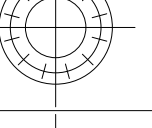
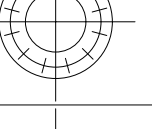
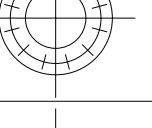
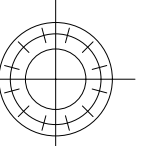
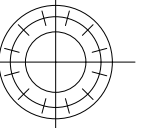
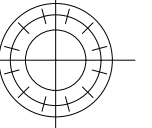
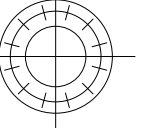
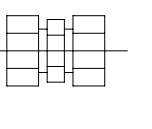
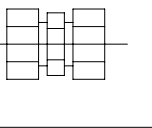
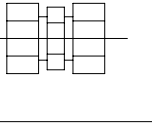
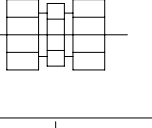
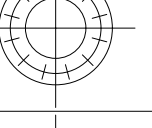
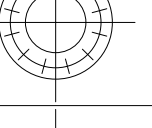
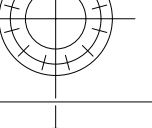
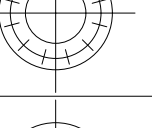
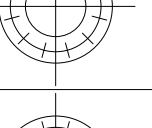
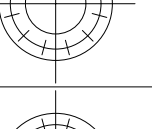
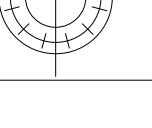
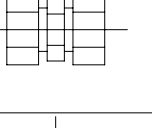
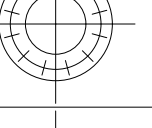
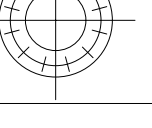
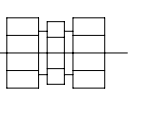
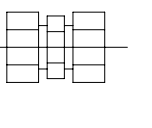


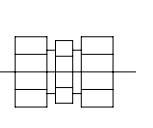
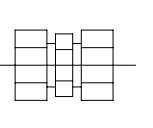
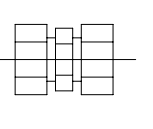
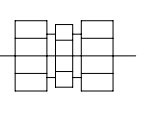
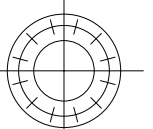
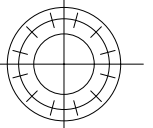
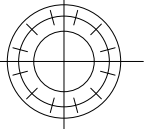
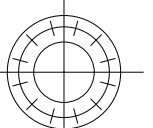
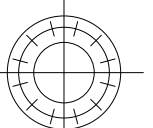
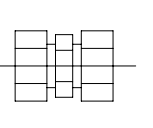
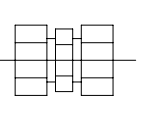
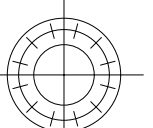
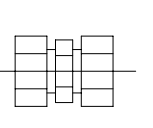
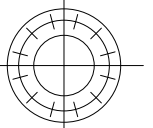
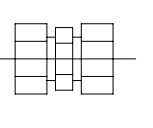
FOR VERTICAL LUB. OIL DRAIN
SEE GROUP 1110 / 9722



Print	5X7ZDF-2-1								
Change History									
	by	by	by	by					
	01.06.2022	01.06.2022	01.06.2022	01.06.2022	Main Design/Drawing Introduced				-
Rev.	Creator	Approver	Approval Date	Change ID	Change Summary	Approved	Activity Code	E	C
 <div> <h2>PIPE CONNECTION PLAN</h2> <h3>(ICR OFF ENGINE (STD))</h3> </div>									
separate BOM available					Dimension				
Scale	1:4.0		NX	Units	[mm]	[kg]	Basic Material	Net Weight	0.00
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City	pat	Engine	A0	Item ID	PTAA028471			Drawing Page/s	1/2

NO.				DG.	X	Y	Z
1		CYLINDER COOLING WATER INLET	DN PN	8301	NOT USED		
2		CYLINDER COOLING WATER INLET	DN 150 PN 10	8305	⊕CYL.5 -2200	1076	6804
3		CYLINDER COOLING WATER OUTLET	DN 150 PN 5	8310	⊕CYL.5 -2200	2332	6804
4		CYLINDER COOLING WATER VENTING	DN	8310	NOT USED		
5		CYLINDER COOLING WATER DRAIN OUTLET	DN 20 PN 5	8313	⊕CYL.5 -2200	1890	6887
6		SAC DRAIN OUTLET	DN PN	8314	NOT USED		
7		SAC-LT-COOLING WATER INLET	DN 250 PN 5	8335	-4108	5200	6878
8		SAC-LT-COOLING WATER OUTLET	DN 250 PN 5	8335	-3735	5200	6878
9		SAC-HT-COOLING WATER INLET	DN PN	8335	NOT USED		
10		SAC-HT-COOLING WATER OUTLET	DN PN	8335	NOT USED		
11		WATER FOR CLEANING PLANT TC AND SAC INLET	DN 20 PN 10	8338	-1380	5100	6987.5
12		AIR FOR CLEANING PLANT TC AND SAC INLET	DN 20 PN 10	8338	-1280	5100	6987.5
13		OILY WATER FROM RECEIVER OUTLET	DN 40 PN 5	8352	1330	2167	2956
14		TURBOCHARGER DIRTY WATER OUTLET	DN PN	8355	NOT USED		
15		WATER DRAIN FROM WATERSEPARATOR OUTLET	DN PN	8356	NOT USED		
16		SAC CONDENSATE WATER OUTLET	DN 50 PN 5	8357	1122	2632	-390
17		SAC WASHING WATER OUTLET	DN PN	8357	NOT USED		
18		SAC VENTING	DN 100 PN 5	8357	1370	2667	470
19							
20							
21							
*1) 22-1	SEE DETAIL	OIL DRAIN BEDPLATE HORIZONTAL		1110	1695	-950	-2175
*1) 22-2	SEE DETAIL	OIL DRAIN BEDPLATE HORIZONTAL			1695	950	-2175
*1) 22-3	SEE DETAIL	OIL DRAIN BEDPLATE HORIZONTAL			⊕CYL.4 -741	950	-2175
*1) 22-4	SEE DETAIL	OIL DRAIN BEDPLATE HORIZONTAL			⊕CYL.4 -741	-950	-2175
*2) 23-1	SEE DETAIL	OIL DRAIN BEDPLATE VERTICAL		1110 9722	0	270	-2455
*2) 23-2	SEE DETAIL	OIL DRAIN BEDPLATE VERTICAL			⊕CYL.4 646	270	-2455
24		CYLINDER LUB. OIL OUTLET	DN PN	8472	NOT USED		
25		MAIN LUBRICATING OIL INLET	DN 200 PN 5	8406	1580	1728	3513
*3) 26		LUBRICATING OIL TURBOCHARGER INLET	DN PN	8430	NOT USED		
27		LUBRICATING OIL TURBOCHARGER OUTLET	DN 65 PN 5	8431	-2108	5050	6962
28		FLUSHING OIL AUTOMATIC FILTER OUTLET	DN PN	8445	NOT USED		
29		DIRTY OIL DRAIN SUPPLY UNIT OUTLET	DN PN	8452	NOT USED		

NO.				DG.	X	Y	Z
30		LUBRICATING OIL CROSSHEAD INLET	DN 125 PN 16	8455	1280	2671	2909
31		DIRTY OIL LEAKAGE FROM ENGINE OUTLET	DN PN	8463	NOT USED		
32*3		CYLINDER LUB. OIL (HIGH BN) INLET	DN 25 PN 5	8475	⊕CYL.5 -1820	-2150	6987.5
33		CYLINDER LUB. OIL (LOW BN) INLET	DN 25 PN 5	8475	⊕CYL.5 -1820	-2260	6987.5
34		LEAKAGE OIL DRIVING END OUTLET	DN 80 PN 5	8482	1780	-640	6855.5
35		LEAKAGE OIL FREE END OUTLET	DN 80 PN 5	8483	⊕CYL.5 -1897	-1450	6855.5
36		DIRTY OIL PISTON UNDERSIDE OUTLET	DN 80 PN 5	8487	⊕CYL.5 -1786	-1620	4226
37		LEAKAGE OIL GLAND BOX OUTLET	DN 40 PN 5	8488	⊕CYL.5 -1786	-1455	4246
38		SUPPLY UNIT OIL RETURN OUTLET	DN 80 PN 5	8454	1880	-2764	-80
39		LEAKAGE DRAIN CYLINDER BLOCK OUTLET	DN PN	8462	NOT USED		
40		STARTING AIR PIPE INLET	DN 125 PN 30	8605	1865.5	-2346	6578
41		VENTING CRANKCASE WITHOUT IELBA OUTLET	DN 65 PN 5	8608	⊕CYL.5 -1800	370	4076
41		VENTING CRANKCASE WITH IELBA OUTLET	DN 65 PN 5	8608	⊕CYL.5 -2071	770	4076
42		VENTING WASTE GATE OUTLET	DN PN	8609	NOT USED		
43		VENTING TURBOCHARGER OUTLET	DN 65 PN 5	8610	Sheet 1	3725	9624.5
44		VENTING CYLINDER COOLING WATER OUTLET	DN 12 PN 5	8310	⊕CYL.5 -1115	1545.5	8470
45		CONTROL AIR SUPPLY INLET	DN 15 PN 10	8630	⊕CYL.5 -2130	-563	6890
46		CONTROL AIR SUPPLY INLET	DN PN	4605	NOT USED		
47		CONTROL AIR SUPPLY VALVE	DN 7 PN 5	8631	NOT USED		
48		EGR PURGE AIR SUPPLY OUTLET	DN 80 PN 5	8670	⊕CYL.5 -520	2774	9712
49		FUEL INLET	DN 65 PN 16	8702	3482	-1814	2273
50		FUEL RETURN OUTLET	DN 65 PN 16	8704	3575	-1774	1913
51		RAIL UNIT DRAIN (DIRTY) OUTLET	DN 50 PN 5	8740	⊕CYL.5 -1820	-2564	7230
52		FUEL RETURN (PRESSURELESS) OUTLET	DN 40 PN 5	8744	1860	-2589	-80
53		FUEL LEAKAGE HP-PIPES OUTLET	DN PN	8742	NOT USED		
54		FUEL LEAKAGE INJECTION PUMP OUTLET	DN PN	8743	NOT USED		
55							
56		FUEL LEAKAGE ICU OUTLET	DN PN	8745	NOT USED		
57-1		DRAIN PIPES VARIOUS	DN 40 PN 5	8746	1100	2475	-170
57-2		DRAIN PIPES VARIOUS	DN 40 PN 5		1944	-2510	149
58							
59		TRACE HEATING FUEL INLET	DN 15 PN 16	8810	⊕CYL.5 -1450	-1374.5	6855
60		TRACE HEATING FUEL OUTLET	DN 15 PN 16	8810	1946	-2649	0

NO.				DG.	X	Y	Z
61		TRACE HEATING FUEL INLET	DN PN	8812	NOT USED		
62		TRACE HEATING FUEL OUTLET	DN PN	8812	NOT USED		
63		TRACE HEATING FUEL CIRCULATION INLET	DN PN	8820	NOT USED		
64		TRACE HEATING FUEL CIRCULATION OUTLET	DN PN	8823	NOT USED		
65							
66							
67		FIRE EXTINGUISHING PLANT CYLINDER BLOCK INLET	DN 32 PN 10	8830	⊕CYL.5 -1800	-1280	6979
68		FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN PN	8831	NOT USED		
69		FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN PN	8832	NOT USED		
70							
71-0°	SEE DETAIL α = 0°	EXHAUST GAS TURBOCHARGER OUTLET	6506 6509		-1588	3610.5	8930
71-15°	SEE DETAIL α = 15°	EXHAUST GAS TURBOCHARGER OUTLET			-1588	3799	8905
71-30°	SEE DETAIL α = 30°	EXHAUST GAS TURBOCHARGER OUTLET			-1588	3975.5	8832
71-45°	SEE DETAIL α = 45°	EXHAUST GAS TURBOCHARGER OUTLET			-1588	4127	8716
72	SEE DETAIL	EXHAUST GAS BY-PASS OUTLET	DN PN	8103 8108	Sheet 1		
73		EXHAUST WASTE GATE OUTLET	FPP-DN 200 CPP-DN 250 PN 10	8135	IF USED, SEE PAAD314410(FPP) AND PAAD315070(CPP)		
74							
75		EGR CHARGER INTAKE INLET	DN 900 PN	6509	⊕CYL.5 141.5	3610.5	10844.5
76		SUPPLY UNIT FUEL PILOT VALVE INLET	DN 15 PN 10	8791	⊕CYL.5 -2273.5	-1694	6890
77		SUPPLY UNIT FUEL PILOT VALVE OUTLET	DN 20 PN 16	8791	⊕CYL.5 -2273.5	-1162	6887.5
78*4	SEE DETAIL	GAS SUPPLY PIPE		8903	⊕CYL.5 (-2451)	(26)	(6807)
79		GAS RELEASE PIPE, ENGINE SIDE OUTLET	DN 100 PN 10/16	8910	2265.5	130	7400
80		ANNULAR SPACE AIR VENTING PIPE OUTLET	DN 20 PN 10	8910	-1762	277	6807
81		ANNULAR SPACE AIR VENTING PIPE INLET	DN 32 PN 10/16	8910	1864	38	6879
82		GAS MONITOR. PIPE PISTON U. SIDE	DN 20 PN 4	8911	⊕CYL.5 -1786	-1255.5	4260

⊕CYL.5 = MEASSURED FROM FREE END (CYL. 5)

FREE END - X + DRIVING END



FUEL SIDE - Y + EXHAUST SIDE



BOTTOM - Z + TOP



*1) OPTIONAL EXECUTION (IF REQUIRED)

*2) STANDARD EXECUTION
PROPOSAL TO DETERMINE FINAL POSITION
IN ACCORDANCE WITH SHIPYARD

*3) EXTERNAL EXECUTION (IF REQUIRED)

*4) INSTALLATION TOLERANCE +/- 1 mm
COMPENSATOR HAS TO BE INSTALLED STRESS FREE

*5) SEE DAAD116127

1x A175-L

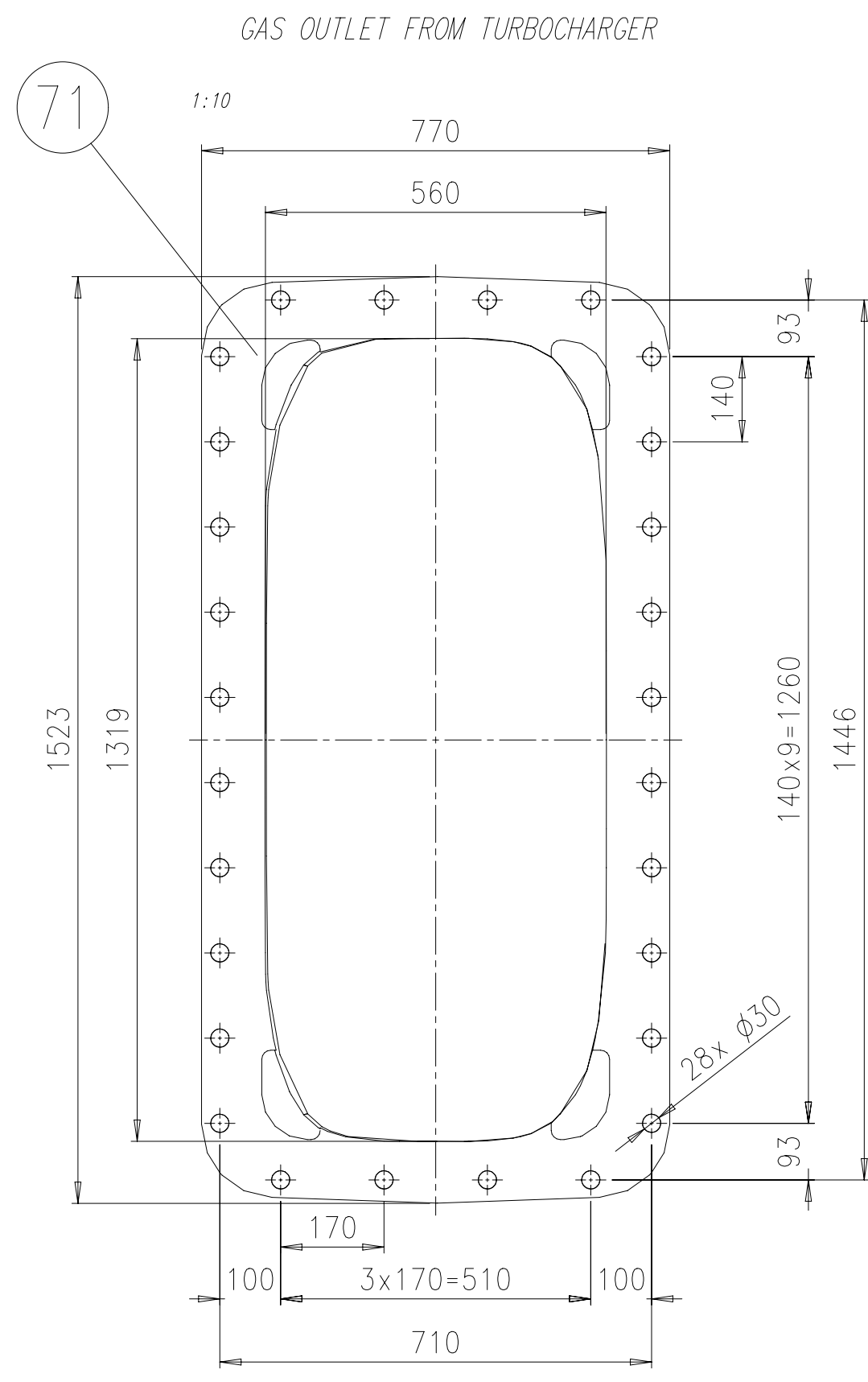
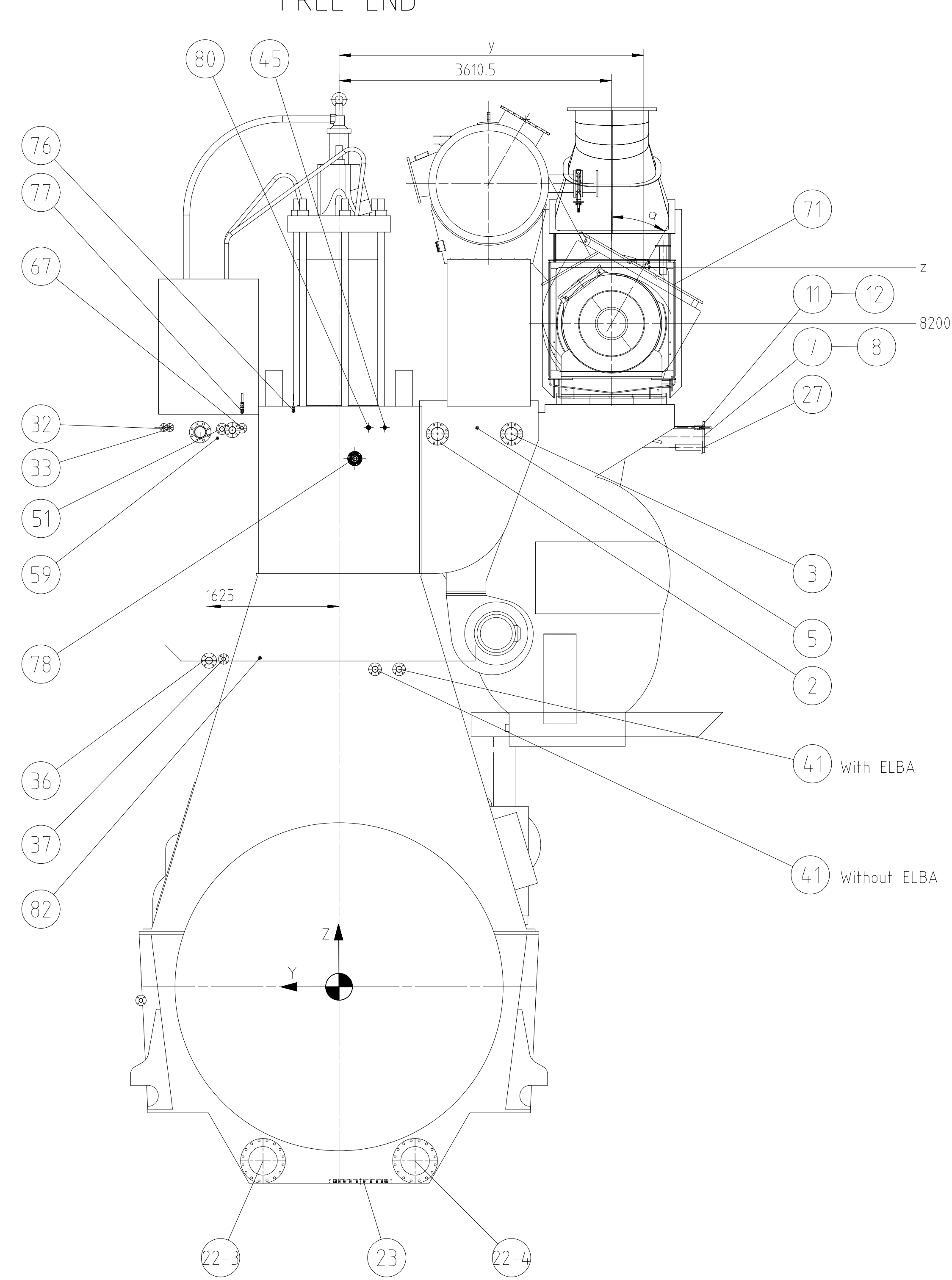
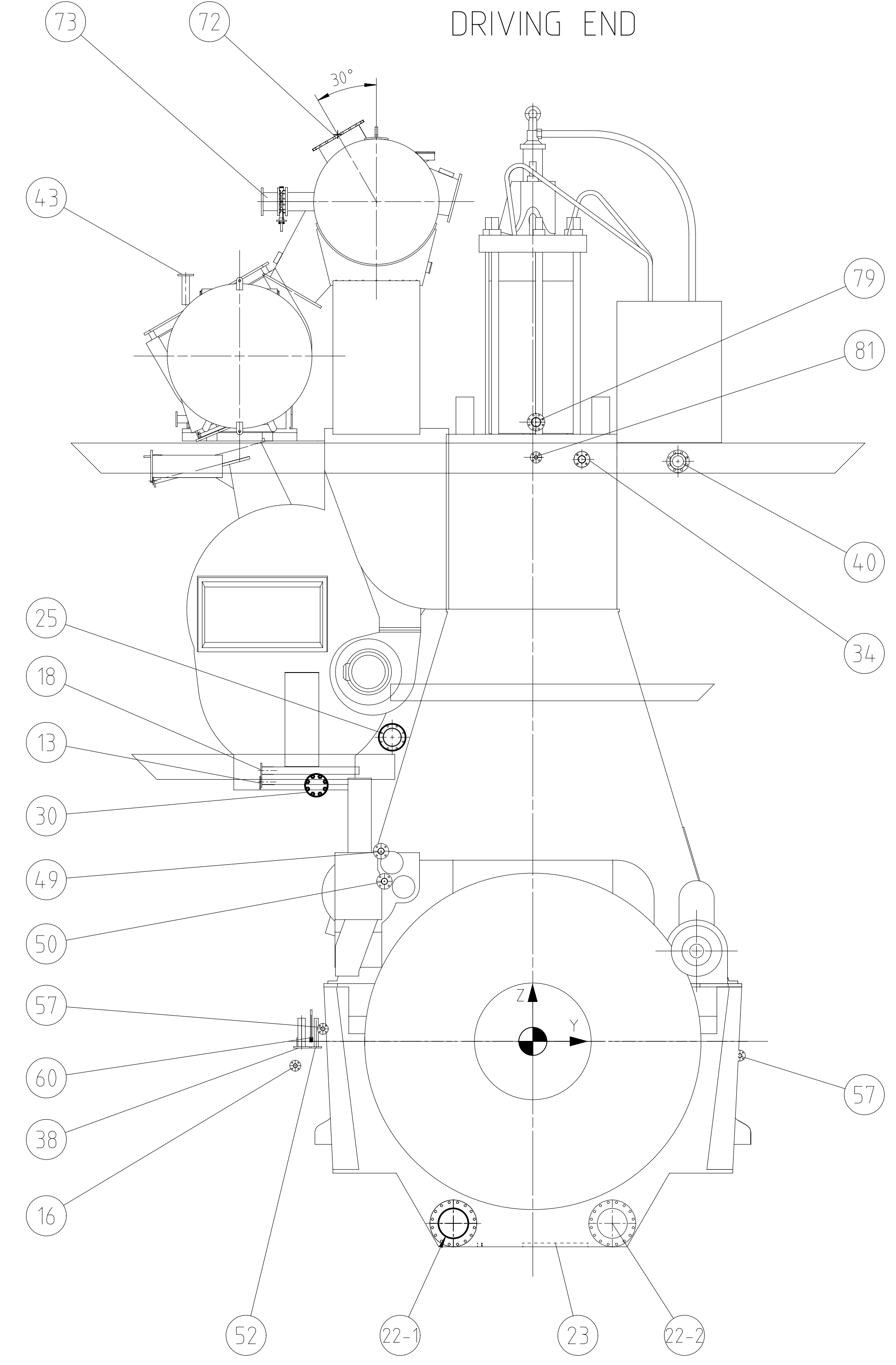
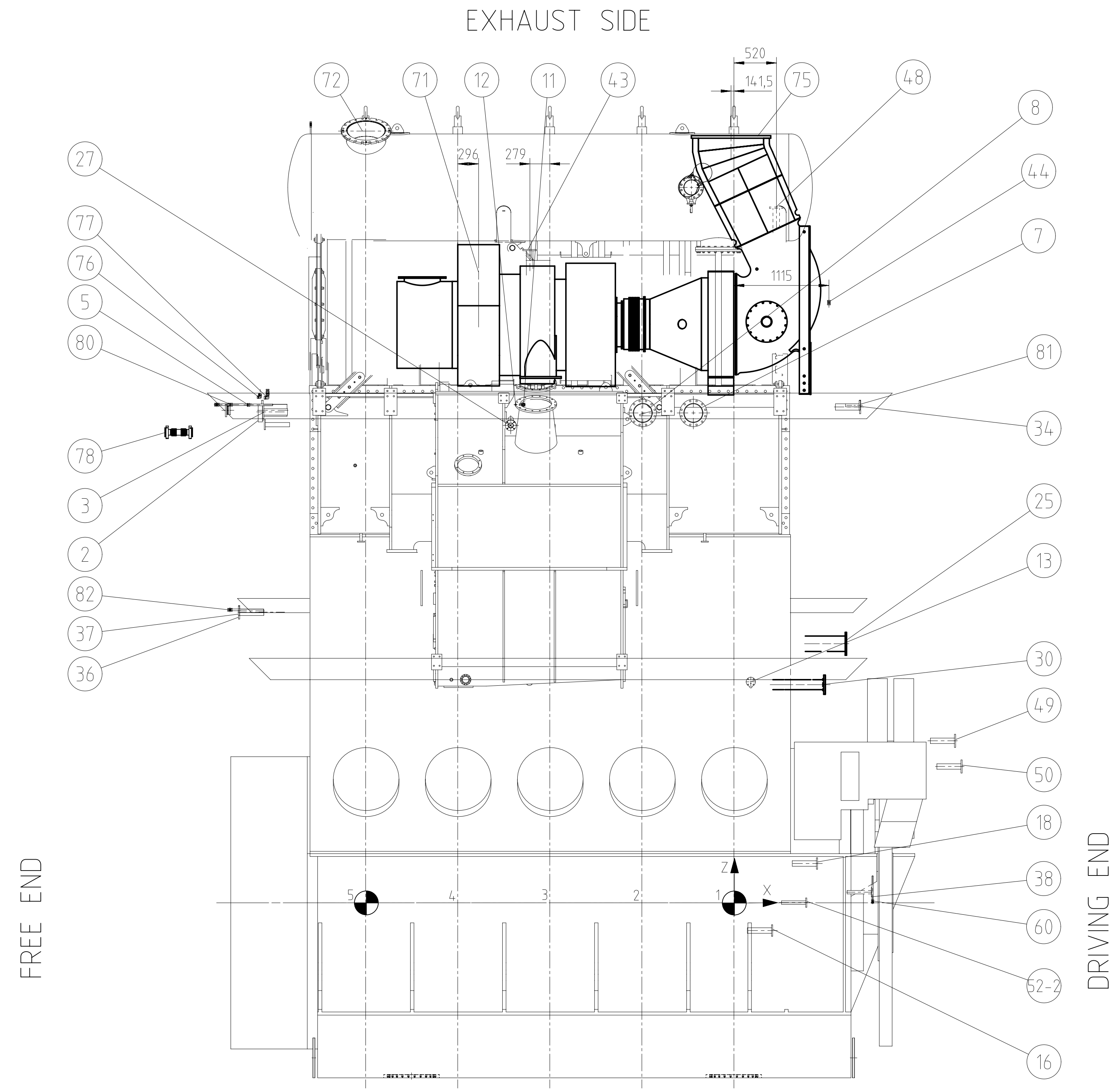
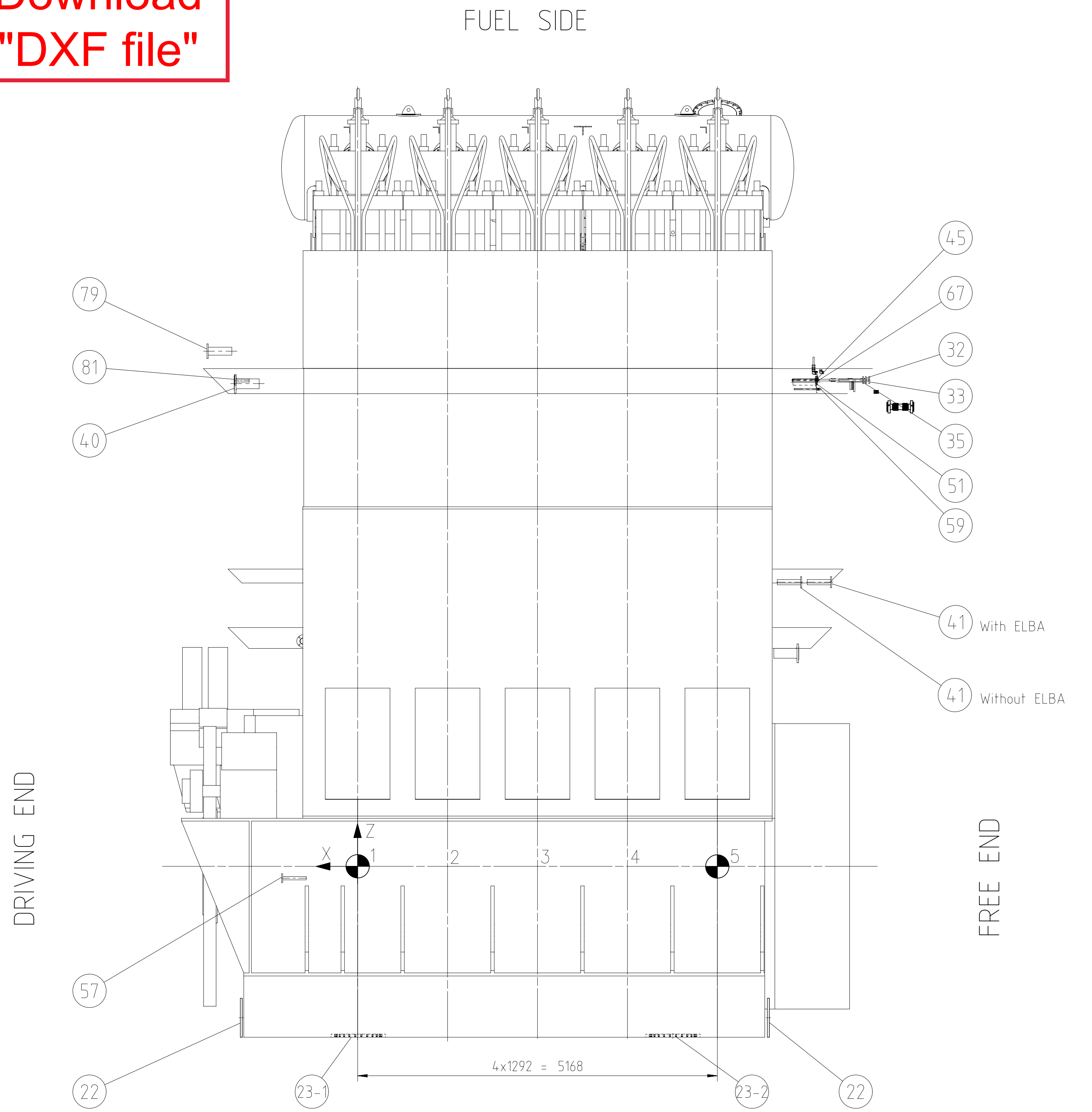
SEQ NO	QTY	Item ID	Item Name Dimension	Standard-ID	Basic Material	Net Weight
001	1	PAAD147122	FLANGE DIMENSIONS			0.01
002	1	107.390.729.500	FLANGE DIMENSIONS			0.001

Prod.	5 X72DF-2.1			
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Bill Of Material	Dimension								
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	Main Design	Yes	Design Group		8020	Q-Code	XXXXX	Standard	WDS
	Qty per	Engine	A4	Item ID	PTAA028482		BOM Page/s	01/01	

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DIMENSIONS FOR REFERENCE ONLY.
TECHNICAL MODIFICATIONS RESERVED.
LATER ADAPIONS ARE POSSIBLE BASED ON
PROJECT REQUIREMENTS AND RELATED DETAIL DESIGN
THIS PIPE CONNECTION PLAN MAY NOT BE USED FOR
FINAL DESIGN!

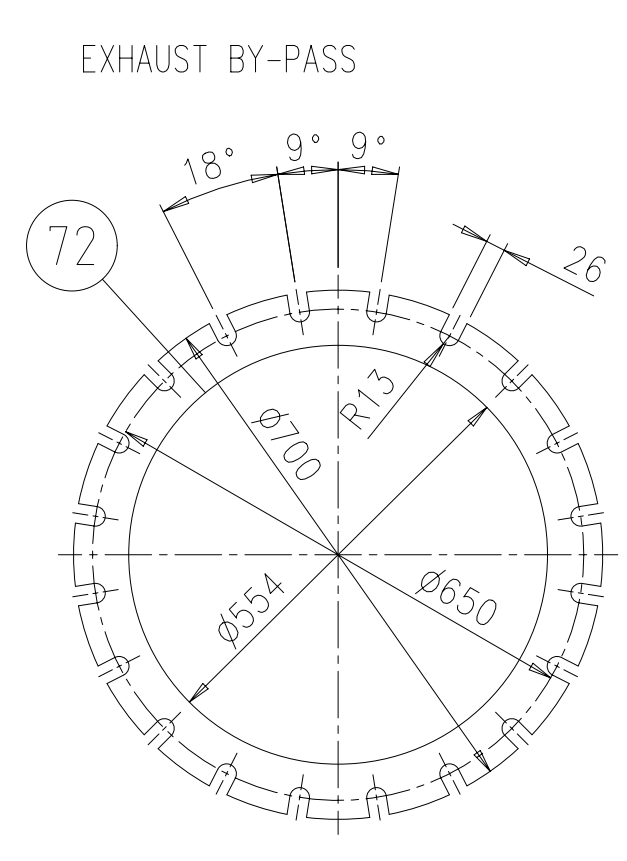
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*2) STANDARD EXECUTION
PROPOSAL TO DETERMINE FINAL POSITION
IN ACCORDANCE WITH SHIPYARD
*3) EXTERNAL EXECUTION (IF REQUIRED)
*5) SEE DAAD116127

THE PIPE CONNECTIONS ON THE ENGINE ARE SUPPLIED
WITH MATING FLANGES (BLIND), WITH EXCEPTION OF THE TURBO-
CHARGER EXHAUST GAS OUTLET, BLIND FLANGES TO BE DRILLED
TO MATCH PIPE DIA SUPPLIED BY THE SHIPYARD.

SCREWED CONNECTIONS ARE SUPPLIED COMPLETE

1 x A175-L

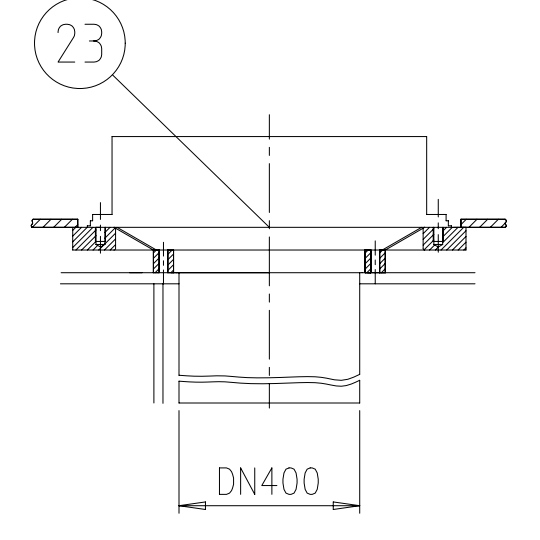
VALID FOR EXECUTION WITH ELBA AND EXECUTION WITHOUT ELBA



GAS OUTLET POSITION	y	z
0°	3610.5	8930
15°	3799	8905
30°	3975.5	8832
45°	4127	8716

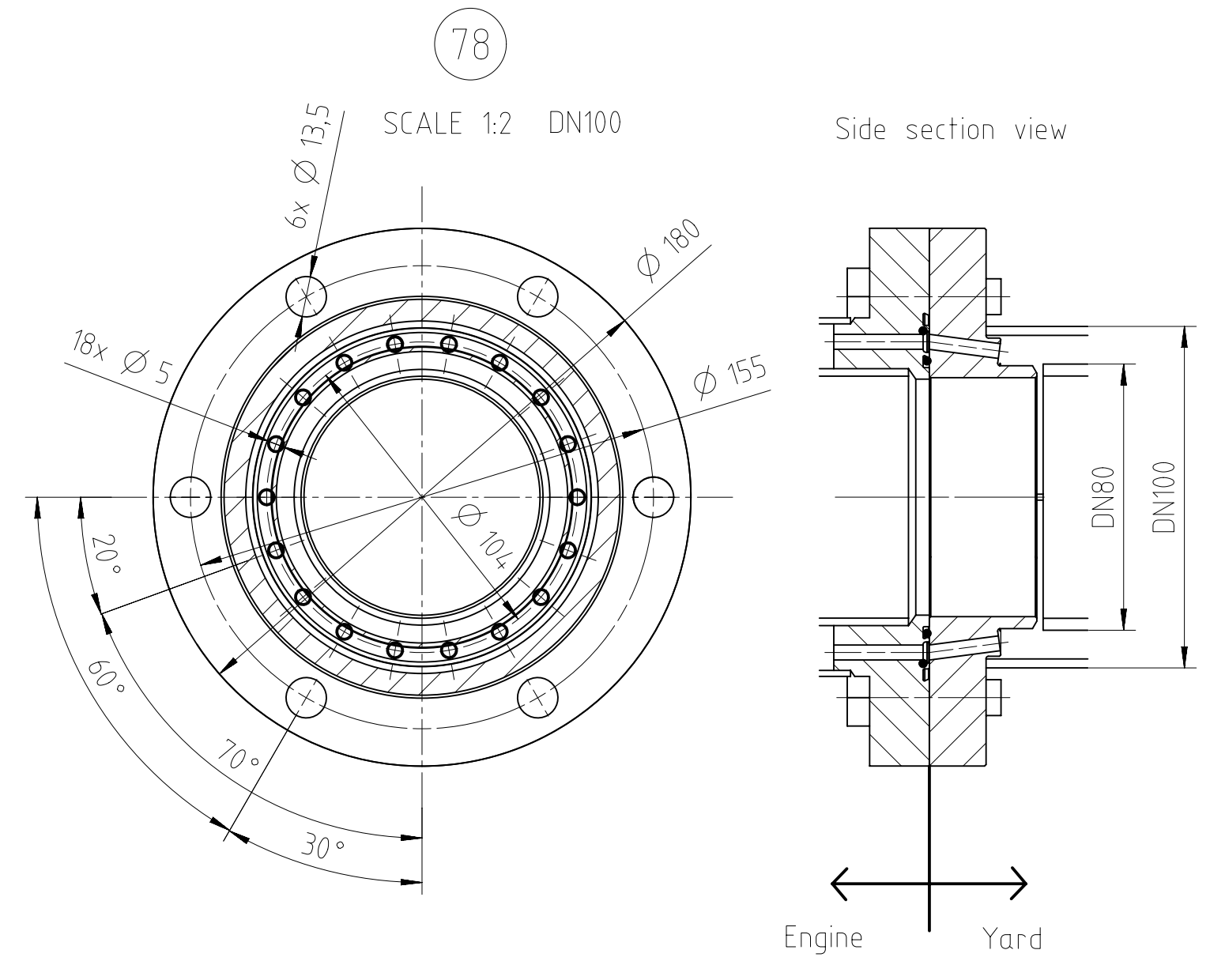
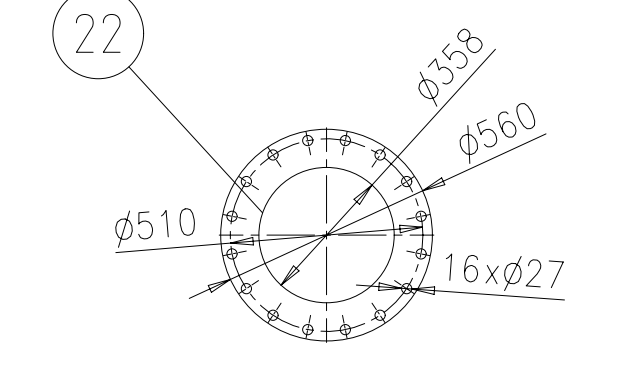
FOR VERTICAL LUB. OIL DRAIN

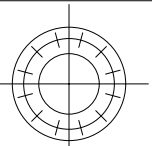
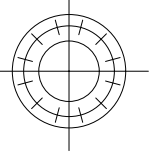
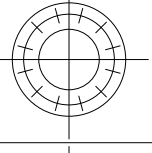
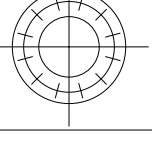
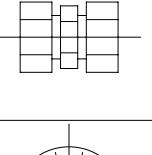
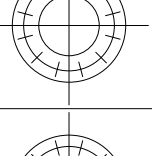
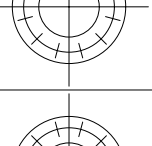
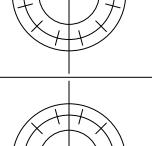
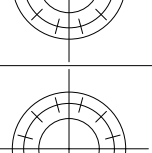
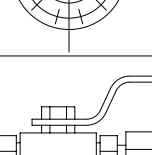
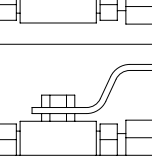
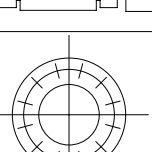
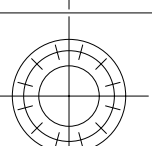
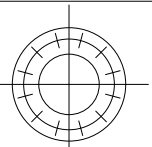
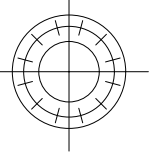
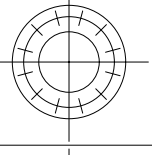
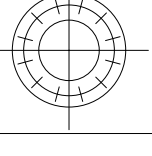

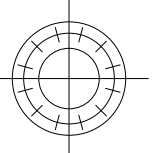
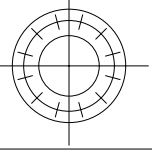
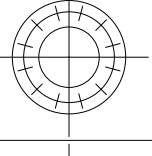
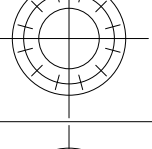
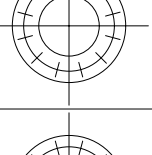
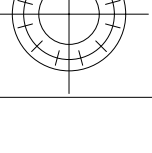
SEE GROUP 1110 / 9722



FOR HORIZONTAL LUB. OIL DRAIN

FREE END AND DRIVING END



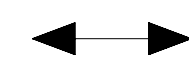
NO.				DG.	X	Y	Z
1		CYLINDER COOLING WATER INLET	DN PN	8301	NOT USED		
2		COOLING WATER PIPE CYL. LINER INLET	DN 150 PN 10	8305	⊕CYL.5 -2200	-1174	6804
3		CYLINDER COOLING WATER OUTLET	DN 150 PN 5	8310	⊕CYL.5 -2200	-2332	6804
4		CYLINDER COOLING WATER VENTING	DN PN	8310	NOT USED		
5		CYLINDER COOLING WATER DRAIN OUTLET	DN 20 PN	8313	⊕CYL.5 -2200	-1890	6887
6		SAC DRAIN OUTLET	DN PN	8314	NOT USED		
7		SAC-LT-COOLING WATER INLET	DN 250 PN 5	8335	-569	-4569	6871
8		SAC-LT-COOLING WATER OUTLET	DN 250 PN 5	8335	-1279	-4569	6871
9		SAC-HT-COOLING WATER INLET	DN PN	8335	NOT USED		
10		SAC-HT-COOLING WATER OUTLET	DN PN	8335	NOT USED		
11		WATER FOR CLEANING PLANT TC AND SAC INLET	DN 20 PN 10	8338	⊕CYL.5 2215	-4536	6987
12		AIR FOR CLEANING PLANT TC AND SAC INLET	DN 20 PN 10	8338	⊕CYL.5 2105	-4536	6987
13		OILY WATER FROM RECEIVER OUTLET	DN 40 PN 5	8352	212	-3266	3100
14		TURBOCHARGER DIRTY WATER OUTLET	DN PN	8355	NOT USED		
15		WATER DRAIN FROM WATERSEPARATOR OUTLET	DN PN	8356	NOT USED		
16		SAC CONDENSATE WATER OUTLET	DN 50 PN 5	8357	757	-2782	-390
17		SAC WASHING WATER OUTLET	DN PN	8357	NOT USED		
18		SAC VENTING	DN 100 PN 5	8357	792	-3255	470
19							
20							
21							
(*)1 22-1	SEE DETAIL	OIL DRAIN BEDPLATE HORIZONTAL		1110	1695	-950	-2175
(*)1 22-2	SEE DETAIL	OIL DRAIN BEDPLATE HORIZONTAL			1695	950	-2175
(*)1 22-3	SEE DETAIL	OIL DRAIN BEDPLATE HORIZONTAL			⊕CYL.5 -741	950	-2175
(*)1 22-4	SEE DETAIL	OIL DRAIN BEDPLATE HORIZONTAL			⊕CYL.5 -741	-950	-2175
(*)2 23-1	SEE DETAIL	OIL DRAIN BEDPLATE VERTICAL		1110 9722	0	270	-2455
(*)2 23-2	SEE DETAIL	OIL DRAIN BEDPLATE VERTICAL			⊕CYL.5 646	270	-2455
24		CYLINDER LUB. OIL OUTLET	DN PN	8472	NOT USED		
25		MAIN LUBRICATING OIL INLET	DN 200 PN 5	8406	1261	-1681	3634
(*)3 26		LUBRICATING OIL TURBOCHARGER INLET	DN PN	8430	NOT USED		
27		LUBRICATING OIL TURBOCHARGER OUTLET	DN 65 PN 5	8431	⊕CYL.5 2108	-5050	6962
28		FLUSHING OIL AUTOMATIC FILTER OUTLET	DN PN	8445	NOT USED		
29		DIRTY OIL DRAIN SUPPLY UNIT OUTLET	DN PN	8452	NOT USED		

NO.				DG.	X	Y	Z
30		LUBRICATING OIL CROSSHEAD INLET	DN 125 PN 16	8455	1281	-2587	3060
31		DIRTY OIL LEAKAGE FROM ENGINE OUTLET	DN PN	8463	NOT USED		
(*) 32		CYLINDER LUB. OIL (HIGH BN) INLET	DN 25 PN 5	8475	⊕CYL.5 -2140	2190.5	6987.5
33		CYLINDER LUB. OIL (LOW BN) INLET	DN 25 PN 5	8475	⊕CYL.5 -2190	2115	6987.5
34		LEAKAGE OIL DRIVING END OUTLET	DN 80 PN 5	8482	1781	586	6955
35		LEAKAGE OIL FREE END OUTLET	DN 80 PN 5	8483	⊕CYL.5 -2095	1334	6956
36		DIRTY OIL PISTON UNDERSIDE OUTLET	DN 80 PN 5	8487	⊕CYL.5 -1786	1625	4076
37		LEAKAGE OIL GLAND BOX OUTLET	DN 40 PN 5	8488	⊕CYL.5 -1788	1442	7096
38		OIL PIPE DRAIN SUPPLY UNIT	DN 80 PN 5	8454	1881	-2764	-81
39		LEAKAGE DRAIN CYLINDER BLOCK OUTLET	DN PN	8462	NOT USED		
40		STARTING AIR PIPE INLET	DN 125 PN 30	8605	1783	1735	6932
41		VENTING CRANKCASE WITHOUT IELBA OUTLET	DN 65 PN 5	8608	⊕CYL.5 -1642	-750	4082
41		VENTING CRANKCASE WITH IELBA OUTLET	DN 65 PN 5	8608	⊕CYL.5 -2071	-770	4082
42		VENTING WASTE GATE OUTLET	DN PN	8609	NOT USED		
43		VENTING TURBOCHARGER OUTLET	DN 65 PN 5	8610	Sheet 1	-3725	9624.5
44		VENTING CYLINDER COOLING WATER OUTLET	DN 12 PN 5	8310	⊕CYL.5 -1115	-1545	8470
45		CONTROL AIR SUPPLY INLET	DN 15 PN 10	8630	⊕CYL.5 -1786	-570	6988
46		CONTROL AIR SUPPLY INLET	DN PN	4605	NOT USED		
47		CONTROL AIR SUPPLY VALVE OUTLET	DN 7 PN 5	8631	NOT USED		
48		EGR PURGE AIR SUPPLY OUTLET	DN 80 PN 5	8670	⊕CYL.1 520	-2774	9712
49		FUEL INLET	DN 65 PN 16	8702	2972	-1475	2173
50		FUEL RETURN OUTLET	DN 65 PN 16	8704	3207	-1774	1913
51		FUEL LEAKAGE RAIL UNIT OUTLET	DN 50 PN 5	8740	⊕CYL.5 -1422.5	1462	6970
52		FUEL LEAKAGE OUTLET	DN 40 PN 5	8744	1860	-2589	-81
53		FUEL LEAKAGE HP-PIPES OUTLET	DN PN	8742	NOT USED		
54		FUEL LEAKAGE INJECTION PUMP OUTLET	DN PN	8743	NOT USED		
55							
56		FUEL LEAKAGE ICU OUTLET	DN PN	8745	NOT USED		
57-1		VARIOUS LEAKAGE OUTLET	DN 40 PN 5	8746	1101	2475	-170
57-2		VARIOUS LEAKAGE OUTLET	DN 40 PN 5		1945	-2510	149
58							
59		TRACE HEATING FUEL INLET	DN 15 PN 16	8810	⊕CYL.5 -1450	1519.5	6855
60		TRACE HEATING FUEL OUTLET	DN 15 PN 16	8810	1946	-2649	0

NO.				DG.	X	Y	Z
61		TRACE HEATING FUEL INLET	DN PN	8812	NOT USED		
62		TRACE HEATING FUEL OUTLET	DN PN	8812	NOT USED		
63		TRACE HEATING FUEL CIRCULATION INLET	DN PN	8820	NOT USED		
64		TRACE HEATING FUEL CIRCULATION OUTLET	DN PN	8823	NOT USED		
65							
66							
67		FIRE EXTINGUISHING PLANT CYLINDER BLOCK INLET	DN 32 PN 10	8830	⊗CYL.5 -1429	1212	6979
68		FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN PN	8831	NOT USED		
69		FIRE EXTINGUISHING PLANT RAIL UNIT INLET	DN PN	8832	NOT USED		
70							
71-0°	SEE DETAIL α = 0°	EXHAUST GAS TURBOCHARGER OUTLET		6506 6509	⊗CYL.5 1588	-3610.5	8930
71-15°	SEE DETAIL α = 15°	EXHAUST GAS TURBOCHARGER OUTLET			⊗CYL.5 1588	-3799	8905
71-30°	SEE DETAIL α = 30°	EXHAUST GAS TURBOCHARGER OUTLET			⊗CYL.5 1588	-3975.5	8832
71-45°	SEE DETAIL α = 45°	EXHAUST GAS TURBOCHARGER OUTLET			⊗CYL.5 1588	-4127	8716
72	SEE DETAIL	EXHAUST GAS BY-PASS OUTLET	DN PN	8103 8108	⊗CYL.5 7	-2333	10836
*1)*2) 73		EXHAUST WASTE GATE OUTLET	FPP-DN 200 FPP-DN 250 PN 10	8135	IF USED, SEE PAAD314410(FPP) AND PAAD315070(CPP)		
74							
75		EGR CHARGER INTAKE INLET	DN900 PN	6509	⊗CYL.1 -141.5	-3610.5	10844.5
76		SUPPLY UNIT FUEL PILOT VALVE INLET	DN 15 PN 16	8790	⊗CYL.5 -1778	678	6990
77		SUPPLY UNIT FUEL PILOT VALVE OUTLET	DN 20 PN 16	8790	⊗CYL.5 -2308	813	6938
78**	SEE DETAIL	GAS SUPPLY PIPE		8903	⊗CYL.5 (-2802)	(197)	(6600)
79		GAS RELEASE PIPE, ENGINE SIDE OUTLET	DN 100 PN 10	8910	2174	38	7400
80		GAS RELEASE PIPE, SYSTEM SIDE OUTLET	DN 20 PN 10	8910	⊗CYL.5 -1780	369	6987
81		ANNULAR SPACE AIR VENTING PIPE INLET	DN 32 PN 10	8910	1774	38	6979
82		GAS MONITOR. PIPE PISTON U. SIDE	DN 20 PN 4	8911	⊗CYL.5 -1904	990	4110

 CYL.5 = MEASURED FROM FREE END (CYL. 5)

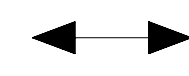
FREE END - X + DRIVING END



FUEL SIDE - Y + EXHAUST SIDE



BOTTOM - Z + TOP



1x A175-L


Change		-	by:0101	Rev:003	22.06.2022	CNA0002019	Main Design/Drawing Introduced				-
SURFACE PROTECTION SEE GROUP 0344		Rev	Creator	Approver	Approval Date	Change ID	Change Synopsis				Approved
TOLERANCING PRINCIPLE ISO8075		<small>Design: Whenever G or C is used all rights reserved. By using processes of the drawing the recipient acknowledges and reserves their rights. Where the photo is not part of this drawing and the used is not for use for reproduction. Subsequent changes are not part of this drawing and the used is not for use for reproduction. Subsequent changes are not part of this drawing and the used is not for use for reproduction. Subsequent changes are not part of this drawing and the used is not for use for reproduction.</small>				[mm]	[kg]	1.1			
GENERAL TOLERANCES ACCORDING TO ISO2768-mK							NX	A0	Item D	PTAA028482	Drawing Peggels

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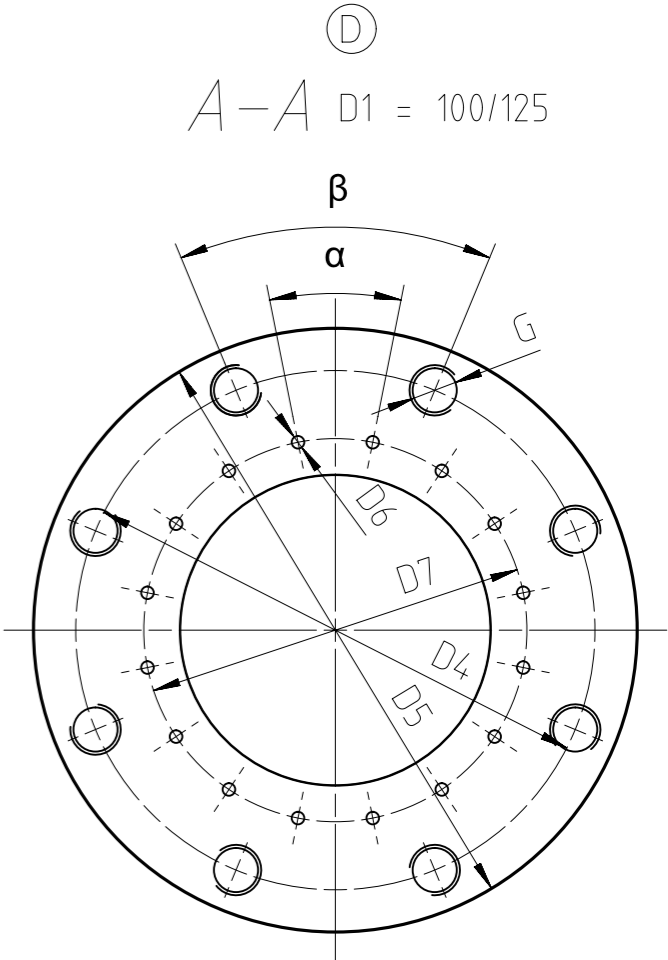
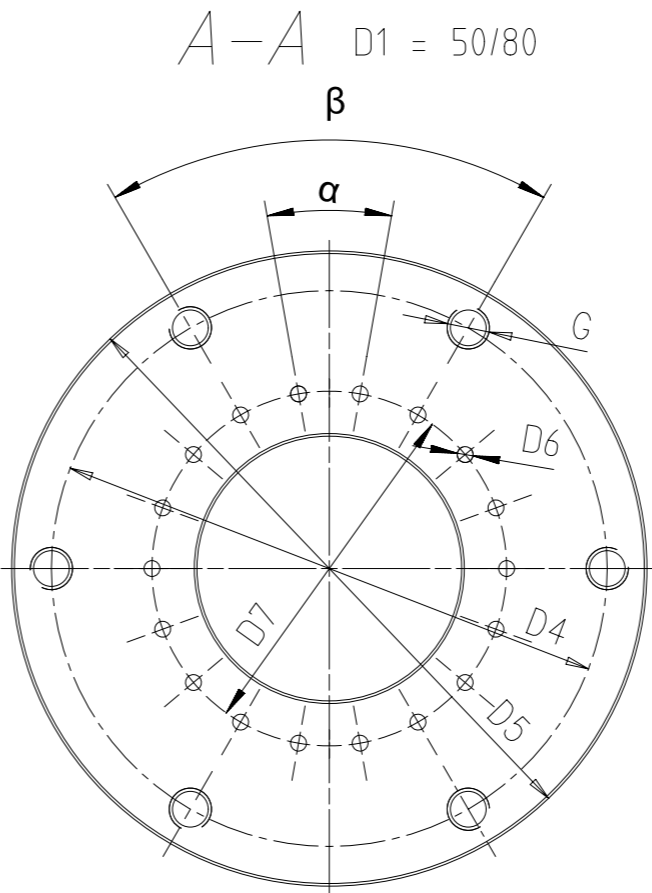
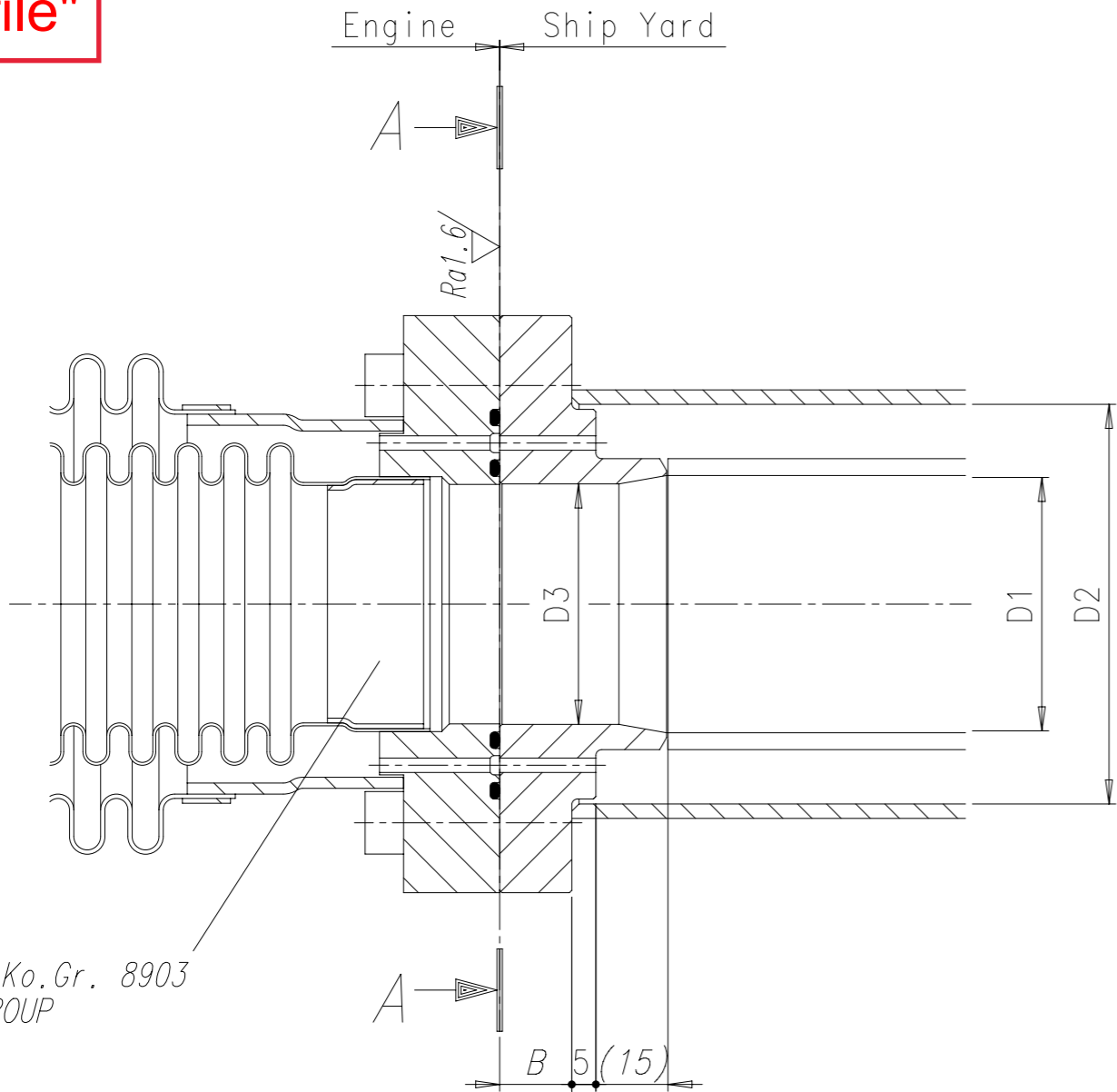
ISO																	
PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS					PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS				
6 bar	25	100	14	75	4	M10	11		16 bar	25	115	16	85	4	M12	14	
	32	120	16	90	4	M12	14			32	140	18	100	4	M16	18	
	40	130	16	100	4	M12	14			40	150	18	110	4	M16	18	
	50	140	16	110	4	M12	14			50	165	19	125	4	M16	18	
	65	160	16	130	4	M12	14			65	185	20	145	8	M16	18	
	80	190	18	150	4	M16	18			80	200	20	160	8	M16	18	
	100	210	18	170	4	M16	18			100	220	22	180	8	M16	18	
	125	240	20	200	8	M16	18			125	250	22	210	8	M16	18	
	150	265	20	225	8	M16	18			150	285	24	240	8	M20	22	
	200	320	22	280	8	M16	18			200	340	26	295	12	M20	22	
	250	375	24	335	12	M16	18			250	405	32	355	12	M24	26	
	300	440	24	395	12	M20	22			300	460	32	410	12	M24	26	
	350	490	26	445	12	M20	22			350	520	35	470	16	M24	26	
	400	540	28	495	16	M20	22			400	580	38	525	16	M27	30	
	450	595	30	550	16	M20	22			450	640	42	585	20	M27	30	
	500	645	30	600	20	M20	22			500	715	46	650	20	M30	33	
PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS					PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS				
10 bar	25	115	16	85	4	M12	14		40 bar	25	115	16	85	4	M12	14	
	32	140	18	100	4	M16	18			32	140	18	100	4	M16	18	
	40	150	18	110	4	M16	18			40	150	18	110	4	M16	18	
	50	165	19	125	4	M16	18			50	165	20	125	4	M16	18	
	65	185	20	145	8	M16	18			65	185	22	145	8	M16	18	
	80	200	20	160	8	M16	18			80	200	24	160	8	M16	18	
	100	220	22	180	8	M16	18			100	235	26	190	8	M20	22	
	125	250	22	210	8	M16	18			125	270	28	220	8	M24	26	
	150	285	24	240	8	M20	22			150	300	30	250	8	M24	26	
	200	340	24	295	8	M20	22			200	375	36	320	12	M27	30	
	250	395	26	350	12	M20	22			250	450	44	385	12	M30	33	
	300	445	26	400	12	M20	22			300	515	48	450	16	M30	33	
	350	505	28	460	16	M20	22			350	580	54	510	16	M33	36	
	400	565	32	515	16	M24	26			400	660	60	585	16	M36	39	
	450	615	38	565	20	M24	26										
	500	670	38	620	20	M24	26										

JIS

PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS					PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS				
5 bar	25	95	10	75	4	M10	12		16 bar	25	125	14	90	4	M16	19	
	32	115	12	90	4	M12	15			32	135	16	100	4	M16	19	
	40	120	12	95	4	M12	15			40	140	16	105	4	M16	19	
	50	130	14	105	4	M12	15			50	155	16	120	8	M16	19	
	65	155	14	130	4	M12	15			65	175	18	140	8	M16	19	
	80	180	14	145	4	M16	19			80	200	20	160	8	M20	23	
	100	200	16	165	8	M16	19			100	225	22	185	8	M20	23	
	125	235	16	200	8	M16	19			125	270	22	225	8	M22	25	
	150	265	18	230	8	M16	19			150	305	24	260	12	M22	25	
	200	320	20	280	8	M20	23			200	350	26	305	12	M22	25	
	250	385	22	345	12	M20	23			250	430	28	380	12	M24	27	
	300	430	22	390	12	M20	23			300	480	30	430	16	M24	27	
	350	480	24	435	12	M22	25			350	540	34	480	16	M30	33	
	400	540	24	495	16	M22	25			400	605	38	540	16	M30	33	
	450	605	24	555	16	M22	25			450	675	40	605	20	M30	33	
	500	655	24	605	20	M22	25			500	730	42	660	20	M30	33	
PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS					PN	DN	OUT.DIA.	THICK	DIM. FOR SCREWS				
10 bar	25	125	14	90	4	M16	19		30 bar	25	130	20	95	4	M16	19	
	32	135	16	100	4	M16	19			32	140	22	105	4	M16	19	
	40	140	16	105	4	M16	19			40	160	22	120	4	M20	23	
	50	155	16	120	4	M16	19			50	165	22	130	8	M16	19	
	65	175	18	140	4	M16	19			65	200	26	160	8	M20	23	
	80	185	18	150	8	M16	19			80	210	28	170	8	M20	23	
	100	210	18	175	8	M16	19			100	240	32	195	8	M22	25	
	125	250	20	210	8	M20	23			125	275	36	230	8	M22	25	
	150	280	22	240	8	M20	23			150	325	38	275	12	M24	27	
	200	330	22	290	12	M20	23			200	370	42	320	12	M24	27	
	250	400	24	355	12	M22	25			250	450	48	390	12	M30	33	
	300	445	24	400	16	M22	25			300	515	52	450	16	M30	33	
	350	490	26	445	16	M22	25			350	560	54	495	16	M30	33	
	400	560	28	510	16	M24	27			400	630	60	560	16	M36	39	
	450	620	30	565	20	M24	27										
	500	675	30	620	20	M24	27										

Substitute for:										PC	Q-Code	X	X	X	X	X
Modif	A	EAAD084180	04.10.2012													
		Number	Drawn Date		Number	Drawn Date		Number	Drawn Date		Number	Drawn Date				
		Product W-2S				Flange Dimensions										
Made	19.09.2007	N. Brand				Main Drw.	Page 1 / 1	Material ID 107.390.729.500								
Chkd	27.09.2007	M. Frei				Design Group	Drawing ID 107.390.729	Rev A								
Appd	27.09.2007	B. Haag				8020										

Download
"DXF file"



Ra12,5 (✓) Rohrleitungs Spezifikationen gemäss Ko.Gr.8903
PIPING SPECIFICATIONS ACCORDING GROUP

A		C		D							
D1	D2	D3	D4	D5	D6	D7	B	G	α	β	
DN	DN	mm	mm	mm	mm	mm	mm				
40	65										
50	80	47	105	120	3	67	15	M8	20°	60°	
80	100	79	155	180	5	104	20	M12	20°	60°	
100	125	95	174	200	5	125	20	M12	22.5°	45°	
125	150	127	206	240	5	152	25	M16	22.5°	45°	

C D E
F
D

Free space for lic.									Q-Code XXXXXX	Main Drw.		
									Standard ISO; JIS			
Modif.	C	EAAD087857	13.12.2017	D	EAAD090045	15.11.2018	E	EAAD090428	14.06.2019	F	EAAD095585	27.11.2020
		Number	Drawn date		Number	Drawn date		Number	Drawn date		Number	Drawn date
WIN GD Winterthur Gas & Diesel		Product W-2S		FLANGE DIMENSIONS Flanschabmessungen								
Units	mm kg		NX				Basic Material			Net Weight 0,01		
Made	17.10.2015		rs0x04 R.W.Sola		Scale 1:1		Size A3	Page 1/1	Material ID PAAD147122			
Chkd	04.09.2014		ihe003 Herceg		Design Group 8020		Drawing ID DAAD045822		Rev. F			
Appd	05.09.2014		bha009 Haag									

SURFACE PROTECTION SEE GROUP 0344
TOLERANCING PRINCIPLE ISO8015
GENERAL TOLERANCES ACCORDING TO ISO2768-mK

WinGD-5X72DF-2.1 _Pipe Connection Plan

TRACK CHANGES

DATE	SUBJECT	DESCRIPTION
2022-06-01	DRAWING SET	First web upload.
2022-07-01	PTAA028471 PTAA028482	New Pipe connection plan for Turbocharger type 1xA175-L (STD & LEFT) has been added.

DISCLAIMER

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