

# Data Sheet Vessel



**1B4700 Buffer Hold Vessel 14**  
**1 (rVIII-SC) / 1UB47 Buffer Hold Chroma 4**  
**Version 02**  
**Status: RFQ**


This datasheet does also apply to:      Total number:      2  
 1B4140

History:


Vers.    Date

02.0	12/19/2016
01.0	12/8/2016

Function	Company	Name	Date	Signature
Author	M+W		12/19/2016	
Review				
Approval				
<b>CSL Behring</b>			<b>M+W</b>	
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Project Number CSL Behring <b>16004</b>			Project Number M+W <b>2304996</b>	
Document Number CSL Behring			Document Number M+W <b>D-P-DA-0162</b>	Version <b>02.0</b>
Project <b>RCF Project Lengnau</b>			Document Type / Description <b>Data Sheet</b>	Page <b>1</b>

Project-No.		2304996		Data Sheet												
Code		NRCFF		Vessel												
Tag-No.		1B4700														
PFD-No.		PVF_B_01_0068		Building-No.		B		Process		1 (rVIII-SC) / 1UB47 Buffer Hold Chroma 4						
P&ID -No.		PRI_B_01_0081		Level		10		Name		Buffer Hold Vessel 14						
Drawing-No.				Room-No.		B_10_2027		Type		Vessel						
01		<b>General</b>								<b>Design Data</b>						
02	0	<b>Inquiry No. / Date</b>		/				0		<b>Pressure Vessel Code</b>		AD2000; PED				
03	0	<b>Bid No. / Date</b>		/				0	v	<b>Inside Diameter</b>		800	mm			
04	0	<b>Order No. / Date</b>		/				0	v	<b>Length w/o Support</b>		1400	mm			
05	0	<b>Standard / Regulation</b>		compliant to technical specification				0	v	<b>Bottom Outlet Height</b>			mm			
06	0	<b>Inspection</b>		compliant to technical specification				0		<b>Nominal volume</b>		500	l			
07	0	<b>Manufacturer / Supplier</b>		/				0	v	<b>Total volume</b>		603	l			
08	0	<b>Necessary Certificates</b>		compliant to technical specification					v	<b>Design Temperature</b>						
09	0	<b>Documentation</b>		compliant to docu requirements				2	v	Inside		-10-150	°C			
10	0							2	v	Jacket (Heating / Cooling)		-10-150	°C			
11	0									<b>Design Pressure<sup>2</sup></b>						
12		<b>Operating Data</b>						0	v	Inside		-1	/	6	bar	
13	0	v	<b>Medium</b>		Process Media				0	v	Jacket (Heating / Cooling)		-1	/	10	bar
14	0	v	Characteristics		wässrige Lsg.				0	v	<b>Type of bottom</b>		dished end DIN 28011			
15	0	v	Working Volume min./max.		59.2	500	l			0	v	<b>Type of top</b>		DIN 28011, removeable		
16	0	v	Operating Temp. Min./max.				°C				<b>Wall Thickness</b>					
17	0	v	Op. Pressure min./max. <sup>2</sup>				bar		0		Top / Bottom / Cylinder		/	/	mm	
18	0		Filling Rate min./max.				m³/h		0		Heating-/ Cooling Jacket		mm			
19	0		Draining Rate min./max.				m³/h		0		Inliner		mm			
20	0	v	Density / Bulk Density at [T]		1200	20	kg/m³	°C			Insulation / Insulation Jacket		mm			
21	0	v	Specific Heat Capacity				kJ/kg K		0		<b>Corrosion Allowance</b>		0	mm		
22	0		Dynamic Viscosity at [T]		0.002	20	Pa s	°C			<b>Welding Factor</b>					
23	0	v	pH-Value min./max.		1	-	14			0	v	<b>Vessel Orientation</b>		vertical		
24	0	v	Flash Point		N/A		°C		0		<b>Reinforcing Sheet(s)</b>					
25	0	v	Inertisation <sup>2</sup>		N/A		mbar		0		<b>Test press. in-/outside<sup>2</sup></b>		bar			
26	0	v	<b>Cleaning in Place</b>		Yes				0		<b>Gaskets / Type</b>					
27	0		Medium		0.5M NaOH, 0.1M HNO3				0		<b>Heat Ex. Surface / Content</b>		m² / l			
28	0		Temperature		<=80		°C				<b>Weight of Vessel</b>					
29	0	v	<b>Sterilisation in Place</b>		Yes				0		Empty / Disaster		/	kg		
30	0		Medium		pyrogen free steam						<b>Construction Details</b>					
31	0		Temperature		<135		°C		0		<b>Heating / Cooling</b>		cylinder			
32	0	v	<b>Heating-/Cooling Medium</b>		Tempering Media				2		Type		coil or jacket*3			
33	0		Inlet Temperature		14		°C				<b>Support</b>					
34	0		Outlet Temperature		20		°C		0		Type / No. / Norm		brackets / 4/ acc. Typical			
35	0		Operating Pressure <sup>2</sup>		~3		bar				<b>Fixing</b>					
36	0		Density at [T]		1000	25	kg/m³	°C	0		Type / No. / Norm		lifting lugs / /			
37	0		Specific Heat Capacity		4,182		kJ/kg K		0				name plate / 1/ acc. Typical			
38	0		Dyn. Viscosity at [T]		0,001	25	Pa s	°C	0		Earthing Connection/		1/			
39	0		Thermal Output (max)		cf Spec		kW		0				/ /			
40	0		Thermal Input (max)		cf Spec		kW		0		<b>Accessories</b>		/ /			
41	0	v	Heating-/ Cooling Rate		N/A	/	cf Spec	°C/min	0		Type / No. / Norm		/ /			
42	0	v	Insulation		yes				0				/ /			
43			<b>Materials</b>						0				/ /			
44	0	v	<b>Product Contacted Parts</b>		1.4539				0	v	<b>Agitator seal</b>					
45	0		d-Ferrite Content		Fe <3%				0	v	Arrangement		none			
46	0		Gaskets		EPDM / MVQ-silicone				0	v	<b>Aseptic Design</b>		yes			
47	0		Sight Glasses		DIN 7080				0							
48	0		Inliner		N/A						<b>Surface Treatment</b>					
49	0		<b>Non Prod. Contacted Parts / Insulation Jacket</b>		ds/coil:1.4404/1.4435/1.4571 rest:1.4301 or equi.*5)				0		<b>Outer surface</b>					
50	0		Gaskets		Gylon				0		Surface finish		uniform grinding			
51	0		<b>Supports</b>		V4A				2		Surface Roughness		RA <=1.2µm			
52	0		Insulation		mineral wool, AS quality				v		<b>Inner surface</b>					
53	0		<b>Screws, Nuts, Bolts</b>		A2-70; A4				2	v	Surface finish		grinded			
54	0		<b>Exterior coating</b>						0	v	Surface properties		RA <=0.6µm			
55	0		Primer						0		Welding Seam		grinded			
56	0		Final Coating						0							
57	0															
58	0															
59			<b>Remarks</b>													
60			1. Lines marked with "v" contain process information													
61			2. Overpressure. Vacuum is marked with a negative sign.													
62																
63	0		4. dynamic loads need to be considered acc to regulations													
64	0		5. Cladding optional in offer: 1.4301 and 1.4404/1.4435													
65	0		6. operation data: see document "scope of order"													


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Project-No.	2304996	<b>Data Sheet</b>			
Code	NRCFF				
Tag-No.	1B4700				
PFD-No.	PVF_B_01_0068	Building-No.	B	Process	1 (rVIII-SC) / 1UB47 Buffer Hold Chroma 4
P&ID -No.	PRI_B_01_0081	Level	10	Name	Buffer Hold Vessel 14
Drawing-No.		Room-No.	B_10_2027	Type	Vessel

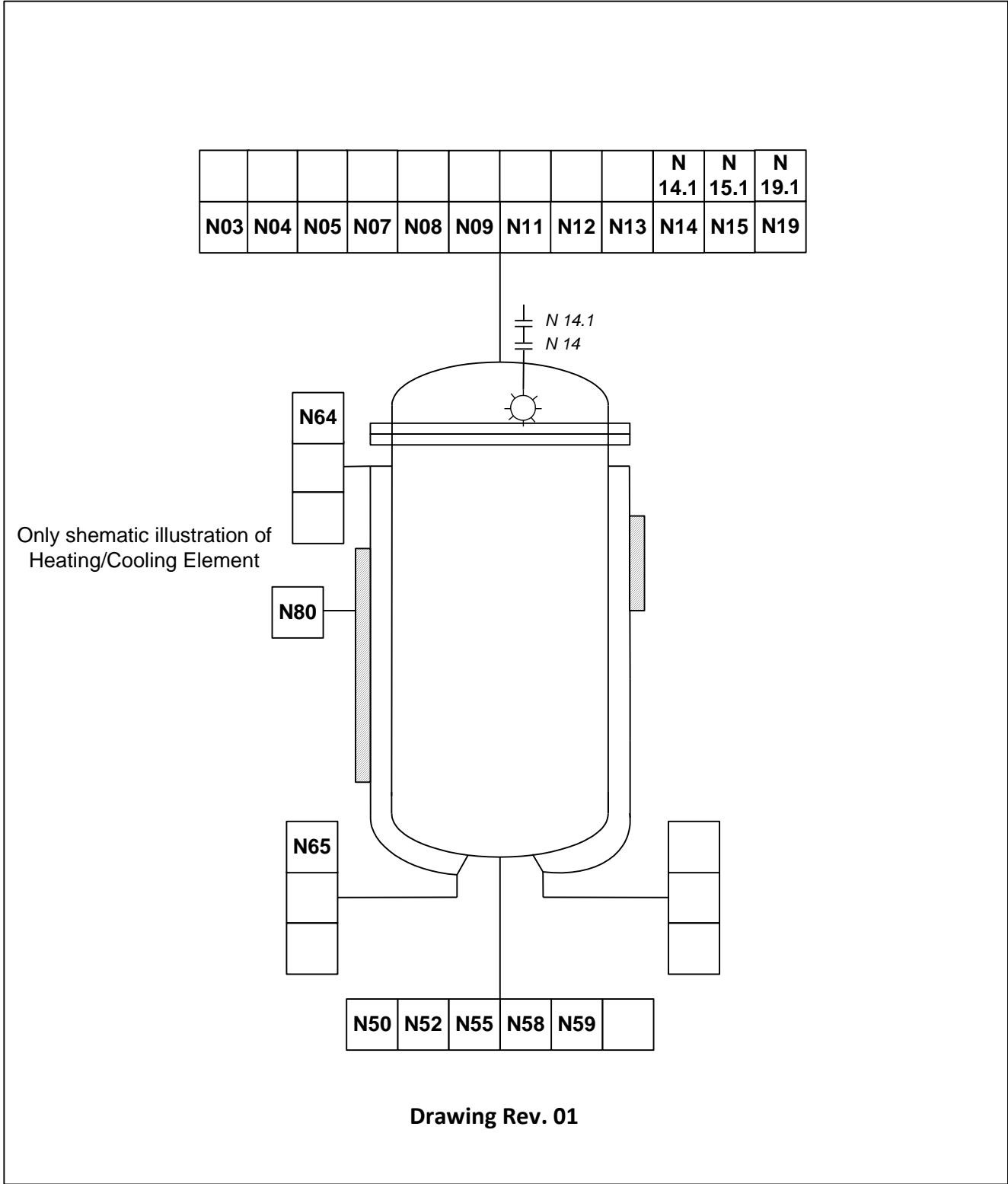
Rev	Table of Nozzles							
	Ident.	No.	DN	PN	Norm	Flange-/Nozzletype	Sealing Face	Service
1	N03	1	80		similar DIN 28117	aseptic block flange, radial	O-ring	0106 - Sight glass
1	N04	1	50		similar DIN 28117	aseptic block flange, radial	O-ring	0317 - Sight glass with light
1	N05	1	2"		ASTM	Na-connect, radial	Flat, ISO 2852	0125 - Rupture disc
1	N07	1	B50			Neumo BioControl, radial	O-ring	0143 - Pressure gauge
1	N08	1	B50			Neumo BioControl, radial	O-ring	0143 - Pressure probe
1	N09	1	B50			Neumo BioControl, vertical	O-ring	0142 - filling level
1	N11	1	B50			Neumo BioControl, vertical	O-ring	0142 - Level switch
1	N12	1	15		weld in	Gemü B600	N/A	0337 - Ventilation
1	N13	1	2"		ASTM	Na-connect, radial	Flat, ISO 2852	spare port
1	N14	1	B50			Neumo Biocontrol, radial	O-ring	0303 - CIP 1 (vessel-connection)
1	N14.1	1	25	25	DIN 11864-2 BF	Dim. DIN 11866-B	O-ring; Form A	0303 - CIP inlet 1
1	N15	1	B50			Neumo Biocontrol, radial	O-ring	0303 - CIP 2 (vessel-connection)
1	N15.1	1	25	25	DIN 11864-2 BF	Dim. DIN 11866-B	O-ring; Form A	0303 - CIP inlet 2
1	N19	1	B25			Neumo Biocontrol, radial	O-ring	0316 - Inlet pipe (J-tube)
1	N19.1	1	15	25	DIN 11864-2 BF	Dim. DIN 11866-B	O-ring; Form A	0316 - inlet pipe
1	N50	1	25		Südmo block flang	Type Südmo SVP	O-ring	0318 - Bottom outlet
1	N52	1	N/A			Thermowell		0332 - Temperature measurement
1	N55	1	1 1/2"		ASTM	Na-connect; Nova Septum	Flat, ISO 2852	0304 - Sampling (5 port)
1	N58	1	G 1 1/4"		Ingold	25H7	O-ring	0330 - Spare (pH)
1	N59	1	B50			Neumo Biocontrol, radial	O-ring	0143 - Spare (conductivity)
1	N64	1	25	40	DIN EN 1092-1 11	welding neck flange	Form B1	Outlet Tempering Media
1	N65	1	25	40	DIN EN 1092-1 11	welding neck flange	Form B1	Inlet Tempering Media
1	N80	1	1/4"		supplier standard	socket with thread		0149 - testsocket insulation


Rev	Remarks Nozzles
0	Nozzle typical number: S-E-AT-XXXX(number in Service column)
0	
0	
0	
0	
0	

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		<b>Vessel</b>				
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P&ID -No.	PRI_B_01_0081	Level	10	Name	Buffer Hold Vessel 14	
Drawing-No.		Room-No.	B_10_2027	Type	Vessel	
<b>Sketch</b>						

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<b>Vessel</b>						
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P&ID -No.	PRI_B_01_0081	Level	1O	Name	Buffer Hold Vessel 14	
Drawing-No.		Room-No.	B_1O_2027	Type	Vessel	
<b>Additional Information for Equivalent Equipment</b>						

Tag-No.	Description	Process	PFD-No./PID-No./ Drawing-No.	Building-No./ Level/Room-No.
1B4140	Buffer Hold Vessel 5 (C1/C2 HETP 1)	1 (rVIII-SC) / 1UB41 Buffer Hold Chroma 1	PVF_B_01_0062 PRI_B_01_0074	B 1O B_1O_2027