

Atomizing-Steam-Cooler Type 1

A MEMBER OF THE ARCA FLOW GROUP

1	Customer:	von Rohr ARCA B.V.	ARTES-No.:		5504453			
2	Plant:	aeb Amsterdam	Pos.:		1.1			
3	Location:	40/12 Reducers	Pcs:		1			
4	KKS No.	10 SAE40 AH001	Serial-No.:		3174391.1			
5	Pipe-Connections		Atomizing Steam		Cooling Water		Steam Line	
6	Dimensions	Ø D [mm] x s [mm]	60,3 x 3,2		48,3 x 3,2		355,6 x 10,0	
7	Material		1.5415 (16Mo3)		1.5415 (16Mo3)		1.5415 (16Mo3)	
8	Cooler - Design				Cooling Water		x-Length	
9	Nominal size	DN	50		40		150	
10	Nominal Pressure	PN	100		40		40	
11	Pressure	bar(g)	64		30		18	
12	Temperature	°C	440		150		415	
13	Butt Weld Ends	Ø D [mm] x s [mm]	60,3 x 3,6		48,3 x 3,6		Flange	
14	Material		1.5415 (16Mo3)		1.5415 (16Mo3)		1.5415 (16Mo3)	
15	Connction-Std.		DIN EN 12627		DIN EN 12627		EN 1092-1/B	
15	Operating Data		Loading Case 1	Loading Case 2	Loading Case 3	Loading Case 4	Loading Case 5	
16	Medium:	Steam						
17	Flow	t/h	67,40					
18	Temperature-In	°C	405,00					
19	Temperature-Out	°C	205,00					
20	Pressure	barA	13,00					
21	Flow Speed	m/s	41,75	--	--	--	--	
22	Medium:	Cooling Water						
23	Flow	t/h	13,06	--	--	--	--	
24	Temperature-In	°C	90,00					
25	Pressure upstr.CV	barA	(19,0)					
26	Pressure Nozzle	barA	17,00	--	--	--	--	
27	Flow Speed	m/s	2,72	--	--	--	--	
28	kvs Water-Nozzle	m³/h	6,64					
29	Medium:	Atomizing Steam						
30	Flow	t/h	3,92	--	--	--	--	
31	Temperature-In	°C	425,00					
32	Pressure-In	barA	41,50					
33	Flow Speed	m/s	35,23	--	--	--	--	
34	kvs Steam-Nozzle	m³/h	10,76					
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53	Inspection acc. To	Pressure Equipment Directive	Final Acceptance Test				3.1	
54		Requirements acc. to: EN 12952	certificate acc. DIN EN 10204					
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56	Mounting Instruction	Required Straight-Run	5,0 m					
57		Min-Distance to Temperature-Sensor	9,0 m					
58	Remarks							
59	steam temperature after steam pressure reducing station 405°C							
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62	Revision	1	2	3	4	5	6	
63	Date:	06.04.2022						
64	Issued:	H. Jäkel						
65	Checked:	C. Pocher						