AIR LIQUIDE	Specification Vibration Limit Switch	TAG - No.: **LL64030** Project-No.: K70101
Air Liquide AGS GmbH	Project: **ASU No. 9 KOSICE**	Page: of:
	Designation: LOX WATER BATH VAPORIZER	Combination with Tag-No.:

Rev.							
	1	Location	Line - No.				
	2		Equipment-No.	W64001			
	3		Size		Class		Material
	4		Flanges			Gasket	
	5		Taps			Material	
	6	Service conditions	Medium	WATER			
	7						
	8		State	☒ liquid	☐ gaseous	☐ vaporous	
	9		Operation case	case 1	case 2	case 3	
	10		Flow	Nm³/h			
	11		P_1 (abs.)	bar	1		
	12		Temperature t_1	°C	50...100		
	13		Ambient temp.	°C	-25...35°C		
	14	Order data	Manufacturer				
	15		Type				
	16		Order no.				
	17		Sensor design:				
	18		☐ without extension	immersion length		mm	
	19		☒ extension tube	immersion length	118	mm	
	20		☐ extension with sliding collar	immersion length		mm	
	21		Process connection				
	22		☐ Thread G 3/4	☒ Thread G 1			
	23		☐ Thread 3/4" NPT	☐ Thread 1" NPT			
	24		☐ Flange				
	25		Size		Class		Material
	26		Materials:				
	27		Process connection	☒ 316 SS	☐ Hastelloy C4		
	28		Sensor	☒ 316 SS	☐ Hastelloy C4		
	29		Extension tube	☒ 316 SS	☐ Hastelloy C4		
	30		Press. limit	64 bar(g) at 150°C			
	31		Allow. medium temp.	-40...+150 °C			
	32		Allow. ambient temp.	-40...+70 °C			
	33						
	34						
	35	Remarks					
	36						
	37						
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	39						
	40						
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Rev.								
	55	Order data						
	56		☒ Compact design					
	57		Contact output					
	58		☐ thyristor (2-wire AC)					
	59		☐ open collector (3-wire DC)					
	60		☒ relay contact (4-wire AC/DC)					
	61		☐ NAMUR (loop powered)					
	62							
	63		Aux. energy	24 VDC	Power consumption	1,3 W		
	64		Cont. load limit	230VAC/ 6A	Conduit connection	M20 x 1,5		
	65		Housing	Alu	Enclosure class	IP65/NEMA 4x		
	66							
1	67		Overfill protection acc. WHG	☐ no	☒ yes			
	68		Explosion proof	☒ no	☐ EEx			
	69		PTB-approval zone 0	☒ no	☐ yes			
1	70		IEC 61511-SIL 3	☒ no	☐ yes			
	71							
	72							
	73		Operating instruction	☐ German	☒ English	☐ French		
	75		Quantity per type	4-fold				
	76							
	77	Certificates	☐ Material certificate EN 10204 -3.1B					
	78		☐ Cleaned, oil and grease free for oxygen service					
	79		☐ Packed acc. MG-cert. 06271					
	80		☐ PTB certificate					
	81		☐ Conformity certificate					
	82		☒ Marking with TAG-number					
	83							
	84							
	85							
	92							
	93							
	93							
	94							

Rev.	Date	Name	Checked	Change	Rev.	Date	Name	Checked	Change
1	10.11.2004	Möller	Eichler	Order Spec.					
0	19.10.2004	Möller	Eichler	Initial Version					

AIR LIQUIDE	Specification Vibration Limit Switch	TAG - No.: **LL73030** Project-No.: K70101
Air Liquide AGS GmbH	Project: **ASU No. 9 KOSICE**	Page: of:
	Designation: LIN WATER BATH VAPORIZER	Combination with Tag-No.:

Rev.							
	1	Location	Line - No.				
	2		Equipment-No.	W73001			
	3		Size		Class		Material
	4		Flanges			Gasket	
	5		Taps			Material	
	6	Service conditions	Medium	WATER			
	7						
	8		State	☒ liquid	☐ gaseous	☐ vaporous	
	9		Operation case	case 1	case 2	case 3	
	10		Flow	Nm³/h			
	11		P_1 (abs.)	bar	1		
	12		Temperature t_1	°C	50...100		
	13		Ambient temp.	°C	-25...35°C		
	14	Order data	Manufacturer				
	15		Type				
	16		Order no.				
	17		Sensor design:				
	18		☐ without extension	immersion length		mm	
	19		☒ extension tube	immersion length	118	mm	
	20		☐ extension with sliding collar	immersion length		mm	
	21		Process connection				
	22		☐ Thread G 3/4	☒ Thread G 1			
	23		☐ Thread 3/4" NPT	☐ Thread 1" NPT			
	24		☐ Flange				
	25		Size		Class		Material
	26		Materials:				
	27		Process connection	☒ 316 SS	☐ Hastelloy C4		
	28		Sensor	☒ 316 SS	☐ Hastelloy C4		
	29		Extension tube	☒ 316 SS	☐ Hastelloy C4		
	30		Press. limit	64 bar(g) at 150°C			
	31		Allow. medium temp.	-40...+150 °C			
	32		Allow. ambient temp.	-40...+70 °C			
	33						
	34						
	35	Remarks					
	36						
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Rev.								
	55	Order data						
	56		☒ Compact design					
	57		Contact output					
	58		☐ thyristor (2-wire AC)					
	59		☐ open collector (3-wire DC)					
	60		☒ relay contact (4-wire AC/DC)					
	61		☐ NAMUR (loop powered)					
	62							
	63		Aux. energy	24 VDC	Power consumption	1,3 W		
	64		Cont. load limit	230VAC/ 6A	Conduit connection	M20 x 1,5		
	65		Housing	Alu	Enclosure class	IP65/NEMA 4x		
	66							
1	67		Overfill protection acc. WHG	☐ no	☒ yes			
	68		Explosion proof	☒ no	☐ EEx			
	69		PTB-approval zone 0	☒ no	☐ yes			
1	70		IEC 61511-SIL 3	☒ no	☐ yes			
	71							
	72							
	73		Operating instruction	☐ German	☒ English	☐ French		
	75		Quantity per type	4-fold				
	76							
	77	Certificates	☐ Material certificate EN 10204 -3.1B					
	78		☐ Cleaned, oil and grease free for oxygen service					
	79		☐ Packed acc. MG-cert. 06271					
	80		☐ PTB certificate					
	81		☐ Conformity certificate					
	82		☒ Marking with TAG-number					
	83							
	84							
	85							
	92							
	93							
	93							
	94							

Rev.	Date	Name	Checked	Change	Rev.	Date	Name	Checked	Change
1	10.11.2004	Möller	Eichler	Order Spec.					
0	19.10.2004	Möller	Eichler	Initial Version					