

Athlon Solutions Bayport Texas		Date: 05/01/19 Revision: A	Created By: DES Checked By:
<b>GENERAL INFORMATION</b>			<b>COMMENTS</b>
Item No. and Tag	New PSV		
Relieves Equipment No.	T-31		
Valve Location ( P&ID # )	New P&ID		
Manufacturer	Consolidated		
Relief Valve Model No.	1905QC-32		
Relief Valve Serial No.	New		
<b>SERVICE CONDITIONS</b>			
Design Code (ASME, DIN etc.)	ASME		
Fluid	Benzyl Chloride		
Fluid State (Liquid, Vapor, or Liq/Vap)	Vapor	Vapor	Operating   Relieving
Required Capacity & Units	34,486 lb/hr		
Molecular Weight	36.460		
Specific Gravity at Flowing Conditions	1.257		
Viscosity at Relieving Temp, Cp	0.017		
Compressibility Factor, Z	1		
Ratio of Heat Capacities, k	1.383		
Design Pressure of Equip., MAWP psig	30 psig		
Operating Pressure, psig	1 psig		
Set Pressure, psig	30 psig		
Temperature, °F	Ambient	459 deg F	Operating   Relieving
Constant Back Pressure, psig	0 psig		
Variable Back Pressure, psig	3.00 psig		Builtup Backpressure
Cold Differential Set Pressure, psig	30 psig		
Allowable Overpressure %	10%		
Blowdown %	10%		
<b>BASIS OF SELECTION</b>			
Design/Sizing Basis	13: Chemical Reaction		
Other Basis	Fire		
<b>DESIGN DETAILS</b>			
Design Type	Conventional		
Bonnet (Open or Closed)	Closed		
Inlet Size, Rating, Facing	6" 150# RFF		
Outlet Size, Rating, Facing	8" 150# RFF		
Calculated Area, Sq In	5.912 sq in		API Calculated Area
Orifice Letter Designation	P		
Orifice Area, Sq In	6.380 SqIn		API Effective Area
<b>MATERIALS</b>			
Body	CS		
Bonnet	CS		
Seat and Disk	316 SS		
Guide and Ring	316 SS		
Spring	CR		
Bellows	NA		
<b>ACCESSORIES</b>			
Lifting Lever (Plain, Packed or None)	None		
Code Stamp	ASME VIII		
Cap (Screwed or Bolted)	Bolted		
<b>NOTES</b>			

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