DRESSER Flow Control

Consolidated Safety Relief Valve Sizing and Selection Report
SRVS6.0, June 15, 2001 Serial No.: 4311 11/26/2003
Dresser Flow Control - Alexandria, LA, USA

Arnd Brandstaeter
Dresser Valves Europe GmbH
D-41751 Viersen / Germany
Prepared by Arnd Brandstaeter
Checked by:
Spec. Sheet No.
Revision 03

Customer Information
Name UNIS,spol, s.r.o.
Location BRNO, CZECH REPUBLIK
Contract 70 000
Project HYDROGEN - NOVOPOLOTSK.

Tag Number	PSV-20315			
P&ID Number - Location	220-PC-B-11169			
Valve Type	1905-DURC-2-CC-MS-34-RF-GS-HP			
Gag Required	NO			
Inlet Connection				
Specified	6.00 Flg	150#	Rf	
Selected	6.00 Flg	150#	Rf	
Outlet Connection				
Specified	8.00 Flg	150#	Rf	
Selected	8.00 Flg	150#	Rf	
Sizing Data				
Design Code	ASME Section VIII			
Sizing Basis	Required Flow Rate			
Fluid	PSA OFF GAS			
Fluid State	Gas			
M	10.4000			
Z	1.0000			
k	1.390			
C	355			
Kd (vapor) Kd (liquid)	0.975			
Kb Kw	1.0000			
Ksh Kn				
G Density @ P1			0.160	lb/ft3
Viscosity Kv				
Acc	10.00 %			
Kc	1.000			
Pressure				
Operating Set	0.30		5.00	Kg/cm2g
MAWP	5.00			Kg/cm2g
Flowing	6.53			Kg/cm2a
Superimposed Minimum	0.00			Kg/cm2g
Superimposed Maximum	1.50			Kg/cm2g
Builtup Total BP	0.50		2.00	Kg/cm2g
Barometric	1.03			Kg/cm2a
Temperature				
Operating	34.00 C			
Relieving	34.00 C			
Design	100.00 C			
Flow Area				
Required	9,077.7883 mm²			
Selected	10,322.5600 mm²			
Standard	API Effective			
Capacity				
Required	28,126.0 Kg/hr			
Selected	31,982.6 Kg/hr			
Nameplate	27,120 SCFM			
Reaction Force	2,962 Lbs			
Noise Level	138 DBa @ 3 ft.			

Valve Number 1
6R8

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P&ID Number - Location: 220-PC-D-11169 -

Tag Number: PSV-20315 **Valve Number:** 1

PART NAME	MATERIAL
ADJ. RING PIN GASKET	SOFT IRON
ADJUSTING RING	316 STAINLESS STEEL
ADJUSTING RING PIN	316 STAINLESS STEEL
ADJUSTING SCREW	416 STAINLESS STEEL
ADJUSTING SCREW LOCKNUT	416 STAINLESS STEEL
BASE	ASME SA216 WCC CARBON STEEL
BASE PLUG	CARBON STEEL
BELLOWS	INCONEL 625
BELLOWS FLANGE	316L STAINLESS STEEL
BELLOWS GASKET	SOFT IRON
BELLOWS NUT	316L STAINLESS STEEL
BONNET	ASME SA216 WCC CARBON STEEL
BONNET GASKET	SOFT IRON
CAP GASKET	SOFT IRON
DISC	316 STAINLESS STEEL
DISC HOLDER	316 STAINLESS STEEL
DISC RETAINER	INCONEL X-750
GUIDE	316 STAINLESS STEEL
GUIDE GASKET	SOFT IRON
NOZZLE	316 STAINLESS STEEL
SPINDLE	410 STAINLESS STEEL
SPINDLE RETAINER	INCONEL X-750
SPRING	ALLOY STEEL
SPRING WASHER	CARBON STEEL

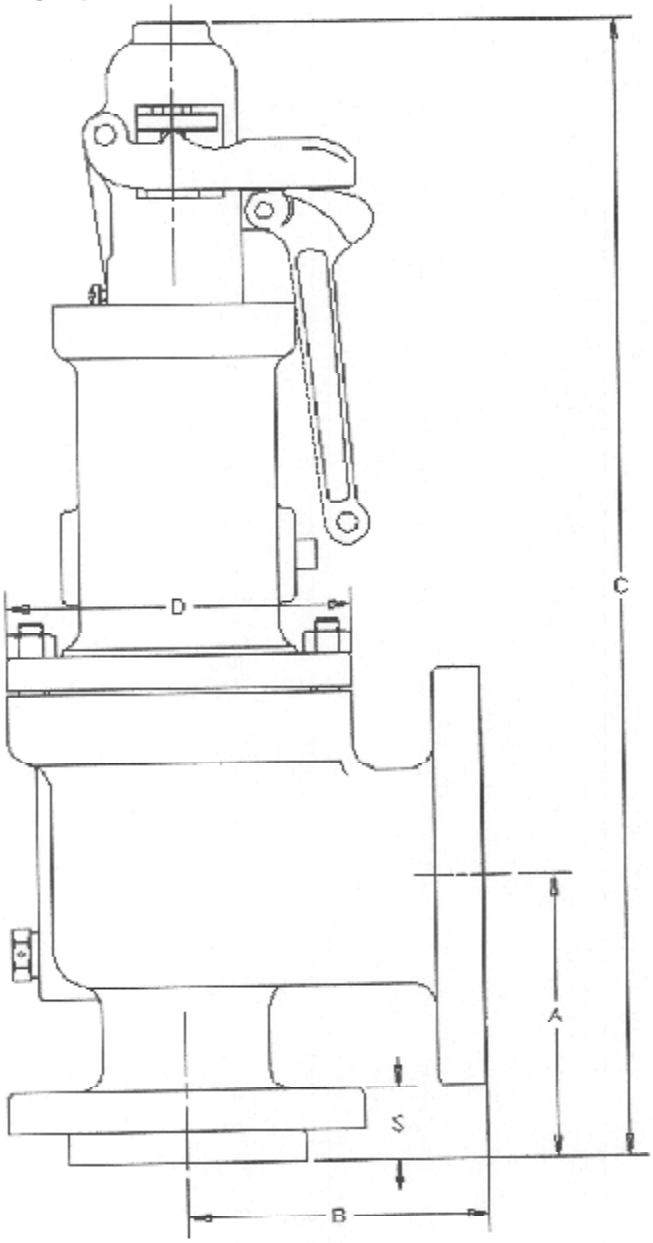
DRESSER
Flow Control

11/26/2003

Certified by Dresser Flow Control

Tag Number PSV-20315
Valve Type 1905-30RC-2-CC-MS-34-RF-GS-HP
Gag Required NO

Valve Number 1
Area ,322.5600



A - 239.7 mm -- 9-7/16 in
B - 241.3 mm -- 9-1/2 in
C - 1092.2 mm -- 43 in
D - 368.3 mm -- 14-1/2 in
S - 46.0 mm -- 1-13/16 in
Weight - 224.7 kg -- 495 lb

Inlet Size	6.00	Inches	Flg	150#	Rf
Outlet Size	8.00	Inches	Flg	150#	Rf