DRESSER Flow Control

Consolidated Safety Relief Valve Sizing and Selection Report
SRVS6.0, June 15, 2001 Serial No.: 0011 10/21/2003
Dresser Flow Control - Alexandria, LA, USA

FRED ZUEGEL
DRESSER VALVES EUROPE
Windenboden 23 , Neuheim , Witzerland
Prepared by FRED ZUEGEL
Checked by:
Spec. Sheet No.
Revision 03

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

Tag Number	PRV-20303			
P&ID Number - Location	220-PC-B-11166 -			
Valve Type	**1905-00HC-1-CC*-TD-34-RF-SS-LP**			
Gag Required	**NO**			
Inlet Connection				
Specified	1.50	Flg	150#	Rf
Selected	1.50	Flg	150#	Rf
Outlet Connection				
Specified	3.00	Flg	150#	Rf
Selected	3.00	Flg	150#	Rf
Sizing Data				
Design Code	ASME Section VIII			
Sizing Basis	Required Flow Rate			
Fluid	STEAM			
Fluid State	Steam			
M	18.0200			
Z	0.9700			
k	1.300			
C	347			
Kd (vapor) Kd (liquid)	0.975			
Kb Kw	1.0000			
Ksh Kn	1.0000		1.0000	
G Density @ P1				
Viscosity Kv				
Acc	10.00 %			
Kc	1.000			
Pressure				
Operating Set	1.50		2.50	Kg/cm2g
MAWP	2.50			Kg/cm2g
Flowing	3.78			Kg/cm2a
Superimposed Minimum	0.00			Kg/cm2g
Superimposed Maximum	0.00			Kg/cm2g
Builtup Total BP	0.00		0.00	Kg/cm2g
Barometric	1.03			Kg/cm2a
Temperature				
Operating	127.10 C			
Relieving	141.00 C			
Design	140.00 C			
Flow Area				
Required	438.4507 mm^2			
Selected	506.4506 mm^2			
Standard	API Effective			
Capacity				
Required	832.0 Kg/hr			
Selected	961.1 Kg/hr			
Nameplate	2,162 Lb/hr			
Reaction Force	47 Lbs			
Noise Level	108 DBa @ 3 ft.			

Valve Number 1
1.5H3

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Tag Number PRV-20303 **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 SA351 CF3 STAINLESS STEEL
BASE PLUG	CARBON STEEL
BASE STUDS	ASME SA193 B7 ALLOY STEEL
BONNET	ASME SA351 CF3 STAINLESS STEEL
BONNET GASKET	SOFT IRON
CAP GASKET	SOFT IRON
DISC HOLDER	316 STAINLESS STEEL
EDUCTOR TUBE	304 STAINLESS STEEL
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
STUD NUTS	ASME SA194 2H ALLOY STEEL
THERMO DISC	616 STAINLESS STEEL
VENT PIPE PLUG	CARBON STEEL

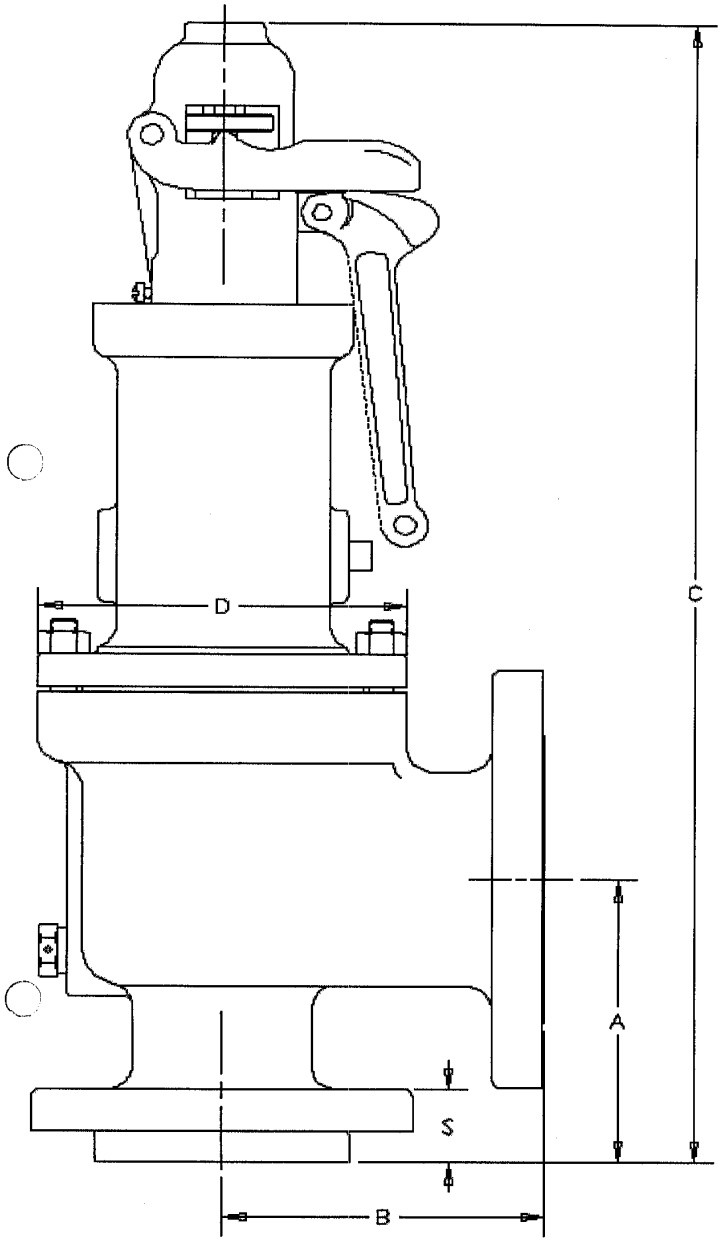
DRESSER
Flow Control

10/21/2003

Certified by Dresser Flow Control

Tag Number PRV-20303
Valve Type 1905-00HC-1-CC*-TD-34-RF-SS-LP
Gag Required NO

Valve Number 1
Area 506.4506



A - 130.2 mm -- 5-1/8 in
B - 123.8 mm -- 4-7/8 in
C - 495.3 mm -- 19-1/2 in
D - 155.6 mm -- 6-1/8 in
S - 31.8 mm -- 1-1/4 in
Weight - 27.2 kg -- 60 lb

Inlet Size	1.50	Inches	Flg	150#	Rf
Outlet Size	3.00	Inches	Flg	150#	Rf