



ПРЕДОХРАНИТЕЛЬНЫЙ КЛАПАН (ВОДОРОД)



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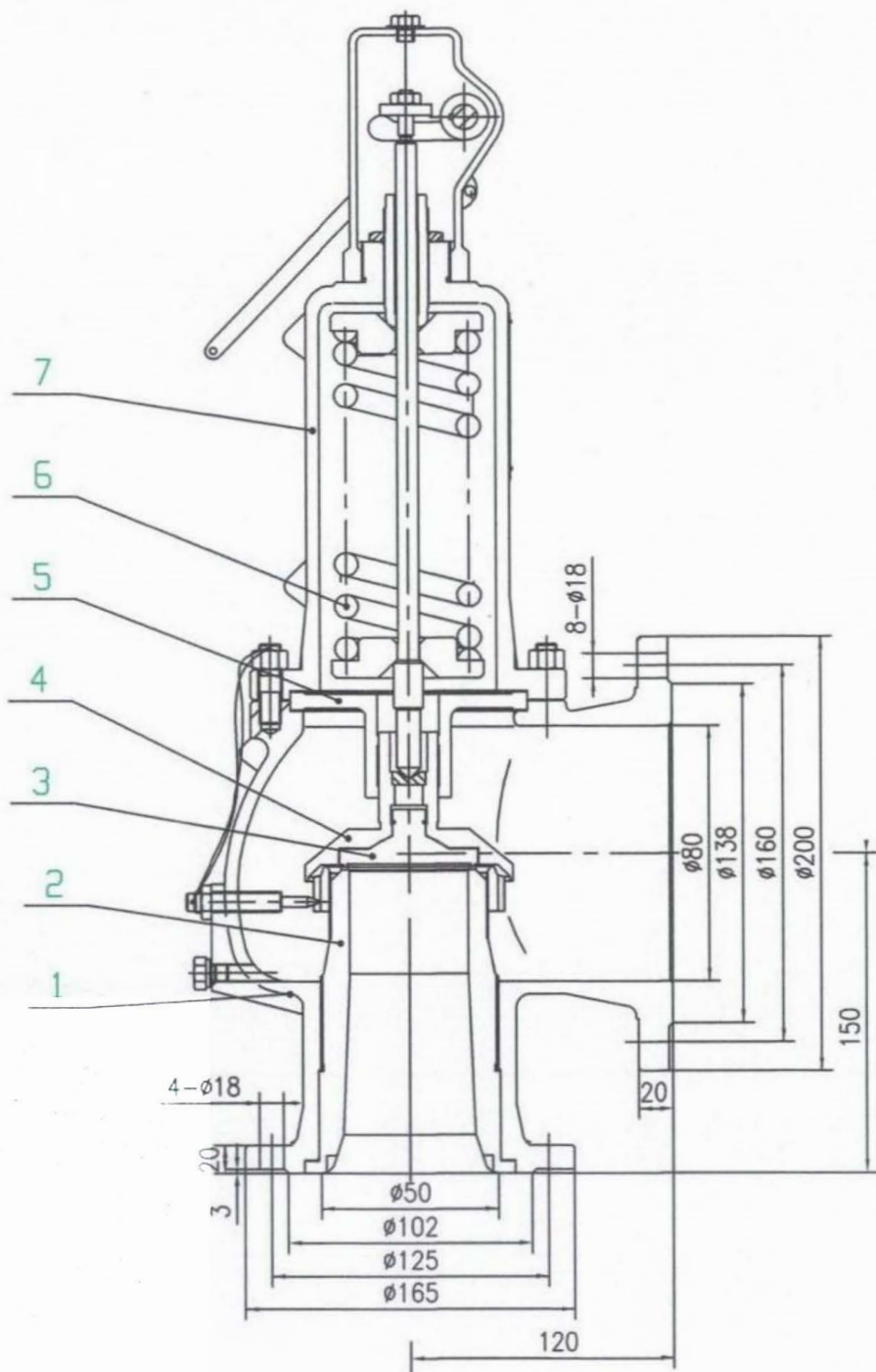


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Чебоксары, Марпосадское Шоссе, дом 11, кабинет 5

TAG NO.	Q.T.Y	TAG NO.	Q.T.Y



1. Design And Manuf. Acc .To DIN 3320
3. Flange Acc. To DIN
2. Inspection And Testing Acc. To API 527

Ref No.	Part Name	Materials
1	Body	CF8
2	Nozzle	316+STL
3	Disc	316+STL
4	Disc Holder	316
5	Guide	316
6	Spring	50CrVA+PTFE
7	Bonnet	CF8

					ASSEMBLE DRAWING Inlet:DN50 PN1.6MPa RF Outlet:DN80 PN1.6MPa RF	
design						SAFETY VALVE A44E-16P DN50/80
		date				

CAPACITY OF SAFETY-RELIEF VALVE										SIZING				
										1	1			
CUSTOMER														
PROJECT														
CODE AND STANDARD														
SPECIFICATION														
1	TAG NO.			PSVI, PSV2		6	QUANTITY			2	Set.			
2	MODEL NO.			A44E-16P DN50X80		7	SEAT TYPE			Stellite				
3	DESIGN TYPE			Conventional		8	RADIATOR			N/A				
4	BONNET TYPE			Close		9	RUPTURE DISK			N/A				
5	LIFTING LEVER			N/A		10	TEST GAG			N/A				
TECHNOLOGICAL PARAMETER														
11	FLUID			Hydrogen		15	SPF. HEAT RATIO			k	1.4			
12	STATE			Gas		16	COMPRESS. FACTOR			Z	1			
13	MOL. WEIGHT			M	2	kg /kmol	17	VISCOSITY			μ	(mPa. s)		
14	DENSITY			ρ		kg/ m³								
PRESSURE														
18	OPER. PRESSURE			P		MPa (G)	23	Back Press.	SUPER. CONST.		Pb		MPa (G)	
19	SET PRESSURE			Ps	1.15	MPa (G)			24	SUPER. MIN/MAX			MPa (G)	
20	ALLOWABLE OVERPRE			Δ Po	10%				25	BUI-IT-UP			MPa (G)	
21	RATED RELIEVING PRE.			Pdr	1.365	MPa (A)			26	TOTAL			MPa (G)	
22	COLD DIF. STET PRE.			Pc	1.15	MPa(G)	27	BLOWDOWN			ΔPbl	15%		
TEMPERATURE														
28	OPERATING. TEMP.			T		°C	30	DESIGN TEMP.			T		°C	
29	RELIEVING. TEMP.				45	°C	31	ABSOLUTE TEMP.				318	K	
FACTOR														
32	RATED COEFF. OF DIS.			Kdr	0.75		36	SUPERHEAT CORR. FACTOR			Ksh	1		
33	BACK PRE. CORK. FACTOR			Kb	1		37	OVERPRE. CORR. FACTOR			Kp			
34	COEFF. DETERMINED BY k			C	356		38	CRRECTION FACTOR			Kc	1		
35	VISCOSITY CORR. FACTOR			Kv										
AREA OR RELIEV ING CALCULATION														
39	CALCULATED AREA			Ac	1030.9	mm²	43	DRIFICE DESIGN						
40	SELECTED AREA			A	1256	mm²	44	THROAT DIAMETER			40.0	mm		
41	REQUIRED CAPACITY			Wr	2265	kg/h	45	LIFT			10.0	mm		
42	RATED RELIEVING CAPACITY			Wdr	2759.4	kg/h	46	REACTIVE FORCE			Qpf	952.284 N		
CONNECTION														
47	FLANGED STANDARD			DIN'2543			50	CENTER TO FACE (L/L1) mm			120 / 150			
48	INLET			DN50 PN16		RF	51	APPROACH IIEIGIIT (ll/f) mm						
49	OUTLET			DN80 PN16		RF	52	APPROX NET WEIGHT			~28	kg		
MATERIALS														
53	BODY/BONNET			CF8										
54	NOZZLE/DISC			316+St1										
55	SPRING			50CrVA4PTFE										
56	BELLOWS			/										
57	GASKETS			PTFE										
CALCULATION FORMULA														
58	$Ac = Wr / (0.076 \times C \times Kdr \times Kb \times Pdr \times Kc \times (M/Z \times T)^{1/2})$													
59	$Wdr = 0.076 \times A \times C \times Kdr \times Kb \times Pdr \times Kc \times (M/Z \times T)^{1/2}$													
NOTES:														
			MADE BY		CHECKED BY		APPROVED BY		DATE		MANUF No.			
									2023/3/2		14-ONN-JS			

Предохранительная разрывная мембрана (водород)





6		过流阀 (Excess Valve)/丝堵 (Plug)	1					
5		压力表 (Pres. Gauge)	1					
4		泄零装置 (Nipple)	1					
3		出口夹持器 (Exit Holddown)	1					
2		爆破片 (Bursting Disc)	1					
1		入口夹持器 (Inlet Holddown)	1					
序号	代号	名称	数量	材料	单件重量	总计重量	备注	
			型号 YC50		安装示意图 Installation Diagram			
标记	处数	分区	更改文件号	签名	年、月、日			
设计			标准化			阶段标记	重量	比例
校对								
审核								
工艺			批准			共 1 张	第 1 张	位号



/QC09-00	
Version	Revise

Delivery date	2023

BASIC TECHNICAL PARAMETERS FOR

DESIGN & MANUFACTURE OF BURSTING DISC DEVICES

- ① The manufacture and acceptance standard of bursting disc safety devices are TSG ZF 003-2011<Safety Technical Supervision Regulations for Bursting Disc Devices> and GB567.1 -4<Bursting Disc Safety Devices>.
- ② The pressure in the table is gauge pressure.

Contract NO.			2023-			Lot No.			2023-						
Associated batch						Association description									
Customer															
Equipment Name						Tag Number									
Nom.inal Dia. (DN)			50 mm			Max. Burst. Pres. (Pf)			1.2075 MPa						
Burst. Pres. (P _B)			1.15 MPa			Min. Burst. Pres. P (Rmin)			1.0925 MPa						
Burst. Temp. (T _B)			45 °C			Burst. Disc Type			YC	YC50-1. 15-45					
Burst. Tolerance ΔP _B			-5	+5	%	Burst Disc Mat.		316L		Quant.		Inventory		Price	
Manu. range P _B			0			Hold Mat.		S31603							
Opera. Pres. ratio						Flange Spec.		DN		50 mm		CL	150 Lb		
Equipment and Medium Condition						Flange Stand.		HG/T20615-2009			Facing		GOST RF		
Equip. Des.. Pres.			MPa			(Remarks)									
Equip. Des.. Tem.			°C												
Equip. Work Pres.			MPa												
Equip. Work Temp.			-253-50 °C			其它配件 Other Accessories									
Equip. Total Vol.			m³			Serial number	Name	Material	Quantity	Unit price	Inventory required	Remark			
Gas Phase Vol.			m³			1	Zero release device	S31603							
Safety Discharge Capacity			2260 Kg/h			2	Pressure gauge								
Equip. Back Pressure			MPa			3	Relief valve	S31603							
Equip. Vacuum			100 KPa												
Pres. Cycl. Freq															
Medium Name			Hydrogen			Tag Number									
Med. Phase.	Gas	√	Full Liquid			Bit number	Number of rupture discs	Number of holders		Other		Remark			
	Mixture		Dust												
Med.Charact.	Corrosion		Poison												
	Explosion														