

IMP161469

GENERAL	1	ITEM	1
	2	Valve Tag Number	
	3	Number of units	1
	4	Valve Type: Conventional / Balanced	SAFETY AND RELIEF VALVE; Conventional
	5	Design type	Direct spring loaded; Full lift safety valve
	6	Manufacturer	TOSACA, SPAIN
TYPE	7	Model / Type number	1415
	8	Material Base	A216 WCB
	9	Size	1" E 2"
	10	End connections	ASME B16.5 150# RF/150# RF
	11	Orifice	E / 133,0 mm2
	12	Bonnet: Closed / Open / vented	Closed
ACCESSORIES	13	Lifting lever: Gastight / Plain / Packed	Lifting device Cap: Screwed
	14	Test gag	No
	15	Bellows	No
	16	Others	No
MATERIAL	17	Body and Bonnet Bolts/ Nuts	A216 WCB A193 Gr B7/ A194 Gr 2H
	18	Nozzle	SS AISI316L Full nozzle
	19	Disc	SS AISI316L / Seat: Metal
	20	Guide	SS AISI316L
	21	Spring	1.8159 Carbon steel
	22	Bellows	-
BASIS OF SELECTION	23	Design Code	EN 4126 / ASME Section VIII / API 526 / Sizing Std. API 520
	24	Sizing basis	Blocked discharge
	25	Process fluid / State	Saturated steam / V
	26	Required capacity	No information
	27	Density	4,46 kg/m3 at 173 °C
	28	Operating Viscosity	cP
	29	Molecular weight, M	18 g/mol Cp / Cv: 1,14 C: 2,51
	30	Set pressure (tolerance set pressure: ± 3%)	7,6 barg / 110,2 psig Temperature operation: 173° C / 343,4° F
	31	Work pressure	barg / psig
	32	Superimposed back pressure	0 barg / 0,0 psig
	33	Built-up back pressure	1,013 bar / 14,7 psi
	34	Total max. back pressure	1,013 bar a / 14,7 psi
	35	% Allowable overpressure	10 %
	36	Blow down	10%
CALCUL	37	Kdr Coefficient of discharge	0,975
	38	Kb Correction factor back pressure	1
	39	Z Compresibility factor	1
	40	Kr Viscosity correction	1
	41	Ksh Superheat correction factor	1
	42	Calculate area	NO information requerided capacity
OTHERS	43	Selected area	Orifice letter: E / 133,0 mm2
	44	Flow capacity @ Selected area	638,4 kg/h
	45	Calculated sound lever 30 m according API 521	109 dB Noise at 1 meter 138 dB
	46	Reaction force	62 Newton
OTHERS	47	Face to face dimension (H / V)	114 mm / 105 mm Total Height: 380 mm
	48	Packing dimension / Weight	50 cm x 26 cm x 20 cm / Total weight with packing: 14,3 kg
	49	Painting and protective coating / Color	EN 12944-2 C3, polyurethane / RAL 7015
	50	Marking	Stainless steel label, including TAG Number
	51	Material test certificate	EN 10204 3.1
	52	Inspection	Pressure equipment directive 2014/68/EU

Tosaca reference: 7888 07/12/2016 Revision: 0
 Valve code: 1415-1E2CS-150-M-01000-7,6V173
 Offer reference No. Impexron GMBH / IMP161469

