

03/10

1811.0 • 3/8”-3”

1821.0 • 3/8”-3”

1831.0 • 3/8”-3”

ADJUSTABLE PRESSURE RELIEF VALVES CE WITH CONVEYED DISCHARGE

CONNECTIONS: FEMALE-FEMALE

CE

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CONNECTIONS: FEMALE-FEMALE



FEATURES

Dn	L	L1	H
3/8”	45	24,5	115
1/2”	56	30	122
3/4”	64	32	149
1”	76	40	163
1”1/4	90	44	192
1”1/2	100	47	218
2”	124	60	247
2”1/2	147	74,5	304
3”	155	86	336

HYDRAULIC FEATURES

The CE marked pressure relief valve with conveyed discharge is a self-regulating valve capable of maintaining the pressure of the system (P) constant within a specified range, using the energy of the fluid, conveyed and discharged, and regulating the position of the obturator. Force is applied directly to the obturator by a spring (direct action). Once the reference point for pressure P is established, the pressure relief valve automatically adjusts itself by either increasing or decreasing the flow section, and thus the discharge capacity, in order to keep the system's pressure constant. In case the system's pressure drops below the reference pressure P, the pressure relief valve will close automatically. The discharge side of the body can not convey and therefore it is perfect for use only with gas and steam (Group I - if compatible). This valve satisfies the essential safety requirements stipulated in the EU Pressure Equipment Directive (PED) 97/23/EC.

TECHNICAL FEATURES

Pressure:	
Maximum allowable working pressure (PN)	16 bar
Preset nominal pressure (Pnr) is adjustable in the field from 0.5 to 16 bar (When ordering, please indicate whether preset pressure surpasses 10 bar)	
Minimum accumulation pressure	- 5%
Overpressure	10%
Reclosing value	20%
Threading:	
Pipeline connections: Threads according to ISO 228/1	
Requirements and tests as per:	
Type test :	
Operating performance	Test P20 - EN 12266-2
Shell strength	Test P10 - EN 12266-1
Acceptance test:	
Seat tightness	Test P12 - EN 12266-1

PED OPERATING LIMITS

Code	Obturator Material	Max. allowable Pressure PS	Max. allowable Temperature TS	PED Risk Category	PED Evaluation Procedure	PED supervisory body	Acceptable Fluids
1811	Brass	16 Bar	from 0° to 220 °C	I	Module A	n.a.	S-L Group 1 (subject to OR approval)
	Rubber	16 Bar	from 0° to 70 °C	I	Module A	n.a.	to OR approval)
1831	Teflon®	16 Bar	from 0° to 180 °C	I	Module A	n.a.	L-G-S Group 1 (subject to OR approval)

L: Liquids - G: Gas - S: Steam

This pressure release valve is not a “safety accessory”, but rather a “pressure accessory” as defined under Article 1, Section 2.1.4 of EU Directive 97/23/EC, and further specified in Article 3, Section 1.4; classified in Annex III, Section 3. Devices of this sort can in exceptional cases be used for a specific safety function, especially if the downstream system is not protected otherwise, within the limits of the relevant risk class.

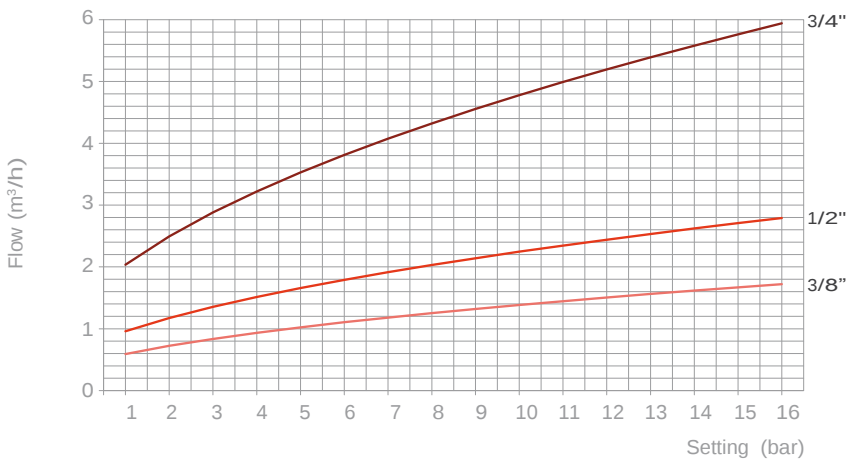
DESIGN

Cast Brass body dimensions 3/8”-2” EN1982-CB753S
Cast bronze body dimensions 2”1/2-3” EN1982-CB491K
Brass bonnet dimensions 3/8”-1”1/2 EN12165-CW617N
Cast brass bonnet dimension 2” EN 1982-CN753S
Cast bronze bonnet dimensions 2”1/2-3” EN1982-CB491K
Other components in brass EN 12164 - CW614N
Metal seat: obturator in brass EN 12165 - CW617N
Rubber seat: obturator gasket in NBR elastomer
Teflon seat: obturator gasket in pure PTFE (Teflon)
Sm GALVANIZED STEEL spring - EN 10270-1

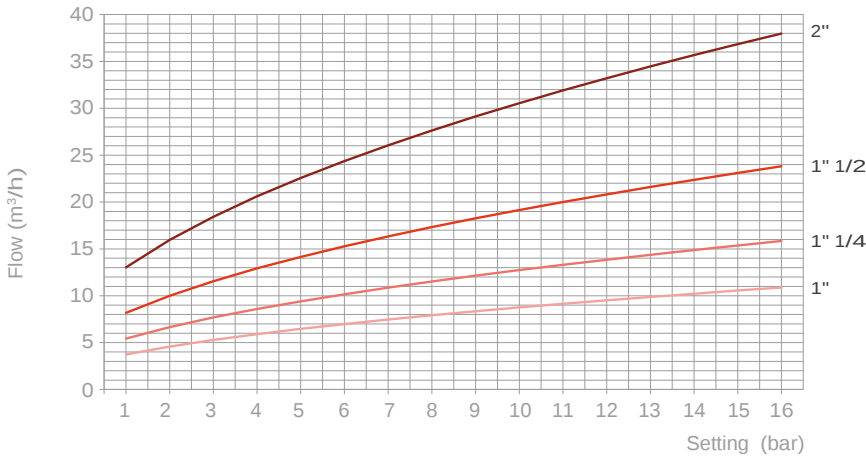
PRODUCT CODES

Metal seat product codes		Rubber seat product codes		PTFE seat product codes	
1811.012	metal seat 3/8” F/F	1821.012	rubber seat 3/8” F/F	1831.012	PTFE seat 3/8” F/F
1811.015	metal seat 1/2” F/F	1821.015	rubber seat 1/2” F/F	1831.015	PTFE seat 1/2” F/F
1811.020	metal seat 3/4” F/F	1821.020	rubber seat 3/4” F/F	1831.020	PTFE seat 3/4” F/F
1811.025	metal seat 1” F/F	1821.025	rubber seat 1” F/F	1831.025	PTFE seat 1” F/F
1811.033	metal seat 1”1/4 F/F	1821.033	rubber seat 1”1/4 F/F	1831.033	PTFE seat 1”1/4 F/F
1811.042	metal seat 1”1/2 F/F	1821.042	rubber seat 1”1/2 F/F	1831.042	PTFE seat 1”1/2 F/F
1811.050	metal seat 2” F/F	1821.050	rubber seat 2” F/F	1831.050	PTFE seat 2” F/F
1811.066	metal seat 2”1/2 F/F	1821.066	rubber seat 2”1/2 F/F	1831.066	PTFE seat 2”1/2 F/F
1811.080	metal seat 3” F/F	1821.080	rubber seat 3” F/F	1831.080	PTFE seat 3” F/F

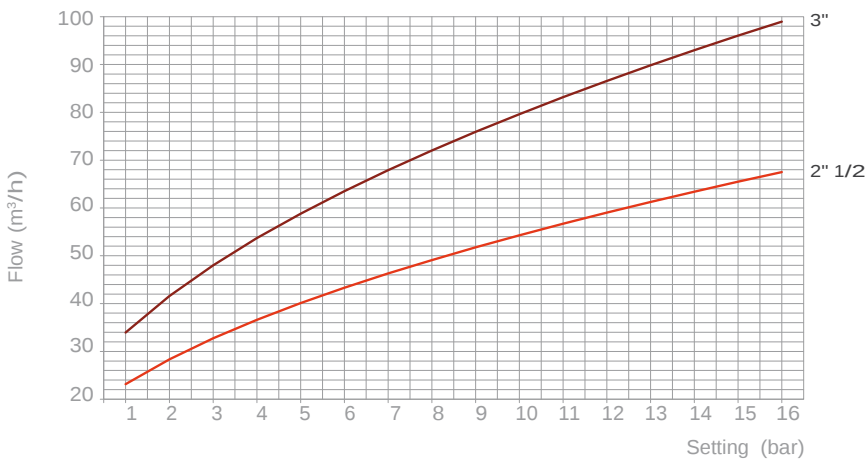
DISCHARGING FLOW H₂O - 1811.0-1821.0-1831.0 3/8"÷3/4"



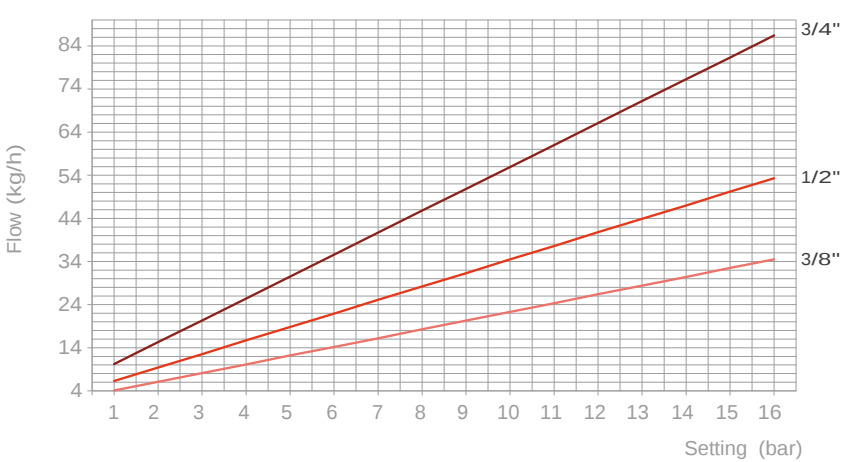
DISCHARGING FLOW H₂O - 1811.0-1821.0-1831.0 1"÷2"



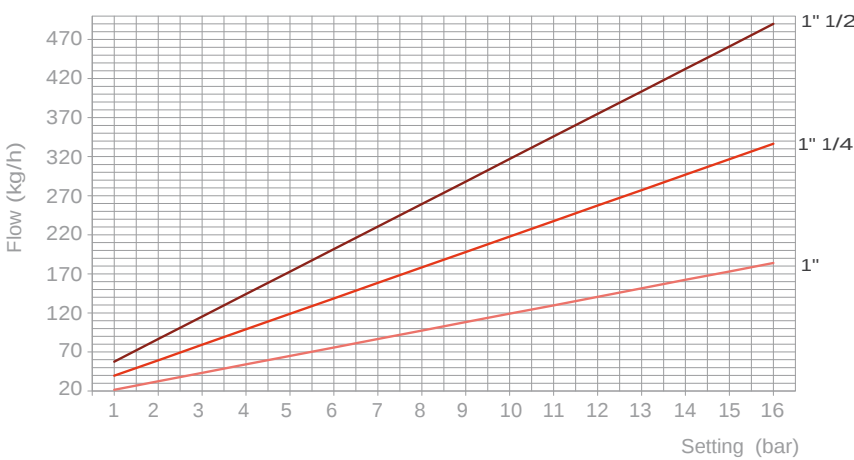
DISCHARGING FLOW H₂O - 1811.0-1821.0-1831.0 2"1/2 ÷3"



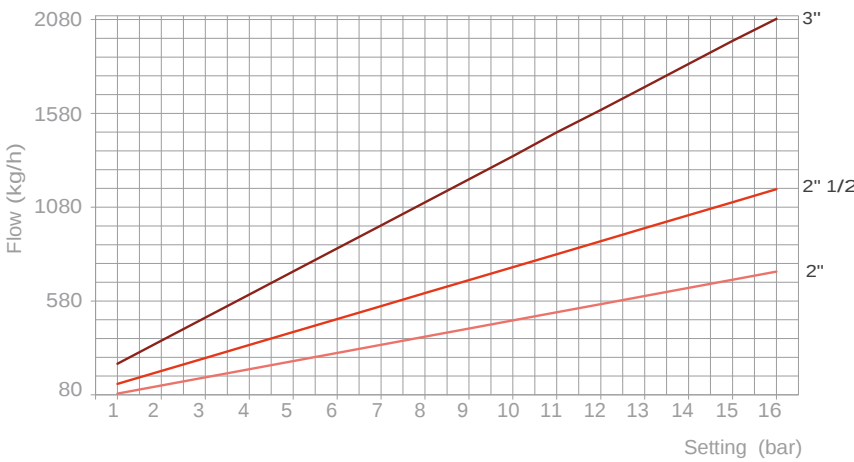
DISCHARGING FLOW GAS - 1831.0 3/8"÷3/4"



DISCHARGING FLOW GAS - 1831.0 1"÷1" 1/2



DISCHARGING FLOW GAS - 1831.0 2"÷3"



DISCHARGING FLOW STEAM - 1811.0-1831.0 3/8"÷3/4"



DISCHARGING FLOW STEAM - 1811.0-1831.0 1"÷2"



DISCHARGING FLOW STEAM - 1811.0-1831.0 2"1/2÷3"

