BOSS™ 206 & 206TD

Thermal Balancing Valve Range

Data Sheet

WRAS APPROVED PRODUCT

Standard BOSS™ 206

Disinfection BOSS™ 206TD

General Description

A Domestic Hot water re-circulation valve range fitted to systems to automatically maintain the hot water temperature. Available options with inbuilt automatic thermal disinfection function

Codes

206 Standard Valve Range	
15mm / ½"	20520001
22mm / ¾"	20520012
40mm Dial Temperature Gauge	20520100
206TD Thermal Disinfection Range	
½" Screwed c/w Temperature Gauge	20520023
¾" Screwed c/w Temperature Gauge	20520034
1" Screwed c/w Temperature Gauge	20520045

Technical Specification	Standard BOSS™ 206	Disinfection BOSS™ 206TD
Connections:	Scd BSPP and Compression	Screwed BSPP Only
BS EN Specification:	BS EN 12165	BS EN 12165 CW724R
Maximum Working Pressure:	16 Bar	16 Bar
Maximum Differential Pressure:	1 Bar	1 Bar
Adjustment Temperature Range:	40°C to 65°C	35˚C to 60˚C
Factory Setting:	58°C	52˚C
Maximum Inlet Temperature:	90°C	90°C
Disinfection Temperature	n/a	70˚C
Closing Temperature	n/a	75˚C
Temperature Gauge Probe Pocket:	Ø10mm (Gauge NOT included)	40mm Dial Gauge Included
PESR / PED Classification	SEP (Group 2 Liquid)	SEP (Group 2 Liquid)
Warranty	1 Year	1 Year

Operating Principle

In domestic hot water distribution circuits, to achieve system requirements for the prevention of Legionella growth, it is essential to ensure that all circuits are kept at the correct temperature.

The re-circulation network must be balanced, to avoid non-uniform temperature distribution.

The thermostatic regulator, installed on each branch of the recirculation circuit, automatically maintains the set temperature.

The regulator modulates the water flow rate in accordance with the inlet temperature by means of the action of a dedicated internal thermostatic cartridge.

When the water temperature approaches the set value, the obturator progressively reduces the passage.

The water flow rate supplied by the recirculation pump is thus distributed to the other network branches, resulting in effective automatic thermal balancing.

BOSS™ Regulator 206TD products are already equipped with a thermal disinfection function, which is useful if the system temperature is to be increased to values over 55˚C to 60˚C.

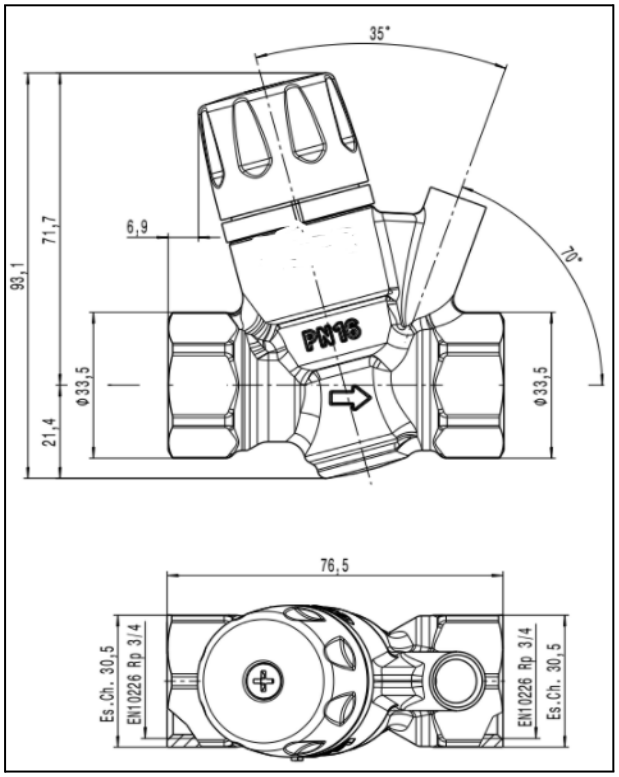
This function can be completely automatic, activated by a dedicated second thermostatic cartridge that trips at 70˚C, or controlled with a control unit by means of a thermo-electric actuator (available as an optional extra - enquire with our BOSS™ Technical Support Team for more details).

Materials of Construction
Both Standard 206 and Disinfection 206TD Options

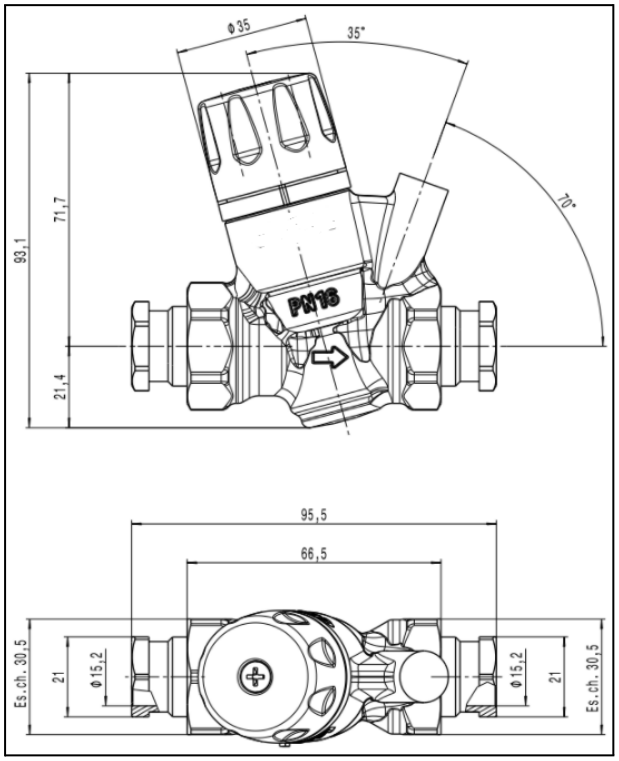
	Material	Specification
Body	**DZR Alloy**	**BS EN 12165 CW724R**
Adjustable Cartridge	**PSU polymer**	
Seals	**EPDM**	
Adjustment Knob	**ABS polymer**	
Springs:	**Stainless steel**	**BS EN 10270-2 (AISI 302)**

Standard BOSS™ 206 Dimensions (all dimensions shown in mm)

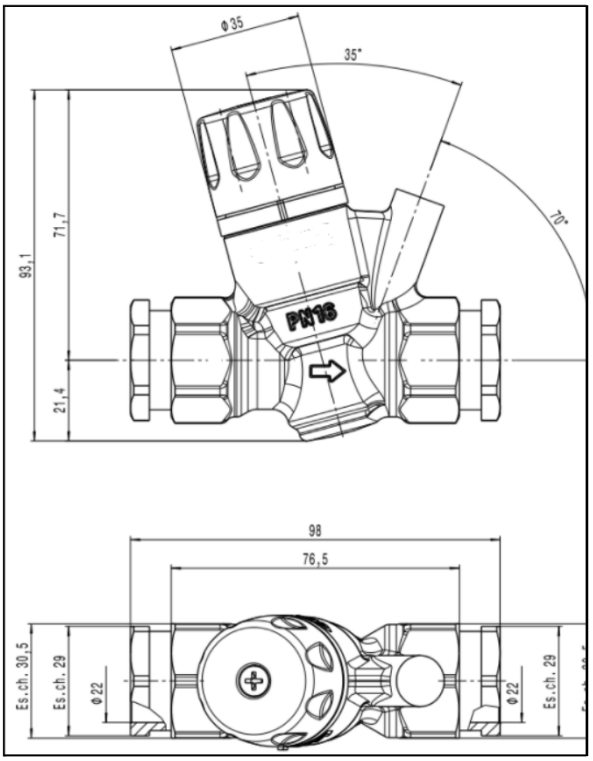
½” & ¾”Screwed BSPP



15mm Compression Ends



22mm Compression Ends



Thermal Disinfection BOSS™ 206TD Dimensions
(all dimensions shown in mm)

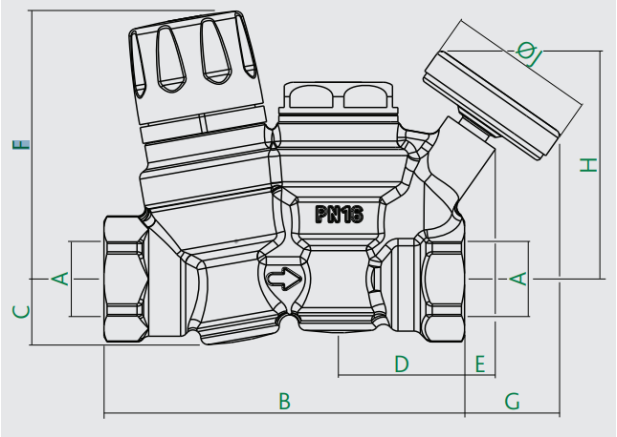
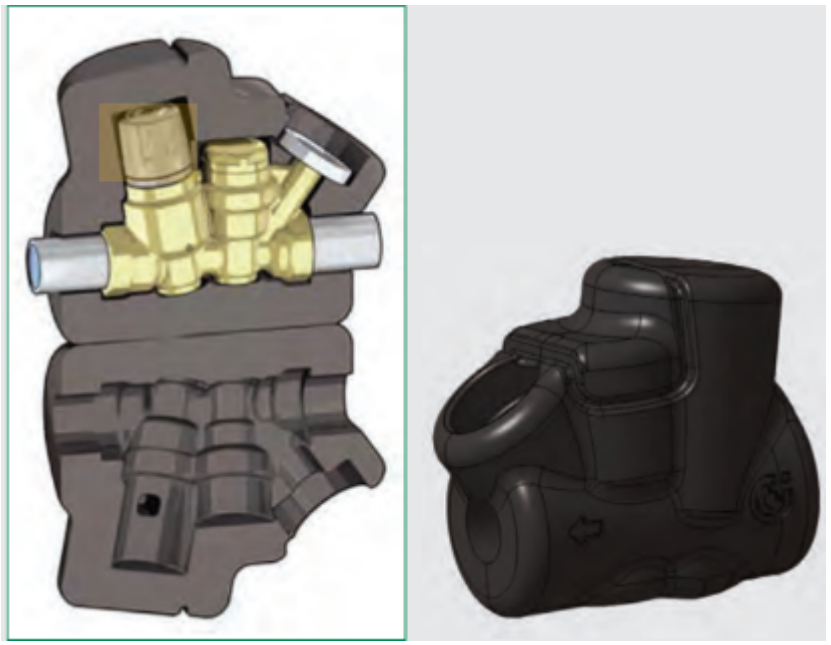


Fig	Product Code	A	B	C	D	E	F	G	H	J
206TD	20520023	½”	100	18.5	35	9	74.5	27	63.5	41
206TD	20520034	¾”	100	18.5	35	9	74.5	27	63.5	41
206TD	20520045	1”	100	18.5	35	9	110.5	21.5	71	41

Insulation Jackets (To suit 206TD Version Only)

Technical Specification

Material: closed cell expanded PE-X
Thickness: min 13mm - max 23mm
Density: inner part 30 kg/m3 outer part 80 kg/m3
Thermal conductivity (EN 12667): - at 0°C: 0.0345 W/(m-K) - at 40°C: 0.0398 W/(m-K)
Coefficient of resistance to water vapour diffusion: > 1.300
Working temperature range: 0 to 100 ℃
Fire behaviour (UNI 9177): class 1



Product Code	Description
20520067	CBN116140 INS JACKET FOR BOSS 1/2 & 3/4 206TD BALANCING VVE
20520078	CBN116160 INS JACKET FOR BOSS 1 206TD BALANCING VALVE