

Product Catalogue

2017



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Powerseat® Eco

The Powerseat® electro-hydraulic gas shut-off valve allows the control and safety shut-off of low pressure combustible gases in pipes from 40mm to 250mm, whilst focusing on being energy efficient and environmentally friendly. The Powerseat® Eco shut-off valve is kept open by a hydraulic pump where hydraulic fluid is forced into a cylinder driving the valve open.

New and improved features

- LED to display “ON” and “Manual Re-set Required” status
- Increased environmental protection to IP56 equivalent
- Manual re-set switch incorporated on all versions
- IP67 equivalent rating option available (increased cost)
- Screwless quick connections for installation of electrics
- Volt free contacts for BMS connection

Quality

- 3 year warranty as standard
- UK manufactured
- EC certified
- IP54 standard:
 - Dust protected - no harmful deposit
 - Splash protected - from any direction
- Certified to EN161, Class A Group 2 construction

Environmental factors

- Around 768kg less carbon emissions than with a comparable magnetic solenoid valve*
- Saves the equivalent carbon emissions of 3,758 miles in a car

Power consumption

- Uses just 6% of the power that a comparable magnetic solenoid valve uses
- Reduced electricity running costs: Uses just a fraction of the energy required by permanently energized magnetic solenoid valves
- Improved energy efficiency from previous Powerseat® model, reduced from 26 VA to 10 VA

	VA	Watts	KwH	KG CO ₂ /Hr	KG CO ₂ /Yr
Electro-Hydraulic	10	10	0.010	0.005	46.2
Traditional Solenoid Valve	170	170	0.17	0.09	784.8



* Calculated on Gov.org Published Figures as at 05/01/2017

** Savings Based on Uswitch Tariff of 10.5p KWh @ 8 Hours per day 261 days per annum

MH Underfloor Heating Manifold Balancing Valve

Valve Series MH is a device for hydraulic balancing and flow control in radiant heating systems.

Valve Series MH is a solution that allows eliminating flow fluctuations and consequently temperature variations in the branches of the heating system, ensuring a better comfort. The possibility of adjustment of the pressure drop makes it adaptable to different installations and different flow. A dynamic balancing device provides best performance in all conditions.



How it works:

- Flow rate set in each individual heating circuit will be maintained constant;
 - Actual flow can be read out on the flow meters integrated in the manifold.
- Series MH is a solution for time and cost saving installation in floor heating.

Benefits:

1. Easy set up

Easy and time saving hydraulic balancing in 3 steps:

- A. Start up: unbalanced loops
- B. Set up the worst loop flow
- C. Set up all the other flows

2. Constant flow rate

Series MH will maintain the pressure drop on the manifold constant, thus ensuring constant flow rate in each heating loop.

3. Energy savings and comfort

- No oversupply of the individual heating circuits
- Response time reduction of radiant heating systems
- Increased comfort thanks to optimum temperature distribution

4. Reliable performance

- Consulting engineer designs the system
- System is installed and commissioned based on design set-points
- The heating system operates in part-load during most of its operation, which leads to uncontrolled system performance
- Optimum performance and a dynamically balanced system during the entire heating season

5. Retrofit solution

- Balancing
- Eliminate room temperature fluctuation
- Manage comfort
- Avoid noise
- Filling and flushing without risks

DOMESTIC & RESIDENTIAL HEATING

The Watts Industries Domestic Heating Range includes a range of air vents, boiler and system safety equipment and valves for gas, oil, solid fuel and fan coil systems.

We have also included a selection of oil equipment and the range is further supplemented in our combustion catalogue.

All products represent the quality and standards associated with Watts Industries.



AIRVENTS

Microvent Automatic Airvent with Shut Off Valve

Automatic side air vent valve. Body and cover of brass CW617N. Sealed with O-Ring. Also suitable for water containing additive (glycol up to 30%).

TYPE	PRODUCT CODE	SIZE	MAX PRESSURE	MAX TEMP.
MKLR	0252310	3/8"	10 bar	110°C
MKLR	0252410	1/2"	10 bar	110°C



MV- SOL Solar Air Vent

Body and cover of brass CW617N, 1265-99. Polyethylene float. Seal between reservoir and cover with O-ring. Connection ND 3/8" - 1/2" DIN - ISO 228/1. Stainless steel (AISI 304) vacuum breaker (only for ND 3/8").

TYPE	PRODUCT CODE	SIZE	MAX PRESSURE	MAX TEMP.
MV-SOL	0249110	3/8"	12 bar	160°C
MV-SOL	0249115	1/2"	12 bar	160°C



BOILER SAFETY GROUPS

Boiler Safety Group with Insulation

Assembly unit for closed heating installations in accordance with DIN EN 12828. Galvanized steel body. 1" Female thread connection. Ready for use with automatic air vent MV 10 R. Pressure gauge MHR 63/4 - 3/8" with automatic shut-off valve and safety relief valve 3,0 bar. With insulation in accordance with DIN 4102-B2 (fire protection class 2). CFC-free.

TYPE	PRODUCT CODE	DESC	MAX TEMP.
KSG 30/ISO 2	0271130	SV 1/2", up to 50 kW	60°C
KSG 30/20M-ISO	0270136	SV 3/4", up to 100 kW	60°C
KSG 30/25M-ISO	0270137	SV 1", up to 200 kW	90°C



FAN COIL VALVES

Two Way Fancoil Valve PN16

Two-way brass valve for fan-coils. Compatible with actuators series 22CX and 26LC. See page 22.

TYPE	PRODUCT CODE	SIZE	DISC STROKE	MAX PRESSURE	MAX TEMP.	KVS
2131	213112	1/2" MM	2.5mm	16 bar	100°C	1,7
2131	213134	3/4" MM	2.5mm	16 bar	100°C	2,8



DOMESTIC & RESIDENTIAL HEATING

FAN COIL VALVES

Three Way Fancoil Valve MBSP PN16

Three-way brass valve for fan-coils. Compatible with actuators series 22CX and 26LC.

Can be used both as mixing and diverting valve. The Kvs and by-pass Kvs values given in the table alongside refer to the valve used for diverting service. See page 22.

TYPE	PRODUCT CODE	SIZE	DISC STROKE	MAX PRESSURE	MAX TEMP.	KVS
3131	313112	1/2" MM	2.5mm	16 bar	100°C	1,7
3131	313134	3/4" MM	2.5mm	16 bar	100°C	2,8



FILLING VALVES

ALIMAT Automatic Filling Valve

Automatic filling valve complete with check valve. Manual shut-off, stainless steel filter.

Vent screw. Brass CW617N body. High impact plastic cap. Pressure gauge connection 1/4" F.

ALMD complete with pressure gauge.

TYPE	PRODUCT CODE	SIZE	MAX UPSTREAM PRESSURE	ADJUSTABLE DOWNSTREAM PRESSURE	MAX TEMP.	KVS
ALIMAT AL	0240100	1/2" MF	10 bar	0.3 to 4 bar	100°C	2,8
ALIMAT ALMO	0240200	1/2" MF	10 bar	0.3 to 4 bar	100°C	1,7



PRESSURE RELIEF VALVES

MSL Relief Valve for Sealed Heating Systems

Diaphragm safety valve. Brass CW617N body. Plastic knob for discharge test. Ni-Cr steel spring.

MSL at 3 bar according to UDT and is AFNOR, CSTB approved. According to Directive PED 97/23/CE.

Identification number CE1115. Suitable for water with glycol up to 50%.

TYPE	PRODUCT CODE	SIZE	OPERATING TEMPERATURE	BAR
MSL - FBSP	0207115	1/2"	-10°C to 110°C	1.5
MSL - FBSP	0207160	1/2"	-10°C to 110°C	6
MSL - FBSP	0207170	1/2"	-10°C to 110°C	7
MSL - M X FBSP	0206115	1/2"	-10°C to 110°C	1.5
MSL - M X FBSP	0206530	1/2"	-10°C to 110°C	3
MSL - M X FBSP	0206160	1/2"	-10°C to 110°C	6



PRESSURE RELIEF VALVES

MSM/E Relief Valve for Sealed Heating Systems with Gauge

Type MSM Pressure Relief Valve with Gauge Port and Pressure Gauge. Complete with Gauge Port and Pressure Gauge. 1/2" FBSP x FBSP Connections or 1/2" MBSP x FBSP Connections. Brass CW617N Body. Plastic Manual Discharge Knob. WRAS Approved.

TYPE	PRODUCT CODE	SIZE	FACTORY SET PRESSURE	SPRING	OPERATING TEMPERATURE RANGE	MAX. GLYCOL %
MSM/E	0210130	1/2" F/F	3.0 Bar	Ni-Cr steel	-10°C to 110°C	50%
MSM/E	0210430	1/2" M/F	3.0 Bar	Ni-Cr steel	-10°C to 110°C	50%



MSV Relief Valve for Sealed Heating Systems

Diaphragm safety valve. Brass CW617N body. Plastic knob for discharge test. Ni-Cr steel spring. Suitable for water with glycol up to 50%. 1/2" Female connections. According to Directive PED 97/23/CE. Identification number CE1115.

TYPE	PRODUCT CODE	SIZE	OPERATING TEMPERATURE	BAR
MSV	0207525	1/2"	-10°C to 110°C	2,5
MSV	0207530	1/2"	-10°C to 110°C	3
MSV	0207540	1/2"	-10°C to 110°C	4



SVH Relief Valve for Sealed Heating Systems

Diaphragm safety valve. Brass CW617N Body. Plastic knob for discharge test. Ni-Cr steel spring. Female connections with reinforced outlet. Normal type diaphragm safety valve. Diaphragm and seals of rubber resistant to 140°C. According to Directive PED 97/23/CE. Identification number CE1115. Models DN 15, 20, 25, 32 with setting pressure 2.5, 3.0, 4.0, 6.0, 8.0, and 10.0 bar are according to TRD721. VdT V Merkblatt Sicherheitsventil 100.

TYPE	PRODUCT CODE	SIZE	OPERATING TEMPERATURE	BAR
SVH	0215125	1/2" x 3/4"	-10°C +110°C	2,5
SVH	0215130	1/2" x 3/4"	-10°C +110°C	3
SVH	0217630	3/4" x 1"	-10°C +110°C	3



DOMESTIC & RESIDENTIAL HEATING

SAFETY VALVE

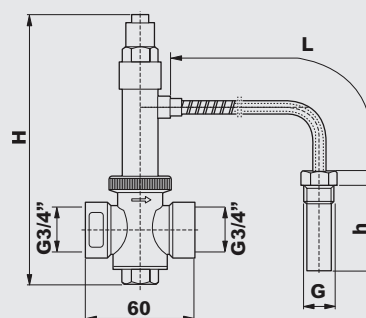
Solid Fuel Safety Drain Valve

Thermal safety drain valve for non atomized, solid fuel boilers with double safety.
Nickel-plated brass CW617N body. Immersion probe with 145 mm sheath and 1/2" M probe connection.
Maximum drain cap 6500 litres/h at 8 bar.

TYPE	PRODUCT CODE	PIPE SIZE	CAPILLARY	MAX. DRAIN CAP. TEMP	BAR
STS	0232120	3/4"	1.300 mm	107°C	10
STS	0232220	3/4"	2.000 mm	107°C	10



G	h	H	L
1/2" Probe Conn	145	129	1300
1/2" Probe Conn	145	129	2000



OIL GAUGES AND FILTERS

Oil Filter

One-way filter for fuel oil, without shut-off valve. Aluminium body and bowl.
Stainless steel filter cartridge. Without mounting bracket and fittings.

TYPE	PRODUCT CODE	SIZE	DEGREE OF FILTRATION
V1/A	0138311	1/4"	100 micron
V1/A	0138310	3/8"	100 micron
V1/A	0138315	1/2"	100 micron



Oil Non Return Valve for Piping VRU

Check valve for fuel oil piping. Complete with kit of fittings for connection to pipe dia.
6 x 8, 8 x 10, 10 x 12 mm. Brass CW617N body.

TYPE	PRODUCT CODE	SIZE	PRESSURE DROP AT 50 LITRES/H	PRESSURE DROP AT 100 LITRES/H
VRU	0120140	3/8" F	11 mbar	18 mbar



OIL GAUGES AND FILTERS

Oil Tank Gauge

MECA-M - Universal Mechanical Level Indicator. Universal mechanical level indicator, vertical reading, complete with seal for tight tank connection. High impact plastic case and cover. Only 0-200cm level gauge is adjustable.

TYPE	PRODUCT CODE	SIZE	TANK CONNECTION
M200V	0103104	0-4ft	1 1/2" BSPM
M200V	0103106	0-6ft	1 1/2" BSPM
MECAV	0103100	Adjustable between 0-2000mm	1 1/2" BSPM



Televar Pneumatic Level Indicator

Remote pneumatic level indicator for tanks of any shape and height between 900 and 3000mm (item 101103), or between 3000 and 5000 mm (for item 101105). Basic dial in percentage volume for cylindrical tanks. Tank connection suitable for pipe with Ø 6 mm. Case with 3 external mounting slots.

TYPE	PRODUCT CODE	TANK HEIGHT
TLM	0101103	400-3000mm
TLM	0101105	3000-5000mm



Polyethylene Tube PE50 x 50m

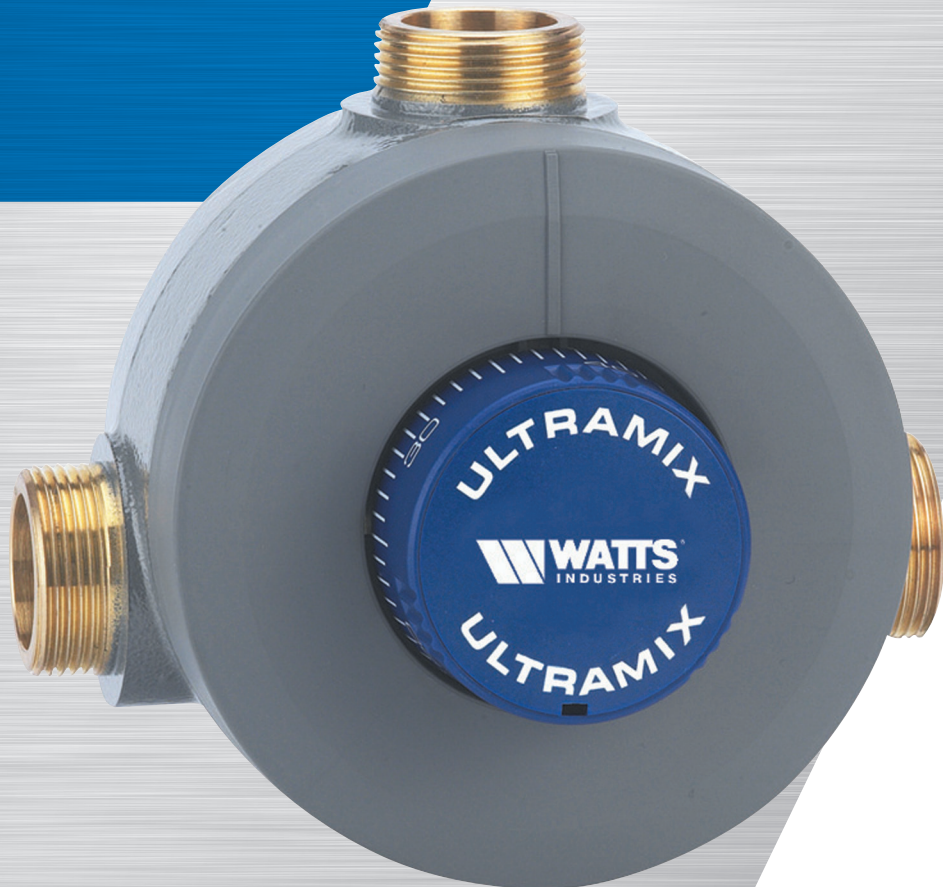
Flexible polyethylene hose for connection of the Televar level indicator to fuel oil probe series G20 or MULTIBLOC dip units MB and MKF200. Lay the polyethylene hose carefully to ensure correct level reading (avoid kinks and holes).

TYPE	PRODUCT CODE	HOSE	LENGTH OF ROLL
PE50	0105150	4 x 6 mm	50M



DOMESTIC & RESIDENTIAL POTABLE & HOT WATER PRODUCTS

This range provides a comprehensive range of devices and valves to protect water supplies, hot water equipment and end users. Backflow prevention and pressure reduction devices listed in this section extend to larger sizes in screwed versions and overlap their larger counterparts shown in our commercial section.



BACKFLOW PREVENTOR

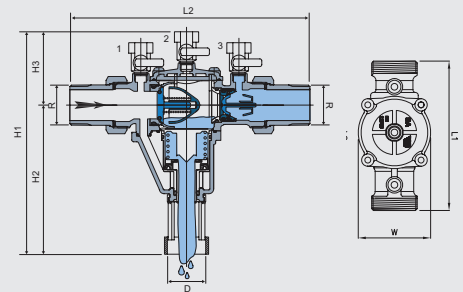
BA Protection BA BM DN15 - DN50

Protection for drinking water. Controllable backflow preventor with reduced pressure zone type BA, to EN 1717 and EN 12729 9157 standards. For protection against back pressure, backflow and back siphonage for fluid up to Category 4. With valves and strainer.



TYPE	PRODUCT CODE	CONNECTION
BA BM RPZ Valve	W405015311	1/2" BSP F/F
BA BM RPZ Valve	W405020311	3/4" BSP F/F
BA BM RPZ Valve	W405025311	1" BSP F/F
BA BM RPZ Valve	W405032311	1 1/4" BSP F/F
BA BM RPZ Valve	W405040311	1 1/2" BSP F/F
BA BM RPZ Valve	W405050311	2" BSP F/F

BA BM	Dimension	Unit	015	020	020	020	020	020
Connections (Male)	R	BSPT	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Connection for Tundish (Female)	D	mm	32	32	40	40	50	50
Overall Length excl. Connections	L1	mm	122	122	157	157	220	220
Overall Length incl. Connections	L2	mm	201	201	252	252	336	336
Height	H1	mm	168.5	168.5	238	238	303.5	303.5
Height	H2	mm	103	103	156	156	202.5	202.5
Height	H3	mm	65.5	65.5	82	82	101	101
Width	W	mm	53	53	76	76	115	115
Weight, incl. Connections & Tundish	L	kg (+/-)	1.2	1.2	2.7	2.7	6.5	6.5



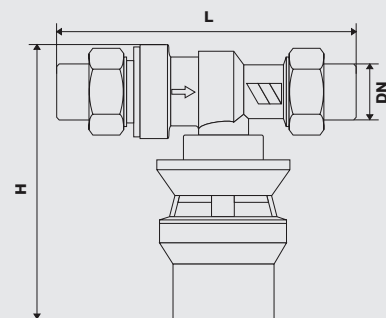
Backflow Preventor for Boilers to 45kW (Fluid Class 3)

Backflow preventor. Compact type. Used to prevent the reverse flow of polluted/contaminated water (fluid class 3). The valve offers protection with regard to back-siphonage as well as backflow. Specially developed for smaller connections to the water supply system, such as with water softeners and central heating boilers > 45 kW. Body Brass (DZR). Spring Stainless steel. Sealing Rubber. Funnel Plastic.



TYPE	PRODUCT CODE	CONNECTION	WORKING PRESSURE	MAX TEMP.
CA9C	M11801	F 1/2"	PN 10	65°C

DN	L	H
1/2"	122	129



DOMESTIC & RESIDENTIAL POTABLE & HOT WATER PRODUCTS

THERMOSTATIC MIXING VALVES

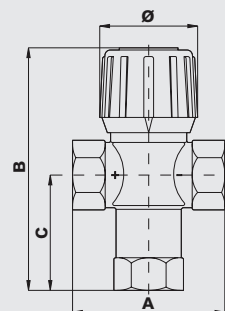
Aquamix Thermostatic Mixing Valve

Thermostatic mixing valve with 4 set positions. Anti-scald protection. Female connections. Without internal check valves.

TYPE	PRODUCT CODE	SIZE	SETTING RANGE	MAX. DIFFERENTIAL PRESSURE
62C	6211C1	1" F	42°C - 60°C	2 bar



DN	A	B	C	Ø
1"	80	110	52	45



Ultramix Thermostatic

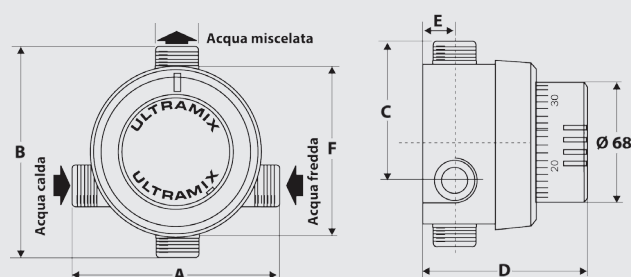
For community installations. Allows controlling and holding of mixed water temp. at a constant level. Brass body. Cover with grey epoxy finish/blue graduated knob (Type E). Chrome-plated cover with white graduated knob (Type C). Anti-seize mechanism with filters and check valves. Bimetal steel strip coated with rilsan to protect against scale formation. Anti-scald protection. Max. operating pressure: 10 bar. Max. hot water temperature: 85°C. Min. difference in inlet/outlet temperature: 5°C. Thermostatic mixing valve mechanism. Approved check-valves NF. Filtering : Strainer. Guaranteed for 2 years. Rinsing kit.

TYPE	PRODUCT CODE	SIZE	TOC RANGE	FLOW RANGE, L/MIN
TX90	TX91E	3/4"	10-50° C	3-56
TX90	TX92E	3/4"	10-50° C	3-80
TX90	TX93E	1"	10-50° C	3-120
TX90	TX94E	1.1/4"	10-50° C	5-175
TX90 Chrome	TX92C	3/4"	10-50° C	3-80



DN	A	B	C
3/4"M	117	120	81
1"M	144	142	95
1.1/4"M	182	166	107

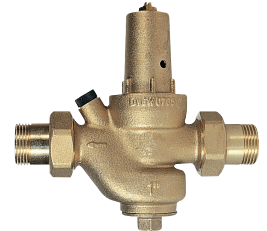
DN	D	E	F
3/4"M	93	18	98
1"M	101	23	116
1.1/4"M	116	24	145



PRESSURE REDUCING VALVES

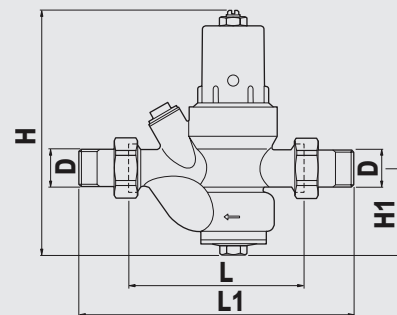
DRV Pressure Reducing Valve

Diaphragm pressure reducing valve with compensated seat and complete with unions.
 Brass CW617N body and cap. Stainless steel strainer. 1/2" - 3/4" - 1" = 600µm.
 1.1/4" - 1.1/2" - 2" = 750µm. Plastic valve seat. Interchangeable filter-regulator unit.
 Can be used for water, air and neutral gases up to 30°C. Can be used for water,
 air and neutral gases up to 30°C. Pressure drops less than 1.3 bar at characteristic
 flow rate DIN. Noise < 20 dB - Class 1 in Germany.



TYPE	PRODUCT CODE	SIZE	MAX. INLET PRESSURE	ADJUSTABLE DOWNSTREAM PRESSURE
DRV	0501115	1/2" M	25 bar	1.5 - 6 bar
DRV	0501120	3/4" M	25 bar	1.5 - 6 bar
DRV	0501125	1" M	25 bar	1.5 - 6 bar
DRV	0501132	1.1/4" M	25 bar	1.5 - 6 bar
DRV	0501140	1.1/2" M	25 bar	1.5 - 6 bar
DRV	0501150	2" M	25 bar	1.5 - 6 bar

DN	L	L1	H	H1
1/2"	97	152	135	48
3/4"	110	171	155	58
1"	120	191	182	66
1.1/4"	140	211	227	75
1.1/2"	160	246	255	82
2"	175	261	262	88



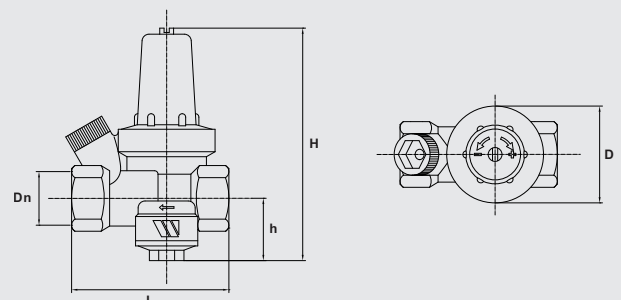
DRV/E Pressure Reducing Valve

Type DRV/E Pressure Reducing Valve. Brass CW602N Body (anti-dezincification alloy).
 Complete with Swivel Nut. Diaphragm pressure reducing valve. Designed to be compact.
 Can be used for water or compressed air and mounted in any position.
 WRAS approved for cold water.



TYPE	PRODUCT CODE	MAX. UPSTREAM PRESSURE	ADJUSTABLE DOWNSTREAM PRESSURE	COMPRESSION	MAX. FLUID TEMP.
DRV/E	0502115	25 bar	1.5 - 6 bar	15mm	70°C
DRV/E	0502120	25 bar	1.5 - 6 bar	22mm	70°C

DN	L	D	H	h
1/2"	64	42	93	23
3/4"	75	45	112	30



DOMESTIC & RESIDENTIAL POTABLE & HOT WATER PRODUCTS

PRESSURE REDUCING VALVES

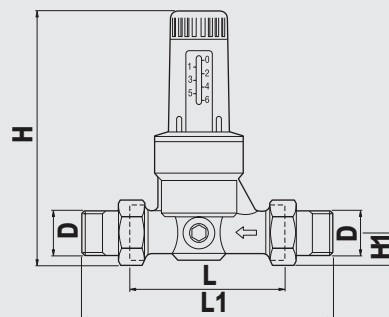
DRVN Pressure Reducing Valve

Patented diaphragm pressure reducing valve with compensated seat. Outlet pressure adjusting knob and external graduated scale for easy reading of set pressure. Complete with unions. Body and cap of shot-blasted stamped brass CW617N. Stainless steel filter cartridge. Materials in contact with fluids KTW certified. Can be used for water, air and neutral gases. Noise < 20 dB - Class 1 in Germany.

TYPE	PRODUCT CODE	PRESSURE GAUGE CONNECTION	MAX. INLET PRESSURE	ADJUSTABLE DOWNSTREAM PRESSURE	MAX. OPERATING TEMP.
DRVN	0502525	1"	25 bar	1.5 and 6 bar	30°C
DRVN	0502532	1 1/4"	25 bar	1.5 and 6 bar	30°C
DRVN	0502540	1 1/2"	25 bar	1.5 and 6 bar	30°C
DRVN	0502550	2"	25 bar	1.5 and 6 bar	30°C



DN	L	L1	H	D
1"	104	161	140	26
1.1/4"	109	175	192	29,5
1.1/2"	134	214	200	36
2"	144	224	205	42



Redufix Pressure Reducing Valves

Pressure reducing valve. Ideal for sanitary water systems. Directly fitted upstream of appliance. Can be set from 1.5 to 5 bar. Corrosion preventing DZR brass body. Diaphragm and seals EPDM & NBR. Factory preset (4 bar at zero discharge for 3 bar working). Maintenance free robust appliance. Ideal for protecting electric hot water storage heaters and household appliances.

TYPE	PRODUCT CODE	SIZE	SETTING RANGE	PRESSURE GAUGE OUTLET	MAX. INLET PRESSURE	MAX. TEMP
62C	82006	1/2" FBSP	2 Bar Nickel	Female 1/4"	15 bar	70°C
62C	82118	22mm Cu	3 Bar Nickel	Female 1/4"	15 bar	70°C
62C	82210	3/4" M x F	4 Bar Union Nut	Female 1/4"	15 bar	70°C
62C	82110	3/4" MBSP	3 Bar Nickel	Female 1/4"	15 bar	70°C



PRESSURE RELIEF VALVES

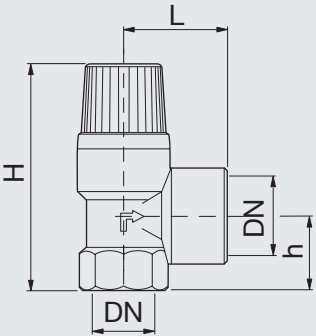
SVW Relief Valve for Potable Water Systems

Diaphragm safety relief valve for water heaters in accordance with DIN 4753. Brass CW617N. Normal type diaphragm safety valve. Brass CW617N body. Plastic manual discharge knob. Ni-Cr steel spring. Diaphragm and seals of rubber resistant to 140°C. Female connections with reinforced outlet. According to Directive PED 97/23/CE. Identification number CE1115.



TYPE	PRODUCT CODE	SIZE	BAR	OPERATING TEMP.
SVW	0215104	1/2" x 3/4"	4	-10 - +110°C
SVW	0216106	1/2" x 3/4"	6	-10 - +110°C
SVW	0217604	3/4" x 1"	4	-10 - +110°C
SVW	0217206	3/4" x 1"	6	-10 - +110°C

DN	L	H	h
1/2" x 3/4"	34	75	24.5
3/4" x 1"	37	86.5	34



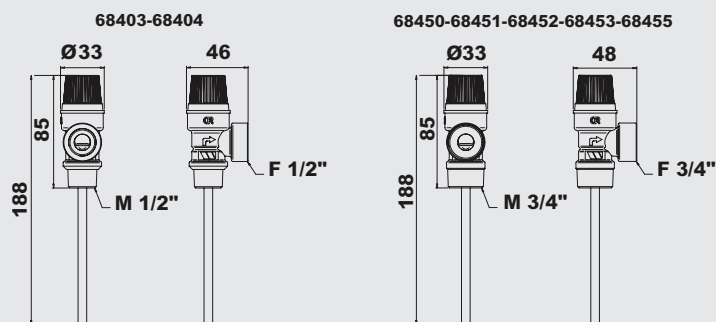
DOMESTIC & RESIDENTIAL POTABLE & HOT WATER PRODUCTS

TEMPERATURE AND PRESSURE RELIEF VALVES

Combined Temperature and Pressure Relief Valves

Combined temperature, pressure and relief valve to protect tank build-up. Models with threaded male/female connections or male/fitting connection for copper pipes. Body: CW617N. Spring: stainless steel. Diaphragm EPDM. Suitable for plumbing water. Designed for vertical and horizontal installation (only with bottom discharge). Accurate and proven probe, exclusively designed and manufactured by Watts Industries. Conform to EN 1490 and WRAS. According to Directive PED 97/23/CE. Suitable for solar application.

TYPE	PRODUCT CODE	SIZE	BAR	NOMINAL TEMP	NOMINAL PRESSURE
PT-684	68403	1/2" x 1/2"	7	92 ± 3°C	10 bar
PT-684	68404	1/2" x 1/2"	10	92 ± 3°C	10 bar
PT-684	68450	3/4" x 3/4"	3	92 ± 3°C	10 bar
PT-684	68451	3/4" x 3/4"	4	92 ± 3°C	10 bar
PT-684	68452	3/4" x 3/4"	6	92 ± 3°C	10 bar
PT-684	68453	3/4" x 3/4"	7	92 ± 3°C	10 bar
PT-684	68455	3/4" x 3/4"	10	92 ± 3°C	10 bar



WATER INLET VALVES

Water Inlet Valve

Safety group for hot water storage heaters. Safety valve 7 bar. Shut off valve. Inspectable check valve. Angle body.

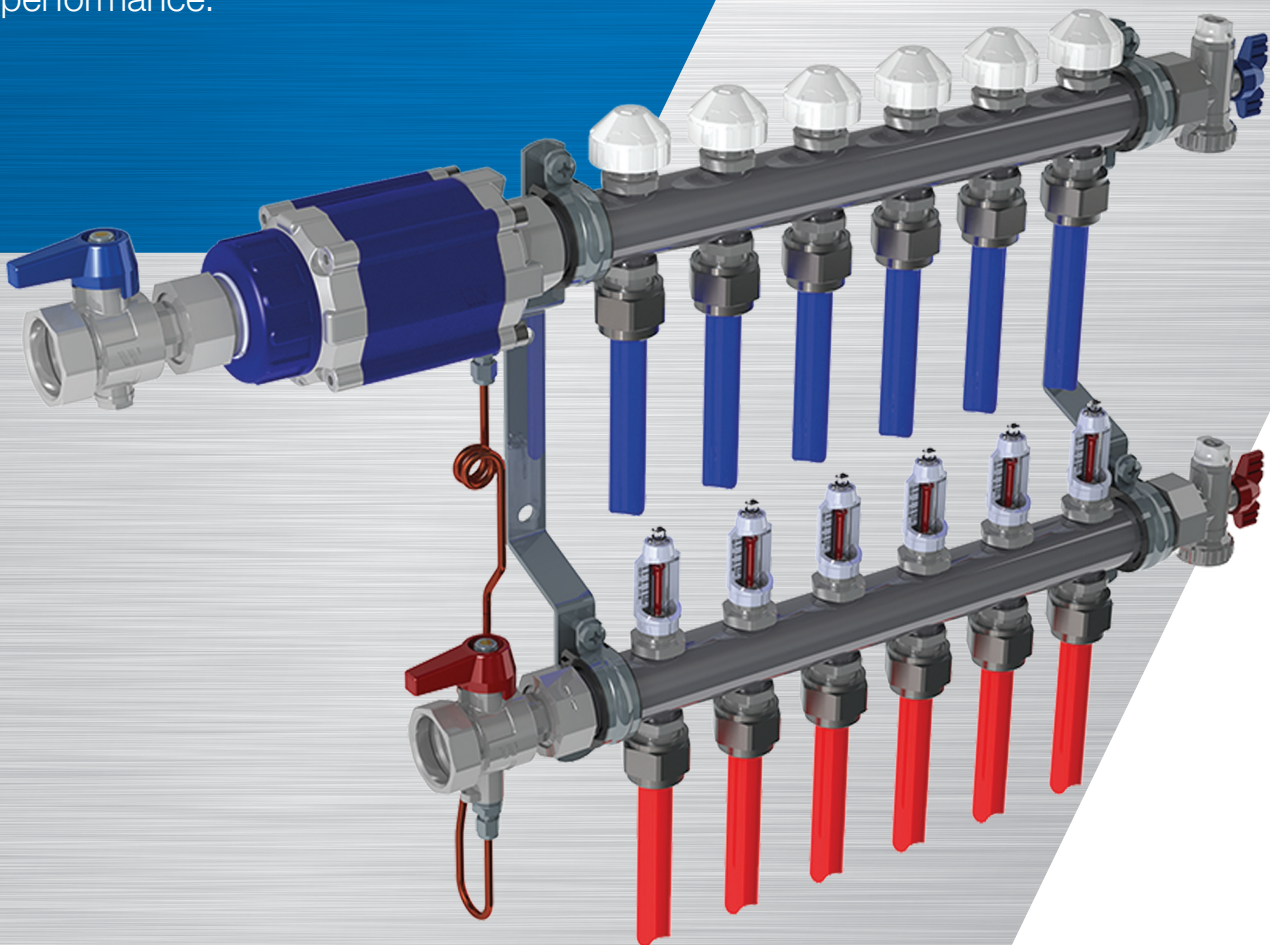
TYPE	PRODUCT CODE	SIZE	SAFETY VALVE	AIR GAP THREADED	HOT WATER STORAGE HEATER	MAX. OPERATING TEMP.
SFR	52550UK	3/4"	6 bar	1"	Up to 18 kW (600L)	120°C
SFR	52550	3/4"	7 bar	1"	10 kW	120°C
SFR (GSM)	54557	1"	7 bar	1"	Up to 18 kW (600L)	120°C





UNDERFLOOR HEATING RANGE

Watts Industries is renowned for manufacturing market leading underfloor heating components and sets the standard in quality and design. We manufacture all products including manifolds, pump packs, actuators and room temperature control systems widely adopted by the industry throughout the UK. All components are system based and are specifically designed to work seamlessly to provide ease in installation and reliability of performance.

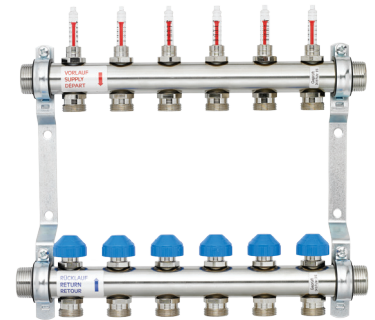


MANIFOLDS

Stainless Steel Manifolds

Stainless steel round pipe manifold. Flat-sealing male thread on both sides. Low installation depth. Connection nipple G 3/4" with Eurocone. Pressure tested. The manifold can be adapted to the individual requirements on-site by using the modular accessories. Supply: Flowmeter with particularly small pressure loss and shut-off function. Return: Control and shut-off valve with adaptation M30 x 1,5 (closing point: 11,8 mm). Flow meters with shut off function and scale 0-4 l/min. Heating circuit connection 3/4" M with Eurocone. Supply branch on the top. Ready-to-mount with brackets. EN1264 Compliant.

TYPE	PRODUCT CODE	STAINLESS STEEL ROUND PIPE	DISTANCE BETWEEN THE OUTLETS
Stainless Manifold 2 Port	2PORT5504	1" M	50mm
Stainless Manifold 3 Port	3PORT5504	1" M	50mm
Stainless Manifold 4 Port	4PORT5504	1" M	50mm
Stainless Manifold 5 Port	5PORT5504	1" M	50mm
Stainless Manifold 6 Port	6PORT5504	1" M	50mm
Stainless Manifold 7 Port	7PORT5504	1" M	50mm
Stainless Manifold 8 Port	8PORT5504	1" M	50mm
Stainless Manifold 9 Port	9PORT5504	1" M	50mm
Stainless Manifold 10 Port	10PORT5504	1" M	50mm
Stainless Manifold 11 Port	11PORT5504	1" M	50mm
Stainless Manifold 12 Port	12PORT5504	1" M	50mm

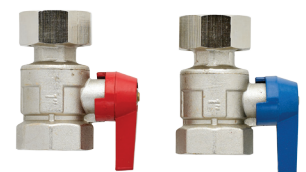


BALL VALVES

Nickel Plated Ball Valve Sets (Pair)

Ball valve set brass body 1" with union nut and gaskets - nickel plated. Option of 1" x 1" Ball valve set with thermometer brass body, with union nut and gaskets. Thermometer NG 34.

TYPE	PRODUCT CODE	SIZE
Ball Valve KH	3114060N	1"UN x 3/4"F, Ni
Ball Valve KH	3114049N	1"UN x 1"F, Ni
Ball Valve with Gauge	3114065N	1" x 1" Ball 0-60 Degrees Temperature Gauge" Valve Set



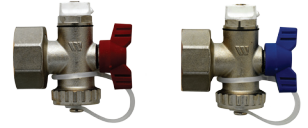
UNDERFLOOR HEATING RANGE

END SETS

Nickel Plated Quatro End Sets with Fill / Drain Valve

Nickel plated brass body, with union nut and gaskets. Ball valve with handle for easy filling, rinsing and draining.

TYPE	PRODUCT CODE	DESCRIPTION
Quatro End Set	3036120N	Manual Air Vent
Quatro End Set	3036125N	Brass Auto Air Vent and 0-6 Bar Pressure Gauge



MANIFOLD ACCESSORIES

Manifold Extension Coupling (Pair)

This is a manifold coupling used with Watts Radiant stainless steel manifolds. It is used to join two Watts Radiant stainless steel manifolds together into a single, larger manifold. It is made of nickel plated brass for optimal corrosion resistance and durability.

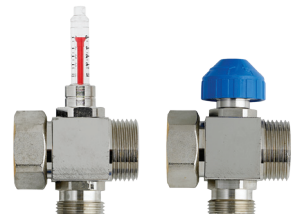
TYPE	PRODUCT CODE
Manifold Extension Coupling (Pair)	402178N



Manifold Extension Set 1" Single Port Addition (Pair)

To extend manifolds with 1" male thread with one heating circuit each.

TYPE	PRODUCT CODE
Manifold Extension Set 1" Single Port Addition (Pair)	4254198N



Manifold Spare - Flow Meter 0-4 LPM

Replacement Flow Meter for manifold.

TYPE	PRODUCT CODE	DESCRIPTION
Manifold Spare Flow Meter	10026953	0-4 LPM



Manifold Spare - Return Balancing Valve

Replacement Return Balancing Valve for manifolds.

TYPE	PRODUCT CODE
Manifold Spare - Return Balancing Valve	1143174N



MANIFOLD PIPE CONNECTORS AND FITTINGS

Eurocone Connector

Eurocone Connector

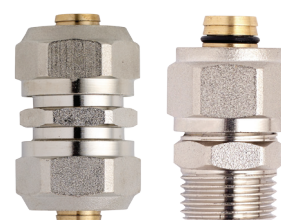
TYPE	PRODUCT CODE
Eurocone 12mm x 2mm	ECN12-2
Eurocone 15mm x 2mm	ECN15-2
Eurocone 16mm x 1.5mm	ECN16-1.5
Eurocone 16mm x 2mm	ECN16-2
Eurocone 18mm x 2mm	ECN18-2



Straight Connector

Straight Connector

TYPE	PRODUCT CODE	DESCRIPTION
Eurocone 16mm x 15mm	SCN16-15	Stainless Steel Coupling
Eurocone 16mm x 16mm	SCN16-16	Stainless Steel Coupling
Eurocone 16mm x 1/2"	MIC16-15	BSP Adapter



PUMP PACKS

FRG 3020F Pump Mixing Unit Nickel Plated 13kW

Ready-to-mount, compact unit for fix-point control of the water temperature in radiant panel heating systems. Suitable for heat output requirements up to 13 kW. Supply temperature setting range 20 – 70°C or with limiting 20 – 50°C. Pump and temperature limiter are cabled ex works. Mounting either on the left or right hand side of the manifold. Fits to all Watts Industries manifolds 1" M. Pressure-tested, packed in a box.

TYPE	PRODUCT CODE	TEMP	PUMP
FRG 3020	FRG3020F	20 – 50 °C	Wilo Yonos PARA 15/6



UNDERFLOOR HEATING RANGE

MIXING VALVES

Aquamix UFH Thermostatic Mixing Valve

Thermostatic mixing valve with 4 set positions. Anti-scald protection. Female connections. Without internal check valves.

TYPE	PRODUCT CODE	SIZE	SETTING RANGE	MAX. DIFFERENTIAL PRESSURE
Aquamix 63C	6311C1	1" F	25°C - 50°C	2 bar



ACTUATORS

Model 22CX Normally Closed

Electrothermic actuator. Compact design with on/off action. Compatible with thermostat adaptable radiator valves series valve for fan-coils series and regulation valves of Watts manifolds. Cap made of flame retardant plastic. Cable 1m. Valve adaption: M30 x 1.5 chrome-plated brass threaded ring nut. Power consumption 1.8W. Protection class IP64. Available in versions 2 wire/4 wire (with auxiliary micro switch)

TYPE	PRODUCT CODE	DESCRIPTION	POWER SUPPLY
22CX	22CX230NC2	230V 2 Wire	230V
22CX	22CX230NC4	230V 4 Wire	230V
22CX	22CX24NC2	24V 2 Wire	24V
22CX	22CX24NC4	24V 4 Wire	24V



Model 26LC 230V - 2 Wire Normally Closed

Electrothermic actuator compact design with on/off action. Compatible with thermostat adaptable radiator valves for fan-coils. Regulation valves of manifolds. Easily removable 2-wire (with auxiliary micro switch) electrical cable with safety latch connector. 1m length. Chrome-plated brass threaded ring nut. Cap made of flame retardant plastic. LED indication for the status (ON/OFF) of the actuator. Power consumption 1.8W. Protection class IP64.

TYPE	PRODUCT CODE	DESCRIPTION	POWER SUPPLY
26LC	26LC230NC2	234V 2 Wire	230 VAC NC



ROOM TEMPERATURE CONTROLS - HARD WIRED

Dial Thermostat with Floor Sensor Compatibility - BTA

Electronic analogical room thermostat specially designed to control different type of heating systems. Can be connected directly to electrothermal NC actuator or through wiring centre. Temperature setting range: 5 - 35°C. Temperature differential 0.5 K. Regulation on the integrated temperature sensor: NTC.

TYPE	PRODUCT CODE	POWER SUPPLY
Dial Thermostat BT-A	P05609	2 batteries 1,5 V



ROOM TEMPERATURE CONTROLS - HARD WIRED

Digital Thermostat with Floor Sensor Compatibility - BTB

Electronic room thermostat with LCD-display specially designed to control different type of heating systems. Can be connected directly to electrothermal NO/NC actuators or through wiring centres. Display with back-light, key lock function. Temperature setting range: 5 - 37°C. Temperature differential 0.5 K or proportional band (PWM). Regulation on the integrated temperature sensor: NTC. Protection IP30. 3 control modes: 1. Via internal sensor. 2. Via external sensor (floor sensor). 3. Via internal room sensor and floor temperature limitation by external sensor.

TYPE	PRODUCT CODE	POWER SUPPLY
Digital Thermostat BTB	P04542	2 batteries 1,5 V



Programmable Thermostat with Floor Sensor Compatibility - BTDP

Programmable electronic room thermostat with LCD-display specially designed to control different type of heating systems. Can be connected directly to electrothermal NO/NC actuators or through wiring centre. Display with back-light, key lock function. Temperature setting range: 5 - 37°C. 9 standard and 4 customisable programs available. Temperature differential 0.5 K or proportional band (PWM). Regulation on the integrated temperature sensor: NTC. Option: possibility to regulate on external sensor. Protection IP30. 3 control modes : 1. Via internal sensor. 2. Via external sensor (floor sensor). 3. Via internal room sensor and floor temperature limitation by external sensor.

TYPE	PRODUCT CODE	POWER SUPPLY
Programmable Thermostat BTDP	P04543	2 batteries 1,5 V



Floor / Wet room Sensor with Tamperproof Box

Where time and temperature control needs to be applied to a bathroom or wet area, the wet area sensor can be installed within the wet room and connected to the programmable room thermostat installed in an adjacent dry area. The sensor is supplied with 3m of cable and can either remain in the supplied housing and be wall mounted, or removed from the housing and used as a floor surface sensor. If required, the wet room sensor cable can be extended to a maximum of 10m providing that a cable of a similar rating is used (NTC 10k).

TYPE	PRODUCT CODE
Floor/Wet Room Sensor	P-2266



2 Channel Time Clock

The thermostat can be used as either a Single Channel or Two Channel Time Clock and is designed to be used with the Master Wiring Center. The unit can be used to provide timing control for either two individual underfloor heating manifolds or a mixture of underfloor heating and radiators.

TYPE	PRODUCT CODE
2 Channel Time Clock	P07099



UNDERFLOOR HEATING RANGE

ROOM TEMPERATURE CONTROLS - HARD WIRED

4 Zone Master Wiring Centre

Connecting box. Base for 4 zones for connection of thermostats with actuators. Pump relay (output 8 A). IP 20. Modular design.

TYPE	PRODUCT CODE
4 Zone Master WFHC	P-2216



Slave Unit for Wiring Centre

Connecting box, best for 4 or 6 zones for connection of thermostats with actuators, pump relay (output 8A) IP20. Modular design.

TYPE	PRODUCT CODE	SIZE
4 Zone Slave Unit	P-2096	4 Unit
6 Zone Slave Unit	P-2092	6 Unit



ROOM TEMPERATURE CONTROLS - RADIO FREQUENCY CONTROLS

Dial Thermostat BTA-RF

Connecting box. Base for 4 or 6 zones for connection of thermostats with actuators (22CX, 26LC). Pump relay (output 8 A). IP 20. Modular design.

TYPE	PRODUCT CODE
RF Dial Thermostat BTA-RF	P06670



Digital Thermostat BTD-RF

Electronic room RF thermostat with LCD-display specially designed to control different types of heating systems. Compatible with other WATTS® Vision™ Smart Home products.

TYPE	PRODUCT CODE	POWER SUPPLY
RF Digital Thermostat BTD-RF	P06671	2 AAA LR03 1.5V Batteries



Programmable Thermostat BTD-RF

Programmable electronic room RF thermostat with LCD-display specially designed to control different types of heating systems. Compatible with other WATTS® Vision™ Smart Home products. Temperature setting range: 5 - 37°C. Working mode: Comfort, Reduced, Auto, Antifreeze, Timer, Holiday. 9 preset and 4 customisable programs available.

TYPE	PRODUCT CODE	POWER SUPPLY
RF Programmable Thermostat	P06672	2 AAA LR03 1.5V Batteries



ROOM TEMPERATURE CONTROLS - RADIO FREQUENCY CONTROLS

6 Zone Master RF

Radio frequency connection box. 868 MHz. Basic unit for 6 zones. Compatible with BT thermostats. Bidirectional communication. Compatible to both NO and NC actuators (internal switch). LED for indication of zones status, power supply and pump activity. Special functions: Pump delay, Valves exercise, Reset. Outputs for pump and boiler: 5A, 250VAC (free contact), 5A, 230VAC (live contact). Power supply: 230 VAC, 50Hz.

TYPE	PRODUCT CODE	POWER SUPPLY
RF 6 Zone Master	P06678	230 VAC

**Slave Modules for Master Wiring Centre**

Extension module 4 and 6 zones with plug-in connector for coupling to BT-M6Z02-RF.

TYPE	PRODUCT CODE	POWER SUPPLY
RF 4 Zone Slave	P06680	230 VAC
RF 6 Zone Slave	P06679	230 VAC

**Single Zone Receiver RF Free Contact**

RF 868MHz Wall mounting receiver. Specially designed to control electrical heating regulation. Embedded 10A Relay.

TYPE	PRODUCT CODE
RF Single Zone Receiver	P06402



UNDERFLOOR HEATING RANGE

MANIFOLD BALANCING SYSTEMS

Series MH Underfloor Heating Manifold Balancing Valve

Valve Series MH is a device for hydraulic balancing and flow control in radiant heating systems.

During operation of a radiant heating system, the working conditions change and require an ongoing re-adjustment to guarantee optimum and energy efficient operation. Therefore the system requires constant balancing of the individual loops which often consist of differences in length and diameter, which results in different pressures and flows. A static balancing device helps to adjust the system to the design point during the highest demand. Valve Series MH is a solution that allows eliminating flow fluctuations and consequently temperature variations in the branches of the heating system, ensuring a better comfort. The possibility of adjustment of the pressure drop makes it adaptable to different installations and different flow. A dynamic balancing device provides best performance in all conditions.

How it works:

- Flow rate set in each individual heating circuit will be maintained constant;
- Actual flow can be read out on the flow meters integrated in the manifold.
- Series MH is a solution for time and cost saving installation in floor heating

Benefits:

1. Easy set up

Easy and time saving hydraulic balancing in 3 steps:

- A. Start up: unbalanced loops
- B. Set up the worst loop flow
- C. Set up all the other flows

2. Constant flow rate

Series MH will maintain the pressure drop on the manifold constant, thus ensuring constant flow rate in each heating loop.

3. Energy savings and comfort

- No oversupply of the individual heating circuits
- Response time reduction of radiant heating systems
- Increased comfort thanks to optimum temperature distribution

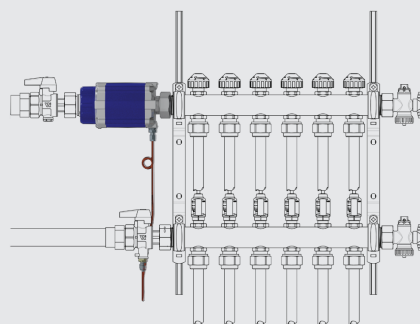
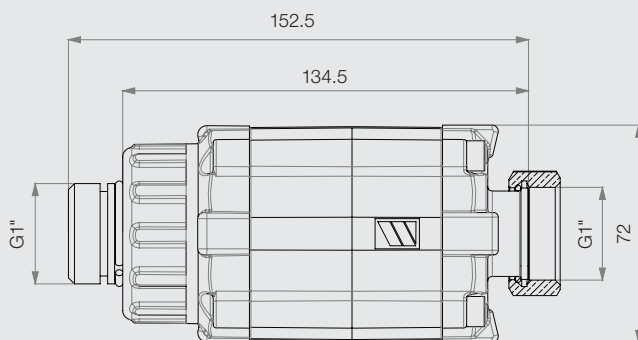
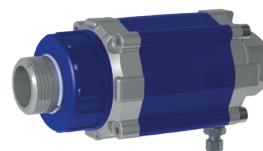
4. Reliable performance

- Consulting engineer designs the system
- System is installed and commissioned based on design set-points
- The heating system operates in part-load during most of its operation, which leads to uncontrolled system performance
- Optimum performance and a dynamically balanced system during the entire heating season

5. Retrofit solution

- Balancing
- Eliminate room temperature fluctuation
- Manage comfort
- Avoid noise
- Filling and flushing without risks

TYPE	PRODUCT CODE	DN	ADJUSTMENT RANGE
MH	MH001WB	G 1"	20-55KPa
KMH	KMMH001100	1" x 1"	Values for MH

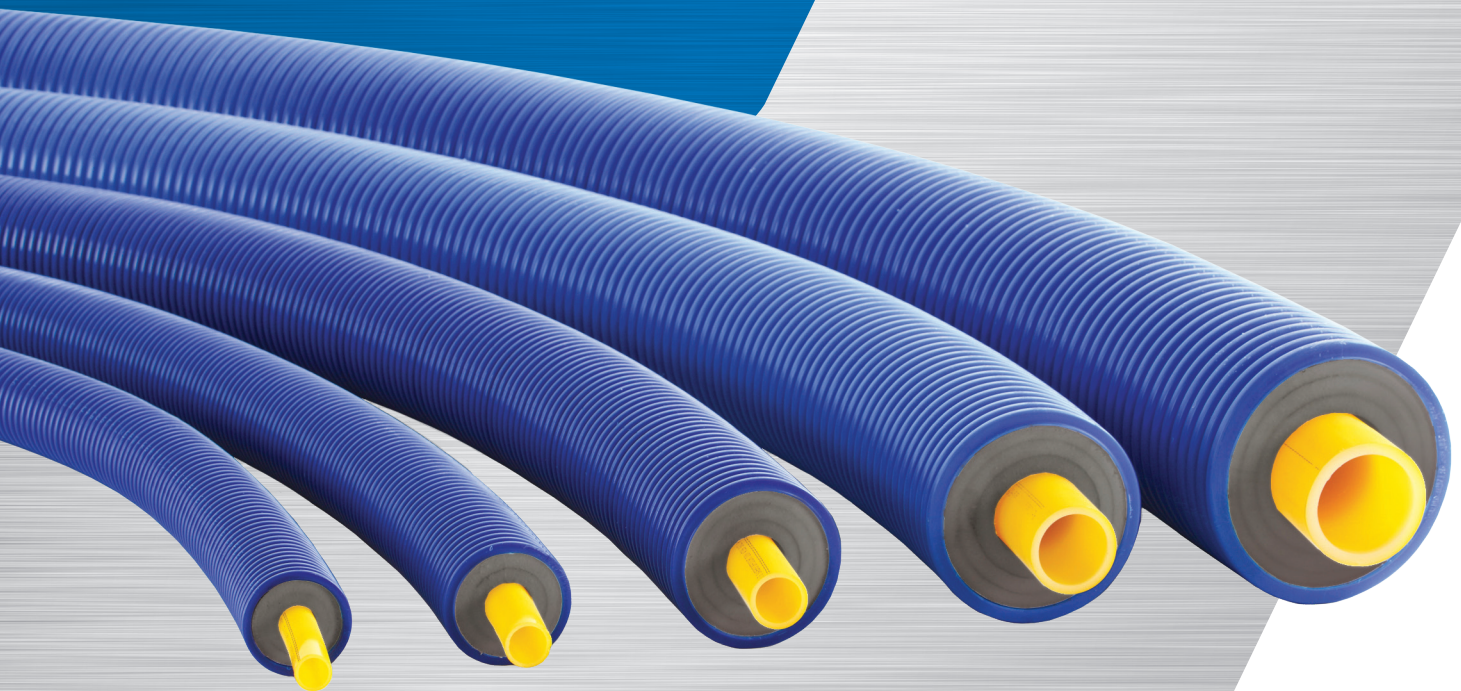




PRE-INSULATED PIPE

MICROFLEX[®]

Microflex is the ideal solution for a pre-insulated piping networks, hot and cold potable water, chilled and heated pipe. Flexibility is what distinguishes microflex from its rivals as the system is recognised as the most flexible allowing installations of larger projects and simple installations between buildings safer and quicker to install.

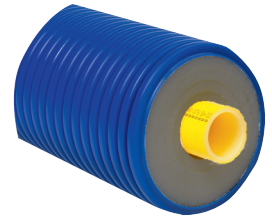


PIPE SYSTEM

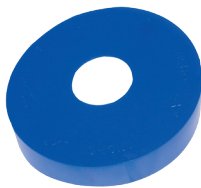
Microflex UNO

Single flexible, pre-insulated, self-compensating, underground pipe. Especially suitable for heating water, but also for (hot) potable water, wastewater and other fluids. Corrosion-resistant transport pipe in cross-linked PE-Xa in accordance with EN ISO 15875, with yellow oxygen diffusion barrier in accordance with DIN 4726. Thermal, elastic, CFC-free foam insulation made from cross-linked PE-X with closed microcellular structure. Minimal water absorption capacity of < 1% in accordance with ISO 2896. Corrugated outside casing in HDPE, made in accordance with the closed chamber principle to provide high-grade protection to the piping system.

PRODUCT CODE	Ø OUT. HOUSING MM	Ø PRESSURE PIPE (EXT.)	WEIGHT (KG/M)	INSULATION	BEND RADIUS (M)	Ø / THICKNESS OF COIL
M7525C	75	25 x 2,3	0,68	Standard	0,20	1,90 / 0,30
M9032C	90	32 x 2,9	1,00	Standard	0,25	2,00 / 0,45
M16040C	160	40 x 3,7	2,32	Advanced	0,30	2,30 / 0,85
M16050C	160	50 x 4,6	2,48	Advanced	0,45	2,30 / 0,85
M16063C	160	63 x 5,8	2,78	Advanced	0,55	2,30 / 0,85
M20075C	200	75 x 6,8	4,16	Advanced	0,80	2,30 / 1,40
M20090C	200	90 x 8,2	4,73	Advanced	1,10	2,30 / 1,40
M200110C	200	110 x 10,0	5,64	Standard	1,20	2,30 / 1,40
M200125C	200	125 x 11,4	6,64	Standard	1,20	2,30 / 1,40



ACCESSORIES



**Dust Cap
For Above
Ground Use**



**End Cap (EPDM)
For Below
Ground Use**



**Microflex
Adaptor Pex
- BSP**

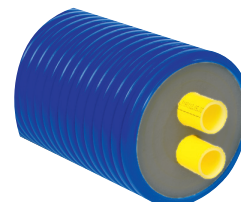
FOR UNO PIPE CODE:	DUST CAP PRODUCT CODE	END CAP PRODUCT CODE	MICROFLEX ADAPTOR PEX PRODUCT CODE	Ø PRESSURE PIPE (EXT.)	THREAD (INCH)
M7525C	MS7525	MG751832	MJ3413425/23	25/2.3	3/4" M
M9032C	MS9032	MG901840	MJ3414432/29	32/2.9	1" M
M16040C	MS16040	MG1603250	MJ3415440/37	40/3.7	1 1/4" M
M16050C	MS16050	MG1603250	MJ3416450/46	50/4.6	1 1/2" M
M16063C	MS16063	MG1606390	MJ341263/58	63/5.8	2" M
M20075C	MS20075	MG20075125	MJ34121275/68	75/6.8	2 1/2" M
M20090C	MS20090	MG20075125	MJ341390/82	90/8.2	3" M
M200110C	MS200110	MG20075125	MJ3414110/100	110/10.0	4" M
M200125C	MS200125C	MG20075125	MJ3414125/114	125/11.4	4" M

PRE-INSULATED PIPE - MICROFLEX®

PIPE SYSTEM

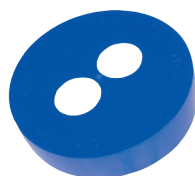
Microflex DUO

Double flexible, pre-insulated, self-compensating, underground pipe. Especially suitable for heating water, but also for (hot) potable water, wastewater and other fluids. Corrosion-resistant transport pipe in cross-linked PE-Xa in accordance with EN ISO 15875. With yellow oxygen diffusion barrier in accordance with DIN 4726. Thermal, elastic, CFC-free foam insulation made from cross-linked PE-X with closed microcellular structure. Minimal water absorption capacity of < 1% in accordance with ISO 2896. Insulating PE centrepiece guarantees an effective separation of flow and return pipes. Corrugated outside casing in HDPE, made in accordance with the closed chamber principle to provide high-grade protection to the piping system.



PRODUCT CODE	Ø OUT. HOUSING MM	Ø PRESSURE PIPE (EXT.)	WEIGHT	INSULATION	BEND RADIUS (M)	Ø / THICKNESS OF COIL
MD16025C	160	25 x 2,3	2,21	Advanced	0,60	2,30 / 0,85
MD16032C	160	32 x 2,9	2,42	Advanced	0,60	2,30 / 0,83
MD16040C	160	40 x 3,7	2,63	Standard	0,60	2,30 / 0,85
MD16050C	160	50 x 4,6	3,10	Standard	0,60	2,30 / 0,85
MD20063C	200	63 x 5,8	4,64	Standard	1,20	2,30 / 1,40

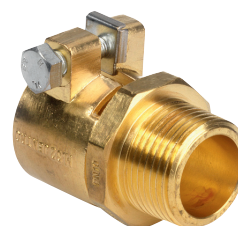
ACCESSORIES



**Dust Cap
For Above
Ground Use**



**End Cap (EPDM)
For Below
Ground Use**



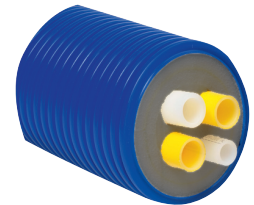
**Microflex
Adaptor Pex
- BSP**

FOR DUO PIPE CODE:	DUST CAP PRODUCT CODE	END CAP PRODUCT CODE	MICROFLEX ADAPTOR PEX PRODUCT CODE	Ø PRESSURE PIPE (EXT.)	THREAD (INCH)
MD16025C	MSD16025	MGD1602550	MJ3413425/23	25/2.3	3/4" M
MD16032C	MSD16032	MGD1602550	MJ3414432/29	32/2.9	1" M
MD16040C	MSD16040	MGD1602550	MJ3415440/37	40/3.7	1 1/4" M
MD20050C	MSD20050	MGD2004063	MJ3416450/46	50/4.6	1 1/2" M
MD20063C	MSD20063	MGD2004063	MJ341263/58	63/5.8	2" M

PIPE SYSTEM

Microflex QUADRO

Flexible pre-insulated, self-compensating underground pipe. Two heating pipes and two sanitary pipes hot water pipe and a pipe for the circulation loop. Designed for heating water (flow and return). Corrosion-resistant transport pipe in cross-linked PE-Xa in accordance with EN ISO 15875, with yellow oxygen diffusion barrier in accordance with DIN 4726 for the heating water pipes. Thermal, elastic, CFC-free foam insulation made from cross-linked PE-X with closed microcellular structure. Minimal water absorption capacity of < 1% in accordance with ISO 2896. Insulating PE centrepiece guarantees an effective separation of flow, return, hot water and circulation pipes. Corrugated outside casing in HDPE, provides high-grade protection to the piping system.



PRODUCT CODE	Ø OUT. HOUSING MM	Ø PRESSURE PIPE (EXT.)	WEIGHT (KG/M)	BEND RADIUS (M)	Ø / THICKNESS OF COIL
MQ16025C2520S	160	2 x 25/2,3 1 x 25/3,5 1 x 20/2,8	2,40	0,60	2,30 / 0,85
MQ16032C2520S	160	2 x 32/2,9 1 x 25/3,5 1 x 20/2,8	2,60	0,60	2,30 / 0,85
MQ16032C3225S	160	2 x 32/2,9 1 x 32/4,4 1 x 25/3,5	2,70	0,60	2,30 / 0,85

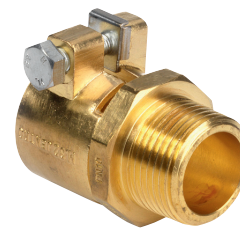
ACCESSORIES



**Dust Cap
For Above
Ground Use**



**End Cap (EPDM)
For Below
Ground Use**



**Microflex
Adaptor Pex
- BSP**

FOR QUADRO PIPE CODE:	DUST CAP PRODUCT CODE	END CAP PRODUCT CODE	MICROFLEX ADAPTOR PEX PRODUCT CODE	Ø PRESSURE PIPE (EXT.)	THREAD (INCH)
MQ16025C2520S	MSQ160252520	MGQ1601832	MJ3413425/23	25/2.3	3/4" M
			MJ3413425/35	25/3.5	3/4" M
			MJ3413420/28	20/2.8	3/4" M
MQ16032C2520S	MSQ160322520	MGQ1601832	MJ3414432/29	32/2.9	1" M
			MJ3413425/35	25/3.5	3/4" M
			MJ3413420/28	20/2.8	3/4" M
MQ16032C3225S	MSQ160323225	MGQ1601832	MJ3414432/29	32/2.9	1" M
			MJ3414432/44	32/4.4	1" M
			MJ3413425/35	25/3.5	3/4" M

PEX FITTINGS

Fix Point

Suitable for applications where the ends of pipes need to be anchored. Fix points must be installed to absorb the possible effects of thermal expansion/shrinkage of the PE-Xa transport pipes. The non-application of fix points may result in serious damage.

TYPE	PRODUCT CODE	THREAD (INCH)
Fix Point 3/4"	MFP34	3/4"MF
Fix Point 1"	MFP44	1"MF
Fix Point 1 1/4"	MFP54	1 1/4"MF
Fix Point 1 1/2"	MFP64	1 1/2"MF
Fix Point 2"	MFP2	2"MF
Fix Point 2 1/2"	MFP212	2 1/2"MF
Fix Point 3"	MFP3	3"MF
Fix Point 4"	MFP4	4"MF



Pex - Straight Coupling

Straight coupling made of brass, to connect two PE-X-heating tubes. In case of an underground connection, we recommend to use the straight insulation kit with two shrink caps or EPDM-end caps.

TYPE	PRODUCT CODE	Ø PRESSURE PIPE (EXT.)	DIMENSIONS (MM)	WEIGHT (KG)
Straight Coupling 25	MJ27025/23	25/2.3	25 x 25	0.35
Straight Coupling 32	MJ27032/29	32/2.9	32 x 32	0.45
Straight Coupling 40	MJ27040/37	40/3.7	40 x 40	0.80
Straight Coupling 50	MJ27050/46	50/4.6	50 x 50	1.35
Straight Coupling 63	MJ27063/58	63/5.8	63 x 63	2.10
Straight Coupling 75	MJ27075/68	75/6.8	75 x 75	2.90
Straight Coupling 90	MJ27090/82	90/8.2	90 x 90	5.10
Straight Coupling 110	MJ270110/10	110/10.0	110 x 110	6.90

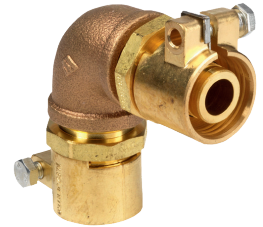


PEX FITTINGS

Pex - 90° Elbow

Elbow coupling made of brass, to connect two PE-X heating tubes, if the inner bending radius is too big. In case of an underground connection, we recommend to use the L-insulation kit with two shrink caps of EPDM-end caps.

TYPE	PRODUCT CODE	Ø PRESSURE PIPE (EXT.)	THREAD (INCH)	DIMENSIONS (MM)
Elbow 25	MJ9025/23	25/2.3	2 x 3/4"	25 x 25
Elbow 32	MJ9032/29	32/2.9	2 x 1"	32 x 32
Elbow 40	MJ9040/37	40/3.7	2 x 1 1/4"	40 x 40
Elbow 50	MJ9050/46	50/4.6	2 x 1 1/2"	50 x 50
Elbow 63	MJ9063/58	63/5.8	2 x 2"	63 x 63
Elbow 75	MJ9075/68	75/6.9	2 x 2 1/2"	75 x 75
Elbow 90	MJ9090/82	90/8.2	2 x 3"	90 x 90
Elbow 110	MJ90110/10	110/10	2 x 4"	110 x 110



Pex - Tee Connection

T-coupling made of brass to make T-connections with PE-X heating tubes. In case of an underground connection we recommend to use the T-insulation kit with shrink caps or EPDM-caps.

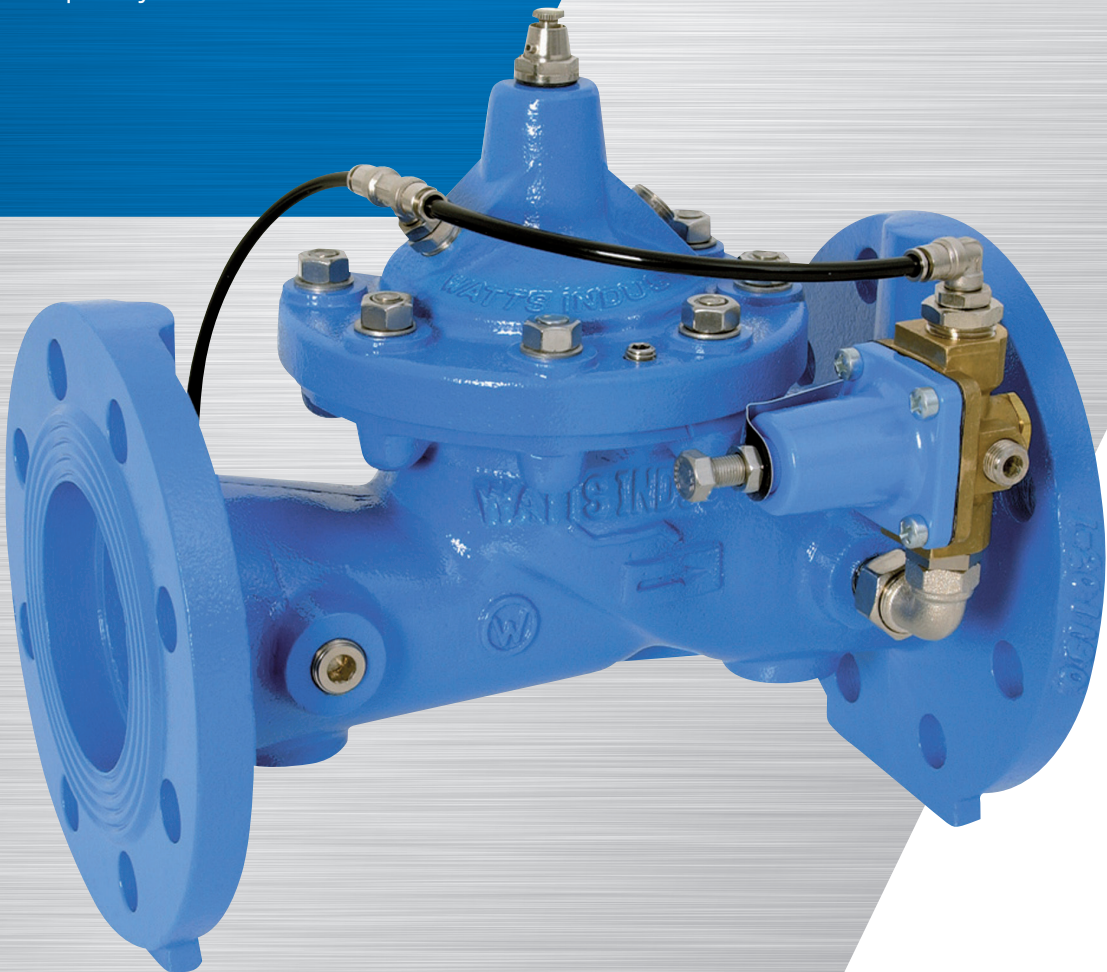
TYPE	PRODUCT CODE	Ø PRESSURE PIPE (EXT.)	THREAD (INCH)	DIMENSIONS (MM)
Equal Tee	MJ13025/23	25/2.3	3 x 3/4"	25 x 25 x 25
Equal Tee	MJ13032/29	32/2.9	3 x 1"	32 x 32 x 32
Reduced Tee	MJ1304032/37	40/3.7 + 32/2.9	2 x 1 1/4" + 1 x 1"	40 x 32 x 40
Equal Tee	MJ13040/37	40/3.7	3 x 1 1/4"	40 x 40 x 40
Reduced Tee	MJ1305040/46	50/4.6 + 40/3.7	2 x 1 1/2" + 1 x 1 1/4"	50 x 40 x 50
Equal Tee	MJ13050/46	50/4.6	2 x 1 1/2"	50 x 50 x 50
Reduced Tee	MJ1306350/58	63/5.8 + 50/4.6	2 x 2" + 1 x 1 1/2"	63 x 50 x 63
Equal Tee	MJ13063/58	63/5.8	3 x 2"	63 x 63 x 63
Equal Tee	MJ13075/68	75/6.8	3 x 2 1/2"	75 x 75 x 75
Equal Tee	MJ13090/82	90/8.2	3 x 3"	90 x 90 x 90
Equal Tee	MJ130110/100	110/10.0	3 x 4"	110 x 110 x 110



INDUSTRIAL & COMMERCIAL WATER PRODUCTS



Watts Industries provide the most comprehensive range of valves for water supply and distribution. Utilising the renowned Watts brands such as Socla and Watts, we offer the most complete range of fluid management products all manufactured to the highest quality and standards.



BACKFLOW PREVENTION

Devices which provide sufficient protection against backflow to meet the requirements of the Water Supply (Water Fittings) Regulations 1999 (England & Wales), The Water Supply (Water Fittings) (Scotland) Byelaws 2014 and the Water Supply (water Fittings) Regulations (Northern Ireland) 2009.

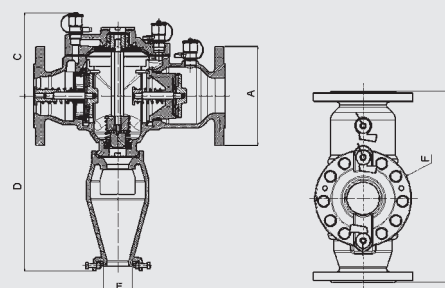
BA 4760 Drinking Water Backflow Preventor (RPZ Valve)
 Type BA - Flanged Cat Risk 4 - Verifiable Backflow Preventor
 with Reduced Pressure Zone


Pressure rating 10 bar. Max temp. 65°. Backflow Preventor with Verifiable Reduced Pressure Zone with Funnel Attached. Cast Iron with Epoxy Coating Casing. BA4760 Valves. Valve Head in DZR Brass or Bronze and Valve Seat in PPO or Bronze. EPDM/Silicone Seals. Stainless Steel Spring. Horizontal Installation. EN1717, EN12729.



TYPE	PRODUCT CODE	SIZE	FLANGE
BA 4760	149B3486	DN65	PN10/16
BA 4760	149B3097	DN80	PN10/16
BA 4760	149B3098	DN100	PN10/16
BA 4760	149B3400	DN150	PN10/16
BA 4760	149B3401	DN200	PN10
BA 4760	149B3402	DN250	PN10

DN "	A MM	B MM	C MM	D MM	E MM	F MM	WEIGHT KG	MAX. ACCEPTABLE TORQUES (NM)
3	80	200	440	173	337	63	200	29.5
4	100	220	530	201	434	80	255	58.0
6	150	285	630	230	456	80	310	83.5
8	200	340	763	272	499	80	390	141.0
10	250	395	763	272	499	80	390	151.0


EC 453/453 Drinking Water Backflow Preventor (Double Check)

Type EC - Flanged Cat Risk 3 (for Above Ground Use) Verifiable Double Check Valve

Pressure rating 16 bar (DN200, DN250 10 bar). Max temp. 65°. Double check valves made with 2 check valves coupled together. WRAS approved type EA453. EN1717, EN13959. PN10 is available for 200 and 250mm on request.

TYPE	PRODUCT CODE	SIZE	FLANGE
EC 453/453	149B99917	DN40/50	PN10/16
EC 453/453	149B99918	DN65	PN10/16
EC 453/453	149B99919	DN80	PN10/16
EC 453/453	149B99920	DN100	PN10/16
EC 453/453	149B99921	DN150	PN10/16
EC 453/453	149B99955	DN200	PN16
EC 453/453	149B99959	DN250	PN16



BACKFLOW PREVENTION

EA453 Drinking Water Backflow Preventor (Single Check)

Type EA - Flanged Cat Risk 2 (For Above Ground Use) - Verifiable Single Check Valve.

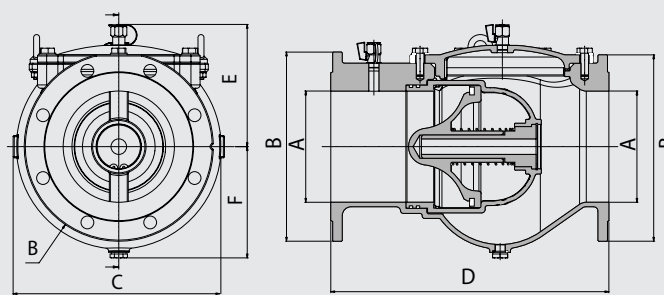


Pressure rating 16 bar (DN200, DN250 10 bar). Max temp. 100°. Ductile Iron With External/Internal Epoxy Coating Casing. 2 Drilled Bosses + Test Cock 1/2" 1 Drilled Bosses + 1 Drain Plug 1/2" (Except Dn40/50 : 1/4"). **DZR Brass Closing System** and Shaft. Brass Valves and Plug. Stainless Steel Seat and Spring. EN1717, EN13959. PN10 is available for 200 and 250mm on request.

TYPE	PRODUCT CODE	SIZE	FLANGE
EA453	149B3831W	DN40/50	PN10/16
EA453	149B3832W	DN65	PN10/16
EA453	149B3833W	DN80	PN10/16
EA453	149B3834W	DN100	PN10/16
EA453	149B3836W	DN150	PN10/16
EA453	149B24871W	DN200	PN16
EA453	149B99957	DN250	PN16



DNA	B	C	D	E	F	WEIGHT
MM	MM	MM	MM	MM	MM	KG
40/50	65	-	200	113	80	8
65	185	-	240	118	93	12
80	200	-	260	131	98	15
100	222	-	300	141	115	21
150	285	-	400	197	144	42
200	340	380	500	220	200	65
250	400	438	600	256	235	94



CHECK VALVES

402B/402 Drinking Water Check Valve (Double Check/NRV)

Flanged - Predates Current Regulations

Pressure rating 16 bar (DN200, DN280, DN300 10 bar). Max temp. 100°. A double check valve composed of 2 standard range WRAS approved single non return valves, type 402, coupled together. 350mm and 400mm available on request.

TYPE	PRODUCT CODE	SIZE	FLANGE
402B/402	149B16023	DN50	PN10/16
402B/402	149B16024	DN65	PN10/16
402B/402	149B16025	DN80	PN10/16
402B/402	149B16026	DN100	PN10/16
402B/402	149B16028	DN150	PN10/16
402B/402	149B22024	DN200	PN16
402B/402	149B20017	DN250	PN16
402B/402	149B21124	DN300	PN16



508 Ball Type Non Return Valve for Water, Waste Water Loaded Liquids

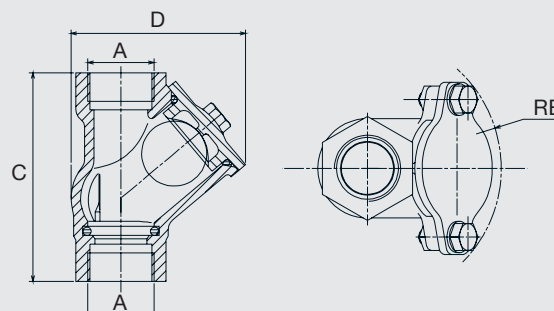
Cast Iron Body Resin Ball BSP

Pressure rating 10 bar. Max temp. 80°. GJL Cast Iron External Epoxy Coated Casing. Resin Ball. NBR (Nitrile) Seal.

TYPE	PRODUCT CODE	SIZE	MM
508	149B3204	DN1 1/2"	10
508	149B3205	DN2"	10
508	149B3206	DN2 1/2"	10



A	RB	C	D	WEIGHT	
"	MM	MM	MM	KG	
1	26/34	76	114	95	1.3
1 1/4	33/42	85	132	110.5	1.9
1 1/2	40/49	93	145	121	2.45
2	50/60	107	173.5	144	3.5
2 1/2	66/76	127	200	174.5	5.90



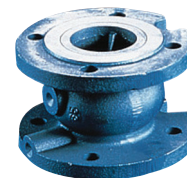
CHECK VALVES

402 Drinking Water Check Valve (Single Check/NRV) Flanged - Predates Current Regulations

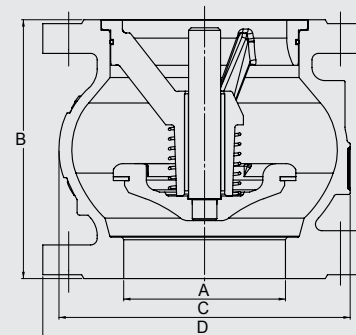


Pressure rating 16 bar (DN200, DN250, DN300 10 bar). Max temp. 100°. GJL cast iron, epoxy coated casing.
2 undrilled bosses. EPDM Seal. Stainless Steel. Type 402 Closing System DN 40 Brass, DN 50 and 65 bronze.
Other DN: Cast iron with Bronze Stem. Note: DN200, DN250 and DN300 not WRAS approved.

TYPE	PRODUCT CODE	SIZE	FLANGE
402	149B2282	DN50	PN10/16
402	149B2283	DN65	PN10/16
402	149B2284	DN80	PN10/16
402	149B2285	DN100	PN10/16
402	149B2226	DN125	PN10/16
402	149B2227	DN150	PN10/16
402	149B002849	DN200	PN16
402	149B002851	DN250	PN16
402	149B002853	DN300	PN16



A	B	C	D	WEIGHT
"	MM	MM	MM	KG
2	50	100	97	5.8
2 1/4	65	120	125	8.1
3	80	140	150	10.2
4	100	170	187	14.5
5	125	200	220	24
6	150	230	250	32
8	200	289	340	53
10	250	354	420	94
12	300	396	490	140



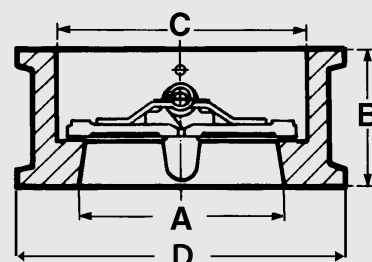
895 Double Plate (Duo Type) Non Return Valve Stainless Plates - Between Flange PN10-16

Pressure rating 16 bar. Max temp. 100°. GJL Cast Iron Epoxy Coated Body (DN50 to 150)GJS Ductile Iron Epoxy Coated (DN200 to 400). Stainless Steel Plates (304). EPDM Seal. Stainless Steel Spring.

TYPE	PRODUCT CODE	SIZE	FLANGE
895	149B3220	DN50	PN10/16
895	149B3221	DN65	PN10/16
895	149B3222	DN80	PN10/16
895	14B3223	DN100	PN10/16
895	149B3224	DN125	PN10/16
895	149B3225	DN150	PN10/16
895	149B3226	DN200	PN16



A	B	C	D	WEIGHT
"	MM	MM	MM	KG
2	50	54	60	1.2
2 1/2	65	54	73	1.8
3	80	57	89	2.9
4	100	64	114	3.9
5	125	70	141	5.8
6	150	76	168	8
8	200	95	219	14



CHECK VALVES

635E Single Plate Non Return Valve

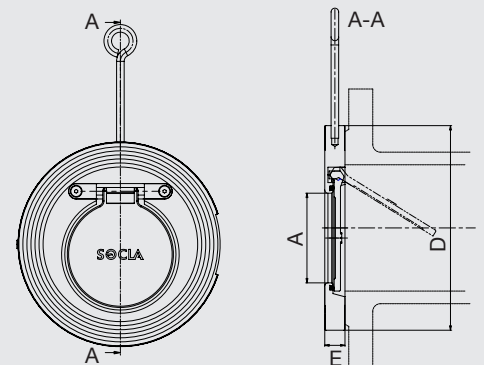
Coated Steel Plate - Between Flanges PN10

Pressure rating 16 bar (DN200 10 bar). Max temp. 110°. Steel Cataphoresis Coated Body & Plate.
EPDM Seal on Seat.

TYPE	PRODUCT CODE	SIZE	FLANGE
635E	149G3551	DN50	PN10
635E	149G3552	DN65	PN10
635E	149F021283	DN80	PN10
635E	149F021284	DN100	PN10
635E	149F021285	DN125	PN10
635E	149F021286	DN150	PN10
635E	149F021287	DN200	PN10



DN MM	A MM	D MM	E MM	WEIGHT KG
50	32	109	16	1,000
65	42	129	16	1,500
80	54	144	16	1,750
100	71	162	16	2,100
125	95	194	16	2,700
150	114	220	19	4,400
200	164	275	28	7,000



STRAINERS

Y333 Y Type Strainer - Flanged

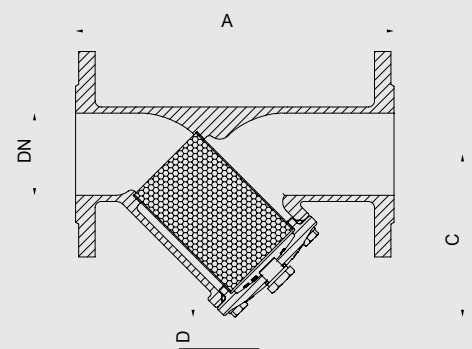
Pressure rating 16 bar (DN200 10 bar). Max temp. 100°. GJL Cast Iron Epoxy Coated Int/Ext Water Filters.
DN40 to 65 / GJS Ductile Iron Epoxy Coated Int/Ext Dn80 to 400°. Stainless Steel Strainer. Internal /
External Epoxy Coating. Delivered with Plug G 1/2" (DN40 to 150) and G 3/4" (DN200 to 400).



TYPE	PRODUCT CODE	SIZE	MICRON	FLANGE
Y333	149B3261	DN50	500	PN10/16
Y333	149B3262	DN65	800	PN10/16
Y333	149B3263	DN80	1250	PN10/16
Y333	149B3264	DN100	1250	PN10/16
Y333	149B3265	DN125	1250	PN10/16
Y333	149B3266	DN150	1250	PN10/16
Y333	149B23119	DN200	1250	PN16



DN "	MM	A MM	C MM	D MM	MESH MM	WEIGHT KG
2	50	230	145	50	0,50	8,5
2 1/2	65	290	137	65	0,80	9.8
3	80	310	159	75	1,25	13,5
4	100	350	187	90	1,25	18
5	125	400	249	125	1,25	27,5
6	150	480	301	170	1,25	43
8	200	600	403	220	1,60	112



INDUSTRIAL & COMMERCIAL WATER PRODUCTS

PRESSURE REDUCING VALVES

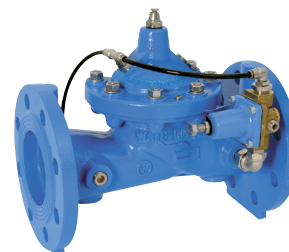
PR500 Pilot Operated Pressure Reducing Valve

Flanged Standard Range, Other Flange Drillings Available

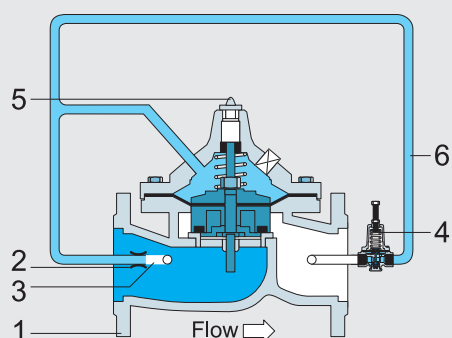
Pressure reducing valve pilot operated. Designed to reduce a higher upstream pressure to a constant lower downstream pressure. Easy to install and adjustable outlet pressure. Ductil Iron Body GGG40. Internal and External Epoxy Finish. Diaphragm: NBR. Max working temperature: + 70°C. Nominal Pressure: PN 16, 25. Adjustment range of pilot: Standard: 1,4 - 12 bar. On Request: 0,1 - 2 Bar, 7 - 21 Bar. Fluid: Water.



TYPE	PRODUCT CODE	SIZE	FLANGE
PR500	500050549	DN50	PN16
PR500	500065549	DN65	PN16
PR500	500080549	DN80	PN16
PR500	500100549	DN100	PN16
PR500	500125549	DN125	PN16
PR500	500150549	DN150	PN16
PR500	500200549	DN200	PN10
PR500	500250549	DN250	PN10

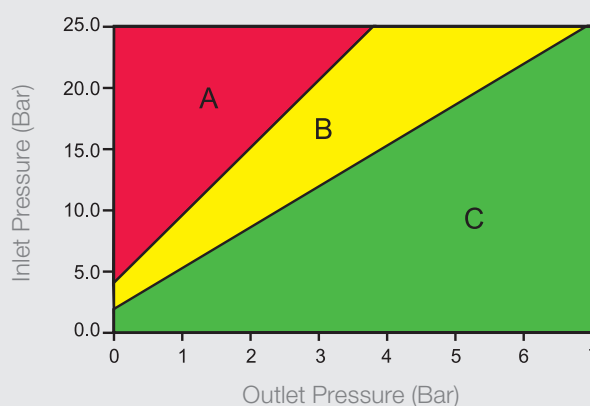


TECHNICAL NOTE



PR500

- 1. Body & Cover
- 2. Fixed Orifice
- 3. Flow Strainer
- 4. Pilot Valve
- 5. Air Vent
- 6. Flexible Tubing



Example: 15 bar upstream, 1 bar downstream = cavitation, unauthorised
10 bar upstream, 4 bar downstream = no cavitation, authorized

ISOLATION/BUTTERFLY VALVES

Sylax Wafer Type Butterfly Valve Cast Iron Body 316 Stainless Disc EPDM Liner

Designed in accordance with EN593, EN558, Class 20.



TYPE	PRODUCT CODE	SIZE	OPERATIONAL TYPE
Skylax Wafer	149G011266	DN50	Lever Handle
Skylax Wafer	149G011287	DN65	Lever Handle
Skylax Wafer	149G011297	DN80	Lever Handle
Skylax Wafer	149G011316	DN100	Lever Handle
Skylax Wafer	149G011334	DN125	Lever Handle
Skylax Wafer	149G059260	DN150	Lever Handle
Skylax Wafer	149G016281	DN200	Lever Handle
Skylax Wafer	149G080130	DN250	Manual Gearbox
Skylax Wafer	149G079120	DN300	Manual Gearbox

Sizes available up to DN1200. Other trim and liners available.

**Sylax Lug Type Butterfly Valve Cast Iron (Dn50-15) or Ductile Iron (DN200-300)**

All come with 316 Stainless Steel Disc EPDM Liner

Designed in accordance with EN593, EN558, Class 20.



TYPE	PRODUCT CODE	SIZE	OPERATIONAL TYPE
Sylax Lug	149G028008	DN50	Lever Handle
Sylax Lug	149G011686	DN65	Lever Handle
Sylax Lug	149G011691	DN80	Lever Handle
Sylax Lug	149G011696	DN100	Lever Handle
Sylax Lug	149G028007	DN125	Lever Handle
Sylax Lug	149G028006	DN150	Lever Handle
Sylax Lug	149G42492	DN200	Lever Handle
Sylax Lug	149G079473	DN250	Manual Gearbox
Sylax Lug	149G079472	DN300	Manual Gearbox

Sizes available up to DN600. Flanged valves also available. Other trim and liners available.



INDUSTRIAL & COMMERCIAL GAS PRODUCTS

The Powerseat® electro-hydraulic gas shut-off valve allows the control and safety shut-off of low pressure combustible gases in pipes from 40mm to 250mm, whilst focusing on being energy efficient and environmentally friendly. The Powerseat Eco shut-off valve is kept open by a hydraulic pump where hydraulic fluid is forced into a cylinder driving the valve open.



GAS SAFETY VALVES

Powerseat® Eco Electro Hydraulic Gas Safety Shut Off Valve

The Powerseat® electro-hydraulic gas shut-off valve allows the control and safety shut-off of low pressure combustible gases in pipes from 40mm to 250mm, whilst focusing on being energy efficient and environmentally friendly. The Powerseat Eco shut-off valve is kept open by a hydraulic pump where hydraulic fluid is forced into a cylinder driving the valve open.

New and improved features

- LED to display “ON” and “Manual Re-set Required” status
- Increased environmental protection to IP56 equivalent
- Manual re-set switch incorporated on all versions
- IP67 equivalent rating option available. (increased cost)
- Screwless quick connections for installation of electrics
- Volt free contacts for BMS connection

Power consumption

- Uses just 6% of the power of a comparable magnetic solenoid valve
- Reduced electricity running costs: Uses just a fraction of the energy required by permanently energized magnetic solenoid valves
- Improved energy efficiency from previous model, reduced from 26VA to 10VA

Environmental factors

- Around 768kg less carbon emissions than with a comparable magnetic solenoid valve
- Saves equivalent carbon emissions of 3,758 miles in a car.

Quality

- 3 year warranty as standard
- UK manufactured
- EC certified
- IP54 standard:
 - Dust protected - no harmful deposit
 - Splash protected - from any direction
- Certified to EN161, Class A Group 2 construction

Powerseat® Eco Electro Hydraulic Gas Safety Shut Off Valve**Aluminium Body - Screwed Connections**

TYPE	PRODUCT CODE	SIZE	POWER	CONNECTION
Powerseat® Eco	PE6683110V	1 1/2" BSP	110V Range	Screwed
Powerseat® Eco	PE6684110V	2" BSP	110V Range	Screwed
Powerseat® Eco	PE6685110V	2 1/2" BSP	110V Range	Screwed
Powerseat® Eco	PE6686110V	3" BSP	110V Range	Screwed
Powerseat® Eco	PE6683230V	1, 1/2" BSP	230V Range	Screwed
Powerseat® Eco	PE6684230V	2" BSP	230V Range	Screwed
Powerseat® Eco	PE6685230V	2 1/2" BSP	230V Range	Screwed
Powerseat® Eco	PE6686230V	3" BSP	230V Range	Screwed

Powerseat® Eco Electro Hydraulic Gas Safety Shut Off Valve**Cast iron Body - Flanged Connections**

TYPE	PRODUCT CODE	SIZE	POWER	CONNECTION
Powerseat® Eco	PE6685FL4110V	65	110V Range	Flanged
Powerseat® Eco	PE6686FL4110V	80	110V Range	Flanged
Powerseat® Eco	PE6687FL4110V	100	110V Range	Flanged
Powerseat® Eco	PE6689FL4110V	150	110V Range	Flanged
Powerseat® Eco	PE6658FL4230V	65	230V Range	Flanged
Powerseat® Eco	PE6686FL4230V	80	230V Range	Flanged
Powerseat® Eco	PE6687FL4230V	100	230V Range	Flanged
Powerseat® Eco	PE6689FL4230V	150	230V Range	Flanged

Powerseat® Electro Hydraulic Gas Safety Shut Off Valve

Cast iron Body - Flanged Connections. 8" & 10" available in Powerseat® specifications.

TYPE	PRODUCT CODE	SIZE	POWER	CONNECTION
Powerseat®	BC66810FL4110V	200	110V Range	Flanged
Powerseat®	BC66811FL4110V	250	110V Range	Flanged
Powerseat®	BC66810FL4230V	200	230V Range	Flanged
Powerseat®	BC66811FL4230V	250	230V Range	Flanged



WATER QUALITY PRODUCTS

Since its founding in 1874, Watts has provided innovative solutions to improve comfort, safety, and quality of life for people around the world through our expertise in a wide range of water technologies. With over 50 years of water treatment and conditioning experience, Watts is known as a worldwide leader in the water quality industry. With a primary focus on commercial and residential markets, Watts specializes in Point-of-Use (POU) and Point-of-Entry (POE) water quality applications. Today, Watts' industry presence extends beyond North America to include Europe, Africa, and Asia.

WATER CONDITIONING

OneFlow® Anti Scale System

Connection Sizes: 1/2" and 3/4" (15 and 20mm) Flow Rates: From 0.5 gpm to 4 gpm (1.9 lpm to 15.2 lpm)

The OneFlow® Anti-Scale System provides protection from scale formation on internal and external plumbing surfaces.

The OneFlow® system is a single cartridge-based system that may be installed on a cold water line prior to a water-using device (water heater, hot-beverage system, appliance, steamer etc.) that requires protection from the ill effects of hard water.

OneFlow® prevents scale by transforming dissolved hardness minerals into harmless, inactive microscopic crystal particles. These crystals stay suspended in the water and are passed to a drain, thereby having a greatly reduced ability to react negatively with plumbing surfaces, as opposed to dissolved hardness minerals.

This environmentally-friendly solution eliminates sodium discharge by using Template Assisted Crystallization (TAC) technology to transform dissolved hardness minerals into harmless, inactive microscopic crystal particles. These particles make their way through plumbing systems without latching on to pipes, inside fixtures, valves, or heating elements.

The system requires very little maintenance, no backwashing, no salt and no electricity. Typical hardness problems, especially build-up of scale in pipes, water heaters, boilers and on fixtures are no longer a concern.

OneFlow® is not a water softener. It does not add chemicals. It is a scale prevention device with proven third party laboratory test data and years of successful Food Service and Commercial applications. OneFlow® is the intelligent scale solution and is a great alternative to water softening (ion exchange) or scale sequestering devices.

Features

- Chemical free scale prevention and protection - converts hardness minerals to harmless, inactive microscopic crystals making OneFlow® an effective alternative technology to a water softener for the prevention of scale due to water hardness
- Virtually maintenance free - No salt bags or other chemicals to constantly add or maintain
- No control valve, no electricity and no wastewater
- Uses environmentally friendly "green" technology
- Improves efficiency of all water appliances whether heating the water or not
- Simple sizing & installation – all you need to know is pipe size and flow rate
- Perfect system for restaurants, cafeterias and coffee shops where multiple or single equipment protection is desired for longer equipment life and reduced energy consumption
- Inlet ball valve for easy isolation shutoff and filter changes
- OneFlow® does not remove the essential minerals in water
- OneFlow® cartridge-based systems are easily maintained; change the cartridge once per year

OneFlow® Anti Scale System

TYPE	PRODUCT CODE	MAXIMUM FLOW RATE	CONNECTION SIZES
Oneflow® 110	WWQ-OF110-1	1 GPM	1/2" (15mm) FNPT
Oneflow® 120	WWQ-OF120-2	2 GPM	1/2" (15mm) FNPT
Oneflow® 140	WWQ-OF140-4	4 GPM	3/4" (20mm) FNPT



WATER CONDITIONING

Replacement Filters for OneFlow® Anti Scale System

Cartridge should be replaced every 12 months.

TYPE	PRODUCT CODE	REPLACEMENT FILTER FOR
Oneflow® Filter 110-1	WWQ-OF110RM	WWQ-OF110-1
Oneflow® Filter 120-2	WWQ-OF120RM	WWQ-OF120-2
Oneflow® Filter 140-4	WWQ-OF140RM	WWQ-OF140-4



WATER QUALITY PRODUCTS

FILTRATION

BBH150 Big Bubba® Filtration System

With optional activated carbon cartridge to remove Chlorine, bad tastes, foul odours and sediment

The Big Bubba® Commercial filtration cartridge system provides a unique rugged, non metallic and easy to use solution.

The features include:

Rugged Construction

Filter housings are made of rugged, glass-reinforced polypropylene so they will not chip, rust or dent. And because all wetted surfaces are non-metallic, they are ideal when chemical compatibility is an issue and for sea water applications.

Economical

Filters are an economical replacement for stainless steel filtration equipment because of their non-metallic construction and today's high cost of stainless steel.

E-Z Change-Out

Cartridge replacement is easy as 1-2-3:

1. Remove swing bolts.
2. Remove lid.
3. Rotate cartridge 1/4 turn and pull-up.

Low Pressure Drop

Big Bubba® Cartridge Filters housings are designed to minimize pressure drop, by using 2" pipe fittings and large diameter center tubes.

Applications

Big Bubba® Cartridge Filters are ideal for a wide range of applications, including:

- Whole house filtration
- Commercial filtration
- Industrial filtration
- Pre-filtration for reverse osmosis equipment
- Community water systems
- Sea water applications due to their non-corrosive construction
- Replacement for bag filters more filter area
- Replacement for multiple cartridge filters for greater convenience
- Water for livestock and poultry

Big Bubba Housing 2"

TYPE	PRODUCT CODE	PIPE FITTING	OVERALL HEIGHT
Big Bubba® Housing	WWQ-BBH-150	2"	40"



Replacement Pleated Cartridge for Big Bubba Housing 2"

TYPE	PRODUCT CODE	MEDIA TYPE	MICRON RATING
Big Bubba® P1A	WWQ-BBC-150-P14	PP	1 Absolute
Big Bubba® P5	WWQ-BBC-150-P5	PP	5
Big Bubba® P20	WWQ-BBC-150-P20	PE	20



Carbon Filter for Big Bubba Housing 2"

TYPE	PRODUCT CODE	MAX FLOW	CAPACITY	CHLORINE REDUCTION
Big Bubba® Carbon	WWQ-BBC-150ACP	15 GPM	140,000 Gals.	90%



ULTRAVIOLET

Watts SmartStream™ B Series UV Systems

The Watts SmartStream™ B Series of UV systems incorporate revolutionary new concepts into a time tested disinfection method

Ultraviolet (UV) light is a water treatment disinfection technology that is highly effective in killing and inactivating many species of disease-causing micro-organisms. Ultraviolet light disinfection is effective on bacteria and chlorine-resistant protozoa like Giardia and Cryptosporidium, and, can also be effective for most viruses.

UV disinfection is suitable for a number of residential and commercial applications such as:

- Agriculture: Livestock, Irrigation, Dairy
- Domestic drinking water in residential use
- Domestic drinking water in municipal use
- Food and Beverage Industry
- Breweries, Wineries
- Secondary treatment of municipal wastewater

All B series systems come standard with wireless radio frequency SmartKey™ technology, so that the UV lamps are properly identified. By properly identifying the lamp, the controller will initiate the proper start up sequence for that specific lamp. The hours of operation are also logged directly to the lamp chip, so a lamp past its life span cannot be accidentally put back into service.

All B series systems also come standard with automatic lamp dimming. During periods of no flow the controller automatically powers the lamp down to 50% intensity. This feature prevents the generation of hot water by the system during periods of no flow and reduces power consumption by up to 46%.

Applications

- Agriculture
- Aquaculture
- Breweries
- Bottling Plants
- Cooling Towers
- Dairies
- Electronics/
Semiconductors
- Food and Beverage
- Hospitals
- Laboratories
- Pharmaceuticals
- Potable Drinking Water
- Residential
- Swimming Pools

Features

SmartKey™ Technology

- Through Radio Frequency Identification (RFID) the controller identifies the lamps to ensure that correct replacement UV lamps are being used and that the lamp is energized properly by the controller
- The controller writes the number of days the lamp has been in service to the lamp's RFID tag so the lamp maintains a record of service
- Automatic lamp dimming reduces UV System power consumption by up to 46%
- Automatic lamp shutoff prevents accidental exposure to UVC light
- Operating hours are logged onto a microchip located within the UV lamp to prevent old lamps from exceeding their life span
- High output and high efficiency 9000 hour rated lamps
- Three different controller options available
- UV Sensor available on select models (optional)
- Universal power input 100v-240v 50/60Hz
- NPT and BSP-Tapered thread options
- Inlet and outlet connections are internally and externally threaded for convenience (12 GPM systems and larger)
- 316 highly polished stainless steel reactor chambers
- Reactor Chambers are designed using Computational Fluid Dynamics delivering a 10%-15% better UV dose
- Audible and visual alarm to indicate lamp failure
- Alarm dry contact alarm circuit and 4-20mA output on select models (optional)
- Uses environmentally friendly "green" technology
- Simple sizing & installation

SmartStream UV System with B Controller

SmartStream UV Systems are manufactured from 304 stainless steel and have an audible and visual lamp failure alarm. They are durable and well constructed, yet economically priced.

TYPE	PRODUCT CODE	GPM	BSP THREAD	POWER
SmartStream B1	WWQ-WB001ABCX	1 GPM	3/8" BSP Thread	220V
SmartStream B2	WWQ-WB002ABCX	2 GPM	3/8" BSP Thread	220V
SmartStream B3	WWQ-WB006ADCX	6 GPM	3/4" BSP Thread	220V
SmartStream B4	WWQ-WB008 DBX	8 GPM	3/4" BSP Thread	220V
SmartStream B5	WWQ-BB012 BFCX	12 GPM	3/4" F x 1" M	220V



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