

Commercial water saving ablution valve specialists since 1967

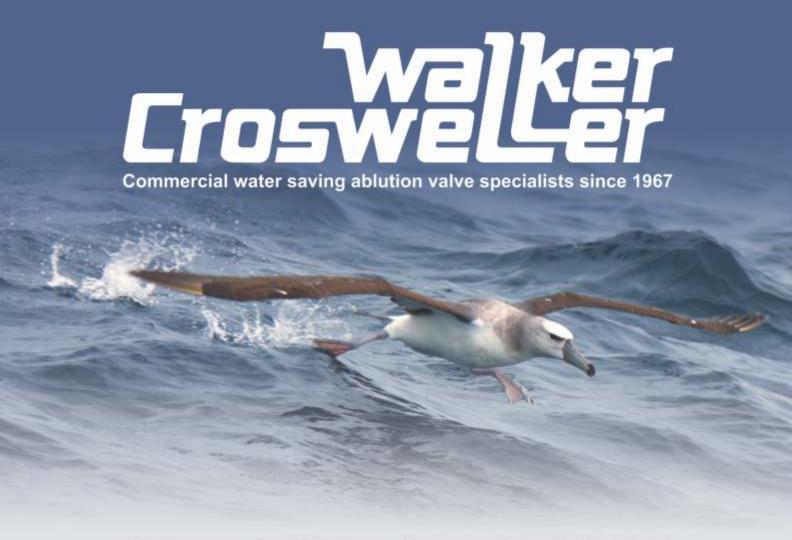






BROEN-LAB





Welcome to Walker Crosweller (Pty) Ltd

Walker Crosweller is a wholly South African owned company and was established in 1967. We provide a wealth of knowledge and experience in all fields of commercial water saving ablution systems.

The Walcro range of toilet and urinal flush valves, metering and demand taps, shower systems and shower roses are quality manufactured here in South Africa with 'water saving' on the top of the priority list with SANS certification where applicable.

The Walcro products are purpose built for South African conditions in terms of vandal resistance, cost and ease of maintenance i.e. service cartridges for taps and valves that are quick and easy to replace, and we carry a full range of spares.





The metering valves are self closing, meaning that after use it will automatically shut off, very hygienic as the user does not have to touch the tap again.

We are also importers of quality products such as the RADA range of thermostatic mixing valves for anti-scald safety, blended water systems, the O.R. range of commercial water system management valves for pressure control, filtering and directional control plus a range of BROEN-LAB emergency body and eye shower systems as well as the BROEN-LAB range of laboratory taps and fittings.

Our head office is in Randburg with offices in Cape Town, Durban, and agents in Bloemfontein, Port Elizabeth and East London. All our products are sold through reputable plumbing retailers throughout the country.

BROEN-LAB





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Exposed WC specifications - Standard models

Walcro 106 Walcro 550 Model Toilet flushing valves **SANS 1240**

Inlet Ø20mm 100kPa - 600kPa

Inlet Ø25mm 30kPa - 600kPa



Walcro 104

Inlet Ø25mm 30kPa - 600kPa



DZR Brass Made in South Africa

Code: Walcro 550B Ø20mm BSP, exposed, lever operated, chrome, toilet flushing valve with back entry flush pipe.



Code: Walcro 106B Ø25mm BSP, exposed, lever operated, chrome, toilet flushing valve with back entry flush pipe.



Code: Walcro 104B Ø25mm BSP, exposed, lever operated, chrome, toilet flushing valve with isolating check valve, telescopic adjustment and back entry flush pipe.





Code: Walcro 550T Ø20mm BSP, exposed, lever operated, chrome, toilet flushing valve with top entry flush pipe.



Code: Walcro 106T Ø25mm BSP, exposed, lever operated, chrome, toilet flushing valve with top entry flush pipe.

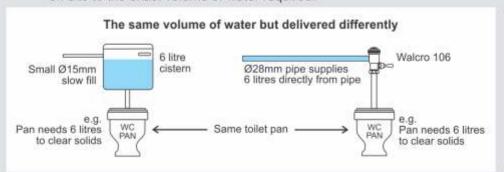


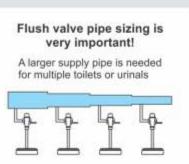
Code: Walcro 104T Ø25mm BSP, exposed, lever operated, chrome, toilet flushing valve with isolating check valve, telescopic adjustment and top entry flush pipe.

Flush valve benefits are

- Multiple "instantaneous" flushing no refill time and drainage gets flushed correctly.
 Suitable for high volume public ablutions.
 Vandal resistant DZR Brass not plastic or ceramic.

For 'water saving design' it would be best to choose a toilet pan or urinal bowl that requires less water to flush - this would reduce the required volume per pan or bowl and the flush valve can then be adjusted on site to the exact volume of water required.

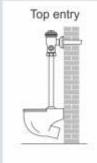






Exposed WC specifications -

Extended lever models for users with limited hand use Walcro 104H Walcro 550H Model Toilet flushing First choice valves Note: **SANS 1240** Can only be used for right **DZR Brass** hand activation Made in South Africa The valve can alternate for the left or right hand side use Inlet Ø25mm Inlet Ø20mm 100kPa - 600kPa 30kPa - 600kPa Back entry Code: Walcro 104HB Code: Walcro 550HB Ø25mm BSP, exposed, extended lever operated, Ø20mm BSP, exposed, extended lever operated, chrome, toilet flushing valve, isolating check valve, chrome, toilet flushing valve with back entry flush





telescopic adjustment and back entry flush pipe,

suitable for disability type use.

Code: Walcro 104HT

Ø25mm BSP, exposed, extended lever operated, chrome, toilet flushing valve, isolating check valve, telescopic adjustment and top entry flush pipe, suitable for disability type use.



Code: Walcro 550HT

Ø20mm BSP, exposed, extended lever operated, chrome, toilet flushing valve with top entry flush pipe. Suitable for disability use.

NB: For right hand activation only.

pipe. Suitable for disability use.

Walcro squat pan toilet flushing valve for Eastern applications

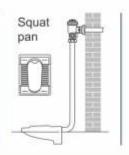
The Eastern type flushing valve models feature the same exposed valve, but have an extended straight vertical chrome flush pipe with additional concealed elbow and horizontal flush pipe for rear type floor entry in squat pan.



Specifications for squat pan exposed valve

Walcro 106SP: Ø25mm BSP, exposed, lever operated, chrome, DZR brass squat pan flushing valve with extended chrome pipe and floor / back entry connections.

30kPa - 600kPa





Concealed / Duct WC specifications - Standard models

Model

Toilet flushing valves

SANS 1240

DZR Brass

Made in South Africa

Walcro 103



Valve hidden in duct

Inlet Ø20mm 100kPa - 600kPa

Walcro 106



Valve hidden in duct

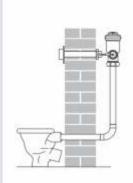
Inlet Ø25mm 30kPa - 600kPa

Walcro 104



Valve hidden in duct

Inlet Ø25mm 30kPa - 600kPa



Only XP button visible inside

toilet cubicle

Code: Walcro 103LCXP Ø20mm BSP, concealed, toilet flushing valve with XP button and concealed flush pipes.



Code: Walcro 106CXP

Ø25mm BSP, concealed, toilet flushing valve with XP button and concealed flush pipes.

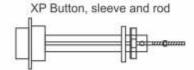


Code: Walcro 104CXP

Ø25mm BSP, concealed, toilet flushing valve with XP button, isolating check valve, telescopic adjustment and concealed

flush pipe.

Supplied with valve



Concealed flush pipes



Rubber bung



Concealed elbow





Only VR button visible inside toilet cubicle

Code: Walcro 103LC Ø20mm BSP, concealed, toilet flushing valve with VR button and concealed flush pipes.



Code: Walcro 106C

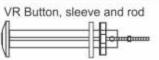
Ø25mm BSP, concealed, toilet flushing valve with VR button and concealed flush pipes.



Code: Walcro 104C

Ø25mm BSP, concealed, toilet flushing valve with VR button, isolating check valve, telescopic adjustment and concealed flush pipe.

Supplied with valve



Concealed flush pipes



Concealed elbow Rubber bung





Concealed / Duct WC specifications Special models for stainless steel prison type WC pans

Walcro 103 Walcro 104 Walcro 106 Model Toilet flushing valves **SANS 1240** DZR Brass Made in South Africa Valve hidden in duct Valve hidden in duct Valve hidden in duct Inlet Ø20mm Inlet Ø25mm Inlet Ø25mm 100kPa - 600kPa 60kPa - 600kPa 60kPa - 600kPa Only VR Only VR Only VR button button button visible inside visible inside visible inside toilet cubicle toilet cubicle toilet cubicle Code: Walcro 103LC-SS Code: Walcro 106C-SS Code: Walcro 104C-SS Ø20mm BSP, concealed, toilet Ø25mm BSP, concealed, toilet Ø25mm BSP, concealed, toilet flushing valve with S.S. WC flushing valve with S.S. WC flushing valve with S.S. WC pan pan adaptor, VR button and pan adaptor, VR button and adaptor, VR button, isolating concealed flush pipe for S.S. concealed flush pipe for S.S. check valve, telescopic pan. adjustment and concealed flush pan. pipe for S.S. pan. VR Button, sleeve and rod Concealed flush pipe Concealed elbow S.S. Pan adaptor Supplied with valve

Please note the differences between the prison stainless steel pan and the standard stainless steel pan



Walcro specialises in high risk / vandal resistant prison and police facility valves



Built-in box model toilet flushing valve specifications

Model

Toilet flushing valves

SANS 1240

DZR Brass

Made in South Africa

Walcro 107CHP



Valve in built-in box

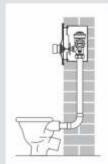
Inlet Ø20mm 100kPa - 600kPa

Walcro 107CLP



Valve in built-in box

Inlet Ø25mm 30kPa - 600kPa



Code: Walcro 107CHP

Ø20mm BSP with union, built-in box, toilet flushing valve with stainless steel cover plate, XP button and concealed flush pipes. Code: Walcro 107CLP

Ø25mm BSP with union, built-in box, toilet flushing valve with stainless steel cover plate, XP button and concealed flush pipes.

Supplied with built-in box



Concealed flush pipes

Concealed elbow

Rubber bung



Commercial water system management valve range

See pages 31 to 34 for a full comprehensive range, sizes and specification guide lines





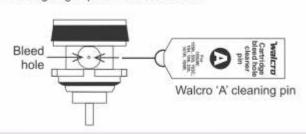


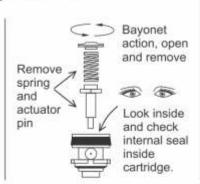


Easy to service toilet flushing valves

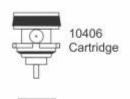
Simple and fast cartridge servicing illustration

The bleed hole is the most important check - it must be open. Clean the hole using the Walcro 'A' cleaning pin or a tiny needle e.g. a gas/paraffin stove cleaner.





Replacing service cartridges





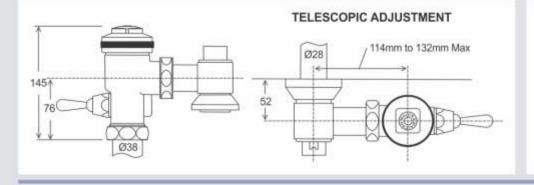


Selected Walcro WC illustrations and dimensions

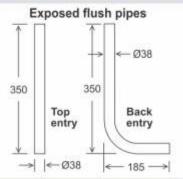
Walcro 550 Exposed Walcro 550 Exposed flush pipes Top entry Back entry Ø28 → ← 170 →



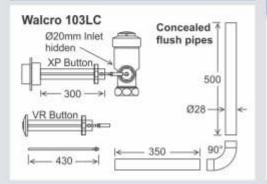
Walcro 104 Exposed



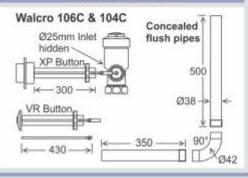
Walcro 106 & 104



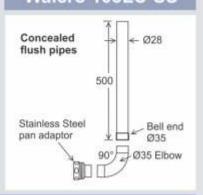
Walcro 103LC Concealed



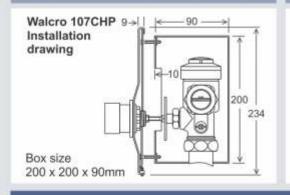
Walcro 106C and 104C Concealed



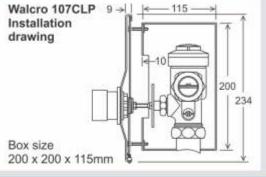
Walcro 103LC-SS



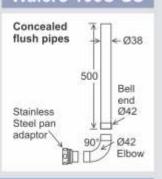
Walcro 107CHP Built-in box



Walcro 107CLP Built-in box



Walcro 104C-SS Walcro 106C-SS



WEILTO® Urinal flushing valves Exposed, built-in and concealed models





Hygienic urinal bowl flushing with minimal water and maximum savings

e.g.

Flatback: Edge to edge coverage using 0,3 Litre / flush* Lavatera: Edge to edge coverage using 0,5 Litre / flush*

*Test conducted with an independent observer at 3 bar.

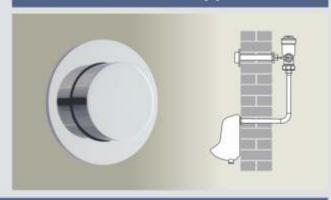
Exposed application



Built-in application



Concealed duct application

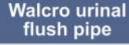




Urinal flushing valves

Exposed UR Specifications

Walcro 330UR Walcro 550URV Walcro 103LUR Model Urinal flushing valves Special high **SANS 1240** volume model for stainless **DZR Brass** steel wall urinals Made in South Africa Made on order Inlet Ø15mm Inlet Ø20mm Inlet Ø20mm 100kPa - 600kPa 30kPa - 600kPa 100kPa - 600kPa Code: Walcro 103LUR Code: Walcro 330UR Code: Walcro 550URV Ø20mm BSP, exposed,lever Ø15mm BSP, exposed, chrome, Ø20mm BSP, exposed, lever operated, chrome, urinal flushing urinal flushing valve with flow operated, chrome, urinal flushing control, strainer and no-hold valve with flow control, strainer valve for stainless steel wall. and no-hold feature for single feature for single bowl urinal. bowl urinal. Note 1: (Not suitable for large siphonic The 550URV has been modified urinals) for a special application.



Code: Walcro UR15TP

Ø15mm offset, exposed, chrome flush pipe for the 330UR and 103LUR.

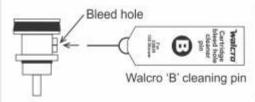


Easy to service urinal flushing valves

Simple and fast cartridge servicing illustration

The bleed hole is the most important check - it must be open.

Clean the hole using the Walcro 'B' cleaning pin or a tiny needle e.g. a gas/paraffin stove cleaner.



Flush out valve after cartridge and strainer is removed before 1010103 assembly.

Note 2:

Depending on the stainless steel urinal wall length, multiple 550URV valves may be required.

> Gently lift out internal plastic cartridge.

Lift out circlip and strainer simultaneously with thumb.



Water saving:

As water saving specialists, Walcro recommends using small urinal bowls which use less water to flush.





Urinal flushing valves

Built-in and Concealed UR Specifications

Model

Walcro 155UW with wall plate

Walcro 155UWS with sleeve

Urinal flushing valves

DZR Brass

No hold open feature

Made in South Africa



Valve in wall

Inlet Ø15mm 30kPa - 600kPa



Valve in wall

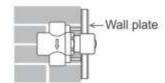
Inlet Ø15mm 30kPa - 600kPa

Illustration of 155UW



Code: Walcro 155UW

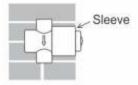
Ø15mm BSP, built-in, urinal flushing valve with internal flow control, strainer, no-hold feature and chrome wall plate for single bowl urinal.



Code: Walcro 155UWS

Ø15mm BSP, built-in sleeve, urinal flushing valve with internal flow control, strainer and no-hold feature for single bowl urinal.

High risk, vandal resistant applications.



Model

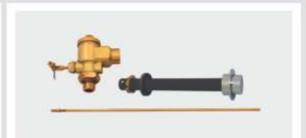
Urinal flushing valves

SANS 1240

DZR Brass

Made in South Africa

Walcro 103LURCXP



Valve hidden in duct

Inlet Ø20mm

Walcro 103LURC



Valve hidden in duct

Inlet Ø20mm

30kPa - 600kPa

30kPa - 600kPa

Code: Walcro 103LURC

Ø20mm BSP, concealed, urinal flushing valve with internal strainer and VR button.

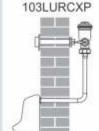
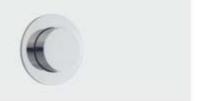


Illustration of

Code: Walcro 103LURCXP

Ø20mm BSP, concealed, urinal flushing valve with internal strainer and XP button.







Urinal flushing valves

Model

Walcro 107CHP-UR Built-in box urinal flushing valve

Urinal flushing valves

SANS 1240

DZR Brass

Made in South Africa



Valve in built-in box

Inlet Ø20mm 100kPa - 600kPa

Code: Walcro 107CHP-UR

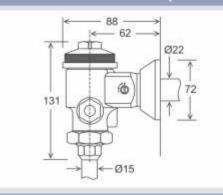
BSP with union, built-in box, urinal flushing valve with stainless steel cover plate and XP button.

Made on order

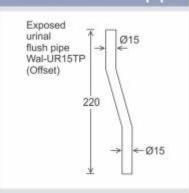
Selected Walcro UR illustrations and dimensions

Walcro 330UR

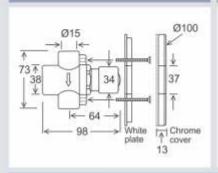
Walcro 103LUR Exposed



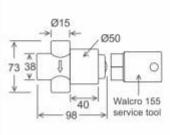
Walcro UR Flush pipe



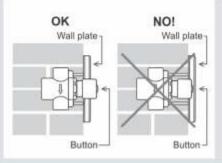
Walcro 155UW



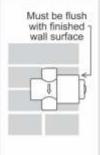
Walcro 155UWS sleeve



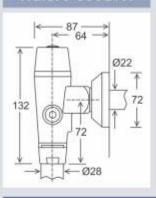
Walcro 155UW Button depth



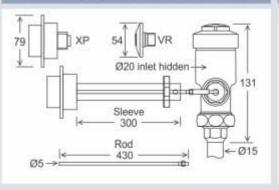
155UWS sleeve



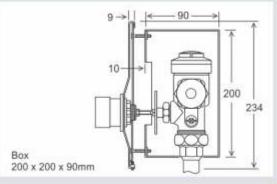
Walcro 550URV



Walcro 103LURCXP & 103LURC



Walcro 107CHP-UR



Walcro Water saving metering taps for commercial and public ablutions

Water saving metering taps for hand wash applications



Metering principle - self closing

- Water saving.
 Self closing.
 Cannot be left running unattended.
 Adjustable flow control.
 Enhanced hygiene no touch closing.
 Perfectly matched for Rada thermostatic mixing valve integration for the ultimate in control, anti-scald safety and water saving.

Metering taps for hand wash applications

Walcro 420 Walcro 424 Walcro 100R Model Metering taps Special low volume model SANS 1808-9 Made on order **DZR Brass** Made in South Africa Inlet Ø15mm Inlet Ø15mm Inlet Ø15mm 30kPa - 600kPa 30kPa - 600kPa 30kPa - 600kPa Code: Walcro 420 Code: Walcro 424 Code: Walcro 100R Ø15mm BSP, pillar, chrome Ø15mm BSP, pillar, chrome Ø15mm BSP, pillar, chrome metering basin tap with internal metering basin tap with internal metering basin tap with internal flow control, strainer, no-hold flow control, strainer, no-hold flow control, strainer, no-hold feature and water saving shut-off. feature and extra water saving feature and water saving shut-off. shut-off.





Metering valve

Hands free ablution washing in toilet ablution blocks

Model

Walcro 155K

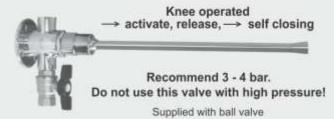
No-touch metering basin valve - knee operated

Walcro SSP/15 High neck basin spout



DZR Brass

Made in South Africa



Inlet Ø15mm 50kPa - 500kPa



Inlet Ø15mm

NB: This is NOT a process valve for repeated use!

Code: Walcro 155K

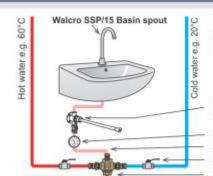
Ø15mm BSP, knee operated, wall mounted, chrome metering valve with internal flow control and ball valve for no-touch water saving hand washing.

Code: Walcro SSP/15: Ø15mm BSP, chrome, high neck basin spout for easy hand washing and use with Walcro 155K.

Additional information



High neck spout for easy hand and arm no-fouch washing with the Walcro 155K



Both hot and cold water supplies must be pressure balanced

Walcro 155K No-touch knee operated metering basin valve with ball valve

Thermometer Blended water 42°C Isolating valve

Rada Meynell 15/3 Thermostatic mixing valve

Rada Meynell 15/3 Thermostatic mixing valve

INDIVIDUAL / GROUP



The Rada Meynell 15/3 thermostatic mixing valve is the perfect solution for 'under basin' type installations to provide a high level of safe anti-scald protection for hand washing applications. The 15/3 is housed in a plastic outer casing for tamper proof temperature adjustment.

Specification

Rada Meynell 15/3: 1/2" thermostatic mixing valve. Supplied complete with white plastic outer casing and integral check valves and strainers.

Rada 222 DK-LF Thermostatic mixing valve

GROUP

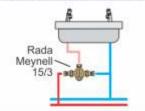


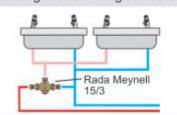
The Rada 222 DK-LF thermostatic mixing valve with 'Radatherm' technology is ideal for anti-scald small group hand basin applications. The valve features a pre-set maximum temperature safety stop concealed in a locked temperature shroud to prevent unwanted tampering.

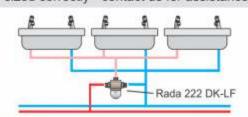
Specification

Rada 222 DK-LF: 3/4" Thermostatic mixing valve incorporating 'Radatherm' cartridge, complete with integral check valves and strainers.

Blended water systems with Rada thermostatic mixing valves are used for anti-scald safety and to limit hot water wastage. The preferred hot water temperature is set at the Rada valve thus ensuring safe and usable water temperature delivery for rapid processing. Rada mixing valves should be sized correctly - contact us for assistance.









Demand taps

Water saving demand taps for 'hold open' applications



Demand principle - hold open

- Water saving.
- · Self closing, requires manual button hold down to release water.
- · Adjustable flow control.

Model

Walcro 100D

Walcro 101D

Walcro 111D

Demand taps

SANS 1808-66

DZR Brass

Made in South Africa



Inlet Ø15mm 30kPa - 600kPa



Inlet Ø15mm 30kPa - 600kPa



Inlet Ø15mm 30kPa - 600kPa

Code: Walcro 100D Ø15mm BSP, chrome, pillar demand tap with internal flow control.

> Not recommended for hand washing as the tap must be continually held open with one hand.

Code: Walcro 101D Ø15mm BSP, chrome, bib / wall

control.

demand tap with internal flow



Code: Walcro 111D Ø15mm BSP, chrome in-line demand stopcock with internal flow control.

Water flow

- Isolate water supply and remove head part from valve or tap body.
- Move flow control sleeve up to open the hole and increase the flow or down to close the flow hole to decrease the flow.



adjustment

Walcro 109 Drinking fountain

Demand taps

Model

SANS 1808-16

DZR Brass

Made in South Africa



Inlet Ø15mm 30kPa - 600kPa

Code: Walcro 109 Ø15mm BSP, chrome, pillar drinking fountain tap with adjustable nozzle flow, hygienic protective plate, internal strainer and easy clean design.

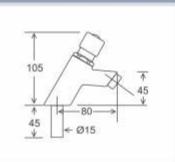




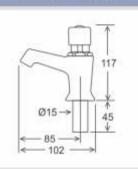
Metering and demand taps

Selected Walcro metering and demand illustrations and dimensions

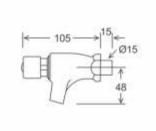




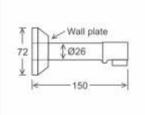
Walcro 100R



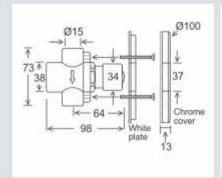
Walcro 101R



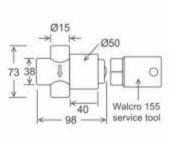
Walcro GWS wall spout



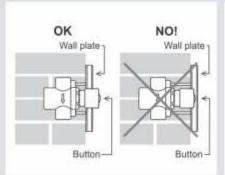
Walcro 155UW Walcro 155



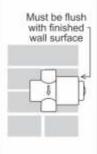
Walcro 155UWS Walcro 155S



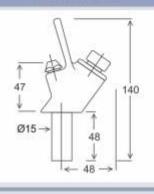
Walcro 155UW & 155 Button depth



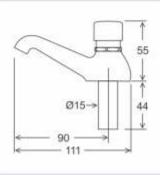
155UWS 155S



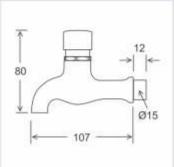
Walcro 109



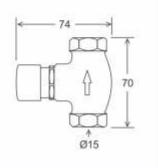
Walcro 100D



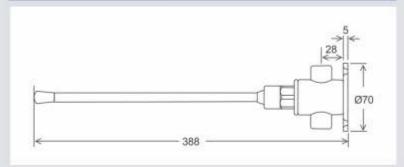
Walcro 101D



Walcro 111D



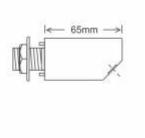
Walcro 155K



Walcro SSP/15



Walcro BBD/65





Water saving shower metering valves

Shower applications

Model

Walcro 155 with wall plate

Walcro 155S with sleeve

Metering shower valves

DZR Brass

Made in South Africa



Valve in wall

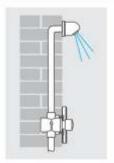
Inlet Ø15mm 30kPa - 600kPa



Valve in wall

Inlet Ø15mm 30kPa - 600kPa

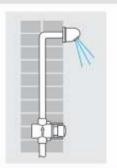
Recommended minimum 100kPa for a reasonable shower Code: Walcro 155 Ø15mm BSP, Built-in, shower metering valve with internal flow control, strainer, no-hold feature and water saving shut off.



Code: Walcro 155S

Ø15mm BSP, Built-in with sleeve, shower metering valve with internal flow control, strainer, no-hold feature and water saving shut off.

High risk vandal resistant applications

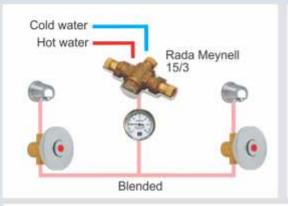


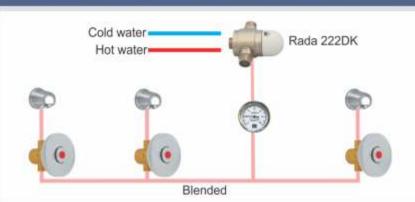
Walcro 155 & 155S Shower metering options

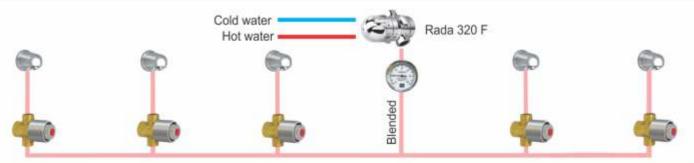


Blended water systems with Rada thermostatic mixing valves enhances safety, comfort and hot water savings. Blended water with Rada Anti-scald safety protection

The Walcro 155 metering valve is also available for cold only.









Shower heads

Walcro CIRS-V2

25 61mm x

Code: Walcro CIRS-V2

Designed for commercial and industrial showering applications. Features vandal resistant properties, internal strainer and provides jet type spray thanks to the internal propeller and thus is far less susceptible to lime scale blocking. The shower rose was specially designed to save water and does not require a regulator.

Inlet connection: 1/2" BSP female (15mm)

Flow rate range: 6 litre/min to 8 litre/min, Pressure dependant

Minimum pressure: 1 bar

Strainer: Internal - removable for cleaning



Walcro CIRS-V3



Code: Walcro CIRS-V3

High Risk, Vandal Resistant Shower Rose with Rotational Flow Technology

Vandal resistant selectable levels of security

- · Tiled-in + wall pins
- · Tiled-in
- · Surface mounted with pins

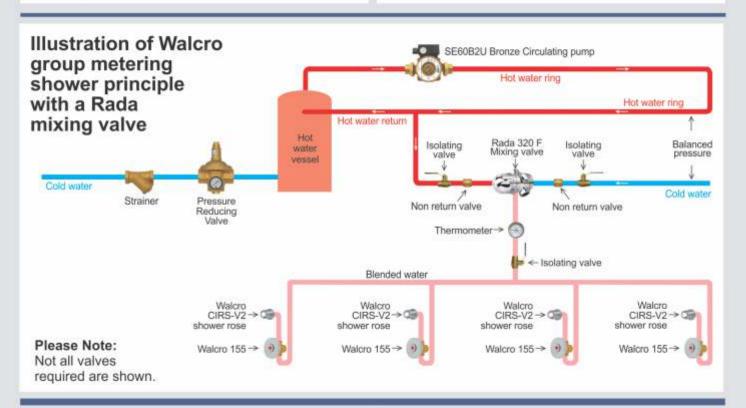
Perfect for mining, prisons and any public ablution shower where vandalism is a high risk.

Walcro's Rotational Flow Technology design ensures that there are no small holes that can easily get blocked with lime or dirt. The V3 has 1 large outlet for long term non-clogging. Internal strainer - to stop large dirt / stone particles.

Inlet connection: 1/2" BSP female (15mm)

Minimum pressure: 1 bar

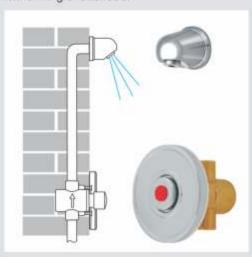
Flow rate range: 6 litre/min to 8 litre/min, Pressure dependant

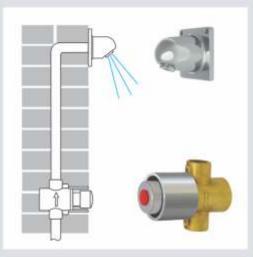




The advantages of metering shower valves

The Walcro metering principle is used for showering applications. After activation the Walcro metering valve operates for a predetermined time with a self closing action. The metering fittings specifically target water saving with adjustable flow control and a self closing action ensuring the fitting cannot be left running unattended.





Rada mixing valves are used for Anti-scald Safety and to limit hot water wastage. The preferred hot water temperature is set at the Rada valve thus ensuring safe and usable water temperature delivery for rapid processing. Rada mixing valves should be sized correctly for single or multiple ablution outlet fittings, please contact us for assistance.



Rada thermostatic mixing valves for anti-scald protection

Rada is the solution to protect the public and children from accidental scalding hot water

Why use Rada thermostatic?
The Radatherm cartridge constantly senses and reacts to deliver a consistent safe blended water temperature. The valve prevents the ablution user from receiving the scalding hot water in a geyser at around 60-65°C. Instead it will accurately reduce the hot water down to a safe temperature.

Skin injuries by scalding				
Temper	ature	Cont	act time	
	48°C	5 Minutes		
	51°C	2 minutes		
	54°C	30 seconds		
	57°C	10 seconds		
Average	60°C	5 seconds	Solution	
Geyser	63°C	3 seconds	= Rada	
Temp.	65°C	1.5 seconds	Thermostatic	

- What they do:
 Thermostatic mixing valves, accurately control the temperature of water for showering, bathing and hand-washing.
 They should maintain the pre-selected temperature even if the water pressures and temperatures vary when other appliances are used.
 Installed and maintained correctly, they can significantly reduce the risk of scalding.

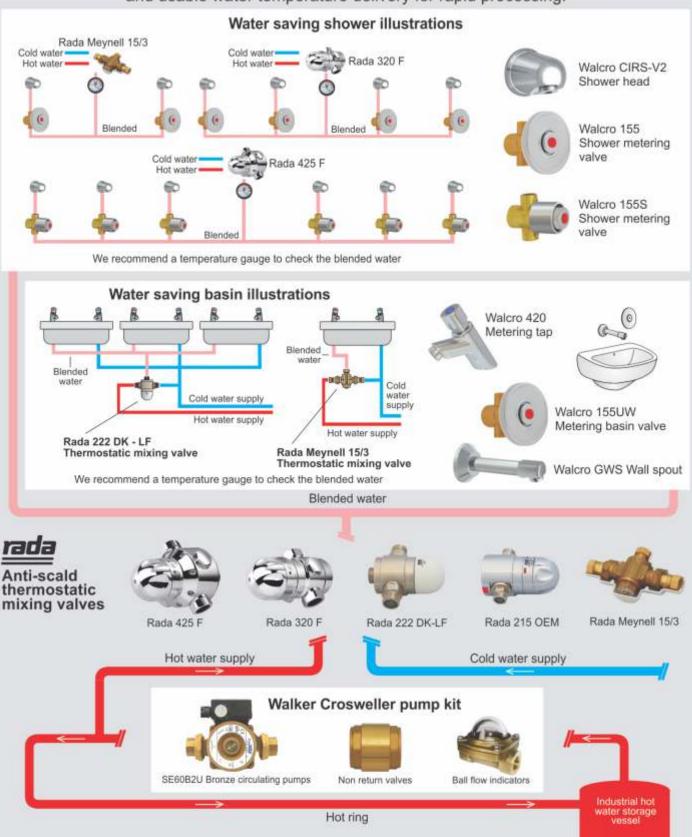
- In the event of cold water supply failure, the thermostatic mixing mechanism will automatically shut down the flow to prevent discharge of dangerously hot water. Similarly, in the event of hot water failure to prevent cold water shock.

- How do they work?
 Hot and cold water enters the valve and is mixed to a temperature pre-selected by the user or installer.
 This is achieved automatically by a thermally sensitive mechanism thermostat or thermistor, within the valve that proportions the amount of hot and cold water entering to produce the required blend.
 The mechanism automatically compensates for any variations in supply pressures or temperatures to maintain the pre-selected temperature.



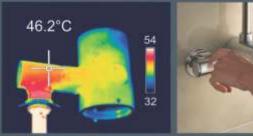
The principles of metering anti-scald blended water

Rada mixing valves are used for anti-scald safety and to limit hot water wastage. The preferred hot water temperature is set at the Rada valve thus ensuring safe and usable water temperature delivery for rapid processing.



Rada V12 thermostatic shower valve with enhanced technology for the healthcare industry





Safe-to-touch

Safety has been addressed with an innovative new insulation solution insutech[™], which limits surface temperature to a safe level.





TMV 3 Certified

The Rada V12 is certified TMV-3 for healthcare applications.



Rada EV Heavy duty shower

The perfect solution for commercial, exposed showering and features a robust chromed metal shower rail for durability with 5 adjustable spray patterns and is supplied with a 1.25m flexible hose, clamp bracket assembly, hose retaining ring and adjustable spray handset.

Suitable for connection to surface mounted shower controls.

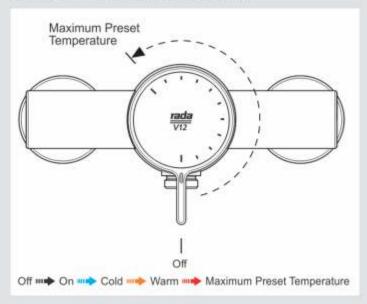
Code: RADA HD-EV-SF

Minimise risk and add value for your customer.

The Rada V12 with enhanced design such as insutech™

Safe-to-touch technology and easy access filters for effective infection control.

The Rada V12 Shower Valve is a Thermostatic Shower Control with a Single Sequential Control Lever for on/off and temperature control. The Control Lever operates anti-clockwise in the following sequence.



- Easy access filters for hygienic cleaning Check valves included.
- Thermostatic anti-scald safety
- Robust construction

Robust construction to withstand heavy usage in commercial and medical environments.

Easy to use sequential control lever

The Rada V12 has a light touch sequential control lever, easy to use for all ages.

The Rada V12 for enhanced performance and ANTI-SCALD safety in leisure, fitness, sport, schools, frail care and medical environments.

rada g

RADA V12 THERMOSTATIC SHOWER SPECIFICATIONS

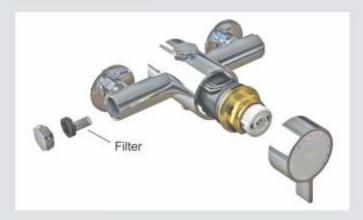


Specify as:

Rada V12 Exposed shower valve

Surface mounted TMV3 thermostatic shower valve featuring insutech™ technology. Sequential single lever operation from cold through to warm.

Includes thermostatic cartridge, check valves, filters and optional flow regulators.



Operating Parameters

Pressures

Maximum Static Pressure: 10 Bar. Maximum Maintained Pressure: 5 Bar. Minimum Maintained Pressure: 1.0 Bar.

Temperatures

Factory Pre-set (Blend) Shower: 41°C.

Optimum Thermostatic Control Range: 35°C - 45°C.

(Achieved with supplies of 15°C cold, 65°C hot and nominal

equal pressures).

Recommended Hot Supply: 60°C.

Note! The Mixing Valve can operate at temperatures up to 85°C for short periods without damage. However, for safety reasons it is recommended that the maximum hot water temperature is limited to 65°C.

Minimum Differential between Hot Supply and Outlet

Temperature: 10°C.

Cold Water Range: 5°C - 25°C.

Thermostatic Shut-down

For safety the Thermostat will shut off the Hot Supply Within 2 Seconds if the Cold Supply Fails.

(Achieved only if the hot supply temperature is greater than 10°C above the set blended temperature).

Connections

Exposed Mixer:

Supplied: Rear Inlets, Bottom Outlet

Inlets: 15mm Compression, Hot - Left, Cold - Right. Outlet: 1/2" BSP Flat Face / 15mm Compression.







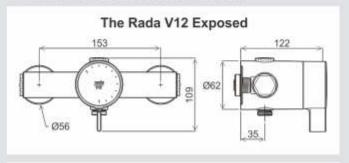
NB: The flow rate is fixed by a flow regulator.

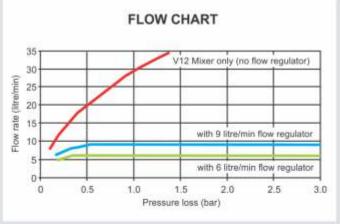


A 6 litre/minute (Black) or 9 litre/minute (Orange) flow regulator (supplied) must be fitted in the outlet connector.

Operation

The Rada V12 is operated via a single sequential control which when rotated initially opens the valve, then increases temperature from cold to a pre-set maximum.







For commercial individual and group showering, hand washing and bathing

Anti-scald protection for the family in public ablutions



RADA 320 F
Thermostatic mixing valve



RADA 425 F
Thermostatic mixing valve



RADA MEYNELL 15/3



RADA 222 DK-LF



RADA 215 OEM

The Rada thermostatic mixing valve employs two advanced thermoscopic temperature sensors to provide blended water at safe and accurate temperatures for showering and hand basins.



Specify Rada thermostatic for complete peace of mind



RADA MEYNELL 15/3

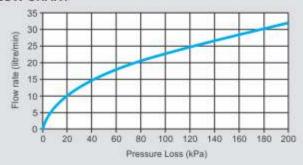
INDIVIDUAL / GROUP - SPECIFY AS: RADA MEYNELL 15/3



The Rada Meynell 15/3 thermostatic mixing valve is the perfect solution for 'under basin' type installations to provide a high level of safe anti-scald protection for hand washing and single or double showering applications. The 15/3 is housed in a plastic outer casing for tamper proof temperature adjustment.

Ideal for use with Walcro 155 showering or Walcro 420 metering tap range for enhanced safety and maximum water saving solutions.

FLOW CHART



SPECIFICATION

Rada Meynell 15/3 - 1/2" Point of use thermostatic mixing valve. Supplied complete with white plastic outer casing and integral check valves and strainers.

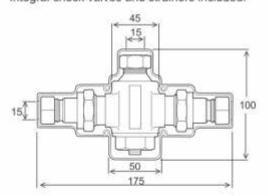
Connections:

Inlet & Outlet: 15mm compression

Body: DZR brass and housed in white plastic

casing

Optimum thermostatic range: 35°C - 45°C Maximum hot water inlet temp: 85°C Maximum supply static pressure: 10 bar Factory pre-set max outlet temp: 42°C Max flow rate velocity: 2 meters per second. Integral check valves and strainers included.



Rada Meynell 15/3 Thermostatic mixing valve

Design tip: Always aim to balance the hot and cold water supply pressures

To combat Legionella in water systems

Recommended to use individual mixing valves at outlet if possible, alternatively, for group mixing, the deadleg piping must be kept as short as possible.



RADA 215 OEM

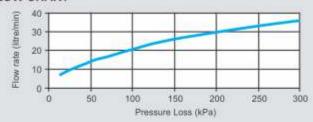


INDIVIDUAL / GROUP - SPECIFY AS: RADA 215 DEM

The Rada 215 OEM thermostatic mixing valve with 'Radatherm' technology provides adjustable anti-scald temperature control in a duct or concealed applications for selected hand basins or single or dual showers. The pre-set maximum temperature stop ensures safe blended water delivery.

Ideal for use with Walcro 155 shower and Walcro 420 metering taps for enhanced energy and water saving.

FLOW CHART



SPECIFICATION

Rada 215 OEM - 1/2" Thermostatic mixing valve with 'Radatherm' cartridge for duct installation, including check valves and strainers.

Connections:

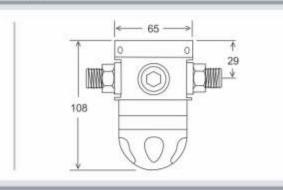
Inlet & Outlet: 1/2" BSP male (15mm) Body: DZR brass chrome plated

Optimum thermostatic range: 35°C - 50°C Maximum hot water inlet temperature: 85°C Maximum supply static pressure: 10 bar Maximum maintained pressure: 5 bar

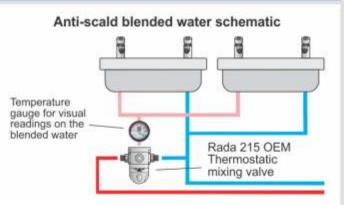
Minimum flow rate: 3 litre/min

Factory pre-set maximum outlet temperature: 41°C

Integral check valves and strainers included.



Anti-scald blended water schematic Rada 215 OEM Thermostatic mixing valve



Design tip: Always aim to balance the hot and cold water supply pressures

To combat Legionella in water systems

Mixing valves must be located as close as possible to the point of use or outlet fitting.



RADA 222 DK-LF

RADA SAFE SULTRA SAFE ANTI-SCALD WATER PROTECTION



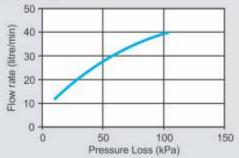


BATHING / GROUP - SPECIFY AS: RADA 222 DK-LF

The Rada 222 DK-LF thermostatic mixing valve with 'Radatherm' technology is ideal for anti-scald bath fill, as well as small group hand basin or shower applications. The valve features a pre-set maximum temperature safety stop concealed in a locked temperature shroud to prevent unwanted tampering.

The Rada 222 DK-LF offers accurate and safe temperature control while limiting hot water usage to reduce water and power consumption bills.

FLOW CHART



SPECIFICATION

Rada 222 DK-LF - 3/4" Thermostatic mixing valve Incorporating 'Radatherm' cartridge, complete with integral check valves and strainers.

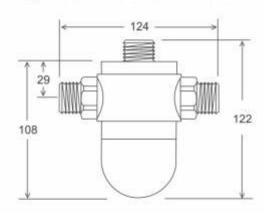
Connections:

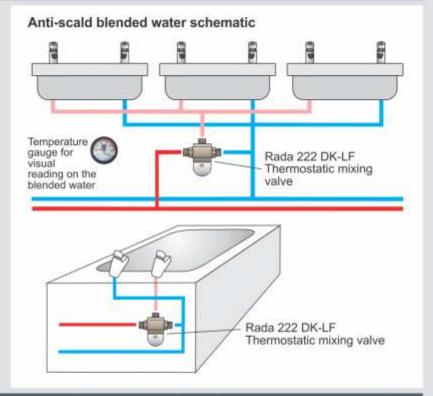
Inlet & Outlet: 3/4" BSP male (20mm) Body: DZR brass chrome plated

Optimum thermostatic range: 30°C - 50°C Maximum hot water inlet temp: 85°C Maximum supply static pressure: 10 bar Maximum maintained pressure: 5 bar

Minimum flow rate: 3 litre/min

Factory pre-set max outlet temp: 44°C Max flow rate velocity: 2 meters per second Integral check valves and strainers included.





Flow control: Group mixing valves do not have flow control, this is provided by the ablution terminal fitting, e.g. Walcro 155 shower metering valve or Walcro 420 metering tap.

To combat Legionella in water systems

Stagnant outlets - outlets which are not used regularly should be flushed regularly as part of a maintenance programme.



RADA 320 F Thermostatic mixing valve

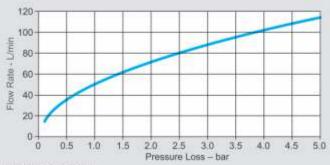
GROUP - SPECIFY AS: RADA 320 F



The Rada 320 F thermostatic mixing valve employs two advanced thermoscopic temperature sensors to provide blended water at safe and accurate temperatures for showering and hand basins. The blended temperature is adjustable within a safe pre-set range for maximum anti-scald protection.

Ideal for use with Walcro 155 shower and Walcro 420 metering tap range for maximum water saving in medium group applications.

Flow Diagram



SPECIFICATION

Rada 320 F - 1" Thermostatic mixing valve incorporating the patented 'Radatherm' temperature sensor. Supplied with 1" female connections.

Connections:

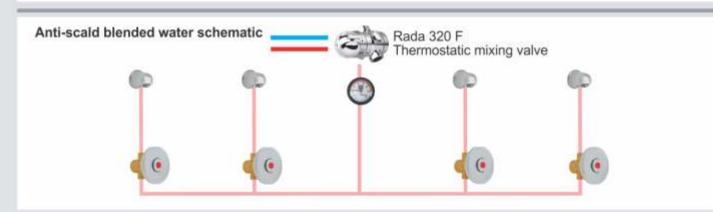
Inlet & Outlet: 1" BSP female (25mm)
Body: DZR brass and Low Lead requirement
Optimum thermostatic range: 35°C - 46°C
Maximum hot water inlet temperature: 70°C
Maximum supply static pressure: 10 bar
Maximum dynamic pressure: 8 bar
Minimum flow rate: 6 litre/min
Maximum flow rate velocity: 2 meters per second

Ø83.5mm

49 mm

185 mm

118.5 mm



Design tip: Always aim to balance the hot and cold water supply pressures



RADA 425 F Thermostatic mixing valve

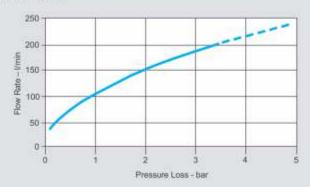
GROUP - SPECIFY AS: RADA 425 F



The Rada 425 F thermostatic mixing valve with patented 'Radatherm' temperature sensor is perfect for blended water supply to group showers and hand basins. The temperature is adjustable on the valve control knob within a pre-set safe range ensuring a high level of anti-scald safety.

Ideal for use with Walcro 155 shower and Walcro 420 metering tap range for the ultimate water saving solution.

Flow Diagram



SPECIFICATION

Rada 425 F - 1" Thermostatic mixing valve incorporating the patented 'Radatherm' temperature sensor with 1" female connections.

Connections:

Inlet & Outlet: 1" BSP female (25mm)

Body: DZR - 'low lead' brass chrome plated
Optimum thermostatic range: 35°C - 46°C

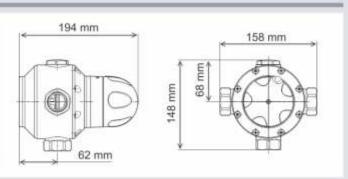
Maximum hot water inlet temperature: 85°C

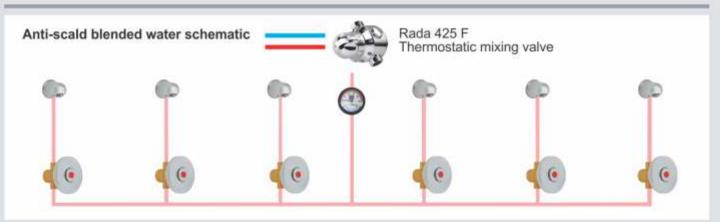
Maximum supply static pressure: 10 bar

Maximum dynamic pressure: 3.5 bar

Minimum flow rate: 8 litre/min

Additional check valves required - Specify Walker Crosweller 25mm check valves (2 per valve).





Flow control: Group mixing valves do not have flow control, this is provided by the ablution terminal fitting, e.g. Walcro 155 shower metering valve or Walcro 420 metering tap.

To combat Legionella in water systems

Mixing valves must be located as close as possible to the point of use or outlet fitting.

Hot water circulating pumps



SE60B2U Bronze hot water circulating pump

Walker Crosweller strongly recommends this bronze pump for potable water.





The Circulating Pump SE60B2U Bronze pump is ideally suited to circulate hot water from a central heating vessel around the building to various ablutions.

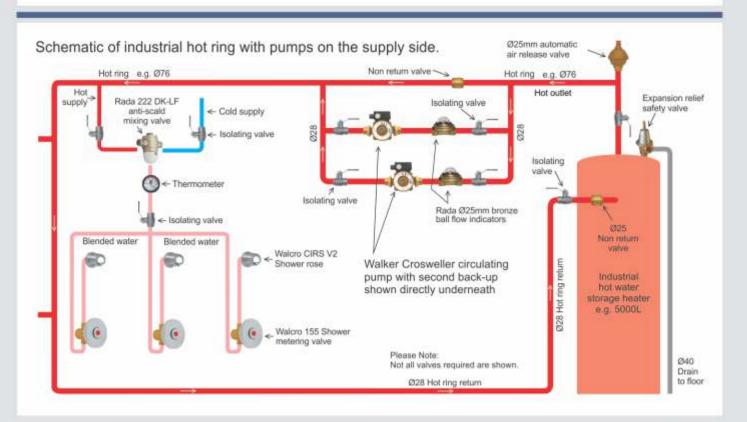
The SE60B2U reduces the dead-leg or waiting time for the hot water to arrive at the Rada mixing valve, thus enhancing comfort and saving water wastage.

The bronze material is perfect for potable water and ensures quality construction.

Specifications

Connections: 1" unions (25mm)
Maximum static pressure: 10 bar
Maximum water temperature: 85°C
Pump speed setting: 3 speed.
Protection level: IP44
Voltage: 230V - 50Hz
Watts input: Speed setting 1 = 50W,

2 = 74W, 3 = 99W Maximum Amps: 0,43.



CP60U Cast iron hot water circulating pump





The CP60U Cast iron circulating pump is for closed heating systems.

Please see the bronze model above as your first choice.

Specifications

Connections: 1" unions (25mm)
Maximum operating pressure: 6 bar
Minimum inlet pressure at +95°C: 0.3 bar
Maximum water temperature: 95°C
Temperature class: TF 95
Protection class IP: X2D
Voltage: 230V - 50Hz

Power: 4W - 40W Maximum Amps: 0,44A

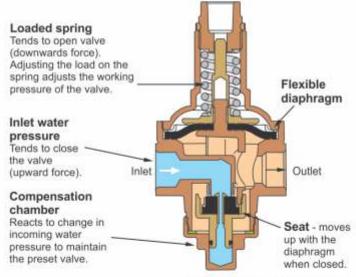
Energy efficiency index EEI ≤ 0.23

Commercial water system management valves



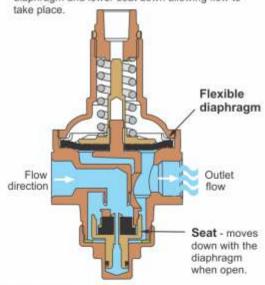
NO FLOW -All downstream fittings closed

When the tap is closed, the downstream water pressure builds up and over powers the spring and pushes the diaphragm and seat up to close the valve.



FLOW - Occurring Downstream fittings open

When a tap is opened, the pressure, under the diaphragm, is reduced and the spring pushes the diaphragm and lower seat down allowing flow to



Recommended maximum design flow velocity: 2m/sec.

Warning: High water velocity = High noise levels! It is better to select a larger size PRV and be 'less noisy'

Walker Crosweller O.R. Diaphragm pressure reducing valves - (PRV)

The O.R. pressure reducing range features the superior diaphragm technology and automatically reduces and stabilizes the pressure of the water supply to the ablutions. The internal flexible diaphragm provides a larger wetter area for control and reduces the amount of internal parts resulting in enhanced performance, higher flow capacity, long term durability and is less susceptible to dirt traveling in the water supply.





High pressure diaphragm 40 bar

BRASS type 229 Ø15mm - 50mm PRV 40 bar

SPECIFICATIONS

- Sizes: 15mm to 50mm
- High Pressure 229 PRV maximum inlet: 40 bar
- Maximum water temperature: 80°C
- Setting range: Type 229 (40 bar) = 1 to 7 bar

ORDER CODE

PRV HP 15 + GAUGE PRV HP 20 + GAUGE PRV HP 25 + GAUGE PRV HP 32 + GAUGE PRV HP 40 + GAUGE PRV HP 50 + GAUGE

Standard pressure diaphragm 16 bar



BRASS Ø15mm - 50mm PRV 16 bar

> Note: A higher spec model is being phased in over the next year you may receive a better valve.

SPECIFICATIONS

- Sizes: 15mm to 50mm
- Standard PRV maximum inlet: 16 bar
- Maximum water temperature: 80°C
- . Setting range: 1,5 to 7 bar

ORDER CODE

PRV STD 15 + GAUGE PRV STD 20 + GAUGE PRV STD 25 + GAUGE PRV STD 32 + GAUGE

PRV STD 40 + GAUGE

PRV STD 50 + GAUGE



Walker Crosweller O.R. 249 'Y' Strainer

The O.R. 249 'Y' type strainer is recommended to be installed on all major water supply lines to separate foreign particles and dirt traveling in the water line. Further more it is good practice to install a strainer before a PRV valve.







Type 249 Brass Ø15mm - 50mm

SPECIFICATIONS

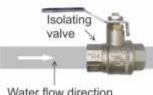
- · Size:15mm to 100mm.
- Max water temp: 95°C
- Max pressure: 15mm 50mm = 16 bar, 80mm - 100mm = 10 bar. • Filter: 500 microns

ORDER CODE	DESCRIPTION
WAL STR 15	15mm Strainer
WAL STR 20	20mm Strainer
WAL STR 25	25mm Strainer
WAL STR 32	32mm Strainer
WAL STR 40	40mm Strainer
WAL STR 50	50mm Strainer
WAL STR 80	80mm Strainer
WAL STR 100	100mm Strainer

Installation method for O.R. diaphragm pressure reducing valve and strainer

Installation method

 Always install isolating valves either side of a pressure reducing valve or strainer.



Water flow direction

Check flow arrow direction on O.R. strainer



Install O.R. pressure gauge Note: gauge shows outlet setting pressure





Water flow direction

Allow space for bottom cap removal for servicing

Walker Crosweller O.R. 295 Easy clean filter



The O.R. Arion 295 semi-automatic strainer provides enhanced filtering with a transparent cup for visual monitoring. The great easy clean feature enables the user to flush-out the dirt with a lever and spout and not interrupt the water supply.

SPECIFICATIONS

- Size: 20mm 50mm.
- Filter Cartridge: 300 microns
- Maximum water temperature: 40°C.
- · Maximum pressure: 16 bar

ORDER CODE	DESCRIPTION
WAL C-FILT 20	20mm Cartridge filter
WAL C-FILT 25	25mm Cartridge filter
WAL C-FILT 32	32mm Cartridge filter
WAL C-FILT 40	40mm Cartridge filter
WAL C-FILT 50	50mm Cartridge filter

Walker Crosweller O.R. Non-return valves



The check valve or non-return valve is used to prevent back flow and only allows water to travel in one direction.

SPECIFICATIONS

- Type: Spring
- Sizes: 15mm 100mm
- Maximum water temperature: 95°C
- •Maximum pressure: 15mm - 25mm = 16 bar, 32mm - 50mm = 10 bar, 80mm - 100mm = 8 bar

WAL 2150/20	20mm Non Return Valve
WAL 2150/25	25mm Non Return Valve
WAL 2150/32	32mm Non Return Valve
WAL 2150/40	40mm Non Return Valve
WAL 2150/50	50mm Non Return Valve
WAL 2150/80	80mm Non Return Valve
WAL 2150/100	100mm Non Return Valve

DESCRIPTION

15mm Non Return Valve

Walker Crosweller O.R. 498 Auto air release

The O.R. 498 'high flow capacity' automatic air release valve with a single float. Used to discharge air from the water supply line. Ideal for industrial hot water vessels and protecting pumps.



Order code: WAL A-VENT 498

SPECIFICATIONS

- · Size: 25mm.
- · Max working pressure: 16 bar
- · Minimum accumulation: 0.5 bar
- Air ejection range: 0,5 to 16 bar
- Maximum water temp: 60°C
- Installation: Install vertically and at highest point.

Walker Crosweller O.R. 502 Auto air release

The O.R. 502 'low flow capacity' automatic air release valve is a junior version to the O.R. 498 valve adjacent and is for small scale operations to release air from the water supply line.



Order code: WAL A-VENT 15

SPECIFICATIONS

· Size: 15mm.

ORDER CODE

WAL 2150/15

- · Max working pressure: 10 bar
- Minimum sealing pressure: 0,2 bar
- Air ejection range: 0,5 to 7 bar
- Max water temp: 95°C
- Installation: Install vertically and at highest point.

Walker Crosweller O.R. Solar air release valve and shut-off ball valve kit



Sunshine solar specific air release valve and shut-off ball valve kit Ø15mm

SPECIFICATIONS

• Size: Ø15mm.

· Max working pressure: 10 bar

· Air vent - Minimum sealing pressure: 0.2 bar

Range of operation air evacuation:

from 0.5 bar to 5 bar

Maximum temperature: 180°C

Compatible fluids:

- water

- Glycolate solutions (glycol) 50%

ORDER CODE | DESCRIPTION

WAL 439402 | Size: Ø15mm

(Sold as a kit - not separately)

Walker Crosweller gauges

Pressure & Temperature

Connection Ø15mm





WAL 508-001, Ø84mm type combination temperature and pressure gauge. Back entry

Temperature

Connection Ø15mm



WAL Ø80mm temperature gauge Range: 0° - 120°C, Back entry

Gauge isolating valve - 1807



BROEN-LAB Premium laboratory solutions

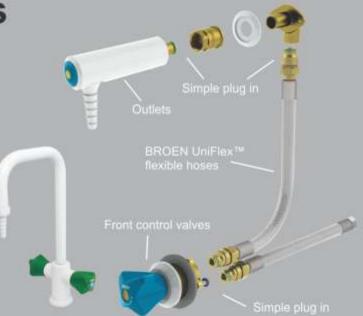
BROEN-LAB Made in Denmark

UniFlex™ fittings

- Water and Special water
- Burning gas
- Non Burning 2.0 & 4.0 gas
- Vacuum
- · Front control valves & outlets
- Cleanline fittings for 5.0 and 6.0 gases



More... safe, efficient, intelligent, flexible, plug and play, simplicity and custom systems



Plumbing merchant range for basic laboratory projects i.e. schools

Bench mounted water fitting with swivel spout

BROEN: 2534 005 1001-14

Spout: Full swivel action Headwork: Rubber, 2 x 360° Temperature range: 0-65°C

Maximum working pressure: 10 bar

Media: Potable water, cold



Two handle bench mounted one hole mixer water fitting with swivel spout

BROEN: 2536 039 1039-52E

Spout: Full swivel action Headwork: Rubber, 2 x 360° Temperature range: 0-65°C

Maximum working pressure: 10 bar

Media: Potable water, cold / hot



Lift / Turn valves for burning gases - ideal for schools

Single "Lift / Turn" valve bench mounted fitting for burning gases

LPG: 2520 317 1012-14

Max. working pressure: 7 bar

Media: LPG



Two-way (90°) "Lift / Turn" valve bench mounted fitting for burning gases

LPG: 2520 318 1012-14

Max. working pressure: 7 bar

Media: LPG



Installer must be qualified for gas

Please contact us for further assistance and advice before ordering

BROEN-LAB

Laboratory solutions

Plumbing merchant range

High quality Emergency Shower Systems and Eye Wash Systems with chemical resistant BROEN-LAB Polycoat for laboratories and industrial sectors.

Emergency hand-held eye showers

Minimum working pressure 1.5 bar. Supplied with 1.5m inlet hose with 1/2" union nut





Emergency eye and body showers











BROEN-LAB

Laboratory solutions

Plumbing merchant range

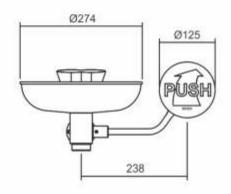
High quality Emergency Shower Systems and Eye Wash Systems with chemical resistant BROEN-LAB Polycoat for laboratories and industrial sectors.

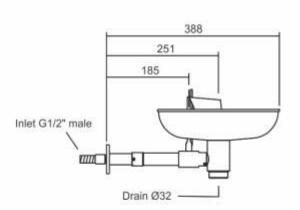
DIMENSIONS:

Eye shower

Wall mounted for concealed piping

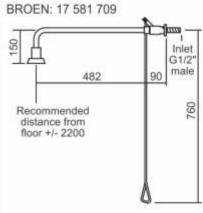
BROEN: 17 533 709





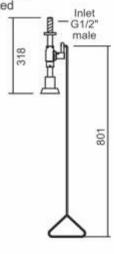
Body shower

Wall mounted



Body shower Ceiling mounted

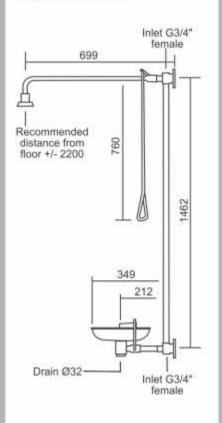
BROEN: 17 580 709



Body and Eye shower

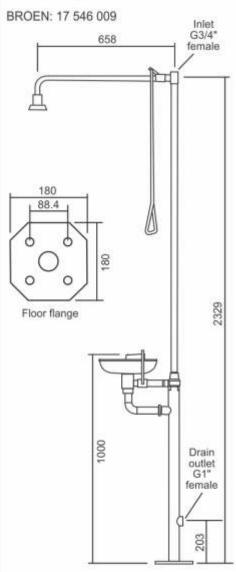
Wall mounted

BROEN: 17 552 709



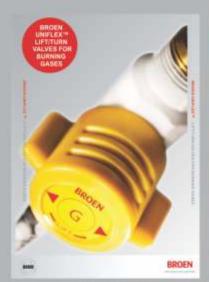
Body & Eye shower

Free standing



Brochures

BROEN-LAB Premium laboratory solutions









Let us guide you to the appropriate solution



Media:

e.g. Water, LPG, Compressed air.

Fitting type:

Bench, wall or front control.

Installation type:

Flexible or fixed.

Lab type:

Basic school or professional laboratory.

Phone us on 011 793 1031 for us to advise on stock in South Africa and what's imported on order.

BROEN

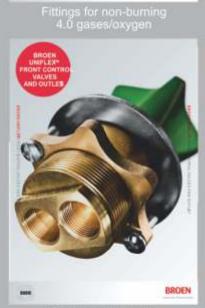


Fittings for special water



Emergency shower systems





Front control valves and outlets



Commercial water saving ablution valve specialists since 1967



Our full range of products are available from a wide range of plumbing retailers throughout South Africa.

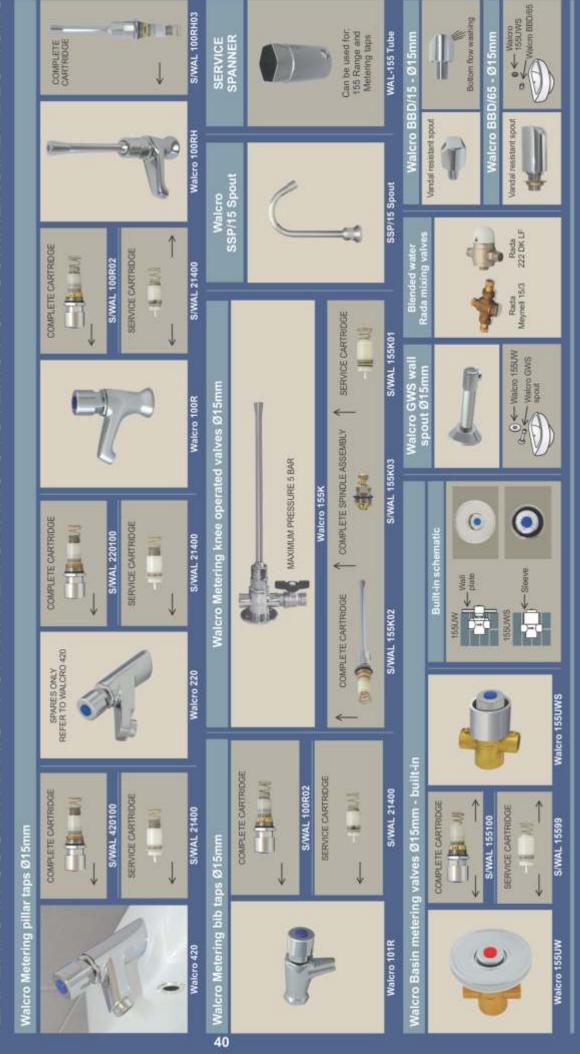
Should you require any assistance, please do not hesitate to contact us directly. Plumbers are welcome to contact us for product specifications and / or technical assistance and will be referred to their nearest plumbing retailer to purchase.

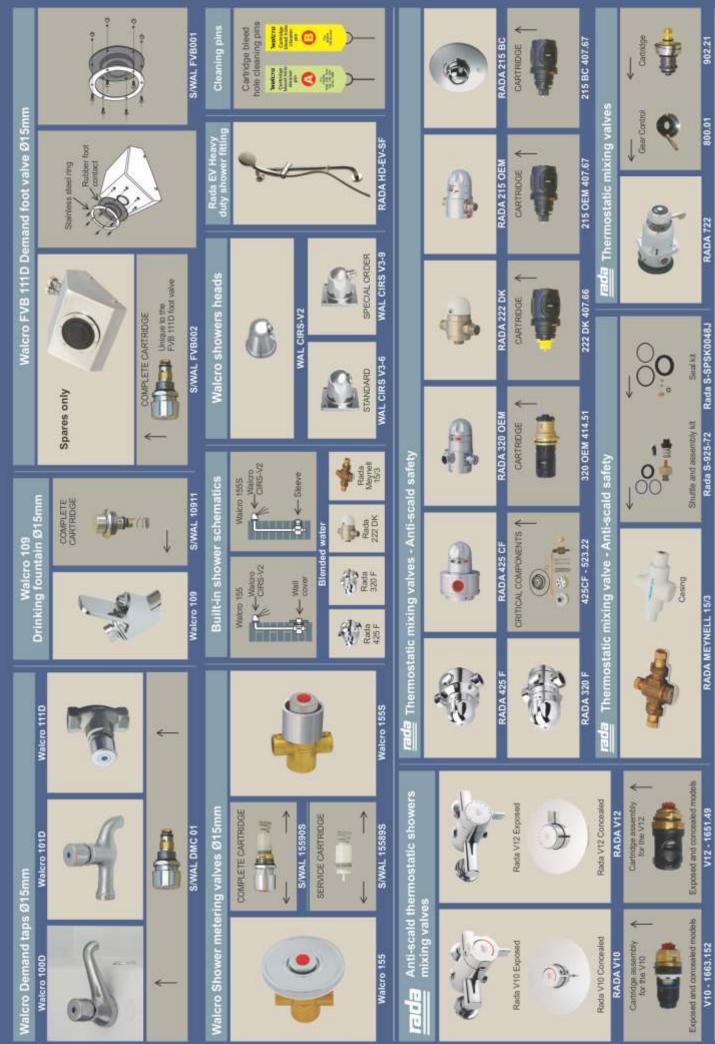
The next four pages contain product and spare part identification charts for current products

Product and spare part identification chart for current products



EXPERTS IN SOUTH AFRICA FOR WATER SAVING SYSTEMS FOR COMMERCIAL ABLUTIONS



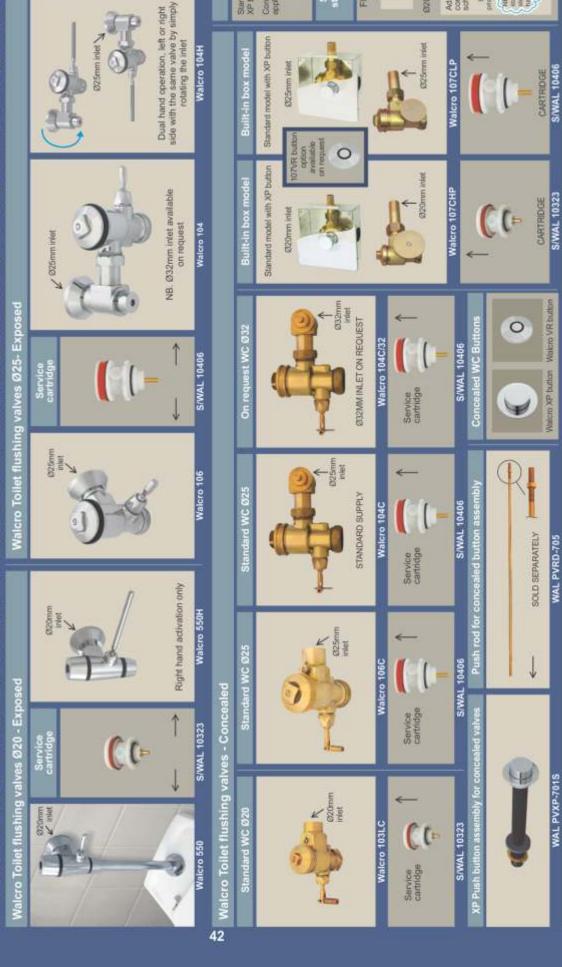


Product and spare part identification chart for current products



EXPERTS IN SOUTH AFRICA FOR WATER SAVING SYSTEMS FOR COMMERCIAL ABLUTIONS

Back entry



825mm visive 106C & 104C

For

Adaptor connection schematic

Flush pipe compression

WCpm

Concealed WC

Concessed duct application

Standard XP tutton

Top



Edition 7



Sector specialities

- Public ablutions
- Mining
- Correctional facilities
- Medical
- Education
- Food industries
- Abattoirs
- Commercial and retail ablutions
- Transport facilities
- Laboratories
- Sport Stadiums
- Marine ablutions



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