

**BROEN
REDLINE
– EMERGENCY
SHOWERS & EYE
WASHES**

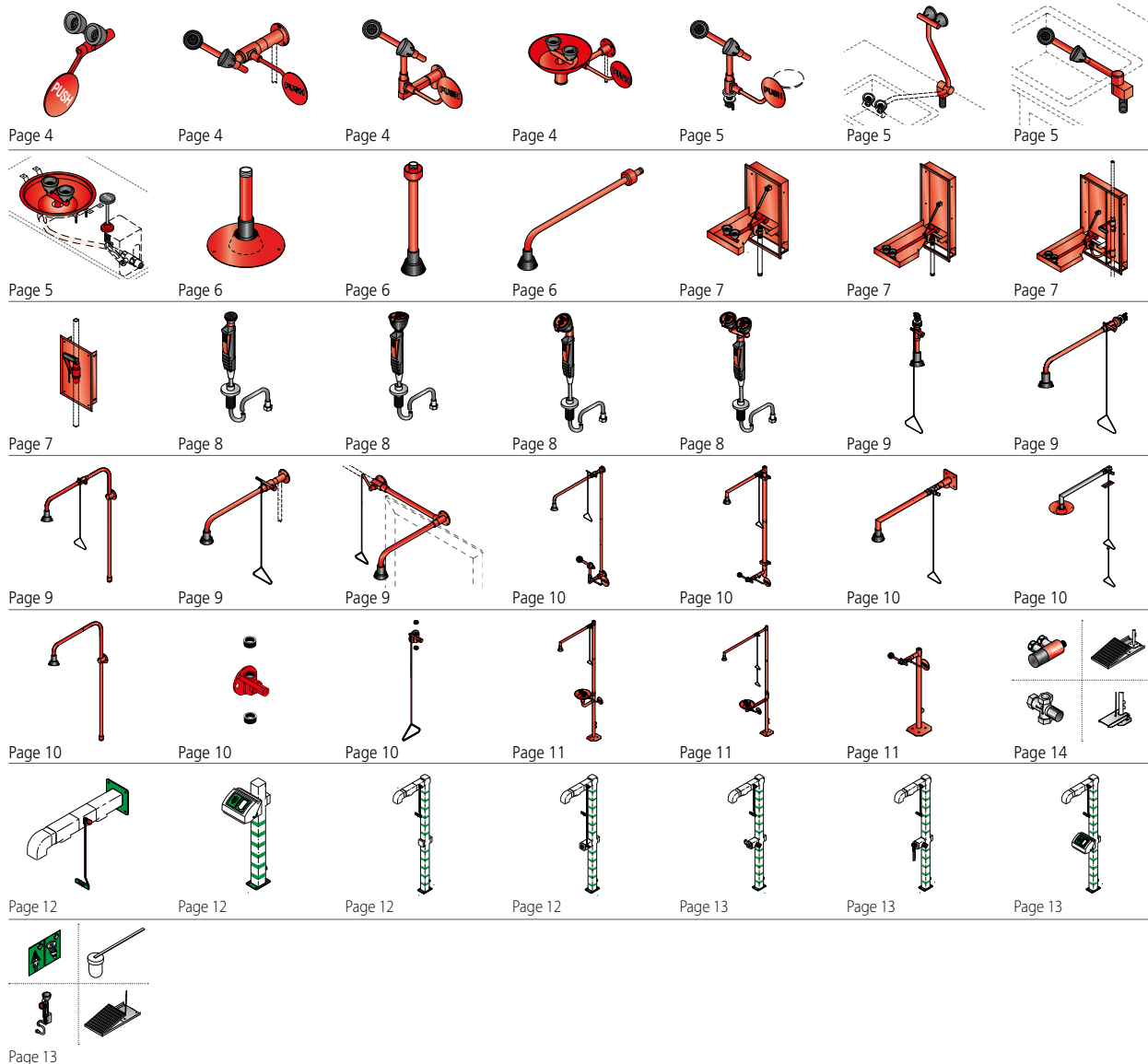
REDLINE EMERGENCY SHOWERS & EYE WASHES

REDLINE EMERGENCY SHOWERS & EYE WASHES

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PRODUCT OVERVIEW - Please refer to the actual page for product versions



REDLINE - FOR THE LABORATORY & INDUSTRY



REDLINE EMERGENCY SHOWERS & EYE WASHES

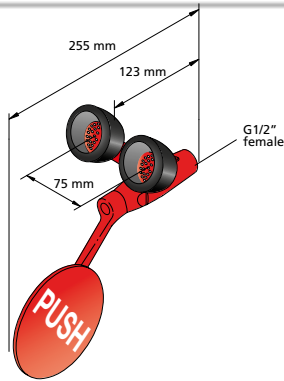
EYE SHOWERS FOR WALL MOUNTING

The European Standard EN15154 advise that the water temperature delivered by emergency equipment should be "tepid". Consequently, BROEN recommends the installation of a Thermostatic Mixing Valve (TMV) with safety shower equipment. Please refer to page 14 for further information.



REDLINE EMERGENCY SHOWERS & EYE WASHES

Eye Shower, Wall Mounted



No. 17 067.009
VVS: 765873 315

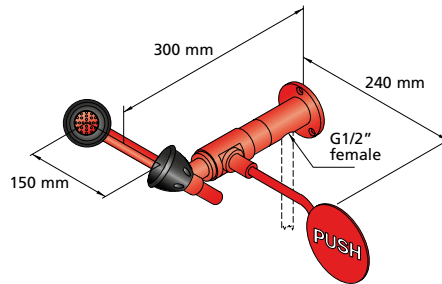
Other Models

No. 17 066.009
VVS: 765871 315
With 1 shower head

Weight: Approx. 1 kg

Eye shower, wall mounted with two heads in brass with chemical resistant BROEN Polycoat and with built-in BALLOFIX® ball valve for regulation of water amount.
Min. working pressure 1.5 bar

Eye Shower, Wall Mounted



No. 17 069.009
VVS: 765907 315

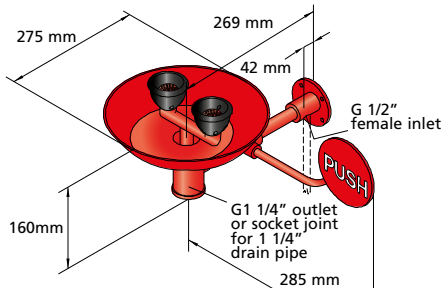
Other Models

No. 17 068.009
VVS: 765904 315
Male inlet

Weight: Approx. 2 kg

Eye shower, wall mounted for exposed pipe work in brass with chemical resistant BROEN Polycoat with built-in FLOWFIX for water regulation (26 l/min).
Min. working pressure: 1.5 bar.

Eye/Face Shower with Bowl, Wall Mounted



No. 17 928.009
VVS: 765912 315

Other Models

No. 17 933.009
VVS: 765912 345
Male inlet

Anti-corrosive

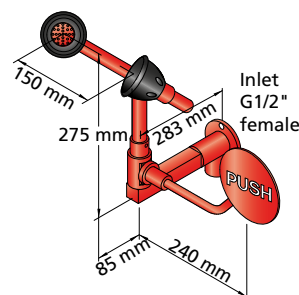
No. 17 928.004
G 1/2" female inlet

No. 17 933.004
Male inlet

Weight: Approx. 4.5 kg

Eye/Face shower with two heads in brass with chemical resistant BROEN Polycoat and stainless steel bowl. Wall mounted for exposed pipe work. The water amount is regulated by a built-in FLOWFIX (26 l/min).
Min. working pressure: 1.5 bar.

Eye Shower, Wall Mounted



No. 17 250.009
VVS: 765906 315

Other Models

No. 17 402.009
VVS: 765911 315
With hand shower

Weight: Approx. 4.5 kg

Eye shower, wall mounted in brass with chemical resistant BROEN Polycoat. The water is regulated with a built-in FLOWFIX (26 l/min).
Min. working pressure: 1.5 bar.

EYE SHOWERS FOR TABLE OR SWIVEL MOUNTING

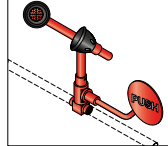
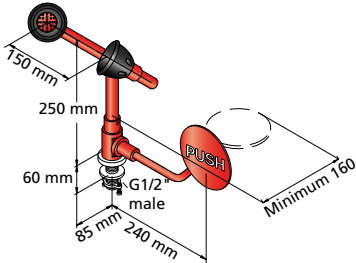
Eye Shower, Table Mounted



No. 17 200.009
VVS: 765905 315

Other Models

No. 17 202.009
VVS: 765909 315
For exposed pipe work



Weight: Approx. 2 kg

Eye shower, table mounted with two heads in brass with chemical resistant BROEN Polycoat. Water is regulated with a built-in FLOWFIX (26 l/min).
Min. working pressure: 1.5 bar.

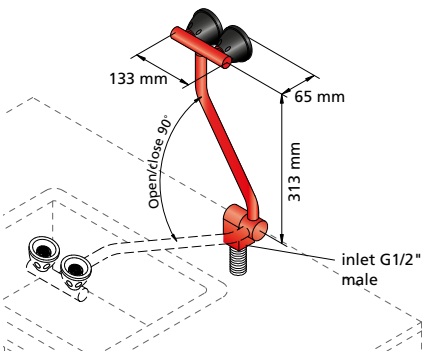
Eye Shower, Table Mounted, Swing Down



No. 17 927.009
VVS: 765927 315

Other Models

No. 17 242.009
VVS: 765928 315
For swivel wall mounting



Weight: Approx. 4.5 kg

Eye shower, table mounted, swing down in brass with chemical resistant BROEN Polycoat for mounting on back side of the sink. The water amount is regulated with built-in FLOWFIX (26 l/min).
Min. working pressure: 2 bar.

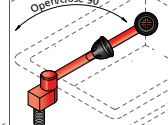
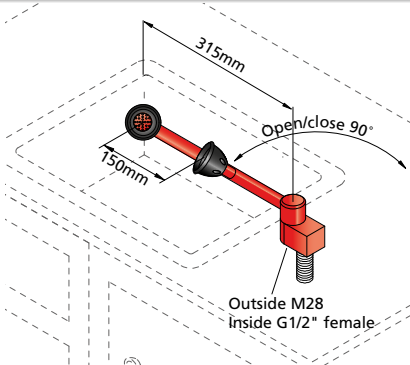
Eye Shower, Table Mounted, Swivel Joint



No. 17 231.009
VVS: 765926 315

Other Models

No. 17 230.009
VVS: 765925 315
For mounting to the left of sink



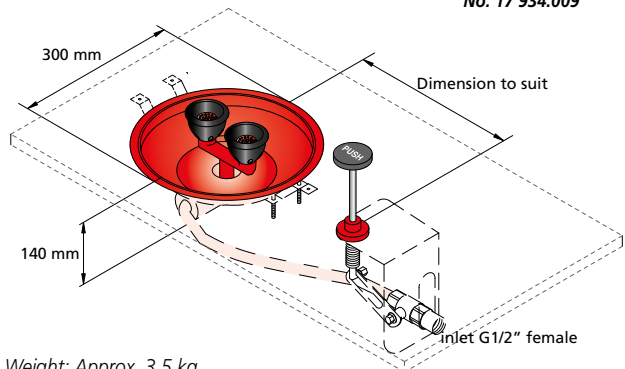
Weight: Approx. 4 kg

Eye shower, table mounted, swivel joint in brass with chemical resistant BROEN Polycoat for mounting on the right side of sink. The water amount is regulated with the built-in FLOWFIX (26 l/min).
Min. working pressure: 1.5 bar.

Eye/Face Shower with Bowl, Recessed



No. 17 934.009



Weight: Approx. 3.5 kg

Eye/face shower with two heads in brass with chemical resistant BROEN Polycoat and stainless steel bowl for recessed mounting on table top, with push-down control. The water amount is regulated with built-in FLOWFIX (26 l/min).
Min. working pressure: 1.5 bar.



REDLINE EMERGENCY SHOWERS & EYE WASHES

RECESSED EMERGENCY SHOWERS

SPECIAL FEATURES

General:

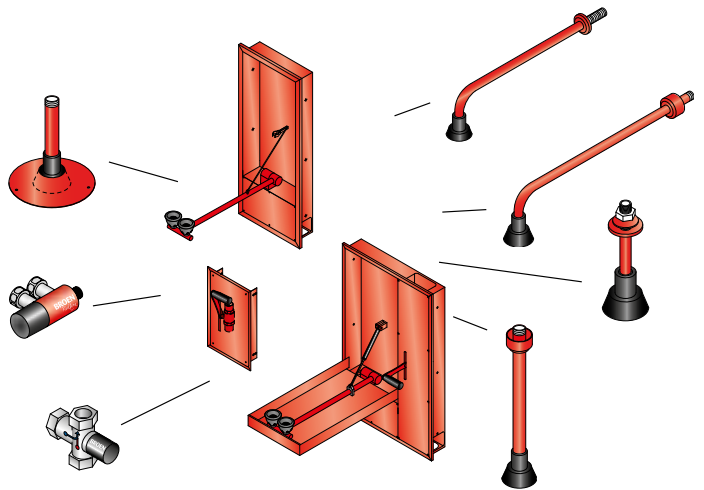
- Choose BROEN Polycoated surface or Stainless Steel .
- Cabinet and cabinet door in stainless steel AISI 304.
- Disability-Friendly models comply with ANSI A117.1-2003.
- Easy to mount and install.
- Cabinet can also be surface mounted (except 17 155.009).

Choose among different body shower outlets by ordering recessed units and outlets separately to fit your exact needs of installation and application.

E.g. : 17 154.009 + 17 110.009

Body Shower:

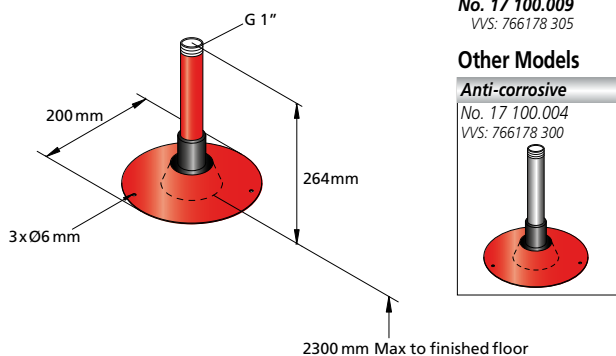
- Strong integrated handle for operating body shower.
- Free choice of combination between ceiling or wall mounted body shower outlet.
- Easy to mount and install.
- Premounted valve for body shower.



Eye Wash:

- Cabinet and cabinet door in stainless steel AISI 304.
- Integrated drain (on models with door).
- Cabinet door catches the water and prevents it from splashing on the floor.
- Filter BALLOFIX® ensures clean shower heads.

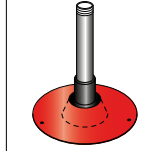
Body Shower Outlet, Ceiling Mounted, Concealed



No. 17 100.009
VVS: 766178 305

Other Models

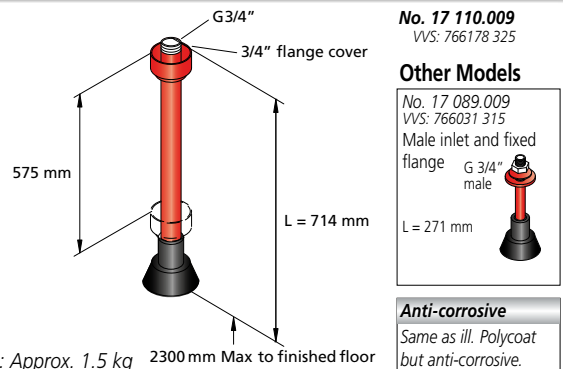
Anti-corrosive
No. 17 100.004
VVS: 766178 300



Weight: Approx. 1 kg

Body shower outlet, ceiling mounted, concealed in stainless steel with self-draining shower head. Inlet G 1" male.
Min. working pressure: 1.5 bar.

Body Shower Outlet, Ceiling Mounted



No. 17 110.009
VVS: 766178 325

Other Models

No. 17 089.009
VVS: 766031 315

Male inlet and fixed flange
G 3/4" male
L = 271 mm



Anti-corrosive

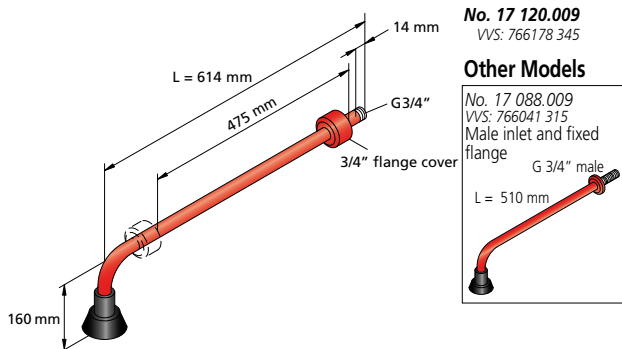
Same as ill. Polycoat but anti-corrosive.
No. 17 110.004
VVS: 766178 320

Male inlet and fixed flange
No. 17 089.004
VVS: 766031 300

Weight: Approx. 1.5 kg 2300 mm Max to finished floor

Body shower outlet, ceiling mounted, in brass with chemical resistant BROEN Polycoat with self-draining shower head. Fits different ceiling heights by adjusting the flange. Inlet G 3/4" male.
Min. working pressure: 1.5 bar.

Body Shower Outlet, Wall Mounted



No. 17 120.009
VVS: 766178 345

Other Models

No. 17 088.009
VVS: 766041 315

Male inlet and fixed flange
G 3/4" male
L = 510 mm



Weight: Approx. 1.5 kg

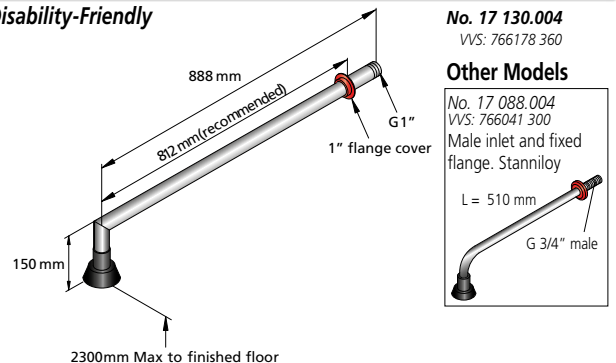
Body shower outlet, wall mounted, in brass with chemical resistant BROEN Polycoat with self-draining shower head. Inlet G 3/4" male.
With adjustable flange.
Min. working pressure: 1.5 bar.

Body Shower Outlet, Wall Mounted

Anti-corrosive



Disability-Friendly

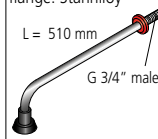


No. 17 130.004
VVS: 766178 360

Other Models

No. 17 088.004
VVS: 766041 300

Male inlet and fixed flange. Stanniloy
L = 510 mm
G 3/4" male



Weight: Approx. 1.5 kg

Wall mounted body shower outlet in stainless steel AISI 304, with self-draining shower head. Inlet G 1" male. With adjustable flange.
Dimensions comply with the requirements of ANSI A117.1-2003.
Min. working pressure: 1.5 bar.

RECESSED EMERGENCY SHOWERS

Eye Shower, Wall Recessed



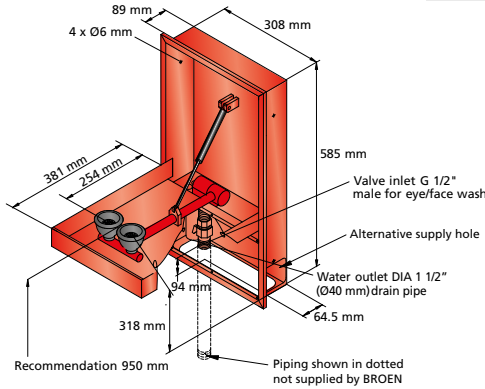
No. 17 150.009
VVS: 766156 305

Other Models

Anti-corrosive

Same as ill. Polycoat but anti-corrosive cabinet.

No. 17 160.009
VVS: 766156 300



Weight: Approx. 8 kg

Eye shower, wall recessed with cabinet with chemical resistant BROEN Polycoat, two outlet heads and built-in FLOWFIX (14 l/min). Cabinet door activates the eye wash and catches the water. Min. working pressure: 2 bar.

Eye Shower, Wall Recessed

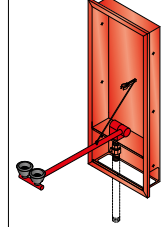


Disability-Friendly

No. 17 152.009
VVS: 766157 325

Other Models

No. 17 151.009
VVS: 766157 305
Without cabinet door.

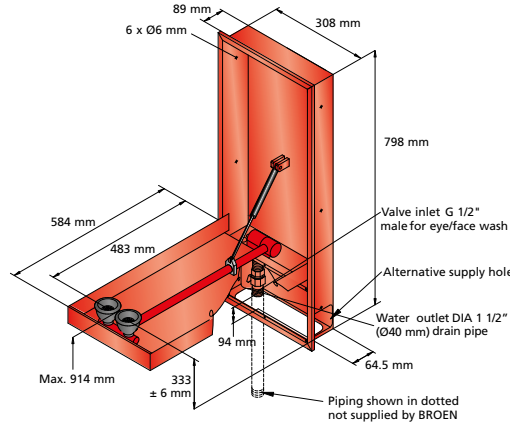


Anti-corrosive

Same as ill. Polycoat but anti-corrosive cabinet.

No. 17 162.009
VVS: 766157 320

Without cabinet door
No. 17 161.009
VVS: 766157 300



Weight: Approx. 10 kg

Eye shower, wall recessed, disability-friendly with cabinet with chemical resistant BROEN Polycoat, two outlet heads and built-in FLOWFIX (14 l/min). Cabinet door activates the eye wash and catches the water. Min. working pressure: 2 bar.

Eye and Body Shower, Wall Recessed

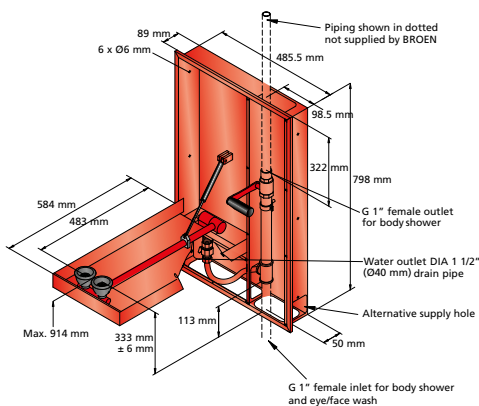
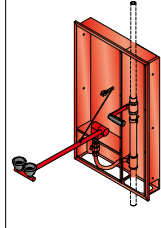


Disability-Friendly

No. 17 154.009
VVS: 766177 325

Other Models

No. 17 153.009
VVS: 766177 305
Without cabinet door



Weight: Approx. 16 kg

Eye shower, with 1" valve for body shower, wall recessed, disability-friendly with cabinet with chemical resistant BROEN Polycoat, two outlet heads and built-in FLOWFIX (14 l/min). Cabinet door activates the eye wash and catches the water. Integrated hand activating 1" valve for body shower with various options for shower outlet. Min. working pressure: 2 bar.

Body Shower, Wall Recessed , Hand Activator

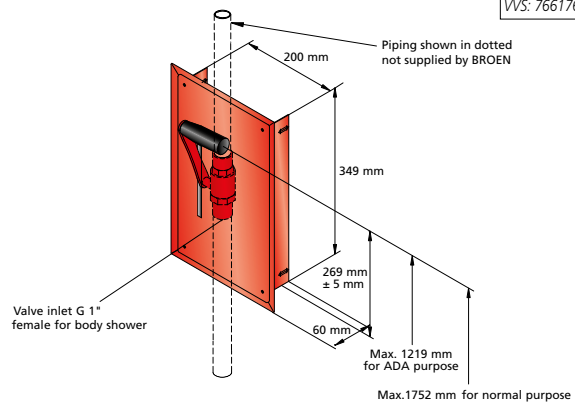


No. 17 155.009
VVS: 766176 305

Other Models

Anti-corrosive
Same as ill. Polycoat but anti-corrosive cabinet.

No. 17 165.009
VVS: 766176 300



Weight: Approx. 2.5 kg

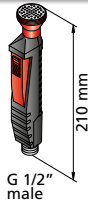
Wall recessed cabinet with chemical resistant BROEN Polycoat and hand activator for body shower with various options for shower outlet. 1" valve for 3/4" or 1" pipe. Min. working pressure: 1 bar.

EYE SHOWERS

Shower for General Purpose without FLOWFIX, Hand-Held

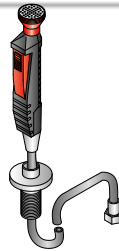
No. 17 701.500
VVS: 765955 345

Weight: Approx. 0.5 kg
Shower for general purpose, hand-held in Polyarylamide, reinforced with glassfibres. Trigger operated without FLOWFIX regulator.



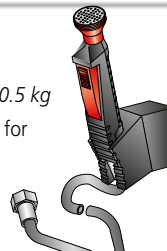
No. 17 701.000
VVS: 765955 315

Weight: Approx. 0.5 kg
Including table mounting accessories



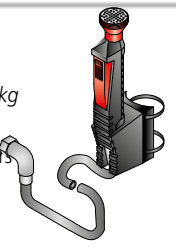
No. 17 711.000
VVS: 765942 315

Weight: Approx. 0.5 kg
Including bracket for wall mounting.



No. 17 731.009
VVS: 766108 305

Weight: Approx. 0.5 kg
Including bracket for modular body showers



Anti-corrosive

No. 17 741.504

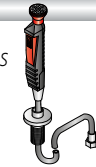
Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 741.204

Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 741.104

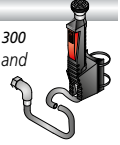
Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 741.004 / VVS: 766108 300

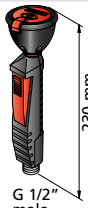
Same as model above but in SS and stanilloy.



Eye Shower with One Straight Head, Hand-Held

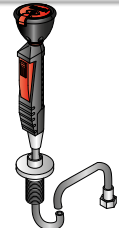
No. 17 702.500
VVS: 765956 345

Weight: Approx. 0.5 kg
hand-held eye shower in Polyarylamide, reinforced with glassfibres. Trigger operated including a built-in FLOWFIX for regulation of water flow (8 l/min).



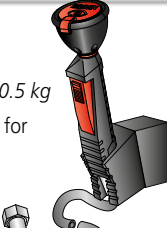
No. 17 702.000
VVS: 765956 315

Weight: Approx. 0.5 kg
Including table mounting accessories



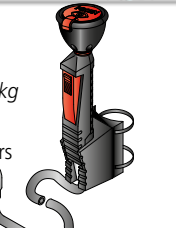
No. 17 712.000
VVS: 765944 315

Weight: Approx. 0.5 kg
Including bracket for wall mounting.



No. 17 732.009
VVS: 766101 305

Weight: Approx. 0.5 kg
Including bracket for modular body showers



Anti-corrosive

No. 17 742.504

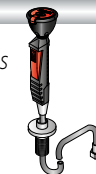
Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 742.204

Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 742.104 / VVS: 765944 300

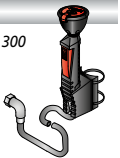
Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 742.004 / VVS: 766101 300

Same as model above but in SS and stanilloy.



Eye Shower with One Angled Head, Hand-Held

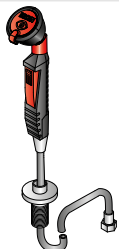
No. 17 713.500
Weight: Approx. 1 kg

Eye shower with one angled head, hand-held. In Polyarylamide, reinforced with glassfibres. Trigger operated including a built-in FLOWFIX for regulation of water flow (8 l/min).



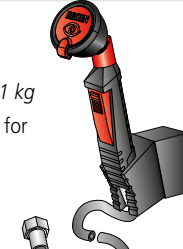
No. 17 717.000
VVS: 765954 315

Weight: Approx. 1 kg
Including table mounting accessories



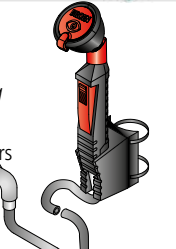
No. 17 713.000
VVS: 765946 315

Weight: Approx. 1 kg
Including bracket for wall mounting.



No. 17 733.009
VVS: 766102 305

Weight: Approx. 1 kg
Including bracket for modular body showers



Anti-corrosive

No. 17 743.504

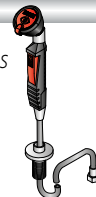
Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 743.204

Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 743.104

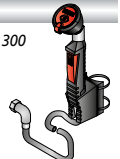
Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 743.004 / VVS: 766102 300

Same as model above but in SS and stanilloy.



Eye Shower with Two Angled Heads, Hand-Held

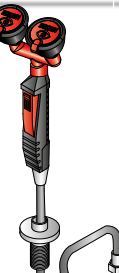
No. 17 715.500
Weight: Approx. 1.5 kg

Eye shower with two angled heads, hand-held. In Polyarylamide, reinforced with glassfibres. Trigger operated with BALLOFIX® included for regulation of water. Min. inlet pressure, dynamic: 1.5 bar / 22 psi flow.



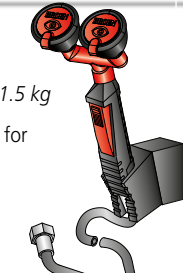
No. 17 714.000
VVS: 765957 315

Weight: Approx. 1.5 kg
Including table mounting accessories



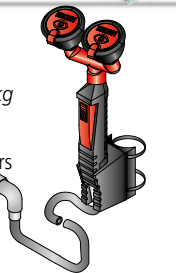
No. 17 715.000
VVS: 765908 315

Weight: Approx. 1.5 kg
Including bracket for wall mounting.



No. 17 734.009
VVS: 766103 305

Weight: Approx. 1.5 kg
Including bracket for modular body showers



Anti-corrosive

No. 17 744.504

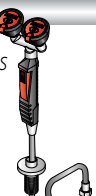
Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 744.204

Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 744.104

Same as model above but in SS and stanilloy.



Anti-corrosive

No. 17 744.004 / VVS: 766103 300

Same as model above but in SS and stanilloy.



Min. working pressure: 1.5 bar for all Eye Showers on this page.

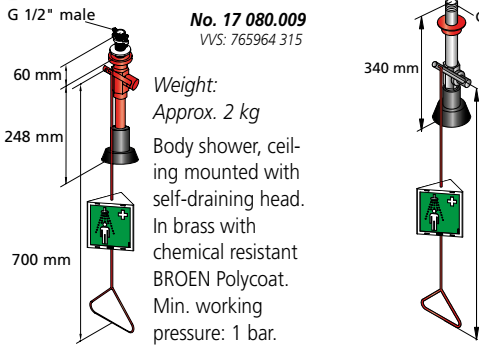
BODY SHOWERS FOR WALL & CEILING

Body Shower, Ceiling Mounted

Anti-corrosive

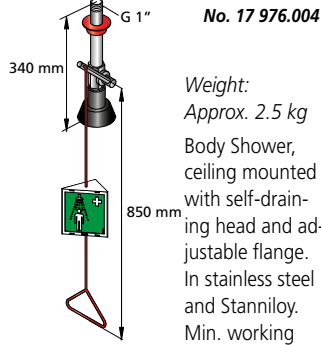
G 1/2" male
No. 17 080.009
 VVS: 765964 315

Weight: Approx. 2 kg
 Body shower, ceiling mounted with self-draining head. In brass with chemical resistant BROEN Polycoat. Min. working pressure: 1 bar.



G 1"
No. 17 976.004

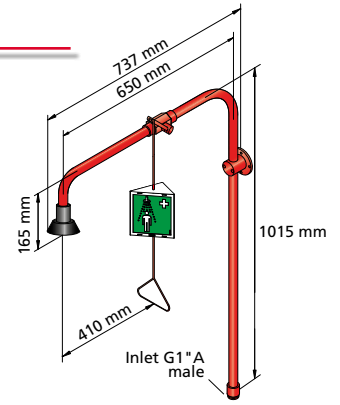
Weight: Approx. 2.5 kg
 Body Shower, ceiling mounted with self-draining head and adjustable flange. In stainless steel and Stanniloy. Min. working pressure: 1 bar.



Body Shower, Wall Mounted

No. 17 973.009

Weight: Approx. 5.5 kg
 Body shower, wall mounted with self-draining shower head. In brass with chemical resistant BROEN Polycoat. Min. working pressure: 1 bar.

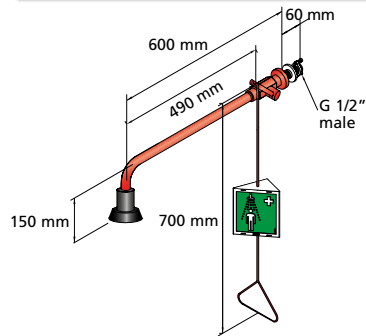


Body Shower, Wall Mounted

Anti-corrosive - Modular

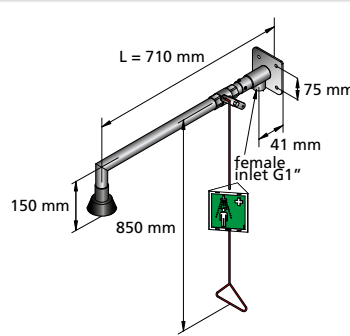
No. 17 081.009
 VVS: 765974 315

Weight: Approx. 3 kg
 Body shower, wall mounted with self-draining shower head. In brass with chemical resistant BROEN Polycoat. Min. working pressure: 1 bar.



No. 17 970.004
 VVS: 766162 300

Weight: 4 kg
 Body shower, wall mounted, modular in SS & Stanniloy with self-draining shower head for flexible wall mounting with pull rod. Min. working pressure: 1 bar.

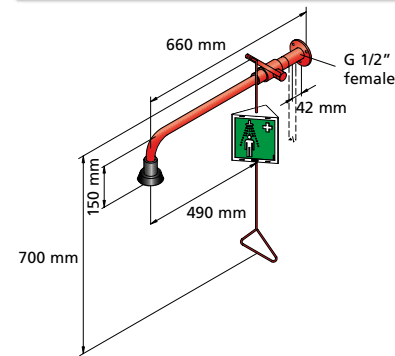


Other Models
 No. 17 969.004
 VVS: 766161 300
 Male inlet & flange cover
 L = 774 mm

Body Shower for Exposed Pipework, Wall Mounted

No. 17 082.009
 VVS: 765984 315

Weight: Approx. 3 kg
 Body shower for exposed pipework with self-draining head. In brass with chemical resistant BROEN Polycoat. Min. working pressure: 1 bar.



Concealed Pipework

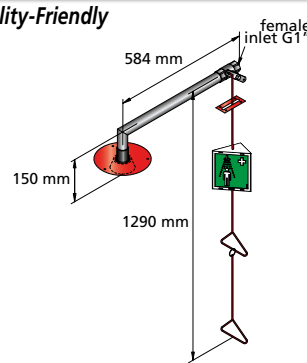


Anti-corrosive - Modular

Disability-Friendly

No. 17 971.004
 VVS: 766163 300

Weight: 2.5 kg
 Body shower, concealed, modular in SS with self-draining shower head for recessed flexible wall mounting. With extended pull rod for disabled people. Min. working pressure: 1 bar.



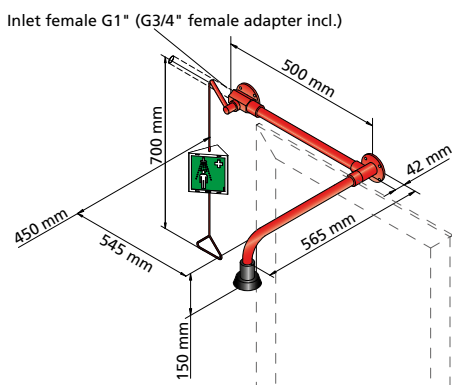
Body Shower, Wall Mounted above Door

Anti-corrosive - Modular

Inlet female G1" (G3/4" female adapter incl.)

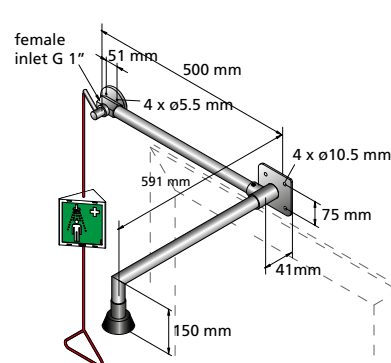
No. 17 087.009
 VVS: 765992 315

Weight: Approx. 4.5 kg
 Body shower, wall mounted above door for exposed pipework with self-draining head. In brass with chemical resistant BROEN Polycoat. Valve to be mounted left or right of door. Min. working pressure: 1 bar.



No. 17 972.004
 VVS: 766162 340

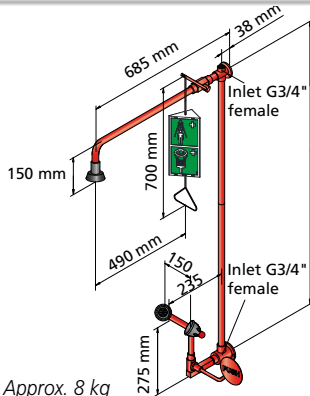
Weight: Approx. 6.5 kg
 Body shower, wall mounted above door for exposed pipework with self-draining head. In stainless steel and Stanniloy. Valve to be mounted left or right of door. Min. working pressure: 1 bar.



BODY & EYE SHOWERS FOR WALL MOUNTING

REDLINE EMERGENCY SHOWERS & EYE WASHES

Body and Eye Shower, Wall Mounted



Weight: Approx. 8 kg

Body and eye shower, wall mounted in brass with chemical resistant BROEN Polycoat with self-draining shower head. Water inlet at the top or bottom. Eye shower has built-in FLOWFIX (26 l/min). Min. working pressure: 1.5 bar.

No. 17 455.009
VVS: 766000 315

Other Models

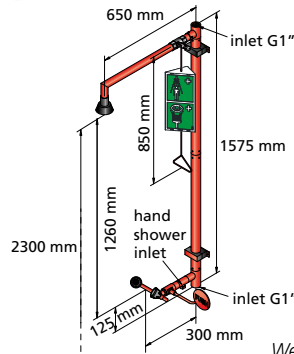
No. 17 454.009
VVS: 766001 315

Including hand shower

No. 17 452.009
VVS: 766002 315

With eye/face shower and bowl

Body and Eye Shower, Wall Mounted, Modular



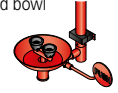
Weight: Approx. 11 kg

Body and eye shower, wall mounted, modular. In brass and SS with chemical resistant red BROEN Polycoat. Body shower has self-draining shower head. Water inlet at the top or bottom. Eye shower has built-in FLOWFIX (26 l/min). Min. working pressure: 1.5 bar.

No. 17 952.009
VVS: 766165 305

Other Models

No. 17 953.009
VVS: 766165 325
With eye/face shower and bowl

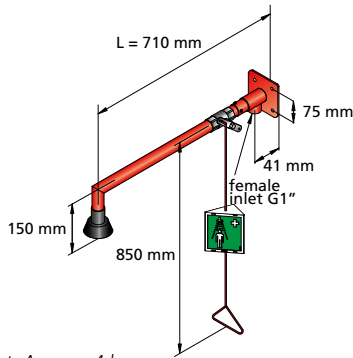


Anti-corrosive

Same as ill. Polycoat but anti-corrosive.
No. 17 963.004
VVS: 766165 300

With eye/face shower and bowl
No. 17 964.004
VVS: 766165 320

Body Shower, Wall mounted, Modular



Weight: Approx. 4 kg

Body shower, wall mounted, modular. In brass and SS with chemical resistant red BROEN Polycoat with self-draining shower head for flexible wall mounting with pull rod. Min. working pressure: 1 bar.

No. 17 959.009
VVS: 766162 305

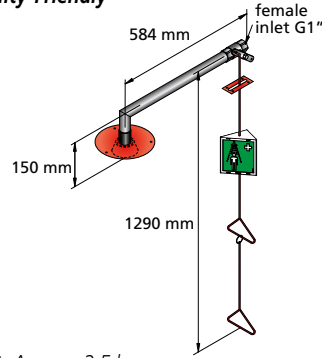
Other Models

No. 17 958.009
VVS: 766161 305

Male inlet & flange cover
L = 774 mm

Body Shower, Concealed, Modular

Disability-Friendly



Weight: Approx. 2.5 kg

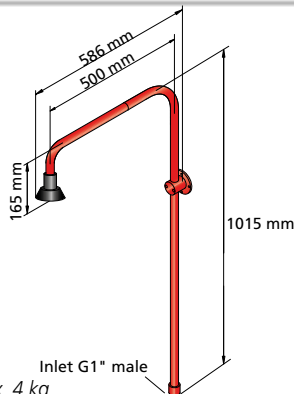
Body shower, concealed, modular. In SS and Chrome/Nickel plated brass with chemical resistant red BROEN Polycoat and self-draining shower head. For recessed flexible wall mounting. With extended pull rod for disabled people. Min. working pressure: 1 bar.

No. 17 960.009
VVS: 766163 305



SHOWERS FOR FLEXIBLE CHOICE OF VALVE

Body Shower Outlet for Flexible Choice of Valve

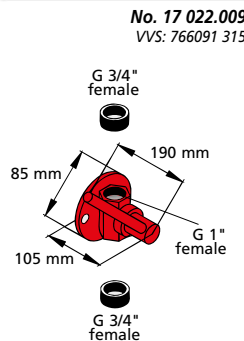


Weight: Approx. 4 kg

Body shower outlet for flexible choice of valve in brass and chemical resistant BROEN Polycoat. Min. working pressure: 1 bar.

No. 17 974.009

BALLOFIX® ball valve

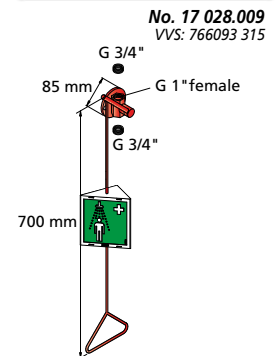


Weight: Approx. 1 kg

Manually hand operated of 1" BALLOFIX® ball valve for 3/4" pipe work.

No. 17 022.009
VVS: 766091 315

BALLOFIX® ball valve w./rod



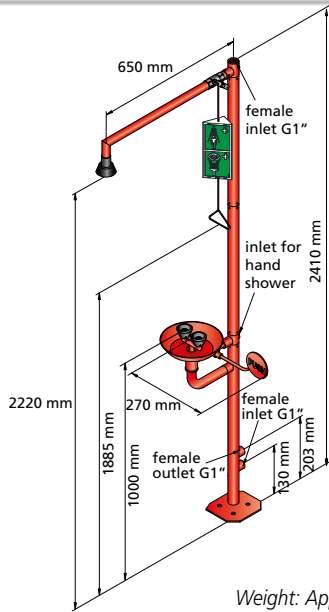
Weight: Approx. 1 kg

Manually rod operated 1" BALLOFIX® ball valve for 3/4" pipe work.

No. 17 028.009
VVS: 766093 315

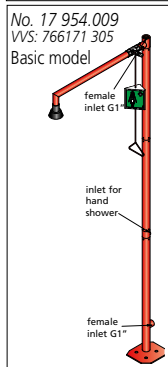
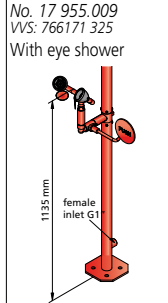
FREE STANDING BODY & EYE SHOWERS

Body Shower with Eye/Face Shower and Bowl, Modular



No. 17 956.009
VVS: 766171 345

Other Models



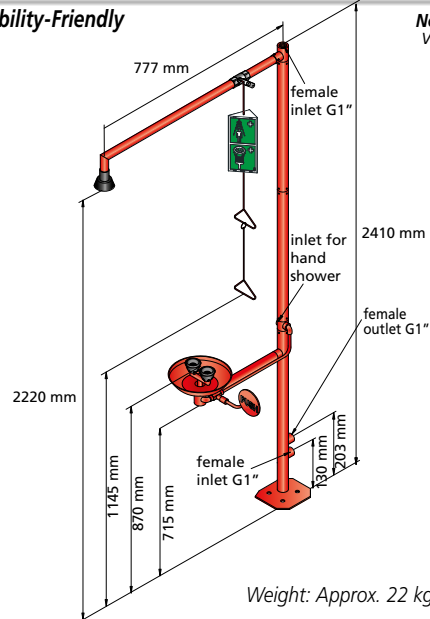
Weight: Approx. 17 kg

Body shower with eye/face shower and bowl, modular. In brass and SS with chemical resistant red BROEN Polycoat with self-draining shower head. Eye wash with built-in FLOWFIX for regulation of water flow (26 l/min). Bowl in stainless steel with integrated outlet. Min. working pressure: 1.5 bar.

Body Shower with Eye/Face Shower and Bowl, Modular



Disability-Friendly

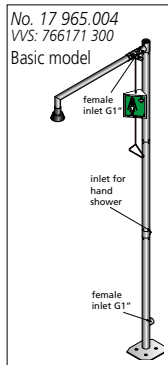
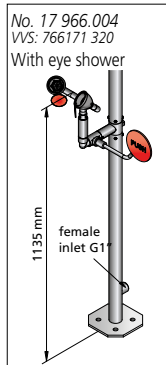
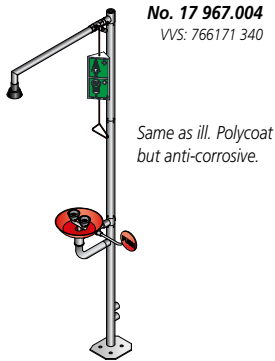


No. 17 957.009
VVS: 766172 305

Weight: Approx. 22 kg

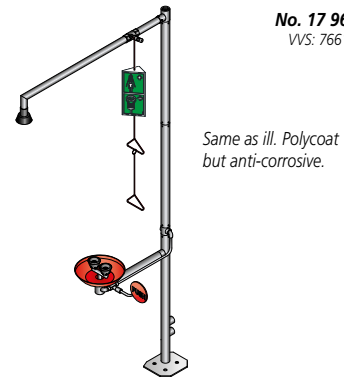
Body shower with eye/face shower and bowl, modular. In brass and SS with chemical resistant red BROEN Polycoat with self-draining shower head. Eye wash with built-in FLOWFIX for regulation of water flow (26 l/min). Bowl in stainless steel with integrated outlet. Min. working pressure: 1.5 bar.

Anti-corrosive - Modular

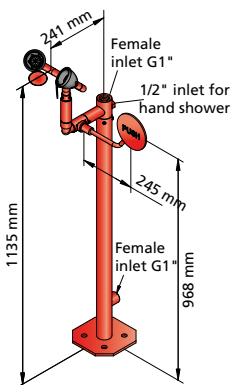


Anti-corrosive - Modular

Disability-Friendly

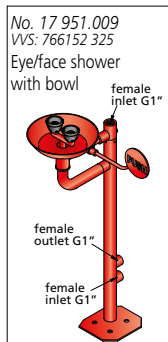


Eye Shower, Free Standing, Modular



No. 17 950.009
VVS: 766152 305

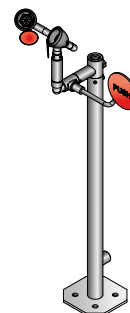
Other Models



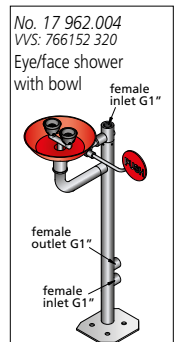
Weight: Approx. 7.5 kg
Eye shower, free standing, modular in brass and SS with chemical resistant red BROEN Polycoat. Built-in FLOWFIX for regulation of water flow (26 l/min). Min. working pressure: 1.5 bar.

Anti-corrosive - Modular

No. 17 961.004
VVS: 766152 300



Other Models

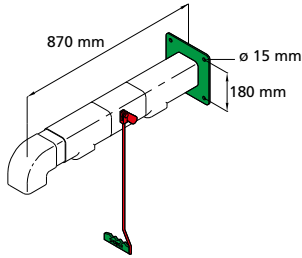


HEATED BODY & EYE WASHES

Body Shower, Wall Mounted, Heated



No. 17 819.009
WS: 766190 308



Inlet size:
G 1" female
Min. working pressure:
1.5 Bar
Water Flow 115 l/min.
Power Supply: 240VAC,
21W

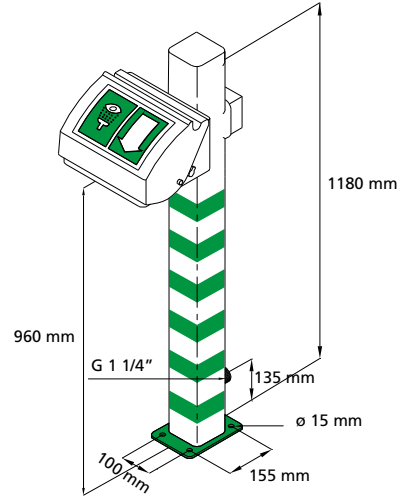
Weight: Approx. 16 kg

Wall mounted emergency safety shower in galvanized steel, trace tape heated and pre-insulated. Frost protected to max. -15°C. By request also available in SS and as arctic version.

Eye Wash Fountain, Pedestal Mounted, Heated



No. 17 824.009
WS: 766197 340



Inlet size:
15mm compression
or G 1/2" male
Min. working pressure:
2.2 Bar
Water Flow 30 l/min.
Power Supply:
240VAC, 30W

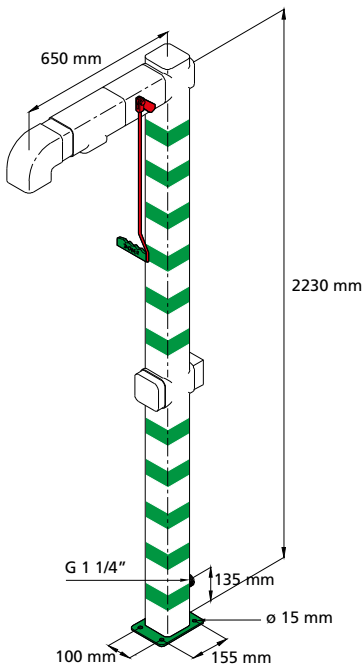
Weight: Approx. 26 kg

Pedestal mounted emergency eye bath/face wash fountain in „unbreakable“ ABS plastic, trace tape heated and pre-insulated. With integral lid, aerated diffusers, flow regulator and self adhesive sign. Max -15°C, by request we can supply an arctic version which is suitable down to -30°C. Also available in Stainless steel.

Body Shower, Free Standing, Heated



No. 17 810.009
WS: 766195 310



Inlet size:
G 1 1/4" male
Min. working pressure:
1.5 Bar
Water Flow 115 l/min.
Power Supply:
240VAC, 21W

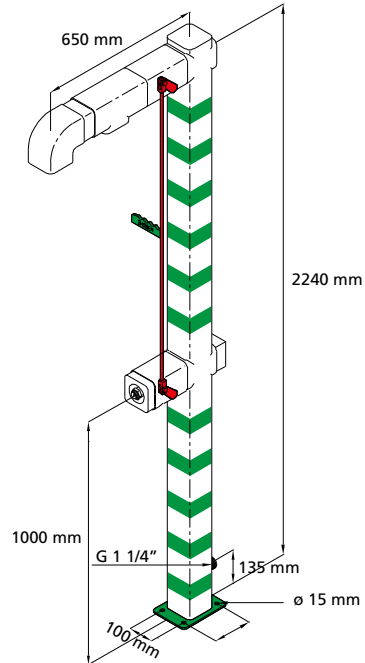
Weight:
Approx. 28 kg

Emergency safety shower in galvanized steel, trace tape heated and pre-insulated. Max -15°C, by request we can supply an arctic version which is suitable down to -30°C. Also available in Stainless steel.

Body Shower, Free Standing, Heated



No. 17 813.009
WS: 766195 340

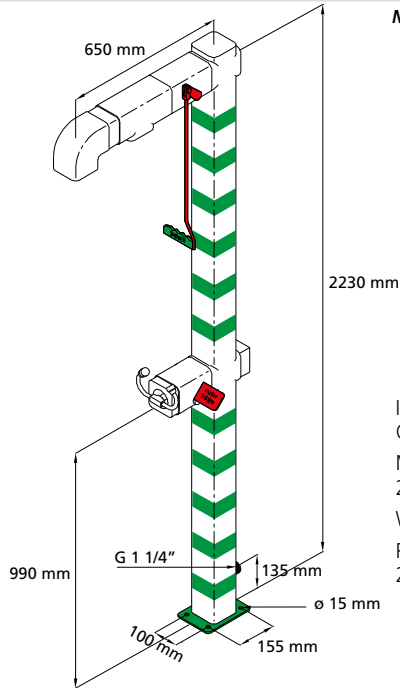


Inlet size:
G 1 1/4" male
Min. working pressure:
1.8 Bar
Water Flow 115 l/min.
Power Supply:
240VAC, 30W

Weight:
Approx. 30 kg

Emergency safety shower in galvanized steel with body spray, trace tape heated and pre-insulated. Max -15°C, by request we can supply an arctic version which is suitable down to -30°C. Also available in Stainless steel.

Body and Eye Shower, Free Standing, Heated



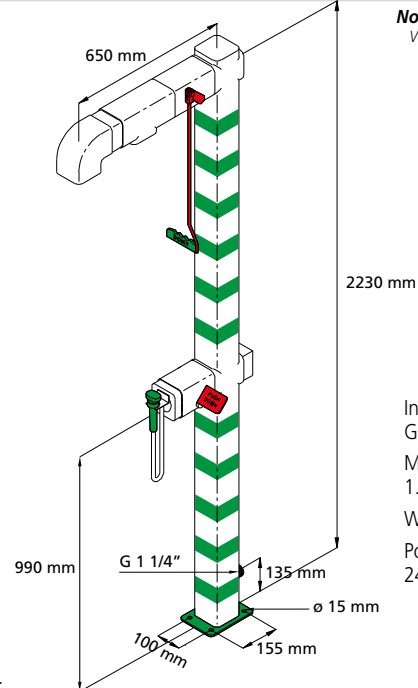
No. 17 816.009
VVS: 766194 340

Inlet size:
G 1 1/4" male
Min. working pressure:
2.2 Bar
Water Flow 115 l/min.
Power Supply:
240VAC, 30W

Weight:
Approx. 30 kg

Heated emergency safety shower in galvanized steel with eye bath/face diffusers, trace tape heated and pre-insulated. Max -15°C, by request we can supply an arctic version which is suitable down to -30°C. Also available in Stainless steel.

Body Shower, Free Standing with Eye Shower on Hose, Heated



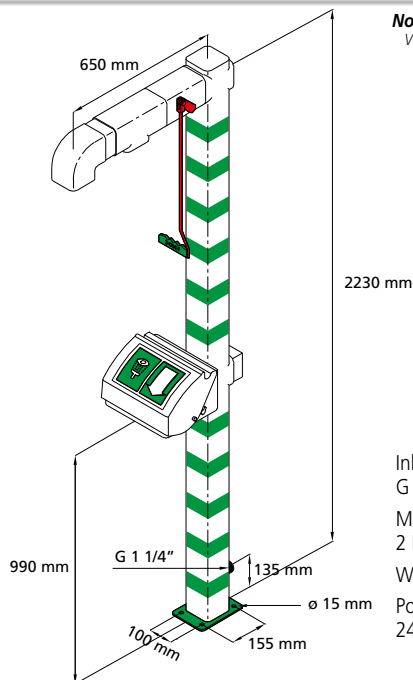
No. 17 817.009
VVS: 766194 370

Inlet size:
G 1 1/4" male
Min. working pressure:
1.5 Bar
Water Flow 115 l/min.
Power Supply:
240VAC, 30W

Weight:
Approx. 30 kg

Heated emergency safety shower in galvanized steel with eye bath on flexible hose, trace tape heated and pre-insulated. Max -15°C, by request we can supply an arctic version which is suitable down to -30°C. Also available in Stainless steel.

Body Shower, Free Standing with Eye Wash Fountain, Heated



No. 17 818.009
VVS: 766194 310

Inlet size:
G 1 1/4" male
Min. working pressure:
2 Bar
Water Flow 115 l/min.
Power Supply:
240VAC, 30W

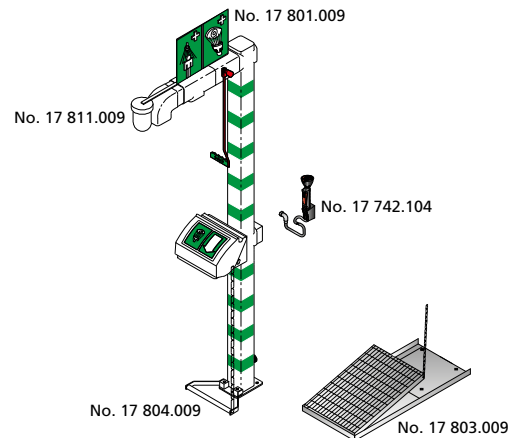
Weight:
Approx. 32 kg

Heated emergency safety shower in galvanized steel with eye bath/face wash fountain, trace tape heated and pre-insulated. Max -15°C, by request we can supply an arctic version which is suitable down to -30°C. Also available in Stainless steel.

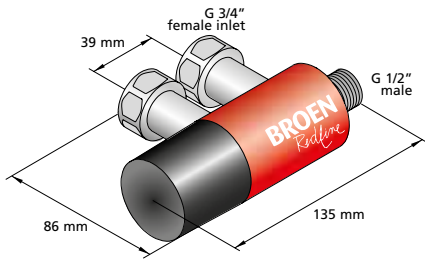
Accessories for Heated Body & Eye Showers

Please add the catalogue No. for the following options:

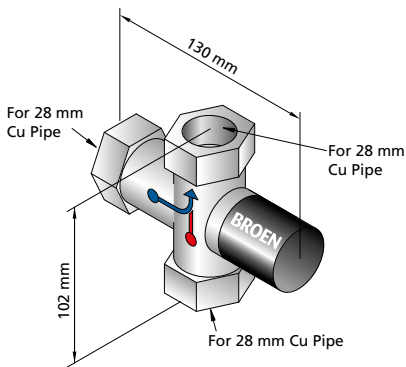
- No. 17 801.009 (VVS: 766198 801) Safety sign and brackets
- No. 17 742.104 (VVS: 765944 300) Hand shower for wall mounting
- No. 17 803.009 (VVS: 766198 803) Foot panel
- No. 17 804.009 (VVS: 766198 804) Foot treadle
- No. 17 811.009 (VVS: 766198 811) Indication light
- No. 17 827.009 (VVS: 766198 827) Shower head in stainless steel
- No. 17 850.009 Heated underground extension pipe



Thermostatic Mixing Valves for Eye and Body Showers



No. 17 140.009: (VVS: 766095 315)
 Weight: Approx. 1.5 kg
 Thermostatic mixing valve for eye shower.
 Min. working pressure: 1 bar.
No. 26 140.059:
 Lockable cap for 17 140.009.



No. 17 457.009*: (VVS: 766094 315)
 Weight: Approx. 1.5 kg
 Thermostatic mixing valve for body shower.
 Min. working pressure: 1.5 bar.

BROEN TMVs for eye and body showers are thermostatic mixing valves designed for delivering tepid water (20-25°C) for eye/hand or body showers.

The solution is designed for the operation of one eye/hand shower respectively one body shower.

The TMV incorporates in one body the following features:

- Fail-safe on hot side: If the cold water is interrupted the built-in anti-scalding device will automatically cease the flow of hot water. AUTOMATIC OPERATION
- Fail-safe on cold side: If the hot water is interrupted the built-in intentional leak will allow cold water to flow at a sufficient flowrate to ensure operation. THIS WORKS AUTOMATICALLY AS WELL
- Including check valves on both hot and cold supply

The mixed temperature is adjusted to tepid water from factory but can easily be adjusted on site by installer or operator.

*Not recommended for use with combination showers.

Signs

Nr. 96M0332
 (Weight: Approx. 0.23 kg)
 Sign for Body and Eye Shower - Pull Rod mounted

Nr. 96M0333
 (Weight: Approx. 0.13 kg)
 Sign for Body Shower - Pull Rod mounted

Nr. 96M0334
 (Weight: Approx. 0.15 kg)
 Sign for Body and Eye Shower - Wall mounted

Nr. 96M0335
 (Weight: Approx. 0.08 kg)
 Sign for Eye Shower - Wall mounted

Nr. 96M0336
 (Weight: Approx. 0.08 kg)
 Sign for Body Shower - Wall mounted

Nr. 96M0227
 (Weight: Approx. 0.03 kg)
 Instruction and Service Sign - Body Shower

Nr. 96M0228
 (Weight: Approx. 0.04 kg)
 Instruction and Service Sign - Body and Eye Shower

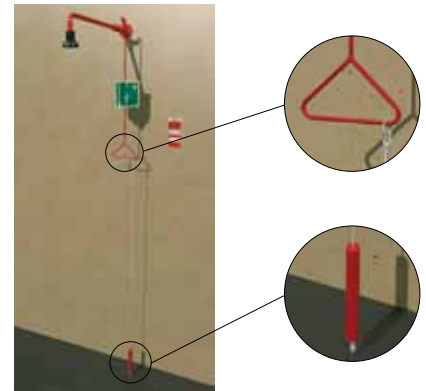
Nr. 96M0229
 (Weight: Approx. 0.03 kg)
 Instruction and Service Sign - Eye Shower

Nr. 96M0230
 (Weight: Approx. 0.03 kg)
 Instruction and Service Sign - Eye Shower - Hand-Held

Nr. 96M0231
 (Weight: Approx. 0.03 kg)
 Instruction and Service Sign - Body Shower - Hand-Held



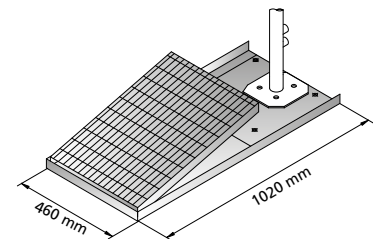
Cable



No. 17 901.64

A cable may be installed as a supplement to the pull rod solution i.e. the cable enables the user to activate the shower at floor level.

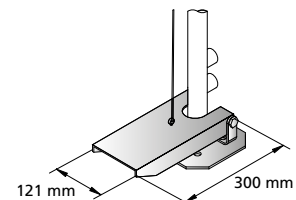
Foot Panel for Operation of Free Standing Body Showers



No. 17 919.009 (VVS: 766179 300)

Weight: Approx. 29 kg
 Foot panel in SS for operation of body showers. Possible to combine with 17 909.909 if mounted 180° opposite. Delivered with all mounting accessories.

Foot Treadle for Operation of Eye Showers



No. 17 909.909 (VVS: 766771 310)

Weight: Approx. 1 kg
 Foot treadle in aluminium and SS for operation of eye showers. Possible to combine with 17 919.009 if mounted 180° opposite. Delivered with all mounting accessories.



Falck

IN THE SERVICE INDUSTRIES



"For more than four years Falck has had an excellent cooperation with BROEN LAB. Our customers must be able to rely on Falck to guarantee the best solutions and consequently we only provide service for emergency showers that comply with the requirements of Danish Standard 15154 Parts I and II.

BROEN LAB products are extremely easy to install and they are also clearly marked and easily serviced. Quite simply, they provide a better and safer solution for all parties."

Michael Hansen, Product Manager Falck



IN INDUSTRY



"At Carlsberg we do not accept a compromise with regard to quality. We have therefore replaced all our emergency shower systems by products from BROEN LAB so that they comply with the EU norm EN 15154.

We want to look well after the people working for us and it is our distinct opinion that our workplace must be a place where you feel well and safe."

Jens Hansen, Coordinating Work Environment Representative Carlsberg Denmark



IN THE LABORATORY



"For quite some time our company has been in charge of the maintenance and service of installations at Akademiska Hus at Medicinberget in Gothenburg. This includes a number of laboratories which again means a considerable number of emergency shower systems supplied by BROEN LAB.

We check the emergency showers regularly and are very content with BROEN LAB's reliable design and construction which make them easy to inspect and test."

Anders Bergvall, Project Manager VVS-Teknik Mölndal



IN THE EDUCATIONAL SECTOR



"At DTU we teach more than 7,000 students within very different fields – from the metal industry to microbiology – and within each specific field unique safety aspects must be considered. Therefore it is essential for us that we have a cooperation partner who supplies a quality product and who can also advice and guide us on the specific risk profile of each classroom."

Bjarne Andersen, HVAC Manager at DTU Campus Service



IN THE MEDICAL INDUSTRY



"As an international advisor it is important for us to have a partner that complies with both national and international norms and standards – and who can document this by an independent third party certification. At the same it is important to have a partner that can offer customized solutions supporting the architectonic expression of the project instead of colliding with it. Even though we are talking about emergency equipment, beautiful design is a plus."

Henrik Als Nielsen, Engineer, Ventilation & Building Utilities, NNE Pharmaplan

Emergency Showers Are Important

Thousands of industrial accidents happen every year in spite of precautionary safety measures, accidents that are caused by human exposure to heat (fire, boiling water and oil, steam, etc.), to corrosive agents (fluid acids and caustics) and/or to influence by dust and corrosive aerosols (metal, dirt, fluids).

These accidents cause the injured person acute pain, disablement and may even lead to loss of life.

However, experience shows that the consequences and human suffering following such accidents can be considerably limited if water is applied directly to the affected areas instantly after the exposure.

It is a fact of life that the risk lurks in many places: in the laboratory, in the kitchen, in the warehouse, in the chemical plant, in the workshop or generally speaking in any place where heat, corrosion or dust can cause serious human injury.

For these reasons we strongly recommend the installation of adequate emergency shower systems as a means of limiting these risks.

Location and Operation of Emergency Showers

As a basic rule the shower must be located as close to the workplace as possible so that the general first aid instructions of flushing the affected area immediately after the accident has occurred can be followed.

Please note that if strong acids or caustics are involved immediate action is demanded.

When installing the emergency shower system please also be aware that it must be easy to locate and access at all times for potential users.

The BROEN REDLINE showers can be recognised by their red body shower pull rods and red eye shower push handles. In addition the internationally adapted graphic symbols for the clear identification of emergency shower installations are always included in BROEN solutions.

Further information and guidelines can be found in the EN 15154 part 1 & 2:2006 - European standard for Emergency safety showers

Operation

All BROEN emergency shower systems are designed and engineered to secure easy operation. This allows for "one-action" activation of the shower system ensuring immediate and continued flushing without any need for further action.

This easy operation also allows the injured person to use both hands to keep his eyes open for effective flushing, to undress under the shower or just to help exposing the affected area for better and more expedient treatment.

On the eye shower the nozzles are protected by rubber cups to keep the injured person from hurting himself unintentionally. The nozzles are also protected against dust and dirt by the caps which are removed automatically by the initial jet of water.

Water Pressure and Temperature

Emergency showers shall be connected to a cold water system with at least drinking water quality which ensures clean and fresh water. In addition we recommend the water temperature to be kept within the range of 15° to 25° Celsius in order to provide the best immediate effect, reasonable human comfort and at the same time avoid hypothermia.

All eye showers are delivered with FLOWFIX water regulating devices ensuring constant adequate water flow regardless of high water pressure.

The illustrations will inform you of the capacities of the showers.

Threadings

In general the BROEN Emergency Showers are equipped with threadings as follows:

E.g. G 1/2": In accordance to ISO 228/1.

E.g. NPT 1/2": In accordance to ANSI-B1.20.1.

Maintenance and Information

When installing emergency shower systems, the relevant safety advisor must provide instructions on operation and maintenance!








As basic information the potential user must be advised of:

- The location of the emergency shower system
- How to operate it and
- How to behave in case of an emergency

BROEN recommends users to check installed emergency shower systems once a week.

IN CASE OF AN EMERGENCY

In the event of accidents caused by human exposure to heat, corrosive agents and/or to influence of dust and corrosive aerosols:

-  Start flushing immediately – the seconds count.
-  Remove contaminated clothing which is not stuck to the skin.
-  Continue flushing.
-  In case of an eye injury keep the eyelid open when continuing flushing.
-  Call for an ambulance. Ask the doctor for advice.
-  Continue flushing in the ambulance.
-  Keep the flushing in the emergency room and during transport to the special ward.

In case of blistering do inform the doctor and the hospital about the substance in question and about possible countermeasures.

RAPID ACTION CAN BE OF VITAL IMPORTANCE.

PERSONAL WASH UNIT

The first seconds following an eye injury are often critical to keeping eye injury to a minimum. A personal wash unit may be kept in the immediate vicinity of employees working in a potentially hazardous area.

The main purpose of these units is to supply immediate flushing. With this accomplished, the injured individual should then proceed to a plumbed or self-contained eyewash and flush the eyes for the required 15-minute period.

REFERENCE: A1 PERSONAL WASH UNIT, ANSI Z358.1-2004

TECHNICAL INFORMATION

SPECIFICATION OF MATERIALS

Shower outlet	Brass/PP or PPO
Stand pipe	Stainless steel (AISI 304) or brass
Rubber cups	EPDM
Dust caps	POM
Bowl	Stainless steel (AISI 304)

Available in chemical resistant "BROEN Polycoat" (polyester powder coating) or "Stanniloy" plating (a highly anti-corrosive treatment based on a tin/nickel alloy).

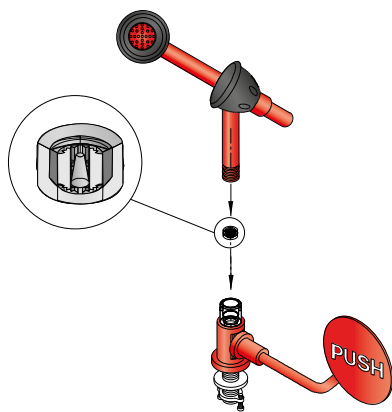
MIN. WORKING PRESSURE (DYNAMIC/FLOW PRESSURE)

See individual products.

MAX. WORKING PRESSURE (STATIC)

kPa	kN/m ²	bar	psi
1000	1000	10	145

FLOWFIX



FLOWFIX is a feature that is built into most of BROEN's eye baths and hand/eye showers. Flowfix is a water regulating device, that controls the water flow at a preset rate regardless of water pressure.

SYMBOLS:



Eye shower



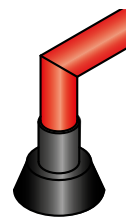
Body shower



For disabled people as well

SELF-DRAINING SHOWER HEAD

BROEN has developed a new self-draining shower head for the Redline series, that complies to both the EN15154 standard part 1 and to ANSI Z358.1 - 2004 standard. BROEN has 3rd party certificate for EN 15154 and ANSI Z358.1 - 2004. The self-draining shower head requires for optimal function min. 1 bar (14.5 psi) and max. 10 bar (145 psi) dynamic water pressure.



FEATURES & BENEFITS

- ✓ Self-draining, anti lime scale - prevents bacteria build-up and reduces maintenance
- ✓ Complies to both EN & ANSI Standards
- ✓ Chemical resistant PPO plastics
- ✓ Soft water spread
- ✓ Available for 1/2", 3/4" and 1" pipes



CALCULATING THE FLOWRATE AND DYNAMIC PRESSURE DROP

Any calculation can be done using the following formulas:

$$K_v = \frac{q_v [\text{m}^3/\text{h}]}{\sqrt{\Delta P [\text{bar}]}} \quad \text{or} \quad q_v = K_v \times \sqrt{\Delta P} \quad \text{or} \quad \Delta P = \left(\frac{q_v}{K_v} \right)^2$$

Where

K_v = flowrate [m³/h] or [l/sec] at 1 bar pressure drop

q_v = flowrate [m³/h] or [l/sec]

ΔP = pressure drop [bar]

1) Please note that eye showers with built-in FLOWFIX have a fixed flowrate.

Examples:

What pressure drop is needed in order to achieve 75 l/min = 1.25 l/sec through a body shower with 1/2" inlet?

$$\Delta P = \left(\frac{q_v}{K_v} \right)^2 = \left(\frac{1.25 [\text{l/sec}]}{1.08 [\text{l/sec}]} \right)^2 = 1.34 [\text{bar}]$$

What flowrate can be expected through a free standing body shower with top inlet at a pressure drop of 1.5 bar?

$$q_v = K_v \times \sqrt{\Delta P} = 1.10 [\text{l/sec}] \times \sqrt{1.5 [\text{bar}]} = 1.35 \text{ l/sec} = 80.8 \text{ l/min.}$$

K_v VALUES

Type of shower	Eye shower without FLOWFIX ¹⁾	Body shower 1/2" pipe or inlet	Body shower 3/4" pipe or inlet	Body shower 1" pipe or inlet	Free standing-body shower, top inlet	Free standing-body shower, bottom inlet	Thermostatic mixing valve 17 140.009	Thermostatic mixing valve 17 457.009	
K_v -value	m ³ /h	0.75	3.89	3.72	5.31	3.97	2.99	1.25	3.89
	l/sec	0.21	1.08	1.03	1.48	1.10	0.83	0.35	1.08

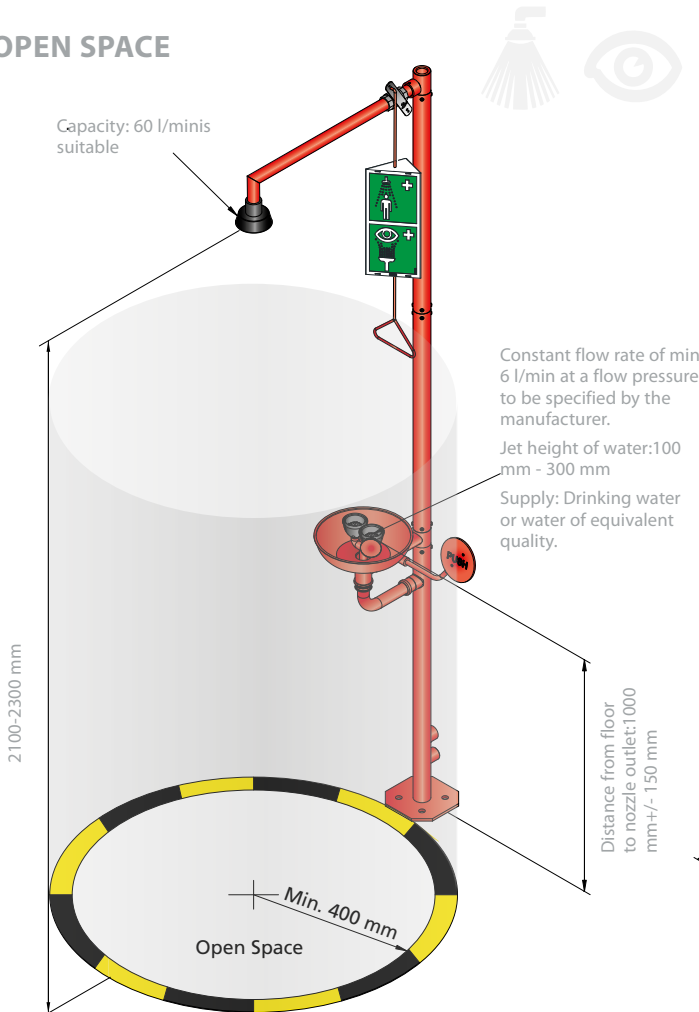
INTERNATIONAL STANDARDS
EN-NORM 15154 - 1&2
 (European Committee for Standardization)

MAIN REQUIREMENTS

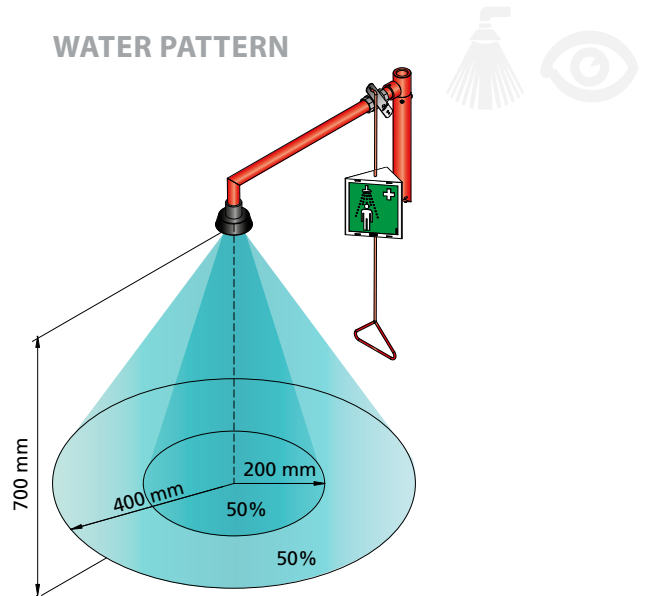
- The water supplied by the body shower shall be of constant flow rate in accordance with national regulations at a flow pressure to be specified by the manufacturer. The flow pressure shall be specified and measured where the shower is connected to the water system. The body shower shall be capable of delivering this supply for a minimum of 15 minutes. Note: When no national or local regulations apply, a constant flow rate of min. 60 l/min is suitable.
- It shall only be possible to make adjustments with a tool to the direction of spray or the water distribution of a shower head. The shower head shall be self-draining between the valve and the outlet. The shower head shall be removable for maintenance but only by use of a tool.
- At a distance 700 mm below the shower head, (50±10) % of the volume of water delivered shall fall in a circle with a radius of 200 mm; the water level in the individual compartments in this circle shall not deviate by more than 30 % from the mean value. At this measuring level, the area reached by minimum 95 % of the water shall be limited to a circle with a radius of 400 mm. The velocity of the water spray shall be low enough to be non-injurious to the user.
- The shower head shall be designed to be installed so that its lower edge is (2200 ± 100) mm above the level on which the user stands.
- The valve shall not close automatically once it has been opened. The direction of operating the valve actuator shall be clearly visible and unmistakable.

REDLINE EMERGENCY SHOWERS & EYE WASHES

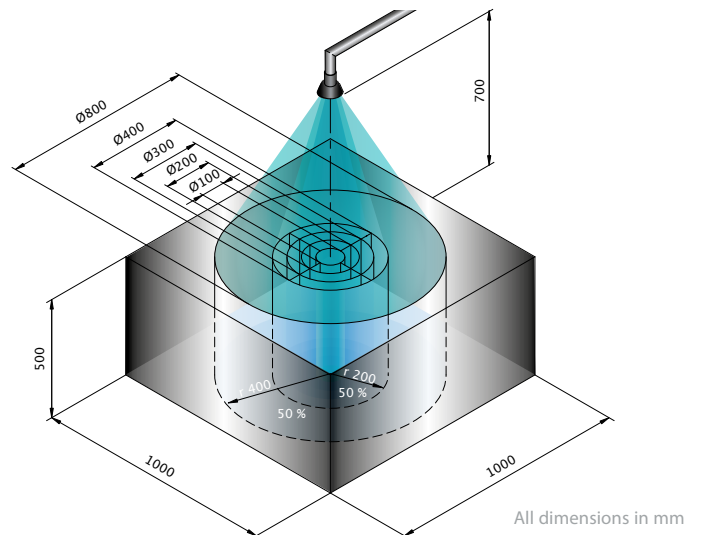
OPEN SPACE



WATER PATTERN



TYPE TESTING OF WATER DISTRIBUTION



BROEN has 3rd party certificate for EN 15154.

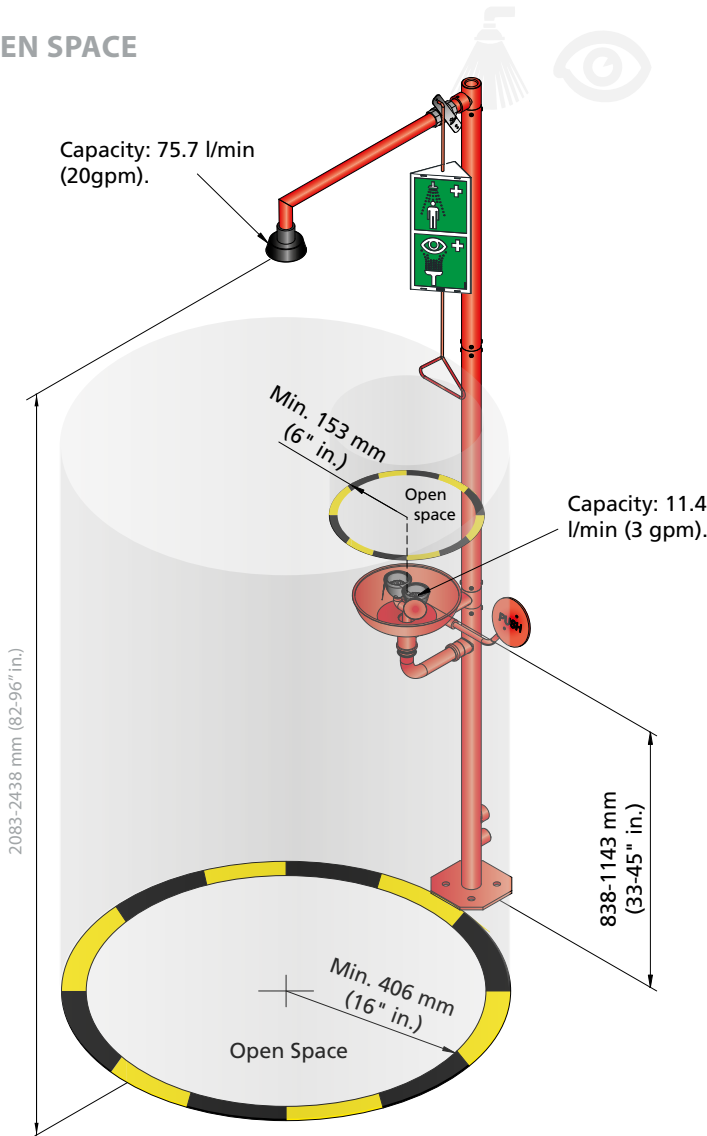
INTERNATIONAL STANDARDS
ANSI NORM Z 358.1-2004
(American National Standard Institute)

MAIN REQUIREMENTS

- Emergency eyewash and showers must be located in such a way that they can be reached by the user within maximum 10 seconds and available for immediate use (ref.: 4.5.2 + Safety considerations - B5).
- Eye/face showers must be able to deliver at least 11.4 l. water per minute continuously for at least 15 minutes (ref.: 6.1.6).
- The handle of pull rod must be located at a maximum height of 175.3 cm above the floor (ref.: 4.2).
- The valve must go from “off” to “on” position within 1 second or less and be able to remain open without further action. (ref.: 4.2).
- The body shower must be capable of delivering flushing fluid at a minimum of 75.7 liters per minute continuously for a minimum of 15 minutes (ref.: 4.1.4).
- The diameter of the water spray pattern must be minimum 50.8 cm measured at 152.4 cm above the floor (ref.: 4.1.5).
- The face of the showerhead shall be located within a range of 208.3 cm to 243.8 cm from the floor (ref.: 4.4.1).
- The eye/face showers flushing fluid nozzles must be located within a range of 83.8 cm to 114.3 cm above the floor (ref.: 5.4.4).
- The shower must be activated at least once a week (ref.: 4.6.2).
- Tepid water is required in all showers (ref.: 4.5.6 + Safety considerations - B5).

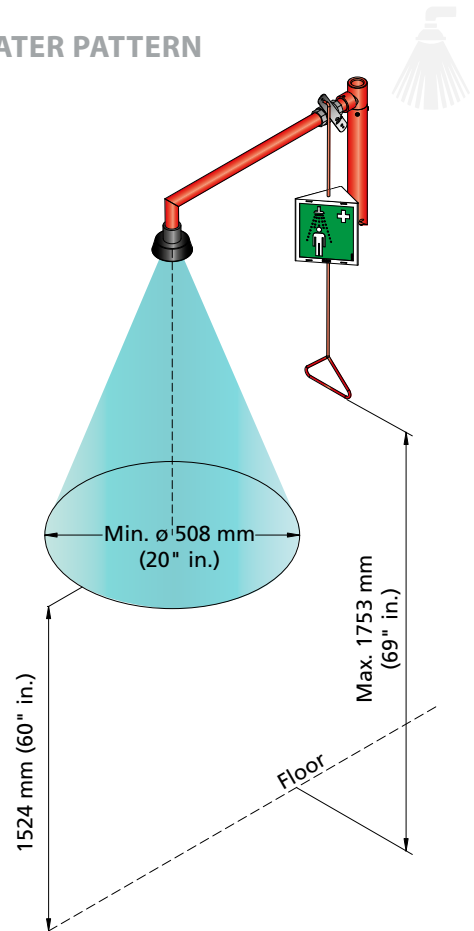
Reference: ANSI Z 358.1-2004

OPEN SPACE



An eye shower is the only allowable exception from the rule that no obstructions are allowed in the “open space”.

WATER PATTERN



BROEN has 3rd party certificate for ANSI Z358.1 - 2004

BROEN LAB develops, manufactures and delivers complete fittings for professional laboratories. Our know-how and our quality products ensure the precise flow of water, gases and air, from source to user.

BROEN LAB solutions are used by professional users in many kinds of laboratories, from the education and health sectors to industry in general. Our products are already an integrated part of many workplaces. From fittings for purified water, nitrogen, vacuum and compressed air, to the control and regulation of pure gases in critical applications such as a gas chromatography and spectrometry.

Our extensive knowledge allows us to continually develop and optimize our products so that they meet customer needs and specifications. Safety, functionality and quality are an integral part of product design and flexibility. Our insight and understanding of working environments and safety in laboratories allow us to develop custom solutions for projects around the world. Use us to plan your project so we can advise you on laboratory layout and design.

Head Office: BROEN LAB GROUP

Skovvej 30 • DK-5610 Assens
Tel. +45 6471 2095 • Fax +45 6471 2476
E-mail: lab@broen.com

BROEN Armaturen GmbH
Industriestrasse 8 • D - 64579 Gernsheim
Germany
Tel. +49 62 58 93 190
E-mail: info@broen.de

BROEN VALVES Ltd.
7, Cleton Street Business Park, Cleton Street
Tipton • West Midlands DY4 7TR • U.K.
Tel. +44 121 522 4515 • Fax +44 121 522 4535
E-mail: broenvalves@broen.com

BROEN Singapore Pte.Ltd.
17 Everton Road • Singapore 089373
Tel. +65 6298 0662 • Fax +65 6298 0468
E-mail: sales@broen.com.sg

www.broen.com

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www.ke-art.dk

