

**BROEN  
EMERGENCY  
SHOWER  
SYSTEMS**

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**EMERGENCY  
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**BROEN**

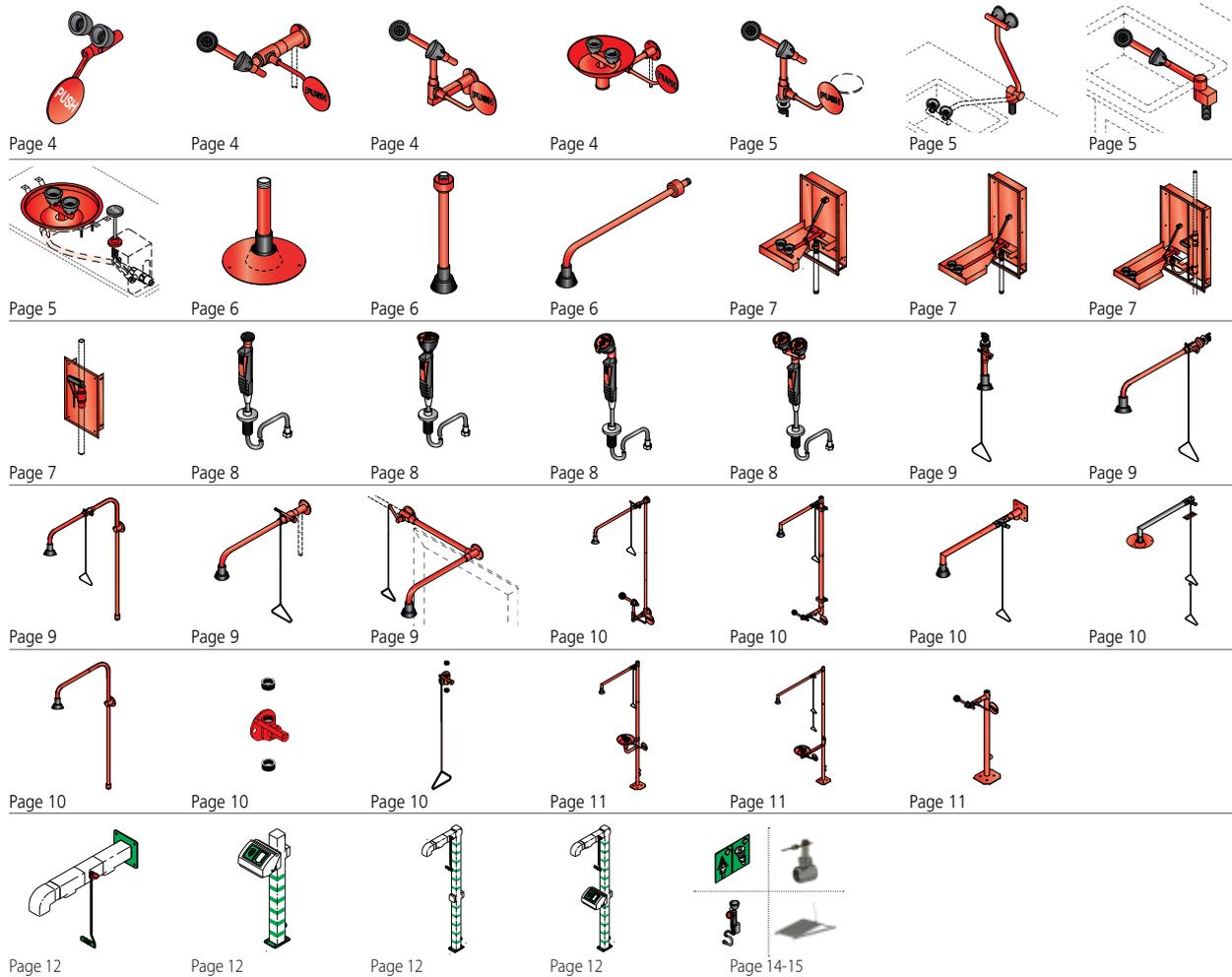
INTELLIGENT FLOW SOLUTIONS

# TABLE OF CONTENTS

Content	Page
Table of Content / Product Overview	2
<b>Emergency Showers &amp; Eye Washes</b>	
Eye Showers.....	4-5
Recessed Emergency Showers.....	6-7
Hand- Held Eye Showers.....	8
Body Showers for Wall & Ceiling.....	9
Body & Eye Showers for Wall Mounting.....	10
Showers with Flexible Choice of Valve.....	10
Free Standing Body & Eye Showers.....	11
Heated Body Showers & Eye Washes.....	12
Accessories for Emergency Showers	14-15
General Information	16
Technical Information	17
International Standards	18-19

BROEN EMERGENCY SHOWER SYSTEMS

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



\* Products shown on the front page of the catalogue will be released during year 2013.



**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*

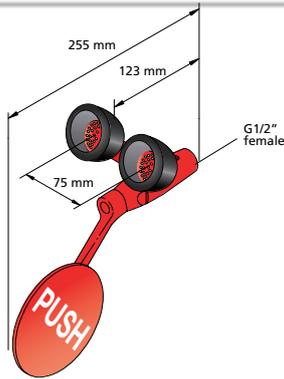
# EYE SHOWERS FOR WALL MOUNTING

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.



BROEN EMERGENCY SHOWER SYSTEMS

## Eye Shower, Wall Mounted



**No. 17 067.009**  
VVS: 765873 315

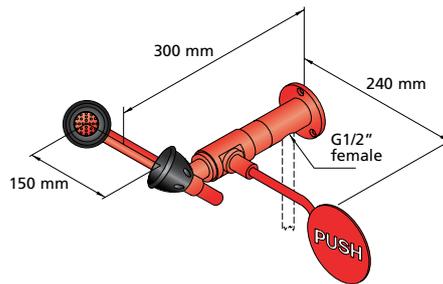
### Other Models

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

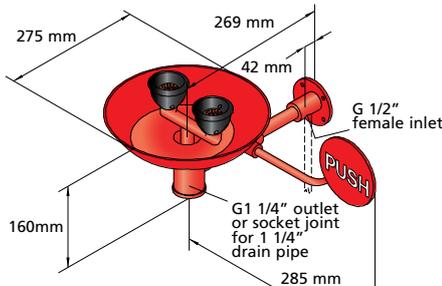
### Other Models

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

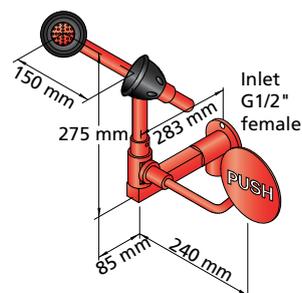
No. 17 928.004  
G 1/2\"/>

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

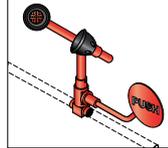
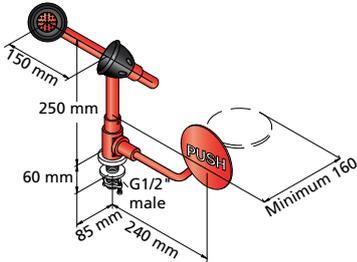
## Eye Shower, Table Mounted



**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.

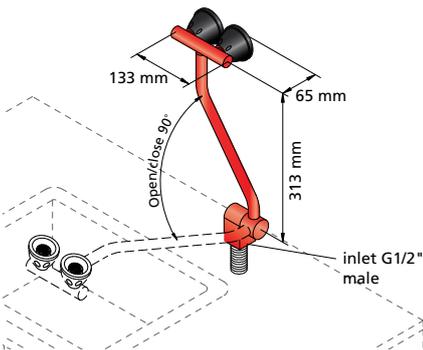
## Eye Shower, Table Mounted, Swing Down



**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.

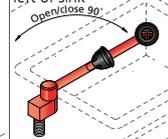
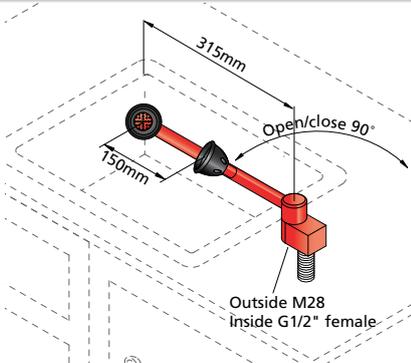
## Eye Shower, Table Mounted, Swivel Joint



**No. 17 231.009**  
VVS: 765926 315

### Other Models

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



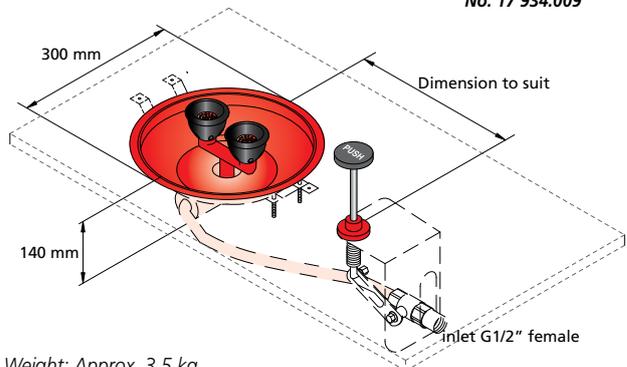
Weight: Approx. 4 kg

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.



BROEN EMERGENCY SHOWER SYSTEMS

# RECESSED EMERGENCY SHOWERS

## SPECIAL FEATURES

### General:

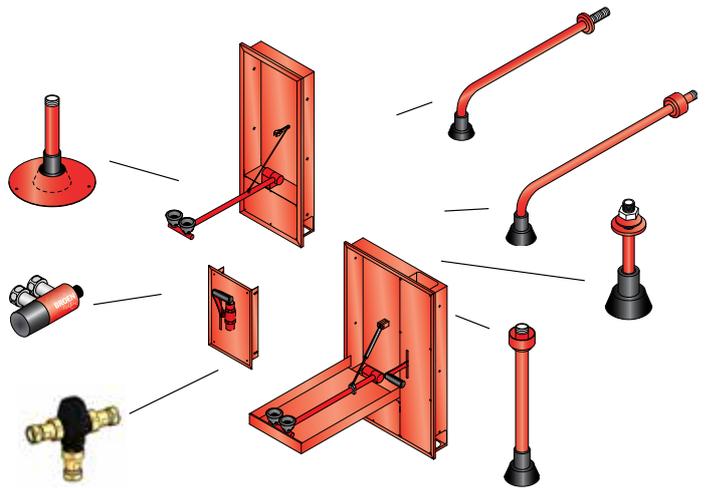
- Choose BROEN Polycoated surface or Stainless Steel .
- Cabinet and cabinet door in stainless steel AISI 304.
- Disability-Friendly models comply with ANSI A117.1-2003.
- Easy to mount and install.
- Cabinet can also be surface mounted (except 17 155.009).

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.

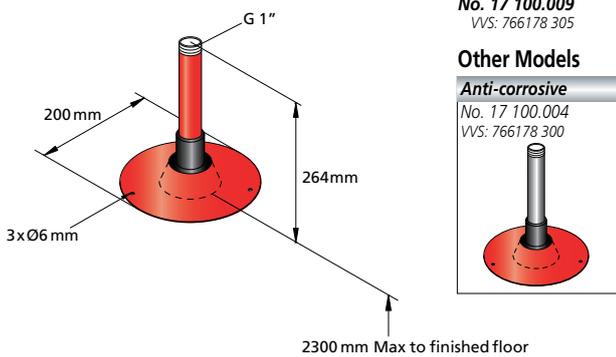


### Eye Wash:

- 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.

BROEN EMERGENCY SHOWER SYSTEMS

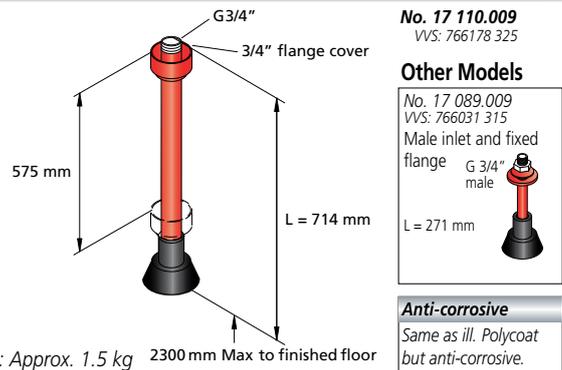
### Body Shower Outlet, Ceiling Mounted, Concealed



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.

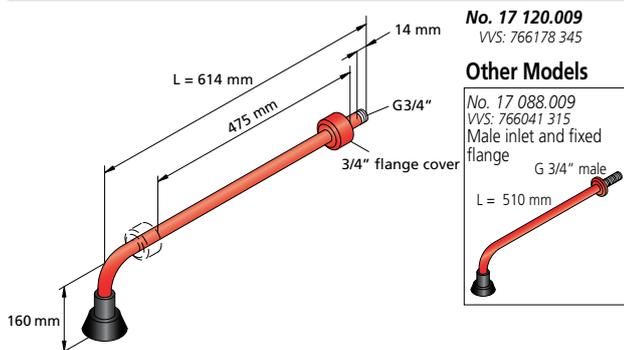
### Body Shower Outlet, Ceiling Mounted



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



Weight: Approx. 1.5 kg

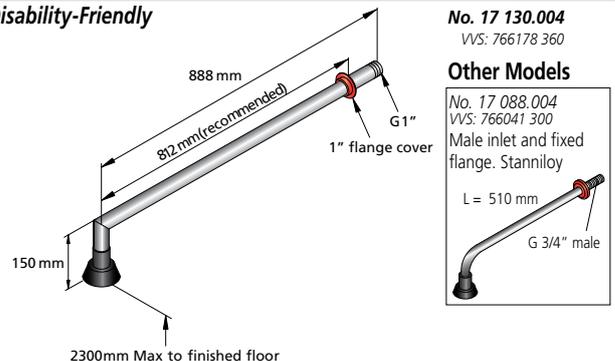
Body shower outlet, wall mounted, in brass with chemical resistant BROEN Polycoat with self-draining shower head. Inlet G 3/4" male.  
With adjustable flange.  
Min. working pressure: 1.5 bar.

### Body Shower Outlet, Wall Mounted

**Anti-corrosive**



#### Disability-Friendly



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

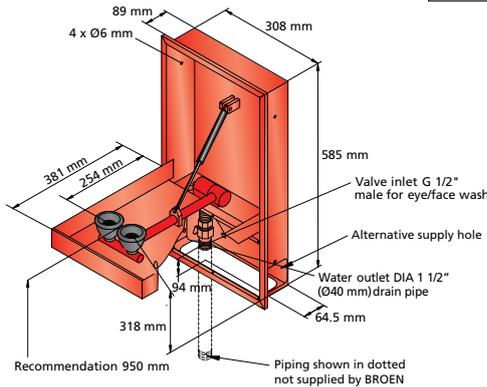


**No. 17 150.009**  
VVS: 766156 305

### 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

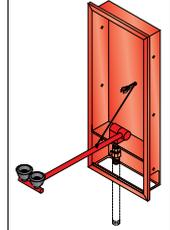


**No. 17 152.009**  
VVS: 766157 325

### Disability-Friendly

### Other Models

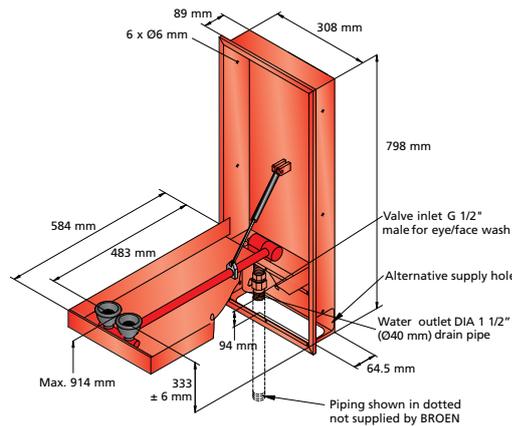
No. 17 151.009  
VVS: 766157 305  
Without cabinet door.



#### 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

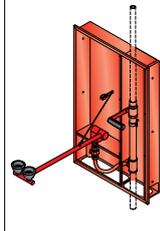


### Disability-Friendly

**No. 17 154.009**  
VVS: 766177 325

### Other Models

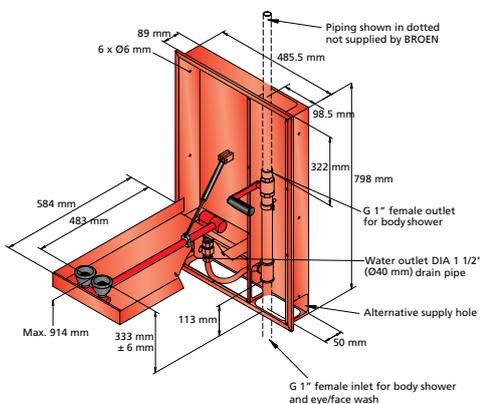
No. 17 153.009  
VVS: 766177 305  
Without cabinet door



#### Anti-corrosive

Same as ill. Polycoat but anti-corrosive cabinet.  
No. 17 164.009  
VVS: 766177 320

Without cabinet door  
No. 17 163.009  
VVS: 766177 300



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.

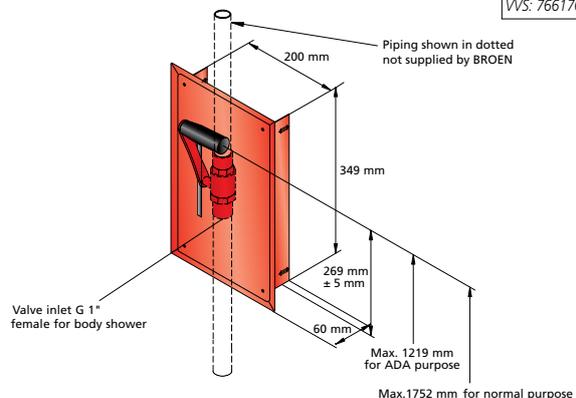
## Body Shower, Wall Recessed , Hand Activator



**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

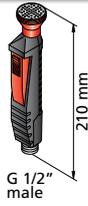
Wall recessed cabinet with chemical resistant BROEN Polycoat and hand activator for body shower with various options for shower outlet. 1" valve for 3/4" or 1" pipe. Min. working pressure: 1 bar.

# HAND-HELD 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



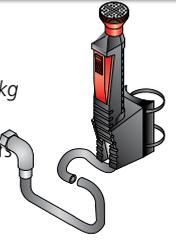
**No. 17 711.000**  
VVS: 765942 315

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**

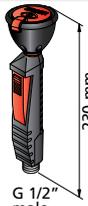
Same as model above but in SS and stanilloy.



## 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).



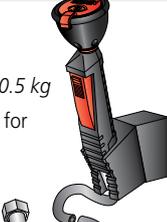
**No. 17 702.000**  
VVS: 765956 315

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



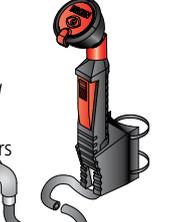
**No. 17 713.000**  
VVS: 765946 315

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

**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.

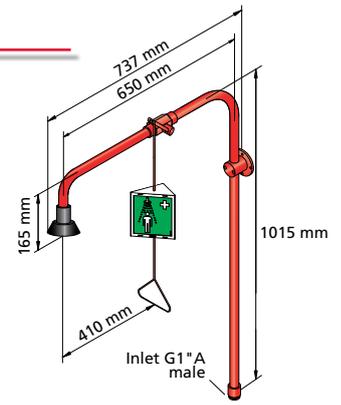
**No. 17 976.004**

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

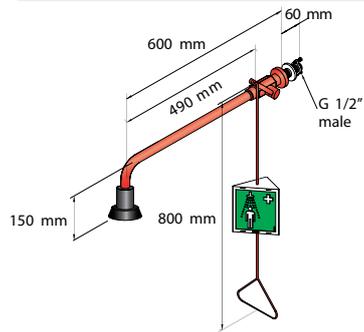
**No. 17 973.009**

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.



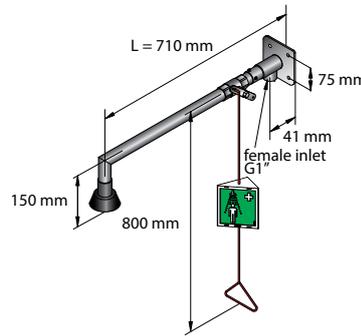
## Body Shower, Wall Mounted

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

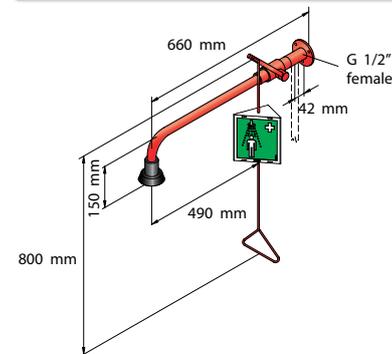
Supporting wall flange can be used for mounting (see page 14)

## Body Shower for Exposed Pipework, Wall Mounted

## Concealed Pipework



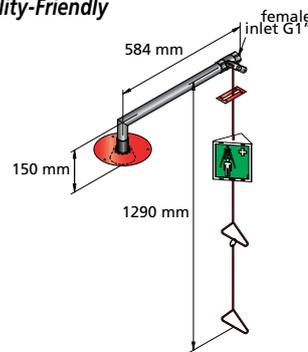
Anti-corrosive - Modular



**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.

## Disability-Friendly



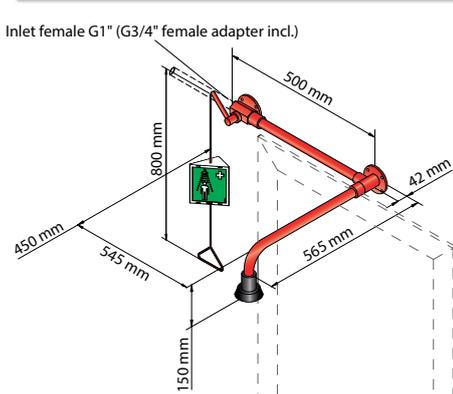
**No. 17 971.004**  
VVS: 766163 300

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.

Supporting wall flange can be used for mounting (see page 14)

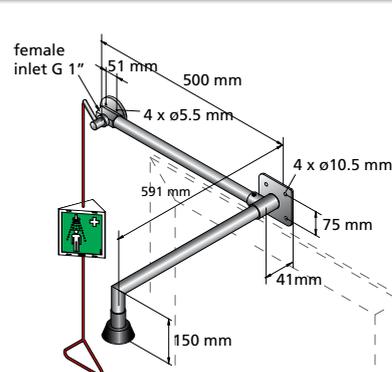
## Body Shower, Wall Mounted above Door

Anti-corrosive - Modular



**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.



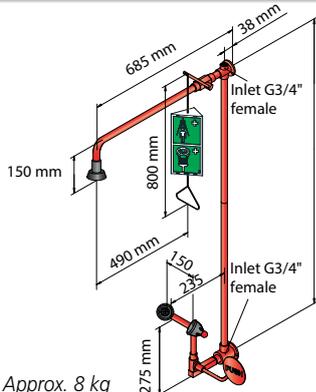
**No. 17 972.004**  
VVS: 766162 340

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

BROEN EMERGENCY SHOWER SYSTEMS

## 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

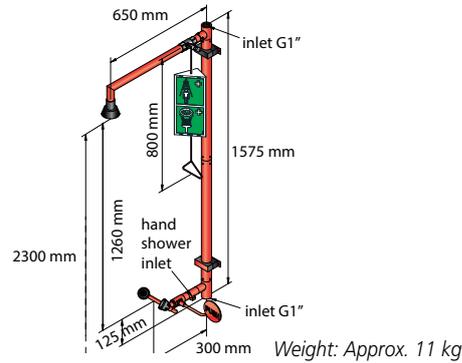
No. 17 454.009  
VVS: 766001 315

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

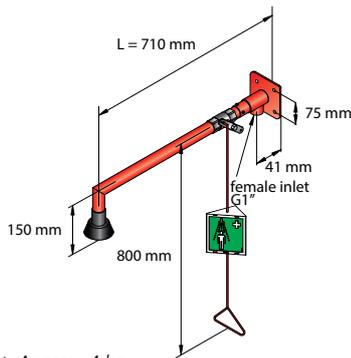
Same as ill. Polycoat but anti-corrosive.

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

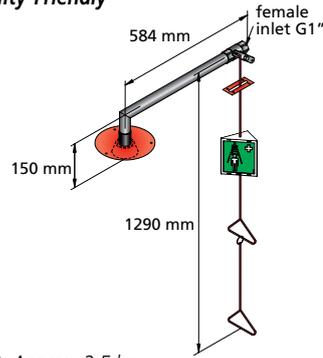
### Other Models

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

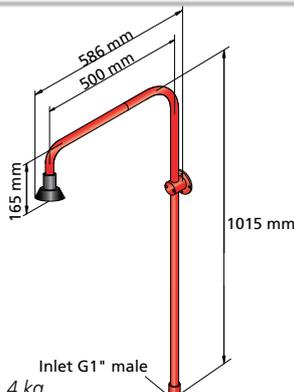
Body shower, concealed, modular. In SS and Chrome/Nickel plated brass with chemical resistant red BROEN Polycoat and self-draining shower head. For recessed flexible wall mounting. With extended pull rod for disabled people. Min. working pressure: 1 bar.

No. 17 960.009  
VVS: 766163 305



# SHOWERS WITH 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.

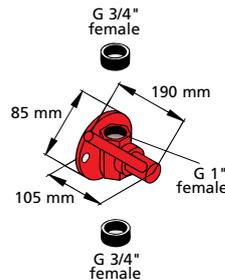
Please refer to page 6 for more outlets for flexible choice of valve.

No. 17 974.009



## BALLOFIX® ball valve

No. 17 022.009  
VVS: 766091 315

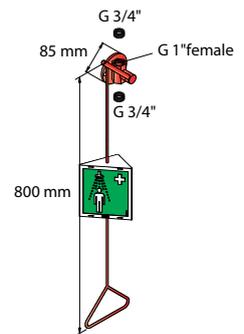


Weight: Approx. 1 kg

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

## BALLOFIX® ball valve w./rod

No. 17 028.009

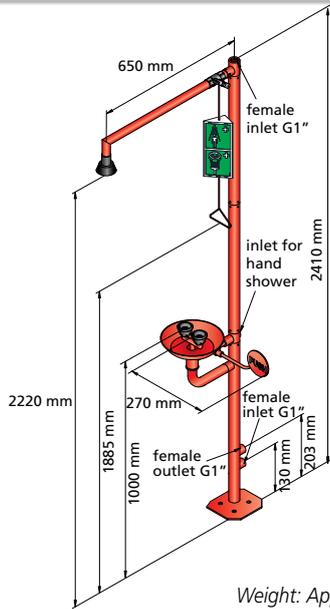


Weight: Approx. 1 kg

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

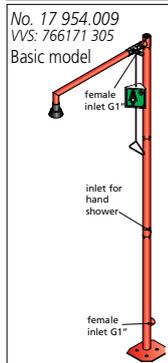
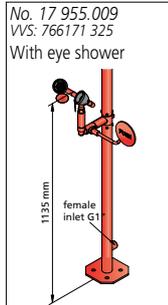
# FREE STANDING BODY & EYE SHOWERS

## Body Shower with Eye/Face Shower and Bowl, Modular



No. 17 956.009  
VVS: 766171 345

### Other Models



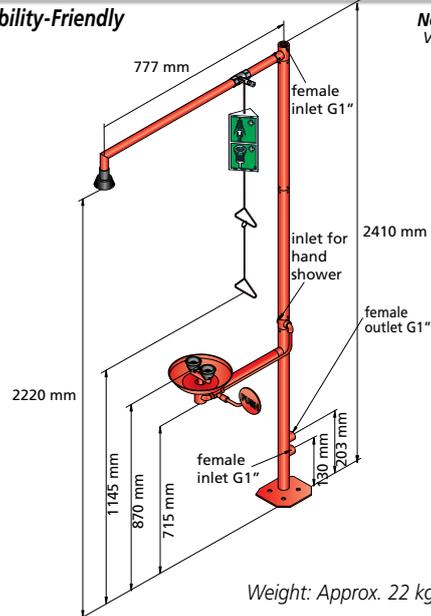
Weight: Approx. 17 kg

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

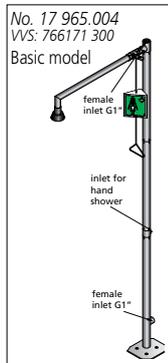
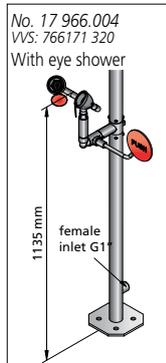
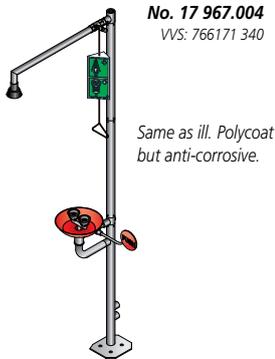


No. 17 957.009  
VVS: 766172 305

Weight: Approx. 22 kg

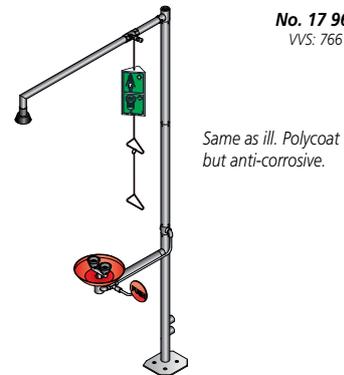
Body shower with eye/face shower and bowl, modular. In brass and SS with chemical resistant red BROEN Polycoat with self-draining shower head. Eye wash with built-in FLOWFIX for regulation of water flow (26 l/min). Bowl in stainless steel with integrated outlet. Min. working pressure: 1.5 bar.

### Anti-corrosive - Modular

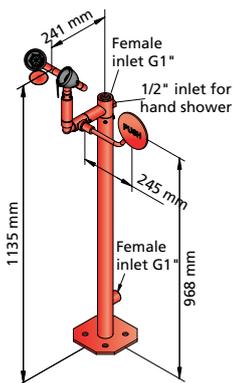


### Anti-corrosive - Modular

### Disability-Friendly

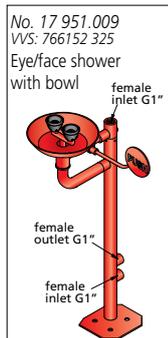


## Eye Shower, Free Standing, Modular



No. 17 950.009  
VVS: 766152 305

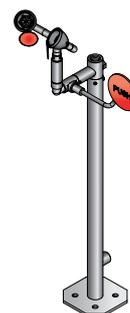
### Other Models



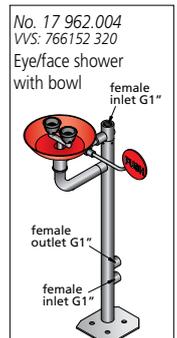
Weight: Approx. 7.5 kg  
Eye shower, free standing, modular in brass and SS with chemical resistant red BROEN Polycoat. Built-in FLOWFIX for regulation of water flow (26 l/min). Min. working pressure: 1.5 bar.

### Anti-corrosive - Modular

No. 17 961.004  
VVS: 766152 300



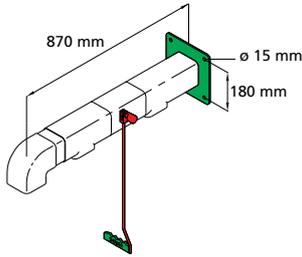
### Other Models



Body Shower, Wall Mounted, Heated



No. 17 851 19  
(Old Item No. 17 819.009)  
VVS: 766190 308



Inlet size: G 1" female  
Min. working pressure: 1.5 Bar  
Water Flow: 115 l/min.  
Power Supply: 230VAC, 12W

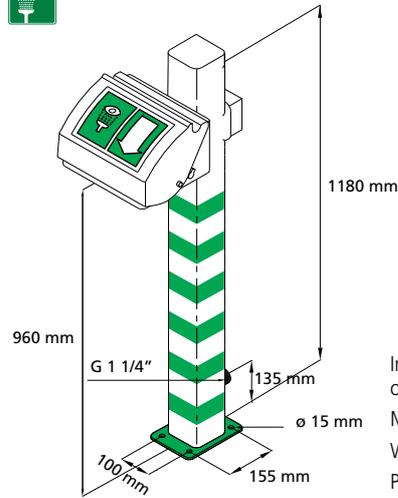
Weight: Approx. 16 kg

Wall mounted emergency safety shower in galvanized steel, trace tape heated and pre-insulated. Frost protected down to -20°C. For lower temperatures please contact your sales representative. By request also available in Stainless Steel.

Eye Wash Fountain, Pedestal Mounted, Heated



No. 17 851 24  
(Old Item No. 17 824.009)  
VVS: 766197 340



Inlet size: 15mm compression or G 1/2" male  
Min. working pressure: 2.2 Bar  
Water Flow 30: l/min.  
Power Supply: 230VAC, 30W

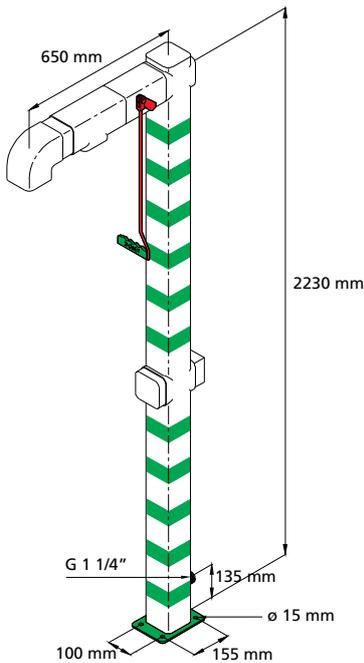
Weight: Approx. 26 kg

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. Frost protected down to -20°C. For lower temperatures please contact your sales representative. Also available in Stainless Steel.

Body Shower, Free Standing, Heated



No. 17 851 10  
(Old Item No. 17 810.009)  
VVS: 766195 310



Inlet size: G 1 1/4" male  
Min. working pressure: 1.5 Bar  
Water Flow: 115 l/min.  
Power Supply: 230VAC, 42W

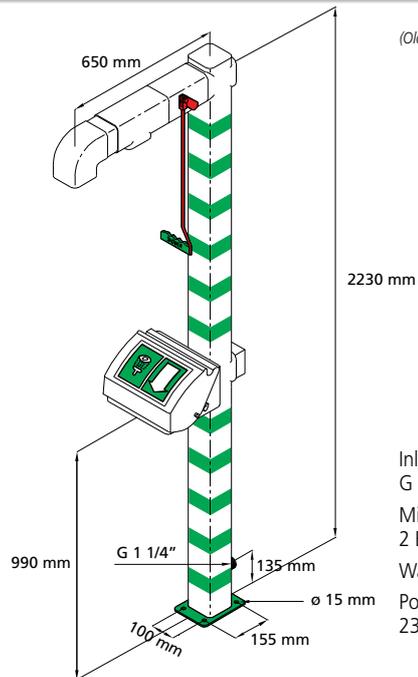
Weight: Approx. 28 kg

Emergency safety shower in galvanized steel, trace tape heated and pre-insulated. Frost protected down to -20°C. For lower temperatures please contact your sales representative. Also available in Stainless Steel.

Body Shower, Free Standing with Eye Wash Fountain, Heated



No. 17 851 18  
(Old Item No. 17 818.009)  
VVS: 766194 310



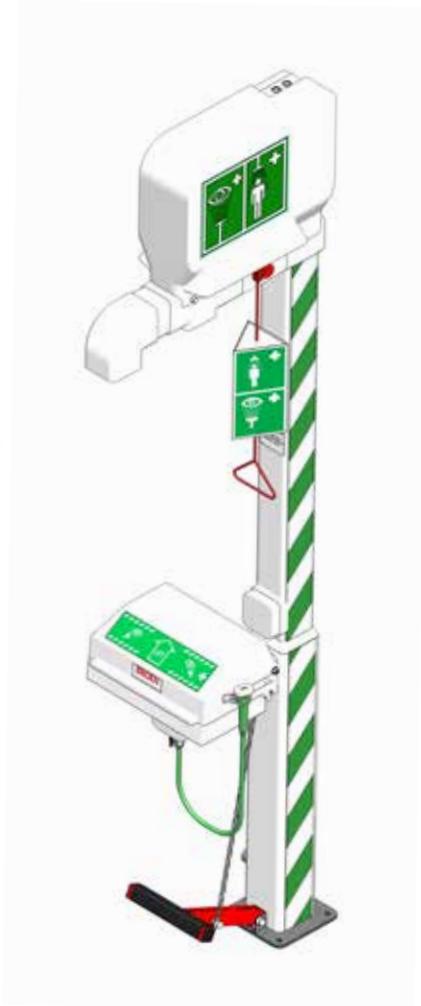
Inlet size: G 1 1/4" male  
Min. working pressure: 2 Bar  
Water Flow 115 l/min.  
Power Supply: 230VAC, 57W

Weight: Approx. 32 kg

Heated emergency safety shower in galvanized steel with eye bath/face wash fountain, trace tape heated and pre-insulated. Frost protected down to -20°C. For lower temperatures please contact your sales representative. Also available in Stainless Steel.

# ALTERNATIVE EMERGENCY SHOWERS & EYE WASHES

**HEATED SHOWER**  
for temperatures  
down to -35°C



## EMERGENCY TANK SHOWER



**BROEN** EMERGENCY SHOWER SYSTEMS

## MOBILE & PORTABLE EMERGENCY SHOWERS



For more information about shown products please contact your local sales representative

# ACCESSORIES FOR EMERGENCY SHOWERS

## Thermostatic Mixing Valves for Eye and Body Showers

**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.**

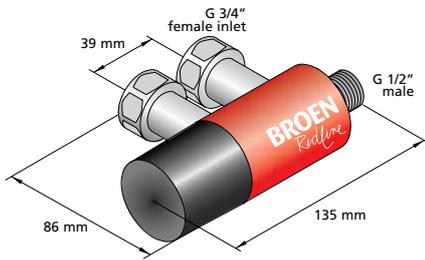
The solution is designed for the operation of one eye/hand shower respectively one body shower.

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.

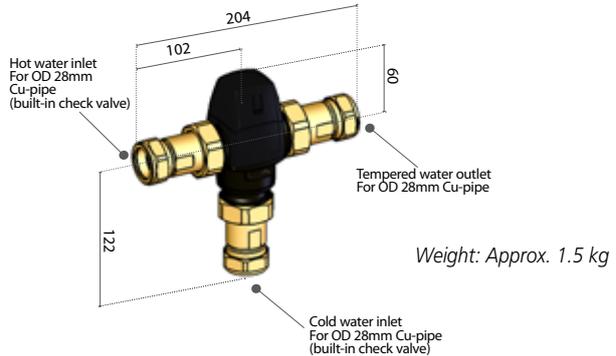
### Thermostatic Mixing Valves for Eye Shower



Weight: Approx. 1.5 kg

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

### Thermostatic Mixing Valves for Body Shower



**No. 17 459.009\*:** (VVS: 766094 315)  
Weight: Approx. 1.5 kg  
Thermostatic mixing valve for body shower.  
Min. working pressure: 1.5 bar.  
\*Please note: Reduced temperature stability at low flow rates

BROEN EMERGENCY SHOWER SYSTEMS

## Signs for Eye and Body Showers

**Nr. 17 001 920** .....

(Weight: Approx. 0.23 kg)  
Sign (pull rod mounted) and instruction card for Body and Eye Shower



**Nr. 17 002 27** .....

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



**Nr. 96M0042** .....

(Weight: Approx. 0.01 kg)  
Label - Body Shower



**Nr. 17 001 910** .....

(Weight: Approx. 0.13 kg)  
Sign (pull rod mounted) and instruction card for Body Shower



**Nr. 17 002 28** .....

(Weight: Approx. 0.03 kg)  
Instruction and Service Sign - Body and Eye Shower



**Nr. 96M0043** .....

(Weight: Approx. 0.01 kg)  
Label - Eye shower



**Nr. 17 002 010** .....

(Weight: Approx. 0.15 kg)  
Sign (wall mounted) and instruction card for Body and Eye Shower



**Nr. 17 002 29** .....

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



**Nr. 17 001 900** .....

(Weight: Approx. 0.08 kg)  
Sign (wall mounted) and instruction card for Eye Shower



**Nr. 17 002 30** .....

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



**Nr. 17 002 000** .....

(Weight: Approx. 0.08 kg)  
Sign (wall mounted) and instruction card for Body Shower



**Nr. 17 002 31** .....

(Weight: Approx. 0.03 kg)  
Instruction and Service Sign - Body Shower with Hand-Held Eye Shower



## Wall bracket for body showers

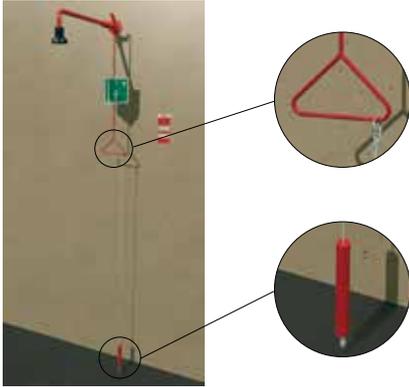


**No. 17 001.079**  
Wall bracket for support of wall mounted body showers (size 1/2").  
Other sizes on request

## ACCESSORIES FOR EMERGENCY SHOWERS



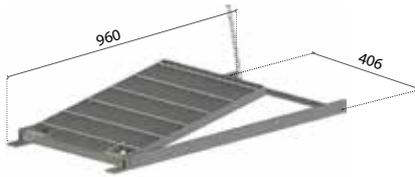
### Cable



#### 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 Shower



Weight: Approx. 23 kg

**No. 17 919.009** (VVS: 766179 300) - **Stainless Steel**  
**No. 17 834.009** - **Galvanized Steel**

Foot panel for operation of body showers. Possible to combine with 17 909.909 if mounted 180° opposite. Delivered with all mounting accessories

### Accessories for Heated Showers

- 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 (Stainless Steel)
- No. 17 833.009 Foot panel (Galvanized Steel)
- No. 17 851.79 (VVS: 766198 804) Foot treadle (SS)
- No. 17 851.02 Indication light (non flame proof)
- No. 17 851.03 Indication light (flame proof)
- No. 17 827.009 (VVS: 766198 827) Shower head in stainless steel
- No. 17 851.50 Frost protected underground extension



No. 17 833.009 or  
 No. 17 803.009

### Flow switch



Weight: Approx. 0,5 kg

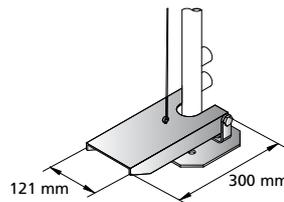
A spring-supported paddle flow switch should be placed close to the inlet of the emergency shower.

When the shower is activated the contact is released and a signal sent to the connected receiving device.

Item No.	Material	Size *	PN, bar
96P0062	brass	G3/4	25
96P0063	brass	G 1 1/4	25
96P0066	SS	G3/4	25
96P0068	SS	G 1 1/4	25

\* Please note that size of the flow switch should be a size bigger than the inlet of the emergency shower

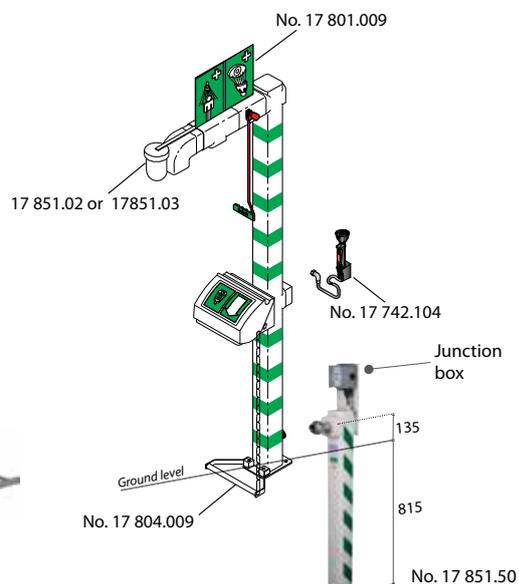
### Foot Treadle for Operation of Eye Showers



Weight: Approx. 1 kg

**No. 17 909.909** (VVS: 766771 310)

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.



### 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 recognized 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.

### Threading

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).

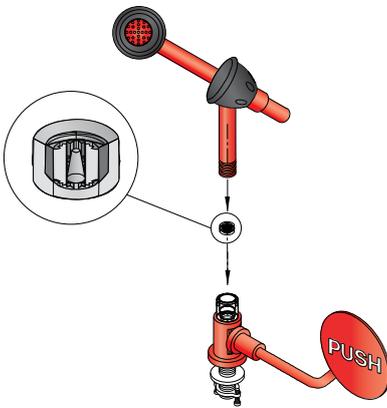
## MIN. WORKING PRESSURE (DYNAMIC/FLOW PRESSURE)

See individual products.

## MAX. WORKING PRESSURE (STATIC)

kPa	kN/m <sup>2</sup>	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 [m<sup>3</sup>/h] or [l/sec] at 1 bar pressure drop

$q_v$  = flowrate [m<sup>3</sup>/h] or [l/sec]

$\Delta P$  = 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<sub>v</sub> VALUES

Type of shower	Eye shower without FLOWFIX <sup>1)</sup>	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 17 459.009
$K_v$ -value m <sup>3</sup> /h	0.75	3.89	4.3	5.31	3.97	2.99	1.25	5.20
l/sec	0.21	1.08	1.19	1.48	1.10	0.83	0.35	1.44

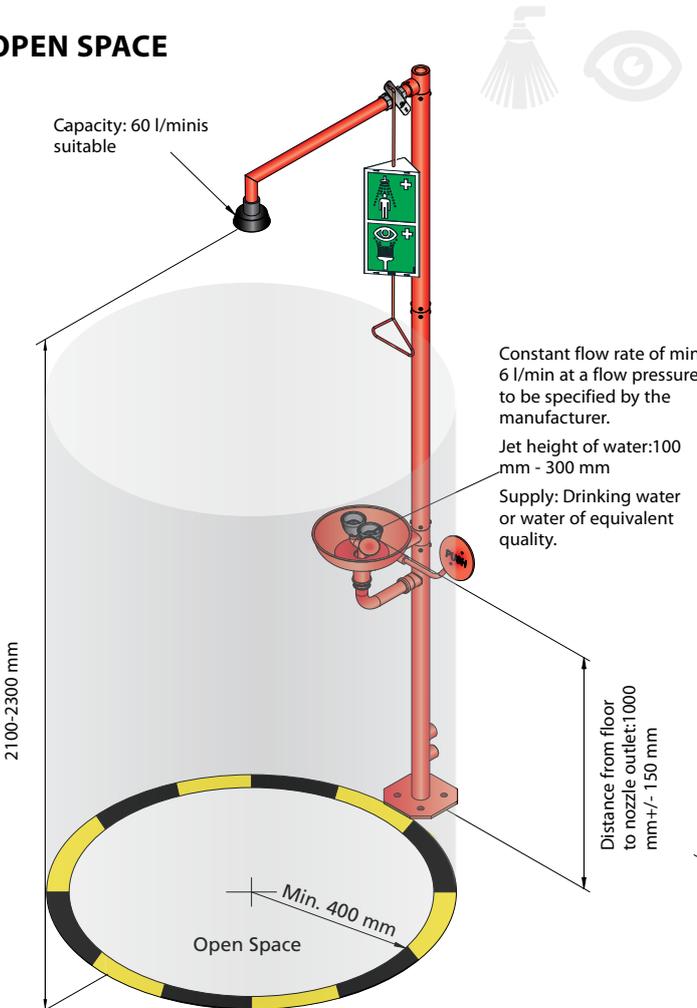
**INTERNATIONAL STANDARDS**  
**EN-NORM 15154 - 1&2**  
 (European Committee for Standardization)

**MAIN REQUIREMENTS**

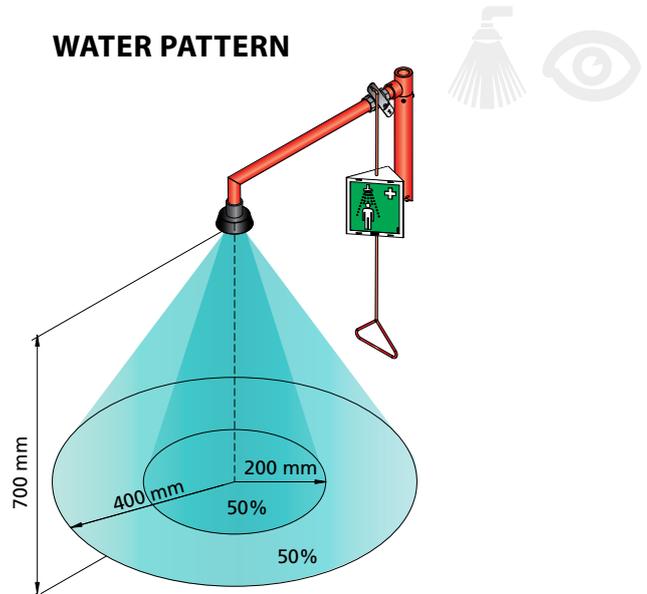
- The water supplied by the body shower shall be of constant flow rate in accordance with national regulations at a flow pressure to be specified by the manufacturer. The flow pressure shall be specified and measured where the shower is connected to the water system. The body shower shall be capable 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.

**BROEN EMERGENCY SHOWER SYSTEMS**

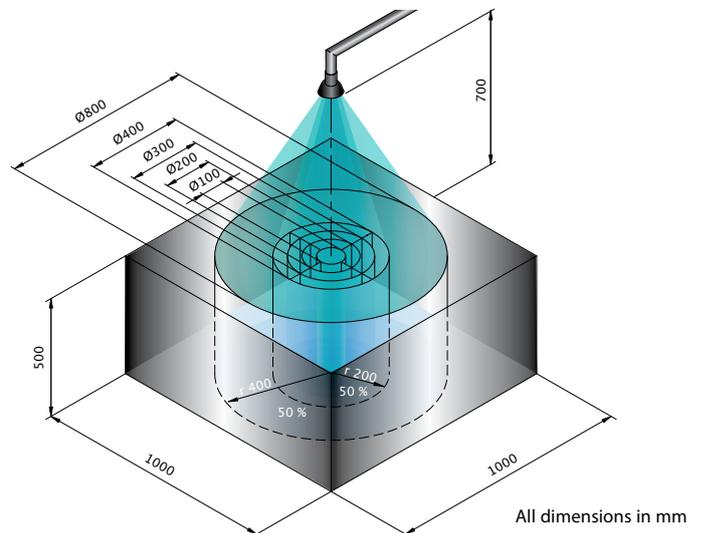
**OPEN SPACE**



**WATER PATTERN**



**TYPE TESTING OF WATER DISTRIBUTION**



Please refer to [www.broen.com](http://www.broen.com) for a 3rd party certificate for EN 15154

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

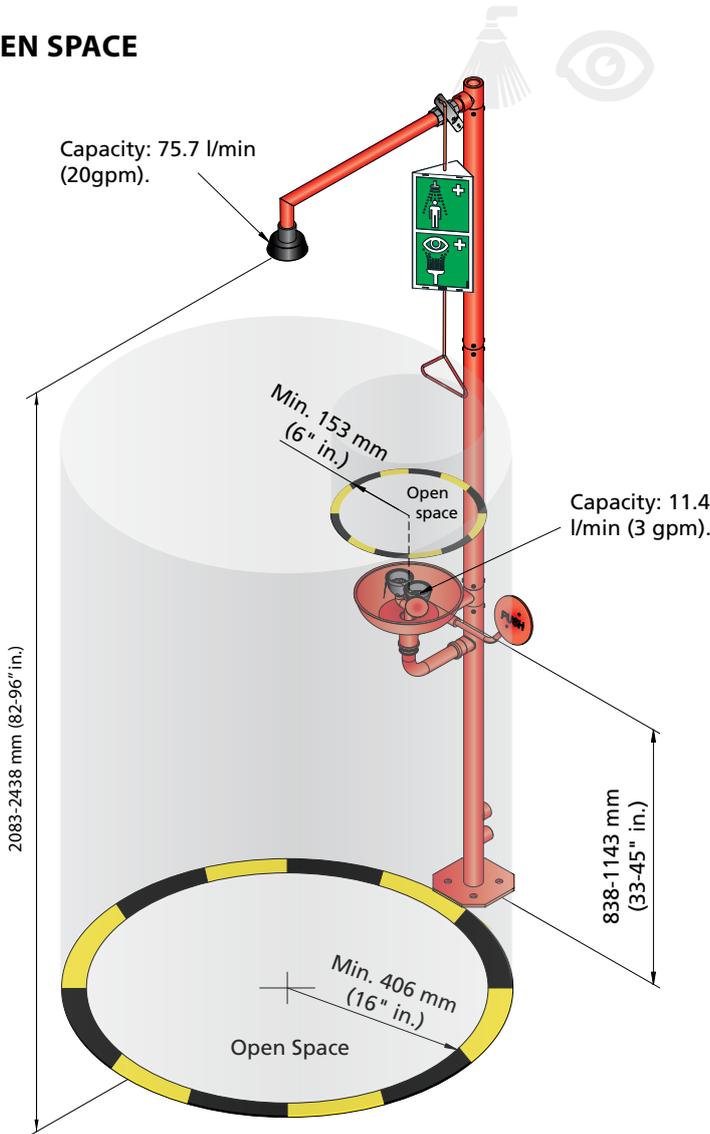
**MAIN REQUIREMENTS**

- 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).

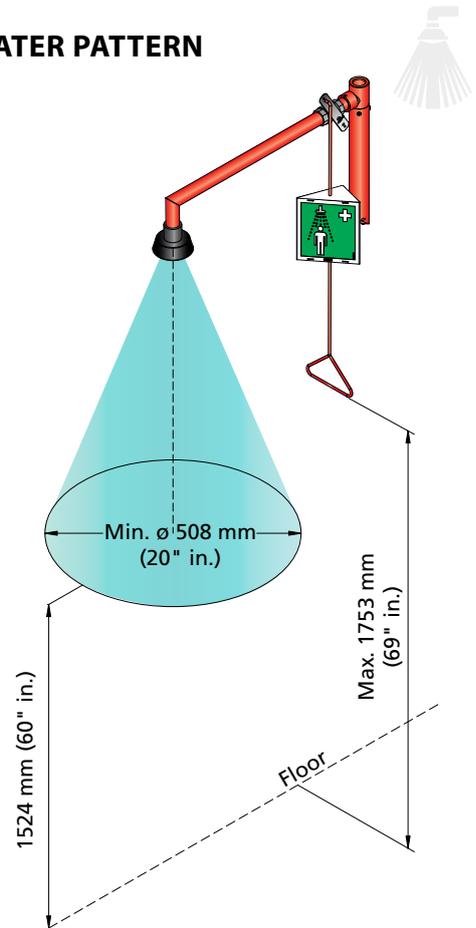
Reference: ANSI Z 358.1-2004

**OPEN SPACE**



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

**WATER PATTERN**



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BROEN LAB and Emergency Showers is a world leader in the supply of emergency showers, eye washers and safety equipment to professional laboratories, the education sector and industrial workplaces. Our complete solutions are designed and developed for dynamic workplaces, and the system is modular so that transport and installation are as simple as possible.

Our safety installations meet all the regulatory requirements and have clearly-marked instructions. They are quick and easy to use, ensuring optimum pain relief in an emergency situation. We give advice on usage, maintenance and testing, so you can be sure your solution works when it is required to.

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.

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