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SPARE PARTS



SPARE PARTS

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CARLOS ARBOLES S.A

SAFFTY FOUIPMENT







CARLOS ARBOLES, S.A. designs and manufactures Emergency Equipment complying with the current International standards that ensures the user's

The requirements of these standards are, among aspects.

others: the flow to be supplied by the Emergency Equipment, the distribution of the water pattern on the body, the dimensions of the facility and the operating elements, signs and accessibility

EUROPEAN STANDARDS

The European Standard EN 15154 applies in Europe. According to this standard, the Emergency Equipment is divided into:

• Emergency Showers used in Laboratories EN 15154-1:2006.

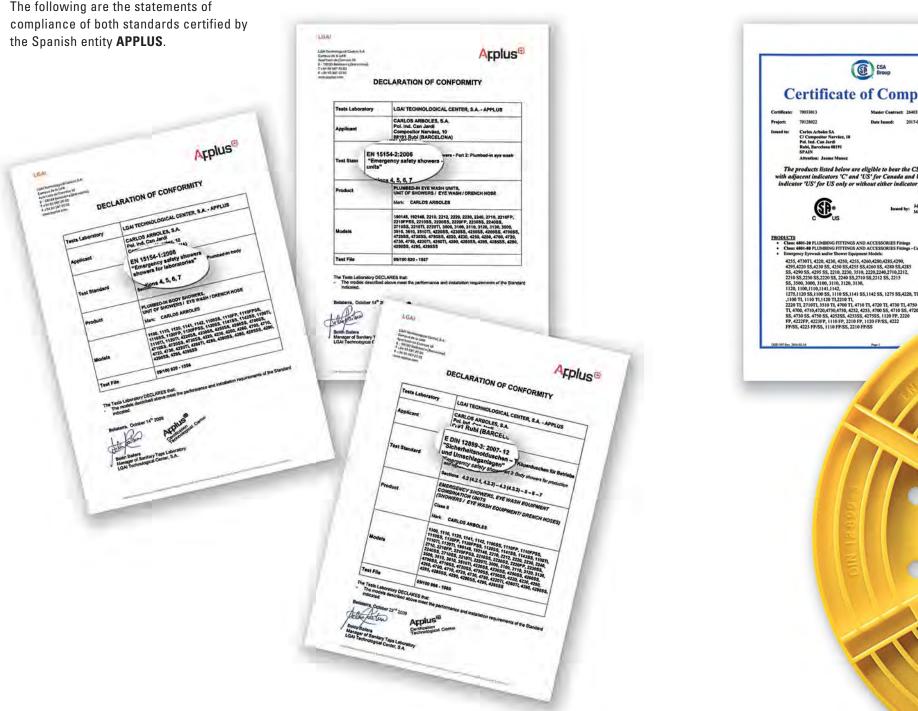
• Emergency Eyewashes **EN 15154-2:2006**. The following are the statements of

In Europe, the only standard for Emergency Showers used in industrial facilities is the German Standard DIN 12899-3:2007.

The following is the compliance statement certified by the entity APPLUS.

AMERICAN STANDARD

At the international level, the American standard ANSI/ISEA Z358.1-2014 is recognized worldwide for Emergency Showers and Eyewashes. The following is the certificate of compliance issued by the CSA Institute.









CARLOS ARBOLES, S.A. has its own design and manufacturing team for Emergency Equipment that develops, innovates and improves its products.

DESIGN

Our technical department continually develop and improve our products, along with specially required projects.

The latest CAD/CAM technology is employed for production and PROTOTYPING of components.

These prototypes are validated in our test LABORATORY. Strict mechanical and hydraulic tests are performed in the laboratory, which guarantee the functionality of the designs in emergency situations.

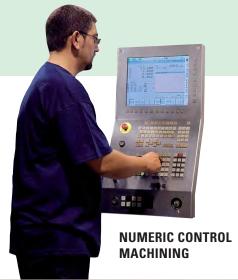




MANUFACTURING

The manufacturing process uses high-precision numerical control lathes and machining centers specifically designed for the production of tap fittings. High-performance ovens heat the parts between 300° C and 450° C to later dip them in polyamide 11 powder tanks, where the powder is melted and adheres to the part.

After the anti-corrosive coating process, the assembly line finishes the manufacturing process with 100% watertight control of the parts. Throughout the process, the Quality department checks the manufacturing parameters.













ANTI-CORROSIVE PLASTIC COATING

PRODUCTS ARE 100% LEAK TESTED



EMERGENCY SHOWERS AND EYEWASHES

CARLOS ARBOLES, S.A. supplies high quality Showers and Eyewashes that are extremely reliable.

The following are the main technical characteristics that distinguish our products.

HIGH QUALITY MATERIALS

Materials in contact with water are galvanized steel pipes, brass fittings and ABS reinforced plastic. We also have the ability to manufacture equipment in stainless steel.

2 ROBUST CONSTRUCTION

All our products are constructed from high quality materials, where fastening is surface mounting the components are always metallic.

This results into a robust equipment for the most adverse conditions.

3 SHOWER HEAD

- The water distribution pattern is in accordance to all relevant standards to give a wide and smooth flow pattern.
- The large Shower head diameter of 250 mm and the design of the flow holes prevent restricted flow caused by lime scale or contamination.

4 FULL RANGE

We have different models based on their installation, WALL, FLOOR, or TABLE mounted. The equipment is supplied disassembled, its assembly is easy and unmistakable.

We have different types of mechanisms:

- Shower with a pull handle or lever.
- Automatic opening and closing when entering and leaving the platform.
- Eyewash with a push lever, pedal, or platform operation.

50 % - 400 mm 50 % - 800 mm

ANSI STANDARD
EN STANDARD

5 EYEWASH ASSEMBLY

One or two spray heads offer a low pressure aerated water, which flushes the face and the eyes without damaging the delicate eye tissues.

The large-diameter jet reaches a 15 cm height, according to the standard. The plastic materials and rounded forms will not cause facial damage in the case of accidental contact. They include an anti-dust cover which operates automatically when the Eyewash unit is activated.

6 ANTI-CORROSIVE AND ENVIRONMENTAL COATING

Anti-corrosive polyamide 11 plastic coating, in HIGH-VISIBILITY YELLOW color. This plastic coating has a thickness of 250 to 300 microns. It has good resistance to acids, bases, sea water, oils...

The coating is not derived from petroleum, but is a raw material originating from vegetable oil, and therefore, it preserves the environment.

We have a Chemical Resistance Table, which can be consulted on our website: www.carlosarboles.com.



7 ANTI SEIZE VALVE

The Showers and Eyewashes include valves that are specifically designed to be used in emergency situations, since they do not become obstructed nor do they stick up after long periods of inactivity.

Optimal results after more than 100,000 cycles.

8 TEMPERATURE PROTECTION

In order to prevent freezing or excess temperature in the pipes, we offer different solutions:

gpm I/min

31,7 120

29 110

26,4 100

21,1 80

15,9 60

10,6 40

- Automatic drain valves to avoid pipe freezing.
- Temperature protection valves, that create a bleed line when the temperatures of the supply piping are extreme.
- Thermostatic valve for the supply of tempered water.

9 FLOW RATE REGULATION

Our valves regulate the water flow, regardless of the inlet pressure.

The Showers are regulated at 110 l/min, and the Eyewashes at 22 l/min. Recommended pressure:

2 bar.

Maximum pressure: 4 bar or

8 bar depending on equipment.

Please notify us if your equipment will operate at pressures lower than 1.5 bar.

RECOMMENDED

SHOWERS EYEWASHES

MAXIMUM

10 HIGH-VISIBILITY SIGNALLING

The Emergency Equipment includes:

- A photoluminescence signaling plate with a green background and white text.
 Dimensions: 210 x 297 mm
- Maintenance table and installation instructions.
- Optionally, an ALARM that may provide a visual and sonorous signal when the Equipment is operated.

INTERNATIONAL STANDARDS

Our products meet or exceed the requirements:

ANSI Z358.1
 EN 15154 1 and 2
 DIN 12899.3

APPLUS and CSA Institute of Certifications.



The following models combine the Shower and the Eyewash in one Safety Equipment for outdoor and indoor facilities, minimizing the required space, and using a single water inlet for both equipments.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

DOUBLE WATER INLET G 1" 1/4 BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar.

SHOWER OPERATION Pull handle.

SHOWER VALVE Full bore 1", regulated at 110 l/min, instant opening and manual closing.

EYEWASH OPERATION Push handle.

 $\mbox{\bf EYEWASH HEADS}$ Two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual closing.

THE UPDATE OF OUR MODELS IS ON THE WEBSITE www.carlosarboles.com

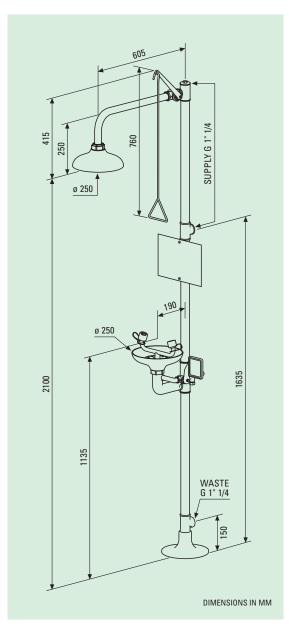


FLOOR MOUNTING

SHOWER SHOWER
HEAD/BOWL HEAD/BOWL
ABS STAINLESS STEEL

4220 SS PULL ROD SHOWER, PUSH HANDLE EYEWASH

4230 4230 SS PULL ROD SHOWER, PUSH HANDLE EYEWASH PUSH HANDLE EYEWASH INCLUDES SPRAY UNIT MOD. 3000



FLOOR MOUNTING

SHOWER SHOWER HEAD/BOWL HEAD/BOWL ABS STAINLESS STEEL

| STIS | 4250 | 4250 SS | PULL ROD SHOWER, PUSH HANDLE AND FOOT TREADLE EYEWASH | |
|--------|------|---------|---|--|
| MODELS | 4255 | 4255 SS | PULL ROD SHOWER, PUSH HANDLE AND FOOT TREADLE EYEWASH INCLUDES SPRAY UNIT MOD. 3000 | |







MOD. 4220



The following models combine the Shower and the Eyewas in one Safety Equipment for outdoor and indoor facilities, minimizing the required space and using a single water inlet for both equipments.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

DOUBLE WATER INLET G 1" 1/4 BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar.

SHOWER OPERATION Pull handle.

MODELS

SHOWER VALVE Full bore 1", regulated at 110 l/min, instant opening and manual closing.

EYEWASH OPERATION Push handle or foot treadle.

EYEWASH HEADS Two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual closing

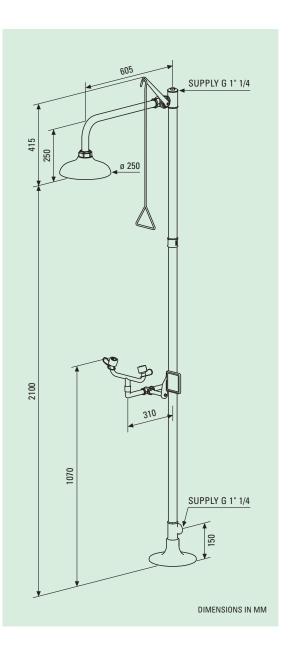
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FLOOR MOUNTING

SHOWER HEAD SHOWER HEAD STAINLESS STEEL

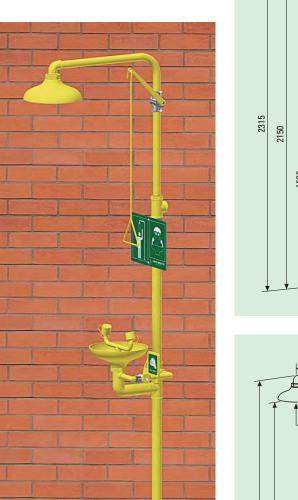
4260 4260 SS PUSH I

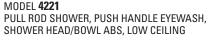
PULL ROD SHOWER, PUSH HANDLE EYEWASH WITHOUT BOWL



LOW CEILING

Low ceiling Shower and Eyewash combination has been designed for areas with a heigth limitation.

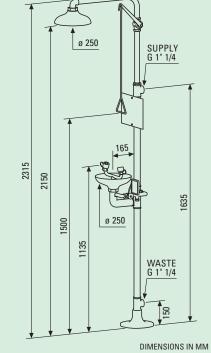


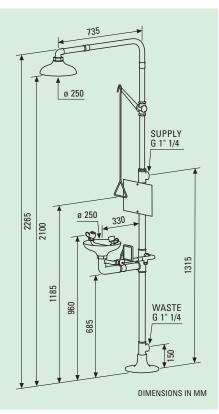


MODEL **4221 SS**

MOD. 4221

PULL ROD SHOWER, PUSH HANDLE EYEWASH, SHOWER HEAD/BOWL STAINLESS STEEL, LOW CEILING





REDUCED MOBILITY

Reduced mobility Shower and Eyewash combination has been designed for disabled people or wheelchair access.



MODEL **4225**

PULL ROD SHOWER, PUSH HANDLE EYEWASH, SHOWER HEAD/BOWL ABS, REDUCED MOBILITY

MODEL **4225 SS**

PULL ROD SHOWER, PUSH HANDLE EYEWASH, SHOWER HEAD/BOWL STAINLESS STEEL, REDUCED MOBILITY



MOD. 4260



WALL MOUNTING USE

The following models combine the Shower and the Eyewash in one Safety Equipment for outdoor and indoor facilities, minimizing the required space, and using a single water inlet for both equipments,

RECESSED MOUNTING USE

Indoor Safety Equipment recessed in the wall. Emergency Shower starts operating when you lower the lever and Eyewash starts operating when you opening stainless steel door.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1" BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar.

WATER INLET PRESSURE MOD. 4275 3 bar.

SHOWER OPERATION Pull handle or cabinet lever.

INSTALLATION Height assembly see pag. 42.

SHOWER VALVE Full bore 1", regulated at 110 l/min, instant opening and manual closing.

EYEWASH OPERATION Push handle or cabinet handle.

EYEWASH HEADS Two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual closing. **EYEWASH VALVE MOD. 4275** Flow 20 l/min at 3 bar, instant opening and manual closing.

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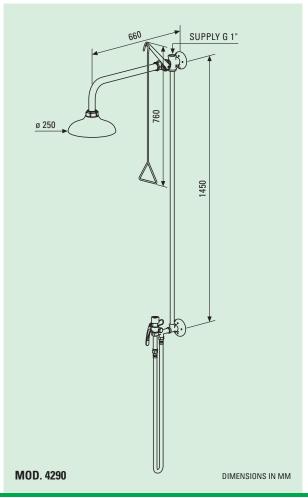


WALL MOUNTING

SHOWER SHOWER HEAD HEAD ABS STAINLESS STEEL

| | HEAD ABS | STAINLESS STEEL | |
|--------|----------|-----------------|--|
| | 4280 | 4280 SS | PULL ROD SHOWER, PUSH HANDLE EYEWASH WITHOUT BOWL |
| MODELS | 4285 | 4285 SS | PULL ROD SHOWER, PUSH HANDLE EYEWASH |
| MOL | 4290 | 4290 SS | PULL ROD SHOWER, DRENCH HOSE EYEWASH |
| | 4295 | 4295 SS | PULL ROD SHOWER, DRENCH HOSE DOUBLE EYEWASH |







RECESSED MOUNTING

SHOWER SHOWER HEAD HEAD ABS STAINLESS STEEL

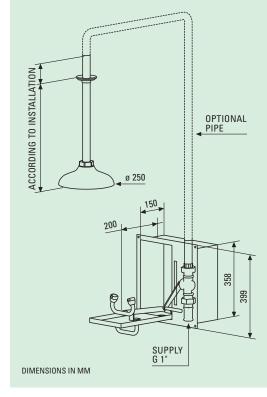
HEAD ABS STAINLESS STEE

4275

4275 SS

RECESSED SHOWER AND EYEWASH, PULL ROD SHOWER, OPENING BOX EYEWASH









MOD. 2210

In outdoor or indoor facilities the Eyewashes are activated by pushing the lever.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1/2" BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar.

EYEWASH OPERATION Push handle, foot treadle or swivel opening.

EYEWASH HEADS Two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual closing.

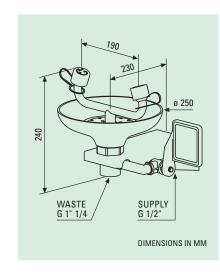
EYEWASH VALVE MOD. 3820 Flow 20 l/min at 3 bar, instant opening and manual closing.

INSTALLATION Height assembly see pag. 42.

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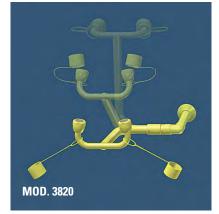
WALL MOUNTING

| | BOWL ABS | BOWL STAINLESS STEEL | |
|--------|--------------|-------------------------|--|
| | 2210 | 2210 SS | WALL EYEWASH |
| ç Ţ | 2230 2510 | 2230 SS | EYEWASH WITH DRENCH HOSE MOD. 3000 |
| 0 | ≥ 3510 | | EYEWASH WITHOUT BOWI |
| _ | 3820 | | EYEWASH SWING OUT WITHOUT BOWI |
| | | | |





CARLOS ARBOLES S-A

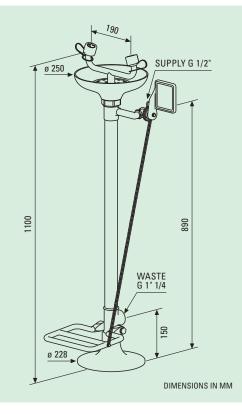


FLOOR MOUNTING

| | DUVVLADS | DOWL STAINLESS STELL | |
|-------|----------|----------------------|---------------------------------------|
| Š | 2220 | 2220 SS | PEDESTAL EYEWASH |
| MODEL | 2240 | 2240 SS | EYEWASH WITH DRENCH HOSE MOD. 3000 |
| Σ | 2710 | 2710 SS | EYEWASH DOUBLE CONTROL HANDLE/TREADLE |











Series of Eyewashes specially designed for their installation in laboratories, directly on the work table itself.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1/2" BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar.

WATER INLET PRESSURE MOD. 3620 - 3720 3 bar.

EYEWASH OPERATION Push handle, push button or swivel opening.

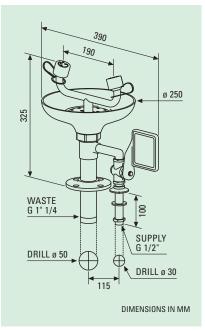
EYEWASH HEADS Two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual clasing

EYEWASH VALVE MOD. 3620 - 3720 Flow 20 l/min at 3 bar, instant opening and manual closing

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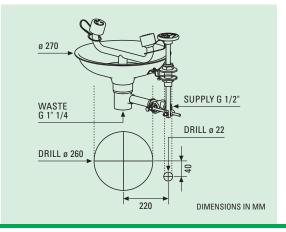
MOD. 2215 SS

TABLE MOUNTING BOWL BOWL ABS STAINLESS STEEL 2212 SS EYEWASH 2212 TABLE RECESSED 2215 SS EYEWASH **EYEWASH** 3500 WITHOUT BOWL 3620 WODELS SWIVEL **EYEWASH** WITHOUT BOWL 90° TURN OPENING

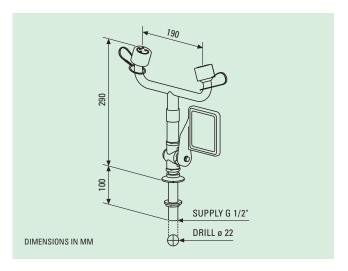
3720

EYEWASH

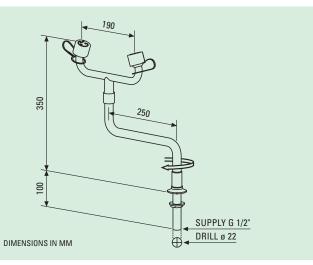
SWING OUT WITHOUT BOWL

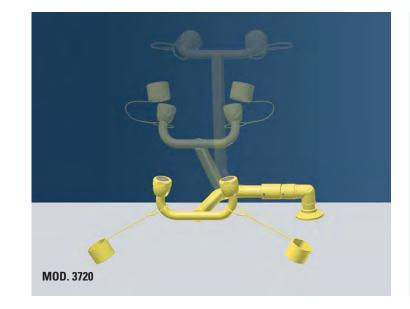


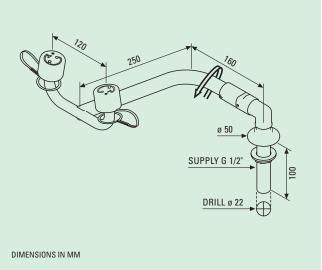
















DRENCH HOSE EYEWASH USE

Manual Eyewashes with 1.5 m long flexible tube, with one or two high-flow aerated water spray heads at low pressure. To be used in industry, laboratories, schools, etc.

RECESSED MOUNTING USE

Indoor Eyewash recessed in the wall. Eyewash starts operating when you opening stainless steel door.

GENERAL FEATURES

MATERIALS Stainless steel flexible tube. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1/2" BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar.

WATER INLET PRESSURE MOD. 2275 3 bar.

EYEWASH OPERATION Lever or cabinet handle.

EYEWASH HEADS One or two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

EYEWASH VALVE Regulated at 15 l/min (one spay head) or 22 l/min (two spray heads), instant opening and manual closing.

EYEWASH VALVE MOD. 2275 Flow 20 I/min at 3 bar, instant opening and manual closing.

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DRENCH HOSE EYEWASHES

| MODELS | |
|--------|---|
| 3000 | WALL EYEWASH WITH SINGLE HEAD |
| 3100 | WALL EYEWASH WITH SINGLE HEAD AND WALL FEEDING BRACKET |
| 3110 | WALL EYEWASH WITH DOUBLE HEAD AND WALL FEEDING BRACKET |
| 3120 | TABLE EYEWASH WITH SINGLE HEAD |
| 3130 | TABLE EYEWASH WITH DOUBLE HEAD |
| 190030 | OPTIONAL NON-RETURN VALVE |



WALL EYEWASH

MOD. 2275

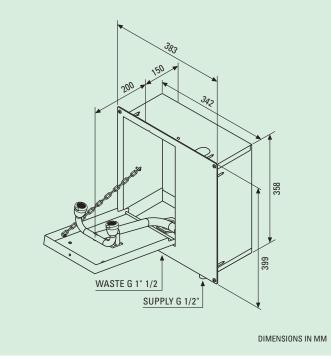
MODEL

RECESSED MOUNTING

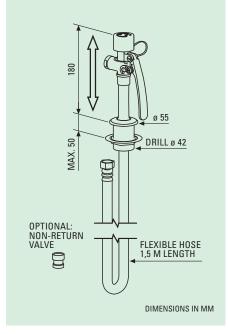


MOD. 3130













In outdoor and indoor facilities the Emergency Showers are activated by pulling the lever.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1" BSP or G 1" 1/4 BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar. SHOWER OPERATION Pull handle.

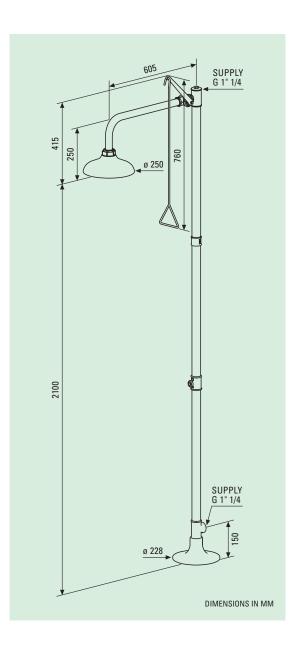
SHOWER VALVE Full bore 1", regulated at 110 l/min, instant opening and manual closing. **INSTALLATION** Height assembly see pag. 42.

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FLOOR MOUNTING

SHOWER HEAD SHOWER HEAD ABS STAINLESS STEEL

| MODELS 1120 1120 SS PEDESTAL SHO | WE |
|----------------------------------|----|
|----------------------------------|----|

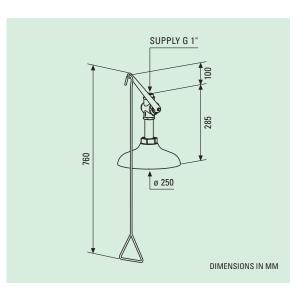




CEILING MOUNTING

SHOWER HEAD SHOWER HEAD ABS STAINLESS STEEL

MODELS 1100 1100 SS VERTICAL SHOWER

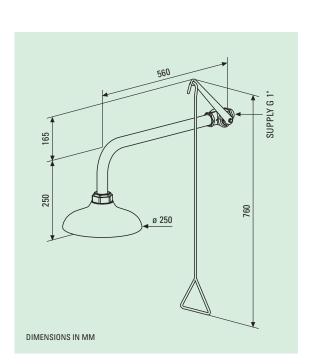


WALL MOUNTING

SHOWER HEAD SHOWER HEAD ABS STAINLESS STEEL

ABS STAINLESS STEEL

MODELS 1110 1110 SS HORIZONTAL SHOWER





MOD. 1120

20

MOD. 1110



OVER DOOR USE

In indoor facilities the Emergency Showers are installed over a door or emergency exit.

RECESSED MOUNTING USE

Indoor Shower recessed in the wall. Shower starts operating when you lower the lever.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1" BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar

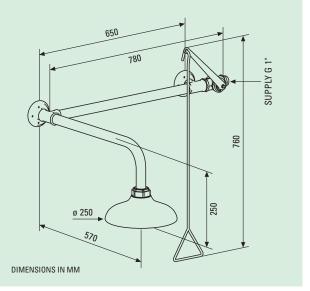
SHOWER OPERATION Pull handle or cabinet lever.

SHOWER VALVE Full bore 1", regulated at 110 l/min, instant opening and manual closing.

INSTALLATION Height assembly see pag. 42.

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OVER DOOR

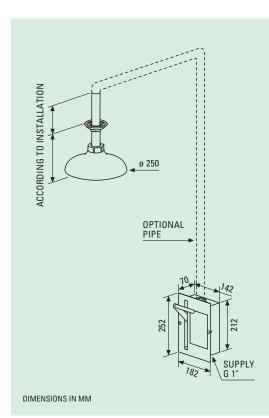
| | SHOWER HEAD ABS | SHOWER HEAD STAINLESS STEEL | |
|--------|--------------------|--------------------------------|----------------------------------|
| ELS | 1141 | 1141 SS | EMERGENCY SHOWER RIGHT CONTROL |
| MODELS | 1142 | 1142 SS | EMERGENCY SHOWER LEFT CONTROL |



RECESSED MOUNTING

| SHOWER | SHOWER HEAD |
|----------|-----------------|
| HEAD ABS | STAINLESS STEEL |

| 1275 1275 SS | RECESSED SHOWER |
|--------------|-----------------|
|--------------|-----------------|







Series of Emergency Showers and Eyewashes completely constructed of stainless steel to be installed in food industries, nuclear energy,

The models combine the Shower and Eyewashes between them, minimizing the required space, and using a sole water inlet for both pieces of equipment.

GENERAL FEATURES

MATERIALS Stainless steel piping and fittings.

WATER INLET G 1" BSP or G 1" 1/4 BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar.

SHOWER OPERATION Pull handle.

SHOWER VALVE Full bore 1", regulated at 110 l/min, instant opening and manual closing.

EYEWASH OPERATION Push handle or foot treadle.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual closing.

INSTALLATION Height assembly see pag. 42.

MOD. 4260 TI

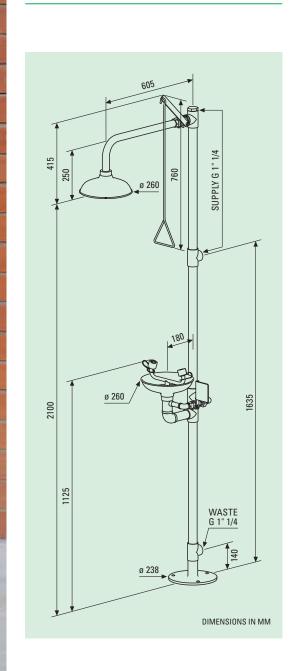
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SHOWERS AND EYEWASHES MODELS PULL ROD SHOWER, PUSH HANDLE 4220 TI

EYEWASH, FLOOR MOUNTING PULL ROD SHOWER, PUSH HANDLE AND 4250 TI FOOT TREADLE EYEWASH, FLOOR MOUNTING

PULL ROD SHOWER, PUSH HANDLE EYEWASH WITHOUT BOWL, WALL MOUNTING 4260 TI

PULL ROD SHOWER, PUSH HANDLE EYEWASH, WALL MOUNTING 4285 TI

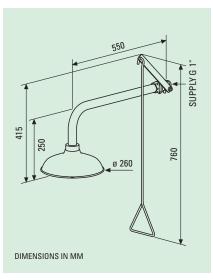


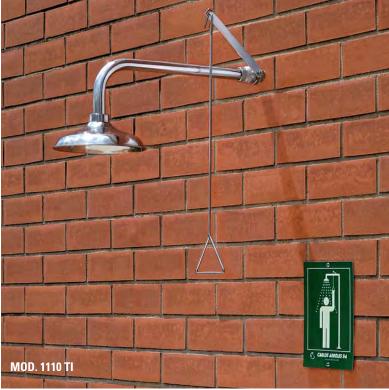
SHOWERS

MODELS

1100 TI VERTICAL SHOWER, CEILING MOUNTING 1110 TI HORIZONTAL SHOWER, WALL MOUNTING 1120 TI PEDESTAL SHOWER, FLOOR MOUNTING









MOD. 4220 TI





Series of Emergency Eyewashes and Booth Stations completely constructed of stainless steel to be installed in food industries, nuclear energy, etc.

GENERAL FEATURES

MATERIALS Stainless steel piping and fittings.

WATER INLET G 1/2" BSP (Eyewash) or G 1" 1/4 BSP (Cabin).

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar (Eyewash) or 4 bar (Cabin).

SHOWER OPERATION Pull handle or platform.

PLATFORM VALVE 1" 1/4, automatic opening and closing, automatic drain.

SHOWER OPERATION Platform or pull handle.

SHOWER VALVE Full bore 1", regulated at 110 l/min, instant opening and manual closing.

EYEWASH OPERATION Push handle, foot treadle or platform.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual closing.

INSTALLATION Height assembly see pag. 42.

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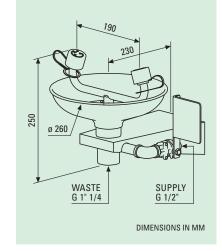
EYEWASHES

| Λſ | JEI | C |
|----|-----|---|

| 2210 TI | WALL EYEWASH WITH BOWL |
|---------|--|
| 2220 TI | PEDESTAL EYEWASH WITH BOWL |
| 2710 TI | PEDESTAL EYEWASH WITH BOWL AND FOOT TREADLE |
| 3510 TI | EYEWASH WITHOUT BOWL |



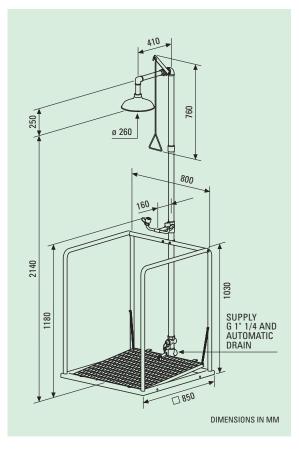






PLATFORMS

| MODELS | |
|---------|--|
| 4700 TI | EMERGENCY SHOWER AND EYEWASH DOUBLE PLATFORM SEPARATE OPERATION |
| 4710 TI | SHOWER PLATFORM, SHOWER HEAD ABS |
| 4720 TI | EMERGENCY SHOWER AND EYEWASH PLATFORM SIMULTANEOUS OPERATION |
| 4730 TI | EMERGENCY SHOWER AND EYEWASH PLATFORM INDEPENDENT OPERATION |
| 4750 TI | EYEWASH PLATFORM |







The Self-draining Showers platforms in external facilities is completely automatic when a person enters the platform. Automatic drain valve for residual water.

When standing on the platform the water enters the supply pipe to the Shower or Eyewash. When exiting after use, the residual water drains via the automatic drain valve thus preventing the system from freezing.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1/2" BSP or G 1" 1/4 BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 4 bar.

PLATFORM VALVE 1" 1/4, automatic opening and closing, automatic drain.

SHOWER OPERATION Platform or pull handle.

SHOWER VALVE Full bore 1", regulated at 110 l/min, instant opening and manual closing. **EYEWASH OPERATION** Platform.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual

EYEWASH HEADS Two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

THE UPDATE OF OUR MODELS IS ON THE WEBSITE www.carlosarboles.com



PLATFORMS SHOWERS AND EYEWASHES

SHOWER SHOWER HEAD HEAD ABS STAINLESS STEEL

EMERGENCY SHOWER AND EYEWASH MODELS 4700 4700 SS DOUBLE PLATFORM SEPARATE OPERATION

| SHUWER HEAD ABS | SHOWER HEAD STAINLESS STEEL |
|--------------------|--------------------------------|
| | |

| MODELS | 4720 | 4720 SS | EMERGENCY SHOWER AND EYEWASH PLATFORM SIMULTANEOUS OPERATION |
|--------|------|---------|--|
| | 4730 | 4730 SS | EMERGENCY SHOWER AND EYEWASH PLATFORM INDEPENDENT OPERATION |

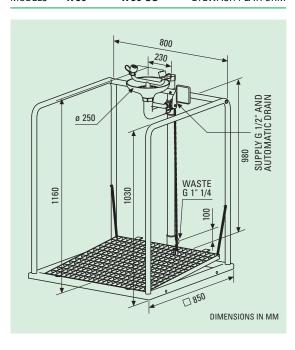


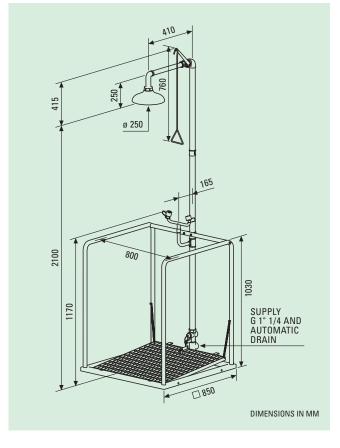




PLATFORMS SHOWERS AND EYEWASHES

| MODELS | 4750 | 4750 SS | EYEWASH PLATFOR |
|--------|------|-----------------|-----------------|
| | ABS | STAINLESS STEEL | |







SF

The Self-draining Showers platforms in external facilities is completely automatic when a person enters the platform. Automatic drain valve for residual water.

The Self-draining Showers floor mounting are provided with drain valves which are activated after pushing the handle.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1" 1/4 BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar. (4 bar for platforms).

PLATFORM VALVE 1" 1/4, automatic opening and closing, automatic drain.

SHOWER OPERATION Push handle, foot treadle or platform.

SHOWER VALVE Full bore 1", regulated at 110 l/min, instant opening and manual closing.

EYEWASH OPERATION Push handle or foot treadle.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual closing.

EYEWASH HEADS Two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

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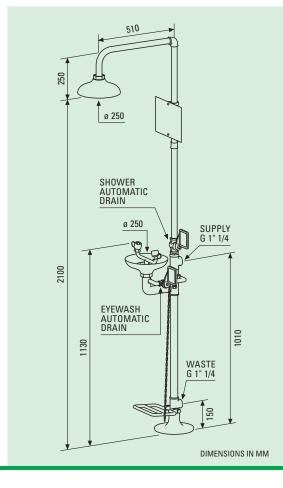
FLOOR MOUNTING

| SHOWER | SHOWER |
|-----------|-----------------|
| HEAD/BOWL | HEAD/BOWL |
| ABS | STAINLESS STEEL |

| S _ | 4252 | 4252 SS | SIMULTANEOUS OPERATION FOOT TREADLE OPERATION |
|--------|------|---------|---|
| MODELS | 4253 | 4253 SS | INDEPENDENT OPERATION, PUSH HANDLE FOR SHOWER, HANDLE OR FOOT TREADLE FOR EYEWASH |









PLATFORM SHOWERS

MODEL **4710**

SHOWER PLATFORM, SHOWER HEAD ABS

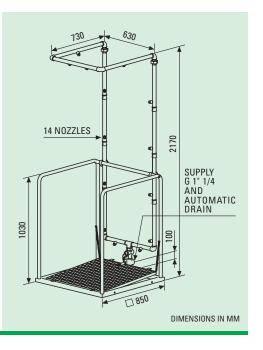
IODEL **4710 SS**

SHOWER PLATFORM, SHOWER HEAD STAINLESS STEEL

DECONTAMINATION BOOTH

MODEL **4810** PLATFORM WITH 14 SPRAYS









In outdoor facilities with extreme low or high temperatures. The floor equipment uses underground valves with automatic drains. The wall equipment is supplied inside the building. When the operating lever is pushed, the water enters the supply pipe to the Shower or Eyewash, when closing the valve after use the residual water drains via the automatic drain valve thus preventing the system from freezing.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1/2" BSP, G 1" BSP or G 1" 1/4 BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar. Maximum 8 bar.

SHOWER/EYEWASH OPERATION Pull lever handle/Push handle.

SHOWER VALVE Full bore 1" or 1" 1/4, regulated at 110 l/min, instant opening and manual closing, automatic drain.

EYEWASH HEADS Two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual closing, automatic drain.

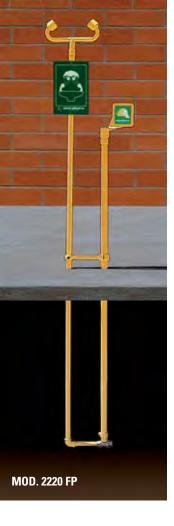
INSTALLATION Height assembly see pag. 42.

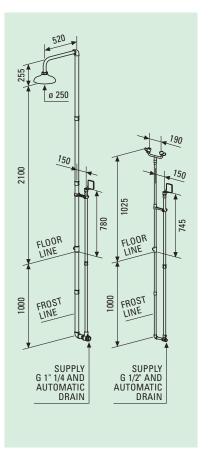
THE UPDATE OF OUR MODELS IS ON THE WEBSITE www.carlosarboles.com

UNDERGROUND FLOOR MOUNTING

| | SHOWER HEAD ABS | SHOWER HEAD STAINLESS STEEL | |
|----------|--------------------|--------------------------------|--------------------------------|
| MODELS | 1120 FP | 1120 FP/SS | TEMPERATURE SHOWER PROTECTION |
| IVIUDELS | 2220 FP | | TEMPERATURE EYEWASH PROTECTION |

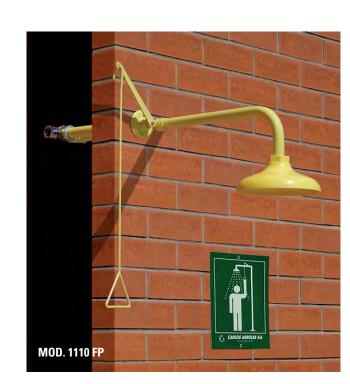


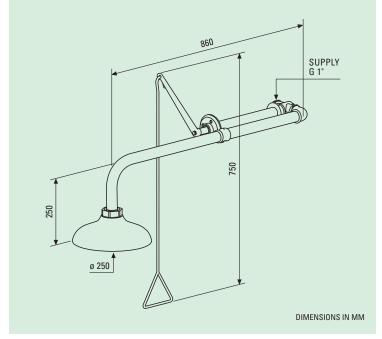




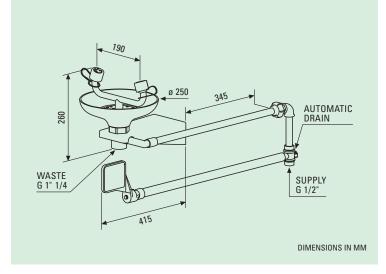
INTERIOR WALL MOUNTING

| | ABS | SHOWER HEAD STAINLESS STEEL | |
|--------|-------------|--------------------------------|-----------------------------------|
| MODELS | 1110 FP | 1110 FP/SS | TEMPERATURE SHOWER PROTECTION |
| | BOWL ABS | BOWL STAINLESS STEEL | |
| MODELS | 2210 FP | 2210 FP/SS | TEMPERATURE EYEWASI PROTECTION |













In outdoor facilities with extreme low or high temperatures. The operation of Decontamination Booths is completed when a person enters the platform. The equipment uses underground valves with automatic drains. When standing on the platform the water enters the supply pipe to the Shower or Eyewash. When exiting after use, the residual water drains via the automatic drain valve thus preventing the system from freezing.

GENERAL FEATURES

MATERIALS Galvanized steel piping. Brass fittings.

COATING Anti-corrosive polyamide 11 in high-visibility yellow.

WATER INLET G 1/2" BSP or G 1" 1/4 BSP.

WATER INLET PRESSURE Recommended 2 bar. Minimum 1.5 bar.
Maximum 8 bar.

PLATFORM VALVE 1" 1/4, automatic opening and closing, automatic drain.

SHOWER/EYEWASH OPERATION Pull lever handle, push handle or platform.

SHOWER VALVE Full bore 1" or 1" 1/4, regulated at 110 l/min, instant opening and manual closing, automatic drain.

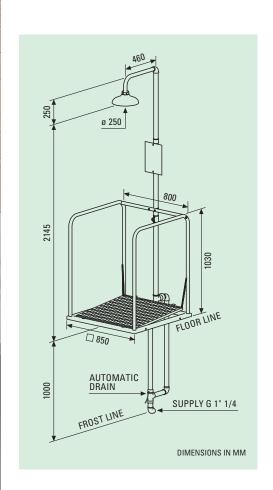
EYEWASH HEADS Two high-flow aerated water spray heads at low pressure with automatic opening anti-dust cover.

EYEWASH VALVE Full bore 1/2", regulated at 22 l/min, instant opening and manual closing, automatic drain **INSTALLATION** Height assembly see pag. 42.

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| HEAD ARS | STAINLESS STEE | 1 |
|-----------------------|----------------|--|
| 4710 FP | 4710 FP/SS | SHOWER PLATFORM |
| 4720 FP | 4720 FP/SS | EMERGENCY SHOWER AND EYEWASH PLATFORM SIMULTANEOUS OPERATION |
| WODERS 4730 FP | 4730 FP/SS | EMERGENCY SHOWER AND EYEWASH PLATFORM INDEPENDENT OPERATION |
| 4750 FP | | EYEWASH PLATFORM WITHOUT BOWL |
| 4810 FP | | PLATFORM WITH 14 SPRAYS |







UNDERGROUND FLOOR MOUNTING

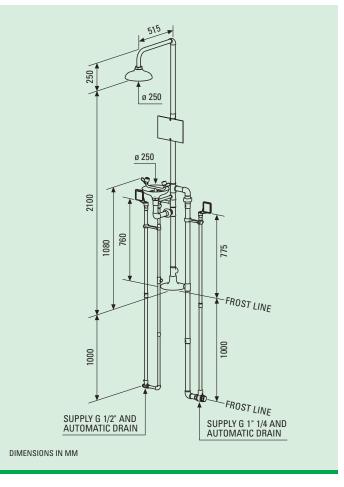
MODEL **4222 FP**TEMPERATURE PROTECTION
SHOWER/EYEWASH BOWL ABS,
SIMULTANEOUS OPERATION

MODEL **4222 FP/SS**TEMPERATURE PROTECTION

SHOWER/EYEWASH STAINLESS STEEL, SIMULTANEOUS OPERATION MODEL **4223 FP**

TEMPERATURE PROTECTION SHOWER/EYEWASH BOWL ABS, INDEPENDENT OPERATION

MODEL **4223 FP/SS**TEMPERATURE PROTECTION
SHOWER/EYEWASH
STAINLESS STEEL, INDEPENDENT
OPERATION





MOD. 4710 FP

34 3

MOD. 4223 FP



Overhead Tank Showers are designed for remote location with inadequate water supply providing necessary water by gravity up to 15 min. according to standard.

In addition for extreme temperatures environment (hot/freeze conditions) are designed Underground Tank Showers.

After use, pipes remain empty preventing the system from heat and freezing. Therefore, expensive chiller and heating systems are not required.

GENERAL FEATURES OVERHEAD TANK

MATERIALS Tank, structure & piping in stainless steel.

TANK CAPACITY 1500 L.

WATER FILLING G 1" BSP.

OVERFLOW INTEGRATED

SHOWER OPERATION Pull handle.

EYEWASH OPERATION Push handle.

GENERAL FEATURES UNDERGROUND TANK

MATERIALS Tank in polyethylene, shower platform in galvanized steel piping with anti-corrosive polyamide 11 coating. Brass fittings.

TANK CAPACITY 2000 L.

ADJUSTABLE DOME SHAFT

WATER FILLING Large oval lid, safe to walk on.

ELECTRICAL Submersible pump 230V 1.5Kw. Control box 230V /24V with platform limit switch.

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OVERHEAD TANK

MODELS

EMERGENCY SHOWER AND EYEWASH WITH OVERHEAD TANK 4820 TI/TS

EMERGENCY SHOWER WITH OVERHEAD TANK

OPTIONS

MODEL **196001**

INLET FLOAT VALVE FOR AUTOMATIC TANK FILLING

MODEL **196002**

VISUAL SIDE INDICATOR OF TANK LEVEL

MODEL **196003**

ELECTRIC HEATER WITH ADJUSTABLE THERMOSTAT FOR COLD WEATHER (T<15° C)

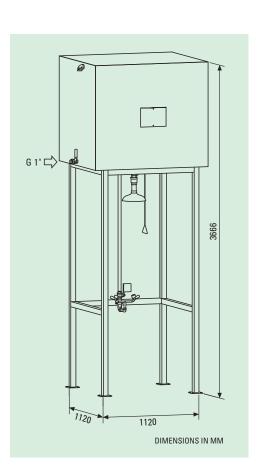
MODEL **196004**

THERMAL INSULATION FOR HOT (T>37° C) OR COLD (T<15° C) WEATHER

EYEWASH ACTIVATION SWITCH TO SEND SIGNAL TO CONTROL ROOM

MODEL **196006**

SHOWER ACTIVATION SWITCH TO SEND SIGNAL TO CONTROL ROOM

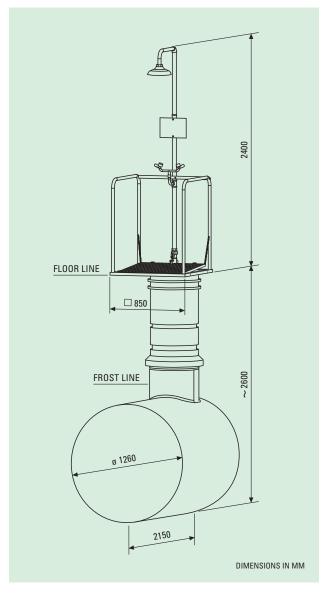






UNDERGROUND TANK

| MODELS | |
|------------|---|
| 4710 TS/FP | SHOWER PLATFORM WITH UNDERGROUND TANK |
| 4720 TS/FP | SHOWER/EYEWASH PLATFORM WITH UNDERGROUND TANK, SIMULTANEOUS OPERATION |
| 4730 TS/FP | SHOWER/EYEWASH PLATFORM WITH UNDERGROUND TANK, INDEPENDENT OPERATION |





MOD. 4820 TI/TS

TEMPERED WATER

In order to avoid thermal shock it is possible to include a thermostatic mixer in the Shower and Eyewash, specifically designed for Emergency Equipment that supply tempered water.

Standards recommends temperatures between 15° C - 37° C.

The valve mixes cold and hot

water inlets to deliver tepid
water at the desired temperature.
On failure of hot water supply,
internal cold water by-pass
delivers cold water supply.
On failure of cold water supply,
hot water is shut down to prevent any
damage on the user.



- \bullet Adjustable temperature knob regulator, from 20 to 43° C.
- Maximum hot water supply temperature: 100° C.
 For optimum performance, 50-70° C.
 Maximum cold water temperature 23° C for optimum performance, 5-10° C.
- Minimum hot and cold water supply pressure:
 bar. Recommended 3 bar.
 Maximum supply pressure is 8 bar.
- G 1" male connections with check valves. • Cold water by-pass flow rate 105 lpm at 2 bar.
- Tempered water flow rate 122 l/min at 2 bar.

SPECIFICATIONS

MODEL 195020

- Adjustable temperature regulator set for 29° C, high temperature limit stop set for 32° C.
- Termomether display.
- Recommended hot inlet temperature, 60° C.



• Minimum hot and cold water supply pressure: 2 bar. Maximum supply pressure is 8 bar.

MODEL **195120**

VALVE 100

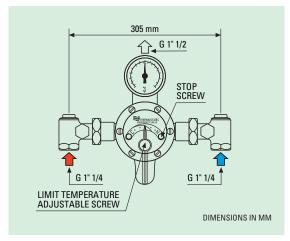
THERMOSTATIC SAFETY

DIMENSIONS IN MM

• G 1" 1/4 male connections with check valves. • Cold water by-pass flow rate 105 lpm at 2 bar.

134

• Tempered water flow rate 350 I/min at 2 bar for multiple Showers/Eyewash.



MODEL **195020** THERMOSTATIC SAFETY VALVE 150

TEMPERATURE PROTECTION

Thermal actuated valves continually sense the water and the ambient temperature and automatically bleed the Shower/Eyewash systems to establish flow until the over temperature water is eliminated.

Operation: When the temperature exceeds safe limits, the thermal actuator modulates the valve open. A small quantity of water from the pipe system flows through the valve until the makeup water temperature returns to the safe range.

SPECIFICATIONS

Body and valves in stainless steel and actuator in brass. Supply and waste 1/2".

MODEL 195110

- Freeze protection valve
- Nominal pressure 2 bar.
- Maximum working pressure 8 bar.
 Temperature of maximum openinng
- Full close temperature 7° C.

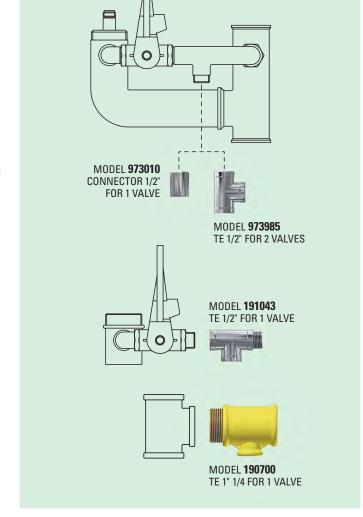
MODEL 195112

- Scald protection valveNominal pressure 2 bar.
- Nominal pressure 2 bar.
 Maximum working pressure 8 bar.
- Temperature of maximum openinng 37° C.
- \bullet Full close temperature 29° C.



MODEL **195110** FREEZE PROOF VALVE

MODEL **195112** ANTI SCALD VALVE



PRESSURE PROTECTION

For optimum usage of the Emergency Equipment it is advised to maintain water pressure under recommended values to avoid premature wear of components, unnecessary strain for users and damage to the installation.

For pressures above 4 bar or 8 bar depending on equipment it is recommended the use of a pressure reduction valve.



MODEL **950250**PRESSURE REDUCTION VALVE FOR MAX.
INLET PRESSURE 25 BAR AND WITH OUTLET ADJUSTED PRESSURE 3 BAR



BOOTH STRUCTURE

Made from coated steel to be fastened on the floor.

The three sides are closed by PMMA panels in high-visibility yellow. The structure reduces the thermal shock, and protects from the wind and cold.

SHOWER PLATFORM

Accessory to activate all to the platform Showers, models 1120 - 4220 - 4230 - 4250 - 4260, and close the Shower

SHOWER TEST

Essential for flow control of the Emergency Shower Stations. Made of plastified PVC.

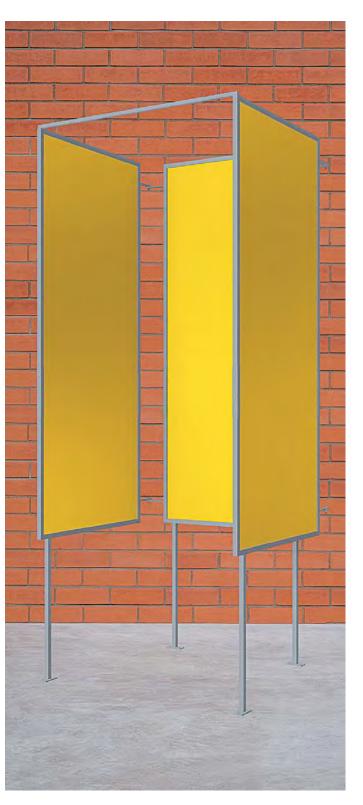
ALARM

Visual and audible alarm is activated when the water flows through the piping while the Emergency Equipment is in use. Optionally, it send an operation signal to the control or emergency room of the facility. Installation must be carried out by qualified personnel.

WATER SUPPLY PRESSURE Optimum 2 bar. Minimum 1,5 bar.

Maximum 8 bar.

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STRUCTURE FOR DECONTAMINATION BOOTH AND PLATFORM SHOWERS



MODEL **194900** SHOWER PLATFORM FOR MODELS 1120 - 4220 - 4230 - 4250 - 4260



MODEL **195003** TEST FOR SHOWER



MODEL **190121** WALL SUPPORT MODEL 1110



220-240 VAC 50/60 Hz (Schuko connection).

ALARM KIT FOR NON EXPLOSIVES ATMOSPHERES

IP43 Protection. **FLOWSWITCH**

- Max swichting voltage 230 VAC, 48 VDC.

KIT ALARMA

- Max swichting current 1A.
 Connecting cable lenht 1.5 m, 2 x 1 mm 2. VISUAL AND AUDIBLE ALARM
- Orange flashing light 110 flash/min.
- Continous sound 92 db.

MODEL **195030** ALARM KIT FOR SAFE AREAS

MODEL 190614

FLOWSWITCH FOR SAFE AREAS



ALARM KIT FOR EXPLOSIVES ATMOSPHERES

220-240 VAC 50/60 Hz.

Group II, Zone 1, Category 2G.

Other classifications available upon request. FLOWSWITCH

- Max swichting voltage 250 VAC/VDC.
 Max swichting current 5A AC/1A DC. VISUAL ALARM
- Orange flashing light up to configurable 120 flash/min. AUDIBLE ALARM
- Continous sound, regulable 90-110 db.

MODEL **195040**

ALARM KIT FOR EXPLOSIVE ATMOSPHERES

MODEL **950634**

FLOWSWITCH FOR EXPLOSIVE ATMOSPHERES



EMERGENCY SHOWER AND EYEWASH

The following are the basic installation standards for **Emergency Equipment.**

INSTALLATION

EMERGENCY EQUIPMENT LOCATION

The location of Emergency Equipment should comply with the following conditions:

- It should be installed in places that are highly-visible and easily accessed from at least in three directions.
- It should be installed in those areas where there is danger, and should not be more than 10 seconds away from the area where accidents can occur. Where there is an immidiate risk from concentrated chemicals, equipment should be adjacent to the risk.
- It should be placed at the same level as the source of danger, without any obstruction in the path to the Emergency Equipment, such as doors, trip hazards, steps or matting, etc..

ASSEMBLY

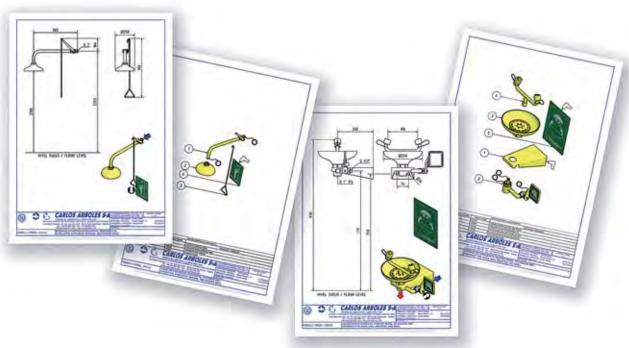
It is recommended to assemble the Emergency Equipment as indicated by the assembly drawing.

The necessary means are as follows:

- Pipe sealings.
- Tools to fasten the equipment to the surface. It is recommended to install the Emergency Showers

that are not fastened to the ground at a height where the spray head is between 210 and 230 cm above the level where the user will stand.

It is recommended to install the Emergency Eyewashes that are not fastened to the ground at a height where the output nozzles of the Eyewashes are between 90 and 110 cm above the level where the user will stand.



WATER SUPPLY

The water supply to the Emergency Equipment should • A water temperature between 15° C and 37° C is comply with the following conditions:

- It should be supplied from the main or the emergency piping. The diameter of the supply tube should be at least G 1" BSP.
- An inlet pressure of 2 bar is recommended for the Emergency Equipment. For correct operation, the minimum pressure is
- 1.5 bar, and the maximum pressure is 4 bar or 8 bar depending on equipment.
- recommended.
- It is recommended to install a filter, as well as to drain the piping before installing the Emergency Equipment.
- Potable water, or of similar quality is required.
- Drainage system are recommend for Eyewash and floordrains for Showers in order to avoid hazard or slippery surfaces. After use waste water may be connected waste disposal system or neutralization tank.

OPERATION

ACTIVATION

In case of accident, the injured person should shower or wash his/her eyes IMMEDIATELY for a minimum of

The Emergency Equipment is quickly activated as follows:

- The Emergency Eyewashes pushing the paddle backwards or by stepping on the foot pedal.
- The Emergency Showers by pulling the triangular lever.
- · The manual equipment by pushing the lever.

Suitable medical assistance should be sent IMMEDIATELY.



MAINTENANCE

MAINTENANCE AND TRAINING

The operation of the Emergency Showers and Eyewashes should be verified at least ONCE a week in order to guarantee the water supply and to prevent the

proliferation of microbes. Fill out the maintenance table supplied (Model 190190) or a similar one. Personnel should be trained as

• The location and signaling of the Emergency Equipment.

follows:

- The operation of the Emergency Showers and Eyewashes.
- The manner of notifying the healthcare personnel.
- Maintenance to be performed on the Emergency Equipment as described above.







MODEL

SIGNS

PLATES

Each piece of equipment that we manufacture is provided with a plate or sign to signal the unit (except in the table assembly models). The plates are photoluminescent, with

a green background, and white text. Dimensions: 210 x 297 mm









MODEL 191004

MODEL 191005





ASK ABOUT AVAILABILITY OF OTHER SPARE PARTS

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MODEL 190100 SHOWER HEAD ABS HIGH VISIBILITY YELLOW G 1" MODEL 190112 SHOWER HEAD ABS HIGH VISIBILITY YELLOW G 1" 1/2



MODEL 192100 SHOWER HEAD STAINLESS STEEL G 1" MODEL 192112 SHOWER HEAD STAINLESS STEEL G 1" 1/2



MODEL **190150** ABS HIGH VISIBILITY YELLOW BOWL



MODEL 191150 STAINLESS STEEL BOWL

MODEL 190145

MODEL **192145**

EYEWASH VALVE G 1/2" BSP



MODEL 192148 **DOUBLE EMERGENCY EYEWASH**



MODEL 190131 COMPLETE FOOT CONTROL **ASSEMBLY**



EYEWASH HEAD COVER

MODEL 190135 EYEWASH HEAD

MODEL 193136





EYEWASH VALVE G 1/2" BSP WITH DRAIN



MODEL 190146 **PUSH HANDLE PLASTIC** MODEL 193146 PUSH HANDLE ALUMINIUM



MODEL 190136 EYEWASH HEAD ASSEMBLY IN ABS



MODEL 190108 SHOWER VALVE G 1" BSP MODEL 192108 SHOWER VALVE G 1" BSP WITH DRAIN



MODEL 190148 EMERGENCY EYEWASH





MODEL **190109**

WALL BRACKET



MODEL 191136 EYEWASH HEAD ASSEMBLY IN STAINLESS STEEL



MODEL 190400 SHOWER FP MODELS VALVE G 1" 1/4 BSP WITH DRAIN MODEL 190401 EYEWASH FP MODELS VALVE

G 1/2" BSP WITH DRAIN





MODEL 190160 WALL BRACKET WITH WATER INLET



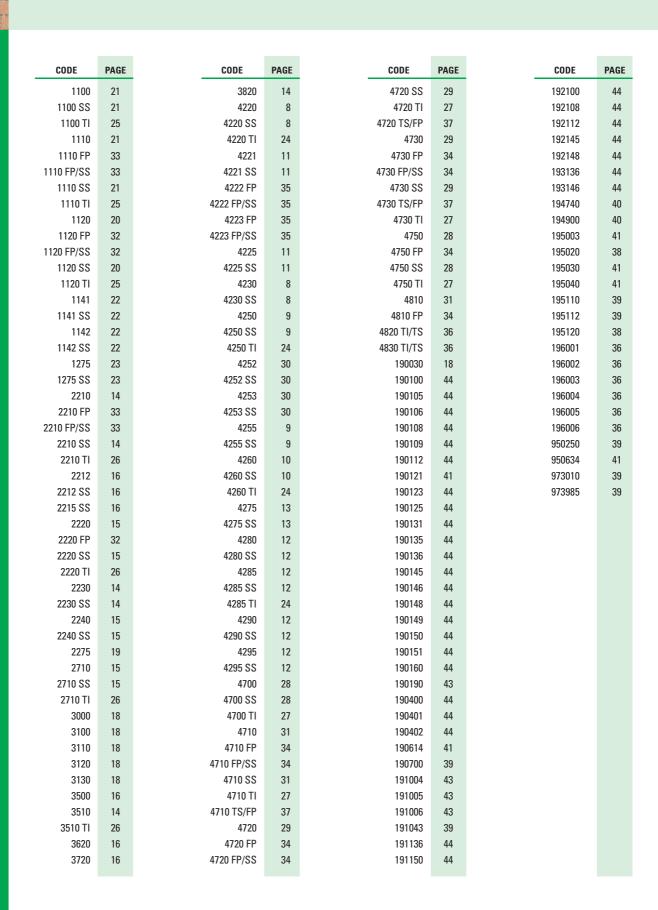


1,5 M FLEXIBLE STAINLESS STEEL HOSE MODEL 190149 FOR SINGLE EYEWASH MODEL 190151 FOR DOUBLE EYEWASH



MODEL 190402 PLATFORM VALVE WITH DRAIN G 1" 1/4 BSP







CGE.UK.2018

CARLOS ARBOLES SA

LABORATORY TAPS AND SAFETY SHOWERS - EYEWASHES

HEAD OFFICE



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