Foam/water monitors
Equipment for the fire service
ZIEGLER offers a comprehensive program of foam, water and dry chemical monitors. During many years of experience in the development of monitors we have reached an optimum compatibility between monitors, pump technique and proportioning systems. This experience guarantees superior performance and durability. On the basis of the pump performance we can design the ideal configuration of monitor, pump and proportioner. The many monitors we have in use all over the world speak for quality, durability and engineering excellence (Know-How).

Special features of ZIEGLER monitors:
- optimum throw range
- low friction loss
- high stability against vibrations as well as smooth movements through ball bearing joints and mechanical or gas bearing force equilibrium
- lightweight construction results in low weight
- high resistance to corrosion by use of aluminium alloys resistant to sea and brackish water
- all water-carrying parts are anodised
- option: self-aspiration of foaming agent with foam pipes up to 3000 l/min
- monitors without self-aspiration feature flow reduction adjustable to 50%
- pattern control by means of deflectors or nozzles
- central cable ducts for remote controlled monitors (no loose cables)
- foam nozzles are designed as combination nozzles for water and/or air foam as well as AFFF
- standard nozzles are suitable for AFFF/water mixture
- manual override for all remote controlled monitors

The foam expansion ratio depends on the foaming agent used.

Protein foaming agent:
1 : 6 to 1 : 8

Synthetic foaming agent:
1 : 12 to 1 : 15

---

<table>
<thead>
<tr>
<th>Flow l/min water</th>
<th>Flow kg/s DC</th>
<th>Control electric</th>
<th>Control manual</th>
<th>Control in-cab</th>
<th>Ground-base</th>
<th>Self-aspiration</th>
<th>Flow adjustment **</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>0.8</td>
<td>Viper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>800</td>
<td>0.32</td>
<td>Viper</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1000</td>
<td>0.4</td>
<td>Viper double branch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1200</td>
<td>0.6</td>
<td>Viper, Python</td>
<td>Kobra</td>
<td>Mamba</td>
<td>Kobra</td>
<td>Kobra</td>
<td>Kobra, Mamba, Python</td>
</tr>
<tr>
<td>1600</td>
<td>0.8</td>
<td>Python, Viper</td>
<td>Kobra</td>
<td>Mamba</td>
<td>Kobra</td>
<td>Kobra</td>
<td>Kobra, Mamba, Python</td>
</tr>
<tr>
<td>1600-3600</td>
<td>10/20</td>
<td>Python double branch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2400</td>
<td>0.25</td>
<td>Python</td>
<td>Kobra</td>
<td>Mamba</td>
<td>Kobra</td>
<td>Kobra</td>
<td>Kobra, Mamba, Python</td>
</tr>
<tr>
<td>3000</td>
<td>0.3</td>
<td>Python</td>
<td>Kobra</td>
<td>Mamba</td>
<td>Kobra</td>
<td>Kobra</td>
<td>Kobra, Mamba, Python</td>
</tr>
<tr>
<td>3600</td>
<td>0.36</td>
<td>Python</td>
<td>Kobra</td>
<td>Mamba</td>
<td>Kobra</td>
<td>Kobra</td>
<td>Mamba, Python</td>
</tr>
<tr>
<td>4000</td>
<td>0.16</td>
<td>Boa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4500</td>
<td>0.18</td>
<td>Boa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5000</td>
<td>0.2</td>
<td>Boa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6000</td>
<td>0.24</td>
<td>Boa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** = not in combination with self-aspiration

For orders please contact our local agent.

Please note that all dimensions and weights noted in our catalogue are approximate values.
## FOAM/WATER MONITORS

### Monitor BOA

<table>
<thead>
<tr>
<th>Monitor</th>
<th>Comb. pipe</th>
<th>Nozzle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pattern adjustment</td>
<td>Deflector</td>
<td>Deflector</td>
</tr>
<tr>
<td>Flow adjustment</td>
<td>100/50%</td>
<td>100/50%</td>
</tr>
</tbody>
</table>

**Operation monitor pipe**
- Electric or manual, manual override by handlever
- Central cable duct, connection 45° DIN or tank-car flange 90° with square flange

**Operation monitor body**
- Electrically remote controlled or by hand wheel, electric motors 24 V with cut-off safety clutch

### Performance

**Flow**
- 4000 l/min - 10 bar
- 4500 l/min - 75 m
- 5000 l/min - 80 m
- 6000 l/min - 85 m

**Throw water/foam**
- 4000 l/min - 60 m
- 4500 l/min - 65 m
- 5000 l/min - 70 m
- 6000 l/min - 75 m

**Horizontal rotation**
- 330° when operated electrically
- 360° when operated manually

**Vertical travel**
- -15° + 60°

### Options
- Floodlights (2 pcs.)
- Proportional control
- Monitor bearing indicator MAZ 3000
- Remote control by joystick
- Switch box with control
- Portable control desk
- Resting position catch (comb. pipe)
## FOAM/WATER MONITORS

### MAMBA

<table>
<thead>
<tr>
<th>Monitor pipe</th>
<th>Comb. pipe</th>
<th>Nozzle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pattern adjustment</td>
<td>Deflector</td>
<td>Pattern adjustment</td>
</tr>
<tr>
<td>Flow adjustment</td>
<td>100/50%</td>
<td>100/50%</td>
</tr>
</tbody>
</table>

**Operation**
- Monitor pipe: Deflector adjustment by cable line, flow adjustment by cable line
- Operation monitor body: Direct hand lever control from cab

**Performance**

<table>
<thead>
<tr>
<th>Flow (l/min)</th>
<th>Throw water/foam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600</td>
<td>55 m/45 m</td>
</tr>
<tr>
<td>2400</td>
<td>60 m/50 m</td>
</tr>
<tr>
<td>3000</td>
<td>65 m/55 m</td>
</tr>
<tr>
<td>3600</td>
<td>70 m/60 m</td>
</tr>
</tbody>
</table>

**Horizontal rotation**: 330°

**Vertical travel**: -15° + 60°

**Option**: Nozzle, electr. remote controlled

---

### PYTHON

<table>
<thead>
<tr>
<th>Monitor pipe</th>
<th>Comb. pipe</th>
<th>Nozzle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pattern adjustment</td>
<td>Deflector</td>
<td>Pattern adjustment</td>
</tr>
<tr>
<td>Flow adjustment</td>
<td>100/50%</td>
<td>100/50%</td>
</tr>
</tbody>
</table>

**Operation**
- Monitor pipe: Electric, manual override by hand lever
- Operation monitor body: Electrically remote controlled, electric motors 24 V with cut-off safety clutch

**Performance**

<table>
<thead>
<tr>
<th>Flow (l/min)</th>
<th>Throw water/foam</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600</td>
<td>55 m/45 m</td>
</tr>
<tr>
<td>2400</td>
<td>60 m/50 m</td>
</tr>
<tr>
<td>3000</td>
<td>65 m/55 m</td>
</tr>
<tr>
<td>3600</td>
<td>70 m/60 m</td>
</tr>
</tbody>
</table>

**Horizontal rotation**: 330° when electrically controlled

**Vertical travel**: -15° + 60°

**Options**
- Floodlights (2 pcs.)
- Proportional control
- Monitor bearing indicator MAZ 3000
- Remote control by joystick
- Switch box with control
- Portable control desk
- Resting position catch (comb. pipe)

---
## Monitor KOBRA

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor pipe Comb. pipe</td>
<td>with self-aspiration</td>
</tr>
<tr>
<td>Pattern adjustment Deflector</td>
<td></td>
</tr>
<tr>
<td>Flow adjustment 100/50% no</td>
<td></td>
</tr>
<tr>
<td>Operation monitor pipe</td>
<td>By hand lever</td>
</tr>
<tr>
<td>Operation monitor body</td>
<td>Hand lever, hand wheel control</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
</tr>
<tr>
<td>Flow 1600-2400-3000-3600 l/min</td>
<td>10 bar</td>
</tr>
<tr>
<td>Throw water/foam/self-aspiration</td>
<td></td>
</tr>
<tr>
<td>1600 l/min 55 m 45 m 50 m</td>
<td></td>
</tr>
<tr>
<td>2400 l/min 60 m 50 m 55 m</td>
<td></td>
</tr>
<tr>
<td>3000 l/min 65 m 55 m 60 m</td>
<td></td>
</tr>
<tr>
<td>3600 l/min 70 m 60 m</td>
<td></td>
</tr>
<tr>
<td>Horizontal rotation</td>
<td>360°</td>
</tr>
<tr>
<td>Vertical travel</td>
<td>-15° – 60°</td>
</tr>
<tr>
<td><strong>Options</strong></td>
<td></td>
</tr>
<tr>
<td>Ground base mount</td>
<td></td>
</tr>
<tr>
<td>Trailer mount</td>
<td></td>
</tr>
</tbody>
</table>

## Monitor VIPER

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor pipe Comb. pipe Nozzle</td>
<td></td>
</tr>
<tr>
<td>Pattern adjustment Deflector</td>
<td>Pattern adjustment no</td>
</tr>
<tr>
<td>Flow adjustment no no</td>
<td></td>
</tr>
<tr>
<td>Operation monitor pipe</td>
<td>Electric, no manual override</td>
</tr>
<tr>
<td>Operation monitor body</td>
<td>Electrically remote controlled,</td>
</tr>
<tr>
<td></td>
<td>electric motors 24 V</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
</tr>
<tr>
<td>Flow 800-1200-1600 l/min</td>
<td>10 bar</td>
</tr>
<tr>
<td>Throw water/foam/nozzle</td>
<td></td>
</tr>
<tr>
<td>800 l/min 40 m 30 m 35 m</td>
<td></td>
</tr>
<tr>
<td>1200 l/min 45 m 35 m 40 m</td>
<td></td>
</tr>
<tr>
<td>1600 l/min 50 m 40 m 45 m</td>
<td></td>
</tr>
<tr>
<td>Horizontal rotation</td>
<td>330° - as bumper monitor 180°</td>
</tr>
<tr>
<td></td>
<td>-15° – 60°</td>
</tr>
<tr>
<td>Vertical travel</td>
<td></td>
</tr>
<tr>
<td><strong>Options</strong></td>
<td></td>
</tr>
<tr>
<td>Water inlet vertical</td>
<td></td>
</tr>
<tr>
<td>Water inlet horizontal</td>
<td></td>
</tr>
<tr>
<td>Floodlights (2 pcs.)</td>
<td></td>
</tr>
<tr>
<td>Remote control by joystick</td>
<td></td>
</tr>
<tr>
<td>Switch box with control</td>
<td></td>
</tr>
</tbody>
</table>
### Monitor VIPER double-branch

<table>
<thead>
<tr>
<th></th>
<th>Nozzle</th>
<th>DC pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor pipe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow adjustment</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Pattern adjustment</td>
<td>Pattern adjustment</td>
<td>no</td>
</tr>
<tr>
<td>Operation monitor pipe</td>
<td>Electric, no manual override</td>
<td></td>
</tr>
<tr>
<td>Operation monitor body</td>
<td>Electrically remote controlled, electric motors 24 V with cut-off safety clutch</td>
<td></td>
</tr>
</tbody>
</table>

#### Performance

<table>
<thead>
<tr>
<th>Flow</th>
<th>800-1000 l/min - 10 bar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throw water/foam/nozzle</td>
<td>800 l/min 40 m 30 m 35 m</td>
</tr>
<tr>
<td>DC pipe</td>
<td>Up to 6 kg/s</td>
</tr>
</tbody>
</table>

#### Options

- Floodlights (2 pcs.)
- Remote control by joystick
- Switch box with control

---

### Monitor PYTHON double-branch

<table>
<thead>
<tr>
<th></th>
<th>Comb. pipe</th>
<th>DC pipe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor pipe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flow adjustment</td>
<td>100/50%</td>
<td>no</td>
</tr>
<tr>
<td>Pattern adjustment</td>
<td>Deflector</td>
<td></td>
</tr>
<tr>
<td>Operation monitor pipe</td>
<td>Electric, manual override by hand lever</td>
<td></td>
</tr>
<tr>
<td>Operation monitor body</td>
<td>Electrically remote controlled, electric motors 24 V with cut-off safety clutch</td>
<td></td>
</tr>
</tbody>
</table>

#### Performance

<table>
<thead>
<tr>
<th>Flow</th>
<th>800 l/min - 3600 l/min</th>
</tr>
</thead>
<tbody>
<tr>
<td>Throw water/foam</td>
<td>1600 l/min 55 m 45 m</td>
</tr>
<tr>
<td>DC nozzle</td>
<td>10 kg/s and 20 kg/s</td>
</tr>
</tbody>
</table>

#### Options

- Floodlights (2 pcs.)
- Proportional control
- Monitor bearing indicator MAZ 3000
- Remote control by joystick
- Switch box with control
- Portable control desk
- Resting position catch (comb. pipe)
Monitor bearing indicator MAZ 3000
for remote monitoring of extension,
vertical travel and horizontal rotation
of remote controlled water/foam
monitors in cases where direct visual
contact with the monitor is obstructed.
Background illuminated rotary
indicators show the horizontal and
vertical position of the monitor. In this
way the indicator is just as legible in
the dark as in sunlight. Each and every
movement can be followed visually.
This is an important step for an efficient
operation of remote controlled
monitors. The MAZ 3000 should be
installed in the driver's cab enabling
the monitor to be brought into the right
attack position before the vehicle is
stopped.

Monitor bearing indicator MAZ 4000
for remote monitoring of extension,
vertical travel and horizontal rotation of
remote controlled water/foam monitors
in cases where direct visual contact
with the monitor is obstructed. This
monitoring is realized by means of a
control unit in LCD design with
graphical representation. These control
units have been especially developed
for use in fighting industrial fires and
are approved for temperatures of -10 °C
up to +60 °C. By means of an integrated
background illumination as well as an
automatic temperature responsive
contrast control an excellent legibility
is ensured at all times. This is an
important step for an efficient operation
of remote controlled monitors. Besides
the above characteristics this bearing
indicator has another practical feature.
Together with a ZIEGLER foam/water or
foam/water/DC monitor with electrical
monitor control the contour for the
monitor operation can be set in a
simple and uncomplicated way.
Furthermore, in case of malfunction
the graphical display shows an error
message (available in 18 languages),
that informs the operator what steps
have to be taken. To be able to use all
the functions of the MAZ 4000 it is
recommended to install the unit into
the driver's cab. This enables the
monitor to be brought into the right
attack position even before the vehicle
is stopped.

A MAZ 4000 can be obtained together
with an electrically remote controlled
monitor incl. control unit only.
PORTABLE FOAM/WATER MONITORS
WITH EQUIPMENT

Trailer for portable foam and water monitors
Single axle trailer with galvanized frame, 4 legs adjustable in height, vertically adjustable towbar with truck clevis DIN 74054 and vertically adjustable jackwheel. Chassis with rubber cushioned axle, steel disk wheels, size of tyres 165 R 13. With hand brake and lights. G.V.W.: 650 kg

The monitor mounting supports are designed to allow the monitor to be quickly and easily removed and used as a portable monitor.

Colours:
- chassis - black RAL 9005
- mudguards - white RAL 9002

Platform trailer
with 2 removable tanks of 110 l each.
Tanks of GRP with handhole cover, suction connection size B, contents telltale window, carrying handles. The tanks are secured by means of clamping devices.
Size of platform: 1320x1600 mm
Material: aluminium tread plate
Dim. of trailer (LxWxH): 3500x1800x950 mm

TÜV certificate for trailer *

PORTABLE FOAM/WATER MONITORS WITH EQUIPMENT

17282
56838

Portable foam/water monitor with equipment

Water monitor type 1008
Vertical travel from 0 up to +90°, horizontal rotation 270°. The ground base is screwed on to the monitor body. The nozzle is infinitely variable from fog to straight stream.
Discharge adjustable from 600 l/min to 1200 l/min.
Dim. (LxWxH): 750x260x290 mm
Weight: 23.4 kg incl. nozzle

Foam tube for water monitor type 1008 *
1000 l/min of water for an expansion ratio of 1:8 and a pressure of 8 bar.
Pick-up rate: 2 - 5%
Throw: 35 m
Length: 1250 mm
Length of suction hose: 1.4 m
Weight: 5.5 kg

Further foam/water monitors on request.

* = not illustrated
PORTABLE FOAM/WATER MONITORS
WITH EQUIPMENT

Water ring monitor, AWG *
2 inlets with size B coupling DIN 14308 and 1 size B blank cap DIN 14312. Throw approx. 52 m with a nozzle of 30 mm diameter and at a pressure of 8 bar.
Horizontal rotation: 360°
Vertical travel: +30° up to +90°
Ring base: Ø 420 mm
Height of ring: 150 mm
All-up height: 470 mm
Dim. (LxWxH): 880x425x470 mm
Weight: 18 kg
....................................................56796

Foam nozzle SW 12 S, self-aspirating, AWG *
with incorporated foam inductor and regualating valve for 2 - 6% pick-up rate. RD 60 x 1/6” female thread. Flow: 1200 l/min
Throw: 40 m at 8 bar
Weight: 4 kg
....................................................56804

Water/foam monitor OZZIE style 911, Akron Brass
Oscillating, water-driven monitor of Pyrolite, without nozzle.
Discharge adjustable up to 1400 l/min.
Horizontal rotation: 60°
Vertical travel: +30° up to +90°. 40 sweeps per minute.
With size B Storz coupling (inlet 75 mm), pressure gauge and carrying handle.
Throw at 950 l/min, 7 bar: straight stream approx. 58 m
Fog at 90° spray angle: approx. 5 m
Dim. (LxWxH): 602x488x338 mm
Weight: 15 kg
....................................................56837

TURBOJET nozzle style 1727, Akron Brass
of Pyrolite, size 2 1/2”, flow adjustable to 475, 550, 750 or 950 l/min at 7 bar.
Inlet 1 1/2” female thread.
....................................................56866

TURBOJET nozzle style 1767, Akron Brass *
of Pyrolite, flow adjustable to 115, 360, 475, 550 or 750 l/min at 7 bar.
With cut-off ring.
Connection 1 1/2” female thread.
....................................................56886

ASSAULT nozzle style 4827, Akron Brass *
of Pyrolite, with rotary cut-off. Flow up to 1350 l/min at 7 bar.
....................................................56911

MERCURY water monitor style 3443 without nozzle, Akron Brass
This compact monitor features a quick set-up and works independently.
Of Pyrolite, with an additional Akro-Tec coating for durability. With spikes of hard metal on the collapsible base feet. With safety belt and hook.
Discharge up to 1900 l/min at 7 bar, lockable by means of Tork-Lok.
Vertical travel adjustable from +30° up to +60°, in case of manual pressure up to +20°.
Horizontal rotation +/-20°.
Ergonomical hand bar. Reflective stripes on the monitor outlet. Various types of nozzles can be used. Inlet with size B connection, outlet 2.5” male thread.
Dim. collapsed (LxWxH): 368x197x229 mm
Dim. erected (LxWxH): 368x597x229 mm
Weight (without nozzle): 6.35 kg
....................................................56902

MERCURY nozzle style 4445, Akron Brass *
of Pyrolite, flow 1900 l/min at 7 bar, inlet 2.5”.
Length: 180 mm
Weight: 2 kg
....................................................56903

MERCURY nozzle style 4447, Akron Brass
of Pyrolite, flow adjustable to 950, 1400 or 1900 l/min at 7 bar, inlet 2.5”.
Length: 180 mm
Weight: 2 kg
....................................................56904

Low expansion foam tube style 3621, Akron Brass *
of Pyrolite, for water monitors with 2.5” inlet. The tube is easily attached to the nozzle by means of a retaining ring.
Foam expansion up to 1:10.
....................................................57108

Small monitor HH 1260, AWG
with ground base, rotating 360°.
Flow: 1200 l/min at 8 bar
Dim. of monitor: 780x305x245 mm
Dim. of ground base: 1190x155x140 mm, incl. multi-purpose nozzle MZ 1200
Weight: 21.8 kg
....................................................41001

* = not illustrated
PORTABLE FOAM/WATER MONITORS

NOZZLES

Foam tube for monitor HH 1260, AWG
Self-priming with incorporated foam inductor with regulating valve 2 - 6% pick-up rate.
Water needed: 1100 l/min at 8 bar
Amount of foam: 6500 l/min with 5% protein foaming agent and 15,000 l/min with 3% multi-range foaming agent
Throw of foam: 40 m at 8 bar
Total length: 1190 mm
Weight: 4.5 kg
(picture on page 9) ....................................................41002

Roof flange for monitor HH 1260, AWG *
of aluminium alloy, anodised.
Dim. (LxWxH): 170x170x45 mm
Weight: 1.4 kg ....................................................41003

APOLLO portable water monitor style 3421, Akron Brass
without nozzle, for use on the ground or on a vehicle roof. With removable base. Compact, rugged and lightweight. Low water ducts increase the stability. Made of Pyrolite.
Flow up to 3030 l/min or 4800 l/min.
The ground base with 5 legs with ground spikes and safety chain is easily removable.
Horizontal rotation with brake.
Vertical travel from +90° to +35° by means of a hand wheel. If the safety stop is removed vertical travel to -15° at reduced pressure.
With carrying handle, 2 size B inlet connections with non-return valves, pressure gauge.
Weight: 22.3 kg ....................................................56761

RAMPAGE MASTER STREAM nozzle style 4460, Akron Brass *
with twist-shutoff.
Flow: up to 4800 l/min
Inlet: 2.5
Material: brass
Weight: 10.5 kg ....................................................57100

AKROFOAM 2.5” foam nozzle style 4470, Akron Brass *
Self-inducting nozzle for proportioning rates of 1, 3 and 6%.
Inlet: 2.5
Material: brass
Weight: 11.3 kg (further accessories available) ....................................................57101

MASTER STREAM foam nozzle style 3625, Akron Brass *
of Pyrolite.
Flow: 1900 l/min
Foam expansion rate: up to 12:1
Inlet: 2.5
Length: 730 mm
Weight: 2.8 kg ....................................................57102

Foam tube with self-inducing proportioner * for APOLLO water monitor. With 2 1/2” female thread connection.
Foam capacity: 8000 - 10,000 l/min at an expansion rate of 1:8 - 1:10 and at a pressure of 8 bar
Throw: 35 m
Pick-up hose: 1.4 m
Dim. (LxØ): 125x90 mm
Weight: 3.87 kg ....................................................56795

OMEGA water monitor style 3526, Akron Brass *
of brass, for stationary use. Simple construction.
Flange connection 3”, horizontal rotation 360”, vertical travel 150°, with tiller bar for control of horizontal and vertical positioning.
Flow: up to 4800 l/min
Weight: 33 kg ....................................................56824

Further foam/water monitors and nozzles on request!

* = not illustrated
NOZZLES WITH EQUIPMENT

**TURBOJET and ASSAULT with accessories, Akron Brass**
Lightweight nozzles of Pyrolite for fog and straight stream. Infinite adjustment of pattern from straight stream to powerful fog cone (110°). Excellent pattern even at low pressure (0.5 bar). Solid rubberlike handle for "open" and "close". Low maintenance due to rugged and simple design.

All the following nozzles are also available as break-apart versions with or without pistol grip. Pistol grips and shut-off handles are available in grey, blue, green, white, yellow, orange, red-brown and black (standard) colour.

10 years warranty on all ASSAULT and TURBOJET nozzles in this catalogue!

**ASSAULT nozzle style 4802, Akron Brass**
Preset flow (45, 90 or 140 l/min at 6 bar). Inlet 1". For normal and high pressure application (40 bar). With size C coupling.
Dim. (LxWxH): 227x102x120 mm
Weight: 1.45 kg ....................................................56845

**Low expansion foam tube style 755, Akron Brass**
for nozzle and high pressure pistols art. Nos. 56845, 56809, 42608. Easy to attach by means of a clamp locking device. Foam expansion: up to 1:14
Length: 280 mm
Weight: 0.52 kg ....................................................56771

**ASSAULT nozzle style 4820, Akron Brass**
Preset flows (210, 330, 440, 520 or 620 l/min at 6 bar). Inlet 1.5". With size C coupling.
Dim. (LxWxH): 340x270x120 mm
Weight: 2.5 kg ....................................................56834

**MIDRANGE ASSAULT nozzle style 4863, Akron Brass**
Preset flows (520, 620 or 700 l/min at 6 bar). With size B coupling.
Length: 250 mm
Weight: 2.2 kg ....................................................57099

**MARAUDER ASSAULT nozzle, Akron Brass**
similar to art. No. 56834, but with connecting elbow. With size C coupling with locking pin. The elbow is anodised and provided with a shrunk hose as insulation for cold.
Dim. (LxWxH): 340x270x120 mm
Weight: 3 kg ....................................................56836

**Low expansion foam tube style 777, Akron Brass**
Foam tube for ASSAULT nozzles art. Nos. 56834 and 56836. Air-aspirating foam capability with up to 1:14 expansion ratio. Suitable for use with all foaming agents on the market.
Length: 425 mm
Weight: 1.1 kg ....................................................56844

Available on request:
- accessories
- larger tips
- attachable low expansion foam tubes

**TURBOJET nozzle style 1702, Akron Brass**
Flow adjustable to 45, 90, 140 or 220 l/min at 6 bar. For normal and high pressure application (40 bar). With size C coupling.
Dim. (LxWxH): 250x105x260 mm
Weight: 1.8 kg ....................................................56809

**TURBOJET nozzle style 1720, Akron Brass**
Flow adjustable to 110, 220, 350 or 460 l/min at 6 bar. With size C coupling.
Dim. (LxWxH): 240x105x260 mm
Weight: 2.3 kg ....................................................56810

**Low expansion foam tube style 766, Akron Brass**
for TURBOJET nozzles art. Nos. 56810 and 56830.
Foam expansion: up to 1:14
Length: 425 mm
Weight: 1.1 kg ....................................................56780

* = not illustrated
**NOZZLES WITH ACCESSORIES**

**TURBOJET nozzle style 1720, Akron Brass**
- with connecting elbow art. No. 56831, otherwise as art. No. 56810 (page 11).
- Weight: 2.8 kg

**Connecting elbow**
- at both ends with 1 1/2" male thread.
- With size C coupling at the short end.
- The elbow is anodised and provided with a shrunken hose as insulation for cold.

**TURBOJET nozzle style 1704, version A, Akron Brass**
- of Pyrolite, with adjustable flow, 65 and 110 l/min at 6 bar.
- Infinitely adjustable water jet from straight stream via fog up to super fog.
- With feature to flush out dirt.
- With ball shut-off, pistol grip and size C coupling.
- The nozzle head with visible and tangible spray pattern marking.
- Dim. (LxWxH): 230x105x260 mm
- Weight: 2 kg

**TURBOJET nozzle style 1704, version B, Akron Brass**
- of Pyrolite, as art. No. 56915, but adjustable flow 45, 85 and 110 l/min at 6 bar.
- Weight: 1.8 kg

**TURBOJET nozzle style 1704, version A, Akron Brass**
- of Pyrolite, with adjustable flow, 65 and 110 l/min at 6 bar.
- Weight: 1.8 kg

**WIDE-RANGE TURBOJET tip style 1766 with double grip with playpipe style 2390, Akron Brass**
- of Pyrolite. Flow adjustable to 115, 360, 475, 550 or 750 l/min at 7 bar.
- Double grip with 1.5" male thread delivery connection and size C coupling.
- Length: 190 mm
- Weight: 1.58 kg

**Larger TURBOJET versions and low expansion foam tubes on request.**

**SAVERJET multi-purpose nozzle style 1523, Akron Brass**
- as art. No. 56870, but flow from 360 l/min to 750 l/min.
- With size B coupling.
- Length: 280 mm
- Weight: 3 kg

**Shut-off with pistol grip 1" style 2116, Akron Brass**
- (picture on page 13)

**Larger TURBOJET versions and low expansion foam tubes on request.**

**SAVERJET multi-purpose nozzle style 1520, Akron Brass**
- to be used at pressures of 3.5 bar onwards.
- Flow 170 - 600 l/min (solid bore tip 1/2"").
- With flushing capability.
- With ball shut-off, pistol grip and size C coupling of impact resistant hard rubber.
- Three sizes of solid bore tips are available.
- Length: 270 mm
- Weight: 2.7 kg

**SABERJET multi-purpose nozzle style 1520, Akron Brass**
- Please see art. No. 56865.
- Length: 470 mm
- Weight: 3.2 kg

**Size C nozzle for CAFS with three tips, Akron Brass**
- of Pyrolite. For use with water and foam, particularly for CAFS. Three different stacked tips with I.D. of 25 to 38 mm make an individual adjustment to the flow possible.
- Length: 340 mm
- Weight: 1.5 kg

**Size B nozzle for CAFS, style 2393 (playpipe), Akron Brass**
- Please see art. No. 56865.
- Length: 470 mm
- Weight: 3.2 kg

**SAVERJET multi-purpose nozzle style 1520, Akron Brass**
- to be used at pressures of 3.5 bar onwards.
- Flow 170 - 600 l/min (solid bore tip 1/2"").
- With flushing capability.
- With ball shut-off, pistol grip and size C coupling of impact resistant hard rubber.
- Three sizes of solid bore tips are available.
- Length: 270 mm
- Weight: 2.7 kg

* = not illustrated
PIERCING APPLICATORS
HIGH PRESSURE NOZZLES

Special piercing applicators for use with compressed-air foam
The applicators are used in connection with the shut-off with pistol grip (art. No. 56894) for the respective object of fire.

a) Straight piercing applicator
1000 mm long, with tip and lateral bores. The applicator is driven into hay bales, through walls or into solid objects.

b) Bent piercing applicator
800 mm long, with bent head. With lateral bores. For use behind impermeable objects and between false floors.

c) Short-angle piercing applicator
800 mm long, with bent head. With lateral bores on the head. The applicator is driven into e.g. car engine compartments or rubbish bins for ejecting foam.

Straight piercing applicator .................................................... 42612
Bent piercing applicator ....................................................... 42613
Short-angle piercing applicator ................................................ 42614

Pistol nozzles and high pressure pistols with accessories
Fine droplets by means to turbo spinning wheel even at low pressure.
- The droplets leave the nozzle with a lower speed as is the case when using conventional high pressure pistols. Higher extinguishing effect through longer period of dwell on the fire.
- Softer recoil because of slower discharge of the droplets.

TURBOJET high pressure pistol style 753/1703, Akron Brass of Pyrolite. Consisting of a high pressure pistol grip, a trigger shut-off, style 753 and TURBOJET tip style 1703. Flow adjustment 50, 100 or 150 l/min at 7 bar during action. Max. flow 230 l/min at 48 bar. Adjustable straight stream to super fog. Connection R 1” female thread.
Length: 400 mm
Weight: 3.2 kg .......................................................... 42608

TURBOJET nozzles (art. Nos. 56809, 56915 and 56916) please see pages 11 and 12.
ASSAULT nozzle (art. No. 56845) please see page 11.

Attachable foam tubes for medium expansion foam up to 750 l are available.
Further nozzles for special use (e.g. with salty water) on request.

* = not illustrated
**TURBO NOZZLES WITH ACCESSORIES**

**HIGH PRESSURE PISTOLS**

**SPECIAL NOZZLES**

---

**Pistol nozzle PN 40 size C-SA, AWG**
for rapid intervention, with trigger lever for straight stream or spray. Weak recoil due to ergonomic design and the favourable hose connection.
Flow full jet: 75 l/min
Flow spray: 115 l/min at 5 bar
Dim. (LxWxH): 450x88x235 mm
Weight: 2 kg

---

**High pressure pistol 1 PN 40, AWG** *
1” swivel inlet for intermittent discharge of straight stream and fog at variable scattering angle.
Flow: 150 l/min at 40 bar
Throw straight stream: 28 m
Throw fog: 15 m
Dim. (LxWxH): 300x480x50 mm
Weight: 2 kg

---

**Foam adaptor for high pressure pistol, AWG** *
Adjustable air nozzles allow adjustment of foam quality and throw as required in the operation.
Dim. (LxØ): 625x90 mm
Weight: 1 kg

---

**CAFS nozzle C-D 25, AWG**
A special nozzle for CAFS. With swiveling size C coupling running in ball bearings. Tip Ø 25 mm.
PLEASE NOTE: This nozzle should be used only in connection with a CAF-System. When only water is used the recoiling forces are too high. (Water flow at 5 bar: 785 l/min)
Dim. (LxWxH): 332x415x115 mm
Weight: 2 kg

---

**Turbo nozzle 2000/0-C, AWG** *
Adjustable flows:
40, 80 or 130 l/min at 6 bar
Fog: adjustable angle 0° up to 120°
Materials: housing and control device of anodised aluminium, turn button of rubber (perbunan), ball of synthetic material (POM), grip and lever of synthetic resin coated cast aluminium.
With swiveling size C Storz coupling running in ball bearings.
Dim. (LxWxH): 265x230x100 mm
Weight: 1.6 kg

---

**Turbo nozzle 2000/1-C, AWG** *
Setting of flow by means of control grip.
Adjustable flows 60, 130 or 235 l/min at 6 bar.
Fog: adjustable angle 0° up to 120°
Materials: housing and cone of anodised aluminium malleable alloy, grip and lever of rubber coated cast aluminium, control device of anodised aluminium, turn button of rubber (perbunan). With size C Storz coupling.
Dim. (LxWxH): 290x245x115 mm
Weight: 2.5 kg

---

**Turbo nozzle 2000/2-C, AWG**
as art. No. 42594, but with adjustable flows: 130, 235 or 400 l/min at 6 bar.
Dim. (LxWxH): 290x240x115 mm
Weight: 2.5 kg

---

**Turbo nozzle 2000/1-B, AWG** *
as art. No. 42594, but with adjustable flows: 60, 130 or 235 l/min at 6 bar.
With size B Storz coupling.
Dim. (LxWxH): 300x245x126 mm
Weight: 2.6 kg

---

**Turbo nozzle 2000/2-B, AWG** *
as art. No. 42594, but with adjustable flows: 130, 235 or 400 l/min at 6 bar.
With size B Storz coupling.
Dim. (LxWxH): 300x240x126 mm
Weight: 2.6 kg

---

**Foam adaptor for Turbo nozzles 2000, AWG**
(but not for art. No. 42592)

---

* = not illustrated
VARIous EQUIPMENT
FOR FIRE FIGHTING

Water shield
A water fan nozzle providing a protective water curtain against flames, smoke, heat radiation, toxic fumes and dust. The water, flow up to 1800 l/min, is diverted by a semicircular plate thus creating a semicircular water curtain. The unit is firmly pressed to the ground by the water pressure. This prevents the shield from moving.

Size B
Flow: 1800 l/min at 8 bar
Height of throw: 10 m
Width of throw: 31 m
Weight: 4.4 kg

Size C *
Flow: 1100 l/min at 8 bar
Height of throw: 8 m
Width of throw: 27 m
Weight: 2.5 kg

Piercing applicator PN 16
Designed to combat all kinds of smouldering fires. The tube (with steel point and handle) is driven into the smouldering material. The water escaping through 12 holes at the end of the applicator covers an area of 360°. With size C coupling for connection to the hose line. Shutoff by ball valve NW 30.

Length: 1600 mm
Weight: 7 kg

Pump tank A 10 DIN 14405
for fire service vehicles. Red, 10 l tank. Lid with snap closure, carrying handle and hose bag. With double-action pump, size D coupling, size D pressure hose of 5 m and with nozzle DK DIN 14405.

Weight: 8 kg

Pump tank A 10 *
as art. No. 56619, but without hose and nozzle.
Weight: 6.2 kg

Pump tank B 10 DIN 14405 *
Red, 10 l tank. Lid with snap closure and carrying handle, double-action pump with 3/4" threaded connection and 1 m of rubber hose 1/2" with nozzle.
Weight: 6.5 kg

Bucket pump ES DIN 14407
of brass, with suction bend and T-handle. With 5 m of plastic hose 1/2" with nozzle and adjustable foot.
Weight: 3 kg

Hydrant drain pump of brass
Double-action pump, with foot rest of steel. With 1.5 m of rubber pick-up hose 1/2" and 0.3 m of delivery hose.
Weight: 2.4 kg

Nozzle DK DIN 14405 *
for pump tank, of light metal. Bore 3.5 mm, with size D coupling, DIN 14308.
Length: 120 mm
Weight: 0.15 kg

Fire broom
of 10 fan-formed spring steel bands, 465 mm wide. The exchangeable wooden boom-stick is fixed by means of a wing bolt.
Weight: 1.5 kg

Spare broom-stick for fire broom *
Length: 2 m

Bucket, 10 l, of canvas
Impregnated, with spout.
Weight: 0.45 kg

Bucket, 13 l, of steel plate *
Round, galvanized.
Weight: 1.2 kg

* = not illustrated
MULTI-PURPOSE BRANCHPIPES (DIN) WITH ACCESSORIES

Multi-purpose branchpipes DIN 14365
Abbreviations:
l = total length of branchpipe
d = bore of nozzle
m = bore of tip
Size D: l=300 mm, d= 6 mm, m= 4 mm
Size C: l=450 mm, d=12 mm, m= 9 mm
Size B: l=500 mm, d=22 mm, m=16 mm

Multi-purpose branchpipe PN 16 DIN 14365
Standard design with housing, control device, tube, nozzle and tip, of light metal. Tube with insulation for cold.
Size DM *
Weight: 0.6 kg ..................... 42506
Size CM *
Weight: 1.4 kg ..................... 42541
Size BM
Weight: 2.3 kg ..................... 42575

Spare parts for branchpipes DIN 14365.
Ball with swirl
for size D * ......................... 42723
for size C ......................... 42724
for size B * ......................... 42725
Threaded nipple of plastic *
for size C ......................... 42727
for size B ......................... 42728
Flat gasket for balls *
for size D, 26x9,4x3,5 mm .......... 42706
for size C, for models before 1991
37x54x3 mm .................. 42704
for size B, 43x60x4 mm .......... 42705
Pressure gasket *
as replacement for art. No 42704
for models from 1992 onwards
49x50,5x30,5 mm ................ 42524
Nozzle tip of polyamide
for size D,* bore 4 mm,
with R 3/4” female thread .......... 42716
for size C, bore 9 mm,
with R 1” female thread .......... 42711
for size B,* of light metal bore 16 mm,
with R 1 1/2” female thread ....... 42714
Set of gaskets *
for size DM ......................... 42719
for size CM ......................... 42720
for size BM ......................... 42721

Valve of light metal complete with handle
for size D * ......................... 42729
for size C ......................... 42722
for size B * ......................... 42730

Spare pipe DIN 14365 *
Size C ......................... 42535
Multi-purpose branchpipe PN 16 DIN 14365
Standard design, but tube, nozzle and tip of polyamide
Size DM *
Weight: 0.6 kg ..................... 42503
Size CM
Weight: 1.25 kg ................... 42536

Multi-purpose branchpipe PN 16 DIN 14365 *
of light metal, with straight stream locking latch
Size CM
Weight: 1.4 kg ..................... 42538
Size BM
Weight: 2.3 kg ..................... 42577

Multi-purpose branchpipe PN 16 DIN 14365 *
of light metal, with water curtain
Size CMM
Weight: 1.9 kg ..................... 42537
Size BMM *
Weight: 2.7 kg ..................... 42576

Multi-purpose branchpipe PN 16 DIN 14365 *
of light metal, with straight stream locking mechanism and water curtain
Size CMM
Weight: 1.9 kg ..................... 42539
Size BMM *
Weight: 2.7 kg ..................... 42578

Branchpipe holder PN 16 DIN 14368-SK
Size B branchpipe holder facilitates the handling of the branchpipe to a great extent. The main recoil is lead to the ground via the hose line. Elbow 50°.
Size B coupling DIN 14308 at the inlet. Outlet with swiveling size B coupling DIN 14303.
Weight: 1.8 kg ..................... 42731

* = not illustrated
COUPLINGS AND ADAPTEDS

**Delivery hose coupling PN 16**
of light metal, gaskets of nitrile rubber,
and acid resistant

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
<th>Weight (kg)</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-DS *</td>
<td>25 mm, DIN 14301</td>
<td>0.1</td>
<td>41111</td>
</tr>
<tr>
<td>C *</td>
<td>52 mm, DIN 14302</td>
<td>0.4</td>
<td>41211</td>
</tr>
<tr>
<td>B</td>
<td>75 mm, DIN 14303</td>
<td>0.5</td>
<td>4124</td>
</tr>
<tr>
<td>A *,</td>
<td>110 mm, DIN 14300</td>
<td>1.7</td>
<td>41411</td>
</tr>
</tbody>
</table>

**Blank cap PN 16**
without chain, of light metal, gaskets of nitrile rubber, oil and petrol resistant

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
<th>Weight (kg)</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>D *</td>
<td>25 mm, DIN 14310</td>
<td>0.1</td>
<td>41701</td>
</tr>
<tr>
<td>C *</td>
<td>52 mm, DIN 14311</td>
<td>0.4</td>
<td>41711</td>
</tr>
<tr>
<td>B</td>
<td>75 mm, DIN 14312</td>
<td>0.6</td>
<td>41721</td>
</tr>
<tr>
<td>A *,</td>
<td>110 mm, DIN 14313</td>
<td>1.3</td>
<td>41731</td>
</tr>
</tbody>
</table>

**Coupling PN 16**
of light metal, gaskets of nitrile rubber,
and petrol resistant

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
<th>Weight (kg)</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-DS *</td>
<td>25 mm, DIN 14306</td>
<td>0.07</td>
<td>41601</td>
</tr>
<tr>
<td>C</td>
<td>52 mm, DIN 14307</td>
<td>0.3</td>
<td>41622</td>
</tr>
<tr>
<td>B *,</td>
<td>75 mm, DIN 14308</td>
<td>0.4</td>
<td>41652</td>
</tr>
<tr>
<td>A *,</td>
<td>110 mm, DIN 14309</td>
<td>1.1</td>
<td>41661</td>
</tr>
</tbody>
</table>

**Chain for blank caps**
2.5 mm, with S-hooks on both ends, galvanized

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
<th>Weight (kg)</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>D, C and B</td>
<td>DIN 14311-5, 220 mm long, 6 links, S-hook, Ø 40 mm</td>
<td>0.32</td>
<td>41751</td>
</tr>
<tr>
<td>A *,</td>
<td>DIN 14311-5, 320 mm long, 9 links, S-hook, Ø 40 mm</td>
<td>0.6</td>
<td>41752</td>
</tr>
</tbody>
</table>

**Adaptor PN 16**
of light metal, gaskets of nitrile rubber,
and petrol resistant

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
<th>Weight (kg)</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>C/D *</td>
<td>52/25 mm, DIN 14341</td>
<td>0.32</td>
<td>4201</td>
</tr>
<tr>
<td>B/C,</td>
<td>75/52 mm, DIN 14342</td>
<td>0.6</td>
<td>4201</td>
</tr>
<tr>
<td>A/B *,</td>
<td>110/75 mm, DIN 14343</td>
<td>1.6</td>
<td>4202</td>
</tr>
</tbody>
</table>

**Suction hose couplings**
of light metal, gaskets of nitrile rubber,
and petrol resistant

<table>
<thead>
<tr>
<th>Size</th>
<th>Description</th>
<th>Weight (kg)</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>C *,</td>
<td>DIN 14321</td>
<td>0.5</td>
<td>4151</td>
</tr>
<tr>
<td>B *,</td>
<td>DIN 14322</td>
<td>0.7</td>
<td>4153</td>
</tr>
<tr>
<td>A,</td>
<td>DIN 14323</td>
<td>1.65</td>
<td>4155</td>
</tr>
</tbody>
</table>

**Kinking protector**
of light metal. For size B and size C hoses.

Weight: 0.9 kg

**Coupling spanner DIN 14822**
Galvanized.

Size ABC
Weight: 0.5 kg

**Circlip remover**
System ZIEGLER.
Weight: 0.2 kg

* = not illustrated
ACCESSORIES
AND SPARE PARTS

Sealing ring for suction or delivery couplings *
of perbunan, mineral oil resistant
Size D-DS, DIN 14301 ............45134
Size C, DIN 14321 ................45154
Size B *, DIN 14322 ..........45155
Size A *, DIN 14323 ..........45156

Sealing ring for suction coupling of perbunan, mineral oil resistant
Size C, DIN 14321 ................45135
Size B, DIN 14322 ..........45136

Clamp fitting *
of delivery couplings of light metal
Size C, DIN 14302 .............41252
Size B, DIN 14303 .............41353

Tail pipe *
of delivery couplings of light metal
Size C 42, DIN 14332 ..........41217
Size C, DIN 14302 ..........41251
Size B, DIN 14303 ..........41351

Tail pipe *
of suction and delivery couplings of light metal
Size D-DS, DIN 14301 ..........41151

Tail pipe *
of suction couplings of light metal
Size C, DIN 14321 ..........41521
Size B *, DIN 14322 ..........41541
Size A *, DIN 14323 ..........41561

Retaining ring of stainless spring steel
Size D *, DIN 14301 ..........45111
Size C, DIN 14302 ..........45112
Size B *, DIN 14303 ..........45113
Size A *, DIN 14323 ..........45114

Sealing ring for delivery couplings *
of perbunan, mineral oil resistant
Size C, DIN 14302 ..........45135
Size B, DIN 14303 ..........45136

Mounting plate
Synthetic, for fastening of equipment with conventional couplings in vehicles. Bores with spacer sleeve prevent distorsion in mounting.

Size A ..........41904
Size B ..........41905
Size C ..........41906

Clamp fitting *
of light metal, for suction and delivery couplings
Size D-DS, DIN 14301 ..........41152

Clamp fitting for suction couplings of light metal
Size C, DIN 14321 ..........41522
Size B *, DIN 14322 ..........41542
Size A *, DIN 14323 ..........41562

Flat gasket *
for couplings
Size D, with 1” female thread
.........................................103426
Size C, with 2” female thread .......................................754294
Size B, with 2 1/2” female thread ....................................754271
Size A, with 4 1/2” female thread .....................................754292

Graphite pencils *
for treating the sealing rings.
Package of 12. .....................................................32905

* = not illustrated
DIVIDERS/PRESSURE RELIEF VALVES
AND SHUT-OFFS

Pressure relief valve DIN 14380
of light metal, piston-controlled and
with automatic draining (non-freezing).
With two swivel size B couplings
DIN 14303 for inlet and outlet and one
size B coupling DIN 14308 for dump
outlet. Can be flushed during action.
Illuminated pressure gauge (0 - 25 bar)
with integrated desired value setting
ring 2 - 16 bar. With turn-down carrying
handle.
Weight: 5.25 kg ...................................................42183

Pressure relief valve DIN 14380 *
with attached 3-way divider B/CBC
DIN 14345 and adaptor B/C
DIN 14342 with chain,
with screw down valves.
Weight: 10.1 kg ...................................................42184

Pressure relief valve DIN 14380 *
as art. No. 42184, but with ball valves.
Weight: 11.2 kg ...................................................42185

Set of gaskets *
for pressure relief valves manufactured
from 1989 onwards. ........................................41124

Pressure gauge with glycerol filling *
BR 1456, measuring range 0 - 16 bar,
connection M 10 x 1" female thread.
....................................................41128

Diaphragm *
complete ............................................102957

Control diaphragm *
complete ............................................102958

Divider PN 16 DIN 14345, of light metal
B/CBC
incl. adaptor B/C, DIN 14342, with
screw down valves.
Weight: 5.9 kg ...................................................42104

B/CBC *, with ball valves.
Weight: 7 kg ...................................................42103

BB/CBC, with ball valves and clapper
meeting the requirements of siamese
A-BB DIN 14355 and divider with ball
valve DIN 14345, of light metal.
Weight: 8.1 kg ...................................................44058

Divider PN 16 DIN 14345, of light metal *
as art. No. 44058, but
C/DCD, with ball valves.
Does not comply with DIN.
Weight: 2.2 kg ...................................................42111

Spares parts for dividers

Bonnet *
with valve disk, spindle and hand
wheel for C connection with 2" male thread.
Weight: 0.5 kg ...................................................44742

for B connection with 2 1/2" male thread.
Weight: 0.6 kg ...................................................44741

Set of gaskets *
for bonnet C connection 2" .......................42735
B connection 2 1/2" .......................42736

Siamese PN 16 *
with clapper DIN 14355.
Size A-BB
Weight: 3.3 kg .........................42201
Size B-CC *
Weight: 2 kg .........................42211

Set of gaskets for siamese *
Size A-BB ...................................................42734

Hose shut-off PN 16 *
size C, DN 30, of light metal
with couplings on both sides.
Weight: 1.3 kg ..............................42441

Hose shut-off PN 16, size B, DN 40, of brass
with couplings on both sides.
Weight: 2.6 kg ..............................42442

Set of gaskets complete for divider
B/CBC * with screw down valves.............42732
with ball valves ............................42733

Valve disk *
Size C, of rubber .....................44745
Size B, of rubber .....................44746

Hand wheel of light metal *
with recessed square 11 mm, for
connection to size C and B. ....................44744

* = not illustrated
SUCTION STRAINERS
WIRE MESH BASKETS

Suction strainer DIN 14362
of light metal, with non-return valve
and drain arrangement. Leakproof and
maintenance-free.
Size C, 52 mm *
Weight: 1 kg
...................................................42301
Size B, 75 mm *
Weight: 2.3 kg
...................................................42311
Size A, 110 mm
Weight: 5 kg
...................................................42321

Suction strainer size A DIN 14362
with fixed handles.
Weight: 5.2 kg
...................................................42322

Suction strainer for dirty water
with valve ball of rubber and suction
sieve of perforated plate.
Size C *, with size C coupling.
Dim. (HxØ): 200x120 mm
Weight: 1.6 kg
...................................................42302
Size B, with size B coupling.
Dim. (HxØ): 290x150 mm
Weight: 2.3 kg
...................................................42312

Inlet strainer for suction strainer
size A
...................................................42737

Low level strainer
with non-return clapper and swivel
clamp fitting. Without side-inlets.
Lowest suction lift 15 mm.
Size B *
Weight: 1.9 kg
...................................................42335
Size A
Weight: 4.4 kg
...................................................42341

ZIEGLER wire mesh basket
with instantaneous lock. Only 11 cm
high when folded. Prevents clogging of
the suction strainer.
Size A
Weight: 1.3 kg
...................................................83121
Size B *
Weight: 1 kg
...................................................83122
Size C *
Weight: 0.7 kg
...................................................83123
DN 125 *
Weight: 1.8 kg
...................................................83124
DN 150 *
Weight: 2.3 kg
...................................................83126

* = not illustrated
EQUIPMENT FOR SUCTION OPERATION
STANDPIPES FOR UNDERGROUND
HYDRANTS PN 16 WITH ACCESSORIES

Quick-acting coupling handles for size A suction hoses and size A suction strainers
Allow fast and safe attachment also at night without use of a wrench. The folding handles are of aluminium and the half-round fixing plates are of impact resistant synthetic material. Easy to fix with just a screwdriver. For a size A suction hose 2 pairs are needed and for a size A suction strainer 1 pair is needed.

ZIEGLER quick-acting coupling handles
1 pair, without fitting. Weight: 0.5 kg
................................................... 41912

Fitting costs *
for 1 pair of ZIEGLER quick-acting coupling handles.
................................................... 41925

AWG quick-acting coupling handles
1 pair, without fitting. Weight: 0.7 kg
................................................... 41914

Fitting costs *
for 1 pair AWG quick-acting coupling handles.
................................................... 41926

Quick-acting coupling handles “Scharfenberg” for size A suction strainers
of light metal. One end of the handles is fixed on the outer rim of the coupling, the other end on an adaptor ring. 1 pair, without fitting. Weight: 1 kg
................................................... 41924

Quick-acting coupling handles “Scharfenberg” for size A suction strainers *
of light metal. One end of the handles is fixed on the outer rim of the coupling, the other end on the suction strainer. Without adaptor ring. 1 pair, without fitting. Weight: 1 kg
................................................... 41913

Fitting costs *
for 1 pair of quick-acting coupling handles “Scharfenberg”.
................................................... 41921

Hydrant standpipe DIN 14375 *
with shut-off of light metal. With swivel head and 2 size C outlets, DN 70/80. Length: 980 mm Weight: 5.7 kg
................................................... 44111

Hydrant standpipe DIN 14375
with shut-off of light metal. With swivel head and 2 size B outlets, DN 70/80. Length: 1050 mm Weight: 7 kg
................................................... 44211

Hydrant standpipe for Württemberg *
Long version, of light metal. With swivel head and 2 size C outlets, DN 50/50. Length: 1900 mm Weight: 7.6 kg
................................................... 44116

Hydrant standpipe for Württemberg *
Long version, of light metal. With swivel head and 2 size B outlets, DN 50/50. Length: 1975 mm Weight: 8.8 kg
................................................... 44212

Standpipe base of light metal consisting of standpipe base, pipe, handle and gasket. DN 70/80 DIN 14375
Weight: 3.1 kg
................................................... 44712

DN 50/50, version Württemberg *
Weight: 4.8 kg
................................................... 44711

* = not illustrated
**STANDPIPES FOR UNDERGROUND HYDRANTS PN 16 WITH ACCESSORIES**

**Standpipe base of light metal with flat gasket and claw nut**
- DN 70/80 DIN 14375
- Weight: 0.7 kg
  
**DN 50/50, version Württemberg**
- Weight: 0.9 kg

**Claw nut of light metal for standpipe base**
- DN 70/80 DIN 14375
- Weight: 0.32 kg

**DN 50/50, version Württemberg**
- Weight: 0.26 kg

**Leather gasket for standpipe base**
- DN 70/80 DIN 14375
- Weight: 0.06 kg

**DN 50/50, version Württemberg**
- Weight: 0.05 kg

**Rubber gasket for standpipe base**
- DN 70/80 DIN 14375
- Weight: 0.04 kg

**Handle for standpipe**
- DIN 14375
- Weight: 0.1 kg

**ZIEGLER standpipe extension**
- with foot DN 50/50. For use with standpipes DN 70/80, DIN 14375, for the deep-set pit hydrants type Württemberg DN 50/50.
- Usable length: 950 mm
- Total length: 1250 mm
- Weight: 9 kg

**Hydrant standpipe with water meter**
- 10 m³/h, working pressure up to 10 bar. Base complying with DIN 14375, DN 70/80. With handle, water meter DN 25. Housing of brass. Oval flange and size C coupling of light metal and outlet connection.
- Weight: 7.8 kg

**Hydrant standpipe with water meter**
- as art. No. 44315, but with long base of light metal (Württemberg) DN 50/50.
- Weight: 9.6 kg

**Further standpipes and versions on request.**

* = not illustrated
FURTHER ACCESSORIES FOR STANDBIPES

ZIEGLER universal standpipe support
A pipe construction with threaded spindle and fishplate against sliding for pits with a cover diameter 45 up to 68 cm as well as with an adjustable and lockable clamp for the standpipe, galvanized. Weight: 3 kg

ZIEGLER standpipe support with quick-action adjustment as art. No. 44606, but with quick-action adjustment button. For hydrant pits Württemberg. Weight: 3.9 kg

Underground hydrant key DIN 3223
Length: 1100 mm Weight: 5 kg

Underground hydrant key for pit hydrants Württemberg *
Length: 1970 mm Weight: 10 kg

ZIEGLER hydrant key extension 87 cm
Easily extends the underground hydrant key, DIN 3223, to a hydrant key for pit hydrants Württemberg. Weight: 4.2 kg

Non-freezing grease *
for greasing the hydrant cover. In bucket. Weight: 5 kg

Actuating key size B DIN 3223
for pillar hydrants. Weight: 1.5 kg

Pit cover lifting hook
of steel, for heavy pit covers. Black. Dim.: 470 mm long, handle 160 mm, hook 90 mm Weight: 1.2 kg

Pit hook with chain (pair)
Weight: 0.6 kg

ZIEGLER mini lifting hook for pit covers
The ideal addition to a hydrant key. Of galvanized steel. Length folded: 180 mm Unfolded: length 180 mm width 280 mm height 60 mm Weight: 0.6 kg

* = not illustrated
**FOAM MAKING EQUIPMENT**

**Low expansion foam nozzles with shut-off of aluminium**

<table>
<thead>
<tr>
<th>Type</th>
<th>S2</th>
<th>S4</th>
<th>S8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dim. (LxWxH):</td>
<td>755x186x98 mm</td>
<td>860x200x126 mm</td>
<td>1270x150x220 mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>2.3 kg</td>
<td>3.5 kg</td>
<td>7 kg</td>
</tr>
<tr>
<td>Connection</td>
<td>C</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Flow l/min</td>
<td>200</td>
<td>400</td>
<td>800</td>
</tr>
<tr>
<td>Inlet pressure, bar</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Foam expansion ratio</td>
<td>1:15</td>
<td>1:15</td>
<td>1:15</td>
</tr>
<tr>
<td>Proportioning rate</td>
<td>1 - 5% **</td>
<td>1 - 5% **</td>
<td>1 - 5% **</td>
</tr>
<tr>
<td>Throw, m</td>
<td>23</td>
<td>26</td>
<td>28</td>
</tr>
</tbody>
</table>

** depending on foaming agent used

**Low expansion foam**

foam expansion ratio 4 to 20

**Medium expansion foam nozzles with shut-off**

<table>
<thead>
<tr>
<th>Type</th>
<th>M2</th>
<th>M4</th>
<th>M8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dim. (LxWxH):</td>
<td>755x186x98 mm</td>
<td>860x200x126 mm</td>
<td>1270x150x220 mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>3 kg</td>
<td>3.9 kg</td>
<td>6.8 kg</td>
</tr>
<tr>
<td>Connection</td>
<td>C</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Largest diameter:</td>
<td>195 mm</td>
<td>250 mm</td>
<td>300 mm</td>
</tr>
<tr>
<td>Length:</td>
<td>535 mm</td>
<td>640 mm</td>
<td>790 mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>3 kg</td>
<td>3.9 kg</td>
<td>6.8 kg</td>
</tr>
</tbody>
</table>

**Medium expansion foam nozzles with pressure gauge pipe of stainless steel**

<table>
<thead>
<tr>
<th>Type</th>
<th>M2</th>
<th>M4</th>
<th>M8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dim. (LxWxH):</td>
<td>755x186x98 mm</td>
<td>860x200x126 mm</td>
<td>1270x150x220 mm</td>
</tr>
<tr>
<td>Weight:</td>
<td>3 kg</td>
<td>3.9 kg</td>
<td>6.8 kg</td>
</tr>
<tr>
<td>Connection</td>
<td>C</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Flow l/min</td>
<td>200</td>
<td>400</td>
<td>800</td>
</tr>
<tr>
<td>Inlet pressure, bar</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Foam expansion ratio</td>
<td>1:60</td>
<td>1:65</td>
<td>1:50</td>
</tr>
<tr>
<td>Proportioning rate</td>
<td>3% **</td>
<td>3% **</td>
<td>3% **</td>
</tr>
<tr>
<td>Throw, m</td>
<td>7</td>
<td>8</td>
<td>11</td>
</tr>
</tbody>
</table>

** depending on foaming agent used

The main values are max. values (changes reserved).
FOAM MAKING EQUIPMENT
AND FOAMING AGENT EQUIPMENT

Foam inductors
DIN 14384
with proportioning rate adjustable from 0 - 6%. Through an automatic control valve the set percentage of foaming agent is always inducted even in case of changes in water flow or pressure fluctuations of up to 2 bar, i.e., the quality of foam is always the same. With size D coupling for a pick-up hose. The visible arrows indicating the direction of flow can also be made out by touching.

Foam inductor "L" Z 2 *
at both ends with size C coupling.
Dim. (LxWxH): 356x135x152 mm
Weight: 2.1 kg

Foam inductor "L" Z 4
at both ends with size B coupling.
Dim. (LxWxH): 362x135x152 mm
Weight: 2.3 kg

Foam inductor "L" Z 8 *
at both ends with size B coupling.
Dim. (LxWxH): 362x135x152 mm
Weight: 2.3 kg

Medium expansion foam pistol M 0.4 *
with fitted foaming agent tank of 2 l, working pressure 2 - 5 bar, throw 3 - 5 m, connection 3/4" male thread.
Dim. (LxWxH): 505x120x323 mm
Weight: 1.8 kg

Foaming agent tank *
for medium expansion foam pistol M 0.4, empty. Volume 2 l, with lid.
Weight: 1 kg

Adjustable foam nozzle S4/M4
with device for quick changeover from low to medium expansion foam and reverse. Mixture flow rate 400 l/min, with shut-off and size Storz B coupling.
Working pressure: 5 bar
Throw:
low expansion foam 27 m,
medium expansion foam 8 m

Pick-up hose for foaming agent
DIN 14819, transparent synthetic hose with synthetic spiral, one end with size D coupling.
Length: 1.5 m, 19 mm I.D.
Weight: 0.55 kg

Plastic can *
Dim. (LxWxH): 350x370x190 mm
Weight: 1.3 kg (empty)

Electric transfer pump for foaming agent
Outside diameter 40 mm, depth of immersion 1000 mm, of polypropylene, for foaming agents and other non-flammable liquids such as acids and lyes. With 230 Volt motor, 0.45 kW. With overload protection switch, splash-proof to IP 44, complete with 5 m of cable and 2-pole plug as well as on/off switch.
Performance: max. 180 l/min
Suction height: max. 7.5 m water column
Weight: 4 kg

PVC hose 3/4" (per metre)

Hose clamp *

Filling nozzle with trigger 3/4"

Wall bracket for transfer pump

Electric transfer pump 24 V *
for foaming agent.
Performance: water 180 l/min
Foaming agent: approx. 50 l/min depending of viscosity. Otherwise as art. No. 21027.

Foam inductor self-aspirating

<table>
<thead>
<tr>
<th>Type</th>
<th>&quot;L&quot; Z 2</th>
<th>&quot;L&quot; Z 4</th>
<th>&quot;L&quot; Z 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection</td>
<td>C</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>Adjustable proportioning rate</td>
<td>0 - 6%**</td>
<td>0 - 6%**</td>
<td>0 - 6%**</td>
</tr>
<tr>
<td>Water flow - l/min at 5 bar</td>
<td>200</td>
<td>400</td>
<td>800</td>
</tr>
</tbody>
</table>

** depending on foaming agent used

* = not illustrated
**FOAMING AGENTS**

Protein foaming agents are based on natural re-growing protein carriers, foam stabilizers and anti-freeze agents. It is biodegradable and sea-water resistant. Approved as agent for low expansion foam.

**Foamousse 36 F-15, 3%**
- Freezing point: -15 °C
- Proportioning: 3% (by vol.)
- 23 kg in plastic can
  - DIN 14452

**Foamousse 43 F, 5-6%**
- Freezing point: -15 °C
- Proportioning: 5-6% (by vol.)
- 23 kg in plastic can
  - DIN 14452

**Synthetic multi-range foaming agents** are based on surfactants. With foam stabilizers and anti-freeze agents. Advantages:
- Suitable for generating low, medium and high expansion foam. They reduce the surface tension of water and thus are excellent wetting agents as well.
- Work with drinking, sea, river and processed industrial water.
- Lower proportioning rates than with protein foaming agents.
- Approved for fire classes A and B.
- The generated foam is stable for a long period.
- Biodegradable.

**Sthamex F-6, 3%**
- Freezing point: -6 °C
- Proportioning: 3% (by vol.)
- 20 kg in plastic can
  - DIN 14452

**Sthamex F-15, 3%**
- Freezing point: -15 °C
- Proportioning: 3% (by vol.)
- 20 kg in plastic can
  - DIN 14452

**Sthamex F-20, 3%**
- Freezing point: -20 °C
- Proportioning: 3% (by vol.)
- 20 kg in plastic can
  - DIN 14452

**Synthetic foam concentrate** is the highly concentrated form of the wellknown synthetic multi-range foaming agents. Besides the advantages of the synthetic multi-range foaming agents this concentrate features the following additional advantages:
- Lower proportioning rates than with the synthetic multi-range foaming agents.
- This results in higher yield of generated foam.
- Lower stock-keeping.

**Sthamex K, 1%**
- Freezing point: -15 °C
- Proportioning: 1% (by vol.)
- 20 kg in plastic can
  - DIN 14452

**Sthamex F-15, 3%**
- Freezing point: -15 °C
- Proportioning: 3% (by vol.)
- 20 kg in plastic can
  - DIN 14452

**Sthamex F-20, 3%**
- Freezing point: -20 °C
- Proportioning: 3% (by vol.)
- 20 kg in plastic can
  - DIN 14452

---

* = not illustrated
**FOAMING AGENTS**

**Aqueous Film Forming Foam, Sthamex AFFF**

is approved for generating low and medium expansion foam. A combination of fluoric components, foam stabilizers and anti-freeze agents provides for its outstanding efficiency. The high foaming agent releasing capacity favours film formation, increases flowability, reduces the extinguishing time and cools the source of fire.

**Advantages:**
- Through the high flowability of the foam a quick extinguishing of the fire is possible.
- Works with drinking, river, sea and processed industrial water.
- Easy to foam.
- Biodegradable.

**Sthamex AFFF, 1% * **

Proportioning: 1% (by vol.)

20 kg in plastic can

DIN 14452 ........................................ 57194
60 kg in plastic can ......................... 57195
210 kg in PE barrel .......................... 57196
1070 kg in container ....................... 57197

**Sthamex AFFF, 3% * **

Freezing point: -18 °C

Proportioning: 3% (by vol.)

20 kg in plastic can

DIN 14452 ........................................ 56697
60 kg in plastic can ......................... 56698
210 kg in PE barrel .......................... 56699
1050 kg in container ....................... 56692

**Sthamex AFFF F-15, 3% * **

Freezing point: -15 °C

Proportioning: 3% (by vol.)

20 kg in plastic can

DIN 14452 ........................................ 57214
60 kg in plastic can ......................... 57215
210 kg in PE barrel .......................... 57216
1050 kg in container ....................... 57217

**Sthamex AFFF, 6% * **

Freezing point: -10 °C

Proportioning: 6% (by vol.)

20 kg in plastic can

DIN 14452 ........................................ 57198
60 kg in plastic can ......................... 57199
210 kg in PE barrel .......................... 57200
1050 kg in container ....................... 57201

**Aqueous film forming, polyvalent, synthetic foaming agent - alcohol resistant**

with a high percentage of aqueous film forming fluoric tensides. It is alcohol resistant (polymer film forming). It can be used to extinguish water immiscible non-polar liquids as well as water miscible polar liquids.

**Advantages:**
- Can be used on non-polar (e.g. mineral oil products) as well as on polar products (e.g. solvents as methanol, isopropanol, acetone).
- Low and medium expansion foam with a proportioning of 3% for water immiscible non-polar liquids.
- Low and medium expansion foam with a proportioning of 3 - 5% for water miscible polar liquids.
- Quick extinguishing of fires through the high flowability of the foam.
- Can be used with drinking, river, sea and processed industrial water.

**Moussol APS 3/3, 3% * **

Freezing point: -10 °C

Proportioning: 3% (by vol.)

20 kg in plastic can

DIN 14452 ........................................ 56645
60 kg in plastic can ......................... 56646
210 kg in PE barrel .......................... 56647
1050 kg in container ....................... 56648

**Moussol APS F-15, 3% * **

Freezing point: -15 °C

Proportioning: 3% (by vol.)

20 kg in plastic can

DIN 14452 ........................................ 56701
60 kg in plastic can ......................... 56700
210 kg in PE barrel .......................... 56702
1050 kg in container ....................... 56688

**Low viscous, alcohol resistant foaming agent without polymer film forming agents**

**Moussol APS LV, 3% **

without polymer film forming agents, admixing not necessary

Freezing point: -15 °C

Proportioning: 3% (by vol.) on polar, 1% (by vol.) on non-polar agents

20 kg in plastic can

DIN 14452 ........................................ 57218
60 kg in plastic can ......................... 57219
210 kg in PE barrel .......................... 57220
1050 kg in container ....................... 57221

**Synthetic foaming agent based on special surface-active agents**

**Sthamex Class A **

especially useful with CAFS and on solid materials

Freezing point: -15 °C

Recommended proportioning:

0.5% (by vol.). From a proportioning rate of 1% onwards it is also approved for non-polar fires of fire class B.

20 kg in plastic can

DIN 14452 ........................................ 56694
60 kg in plastic can ......................... 56695
210 kg in PE barrel .......................... 56696
1040 kg in container ....................... 56693

Further foaming agents on request!