

User manual

Froggy

Portable monitor nozzle, 750 lpm head diffuser,
inlet Storz B/75 2.5" BSP female thread

MOP_LMM_02326_EN_A - 03/05/2021

DESIGNATION	DESCRIPTION
Product type	Monitor nozzle
Product	Portable monitor nozzle FROGGY, 750 lpm Tornadomatic head diffuser, made of aluminium alloy, shutoff valve, inlet Storz B/75 2.5" BSP female thread, outlet 1.5" BSP female thread
Product reference concerned by the manual	Ref.: 18338 Ref 18338 used for all visuals
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1 • Note

POK SAS reserves the right to change or modify the specifications of its products at any time to incorporate the latest technological and regulatory developments. The information contained in this document is subject to change without notice.

2 • General Warning



Before any use or installation of POK equipment, it is mandatory to read the information contained in this operating manual, to guarantee the safety of persons and material. The use, maintenance, or any other operation of the equipment, must be carried out exclusively by personnel informed of safety rules and trained in the use of this material.

The non-compliance of safety instructions can be dangerous and cause serious bodily harm and/or property damage.

3 • Safety



This symbol indicates important safety tips. Pay careful attention to prevent serious bodily harm and/or property damage.



This symbol indicates instructions that must be observed to ensure smooth operation of the device. Please always make sure to follow all the necessary precautions.



This symbol indicates useful information to know and understand the correct operation of the device.

3.1 • General instructions

Operators should read the operating instructions written in this manual before using the monitors. They shall not be used by people suffering from vision or hearing problems, illness or under medication.

In order to work safely, please observe the following instructions while using the material:

- Material shall be used according to the instructions written by POK in this manual.
- Systematically control the good condition of the monitors and the control systems before any use.
- Any use not following the manual instructions could result in damages to people, to material or to environment.
- Before opening the water supply, check that every person (civil or from the brigade) is out of the aiming field of the monitor. Please be sure that the direction and the range of the stream cannot lead to potential material damages.
- Always be familiar with the hydraulic characteristics of the monitor nozzles.
- POK monitors have been designed to work with a POK outlet equipment (diffuser, branchpipe, blabbermouth, etc.). Never use an outlet equipment from another brand.
- Be sure that the outlet thread of the monitor fits with the one on the outlet equipment.
- Do not unnecessarily expose people to dangerous fire conditions.
- Always open the water supply valves of the monitor carefully, in order avoid any water hammer in the hoses.
- Never go over the indicated maximum flow rate and pressure, it could result in injuries to people and/or

damages to the monitor.

- The monitor has swivel and moving components, keep your hands and all objects away from any pinch point.
- Replace the instructions stickers if worn or damaged.
- The monitor shall be kept clean and protected against dust.
- Important material damage and physical injuries are to be feared in the following situations:
 - Unauthorised removal of a protection part,
 - Improper use of the material or in dangerous situations,
 - Poor maintenance,
 - Maintenance on the material while under pressure.



Never go over the indicated maximum flow rate and pressure, it could result in injuries to people and/or damages to the monitor.



Never set the stream in a vertical position higher than 85° or lower than 35°.

INFORMATION

The frost damages can be irreversible, drain the monitor at low temperature (near 0°C and below).

3.3 • Use

An proper usage of POK material implies following the indicated use and maintenance instructions. Please follow each instruction listed in this user manual.



The equipment should not be used if a component is damaged or missing



The recommended pressure of use is 7 bar. Efficiency and safety of the material is not guaranteed beyond this value. Non-compliance with safety instructions and use of the material over the recommended pressure can be dangerous and even cause death.

3.4 • Limits of use

Our monitors are guaranteed to work with a maximum operating pressure of 16 Bar. Without explicit written authorization from POK, the warranty will be void if the pressures listed above are exceeded.

3.5 • Spare Parts

Regarding spare parts, only use POK parts and accessories.

3.6 • Safety elements

It is forbidden to render safety features inoperative, to modify them or to use them in an opposite manner to their purpose.

4 • Liability

POK's liability is excluded for all damages caused by its material and its accessories because of an improper use or because operated by non-qualified or not enough qualified people. Any claim from third parties is also excluded.

POK cannot be held liable for consequences resulting from a change, made on the mechanical and electrical part and also on the software, by the user without written authorization from POK.

4.1 • Obligations

The owner of POK's material shall bring the instructions written in this manual to the attention of all people likely to handle, use, install or do maintenance on this material.

The user manual has to be stored near the material for further consultation all along the life of the monitor.

5 • Operational instructions

5.1 • General remarks regarding safety during operations



Any person under the influence of drugs, alcohol or under medication that might undermine his reflexes is not authorized to use the monitor.



Please observe all local, national and international instructions regarding property and persons safety, accident prevention and environmental compliance.



Any non-compliance with these instructions and the one in this manual may lead to serious injuries.

INFORMATION

Complete the manual with the rules in place where the remote control is used (personal protective equipment, operation sequence, storage of the remote control, etc.).

6 • Warranty

• Without prejudice to the legal guarantee that applies in any case, POK grants a warranty of 2 years from the shipping date on its material (hose reel, accessories) apart from wearing parts and batteries, against faulty design, construction and machining and against all abnormal wear on condition of having observed the use and maintenance instructions in this manual.

• Any attempt to troubleshoot, modify any components or parts, as well as any use of parts that are not original and/or expressly approved by POK, by a non-authorized dealer, and without written permission, results in the loss of the POK guarantee for all parts.

• POK's warranty excludes all damages resulting from:

- improper use or non-compliance with the instructions,
- an error while operating the material,
- negligence,
- lack of maintenance,
- improper handling,
- improper storage,
- a use in polluted areas (chemical or electrochemical agents, hazardous fumes, etc.).

• Only a specialized staff, qualified and trained by POK is allowed to do maintenance and repair POK products.

• POK cannot be held liable for direct or indirect consequences suffered by the client, due to a failure of its material. POK's liability is strictly limited to its material and will not lead to a compensation to cover

damages and interest.

- Repair or modification of POK material while under warranty does not extend the warranty period.
- Cost of packing, transport and insurance when sending POK material back to our premises while under warranty is the responsibility of the client.
- POK warranty includes the repair (spare parts and labour) or replacement of parts recognised as faulty after technical assessment. The place of performance of the warranty is POK's plant in Nogent-sur-Seine (10).
- In the event of dispute regarding the supply or the payment of material, only the commercial court of TROYES is competent, even in the event of appeal or multiple defendants.

7 • Handling / Transport / Storage

7.1 • General

When unpacking the monitor after transport, check that there is no mechanical damage and/or loose parts in the interior of the package. In case of damage, the carrier must be informed immediately. In this case, do not put the monitor into use.

7.2 • Delivery Information

POK equipment is delivered in a packaging adapted to the weight and dimensions of the material. Packaging is securely closed. A delivery note is included with the equipment.

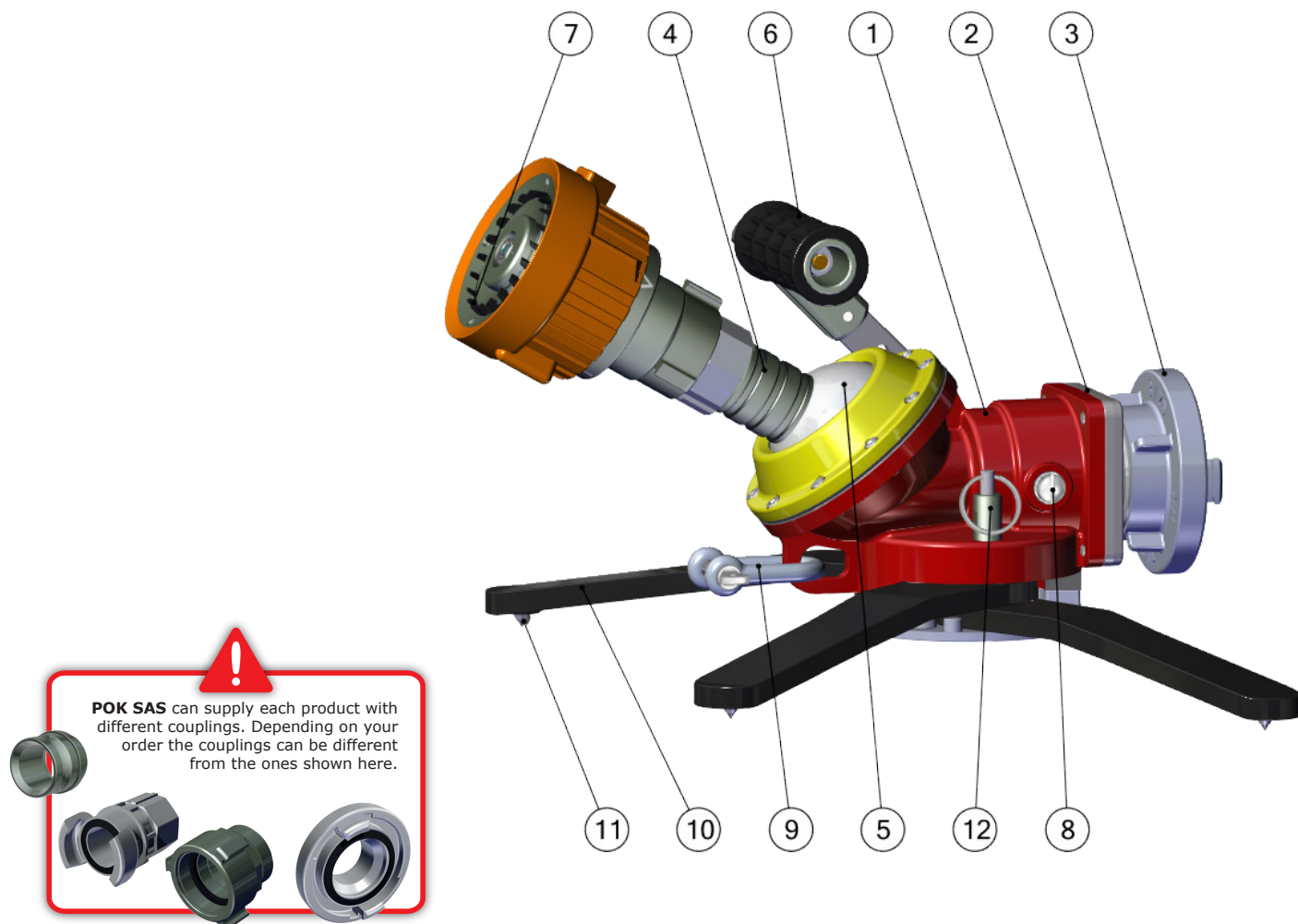
7.3 • Shipment of Material

In case of reshipping the equipment, or transferring the shipment to other sites, the shipping process above should be followed.

7.4 • Storage of Material

When storing the device, it is recommended to keep it in its original packaging to protect from humidity, dust and kept at a temperature between +10° and + 70°C.

• Main view



MARKS	DESCRIPTION
1	Body made of aluminium alloy
2	Inlet flange 2.5" BSP male thread Note: A coupling is available upon request. See our catalogue for more information on couplings.
3	Storz B/75 coupling 2.5" BSP female thread Note: A coupling is available upon request. See our catalogue for more information on couplings.
4	Stream shaper
5	Multi-directional ball
6	Carrying and shutoff handle
7	Spinning teeth
8	Valve axle
9	Anchorage ring
10	Stabilizing leg
11	Tungsten pins
12	Legs unlocking device

• Construction

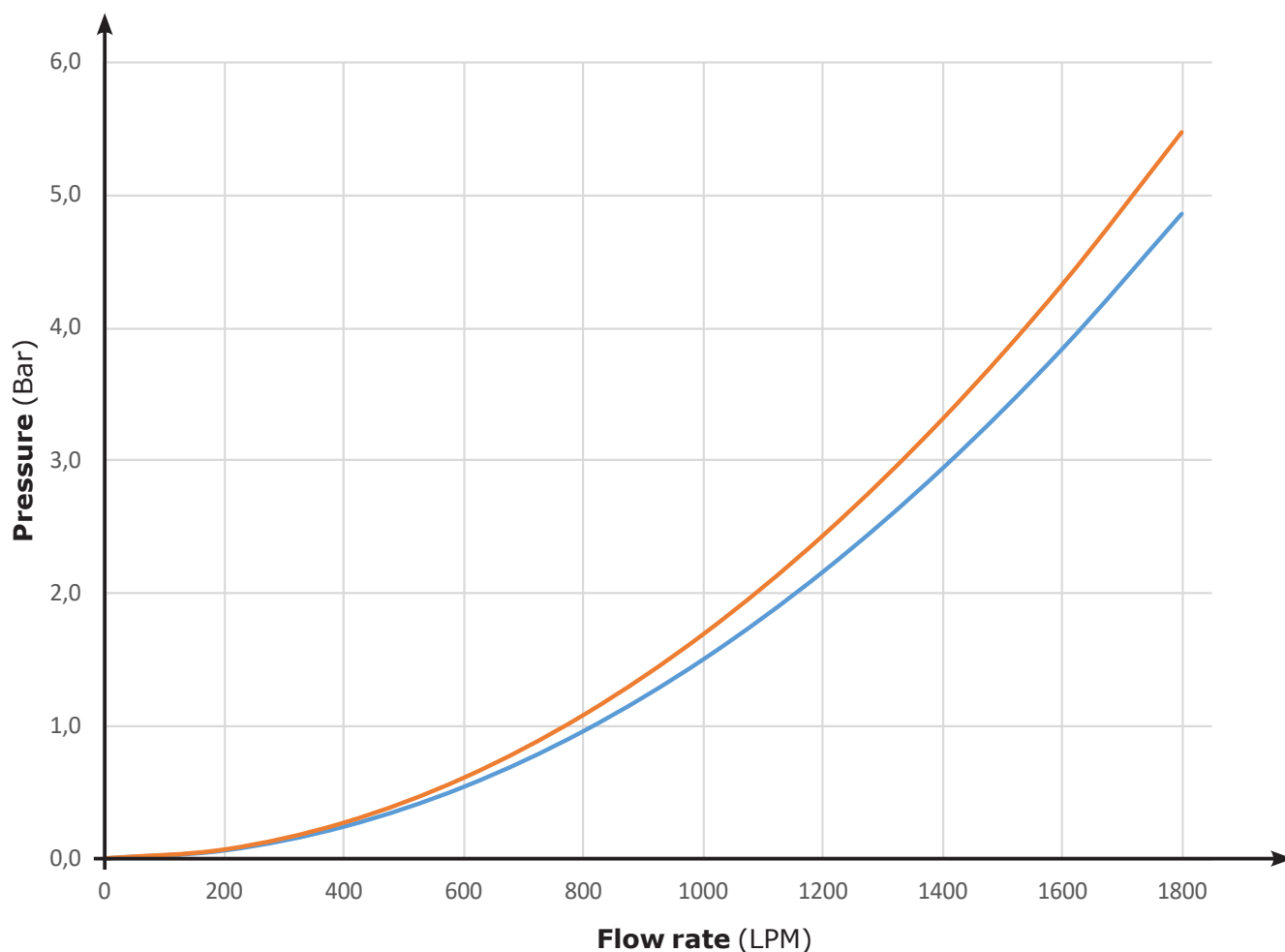
DESIGNATION	DESCRIPTION
Code	• 18338
Body	• Aluminium alloy, polyester coated
Outlet ball, ball valve, stabilizing leg, inlet flange, stream shaper	• Aluminium alloy, hard anodisation
Screws, springs and axles	• Stainless steel
Joints	• Nitrile
Stabilizing legs pins	• Tungsten carbide
Weight	• 8.9 Kg

• General data

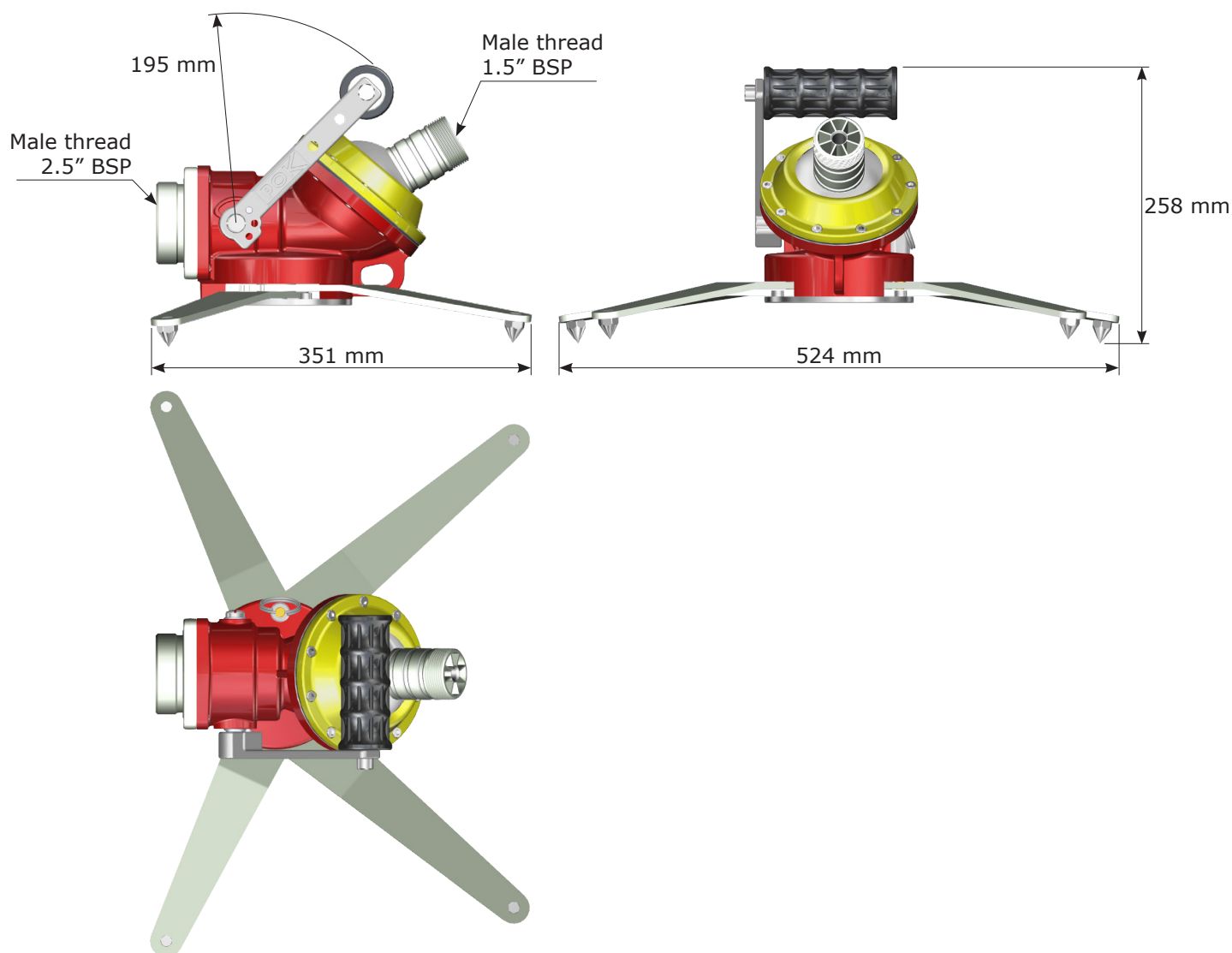
DESIGNATION	DESCRIPTION
Flow rate	• 750 lpm @ 7 bar
Maximum working pressure	• 16 bar
Maximum pressure	• 25.5 bar
Monitor inlet	• 2.5" BSP male thread Note: A coupling is available upon request. See our catalogue for more information on couplings.
Monitor outlet	• 1.5" BSP male thread
Vertical movement	• from +24° to +76° • Output on multi-directional ball mounted
Horizontal movement	• from -26 to +26° • Output on multi-directional ball mounted
Shutoff	• ball valve, quarter turn opening • Waterway Ø 52 mm
Safety	• Opening / closing valve • Safety pin for stabilizing legs • Anchoring strap

● Pressure Loss Curve

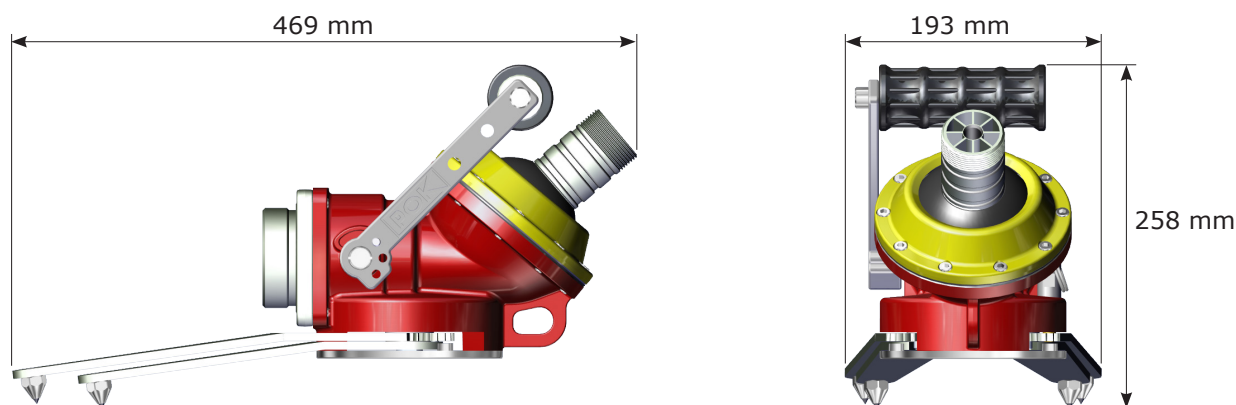
Kv change from 769 to 816 depending on different inclinations - **Kv** is expressed in $\frac{Q(lpm)}{\sqrt{P(bar)}}$



• Unfolded position



• Storage position



Weight: 6.1 Kg

• Preamble

You must read this documentation before operating the monitor. Non-compliance with the recommendations in this manual could make "FROGGY" use dangerous.

The monitor is designed to work with an optimum flow rate of 750 lpm @ 7 bar.

• Unfold

- **1** - Fold out the stabilizing legs by holding the monitor with the carrying handle. Pull on a long stabilizing leg, the others unfold in fan up to the "CLIC" (Fig. 1).
- **2** - Check that the stabilizing leg locking pin is locked (Fig. 2).
- **3** - Place the monitor on stable ground, the four pins of the stabilizing legs in contact with the ground (Fig. 3).

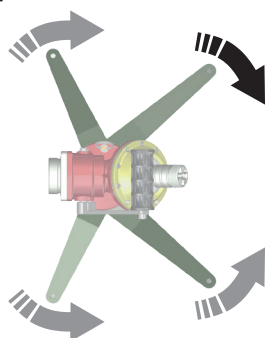


Fig. 1

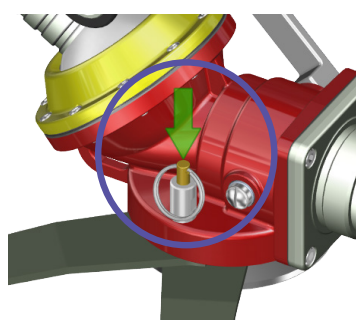


Fig. 2

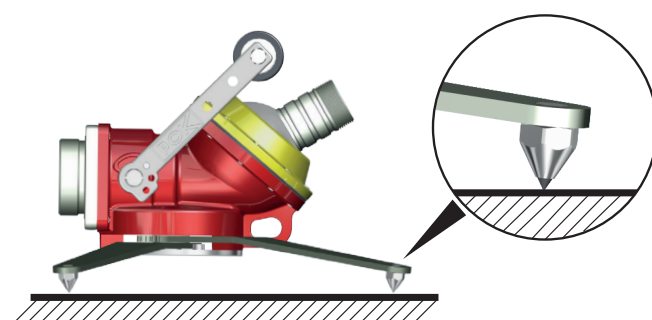


Fig. 3

Note : the ground on which the stabilizing legs are in contact must be consistent. A loose ground (sand, gravel, mud, etc.) will not provide optimal grip. In some cases, the lance may slip, ripper and/or take off from the ground.



For your safety, attach the monitor with the supplied strap on a secure solid location.

• Anchor

The monitor must be secured to the ground (stake driven, solid support in contact with the ground or hanging on the supply hose).

- **1** - Attach the supplied strap to the towing ring (Fig. 4).
- **2** - The anchoring point must be between the monitor and the target (Fig. 5).
- **3** - If you do not have solid support, the monitor may be secured to the water supply hose (Fig. 6).

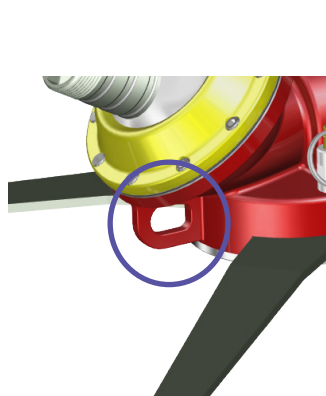


Fig. 4

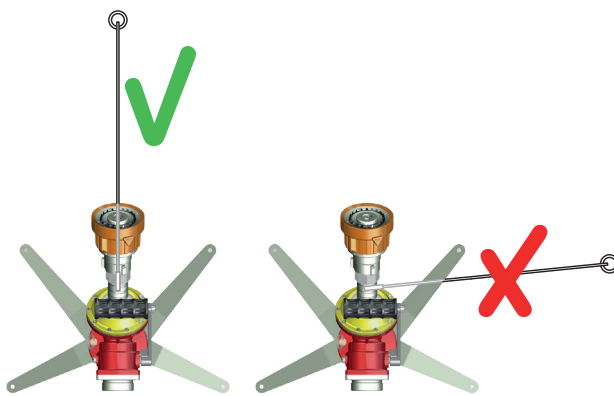


Fig. 5

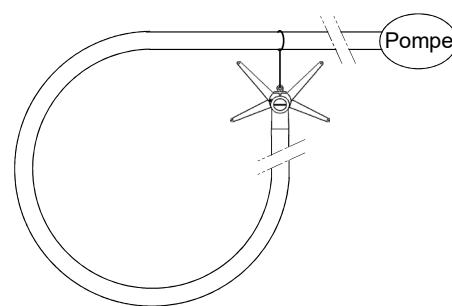


Fig. 6

• Connecting

- **1** - Connect the hand nozzle (not supplied) to the outlet of the base and connect the water inlet to the inlet of the base with a suitable coupling (Fig. 7).
- **2** - A straight hose length of 8 meters must be set behind the monitor (Fig. 5).

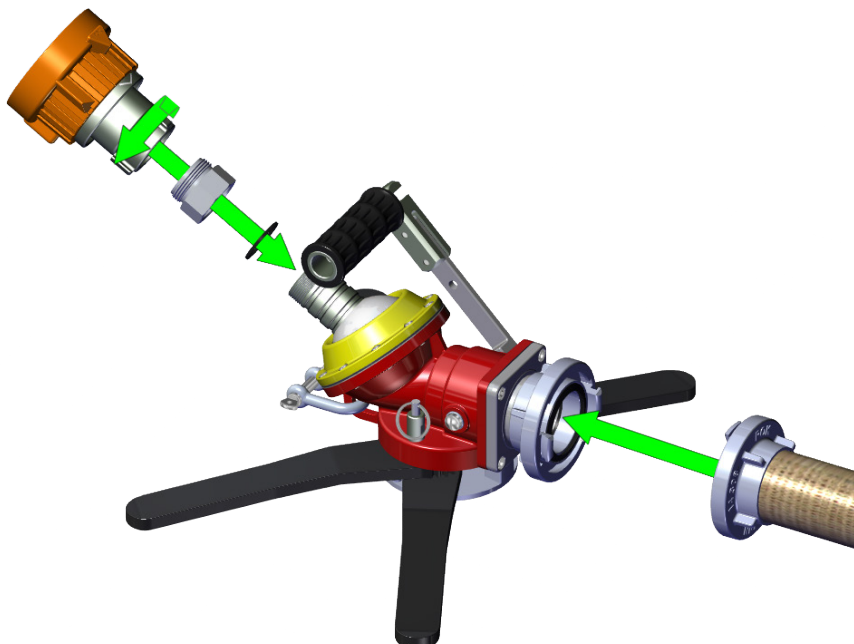


Fig. 7

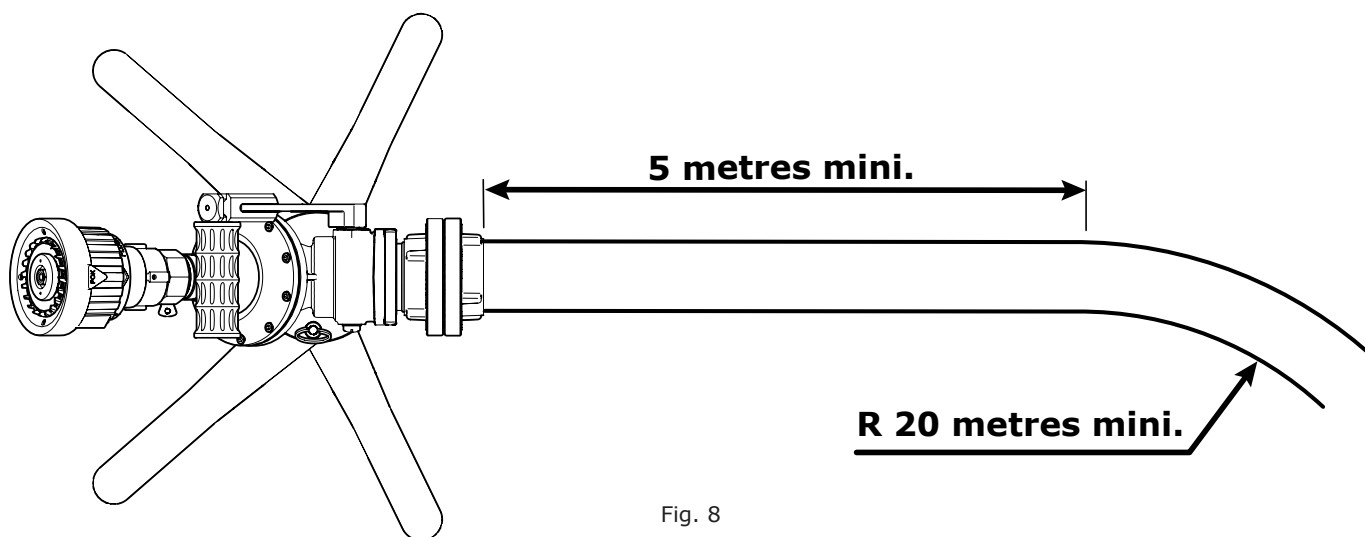


Fig. 8

Note: To obtain optimal performance, respect the following limits:

- Maximum flow rate: 750 lpm
- maximum working pressure: 7 bar

- **1** - Make sure the lance is properly installed and directed.
- **2** - Open the quarter-turn valve to supply the monitor with water or foaming solution (Fig. 9) depending on use.
- **3** - Supply the monitor with a suitable pump for the required flow rate.

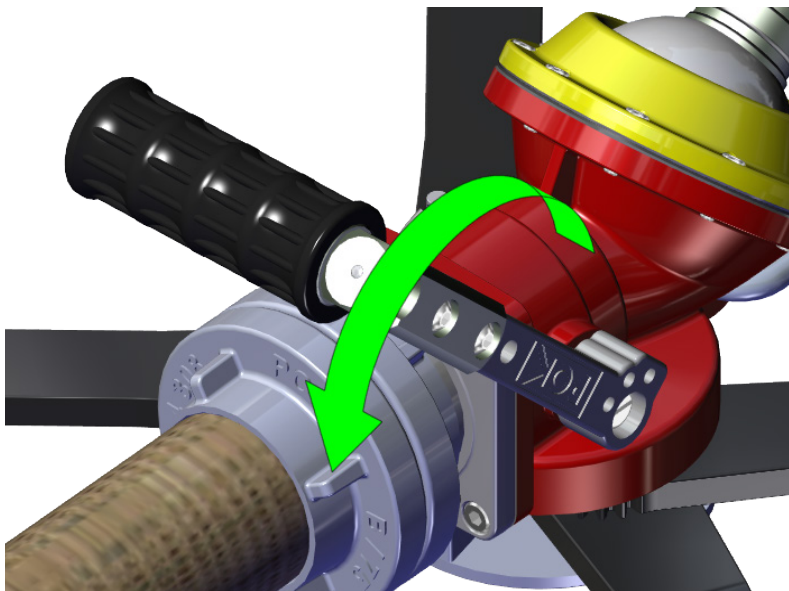
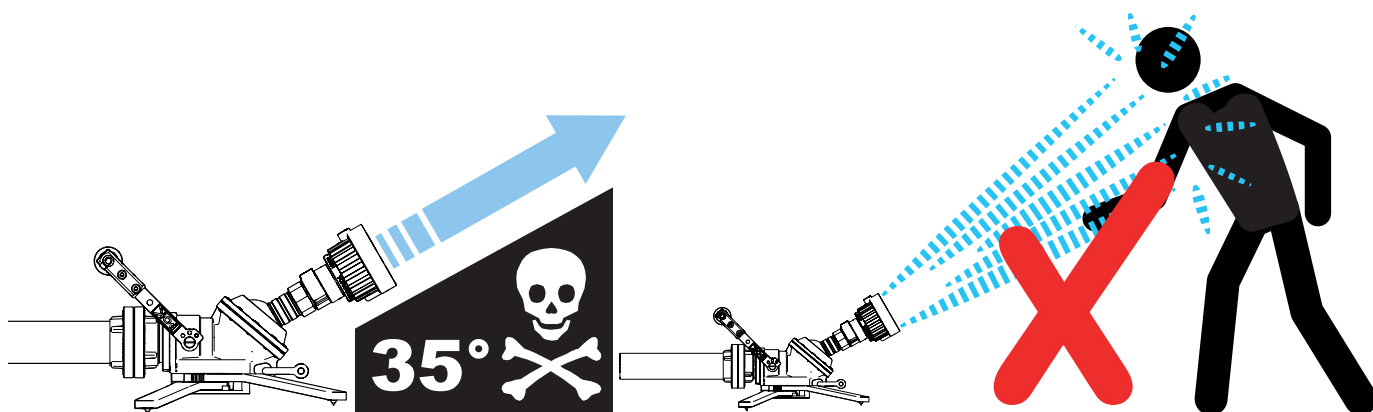


Fig. 9



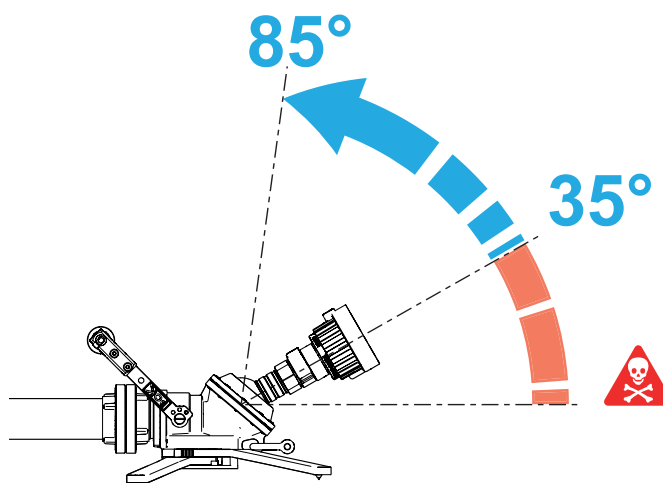
Do not target someone with the nozzle
Never set the stream in a vertical position higher than 85° or less than 35° if you are using a portable monitor.



Never point the stream towards an area between the pump and the monitor.
If your monitor is equipped with a diffuser allowing spraying, be sure that the area around the monitor will not suffer from heavy water exposition before using this feature.

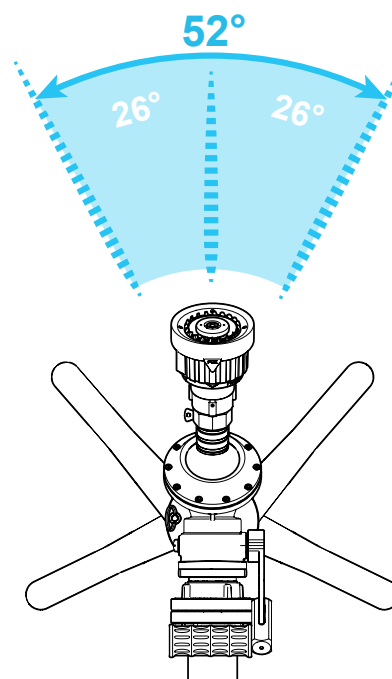
• Adjusting the vertical position

The monitor nozzle is adjustable
In vertical position
(vertical range)
from $+24^\circ$ to $+85^\circ$
It is not recommended to use
the nozzle with a setting
below 35° .
Simply rotate
the diffuser head into the
the desired position
to make the adjustment.



• Adjusting the horizontal position

The monitor nozzle is adjustable
in horizontal position
(horizontal range)
from -26° to $+26^\circ$
Simply rotate
the diffuser head into the
the desired position
to make the adjustment.



• Storage

- **1** - Disconnect the supply pump and remove the supply hose.
- **2** - Tilt the monitor (back and forth, left and right) in order to remove the water remaining in the pipes and oscillator. Remove all the water from the monitor, before storing, to keep from corrosion and/or freezing.

• Maintenance of the monitor

In order to guarantee optimum functioning, it is important to:

- **1** - Clean the monitor with clear water after each use.
- **2** - In the case of repeated use of salt water, or dirty water, use the monitor with clear water to drain away any particles and/or corrosive residue that could damage the internal components.
- **3** - Do not use corrosive products, that may damage the gaskets and lead to leaks.
- **4** - Check that moving parts are properly working, that no part is jammed nor blocked.
- **5** - We recommend regular visual inspections to detect potential leaks.

• Restarting procedure

It is mandatory to check the following before putting the material back in use:

- **1** - Check that no part is missing or damaged.
- **2** - Connect the material to water supply.
- **3** - Put a cap equipped with an air valve on the output of the monitor nozzles.
- **4** - Test the monitor while gradually increasing the pressure until reaching its nominal pressure. Check for potential leaks.
- **5** - Put a diffuser or a branchpipe on the monitor.
- **6** - Test under normal conditions of use with a pressure of 7 bar. Be sure that moving parts are moving without pressure point or jamming. Operation should last 10 minutes.

If no dysfunction is found the monitor can be put back in use.

If you perform the maintenance by yourself, it is possible that the hydraulic values of the equipment no longer correspond to those of the delivered product. Only a maintenance carried out in the workshops of POK SAS can guarantee a precise calibration of your equipment.



During the test process, it is mandatory to take special precautions. Only the staff concerned by the process of putting the foam station back in service can be around. If the equipment was not properly reassembled, parts can be ejected and cause important damages.

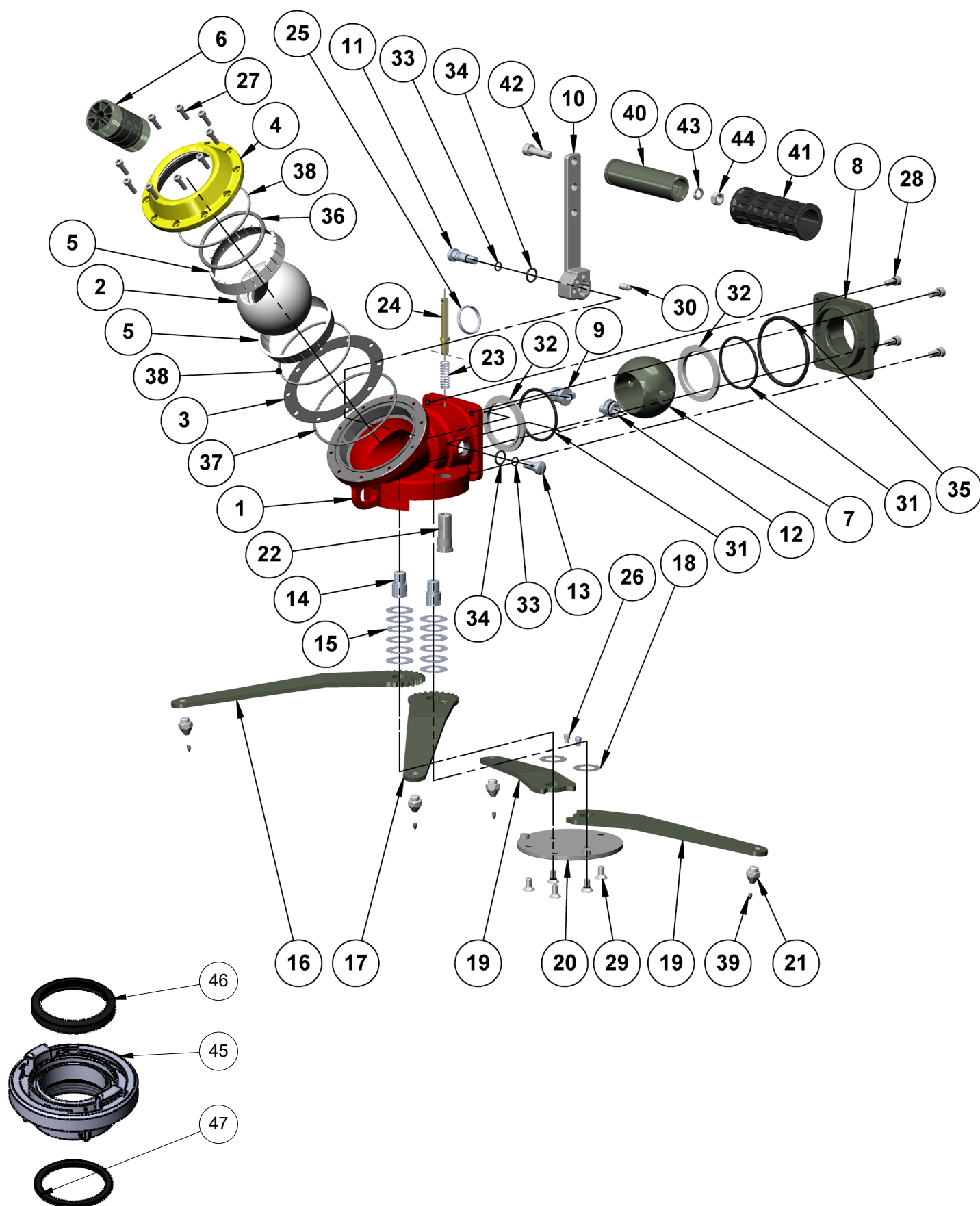
• Spare Parts

According to the conditions of use and/or storage, some parts may deteriorate more or less quickly than others.

Please contact our export service department to be informed of the prices and conditions to return the equipment to the POK SAS workshop or to obtain spare parts.

Use the exploded views and parts lists to identify the precisely needed parts.

Note: Identification number of the monitor can be asked to check if the warranty is still valid.



Bill of materials

Parts list - FROGGY

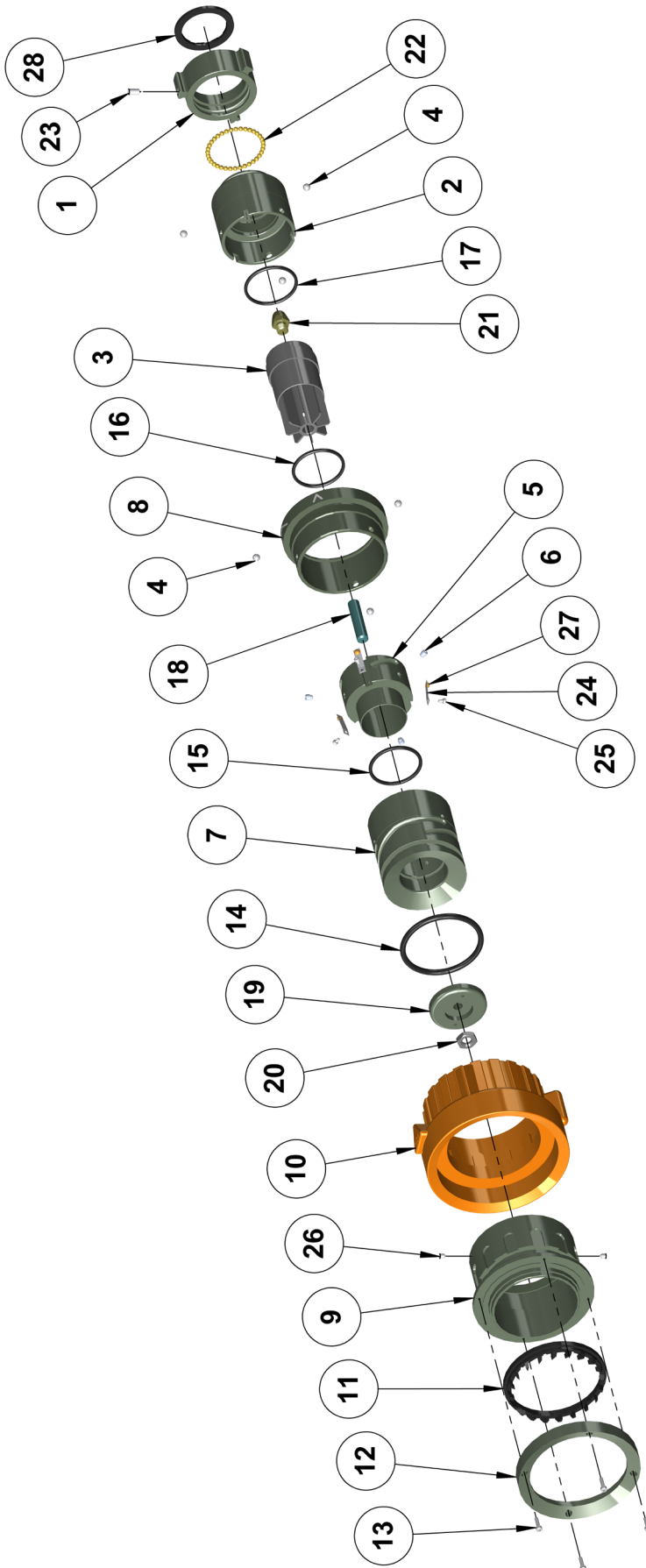
FROGGY - Portable monitor nozzle, 750 lpm head diffuser, inlet Storz B/75 2.5" BSP female thread

MARK	QTY	DESCRIPTION	CODE
1	1	BODY	18068
2	1	BALL	18069
3	1	SPACE TH.1	19552
4	1	COVER	18070
5	2	SPHERICAL PAD	18071
6	1	STREAM SHAPER	20021
7	1	SWIVEL BALL Ø52	2616
8	1	SQUARE FLANGE DN 65 - 2.5" BSP MALE THREAD	11920
9	1	TAP AXLE	16188
10	1	FLAT HANDLE	14465
11	1	SCREW FOR TAP AXLE	16189
12	1	LOWER AXLE	10517
13	1	LOWER AXLE SCREW	10518
14	2	STABILIZING LEGS AXLE	10876
15	12	SPRING WASHER	16644
16	1	LONG RIGHT STABILIZING LEG	17971
17	1	LONG LEFT STABILIZING LEG	17972
18	2	SETTING WASHER	10916
19	2	SHORT STABILIZING LEG	17973
20	1	BOTTOM PLATE	25671
21	4	PIN HOLDER	10867
22	1	LEGS LOCKING PIN SLEEVE	10901
23	1	LOCKING SPRING	10900
24	1	SAFETY PIN FOR STABILIZING LEGS	10899
25	1	2 TURNS RING	2898
26	2	DRIVE PIN	20123
27	10	SCREW CHC M6-20	
28	4	SCREW CHC M8-16	-
29	5	SCREW FHC M8-16	
30	1	SCREW STHC TL M8-20	
31	2	O'RING Ø64 x Ø4	-
32	2	BALL SWIVEL JOINT Ø52	14800
33	2	O'RING R7	8207
34	2	O'RING R12	8212
35	1	O'RING R43	8243
36	1	O'RING R44	
37	1	O'RING Ø117.07 X 3.53	16819
38	2	O'RING Ø101.2 X 3.53	
39	4	PIN	10868
40	1	CARRYING HANDLE	10914
41	1	HANDLE COVER FOR PIPE	12021
42	1	SCREW CHC M10x35	-
43	1	WASHER W10	-
44	1	NUT H M10	
45	1	COUPLING STORZ B/75 - 2.5" BSP FEMALE THREAD DIN 14 308	35690
46	1	STORZ B75 GASKET	15217
47	1	FLAT GASKET FOR BOTTOM THREAD 2.5" BSP	06166

Bill of materials

Exploded view - Tornadomatic head diffuser 750 lpm

FROGGY - Portable monitor nozzle, 750 lpm head diffuser, inlet Storz B/75 2.5" BSP female thread



Bill of materials

Parts list - Tornadomatic head diffuser 750 lpm

FROGGY - Portable monitor nozzle, 750 lpm head diffuser, inlet Storz B/75 2.5" BSP female thread

MARK	QTY	DESCRIPTION	CODE
1	1	SWIVEL COUPLING - 1.5" NST-NH FEMALE THREAD	01675
2	1	BODY (for 1.5" swivelling nut)	11448
3	1	CROSS PIECE	11321
4	6	BALL Ø6.35	16204
5	1	FLUSH RING	11315
6	3	ANTI-ROTATING SCREW	00105
7	1	INNER BORE	11325
8	1	GUIDE RING	11773
9	1	HEAD RING	11772
10	1	BUMPER GUARD	22710
11	1	SPINNING TEETH	00163
12	1	LOCKING RING FOR SPINNING TEETH	00154
13	4	SCREW CHC M3x12	-
14	1	O'RING R36	-
15	1	O'RING Ø41 x Ø3	-
16	1	O'RING Ø41 x Ø3	-
17	1	O'RING Ø41xØ3	-
18	1	STEM AXLE	10485
19	1	VALVE	11464
20	1	NUT HM M10	-
21	1	OGIVE PIECE	10492
22	36	BALL Ø4	16168
23	1	SCREW STHC PL M5 - 10	-
24	3	INDEX SPRING	11636
25	3	SCREW CHC M2,5 - 4	-
26	2	SCREW STHC TR M4 - 6	-
27	3	FALSE BALL	11713
28	1	FLAT GASKET BOTTOM THREAD 1.5" NST-NH	-

Notes

FROGGY - Portable monitor nozzle, 750 lpm head diffuser, inlet Storz B/75 2.5" BSP female thread

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.