

User manual



Leader FLOW COMPACT

MULTIFLOW FLOWMATIC MULTIMATIC



EN

Read this manual carefully, before the first use

Product reference

**MULTIFLOW
FLOWMATIC
MULTIMATIC**

See models on pages 13/14/15



This manual was designed to familiarise you with the use of the nozzle.

The instructions for use and safety guidelines must be followed in order to prevent accidents. Any disassembly or repair must be performed by either **LEADER** or an approved dealer.

This manual presents the simplicity and ease of use of the nozzle. In order to improve this manual **LEADER** remains open to your suggestions. Please do not hesitate to contact us.

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1 INTRODUCTION

This nozzle meets your needs by its ease of use and efficiency.
This nozzle allows you to select its type of fitting, body, head, and colour.

- **The choice between several head types:**
 - **MULTIFLOW:** nozzle with flow selection.
 - **FLOWMATIC:** nozzle with pressure regulator.
 - **MULTIMATIC:** nozzle with several pressure settings.

- **The choice between several body types:**
 - Aluminium body with a standard handle.
 - Aluminium body with a trigger handle or without a protective hoop.

- **A range of colours to suit your taste:**
 - Red is the default colour for **MULTIFLOW** nozzles.
 - Blue is the default colour for **MULTIMATIC** and **MULTIFLOW** nozzles.
 - Orange.
 - Green.
 - Yellow.

- **A choice of misting gear teeth:**
 - Machined gear teeth.
 - Turbined.

2 SAFETY INSTRUCTIONS



IMPORTANT

- This equipment is manufactured in accordance with European directives and **NF EN 15182**.
- Its use is restricted to firefighting professionals.
- Please read this manual thoroughly along with the instructions for use before commissioning and using the equipment.
- Do not exceed 40 bars of input pressure.
- Only qualified and trained personnel should operate or repair this device.
- Always replace a defective part by an original part provided by **LEADER**.
- The device should not be disassembled when pressurised.
- Keep the device away from children.
- The use of the nozzle to spray water on the protective clothing of a team members subjected to heat radiation is prohibited.
- Never allow someone to use the device without having provided them with the necessary instructions.
- Do not leave water inside the gun if there is a risk of freezing.
- Rinse with clean water after use with seawater, brackish water, or additive water.
- Do not disconnect the device from the hose without first making sure the pressure is off.
- A rapid closing of the spray gun can lead to a water hammer effect detrimental to the device.
- Clean the filter of all debris after each use.
- The reaction force of the spray gun must be taken into account. This must be anticipated when the operator turns it on.
- Use a fitting in line with the thread of the nozzle.
- Do not use the nozzle on high-voltage wires.

3 REFERENCE

C FM A-0 5 38-RI B

C: Compact	MF: MultiFlow	A: Aluminium G: TriggerFlow	0: Without protective hoop 1: With protective hoop (Only on TriggerFlow)	5: Without turbine 7: With turbine	30: 150 lpm 31: 235 lpm 32: 400 lpm 33: 40 gpm 34: 60 gpm 35: 125 gpm 52: 470 lpm@7b	LI: 1" F – BSP 1L: 1" F – NH MI: 1.5" F – BSP TI: 1.5" F – NPSH RI: 1.5" F – NH EI: 2" M – BSP	R: Red B: Blue O: Orange G: Green Y: Yellow TriggerFlow is only in Red
	FM: FlowMatic				36: Ring – 150 lpm@6b 37: No ring – 150 lpm@6b 38: Ring – 250 lpm@6b 39: No ring – 250 lpm@6b 40: Ring – 400 lpm@6b 41: No ring – 400 lpm@6b 42: AA - no ring – 400 lpm@6b 43: No ring – 125 gpm@100PSI 56: Ring– 125 gpm@100PSI		
	MM: MultiMatic				45: Puls – 125 gpm 46: Puls – 400 lpm 47: Puls – Low – 400 lpm 48: Puls – Low – 125 gpm 49: Low – 400 lpm 50: Low – 125 gpm		

4 DESCRIPTION

Standard handle nozzle



TriggerFlow nozzle



➤ ALUMINIUM body with a Standard handle:

- **AGS T5** aluminium alloy construction.
- Protection against mechanical and chemical attack by **50μ** hard anodization and Teflon impregnation.
- Protection against shocks thanks to its heat and cold resistant polyurethane head sheath. Excellent thermal insulation.
- Its ergonomic grip is made of non-slip polyamide.
- Stainless steel pins and screws.
- Ergonomic handle.



➤ ALUMINIUM body with a Trigger handle:

- **AGS T5** aluminium alloy construction.
- Protection against mechanical and chemical attack by **50μ** hard anodization and Teflon impregnation.
- Protection against shocks thanks to its heat and cold resistant polyurethane head sheath. Excellent thermal insulation.
- Its ergonomic grip is made of non-slip polyamide.
- Protective hoop (optional).
- Stainless steel pins and screws.
- Ergonomic handle.



➤ Interchangeable handles:

- Facilitates identifying the device after an intervention.
- Possibility for users to choose the colour of the handle grip between Red, Yellow, Orange, Blue, and Green.
This option is valid on devices having a standard aluminium handle.



➤ **Valve:**

- Quick opening and closing with the Standard handle.



- Quick opening and closing with the Trigger handle.



➤ **Nominal Pressure:**

- 40 bars.

➤ **Protection filter:**

- Protects against debris at the inlet connection.
NB: 1" British standard pipe (BSP) connectors are not equipped with a filter.



➤ **Purge:**

- Manoeuvrable during operation, this enables evacuating debris that may have passed through the filter. The purge can be triggered either by means of the flow ring in the "FLUSH" position or by rotating the head beyond the protective spray.

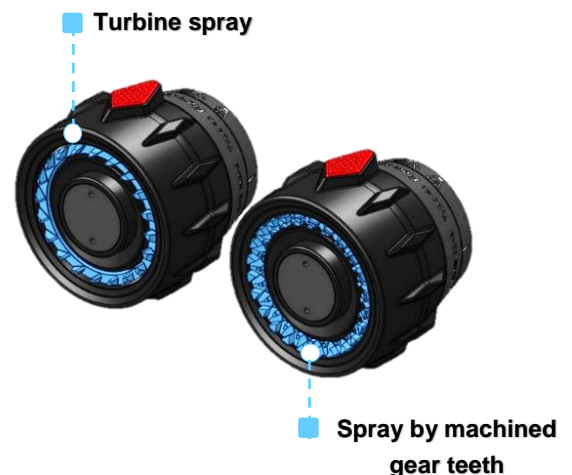
➤ **Inlet connection:**

- Rotating 360°, various choices possible.
 - Female 1" BSP.
 - Female 1" NH.
 - Female 1.5" BSP.
 - Female 1.5" NH.
 - Female 1.5" NPSH.
 - Male 2" BSP.



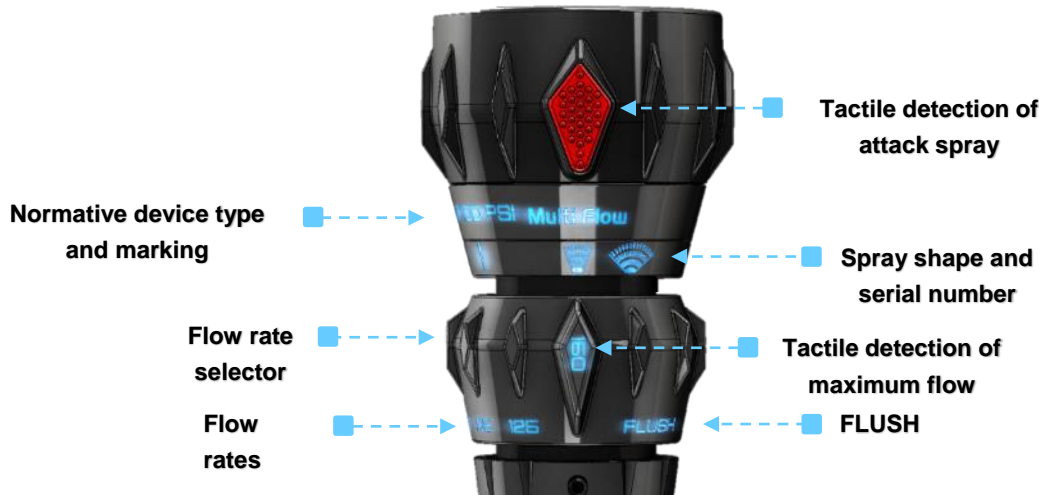
➤ **Spray:**

- The spray system can be selected either with machined gear teeth in aluminium or turbine in stainless steel.



➤ **Adjustable spray:**

- The rotation of the head ring makes it possible to switch from a wide cone-like spray at 130° wide, gradually reduced to a 50° narrow spray then up to a full spray position.
- Tactile and visual detection enable determining the shape of the selected spray.
- Engravings.



➤ **Various models:**

<p>MULTIFLOW</p>	<p>Adaptable spray shape with an adjustable flow. By simply rotating a flow selector ring.</p> <p>This ring has the flow rates engraved on it : 20-40-100-150 lpm / 70-130-230-400 lpm... 5-10-24-40 gpm / 30-60-95-125 gpm...</p> <p>"FLUSH" This corresponds to the Flush position. It is used to evacuate any debris stuck inside the device.</p> <p>Tactile detection allows identifying the position of the maximum flow rate setting.</p>
<p>FLOWMATIC</p>	<p>Adaptable spray shape with constant pressure.</p>
<p>MULTIMATIC</p>	<p>Adaptable spray shape with constant pressure and adjustable constant flow.</p>


➤ **Option:**

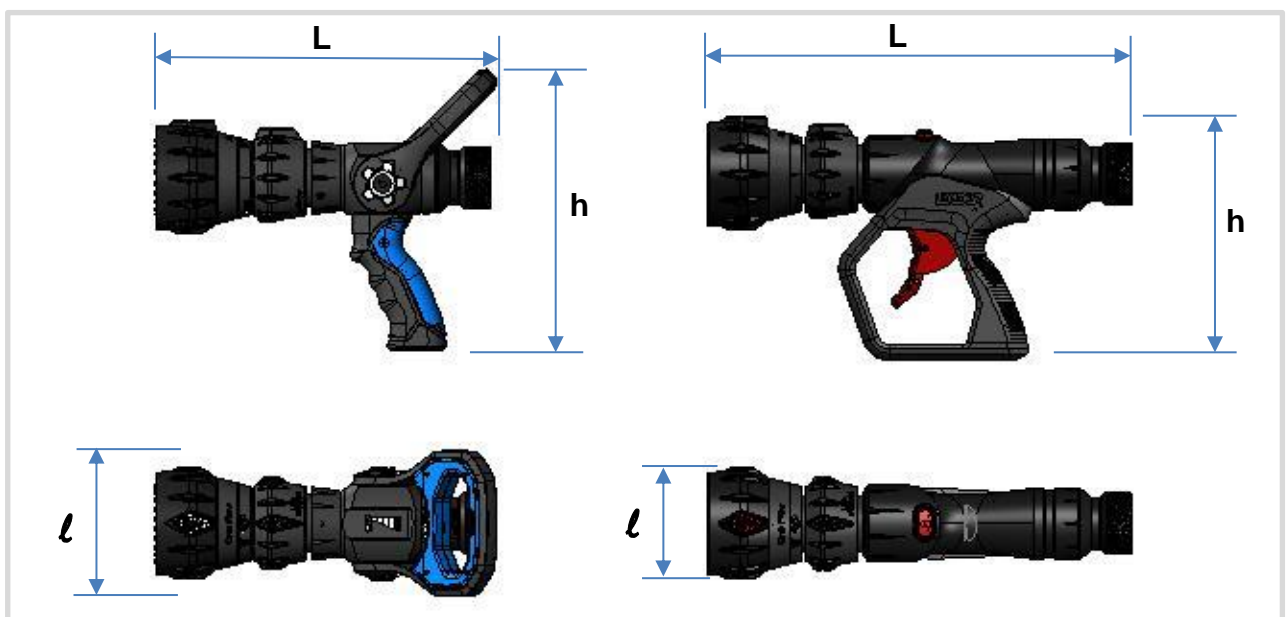
- **LEADER** spray gun handles can be equipped with a multi-expansion foam generator (Low and Medium).



5 FEATURES

5.1 General information

- **Manufacturer:** LEADER
- **Size:** COMPACT
- **Operation under nominal pressure:** PN 40
- **Type of spray:** Diffusion alternating between hollow cone / solid cone 
- **Valve:** Sliding valve
- **Protective filter:** Against debris at the inlet connection



5.2 MULTIFLOW model

Type is according to Annex A of EN 15182-1: Type 3.

Type according to EN 15182	Reference	Flow rates	Body	Gear teeth	Inlet	Mass kg (±0.2)	Length L (mm)	Width l (mm)	HT h (mm)
MULTIFLOW Type 3	CMFA-0530-LI	20-40-100-150 lpm	Aluminium	Fixed	1" F BSP	1.74	270	117	232
	2" M BSP				1.79	309	117	232	
	CMFA-0530-EI		TriggerFlow	Fixed	1" F BSP	2.34	325	87	209
	CMFG-1530-LI				2" M BSP	2.39	356	87	209
	CMFG-1530-EI	40-100-150-235 lpm	Aluminium	Fixed	1" F BSP	1.74	270	117	232
	CMFA-0531-LI				2" M BSP	1.79	309	117	232
	CMFA-0531-EI		TriggerFlow	Fixed	1" F BSP	2.338	325	87	209
	CMFG-1531-LI				2" M BSP	2.39	356	87	209
	CMFG-1531-EI	70-130-230-400 lpm	Aluminium	Fixed	1.5" F BSP	1.76	285	117	232
	CMFA-0532-LI				2" M BSP	1.79	309	117	232
	CMFA-0532-EI		TriggerFlow	Fixed	2" M BSP	2.39	356	87	209
	CMFG-1532-EI	470 lpm @ 7 bars	Aluminium	Turbine	1.5" F BSP	1.03	270	117	232
	CMFA-0752-MI	5-10-24-40 gpm	Aluminium	Fixed	1" F NH	1.74	270	117	232
	CMFA-0533-1I				Turbine	1" F NH	1.74	270	117
	CMFA-0733-1I		TriggerFlow	Fixed	1" F NH	2.34	325	87	209
	CMFG-1533-1I				Turbine	1" F NH	2.38	325	87
	CMFG-1733-1I	10-24-40-60 gpm	Aluminium	Fixed	1.5" F NH	1.76	285	117	232
	CMFA-0534-LI				Turbine	1.5" F NH	1.8	285	117
	CMFA-0734-LI		TriggerFlow	Fixed	1.5" F NH	2.18	340	87	209
	CMFG-1534-LI				Turbine	1.5" F NH	2.22	340	87
CMFG-1734-LI	30-60-95-125 gpm	Aluminium	Fixed	1.5" F NH	1.76	285	117	232	
CMFA-0535-LI				Turbine	1.5" F NH	1.8	285	117	232
CMFA-0735-LI		TriggerFlow	Fixed	1.5" F NPSH	1.8	285	117	232	
CMFA-0735-TI				1.5" F NH	2.18	340	87	209	
CMFG-1535-LI	Turbine	1.5" F NH	2.22	340	87	209			
CMFG-1735-LI									

5.3 FLOWMATIC model

Type is according to Annex A of EN 15182-1: Type 4.1.

Type according to EN 15182	Reference	Flow rates	Body	Gear teeth	Inlet	Mass kg (± 0.2)	Length L (mm)	Width l (mm)	HT h (mm)
FLOWMATIC Type 4.1	CFMA-0536-LI	0-150 lpm @ 6 bar	Aluminium	Fixed	1" F BSP	1.75	270	117	232
	CFMA-0536-EI		Aluminium		2" M BSP	1.79	309	117	232
	CFMA-0537-LI		Aluminium	Fixed	1" F BSP	1.75	251	117	232
	CFMA-0537-EI		Aluminium		2" M BSP	1.79	290	117	232
	CFMG-1537-LI		TriggerFlow	Fixed	1" F BSP	2.25	306	87	209
	CFMG-1537-EI				2" M BSP	2.3	337	87	209
	CFMA-0538-LI	0-250 lpm @ 6 bar	Aluminium	Fixed	1" F BSP	1.75	270	117	232
	CFMA-0538-EI				2" M BSP	1.79	309	117	232
	CFMA-0539-LI		Aluminium	Fixed	1" F BSP	1.75	251	117	232
	CFMA-0539-EI				2" M BSP	1.79	290	117	232
	CFMG-1539-LI		TriggerFlow	Fixed	1" F BSP	2.25	306	87	209
	CFMG-1539-EI				2" M BSP	2.3	337	87	209
	CFMA-0540-MI	0-400 lpm @ 6 bar	Aluminium	Fixed	1.5" F BSP	1.76	285	117	232
	CFMA-0540-EI				2" M BSP	1.79	309	117	232
	CFMA-0541-LI		Aluminium	Fixed	1" F BSP	1.75	251	117	232
	CFMA-0541-MI				1.5" F BSP	1.76	266	117	232
	CFMA-0541-EI		2" M BSP	1.79	290	117	232		
	CFMG-1541-MI		TriggerFlow	Fixed	1.5" F BSP	2.27	321	87	209
	CFMG-1541-EI				2" M BSP	2.3	337	87	209
	CFMA-0542-MI		Aluminium AA	Fixed	1.5" F BSP	1.8	266	117	232
	CFMA-0542-EI				2" M BSP	1.8	290	117	232
	CFMA-0543-RI		125 gpm @ 100 psi	Aluminium	Fixed	1.5" F NH	1.76	266	117
	CFMA-0743-TI	Aluminium		Turbine	1.5" F NPSH	1.8	266	117	232
	CFMA-0743-RI				1.5" F NH	1.8	266	117	232
CFMG-1543-RI	TriggerFlow	Fixed		1.5" F NH	2.27	321	87	209	
CFMG-1743-TI				Turbine	1.5" F NPSH	2.3	321	87	209
CFMG-1743-RI		1.5" F NH			2.3	321	87	209	
CFMA-0556-RI		Aluminium		Fixed	1.5" F NH	1.76	285	117	232

5.4 MULTIMATIC Model

Type is according to Annex A of EN 15182-1: Type 4.2

Type according to EN 15182	Reference	Flow rates	Body	Gear teeth	Inlet	Mass kg (±0.2)	Length L (mm)	Width l (mm)	HT h (mm)	
MULTIMATIC type 4.2	CMMA-0545-TI	0- 125 gpm Pulsing	Aluminium	Fixed	1.5" F NPSH	1.758	285	117	232	
	CMMA-0546-LI	0-400 lpm Pulsing	Aluminium	Fixed	1" F BSP	1.742	270	117	232	
	CMMA-0546-MI				1.5" F BSP	1.758	285	117	232	
	CMMA-0546-EI				2" M BSP	1.79	309	117	232	
	CMMG-1546-EI		TriggerFlow	Fixed	2" M BSP	2.386	356	87	209	
	CMMA-0547-MI	0-400 lpm Pulsing Low Pressure	Aluminium	Fixed	1.5" F BSP	1.758	285	117	232	
	CMMA-0547-EI				2" M BSP	1.79	309	117	232	
	CMMG-1547-EI				TriggerFlow	Fixed	2" M BSP	2.386	356	87
	CMMA-0548-TI	125 gpm Pulsing Low Pressure	Aluminium	Fixed	1.5" F NPSH	1.758	285	117	232	
	CMMA-0548-RI				1.5" F NH	1.758	285	117	232	
	CMMG-1548-TI		TriggerFlow	Fixed	1.5" F NPSH	2.354	340	87	209	
	CMMG-1548-RI				1.5" F NH	2.354	340	87	209	
	CMMA-0549-MI	0-400 lpm Low Pressure	Aluminium	Fixed	1.5" F BSP	1.758	285	117	232	
	CMMA-0549-EI				2" M BSP	1.79	309	117	232	
	CMMG-1549-MI		TriggerFlow	Fixed	1.5" F BSP	2.354	340	87	209	
	CMMG-1549-EI				2" M BSP	2.386	356	87	209	
	CMMA-0550-RI	125 lpm Low Pressure	Aluminium	Fixed	1.5" F NH	1.758	285	117	232	
	CMMA-0750-TI				Turbine	1.5" F NPSH	1.758	285	117	232
	CMMA-0750-RI					1.5" F NH	1.758	285	117	232
	CMMG-1750-TI		TriggerFlow	Turbine	1.5" F NPSH	2.354	340	87	209	
CMMG-1750-RI	1.5" F NH				2.354	340	87	209		
CMMG-1550-RI	Fixed			1.5" F NH	2.354	340	87	209		
				1.5" F NH	2.354	340	87	209		

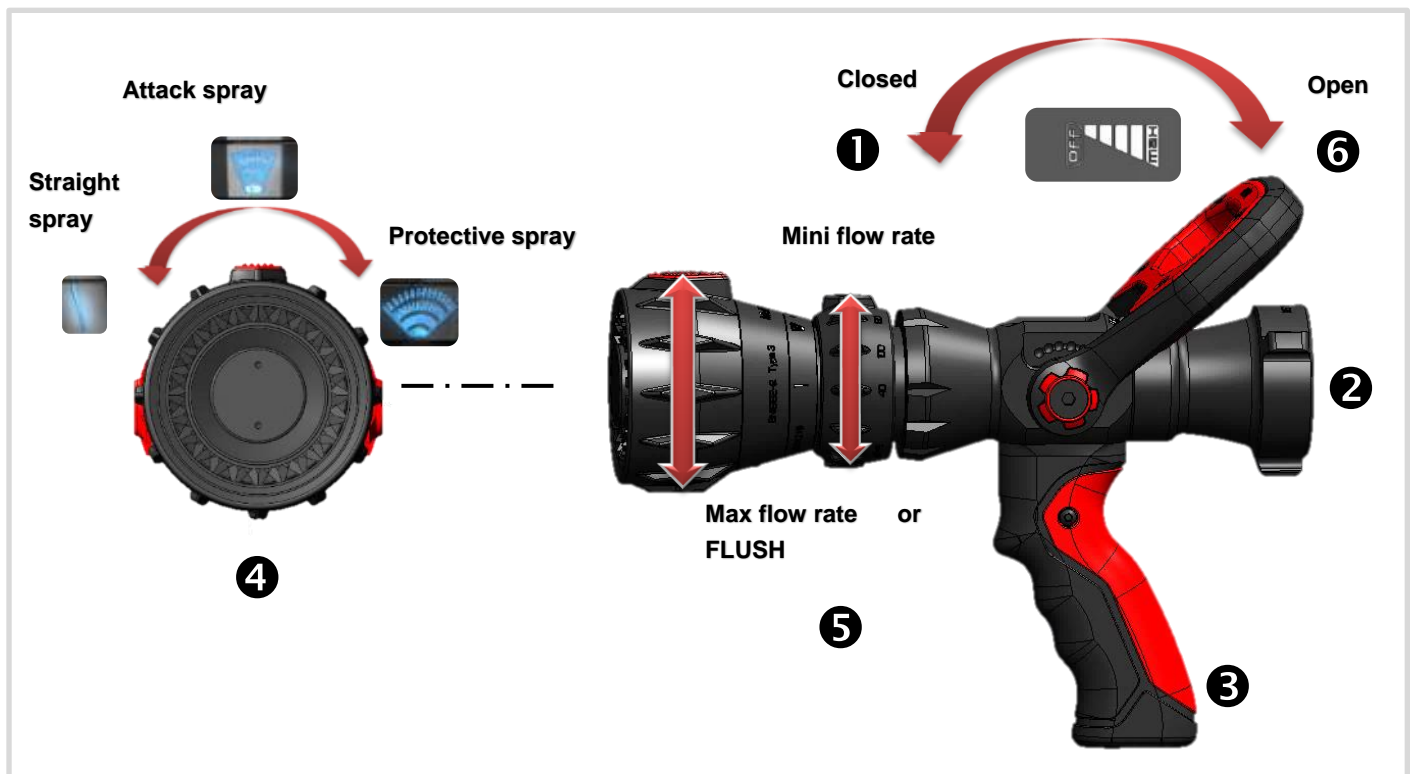
6 REQUIREMENT

	Standards	Post	Test results
CONTROL AND OPERATION	EN 15182-2 /4.2.1	Dimensions (mm).	See previous table
	EN 15182-2 /4.2.1	Mass (kg).	See previous table
	EN 15182-2 /4.2.2	Torque required to operate the handle.	2 N.m
	EN 15182-2 /4.2.2	Torque required to operate the flow control ring.	2.5 N.m
	EN 15182-2 /4.2.2	Torque required to operate the spray adjustment ring.	2.25 N.m
	EN 15182-2 /4.2.2	Torque required to operate the rotary inlet connector.	1 N.m
	EN 15182-2 /4.2.3	Flow control for FLOWMATIC models Rotation from minimum flow to maximum flow.	90°
	EN 15182-2 /4.2.4	Spray adjustment Rotation from a straight spray to a wide diffusion spray with a minimum diffusion angle of 100°.	90°
PERFORMANCE	EN 15182-2 /4.3.3	Effective range	See Flow / Pressure Curve
	EN 15182-2 /4.3.4	Wide spray.	120°
	EN 15182-2 /4.3.5	Narrow spray.	50°
PHYSICAL	EN 15182-1 / 7.2.2	Sensitivity to freezing.	-32°C
	EN 15182-1 /7.2.1	Sensitivity to heat.	+70°C
	EN 15182-1 / 6.3.1	Non-obstruction test.	3.18 mm
	EN 15182-2 /5.5	Burst pressure.	>100 bars

7 USING THE NOZZLE

7.1 Implementing the standard handle nozzle

- A/ Handle in closed position. ①
- B/ Connect the inlet fitting to an appropriately sized supply hose. ②
- C/ Turn on the pressure while firmly holding the device by the grip handle. ③
- D/ Select the desired spray type on the head. Tactile detection indicates the attack spray. ④
- E/ Select the desired flow rate on the ring. Tactile detection indicates the maximum flow rate. ⑤
- G/ Anticipate the reactive force when initiating the device. ⑥

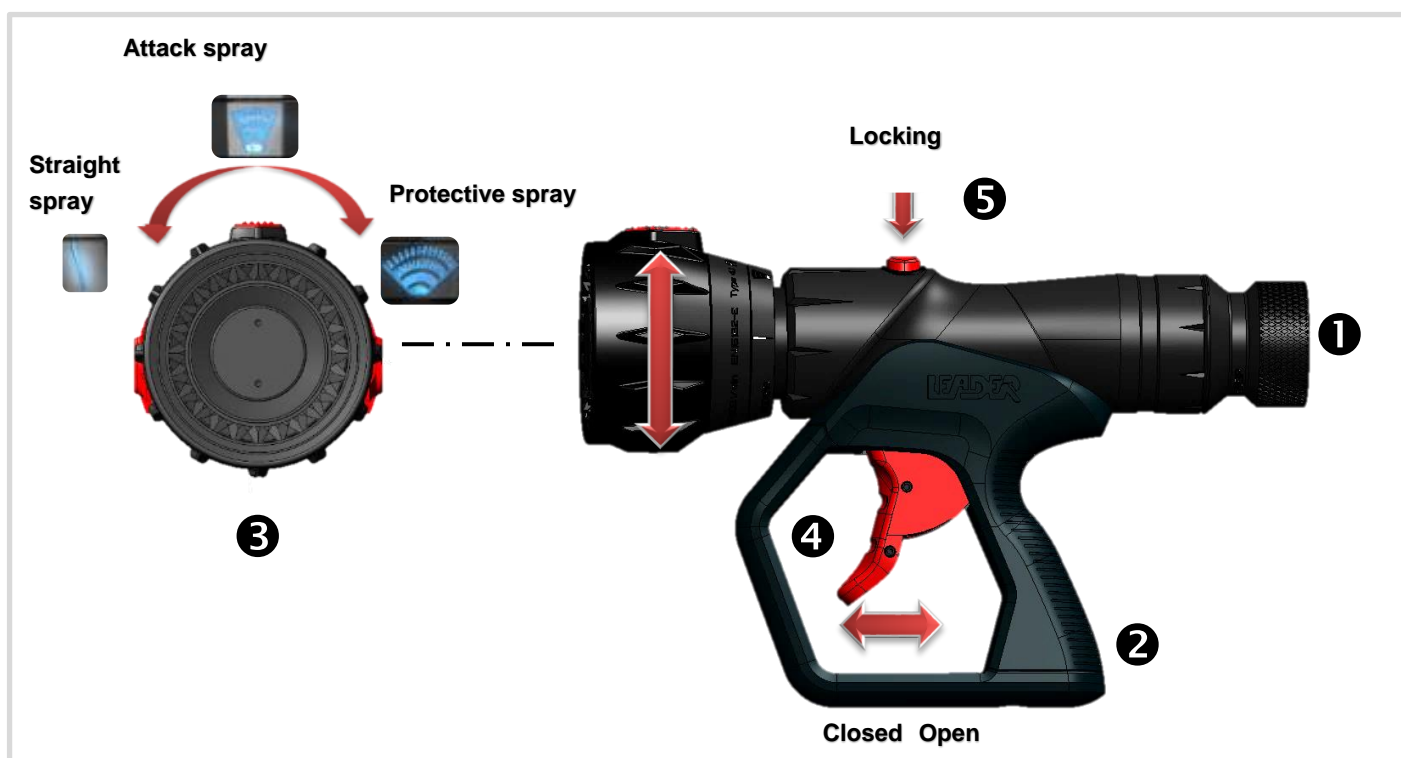


➤ Storing the nozzle

- A/ Turn off the pressure.
- B/ Turn on the device and set the position to "FLUSH". ⑤
- C/ Disconnect the device. ②
- E/ Drain any water remaining inside.
- F/ Check and clean the inlet filter if necessary.

7.2 Implementing the TriggerFlow nozzle

- A/ Connect the inlet fitting to an appropriately sized supply hose. ①
- B/ Turn on the pressure while firmly holding the device by the grip handle. ②
- C/ Select the desired spray type on the head. Tactile detection indicates the attack spray. ③
- D/ Press the trigger, while anticipating its reactive force. ④
- E/ Block the trigger by pressing the lock button if necessary. ⑤
- F/ Unlock by simply activating the trigger. ④



➤ Storing the nozzle

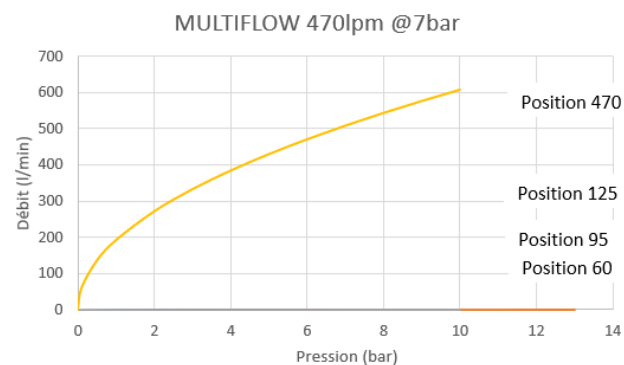
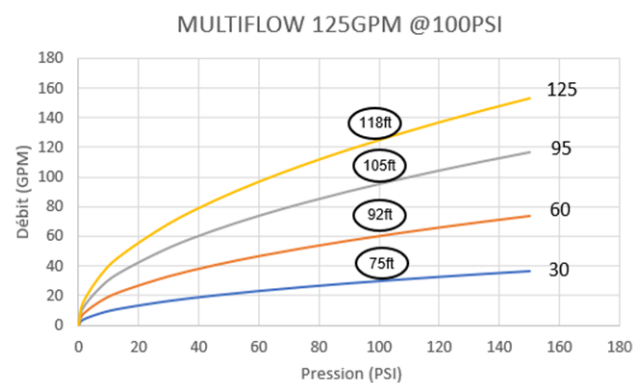
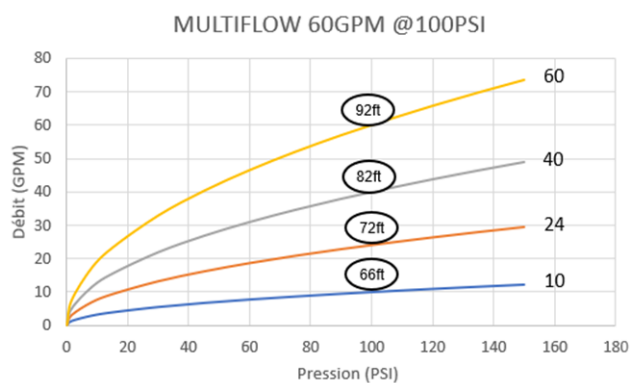
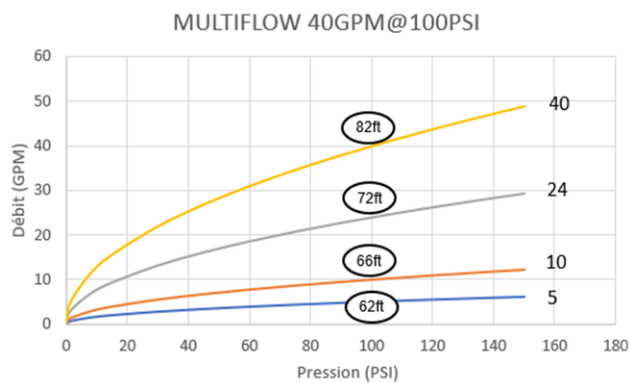
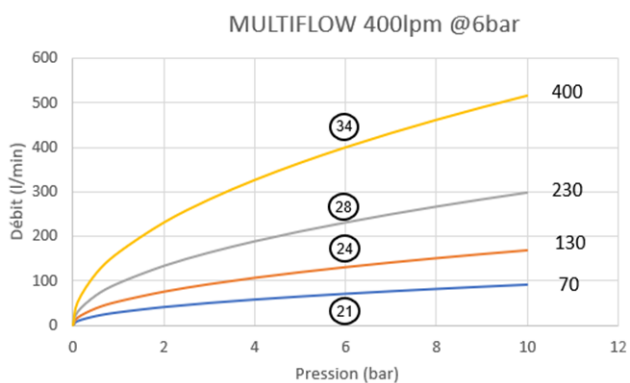
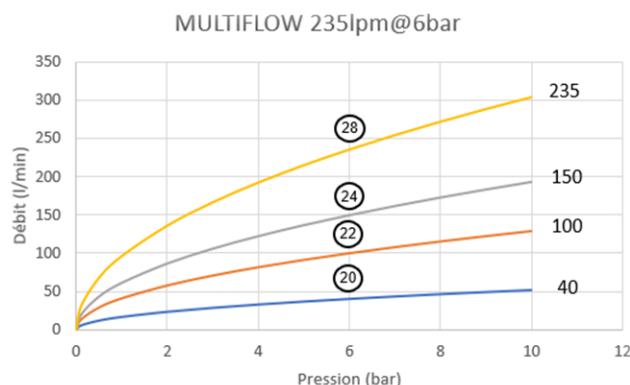
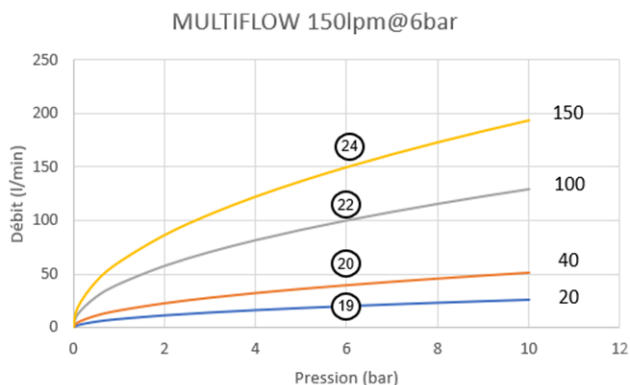
- A/ Turn off the pressure.
- B/ Release the trigger. If locked, apply a brief pressure to the trigger. ④
- C/ Disconnect the device. ①
- D/ Drain any water remaining inside.
- E/ Check and clean the inlet filter if necessary.

8 FLOW RATE DIAGRAM - PRESSURE

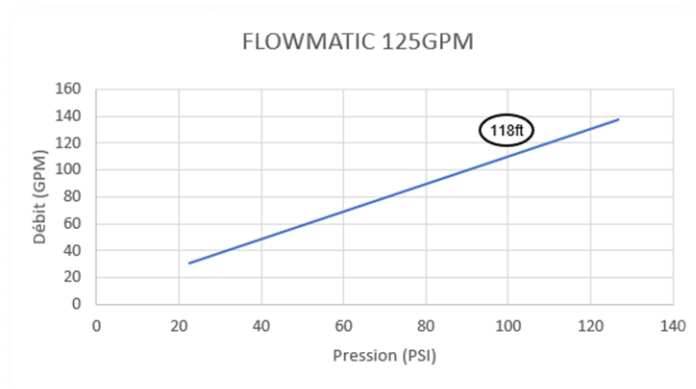
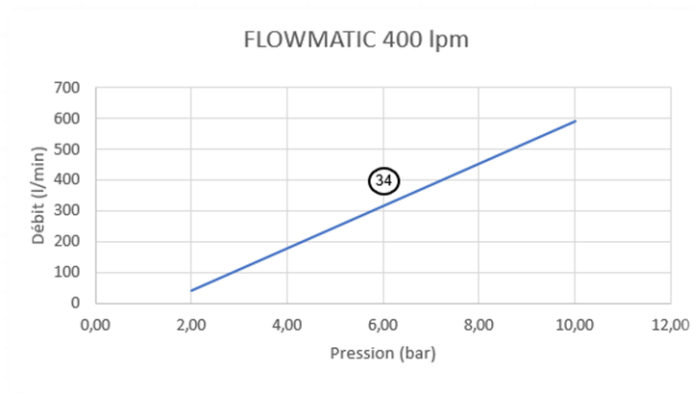
25 Range in meters at the indicated pressure.

128 ft Range in feet at the indicated pressure.

8.1 MULTIFLOW model



8.2 FLOWMATIC model



9 MAINTENANCE

After each use, check:

- 1) That no parts are damaged, broken, or missing.
- 2) That the swivel fitting turns freely.
- 3) The opening and closing of the faucet.
- 4) The proper operation of the flow selector.
- 5) The proper operation of the spray selector.

It is recommended to clean the device after each use with clear water, externally and internally while under pressure.



In case of repeated use with sea water or brackish water, it is recommended once a year to disassemble the device, clean all parts, and reassemble it using the maintenance procedure provided with the spare parts kit.

This task can be carried out at LEADER's workshops.

10 EXPLODED VIEW

To locate and identify the parts of your device, please contact us and we will send you the exploded views.



info@groupe-leader.fr

11 WARRANTY



This **LEADER** spray gun comes with a **5-year** warranty on parts and labour from the date of purchase, excluding transportation and travel expenses.

Normal wear parts are excluded from this warranty. This warranty is specifically limited to replacing or repairing the equipment or its parts that, after examination, prove to be defective for causes attributable to **LEADER**.

To use this warranty, with **LEADER'S** prior agreement, return the equipment to **LEADER, ZI des Hautes Vallées, Chemin no. 34, CS 20014, 76930 Octeville Sur Mer, France** as soon as possible following the discovery of the defect.

After examining the equipment:

- If the defect is attributable to **LEADER**, the company will repair it and assume the costs thereof, excluding transport and travel expenses.
- If the defect is not attributable to **LEADER**, see the procedures provided in the paragraph **out-of-warranty Defect**.

This warranty does not commit **LEADER** in the following cases: failure due to mishandling, misuse of the equipment, lack of maintenance, incident to the equipment, repair, or modification by another company or unauthorised personnel.

OUT-OF-WARRANTY DEFECT OR EQUIPMENT NO LONGER COVERED BY THE WARRANTY

A complete diagnostic will be conducted on your faulty equipment, at the end of which a detailed estimate will be proposed to you for the device's necessary repairs.

For failures and repairs no longer covered by the warranty, a diagnostic flat rate will be applied regardless of the acceptance of the repair quote.

LEADER®

● *Fighting for performance*

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LEADER GROUP

Our policy is to constantly seek to improve our products. We therefore reserve the right to change their technical specifications at any time and without prior manual. No contractual images.



PLEASE RECYCLE

Package leaflet code :

COMPACT.00.ZN1.2.EN.1