CTD

Fire Fighting

FOAM CONCENTRATE PROPORTIONING DEVICES

FOR FIRE TRUCKS

EN-01-21

CTD GROUP

CTD Group has been moving forward for more than 30 years with the same requirement: to learn, master and perfect its experiences, skills and the quality of its products. The group has become a key player in the maintenance of green spaces through garden cultivation, spraying, watering and dosing. It is also recognized in the world of firefighting for its dosing, transfer and high pressure equipment.
Fostering innovation and long-term vision, CTD Group is diversifying its activities and expanding its geographic reach from France to the international stage. CTD Group manages the activities of the companies CTD and YVMO. The head office is based in Guéreins, north of Lyons, FRANCE.

1 group

2 subsidiaries

4 activities

30 years of experience

2 production sites

35 employees

€ 7,500K turnover

25% of the turnover in Export business

+1,000 customers

COMPANY STRENGHTS

CUSTOMER RELATIONSHIP

5 sales managers
Supplying more than 60 countries
Demonstration and training on site
Tailor-made quotations

R&D

Customised design
5% of the turnover in R&D
3D SolidWorks software
Technical documentation customised

ISO 9001

BCS Certification

QUALITY

ISO 9001 2015
Performance monitoring indicators
Testing station
UTAC approval

AFTER SALES SEVICE

Helpline
On-site intervention
Equipment maintenance
Spare Parts department

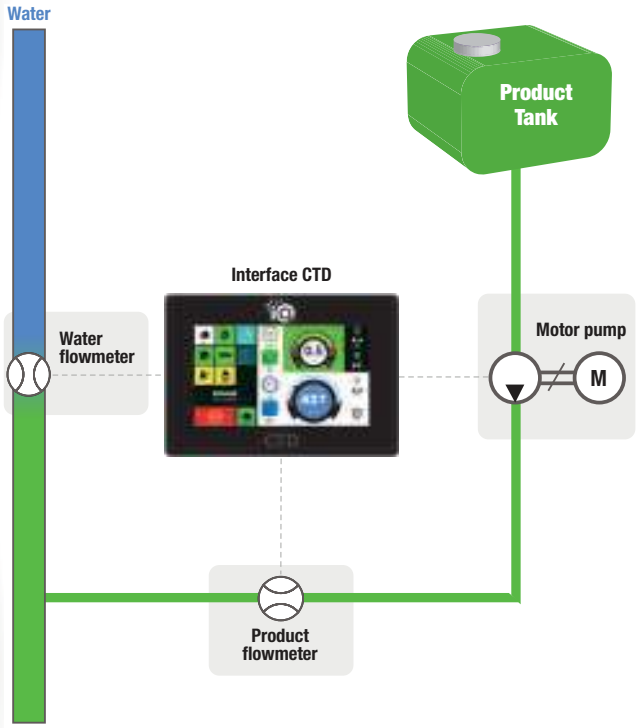
Experience
our new
IQ connected interface

INNOVATION 2021

PAGES 6-7

PRINCIPLE OF OPERATION

Positive pressure injection is the basis of our dosing systems which means that the product is injected at a higher pressure into the water.
For this, a motor pump dedicated to additive products is installed on the vehicle and is connected to the hydraulic and electrical system of the truck.
The motor pump sucks the product from the tanks or from an external inlet and an automatic control allows the correct amount of product to be dosed into the water.
The use of electronics associated with various measurement sensors makes it possible to control the water flow rate/product concentration ratio precisely.
The on-board sensors convey the information to the system interface allowing the user to have real-time working information.
Concentration is selected by means of our simple and functional screens.



Benefits of our systems

1 NO PRESSURE LOSS
The product injection is carried out by the motor pump without external elements to be installed on the water piping.
No pressure drop is therefore induced by the system, which makes it possible to stay away from the dangerous areas by allowing long hose lengths.

2 PRECISE DOSAGE
The accuracy is optimized by the use of sensors associated with our electronic interface which regulates the product injection pump.

3 PRODUCT SAVINGS
The dosage accuracy associated with the daily screen reports allows better control of the quantity of products used.

4 QUICK COMMISSIONING
The on-vehicle system combined with our easy-to-use interface reduces setup time and produces instant foam at the branch.

5 VARIABLE FLOW RATES AND CONCENTRATIONS
Our systems measure the current water flow of the branch and regulate the concentration based on the user's choice on the screen. Operating ranges can be defined on our interface.

6 COMPATIBLE WITH CLASS A AND CLASS B PRODUCTS
The installed motor pump can inject products dedicated either to class A fires or class B fires.

7 AUTOMATED FLUSHING
The system flushes automatically at the end of the operation, thus limiting the risk of clogging associated with the products. The possibility of adding the automatic frost protection option optimizes the cycle.

8 ADDITIONAL FUNCTIONS
The use of a motor pump makes it possible to combine optional functions on the vehicle such as tank filling, products transferring, etc.

9 FUNCTIONAL INTERFACE
Our screen show all the information essential to the user thus optimizing control of the intervention.

THIS SIMPLE AND COMPACT BLACK AND WHITE DISPLAY IS THE INTERFACE OF OUR ELECTRICALLY-POWERED SINGLE-PRODUCT DOSING SYSTEMS.

It is used to regulate the dosage of a single class A or class B product by means of rapid use with a Start/Stop button. Other options such as tank filling or automatic flushing enhance this screen to optimize its use

DOSING

The screen manages the dosage regulation. A Start/Stop button activates the system quickly and easily. The regulated concentration can be modified using 2 + and - keys.

FUNCTION FILLING

The tank filling can be managed by our screen using the pump of the dosing system to fill up the product tank at the end of the fire intervention.

FUNCTION FLUSHING

The display provides an automatic fushing function after use. The pump sucks in water and sends it to the ground in order to flush the pipes, thus guaranteeing the lifespan of the equipment.

INTERVENTION LOG BOOK

The screen records information related to interventions. The quantity of water and product used as well as the duration of the intervention are recorded in a listing accessible from the screen.

CONFIGURABLE

The screen integrates several setting configurations in order to adapt to the system quickly thus simplifying the commissioning at the fire vehicles OEMs.

BENEFITS

- SIMPLE USE
- QUICK SETUP
- SMALL FOOTPRINT
- ECONOMICAL

6 | IQ CONNECTED INTERFACE

A TRUE REVOLUTION IN ELECTRONIC DOSING SYSTEMS, THIS COLOUR AND CONNECTED TOUCH SCREEN PROVIDES ALL THE INFORMATION NECESSARY FOR THE GOOD PERFORMANCE OF A FIRE INTERVENTION.

This dynamic interface makes it possible to regulate the dosage of up to 3 different products. Its many additional functions bring comfort to the user. New Wi-Fi and Sat-Nav technologies integrated into the screen ensure the device's connectivity and the traceability of fire interventions. The fully customizable screen display (colours, languages, keys, etc.) fully adapts to the working methods of firefighters around the world.

LOG BOOK

The screen records information related to interventions. The quantity of water and product used as well as the duration of the intervention are recorded in a report accessible from the screen. A detailed analysis is presented in the form of graphs ensuring traceability of the use of the product during the intervention. The system's Sat Nav records the location of the intervention thus completing the report. A fault log is also available.

FILLING / TRANSFER

The tank filling can be managed by our interface by using the pump of the dosing system to fill up the product tank at the end of the fire operation.
A transfer from the tank to the outlet can also be done through the screen in order to supply foam concentrate to another vehicle.

EXERCISE MODE

An exercise mode is accessible from the screen in order to use the system without using any product. User training is thus carried out while respecting the environment.

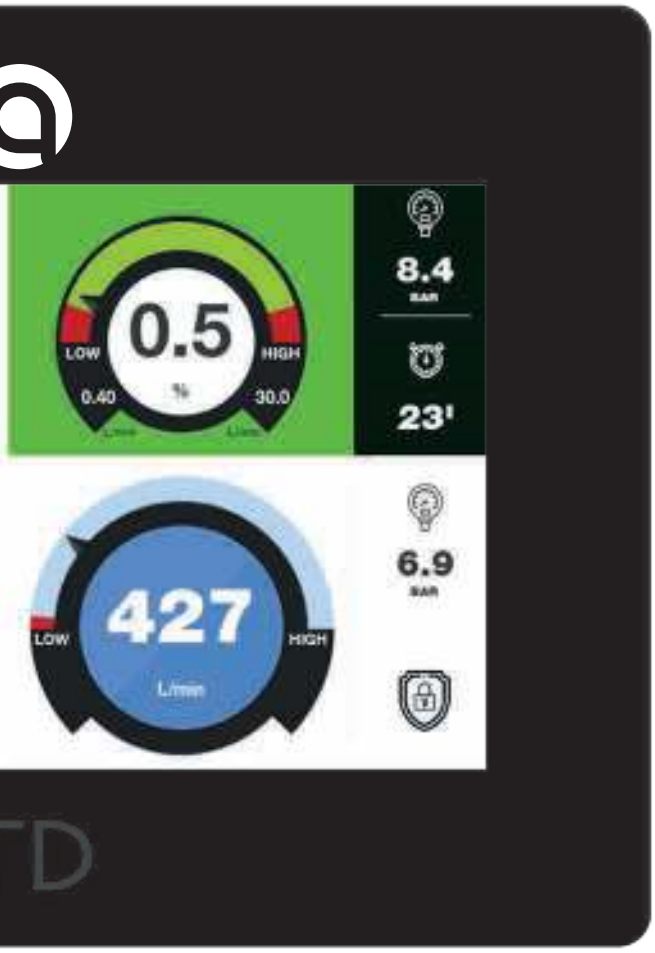
INNOVATION 2021

DOSING

The screen manages the dosage regulation. The system is put into operation by means of pre-programmed intervention keys. The dosage is controlled by automated priming, flushing and frost protection cycles. A stop button is used to end the intervention and to save the work information. A simplified display is also available on this screen.

REMOTE TAKE-OVER

Remote maintenance is available using the screen's wifi connection. An update or configuration can be carried out by CTD in order to maintain a functional and efficient system.



SETTING

The screen integrates several setting configurations in order to adapt to the system quickly thus simplifying the commissioning at the fire vehicles OEMs. Many screen display options are available so that the user can take ownership of their interface.

IQ BENEFITS

- CAPACITIVE TOUCH
- WATERPROOF IP68
- WIFI COMPATIBLE
- SHOCK AND WATER RESISTANT
- CUSTOMIZABLE
- MULTILANGUAGES
- INTEGRATED SAT NAV

8 | ADDITIVES / FOAM CONCENTRATE

WATER HAS ALWAYS BEEN USED TO EXTINGUISH FIRES. SINCE THE 1960's, THE EARLY ADDITIVES HAVE BEEN INVENTED TO BE ADDED TO THE WATER TO INCREASE SIGNIFICANTLY ITS EXTINGUISHING POWER. THIS IS HOW FOAM APPEARED IN THE FIRE ENVIRONMENT.

As Class C D E F fires are rather extinguished with powders, Class A and Class B fires, on the other hand, can be extinguished by combining water and additives thus producing an extinguishing foam.

THE TYPES OF FIRE

Class A	Solid material fires (wood, tires, cars, house, etc.)
Class B	Hydrocarbon liquids (immiscible with water) and polar liquids (miscible with water)
Class C	Gas fire
Class D	Metal fire
Class E	Electrically generated fire
Class F	Fires related to cooking appliances

THE PRODUCTS

Class A

Class A - WETTING / FOAMING ADDITIVE

So-called wetting/foaming products have been developed to fight Class A fires.
These are products that combine different synthetic surfactants to reduce the surface tension of water. The latter being made more penetrating by the product will more easily reach the embers of burning materials and will prevent any resumption of the hearth.
The use of suitable nozzles generating an air supply to the water + product solution will produce a foam that will extinguish the flames on the surface.
These Newtonian products (low viscosity) are used at low concentrations between 0.1 and 1%.

BENEFITS

- NON VISCOUS
- LOW CONCENTRATION
- QUICK EXTINGUISHING
- WATER SAVING
- BIODEGRADABLE
- MULTI-EXPANSION

Class B

Class B - FOAM CONCENTRATE

Also used in certain cases in Class A fires, a foam concentrate is mainly used for class B fires.

The liquid risk of the hydrocarbon type requires a so-called film-forming foam concentrate (AFFF: Aqueous Film Forming Foam) allowing the foam solution to create a film of water on the surface of the hydrocarbon. Extinguishing should be carried out with a direct, long-range stream. This foaming solution prevents the supply of oxygen to the burning liquid, stops the emission of flammable vapors and cools the surface with its constitution water.
The liquid risk of the polar solvent type requires a so-called polyvalent foam concentrate (AR: Alcohol Resistant) allowing to create a thicker protective film gel. Extinguishing should be carried out with an indirect jet in gentle application.

These pseudo-plastic products are used at concentrations between 1 and 6%.

There are several kinds of foam products such as Proteinic, Fluorinated Synthetics, Fluoride-free Synthetics or Polyvalent. The viscosity of the products is very different depending on their composition.

HOW TO CHOOSE YOUR DOSING SYSTEM IN 4 QUESTIONS ?

01 WHAT PRODUCT IS USED ?

Class A ❑ Class B ❑ Class AB ❑

FIND OUR TOOL to help you choose your system online on our website www.ctdfrance.com or by scanning the QR code.

https://frama.link/CHOICE-CTD-SYSTEMS

02 WHAT IS THE MAXIMUM OPERATING PRESSURE ?

❑ LP 0 to 16 bar ❑ HP 0 to 45 bar

03 WHAT IS THE MIN AND MAX WATER FLOW ?

Min flow	10	30	35	40	50	75	80	200	300	400	600
Max flow	100	850	350	1,250	2,000	750	3,000	5,000	8,000	10,000	20,000
Pressure type	HP	LP	HP	LP	LP	HP	LP	LP	LP	LP	LP
Size of the manifold	DN25 (1")	DN40 (1 1/2 ")	DN40 (1 1/2")	DN50 (2")	DN65 (2 1/2")	DN50 (2")	DN80 (3")	DN100 (4")	DN125 (5")	DN150 (6")	DN200 (8")
	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑	❑

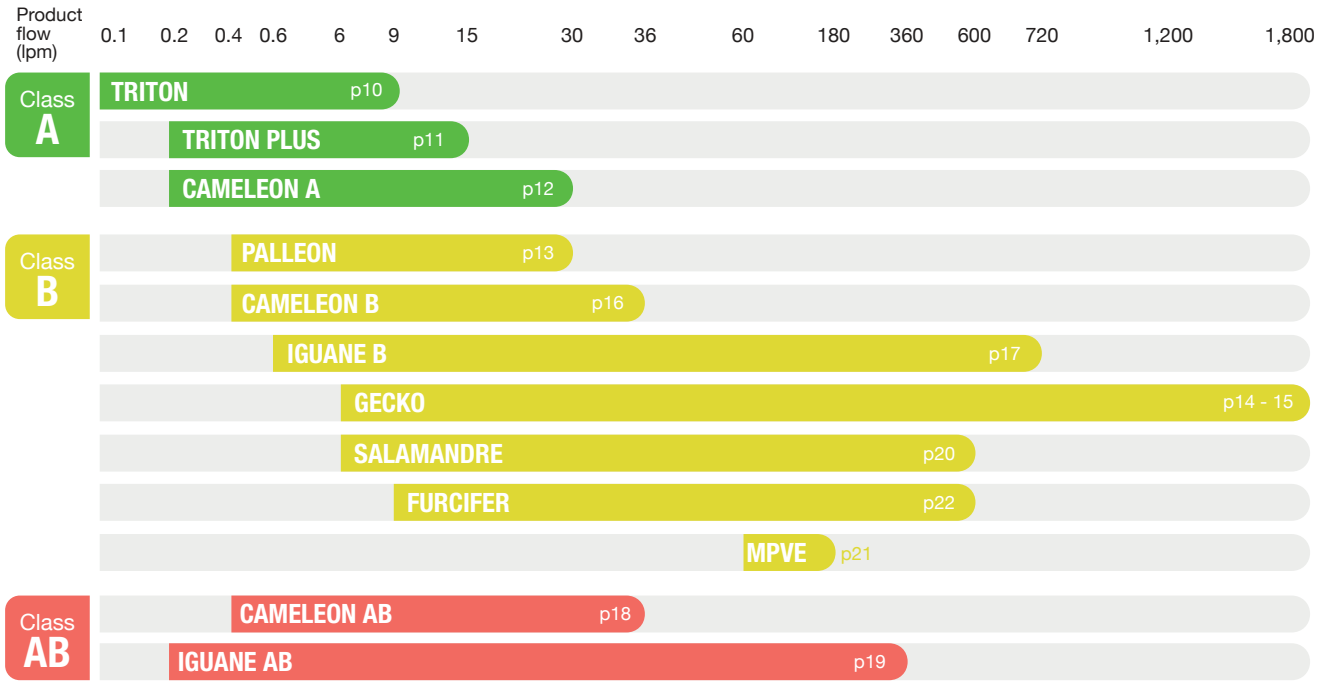
04 WHAT IS THE MIN AND MAX CONCENTRATION IN ORDER TO DETERMINE THE PRODUCT FLOW ?

❑ ≤ 0,5% ❑ between 0.5 and 1% ❑ between 1 and 3% ❑ between 3 and 6% ❑ ≥ 6%

SCORECARD

Water flow x Concentration = Product flow

EXAMPLE You want to use foam concentrate between 500 and 3,000 lpm on your vehicle at a concentration between 3 and 6% for a pressure of 15 bar. The range of GECKO systems will match your needs



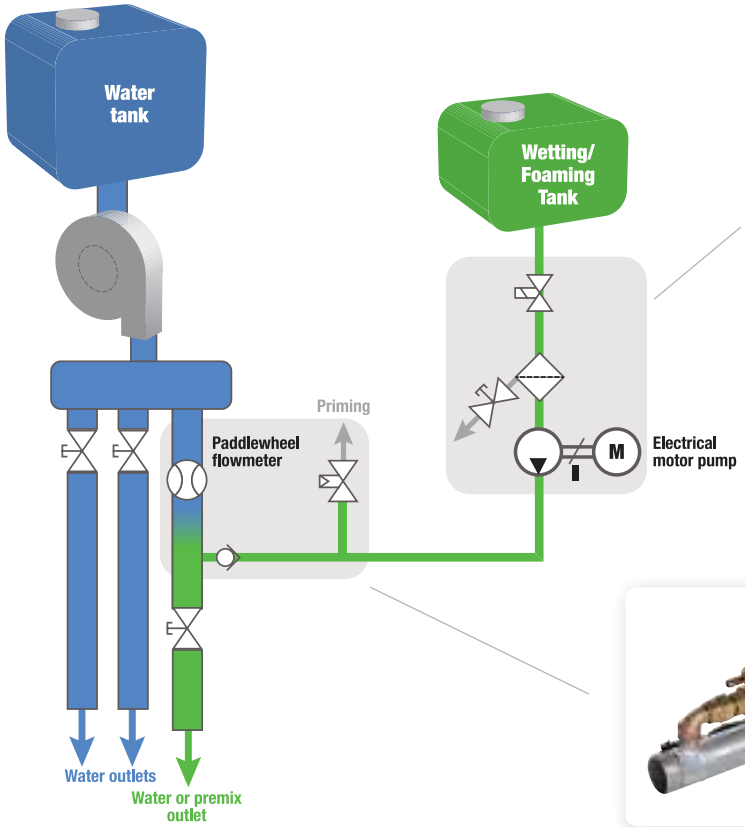
Van Truck

Water Pump < 2,000 lpm

Class A

FEATURES

* by default	BP	HP
Pump flow range	0.1 to 9 lpm	0.1 to 3 lpm
Pump type	Piston	Piston
Suction	0 bar	0 bar
Max pressure	15 bar	45 bar
Dosing range*	0.1 to 1%	0.1 to 1%
Water flow range*	1 1/2": 30 to 850 lpm	1 1/2": 35 to 350 lpm
Power	elec 24V - 16A	elec 24V - 16A
Product compatibility	Newtonian	Newtonian
Priming	Manual	Manual



POSSIBLE OPTIONS

- Flushing
- Additional screen
- Other flowmeter size
- Canopen bus communication

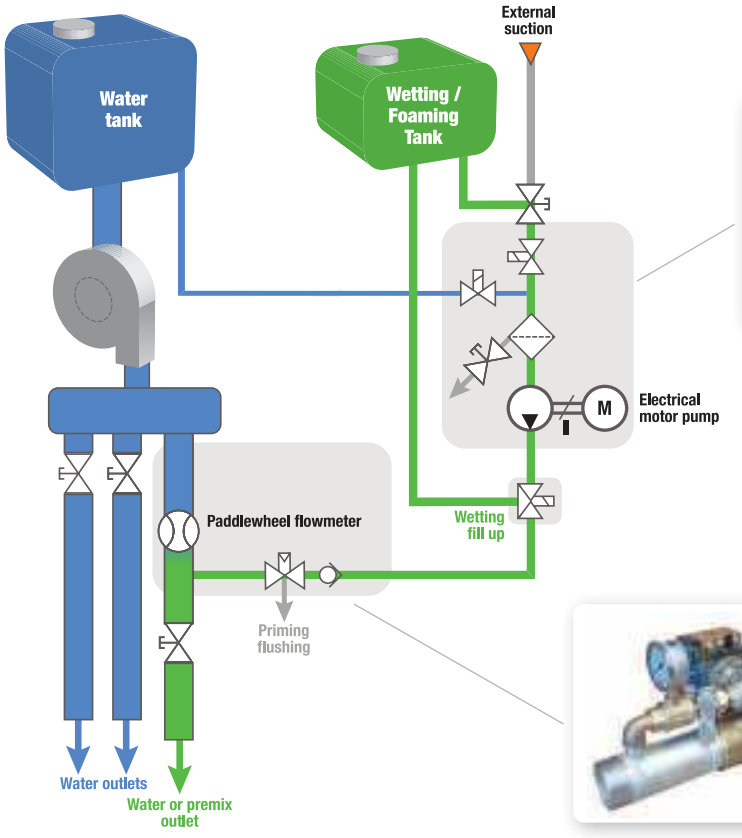
Van Truck

Water Pump < 2,000 lpm

Class A

FEATURES

* by default	BP
Pump flow range	0.2 to 15 lpm
Pump type	Piston
Suction	-0.15 bar
Pressure	12 bar
Dosing range*	0.1 to 1%
Water flow range*	1 1/2": 35 to 850 lpm
Power	elec 24V - 45A
Product compatibility	Newtonian
Priming	Manual



POSSIBLE OPTIONS

- Flushing
- External suction
- Product tank filling
- Tank level sensor
- External suction hose
- Other flowmeter size
- Additional screen
- Canopen bus communication

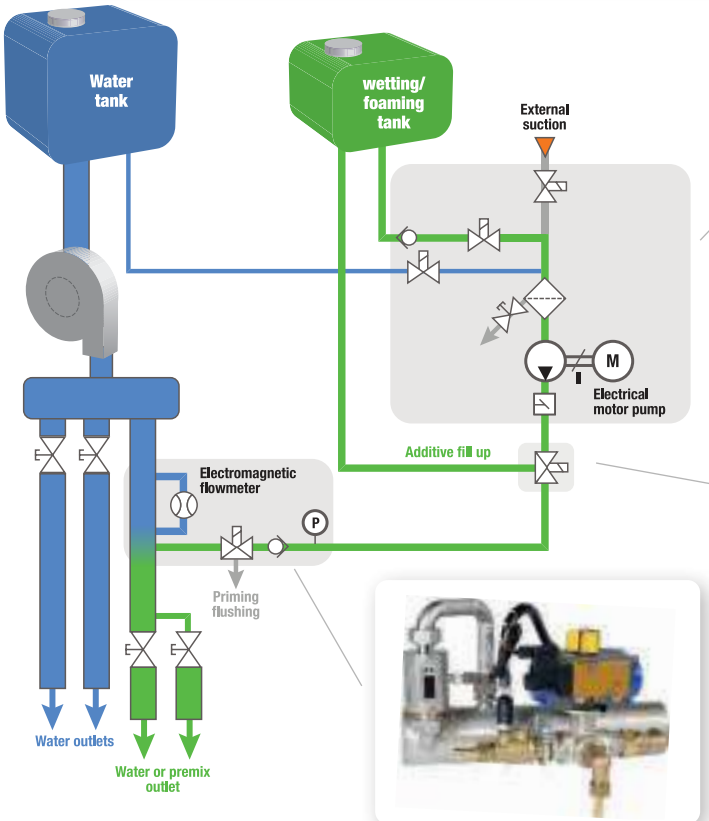
Van Truck

Water Pump < 3,000 lpm

Class A

FEATURES

* by default	BP	HP	HF
Pump flow range	0.2 to 15 lpm	0.2 to 15 lpm	0.4 to 30 lpm
Pump type	Piston		
Suction	-0.15 bar		
Pressure	12 bar	45 bar	12 bar
Dosing range*	0.1 to 1%		
Water flow range*	2 1/2": 50 to 2,000 lpm	1 1/2": 35 to 350 lpm	2 1/2": 50 to 2,000 lpm
Power	elec 24V - 45A	elec 24V - 110A	elec 24V - 60A
Product compatibility	Newtonian		
Flushing	Automated		
Priming	Automated		



POSSIBLE OPTIONS

- External suction
- Product tank filling
- Automatic frost protection
- Product transfer
- External suction hose

- Intervention GPS tracking
- Tank level sensor
- Additional screen
- Double injection LP/HP

FEATURES

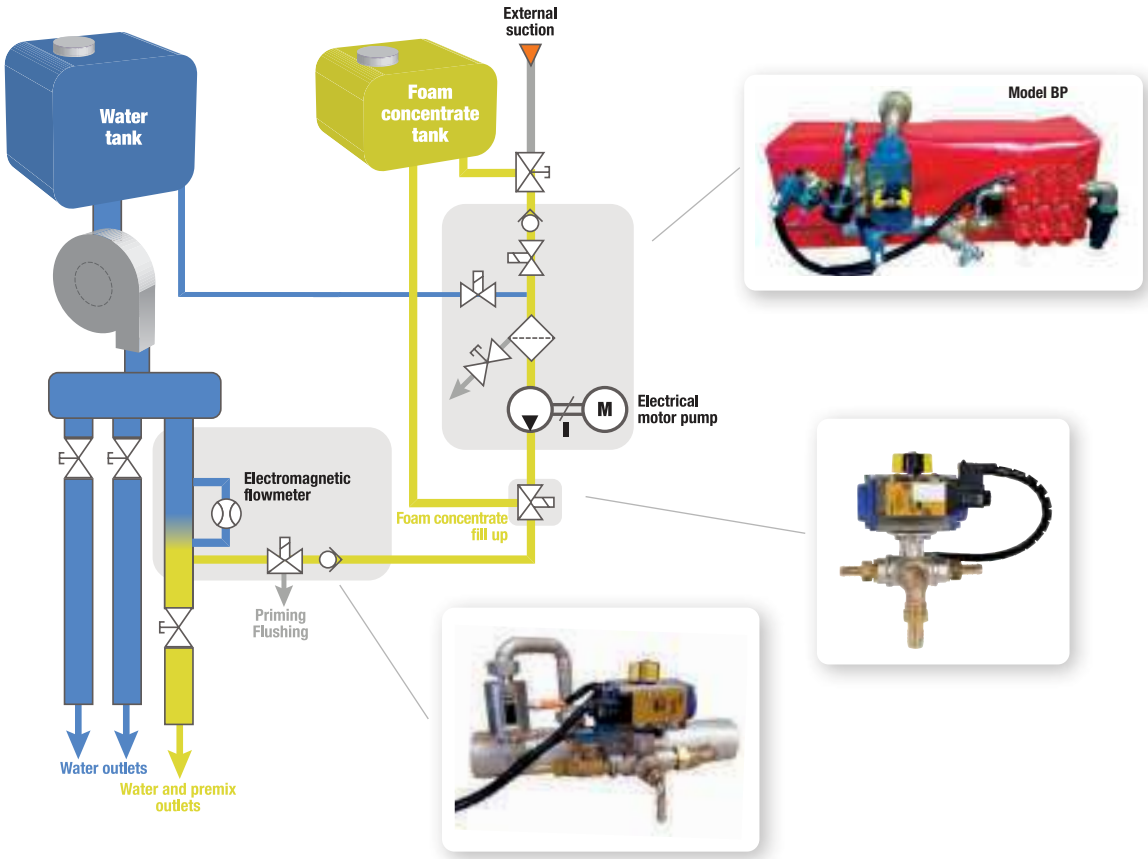
Van Truck

Water Pump < 3,000 lpm

Class B

* by default	BP	HP	HV
Pump flow range	0.4 to 30 lpm	0.6 to 24 lpm	0.6 to 30 lpm
Pump type	Piston		Gear
Suction	-0.15 bar		-0.7 bar
Pressure	12 bar	45 bar	12 bar
Dosing range*	0.5 to 6%		
Water flow range*	2 1/2": 50 to 2,000 lpm	1 1/2": 35 to 350 lpm	2 1/2": 50 to 2,000 lpm
Power	elec 24V - 60A	elec 24V - 140A	elec 24V - 95A
Product viscosity compatibility	< 120 Mpa.s(1) at 20°C		< 400 Mpa.s(1) at 20°C
Priming	Manual		

(1) At 375 s^{-1} shear rate following the norm EN 1568-3:2018



POSSIBLE OPTIONS

- Flushing
- External suction
- Product tank filling
- Tank level sensor
- External suction hose
- Additional screen
- Canopen bus communication

FEATURES

Van Truck

Water Pump < 30,000 lpm

Class B

The range of dosing of the Gecko IQ is available in several configurations to match the performance of the foam concentrate pump to the extinguishing needs of the vehicle. Components are suited to the product flow to maintain a reliable and accurate dosing.

* by default	120	180	240	360	480
Pump flow range	6 to 120 lpm	8 to 180 lpm	12 to 240 lpm	15 to 360 lpm	24 to 480 lpm
Pump type	Piston		Gear		
Suction	-0.6 bar		-0.7 bar		
Pressure	16 bar				
Dosing range*	1 to 6%				
Water flow range*	3": 80 to 3,000 lpm	4": 200 to 5,000 lpm	5": 300 to 8,000 lpm	6": 400 to 12,000 lpm	
Engine compatibility	Thermal/Hydraulic				Hydraulic
Viscosity compatibility	< 220 Mpa.s(1) at 20°C		< 400 Mpa.s(1) at 20°C		
Flushing	Automated				
Priming	Automated				
External suction	Included				

(1) At 375 s^{-1} shear rate following the norm EN 1568-3:2018

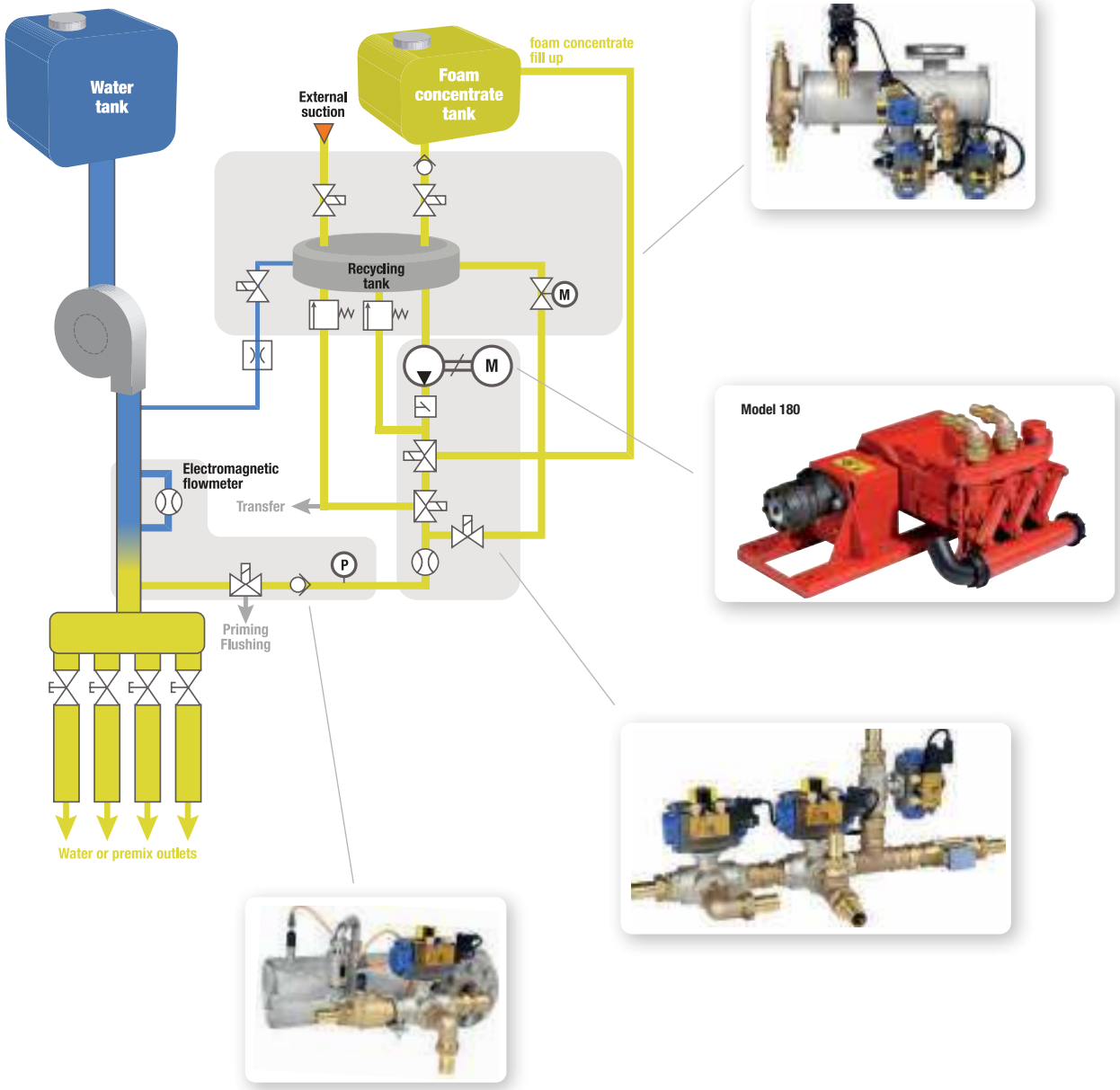
* by default	600	720	900	1200	1800
Pump flow range	40 to 600 lpm	48 to 720 lpm	60 to 900 lpm	90 to 1200 lpm	120 to 1,800 lpm
Pump type	Gear				
Suction	-0.7 bar				
Pressure	16 bar				
Dosing range*	1 to 6%				
Water flow range*	6": 400 to 12,000 lpm		8": 600 to 20,000 lpm		12": 1,300 to 50,000 lpm
Engine compatibility	Hydraulic				
Viscosity compatibility	< 400 Mpa.s(1) at 20°C				
Flushing	Automated				
Priming	Automated				
External suction	Included				

(1) At 375 s^{-1} shear rate following the norm EN 1568-3:2018

Van Truck

Water Pump < 30,000 lpm

Class B



POSSIBLE OPTIONS

- Product tank filling
- Automatic frost protection
- Product transfer
- Product pumping
- Product tank blending
- External suction hose
- Tank level sensor
- Additional screen
- Motorisation
- Full integration on skid
- Choice of pump material (stainless steel or bronze)

Van Truck

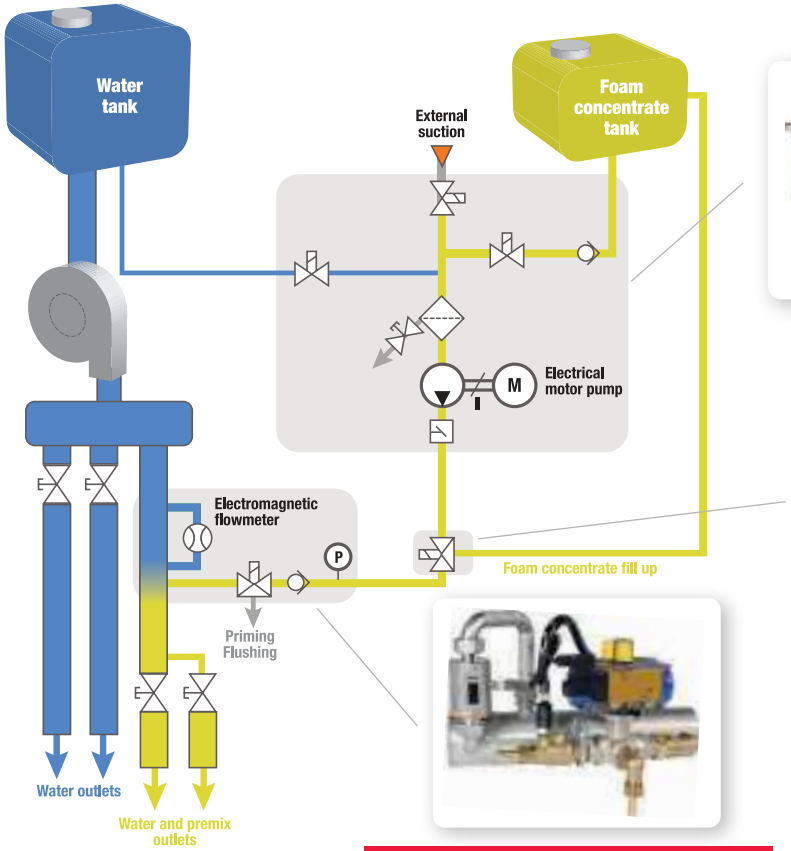
Water Pump < 3,000 lpm

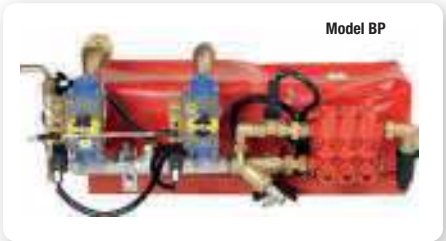
Class B

FEATURES

* by default	BP	HP	HF	HV
Pump flow range	0.4 to 30 lpm	0.6 to 24 lpm	0.6 to 36 lpm	0.6 to 30 lpm
Pump type	Piston			Gear
Suction	-0.15 bar			-0.7 bar
Pressure	12 bar	45 bar	12 bar	12 bar
Dosing range*	0.5 to 6%			
Water flow range*	2 1/2": 50 to 2000 lpm	1 1/2": 35 to 350 lpm	3": 80 to 3,000 lpm	2 1/2": 50 to 2,000 lpm
Power	elec 24V - 60A	elec 24V - 140A	elec 24V - 95A	elec 24V - 95A
Viscosity compatibility	< 120 Mpa.s(1) at 20°C			< 400 Mpa.s(1) at 20°C
Flushing	Automated			
Priming	Automated			

(1) At 375 s^{-1} shear rate following the norm EN 1568-3:2018





POSSIBLE OPTIONS

- External suction
- Product tank filling
- Automatic frost protection
- Product transfer
- External suction hose
- Intervention GPS tracking
- Tank level sensor
- Additional screen
- Double injection LP/HP

FEATURES

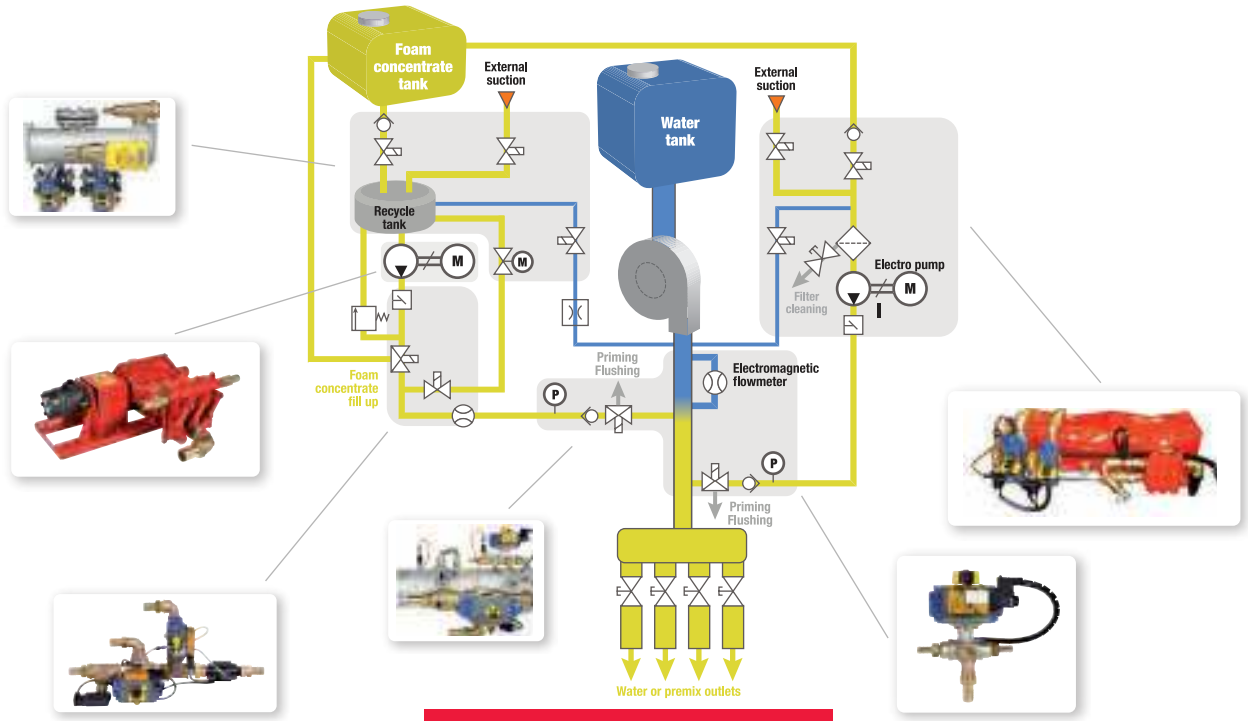
Van Truck

Water Pump < 12,000 lpm

Class B

* by default	30		360		480		600		720
Product type	Foam concentrate	+	Foam concentrate	OR	Foam concentrate	OR	Foam concentrate	OR	Foam concentrate
Pump flow range (1)	0.6 to 30 lpm		15 to 360 lpm		24 to 480 lpm		40 to 600 lpm		48 to 720 lpm
Pump type	Gear		Gear		Gear		Gear		Gear
Suction	-0.7 bar		-0.7 bar		-0.7 bar		-0.7 bar		-0.7 bar
Pressure	12 bar		16 bar		16 bar		16 bar		16 bar
Dosing range*	0.1 to 6%		1 to 6%		1 to 6%		1 to 6%		1 to 6%
Water flow range*	On demand		On demand		On demand		On demand		On demand
Power	elec 24V - 95A		Thermal/ Hydraulic		Hydraulic		Hydraulic		Hydraulic
Product viscosity compatibility	< 400 Mpa.s(2) at 20°C		< 400 Mpa.s(2) at 20°C		< 400 Mpa.s(2) at 20°C		< 400 Mpa.s(2) at 20°C		< 400 Mpa.s(2) at 20°C
Flushing	Automated		Automated		Automated		Automated		Automated
Priming	Automated		Automated		Automated		Automated		Automated
External suction	Option		Included		Included		Included		Included

(1) Other pump flow rate ranges available on request - (2) At 375 s^{-1} shear rate following the norm EN 1568-3:2018



POSSIBLE OPTIONS

- Product tank filling
- Automatic frost protection
- Product transfer
- Product pumping
- Product tank blending
- External suction hose
- Tank level sensor
- Additional screen
- Motorisation
- Full integration on skid

Van Truck

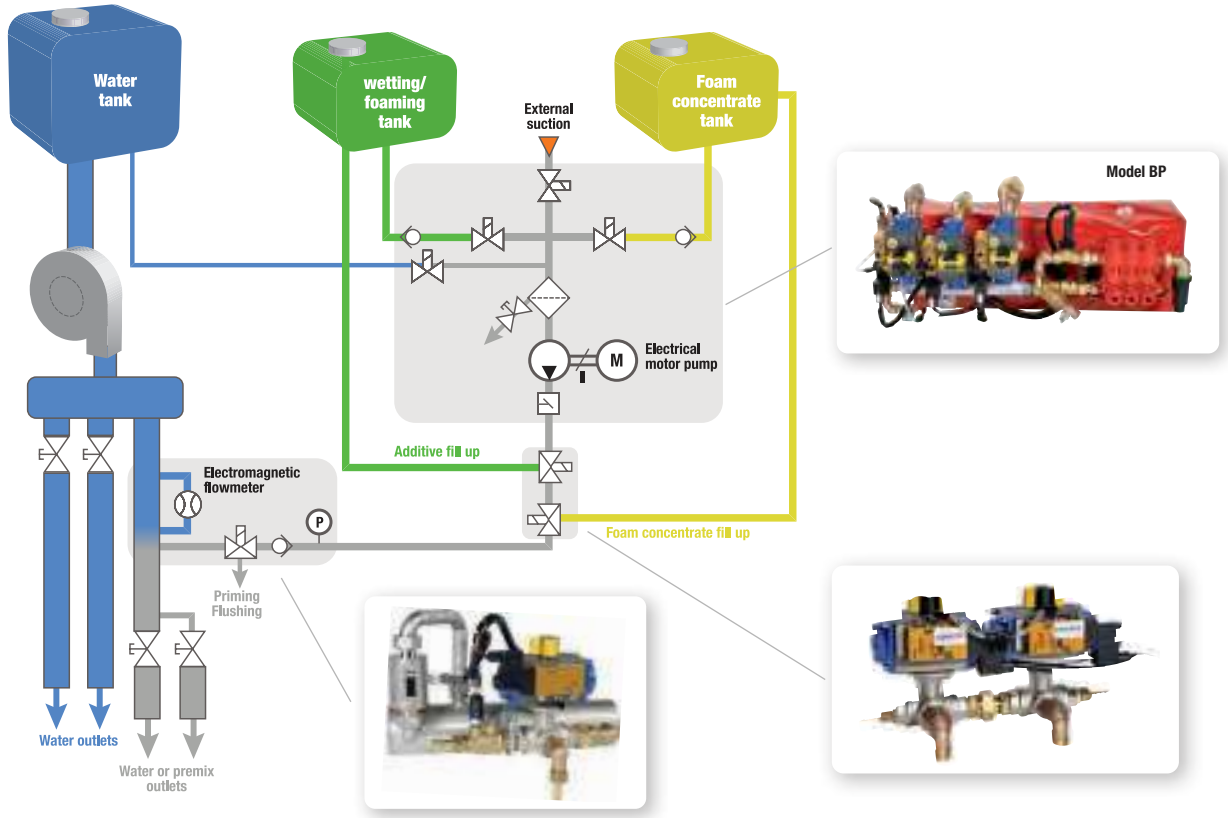
Water Pump < 3,000 lpm

Class AB

FEATURES

* by default	BP	HP	HF	HV
Pump flow range	0.4 to 30 lpm	0.6 to 24 lpm	0.6 to 36 lpm	0.6 to 30 lpm
Pump type	Piston			Gear
Suction	-0.15 bar			-0.7 bar
Pressure	12 bar	45 bar	12 bar	12 bar
Dosing range*	0.1 to 6%			
Water flow range*	2 1/2": 50 to 2,000 lpm	1 1/2": 35 to 350 lpm	3": 80 to 3,000 lpm	2 1/2": 50 to 2,000 lpm
Power	elec 24V - 60A	elec 24V - 140A	elec 24V - 95A	elec 24V - 95A
Viscosity compatibility	< 120 Mpa.s(1) at 20°C			< 400 Mpa.s(1) at 20°C
Flushing	Automated			
Priming	Automated			

(1) At 375 s^{-1} shear rate following the norm EN 1568-3:2018



POSSIBLE OPTIONS

- External suction
- Product tank filling
- Automatic frost protection
- Product transfer
- External suction hose
- Intervention GPS tracking
- Tank level sensor
- Additional screen
- Double injection LP/HP

FEATURES

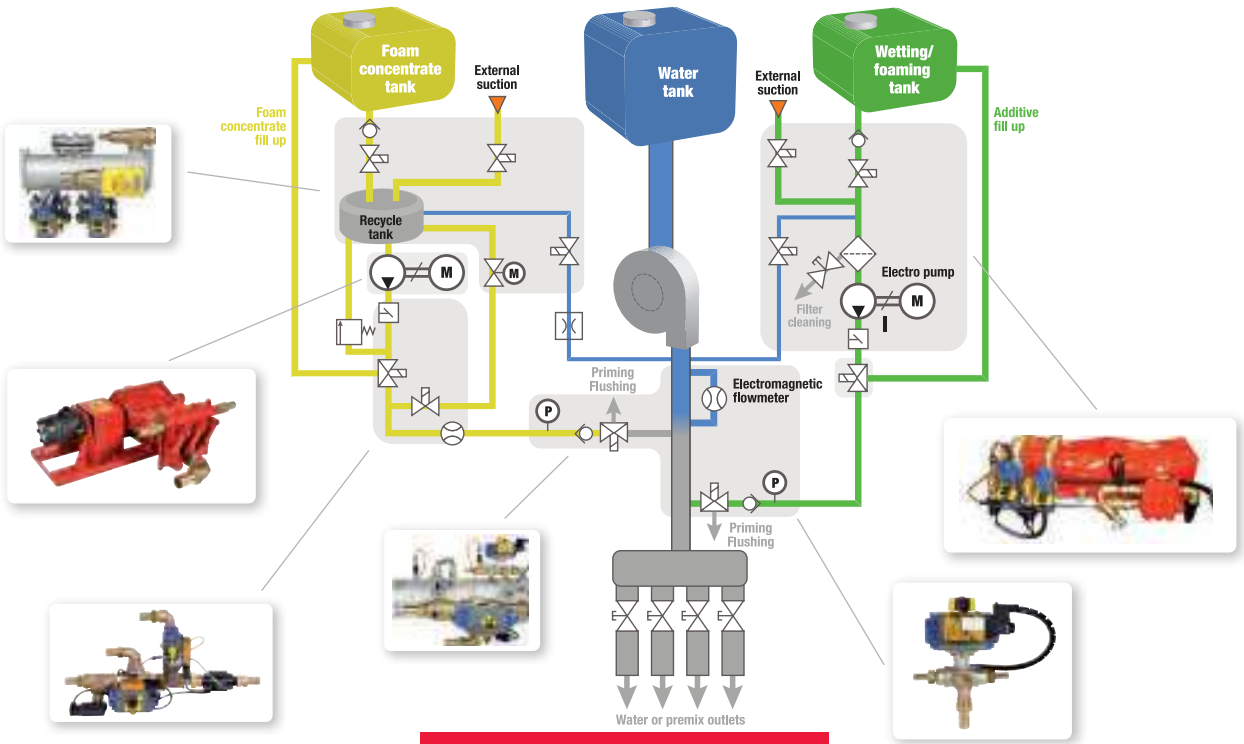
Van Truck

Water Pump < 12,000 lpm

Class AB

* by default	15		120		180		240		360
Product type	Wetting/ Foaming	+	Foam concentrate	OR	Foam concentrate	OR	Foam concentrate	OR	Foam concentrate
Pump flow range [1]	0.2 to 15 lpm		6 to 120 lpm		8 to 180 lpm		12 to 240 lpm		15 to 360 lpm
Pump type	Piston		Piston		Piston		Gear		Gear
Suction	-0.15 bar		-0.6 bar		-0.6 bar		-0.7 bar		-0.7 bar
Pressure	12 bar		16 bar		16 bar		16 bar		16 bar
Dosing range*	0.1 to 1%		1 to 6%		1 to 6%		1 to 6%		1 to 6%
Water flow range*	On demand		On demand		On demand		On demand		On demand
Power	elec 24V - 45A		Thermal/ Hydraulic		Thermal/ Hydraulic		Thermal/ Hydraulic		Thermal/ Hydraulic
Product viscosity compatibility	Newtonian		< 220 Mpa.s[2] at 20°C		< 220 Mpa.s[2] at 20°C		< 400 Mpa.s[2] at 20°C		< 400 Mpa.s[2] at 20°C
Flushing	Automated		Automated		Automated		Automated		Automated
Priming	Automated		Automated		Automated		Automated		Automated
External suction	Option		Included		Included		Included		Included

[1] Other pump flow rate ranges available on request - [2] At 375 s^{-1} shear rate following the norm EN 1568-3:2018



POSSIBLE OPTIONS

- Product tank filling
- Automatic frost protection
- Product transfer
- Product pumping
- Product tank blending
- External suction hose
- Tank level sensor
- Additional screen
- Motorisation
- Full integration on skid

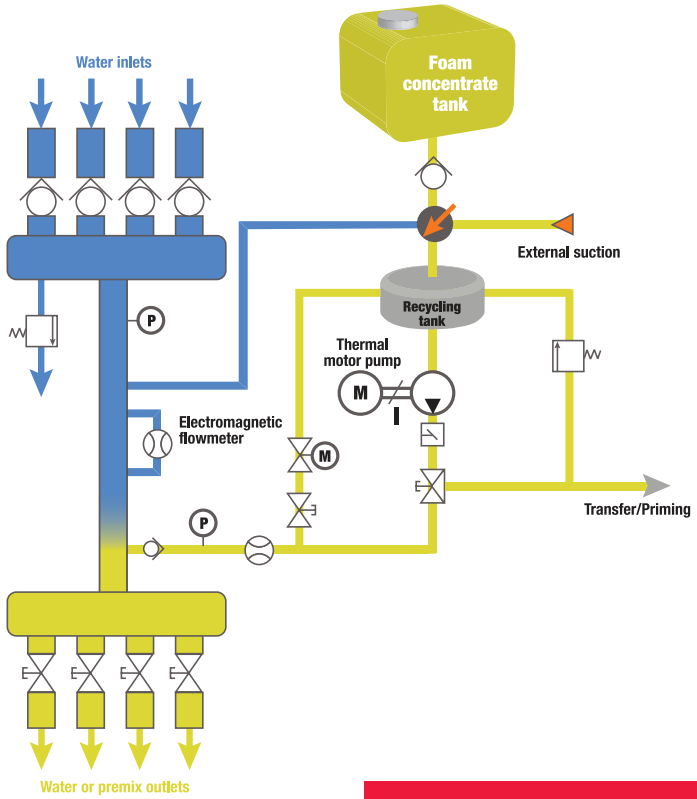
Stand-alone Skid

Class B

FEATURES

* by default	120	180	240	360	600
Pump flow range (1)	6 to 120 lpm	8 to 180 lpm	12 to 240 lpm	15 to 360 lpm	40 to 600 lpm
Pump type	Piston				Gear
Suction	-0.6 bar				-0.7 bar
Pressure	16 bar				
Dosing range*	1 to 6%				
Water flow range*	4": 200 to 5,000 lpm		5": 300 to 8,000 lpm	6": 400 to 12,000 lpm	
Inlet/outlet manifold	On demand				
Motorisation	Thermal				
Product viscosity compatibility	< 220 Mpa.s(2) at 20°C				< 400 Mpa.s(2) at 20°C
Flushing	Automated				
Priming	Automated				

(1) Other pump flow rate ranges available on request - (2) At 375 s^{-1} shear rate following the norm EN 1568-3:2018



POSSIBLE OPTIONS

- Product tank filling
- Product transfer
- Product pumping
- External suction hose
- Tank level sensor
- Floating battery charger

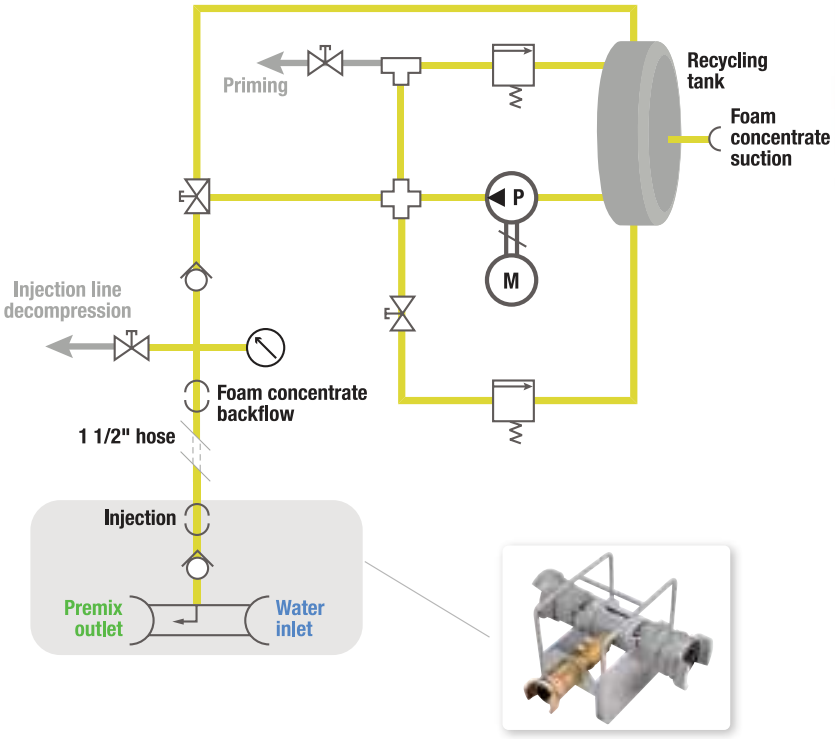
Stand-alone Skid

Class B

FEATURES

	120	180
Pump flow range	60 to 120 lpm	90 to 180 lpm
Pump type	Piston	Piston
Suction	-0.6 bar	-0.6 bar
Pressure	16 bar	16 bar
Dosing range	3 to 6%	3 to 6%
Motorisation	Thermal	Thermal
Product viscosity compatibility	< 220 Mpa.s(1) at 20°C	< 220 Mpa.s(1) at 20°C
Priming	Manual	Manual

(1) At 375 s^{-1} shear rate following the norm EN 1568-3:2018



POSSIBLE OPTIONS

- External suction hose
- Water line injector
- Product transfer
- Protective cover
- Electric start

Van Truck

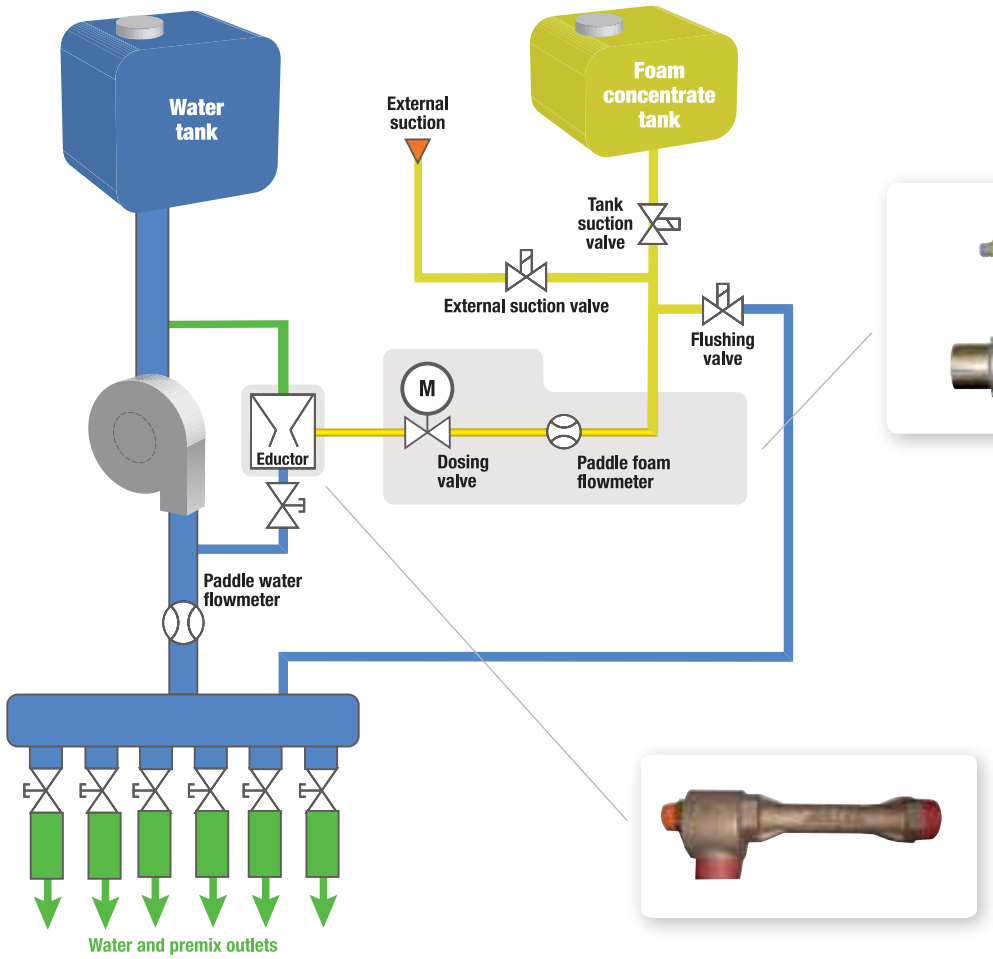
Water Pump < 20,000 lpm

Class B

FEATURES

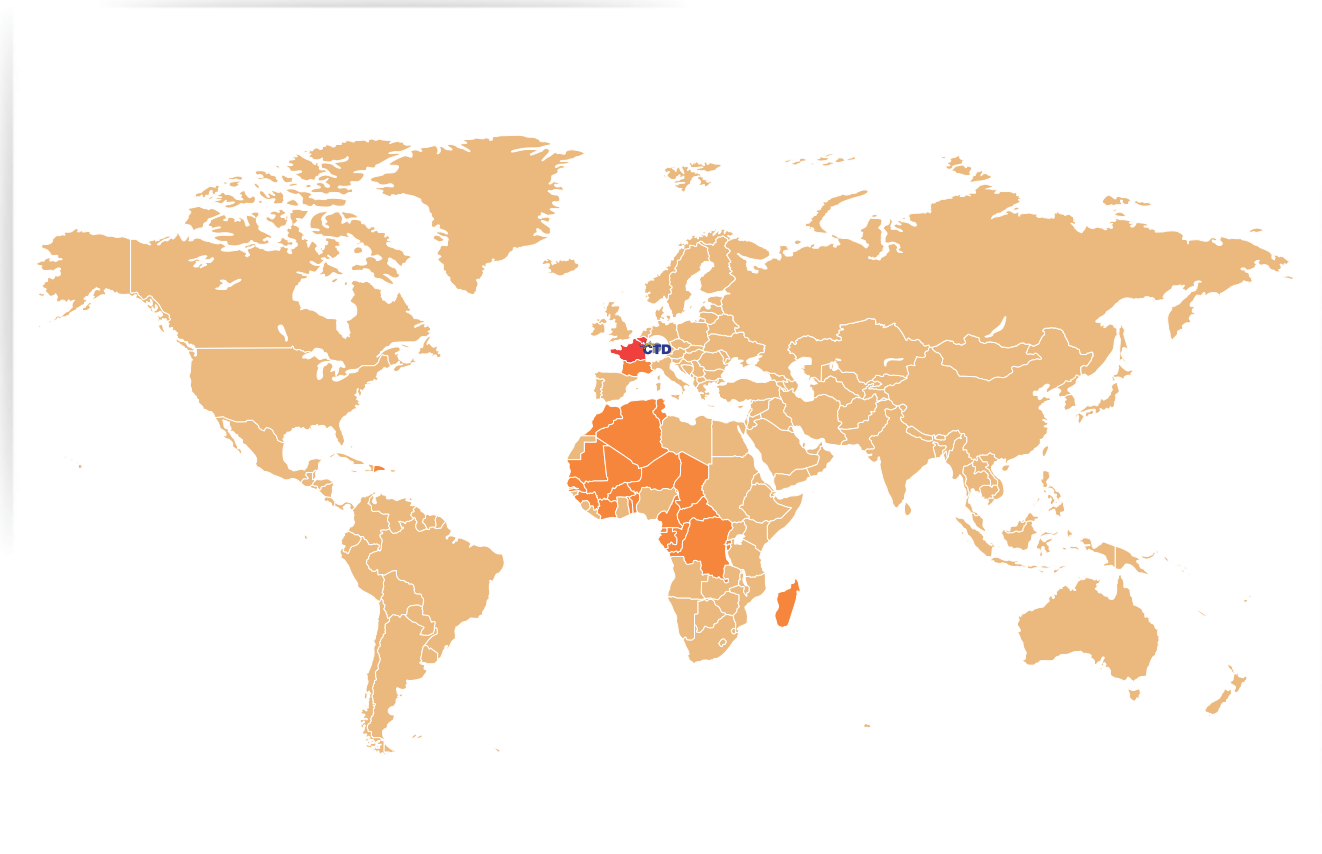
* by default	120	180	240	360	600
Foam concentrate flow range	12 to 120 lpm	18 to 180 lpm	24 to 240 lpm	36 to 360 lpm	60 to 600 lpm
Suction	-0.2 bar				
Pressure	15 bar				
Dosing range*	1 to 6%				
Water flow range*	3": 80 to 3,000 lpm	4": 150 to 5,000 lpm	4": 150 to 5,000 lpm	5": 250 to 8,000 lpm	6": 350 to 10,000 lpm
Product viscosity compatibility	< 120 Mpa.s[2] at 20°C				

[1] Other pump flow rate ranges available on request - [2] At 375 s^{-1} shear rate following the norm EN 1568-3:2018



POSSIBLE OPTIONS

- Additional screen
- External suction hose
- Pneumatic suction valve



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