

MORE POWER TO YOUR ELBOW: THE NEW 'OVAL FLAT DESIGN'.

The *FireDos* monitors are a new generation of monitors, not just by their appearance. And their special look has got a particular purpose:

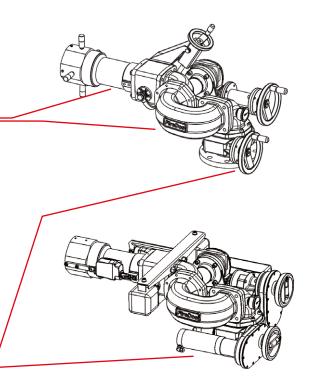
The elbows in their distinctive octagonal 'Oval Flat Design' are the result of a sophisticated, flow-optimised interior.

The special shaping ensures a homogenous flow pattern with low turbulence and reduces the pressure loss to a minimum. This way, the water jet reaches a maximum range.

A comparatively low pressure is already enough to achieve the specified maximum flow rates. This saves pump power.

MODULAR DESIGN.

- Every FireDos monitor consists of a pivot mounting and a separate nozzle (except type M1).
- Designed as a universal monitor, they suit all application purposes in always the same basic structure. This keeps selecting easy.
- Swivelling the pivot mounting and the optional nozzle adjustment is done either by <u>electric drives</u> or <u>manually</u>.
- For remote-control operation, high-performance controls made by *FireDos* are available. Alternatively, the electric drives can be integrated into an existing control system.
- Suitable nozzles and pipes for all types of extinguishing agent (see pages 6 and 7).
- Numerous type series for all flow rates. Up to 60 000 l/min (see pages 6 and 7)!





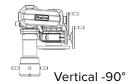
				ADJUSTMENT:																	
	electric	recree	electric	recrue	electric	recrue	electric	recess	electric	recrue	electric	recrued	electric	recrue	electric	recess	electric	recess	electric	recost	
Type series of pivot mounting: Flow rate in limin up to:	M1 2000	25	M2	40	00	M 40	oo ac	BO.		86	IC.	12 0	100	20 i		241		40	000	M1	
MPN = Multi Purpose Nozzle	•	•	•	•	•			•	•			•	•	•	•	•	•	•	•	•	
AMPN = Adjustable Multi Purpose Nozzle		•	•	•	•			•					•	•	•	•	•	•	•	•	
RFP = Removable Foam Pipe	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
FP = Foam Pipe			•		•			•					•	•	•						
FPD = Foam Pipe Deflector		•	•		•			•	•			•	•	•	•						
AFPD = Adjustable Foam Pipe Deflector			•		•			•					•	•	•						
JN = Jet Nozzle		•	•	•	•			•	•			•	•	•	•	•	•	•	•	•	I
MPN-NDC = Multi Purpose Nozzle - Nozzle Dry Chemical					•	•	•			•	•										I
AMPN-NDC = Adjustable Mubi Purpose Nozzle - Nozzle Dry Chemical					•	•	•		•	•	•										
NDC = Nozzle Dry Chemical			•																		

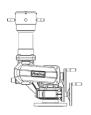
THE ADVANTAGES.

- The following swivelling ranges are available, depending on the version:
 - Horizontal ('Left/Right'): 360° (when using DC drives: 330°)
 - Vertical ('Up/Down') depending on the selected version, up to +- 90°
- Both swivelling axes (horizontal and vertical) have self-locking worm gears (except the hand-lever version). Therefore, the monitor cannot be misadjusted by an external force effect.
- All bearings are enclosed and lubricated for life. Their high-quality workmanship keeps the pivot mountings torsion-resistant and free from play.
- Fixed connection for the supply of foam agent or powder. For this purpose, the version "C" with a central supply line is available (see dashed line). The hose at the side just has to follow the vertical swivelling movement ('Up/Down') and will not be compromised by it.
- All type series are available with nozzles and pipes that allow <u>adjusting the extin-</u> <u>guishing agent flow rate</u> even during operation and at full operating pressure.
- Special nozzles allow <u>simultaneous</u> <u>discharge of foam and powder</u>.
- Compact dimensions and low height.

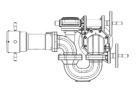


Vertical 0°





Vertical +90°



Horizontal 360°

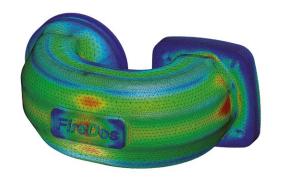




THE ADVANTAGES

- Only low operating force is required to swivel the monitor. This is to the operator's benefit in the case of manual use, and makes smaller electric drives sufficient in the case of a remote control.
- The components under pressure are designed for a testing pressure of 64 bar and are therefore extremely sturdy. They can also withstand a jerky application of extinguishing agent.
- Only low-wear seals with PTFE coating are used. Even after long down-times, only little breakaway force is required due to the low friction of the seals.
- The remote-controlled electric versions also have hand wheels and can therefore be operated manually. During remote operation, these hand wheels are disengaged automatically.
- When used on trailers, the smart design of the monitor ensures vertical stability even without any additional load, such as water tanks.
- All components through which the extinguishing agent flows consist of seawater-resistant aluminium to which an <u>extra hard coating</u> is added. This surface hardness of approx. 450 HV can withstand even abrasive components of the extinguishing agent.







■ PIVOT / NOZZLE COMBINATIONS.		Jet adjustable	ate able	al ment	c ment
NAME:	Extinguishing agent type:	Jet ad	Flow rate adjustable	Manual adjustment	Electric adjustment
MPN = Multi Purpose Nozzle Stepless adjustment between hollow jet and spray jet also during operation. Factory-set to a fixed flow rate depending on the available system pressure. This setting can be modified afterwards.	Water, premix	•		•	•
AMPN = Adjustable Multi Purpose Nozzle Stepless adjustment between hollow jet and spray jet possible during operation. Flow rate adjustable as well.	Water, premix	•	•	•	•
RFP = Removable Foam Pipe Supplement to Multi Purpose Nozzle (with/without adjustment of flow rate) to increase the expansion rate.	Water, foam				
FP = Foam Pipe For discharge of a straight foam jet. Factory-set to a fixed flow rate depending on the available system pressure. This setting can be modified afterwards.	Water, premix				
FPD = Foam Pipe Deflector Can supply a flat jet additionally to straight jet mode.	Water, premix	•		•	•
AFPD = Adjustable Foam Pipe Deflector Adjustment of flow rate and stepless deflector opening possible also during operation (remote control only).	Water, premix	•	•		•
JN = Jet Nozzle Focus on maximum reach.	Water				
MPN-NDC = Multi Purpose Nozzle - Nozzle Dry Chemical The powder is coated by the water jet and therefore achieves more reach. Stepless adjustment between hollow jet and spray jet also possible during operation (remote control only). Factory-set to a fixed extinguishing agent flow rate depending on the available system pressure.	Water, dry chemical	•			•
AMPN-NDC = Adjustable Multi Purpose Nozzle - Nozzle Dry Chemical The flow rate can be adjusted during operation (remote control only).	Water, dry chemical	•	•		•
NDC = Nozzle Dry Chemical Operation with powder only.	Dry chemical				

ADJUSTMENT:

	electric	manual	electric																		
Type series of pivot mounting:	M1		12	M3		M3C*		M4		M4C*		M5		M7		M7		M9		M12	
Flow rate in I/min up to:	2000	250	00	4000		4000		8000		8000		12 000		20 000		24 000		40 000		60 00	
MPN = Multi Purpose Nozzle	•	•	•	•	•			•	•			•	•	•	•	•	•	•	•	•	•
AMPN = Adjustable Multi Purpose Nozzle		•	•	•	•			•	•			•	•	•	•	•	•	•	•	•	•
RFP = Removable Foam Pipe	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
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^{*} Version "C" with central supply line for foam agent or powder, see page 4.

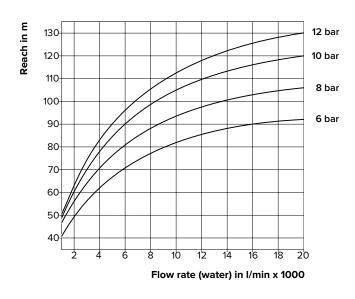
OPTIONAL VERSIONS.

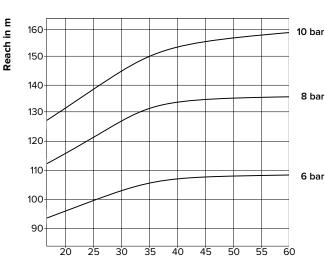
- LED headlights.
- Folding swivel, for folding down the monitor on a vehicle's roof.
- Swivelling unit, for swivelling between rest and working position.
- Oscillating unit, to initiate a horizontal oscillating movement of the monitor.
- **ATEX version**, for use in explosive areas.
- Elbow on the pivot mounting, for mounting the monitor on a horizontal supply line.
- Special colours.
- Protection cover.

We will be pleased to supply complete fire trailers equipped with *FireDos* monitors and/or *FireDos* proportioners, according to your individual requirements.

REACH.

- Both below graphs show the reach that Multi-Purpose Nozzles can achieve under the following conditions:
 - Nozzle adjusted to hollow jet.
 - No wind.
 - Pivot mounting swivelled to +30° vertically.





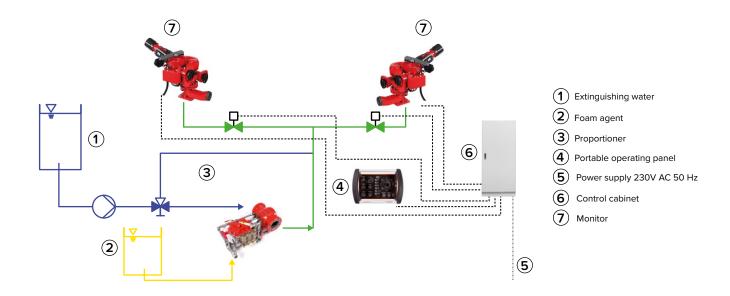
CONTROL SYSTEMS FOR EFFECTIVE FIRE-FIGHTING.

FireDos monitors fitted with electric drives can be upgraded by our perfectly tailored, multi-functional control systems.

- For all types of electric drives on *FireDos* monitors, according to your requirements:
 - Direct current drives -DC.
 - Single-phase alternating current -AC.
 - Three-phase alternating current drives -AC.
- Remote control of all monitor functions.
- For monitors installed outdoors, in buildings or on vehicles.
- Also suited for explosive areas.
- Plug-and-play systems: Tested at our factory, ready for instant use.
- Sturdy and easy-to-maintain design to guarantee readiness for operation under all conditions.
- PLC (Programmable Logic Controller) version with or without fieldbus, according to your requirements.

- Individual integration of external systems:
 - Processing of signals from fire detection systems.
 - Signal exchange with distributed control systems (DCS) and fire alarm centres.
 - Integration of CCTV (Closed Circuit Television).
- Highlights of PLC (Programmable Logic Controller) systems.
- Interfaces: Profibus (Process Field Bus), CAN bus and Ethernet.
- Up-to-date touch panels offering visualisation in WinCC.
- Monitoring of availability and functionality of the system.
- Explosion-proof version for hazardous zones 1, 2, 21 and 22 (gas and dust) also available.

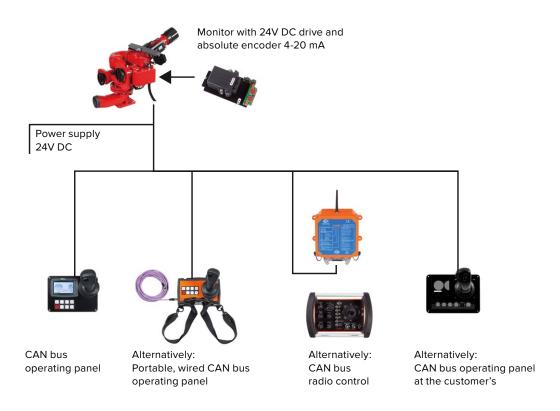
Control system for a stationary fire-extinguishing system with FireDos monitors.



- Highlights of the CAN bus control systems.
- Control commands to be entered optionally through:
 - fixed operating panels,
 - portable operating panels with a flexible cable connection,
 - portable radio transmitters,
 - existing operating panels at the user's, which do have a CAN bus interface.
- Variable speeds of the monitor's swivelling movements.
- Position transmission by high-resolution, IP 67-protected analogue absolute encoders.
- Jet and flow rate adjustment including the option to dial up to five pre-set values.

- Automatic, customer-programmable obstacle avoidance.
- Automatic, customer-programmable oscillating operation.
- Integration of water supply valves.
- Automatic folding into working or rest position and vice versa.
- Components tested for electromagnetic compatibility (EMC) and vibration/shock resistance.
- Protection class IP 67.

■ Control system for a *FireDos* monitor with 24V DC drives.



FIRE TRAILER FOR USE WITH WATER AND FOAM.

The *FireDos* fire trailers are available in various configurations. The maximum version may include a monitor, a proportioner and a foam agent tank. These components are connected by a flow-optimised pipework which allows flexible operation in different combinations by switching the corresponding valves:

- Proportioner use <u>only</u>, with remote foam discharge supplied through hose connections from the trailer.
- Monitor use <u>only</u>, without the proportioner, for discharge of water.
- With proportioner <u>and</u> monitor, for discharge of foam.

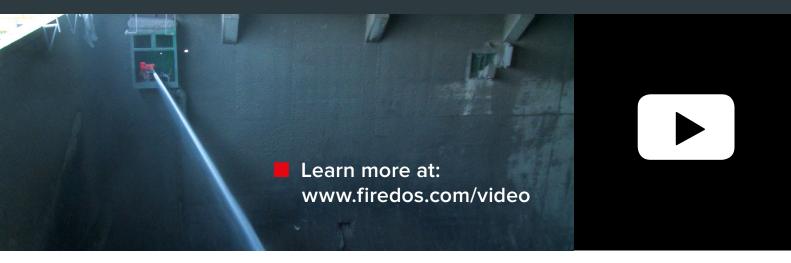
The fire trailer works without external energy and can therefore be used completely independently. Water supply is all that you need.

Further features:

- Plane and spacious platform.
- Height-adjustable tongue.
- Weight provision for additional load.
- Unrestricted *FireDos* proportioner and *FireDos* monitor type selection.
- IBC-type foam agent tanks, allowing easy exchange at any time when getting empty.







WE ARE HERE FOR YOU.

We are proven experts on our <u>proportioners</u> and <u>monitors</u> for fire-fighting, designed and developed entirely by us. We know the practice and use our experience to find the best technical solution for your requirements. Our products are used and relied on worldwide. And they are 'Made in Germany.'

We will be pleased to assist you prior to, during and after purchasing:

- Consulting during your planning.
- 3D drawing data to be included in your plans.
- Factory certificates in accordance with DIN EN 10204.
- Commissioning on site.
- Maintenance, also by offering maintenance contracts.
- Training for your staff (at your site or at ours).



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