



Robust linear heat detector
for demanding applications.

SecuriHeat ADW

ADW line type heat detector: Built for tough conditions



Transformers

Oil-filled transformers pose a significant fire hazard. In the event of a sudden increase in heat, the ADW system detects the danger and triggers an alarm at lightning speed – regardless of whether the system is located in a building or outdoors, or in a remote location or city centre.



Food industry

Due to hygiene regulations, surfaces used in food production have to be jet-cleaned at high pressures or cleaned with aggressive or corrosive chemicals. As a result, conventional heat or fire detectors may then experience limited functionality. This is not the case when using ADW. Its sealed sensing tubes made from food-safe steel can be cleaned at the same time without any problems, while the control unit can also be positioned outside the production area.



Car parks

Car parts can overheat, leading to major damages in combination with highly flammable fuel. However, electric cars are also not free from danger – their rapid increase in popularity also poses problems for car park operators when it comes to minimising the risk of fire. ADW offers robust, reliable and cost-effective protection against all types of fire.



Danger zones

Oxygen, fuel and heat are a particularly potent mixture. Due to the risk of explosions, fire detection systems have to be sensitive enough to trigger an alarm in good time, yet also robust enough to survive in harsh surroundings. ADW and its metal pipes are the perfect solution here. Furthermore, with the exception of the robust ATEX models, the active electrical system components are mounted outside the classified danger zone.



Historical buildings

Older, culturally important buildings are often more susceptible to fires than modern buildings. ADW brings fire protection and historic preservation together in perfect harmony. The pipes on the ADW system are inconspicuous and maintain the character of the building. They can be retrofitted easily in tight spaces. ADW monitors heat development across the entire building precisely and detects fires before they are able to spread.



Dirty and harsh environments

SecuriHeat ADW works reliably in places where other systems are unable to cope with difficult ambient conditions. The line type heat detector is insensitive to dirt and dust, is resistant to corrosive chemicals and is the ideal solution for outdoor use in all weather conditions. The system can even send warnings about unusual heat developments when the pipes are encased in material.

System overview: The right model for every risk profile



ADW 535-1, 1 channel



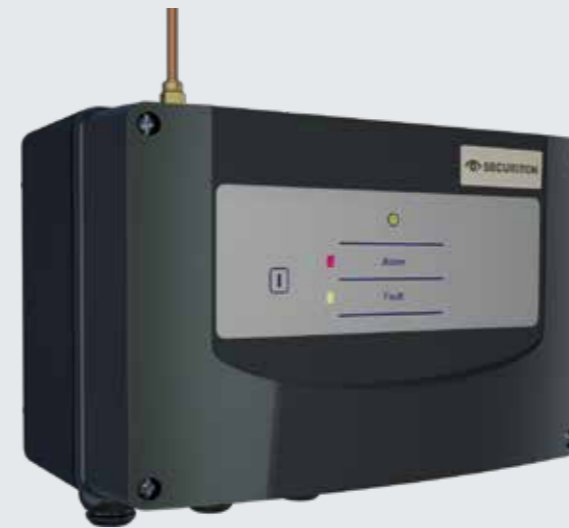
ADW 535-2, 2 channel

ADW 535 For sophisticated applications

- Immune to contaminants such as dust, dirt, etc.
- Optimal response behaviour with differential and maximum evaluation
- Applications: transformers, abattoirs, multi-storey car parks, food industry, loading ramps
- Approvals: VdS, UL, FM, ActivFire, KFI, SIL
- Total length of sensing tube: 2 x 200 m
- Protection type: IP 65
- Temperature range: Evaluation unit: -30 °C to +70 °C
Sensing tube: -30 °C to +300 °C

The benefits to you

- Simple: a detector for many different applications
- Reliable in extreme conditions: thanks to robust design and high IP protection
- No limits: reliable monitoring even in high-temperature conditions where other detectors reach their limits
- Extended monitoring area: with two independent channels up to 2 x 200 m



ADW 535-1 HDx, 1 channel



ADW 535-2 HDx, 2 channel

ADW 535 HDx For heavy-duty and ATEX applications

- Applications: paint shops, chemical industry, fuel depots and outdoor applications
- ATEX zones: zones 2 and 22
- Approvals: VdS, UL, FM, ActivFire, KFI, SIL, ATEX
- Total length of sensing tube: 2 x 200 m
- Protection type: IP 66
- Temperature range: Evaluation unit: -30 °C to +70 °C
Sensing tube: -30 °C to +300 °C

ADW 535 ATEX For ATEX applications

- ATEX zones: zone 1
- Response behaviour: differential and maximum evaluation
- Applications: chemical industry, fuel depots, chemical depots
- Approvals: VdS, ATEX
- Protection type: IP 65
- Temperature range: Evaluation unit: -20 °C to +40 °C
Sensing tube: -30 °C to +300 °C



ADW 535-1 ATEX, 1 channel

Maximum reliability: With double evaluation

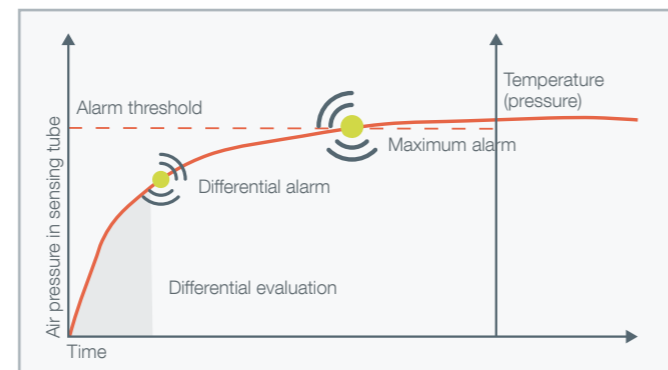
Detection with maximum and differential evaluation

Detection with maximum and differential evaluation

One detector, two detection options: With maximum and differential evaluation available in every application, the ADW system family boasts optimal response behaviour. With maximum evaluation, ADW triggers an alarm as soon as a pre-configured temperature threshold has been reached. This ensures that there are no excessive temperatures in the monitored object. Additionally, ADW also monitors the temperature with differential evaluation. In this case, ADW reliably triggers an alarm as soon as a rapid increase in temperature is detected – as is typical in the event of fire.

The operating principle: detecting fires using air pressure

The integrating SecuriHeat ADW line type heat detector combines a proven operating principle with the latest developments in sensor technology. A sensing tube filled with regular air is installed in the monitored area. A fully electronic pressure sensor permanently monitors the pressure in the sensing tube. The air pressure values are constantly monitored by the evaluation electronics and compared with the alarm criteria. Dynamic Heat Watch technology (DHW) also protects against false alarms resulting from brief increases in temperature caused by normal ambient conditions.



Alarm thresholds



Operating principle of ADW 535

Norms and ranges SecuriHeat ADW

EN 54-22

Response grades

A1I-GI

With SecuriHeat ADW, you can carry out projects according to all response grades (54 to 160 °C). ADW can be used in all surroundings, from indoor applications to outdoor applications in challenging conditions.

NFPA 72

Temperature classes

58 – 162 °C
135 – 324 °F

An ADW system installed according to NFPA 72 can be planned in line with the “Ordinary”, “Intermediate” or “High” classes.

The planning is supported by spacings of between 15 ft and 40 ft.

Sensing tube

2 x 200 m

Large monitoring area with two independent detection channels:
EN 54: metal max. 140 m / Teflon max. 125 m
NFPA 72: max. 200 m

Robust

IP 65

The high IP class allows ADW to be used in humid and contaminated environments. Thanks to sensing tubes made of Teflon or metal, countless different applications are possible – including in high-temperature environments.

Planning: Finished in record time

Securiton provides you with tools that make planning ADW systems a breeze.

Simple planning with ADW HeatCalc

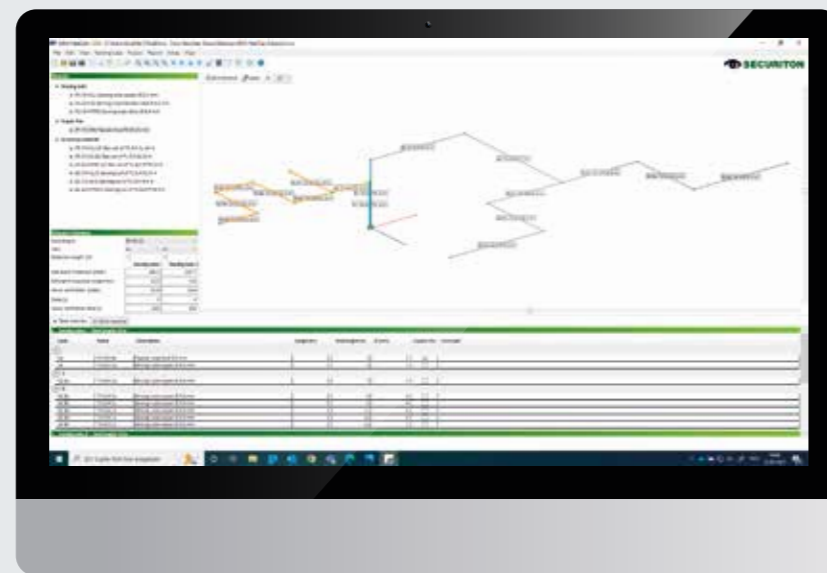
The ADW HeatCalc software from Securiton allows for security systems to be planned from a very early stage. With just a few clicks of your mouse, you sketch the pipe layout with the help of the program. The software ensures that your system meets all standards (EN 54-22, NFPA 72) and delivers the maximum benefit. ADW HeatCalc creates a comprehensive report for the system documentation. It includes the calculated device configuration and a part list for ordering the required components.

Efficient building planning with BIM

Securiton offers BIM models in Revit for its products – including SecuriHeat ADW. Planning is then more efficient: you can identify planning errors early on and BIM automatically calculates the system dimensions and costs. You can then benefit from savings in both planning costs and working hours.

The benefits to you

- Flexible planning for a variety of applications
- Easy planning allows for efficient procedures
- Simple material ordering thanks to complete material list
- Lower costs due to minimal outlay



ADW HeatCalc – mastering complexity

Configuration and commissioning: The fast way to optimal settings

Use the practical ADW Config software tool for commissioning and application-specific tailoring directly on the device.

Configuration – directly on the device or via software

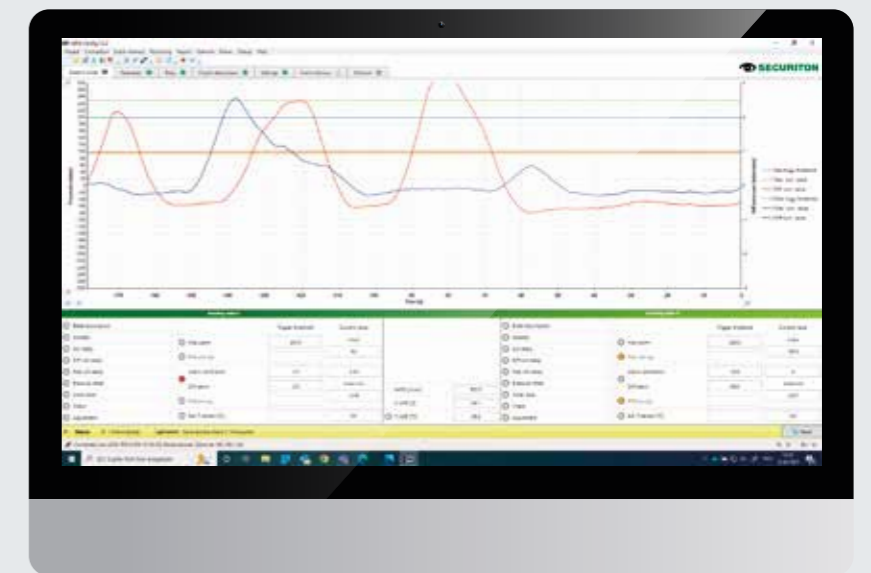
Simple systems are configured directly on the device without the use of a PC – EasyConfig takes you through the individual steps in a logical way. The practical ADW Config software tool is used for more complex systems and specific adaptations. Its comprehensive analysis functions and setting options ensure the safe, economical operation of the system. As a practical plus, the device configuration calculated by ADW HeatCalc can be saved as a file directly in the device via ADW Config.

Get away from complexity – with our ADW tools

- ADW Config software for complete device setting and analysis
- ADW HeatCalc software for efficient planning, VdS-approved
- BIM models for smart building planning
- Config over Line for central configuration, commissioning and maintenance without physical access to the device

The benefits to you

- Full access to the ADW system with ADW Config
- Fast commissioning
- Simple, cost-effective maintenance and analysis



ADW Config – simple configuration and analysis

Sensing tube: Robust and versatile

ADW heat detectors can be used in a wide variety of applications. As a result, the sensing tubes have to be able to meet various requirements. Thanks to the different pipe materials, ADW offers the perfect solution for every application.



Teflon

Simple installation: available on rolls of up to 125 metres long, Teflon pipe is flexible and can be laid quickly and easily with few connection pieces – just like an electric cable. Applications: chemical industry, aggressive environments, multi-storey car parks, standard applications, resistant to many chemicals.



Copper

Can be laid flexibly and is available as rolls or pipes. For applications in industrial surroundings, loading ramps, transformers and tunnels.



Stainless steel

Stainless steel sensing tubes are available as pipes and can be laid flexibly. Applications: food industry, high temperatures, environments with strict hygiene standards that are cleaned with steam or aggressive agents.

The benefits to you

- Meets requirements: flexible material selection for different installations
- Simple mounting: wide range of accessories
- Broad application scope: thanks to different sensing tube materials
- Extremely robust: thanks to high IP protection
- Reliable detection: even in difficult environments

Demanding applications: Every situation under control

ADW not only offers the necessary protection in standard applications. It is also the perfect solution in difficult conditions. ADW comes into play wherever standard fire detection reaches its physical limits.



Rodent protection

Line type heat detectors are often exposed to attacks from rodents such as mice, martens or rats. The ADW sensing tube (copper or steel) is completely resistant to such damage. The result is fewer fault messages, false alarms and repairs.



Lightning resistance

Electrical interference all the way up to lightning strikes can disturb or even completely interrupt the operation of exposed active system components. ADW is completely immune against electromagnetic interference. Full lightning protection is ensured by the earthing of the sensing tube. In practice, you then benefit from a virtually unlimited service life of the system.



Protection against explosions

With its metal sensing tube, the ADW 535 HDx model is the ideal choice for monitoring potentially explosive areas. The system offers reliable protection in distilleries, warehouses and any location where flammable materials are stored or handled.

Complete range of accessories: The right components for every application

Industrial applications

Accessories for harsh environments.

Copper range:



Optional modules

Functional enhancement for line type heat detectors.



Standard applications

Securiton offers a comprehensive range of accessories for a complete installation.

Teflon range:



Special applications

Food industry, high temperatures, for the demanding protection of premises.

Stainless steel range:



Accessories for Ex zones

For increased requirements in potentially explosive environments. Copper or stainless steel range also possible.

ATEX range:



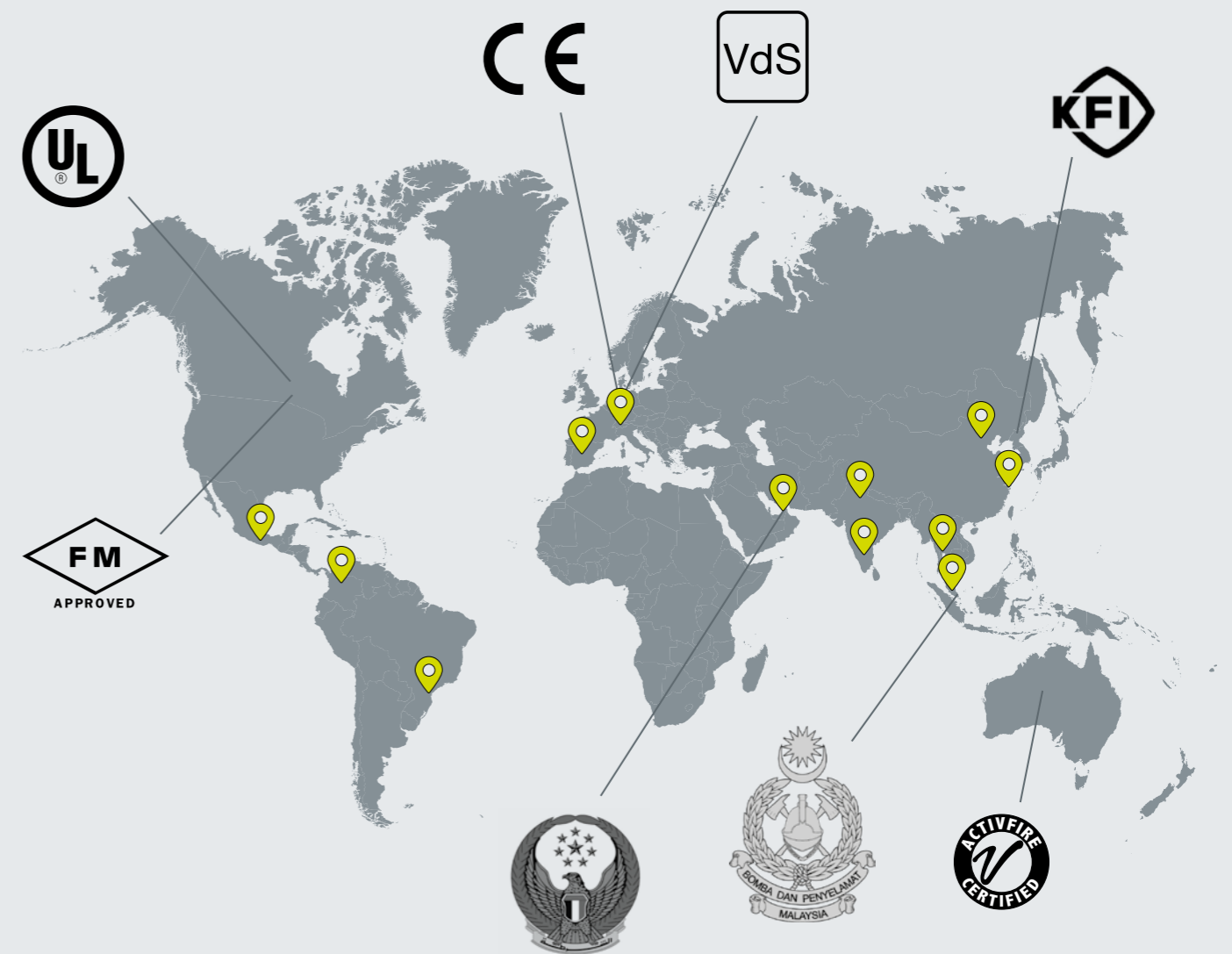
Globally successful: With universally accepted certifications

Global product tests and certifications give SecuriHeat ADW line type heat detectors universal market access and world-wide applications.

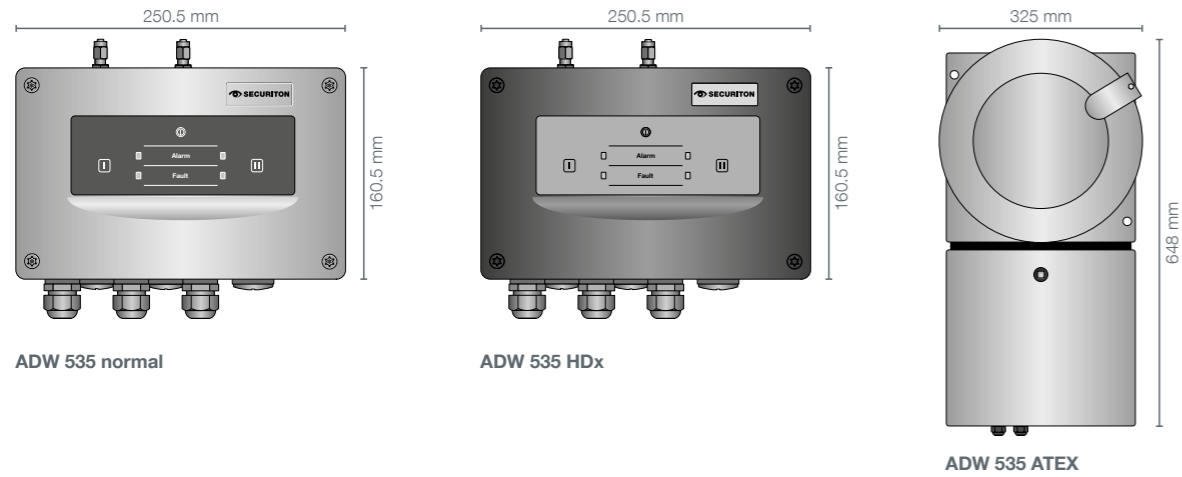
SecuriHeat ADW line type heat detectors speak many different languages: globally applicable standards such as NFPA 72, FIA Code of Practice, VDE 0833-2, TS 54-14, BS 5839-1, etc. can be met in all confidence when planning a system.



Securiton maintains a global presence. Our head office is in Switzerland, with subsidiaries or local employees in Mexico, Brazil, Spain, India, Malaysia, China, Colombia, Thailand and Dubai.



Overview of fire alarm control panels: SecuriHeat ADW



	ADW 535	ADW 535 HDx	ADW 535 ATEX
Product details			
Channels	1/2	1/2	1
Detection unit	Differential pressure sensor		
Operating principle	integrating line type heat detector		
Programming (PC tool)	ADW Config		
Configuration	EasyConfig		
Calculation software	ADW HeatCalc		
Applications	Vehicle storage halls, loading ramps, chemical industry, food industry, historical buildings	Additionally in ATEX zones, such as fuel depots and chemical systems	Additionally in ATEX zones, such as fuel depots and chemical systems
ATEX zones (evaluation unit)	N/A	Zones 2 and 22	Zone 1
Approvals	VdS, UL, FM, ActivFire, EAC, SIL	VdS, UL, FM, ActivFire, EAC, SIL, ATEX	VdS, ATEX
EN 54-22 norm	Metal: Classes A11, A2I, BI, CI, DI, EI, FI, GI Teflon: A11, A2I, B		
NFPA 72 / FM 3210 / UL 521	Metal: Ordinary, Intermediate, High Teflon: Ordinary	Metal: Ordinary, Intermediate, High Teflon: Ordinary	N/A

	ADW 535	ADW 535 HDx	ADW 535 ATEX
Product details			
Supply voltage range	EN 54: 9.0 – 30 VDC FM/UL: 10.6 – 27 VDC	EN 54: 9.0 – 30 VDC FM/UL: 10.6 – 27 VDC	EN 54: 9.0 – 30 VDC
Power consumption (24 VDC) 1-channel device	Normal operation: 35 mA Self-test: 210 mA (ca. 180 sec)	35 mA 210 mA (ca. 180 sec)	35 mA 210 mA (ca. 180 sec)
Power consumption (24 VDC) 2-channel device	Normal operation: 43 mA Self-test: 230 mA (ca. 180 sec)	43 mA 230 mA (ca. 180 sec)	43 mA 230 mA (ca. 180 sec)
Sensing tube length per channel	EN 54-22 (metal/Teflon) NFPA 72 (metal/Teflon)	10–140 m / 10–125 m 10–200 m / 10–150 m	10–140 m / 10–125 m 10–200 m / 10–150 m
Sensing tube monitoring	Yes	Yes	Yes
Relay contacts	2 (1 × alarm, 1 × fault)	4 (2 × alarm, 2 × fault)	2 (1 × alarm, 1 × fault)
Interfaces	Ethernet	Ethernet	Ethernet
Optional modules	2 × RIM 36, SIM 35, XLM 35		
Operating temperature/humidity	Evaluation unit: –30 to +70 °C / 95% RH	–30 to +70 °C / 95% RH	–20 to +40 °C / 95% RH (ATEX zone)
	Sensing tubes (depending on material)	Metal: –40 to +300 °C / 100% RH Teflon: –40 to +85 °C / 100% RH	
Housing	Protection type	65	66



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