ANALYTICAL FILTERS ENGINEERING

MAESTROGUARD®
Analyser Protection & Sample Integrity

COMPACT FILTER / CF SERIES

CF-30

Compact, Versatile Filtration for Reliable Analyzer Protection

FOR GAS & LIQUID APPLICATIONS

APPLICATION

Designed for both gas and liquid sample-conditioning applications, the MaestroGuard® CF-30 provides reliable upstream contamination control. Its compact 316L stainless steel housing helps protect analyzers, regulators and downstream components.

The installed filter medium determines the function, from particle removal to effective aerosol coalescence.

TECHNOLOGY

ONE HOUSING. APPLICATION-MATCHED PERFORMANCE.
The installed medium determines the function: borosilicate microfibre for high-efficiency particle capture or aerosol coalescence, and sintered SS316L for durable metallic particle filtration.



CF-30 product illustration; specifications per approved assembly.

160 bar	316L	MEDIA
Maximum rated pressure	Stainless steel housing	Media-selected performance

PARTICLE FILTRATION

Application-matched media capture dust and suspended solids before they reach sensitive instruments.

AEROSOL COALESCENCE

Coalescing-grade microfibre promotes fine mist capture and droplet growth for effective downstream drainage.

OPTIONAL MAESTROINERT™ SURFACE TECHNOLOGIES

MI-2010 protective finish • MI-2020 low-adhesion surface • MI-2030 inert SiOx

Engineered for Sample Integrity.

Developed & Manufactured by Analytical Filters Engineering Kft.

Technical specifications

MaestroGuard® CF-30 | One housing, media-selected filtration performance

CONSTRUCTION & MATERIALS

Housing material	Stainless steel AISI 316L / EN 1.4404
Filter media	Borosilicate microfibre / sintered SS316L / stainless mesh
Borosilicate binder	PVDF- or SI-bonded microfibre, according to selected element
Filtration duty	Particle filtration or aerosol coalescence, defined by the medium
Connections / drain ports	1/8 NPT female; 2-port or 4-port (with drains)

MEDIA-SPECIFIC FILTRATION

BOROSILICATE MICROFIBRE

High-efficiency depth media for particle removal or fine-aerosol coalescence. Performance depends on the selected grade.

SINTERED STAINLESS STEEL

Durable metallic elements for demanding particle duty. Select filtration grade and pressure drop to suit the service.

OPERATING PARAMETERS

Pressure rating*	Up to 160 bar for the approved complete assembly
Temperature limit*	Specified by the selected media, seals and approved assembly
Sample flow / pressure drop	Application-specific; select by element grade and pressure drop
Dimensions / outline	Body Ø36 mm; overall length 79 mm; see page 4
Port arrangement	2 ports (inlet/outlet) or 4 ports (including drains)

DOCUMENTATION & OPTIONS

Material certificate	EN 10204 Type 3.1 documentation upon request
ATEX / PED / CE	Status and marking per approved CF-30 documentation
MaestroInert™	MI-2010 / MI-2020 / MI-2030 options, as suitable for service

* Pressure and temperature ratings are subject to the approved assembly and selected media/seals.

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Selection & ordering data

Configure the same CF-30 housing for the application - simply select the appropriate filter medium.

ORDERING CONFIGURATION

CONFIGURATION STRUCTURE

CF-30-316L-[PRESSURE]-[SEAL]-[MEDIA]-[GRADE]-[FINISH]

Final part number and available variants are confirmed with the AFE quotation.

CONFIGURATION FIELDS

01 Filter type	CF-30 compact stainless steel filter
02 Filter function	Particle filtration or coalescence, selected by element
03 Housing material	AISI 316L stainless steel
04 Element material	Borosilicate microfibre / sintered SS316L / stainless mesh
05 Binder (if applicable)	PVDF / SI; confirm process-media compatibility
06 Filtration grade	Specify filtration grade for particle or aerosol duty
07 Seals / finish	Service-compatible seal; optional MaestroInert™ finish

MAESTROINERT™ SURFACE TECHNOLOGIES

MI-2010	Protective surface treatment for demanding wet service
MI-2020	Hydrophobic / oleophobic low-adhesion surface
MI-2030	Inert SiOx for sensitive trace-gas measurements

SERVICE & ACCESSORIES

Replacement element	Specify medium, binder and filtration grade
Seal kit / bracket	Specify correct CF-30 configuration and seal material
Documentation	Configuration-specific material and conformity documents

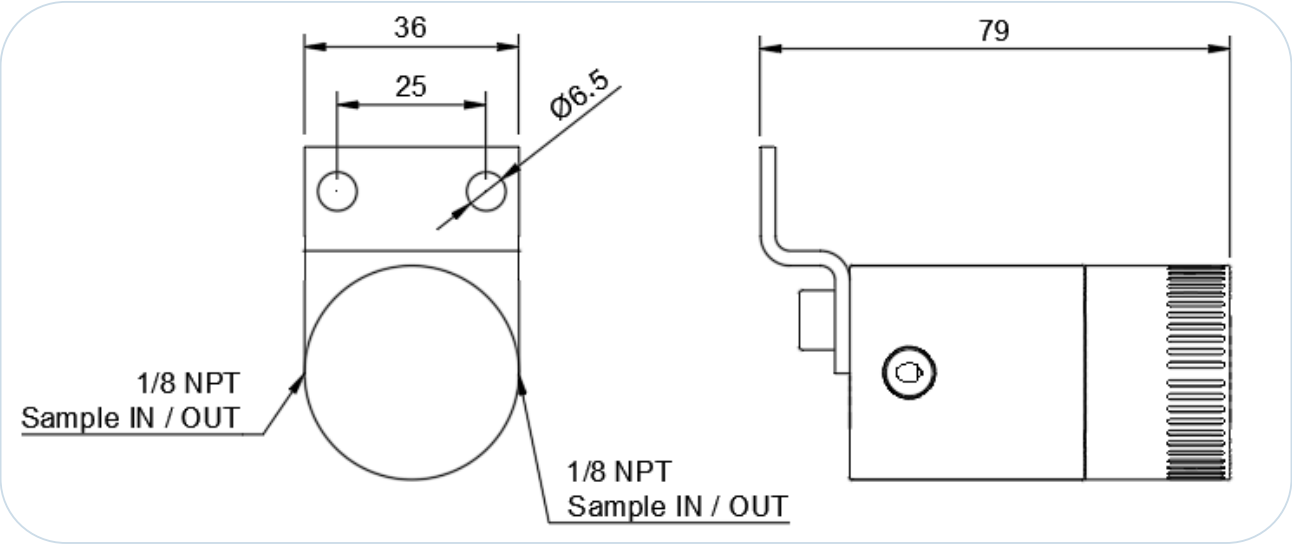
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Dimensions & interfaces

Compact mechanical envelope. Flexible connection configurations.

CF-30 REFERENCE DIMENSIONS



MECHANICAL SPECIFICATIONS

Overall length	79 mm overall; 64 mm housing section
Body diameter	Ø36 mm
Mounting bracket	36 mm width; 25 mm hole spacing; 2 × Ø6.5 mm holes
Connection threads	1/8-27 NPT female – all process and drain connections
Port configurations	2 ports: inlet + outlet | 4 ports: inlet + outlet + drains

APPLICATIONS & INSTALLATION

Natural gas • Refinery • Biogas • Hydrogen • Analyzer shelters • OEM systems

Particle or aerosol duty is determined by the installed filter medium. For coalescing applications, provide a suitable drain path and flow orientation.

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