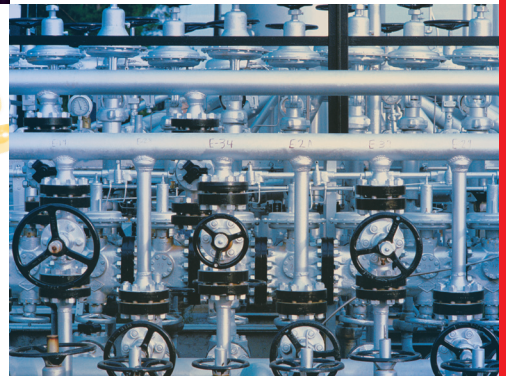
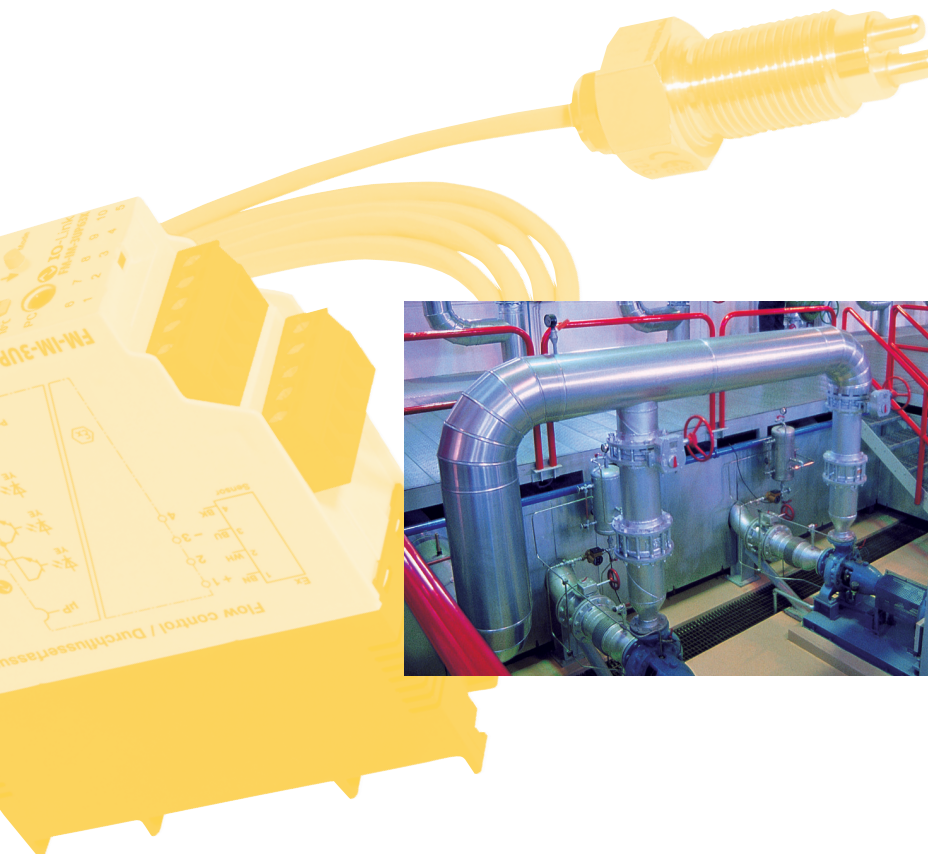


TURCK

Industrial
Automation

**INTELLIGENT
SIGNAL
PROCESSORS
FOR
FLOW SENSORS**



Sense it! Connect it! Bus it! Solve it!

The new generation of flow modules FM/FMX

Intelligent signal processors for flow sensors

Signal processors with diagnostic functions and IO-Link/HART® interface

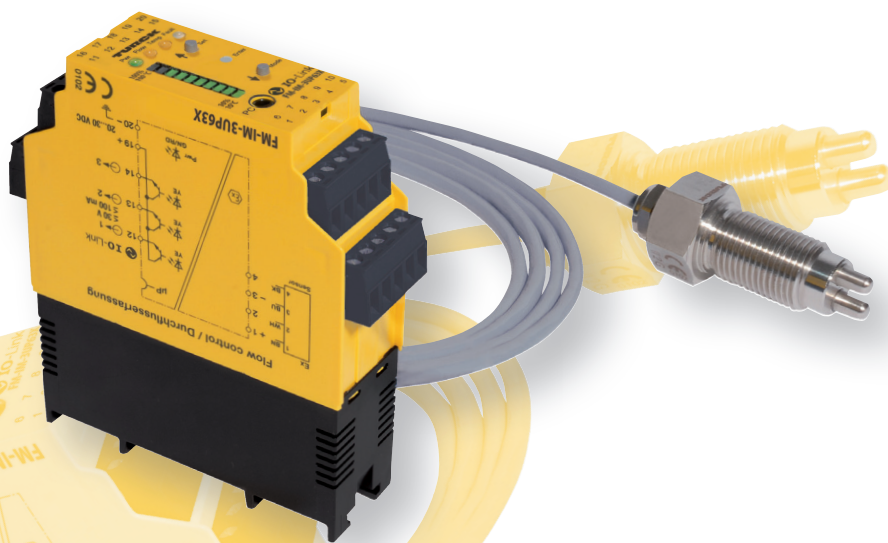
The new flow modules of the FM-IM series combine easy handling and high functionality with many connection possibilities, adapted to the latest requirements.

All TURCK flow sensors of the FCS (immersion) and FCI (inline) series can be operated at the new modules. The sensors working on the calorimetric principle, detect the flow speed as well as the media temperature continuously.

The modules are available in the approved IM DIN rail design and are easily configured either via pushbutton or via IO-Link/HART® interface. The user can adjust the switchpoint with the innovative quick-teach function.

Not only wire-break, short-circuit or the operating range are monitored, the diagnostic results are also indicated via LED and a 10-segment LED band, if required.

Thanks to its multifunctionality, the FM-IM series is easily integrated in any automation system. There are many application possibilities, such as run-dry protection of pumps or monitoring of coolant circuits and inerting systems.



High functionality



No complicated adjustments of upper and lower limit values. Switchpoints, flow and temperature ranges are easily set up, thanks to the quick-teach function and the intuitive menu navigation.

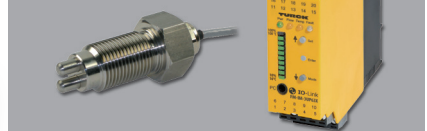
Simple configuration



Overview of flow modules

Dimension drawing

Non-Ex area



Ex area



n/s
 /m
 °C

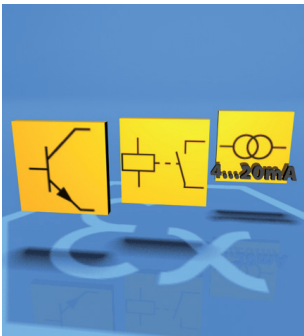


HART®
 COMMUNICATION PROTOCOL

 **IO-Link**

type code	20...30 VDC	20...125 DC/ 20...250VAC	Flow (Out 1)	Temperature (Out 2)	Fault signal (Out3)	IO-Link	HART®
M-IM-3UP63X	✓					COM (PC), Out 1	–
M-IM-3UR38X		✓				COM (PC)	–
M-IM-2UPLi63X	✓					COM (PC), Clamp 12	–
MX-IM-3UP63X	✓					COM (PC), Out 1	–
MX-IM-3UR38X		✓				COM (PC)	–
MX-IM-2UPLi63X	✓					–	COM (PC), Out 1

Large variety of device types



The FM series features six devices. Three devices for the connection of non-Ex area sensors (FM) and three for Ex area sensors (FMX). They are equipped with standard PNP transistor outputs, relay outputs as well as analog 4...20 mA current outputs.

Comprehensive display and diagnostics of values



The user can choose between local as well as different remote diagnostic functions. For example, wire-break, short-circuit, monitoring of the operating range and display of flow speed and media temperature.

TURCK flow sensors and modules combination possibilities

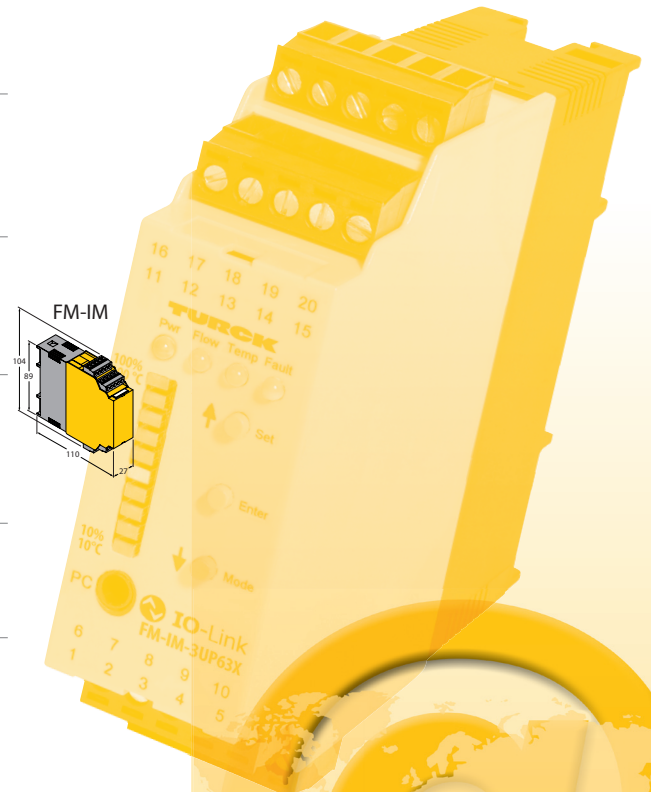
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**Industrial
Automation**

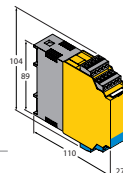
Flow sensors

Flow-modules

Type code		Ex area		Medium		Housing	
Connection type	Connection type	zone 0	zone 1	liquid	gaseous	immer- sion	inline
Cable	M12 x 1						
FCS-...-NA	FCS-...-NA-H1141			✓		✓	
FCS-...-NA/A	FCS-...-NA-H1141/A				✓	✓	
FCI-...-NA-H1141				✓			✓
FCI-...-P-NA				✓			✓
FCI-...-P-NA-H1141				✓			✓
FCS-...-NAEX	FCS-...-NAEX-H1141		✓	✓		✓	
FCS-...-NAEX/A	FCS-...-NAEX-H1141/A		✓		✓	✓	
FCI-...-NAEX-H1141			✓	✓			✓
FCS-...-NAEX0	FCS-...-NAEX0-H1141	✓		✓		✓	
FCS-...-NAEX0/A	FCS-...-NAEX0-H1141/A	✓			✓	✓	



FMX-IM



www.turck.com



To get all product information, just scan the QR code with a smart-phone or webcam

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