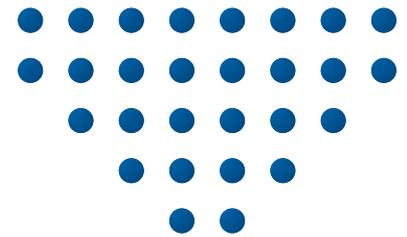


Sensors

ETF



HVAC CONTROLS AND POWER

All-purpose Temperature Sensors

ETF is a complete series of temperature sensors designed for temperature control and monitoring in heating and cooling systems.

All common sensor types are available in a wide range of mechanical types. The specific requirements of individual applications can therefore always be met.

The ETF series also contains sensors dedicated to the temperature controllers from OJ Electronics. ETF sensors thus provide optimum temperature control.

ETF sensors are designed to provide our customers with an advantageous combination of high quality, accurate measurement and low life cycle costs.

ETF FUNCTIONS

Wide Temperature Range

ETF sensors are available for measuring temperatures between -50 and $+500^{\circ}\text{C}$. A suitable sensor can therefore always be found for any specific application.

Many Mechanical Types

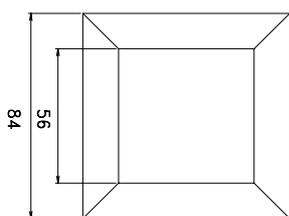
Thanks to the many mechanical types, a single supplier can provide ideal sensors for temperature measurement in everything from large tank installations and cold-storage facilities to residential living rooms. Sensors can be custom-built to order.

Many Sensor Types

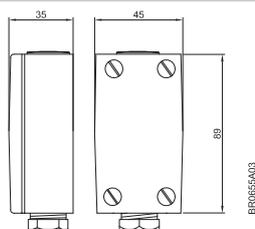
ETF sensors are available with NTC, PTC, PT100, PT1000 and digital elements. It is therefore always possible to choose a type to suit the particular controller or thermostat.

Fast Delivery

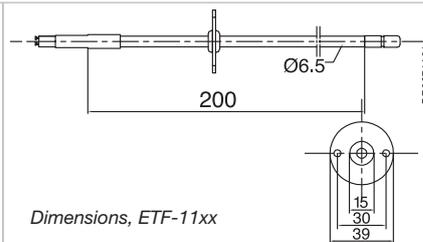
Most sensor types are kept in stock and delivered from day to day. This makes OJ Electronics a valuable supplier for many companies in the HVAC sector where delays and fines are not uncommon.



Dimensions,
ETF-7xx

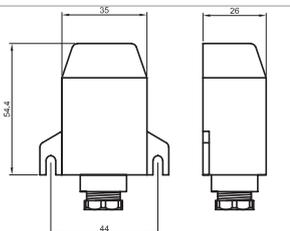


Dimensions, ETF-11xx

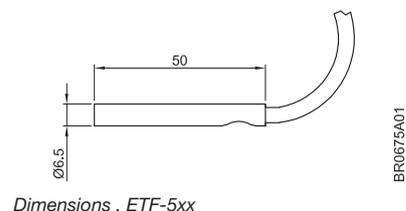


BR0836A01

Dimensions, ETF-9xx



Dimensions,
ETF-17xx



Dimensions, ETF-5xx

ETF FUNCTIONS

Sensor Cable Installation

The sensor cable to the external controller may be up to 50 m in length. The sensor cable must be kept separate from mains-carrying cables as voltages may be produced that can interfere with temperature measurement and damage the controller.

CE MARKING

The ETF sensors meet the requirements contained in the following directive:

MACHINERY DIRECTIVE
89/392/EEC

PRODUCT PROGRAM

SENSOR CODE	XX:								
ETF-AAXX	12	22	44/55	88	95	97	98	99	ASK FOR CODE NO.
TEMPERATURE RANGE °C									
SENSOR ELEMENT	NTC	NTC	NTC	NTC	PTC	PT100	PT1000	NTC	DIGITAL
Floor sensor, IP65									
ETF-1XX	-20/+280	-40/+120	-20/+70	-50/+125	-40/+125	-50/+125		-20/+70	
Sensor/aggressive fluids, IP54									
ETF-3XX		-40/+120			-40/+125	-50/+165			
Sensor/liquids, IP54									
ETF-4XX		-40/+120	-20/+70		-40/+125	-50/+165	-50/165		
Sensor/machine parts, IP54									
ETF-5XX		-40/+120	-20/+70		-40/+125	-50/+165	-50/165		-30/+70
Surface sensor, IP54									
ETF-6XX		-40/+120	-20/+70		-40/+125	-50/+165	-50/165		
Outdoor sensor, IP54									
ETF-7XX			-20/+70	-20/+70	-20/+70	-20/+70	-20/+70	-20/+70	
Sensor/liquids, IP54									
ETF-8XX		-40/+120			-40/+125	-50/+165	-50/+165		
Room sensor, IP20									
ETF-9XX			-20/+70		-20/+70	-20/+70	-20/+70	-20/+70	-20/+70
Duct sensor, IP43									
ETF-11xx			-20/+70		-30/+80	-50/+165	-50/+165	-20/+70	-30/+70
Industrial sensor, IP54									
ETF-13XX					-40/+125	-50/+500			
Pipe sensor, IP43									
ETF-16-XX			-50/+70		-50/+70	-50/+70	-50/+70		-30/+70
Outdoor sensor IP54									
ETF-17XX			-40/+70		-40/+70	-40/+70	-40/+70		-30/+70
External attachment, IP54									
ETF-18XX					-40/+125			-20/+70	
Wall sensor, IP65									
ETF-27XX			-40/+70		-40/+70	-40/+70	-40/+70		
Industrial sensor for high temperatures, IP54									
ETF-29XX		-40/+120			-40/+125	-50/+165	-50/+165		