

## Description

The economical AFX Analog Field Indicator accepts a 4-20mA input from a process measurement device such as a flowmeter or temperature transmitter, and displays a proportional, 0-100% analog gauge readout (special ranges also available).

Rugged and vibration resistant, the loop-powered AFX is accurate to within  $\pm 2\%$  of input span. Its large, easy-to-read, 2 1/4" (57 mm) dial face comes with 3-, 4-, or 5-segment, standard factory scaling, or can be custom scaled with engineering units and labeling. It can be ordered in a low dome, glass cover explosion-proof enclosure, or mounted on top of another Moore Industries 2-wire hockey-puck temperature transmitter in a high-dome, glass cover explosion-proof enclosure, useful for on-site display of temperature readings.

## How to Order an AFX Dial Face

To order one of the factory-standard dial faces, use the bold face data from the "Output" field of the Ordering Specifications table on the back of this data sheet. An example of a typical model number appears at the end of the table.

**To order a custom dial face**, use the REMARKS box of your Preferential Order Form. Enter the minimum display, the values for the "major tick marks" (dial face divisions) to be used, the maximum display, and finally, the engineering units for the application. Preface the entry on the order form with the symbol "\$". For example, "\$50, 75, 100, 125, 150, GPH".

**Step 1.** Divide the application's display range (maximum display minus minimum display) by 3, 4, and/or 5 (the custom dial face segment options). Label the answer to this equation "n". Choose the segment option that yields a whole number (or closest to a whole number) when used to divide the display range.

**Example:**  $150 - 50 = 100$ ,  $100 \div 3 = 33.33$ ,  $100 \div 4 = 25$ , and  $100 \div 5 = 20$

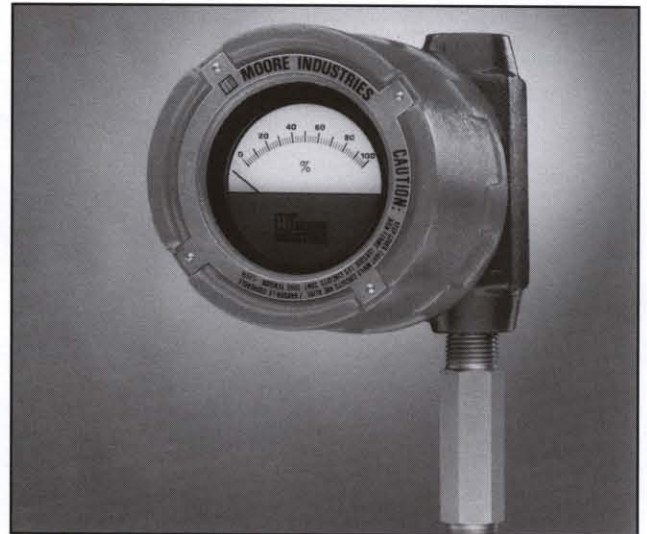
The -4 or the -5 option is a good choice.

**Step 2.** Determine the values for the "major tick marks" on the dial face by adding consecutive multiples of n to the application's display minimum.

Start with *minimum + (n X 1)*. Add 2 multiples for the -3 option, 3 multiples for the -4 option, and 4 multiples for the -5 option. The results are the values for the tick marks on your custom AFX dial face.

**Example:** Using the range from step 1 (50) with the -4 option, n would equal 25.  $50 + (25 \times 1) = 75$ ,  $50 + (25 \times 2) = 100$ , and  $50 + (25 \times 3) = 125$

REMARKS: \$50, 75, 100, 125, 150, GPH



**Economical and rugged**, the AFX mounts alone or "piggy-back" on top of a Moore Industries 2-wire hockey-puck transmitter.

## Features

- **Large, easy-to-read dial face.** The AFX indicator features a 2 1/4" (57 mm) diameter face with a 2" (51 mm) scale for easy readability.
- **Perfect for field-mounting.** Tough under adverse conditions, the AFX field-mounts alone in a rugged, explosion-proof enclosure, or on top of another two-wire transmitter in a slightly larger explosion-proof enclosure.
- **Low-cost, on-site readouts.** The AFX is the ideal choice when an economical, accurate, on-site indicator is required.
- **Loop protection diode.** A diode is incorporated into the AFX terminal block to preserve loop integrity if the indicator is removed.
- **Wide array of dial options.** In addition to standard linear and square root dials, custom dials can be ordered using the simple, three-step procedure at left.

### Certifications



**ISSEP**, Flameproof, EExd IIC T6  
(requires F prefix on housing selection)



**SAA**, Explosion-Proof, Ex d IIC T6 IP66  
(requires S prefix on housing selection)

# AFX

Analog Field Indicator

## Specifications

<b>Display</b>	Linear, 0-100%, analog dial face with 2 1/2" (57 mm) diameter, 2" (51 mm) scale	<b>Performance (continued)</b>	<b>Load:</b> 10Ω maximum series resistance	<b>Ambient Humidity</b>	<b>Operating Range:</b> 0 to 85%, non-condensing
<b>Performance</b>	<b>Accuracy:</b> ±2% of calibrated input span	<b>Ambient Temperature</b>	<b>Operating Range:</b> -40°C to +60°C (-40°F to +140°F) <b>Effect:</b> Less than 2% of input full scale within rated operating range	<b>Weight</b>	Less than 5 oz (142 g)

## Ordering Specifications

Unit	Input	Output	Power	Options	Housing
AFX	4-20MA	<b>0-100%</b> Standard, linear scale <b>0-10SQR</b> Square root scale <b>0-100SQR</b> Square root scale Custom scaling available	<b>NP</b> Loop powered	One segment option required for any custom dial face <b>-3</b> Three-segment scale <b>-4</b> Four-segment scale <b>-5</b> Five-segment scale	<b>AFD</b> Dual, explosion-proof enclosure affords extra space for mounting AFX on top of another Moore Industries transmitter <b>2LG</b> Mounted in 2-hub, low-dome, windowed explosion-proof enclosure* <b>3LG</b> Similar to 2LG, but with 3 hubs* <b>2HG</b> Mounted in a 2-hub, high-dome, windowed explosion-proof enclosure, suitable for housing the AFX atop another hockey-puck transmitter* <b>3HG</b> Similar to 2HG, but with 3 hubs* <b>NC</b> No enclosure; used as replacement unit <small>* Prefix selection with F for units with CENELEC flameproof rating EExd IIC T6 (e.g., F3HG, F2LG).            * Prefix selection with S for units with SAA explosion-proof rating Ex d IIC T6 IP66 (e.g., S2LG).            * Add P suffix for units equipped with base plate and U-bolts for mounting on a 2-in pipe.</small>

**When Ordering, Specify:** Unit / Input / Output / Power / Option(s) [Housing]

**Model Number Example, Standard Dial Face:** AFX / 4-20MA / 0-100% / NP / [F3HG P]

**Model Number Example, Custom Dial Face:** AFX / 4-20MA / 0-100% / NP / -4 [F3HG P]

Specify desired engineering units and any special scaling in the REMARKS box of the preferential order form.

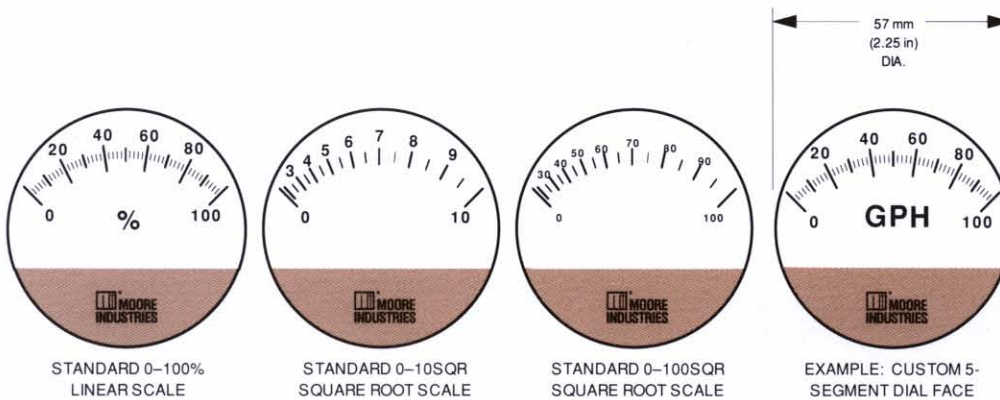


Figure 1. AFX Factory-Standard Dial Face Options



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