



# Datasheet

## General Features

- The PFA3000-12000 is a potentiometric draw-wire encoder that convert a linear motion into an analogue resistance signal, 0-10 V voltage signal or 4-20 mA current signal.
- It consists of a rotating precision potentiometer operated by the winding and unwinding of a stainless-steel wire.
- It constitutes a simple but effective system for measuring linear displacements and movements on machine tools, marble, glass, and woodworking machinery etc., to a degree of resolution of  $\pm 0.1$  mm.



## Mechanical Characteristics

Version	PFA3000	PFA4000	PFA5000	PFA6000	PFA8000	PFA10000	PFA12000
Measuring length [mm]	0-3000	0-4000	0-5000	0-6000	0-8000	0-10000	0-12000
Available stroke [mm]	3200	4200	5200	6200	8200	10200	12200
Dimension H/D [mm]	105 x 119	105 x 119	105 x 119	105 x 119	135 x 119	135 x 119	135 x 119

Wire strength	max. $\sim 9$ N
Linearity	$\pm 0,25$ %
Material/ housing	Aluminum, anodized
Speed	max. 0,5 m/s
Operating temperature	-10 °C to 70 °C
Relative humidity	10% to 90% (not condensed)
Protection class (EN 60529)	IP 54
Weight	1500 g

## Electrical Characteristics

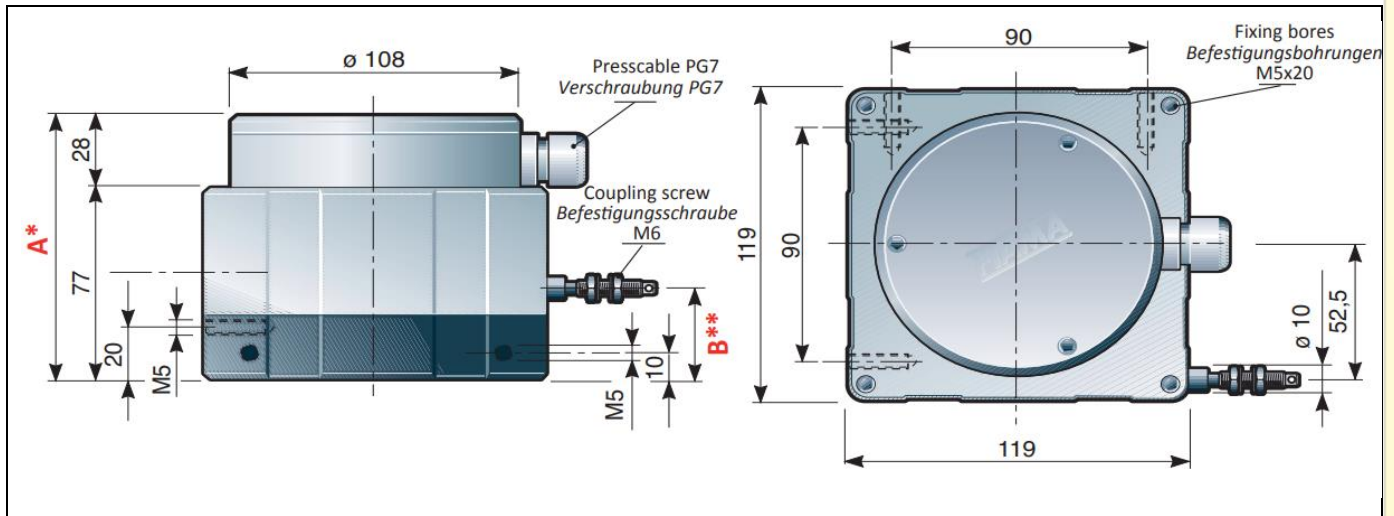
Power supply	15 - 30 VDC
Absorption	50 mA
Resistance	10 K $\Omega$ $\pm 10\%$
Power capacity	max. 1 W
Electrical connection	8-pole terminal strip
Analog output (optional)*	I = 4-20 mA V = 0-10 VDC
Directive	2014/30/EU Electromagnetic compatibility

\* Must be specified in ordering code.

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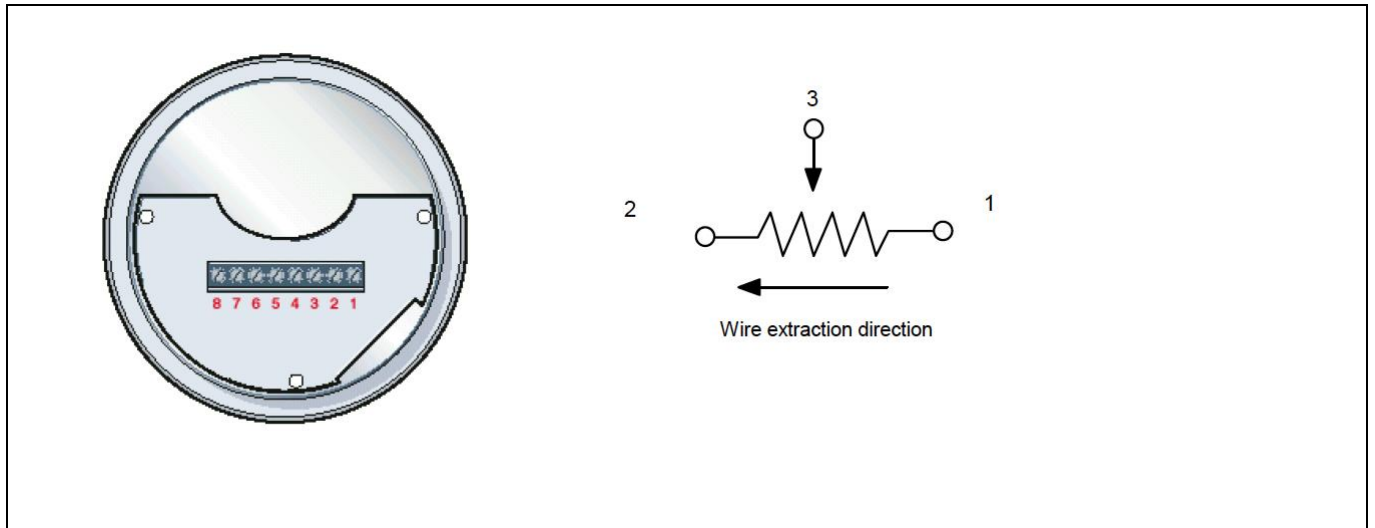
## Dimensions



Versions	PFA3000 - PFA4000 - PFA5000 - PFA6000	PFA8000 - PFA10000 - PFA12000
A*	105	135
B**	39,5	49,5

\* All Dimensions given in mm

## Connection



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## Ordering Code

<b>Type</b>	<b>PFA</b>	-	<b>4000</b>	-	<b>R</b>
<b>Measuring length [mm]*</b>					
3000	= 3000 mm				
<b>4000</b>	= 4000 mm				
5000	= 5000 mm				
6000	= 6000 mm				
8000	= 8000 mm				
10000	= 10000 mm				
12000	= 12000 mm (max.)				
<b>Output</b>					
<b>R</b>	= 10 kOhm (standard)				
<b>I</b>	= 4-20 mA (optional analog)				
<b>V</b>	= 0-10 VDC (optional analog)				



\* Larger construction form beginning from measuring length 6000 mm, see table.

Manufacturer: **FIAMA**  
since 1913

Without prior notice, the products may be subject to modifications that the Manufacturer reserves to introduce as deemed necessary for their improvement.