

# KMA Series

## Amplified OEM pressure sensors

### FEATURES

- 0...500 mbar to 0...100 bar gage
- Excellent media compatibility
- Ratiometric 0.5...4.5 V output
- Digital calibrated and passive temperature compensated
- For easy OEM device integration

### MEDIA COMPATIBILITY

Wetted materials:  
Stainless steel 1.4404 (316L), ceramic  $AL_2O_3$ ,  
NBR (FKM)

Housing:  
Stainless steel 1.4404 (316L)

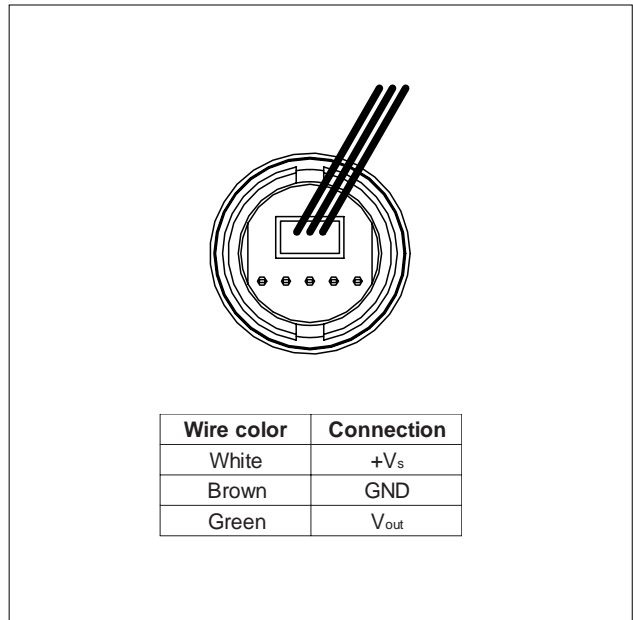


### SPECIFICATIONS

#### Maximum ratings

Supply voltage	2.7...5.5 V <sub>DC</sub>
Supply current	2.5 mA
Temperature ranges	
Compensated	0 ... +85 °C
Operating	-25 ... +85 °C
Storage	-40 ... +125 °C

### ELECTRICAL CONNECTION



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### PRESSURE SENSOR CHARACTERISTICS

( $V_s = 5.00\text{ V}$ ,  $t_{amb} = 25^\circ\text{C}$ )

Part no.	Operating pressure	Proof pressure	Max. negative pressure	Burst pressure
KMAM500...	0...500 mbar	1 bar	-200 mbar	4 bar
KMAB001...	0...1 bar	2 bar	-200 mbar	4 bar
KMAB002...	0...2 bar	4 bar	-400 mbar	5 bar
KMAB005...	0...5 bar	10 bar	-800 mbar	12 bar
KMAB010...	0...10 bar	20 bar	Vacuum resistant	25 bar
KMAB020...	0...20 bar	40 bar		50 bar
KMAB050...	0...50 bar	100 bar		120 bar
KMAB100...	0...100 bar	200 bar		250 bar

### PERFORMANCE CHARACTERISTICS

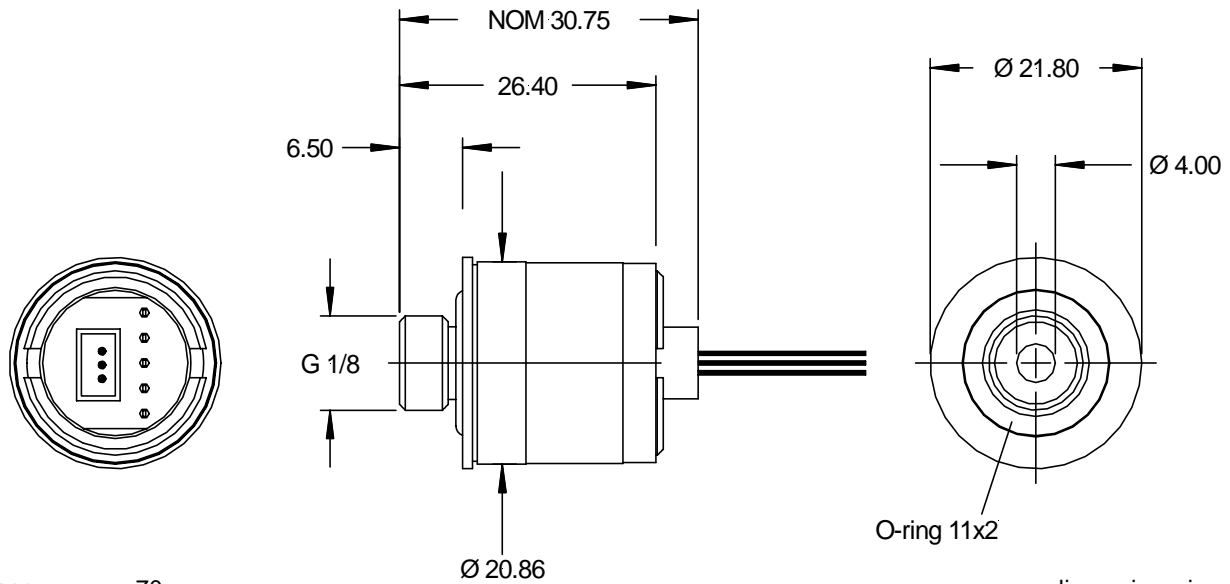
( $V_s = 5.00\text{ V}$ ,  $t_{amb} = 25^\circ\text{C}$ , output signal is ratiometric to  $V_s$ )

Characteristics	Min.	Typ.	Max.	Unit	
Zero pressure offset	0.45	0.5	0.55	V	
Full scale span		4.0			
Full scale output	4.45	4.5	4.55		
Non-linearity, hysteresis and repeatability (terminal based)			±0.4	%FSO	
Thermal effects (0...85 °C)	Offset	KMAM500...		±0.08	%FSO/°C
		all others		±0.04	
	Span	KMAM500...		±0.026	
		all others		±0.013	
Output load resistance	5			kΩ	
Long term stability			±0.3	%FSO/y	

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### OUTLINE DRAWING



mass: approx. 70 g

dimensions in mm

### ORDERING INFORMATION

Options	Series	Pressure range / pressure mode	Calibration	Pressure connection	Electrical connection	Sealing					
	KMA	M500G	0...500 mbar gage	U	Unidirectional	Y	G 1/8 (BSP)	L	Flying leads, 60 mm	N	NBR
		B001G	0...1 bar gage							V	FKM (Viton)
		B002G	0...2 bar gage								
		B005G	0...5 bar gage								
		B010G	0...10 bar gage								
		B020G	0...20 bar gage								
		B050G	0...50 bar gage								
		B100S	0...100 bar sealed gage								
<b>Example: KMA B010G U Y L N</b>											

**Other pressure ranges, optional pressure fittings and parylene coating are available on request. Please contact First Sensor for further information.**

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