

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)

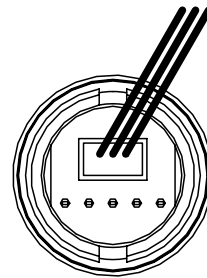


SPECIFICATIONS

Maximum ratings

Supply voltage	2.7...5.5 V _{DC}
Supply current	2.5 mA
Temperature ranges	
Compensated	0 ... +85 °C
Operating	-25 ... +85 °C
Storage	-40 ... +125 °C

ELECTRICAL CONNECTION



Wire color	Connection
White	+V _s
Brown	GND
Green	V _{out}

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PRESSURE SENSOR CHARACTERISTICS

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

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

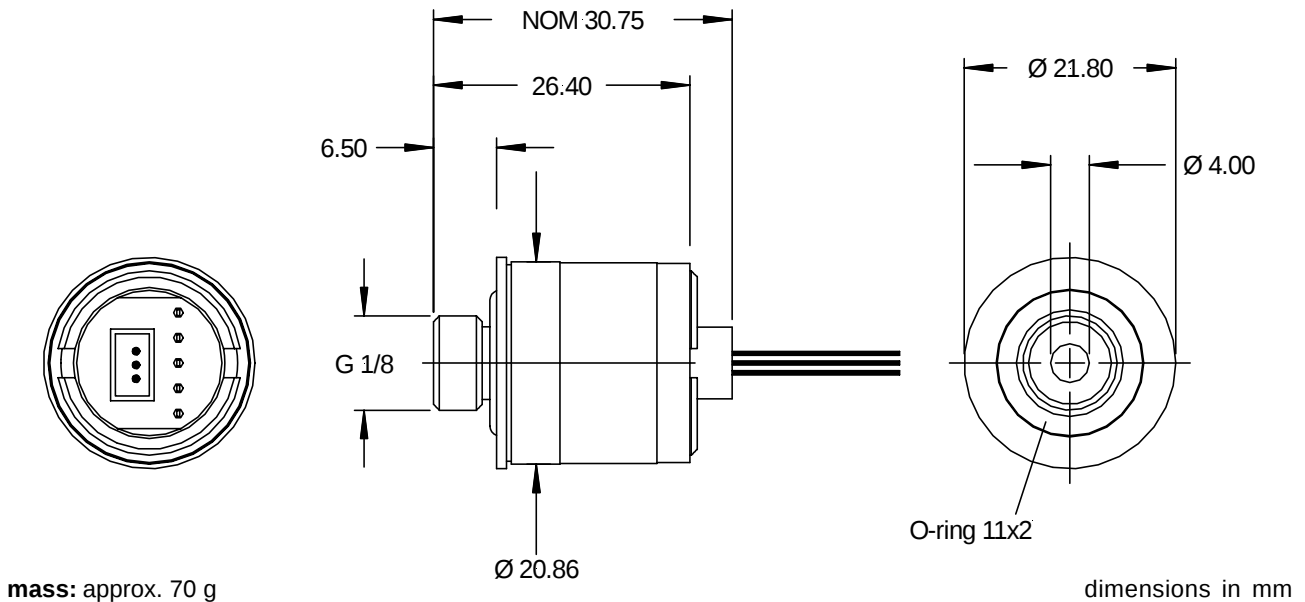
($V_s = 5.00\text{ V}$, $t_{\text{amb}} = 25^\circ\text{C}$, output signal is ratiometric to V_s)

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



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								
Example: KMA B010G U Y L N											

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

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