Data Sheet

ASHCROFT® Trust the shield.®

KM15 Pressure Transducer

FEATURES

- Combined high performance ASIC with proven polysilicon thin film sensory technology
- Provides a highly accurate, stable and durable transducer
- Provides superior media compatibility and over pressure capability
- Digital compensation for calibration provides an extremely linear and repeatable instrument over a wide range of temperatures

TYPICAL USES

- Off road equipment
- Construction machinery
- Compressor control
- Pump monitoring
- Agricultural implements
- Diagnositic kits
- Engine monitoring
- Process automation & control
- Hydraulic & pneumatic sensing
- Machine tool

PERFORMANCE SPECIFICATIONS

Reference Temperature:	73 °F ± 2 ° (23 °C)
Accuracy:	$\pm 0.5\%$ Span, 100 psig of span and above $\pm 1.0\%$ Span, 75 psig of span and below
Stability:	±0.25% of span/year
Interchangeability:	<0.5% of span
Durability:	10 million cycles (10 to 100% FS)
Approvals:	CE/UKCA, RoHS, IP67

ENVIRONMENTAL SPECIFICATIONS

Temperature	Compensated:	-25 °F to 250 °F (-30 °C to 120 °C)
Limits:	Operating:	-40 °F to 250 °F (-40 °C to 120 °C)
	Storage:	-40 °F to 250 °F (-40 °C to 120 °C)

Humidity: 0 to 100% R.H., no effect

Terminal Coefficients: Zero: $\pm 0.0055\%$ / °F ($\pm 0.01\%$ / °C) -25 °F to +250 °F (-30 °C to 120 °C) Span: $\pm 0.0055\%$ / °F ($\pm 0.01\%$ / °C)

FUNCTIONAL SPECIFICATIONS

FUNCTIONAL SP	ECIFICATIONS
Pressure Range:	Vacuum to 7,500 psi
Vibration:	Random to 1 KHz, 20 g's
Shock:	50 g's, 11 msec
Drop Test:	Withstands 1 meter on concrete
Response Time:	< 1 msec
Position Effect:	< ±0.01% span





KEY BENEFITS

- Broad selection of pressure ranges, pressure connections and electrical terminations
- Cost effective construction
- Compact, rugged construction

FUNCTIONAL SPECIFICATIONS

Overpressure (F.S):	Proof	Burst
750 psi and below	2x Range	10x Range
1,500 psi	2x Range	5x Range
3,000 psi	2x Range	5x Range
5,000 psi	1.5x Range	5x Range
7,500 psi	1.2x Range	5x Range

ELECTRICAL SPECIFICATIONS

ELECTRICAL S	PECIFIC
Reverse Polarity	Yes
Protection:	

Insulation 100 M Ω min. @50 Vdc (Circuit to Case)

Resistance:

Insulation 500 Vac Breakdown Voltage:

Warm-up Time: < 25 msec

OUTPUT SIGNALS AVAILABLE					
Voltage Output	Excitation	Supply Current			
0.5-4.5 Vdc	5 Vdc ± .5 Vdc	10 mA typical			
Ratiometric Output					
1-5 Vdc	8-32 Vdc	10 mA typical			

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PHYSICAL S	PECIFICATIONS
Electrical Termination:	Metri-Pack® 150 Series, Shielded Cable, Flying Leads
Weight:	Connector: Approx. 2 oz. (60 g) Cable: Approx. 3.88 oz. (110 g)

		(0)			
WETTED COMPO	NENTS				
Process Connection	Diaphragm	Joints			
304 SS	17-4 PH® SS	Welded			
OPTIONAL FEAT	URES				
Oxygen Cleaning:	Gaseous				
Electrical Termination:	See ordering code				
Process Connection Size:	See ordering code				
Consult factory for:	Pressure range options, throttle screw options, custom mating harness, and approval descriptions				

KM15 RANGE TABLE				
	Range	Code		
Vacuum	vac/0 psi*	0#&vac		
	vac/15 psi*	15#&vac		
	vac/30 psi*	30#&vac		
	vac/50 psi*	50#&vac		
<u>o</u>	vac/75 psi*	75#&vac		
Gauge	vac/100 psi*	100#&vac		
Ğ	vac/150 psi*	150#&vac		
	vac/200 psi*	200#&vac		
	vac/300 psi*	300#&vac		
	0/15 psi*	15#		
	0/30 psi*	30#		
	0/50 psi*	50#		
	0/75 psi*	75#		
-	0/100 psi*	100#		
1801	0/200 psi*	200#		
ser	0/300 psi*	300#		
Gauge (sealed sensor)	0/500 psi	500#		
sea	0/750 psi	750#		
) e	0/1,000 psi	1,000#		
auç	0/1,500 psi	1,500#		
5	0/2,000 psi	2,000#		
	0/3,000 psi	3,000#		
	0/5,000 psi	5,000#		
	0/7,500 psi	7,500#		
*Ranges in psi with vented cable or Metri-Pack®				

^{*}Ranges in psi with vented cable or Metri-Pack® termination only.

ORDERING CODE	Example:	KM15	5	M01	RM	G2	100#	XTS
Model								
KM15 - OEM Pressure Transducer		KM15						
Accuracy								
5 - 0.50% (100 psi & above)			5					
7 - 1.0% (75 psi & below)								
Pressure Connection Size								
M01 - 1/8 NPT-M				M01				
M02 - 1/4 NPT-M								
M38 - 3/8-24 UNF-2A								
MEK - 7/16-2- UNF-2B								
M10 - M10 x 1								
M14 - M14 x 1.5								
MR3 - R 3/8								
MR2 - R 1/4								
MG3 - G ¾								
MG2 - G 1/4								
Output Signal								
15 - 1-5 Vdc								
RM - Ratiometric 0.5-4.5 Vdc					RM			
Electrical Termination								
Metri-Pack®								
GN - no mating connection								
G2 - mating connection 3 cable						G2		
G1 - mating connection with customer specified length								
Shielded Cable								
F2 - 36" shielded cable, PVS sheath								
P1 - Other length								
P9 - Custom cable								
Flying Lead								
12 - 12" length								
24 - 24" length								
36 - 36" length								
Pressure Ranges (see range table on page 2)								
100# - 0/100 psi*							100#	
Option (if including an option(s) must include an "X")								X
XTS - Throttle Screws								TS
6B - Clean for oxygen service								
Consult factory for additional options								

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KM15 Pressure Transducer

DIMENSIONS

Dimensions in [] are milimeters.









