

KM46 High Pressure Transducer

FEATURES

- Pressure ranges from 30,000 to 72,000 psi
- Process connections geared for high pressure applications
- Stainless steel & Titanium construction
- High reliability

TYPICAL USES

- Water jet based cutting & cleaning
- High pressure chemical & petrochemical applications
- Pressure burst testing



KM46
Transducer



SPECIFICATIONS

Reference Temperature: 72 °F ±2 °F (21 °C ±1 °C)

Accuracy Class: ±1.00% of span*
*incl. nonlinearity, hysteresis, repeatability, zero-offset and final-offset

Non Linearity: BFSL ±0.30% of span

Accuracy (TEB): ±2.0% of span from -4 °F to 185 °F (-20 °C to 85 °C). Total Error Band Accuracy: includes the combined effects of non-linearity (Terminal Point Method), hysteresis, non-repeatability, temperature and zero offset and span setting errors

Stability: ≤ ±0.20% of span/year

ENVIRONMENTAL SPECIFICATIONS

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

MIN/MAX TEMPERATURE LIMITS

Storage	Process	Operating	Compensated
-40 °F to 257 °F (-40 °C to 125 °C)	-40 °F to 257 °F (-40 °C to 125 °C)	-40 °F to 221 °F (-40 °C to 105 °C)	-4 °F to 185 °F (-20 °C to 85 °C)

KEY BENEFITS

- High pressure measuring capacity
- Broad temperature capability
- Up to IP69K Ingress rating

FUNCTIONAL SPECIFICATIONS

Vibration Effects: 20 gs, according to DIN EN 60068-2-6

Shock Effects: 50 gs, according to DIN-EN 60068-2-27

Drop Test: Withstands for 1 meter on concrete

Response Time: < 2 msec

Position Effect: < ±0.01% span

Overpressure (of span):	Range	Proof	Burst
	30,000 to 36,000 psi	150% of span	180% of span
	60,000 to 72,000 psi	120% of span	150% of span
	2,000 to 2,500 bar	150% of span	180% of span
	4,000 to 5,000 bar	120% of span	150% of span

ELECTRICAL SPECIFICATIONS

Insulation Breakdown Voltage: 50 Vdc

Insulation Resistance: >100 megohms at 100 Vdc

Data Sheet

KM46 High Pressure Transducer

OUTPUT SIGNALS AVAILABLE		
Voltage Output	Excitation	Supply Current
0-10 Vdc, 3 wire	12-32 Vdc	10 mA
1-5V Vdc, 3 wire	8-32 Vdc	10 mA
Current Output		
4-20 mA	10-32 V DC	

SPECIFICATIONS	
Rating	Electrical Connections
IP67	M12 4-Pin & Shielded Cable (IP69K option-cable only)
IP65	EN 175301-803 Forms A & C (DIN 43650 A & C)

WETTED MATERIAL
Titanium

NON-WETTED MATERIAL
Stainless steel

APPROVALS
CE Declarations of conformity 2014/30/EU, 2014/68/EU

PRESSURE RANGE TABLE			
Range	Code	Range	Code
30,000 psi	30000#	2,000 bar	2000br
36,000 psi	36000#	2,500 bar	2500br
60,000 psi	60000#	4,000 bar	4000br
72,000 psi	72000#	5,000 bar	5000br

Consult factory for other ranges.

ORDERING CODE	Example:	KM467	F16	42	DC	60000#	G
Model		KM467					
KM467 - KM46 Series, 2.0% Total Error Band (-20 °C to 85 °C)		KM467					
Pressure Connection Size							
F16 - M16 x 1.5 Female			F16				
M18 - M18 x 1.5 Male							
F09 - 9/16-18 UNF 2B Female							
Output Signal							
10 - 0-10 Vdc							
15 - 1-5 Vdc							
42 - 4-20 mA				42			
Electrical Termination							
EN175301-803 Form C (DIN 43650, Form C)							
DC - No mating connector					DC		
N1 - Mating connector, no cable							
N2 - Mating connector, 3 feet of cable							
N9 - Mating connector with customer specified length							
EN 175301-803 Form A (DIN 43650, Form A)							
DN - No mating connector							
D0 - Mating connector, no cable							
D2 - Mating connector, 3 feet of cable							
D1 - Mating connector with customer specified length							
M12 4-Pin							
EW - No mating connector							
E0 - Mating connector, no cable							
E2 - Mating connector, 3 feet of cable							
E1 - Mating connector with customer specified length							
Pigtail - Shielded cable with PVC jacket and 24 AWG leads							
F2 - With 3 feet of cable length							
F3 - With 10 feet of cable length							
P1 - Customer specified length							
Pressure Ranges (see range table on page 2)							
60000# - 60,000 psi						60000#	
Measurement Type							
G - Gauge							G

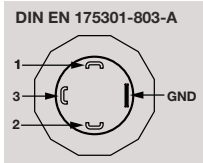
Data Sheet

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DIMENSIONS in [] are millimeters

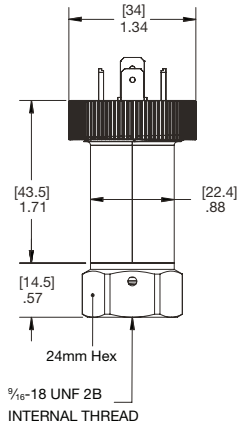
For reference only, consult Ashcroft for specific dimensional drawings

DIN EN 175301-803-A Electrical Connection

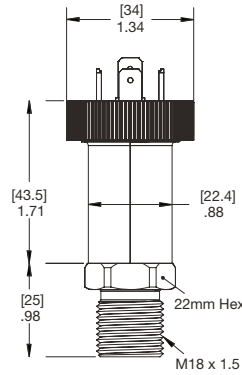


Electrical Configuration			
2 - Wire		3 - Wire	
1: UB +	Red	1: UB +	Red
2: Out	Black	2: UB -	Black
3: nc	White	3: Out	White
4: nc	Green	4: nc	Green

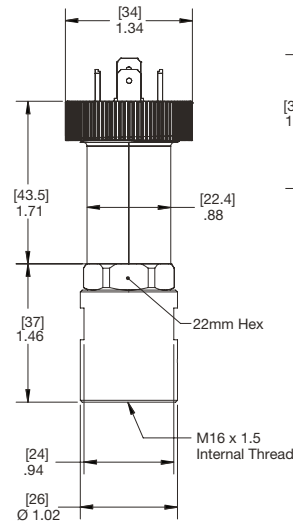
F09 Fitting Shown



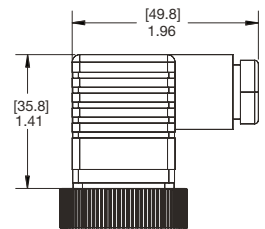
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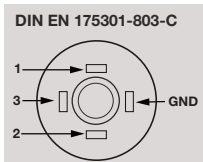
F16 Fitting Shown



Optional Mate

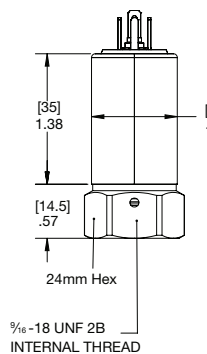


DIN EN 175301-803-C Electrical Connection

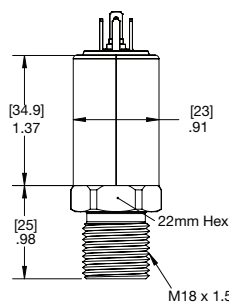


Electrical Configuration			
2 - Wire		3 - Wire	
1: UB +	Red	1: UB +	Red
2: Out	Black	2: UB -	Black
3: nc	White	3: Out	White
4: nc	Green	4: nc	Green

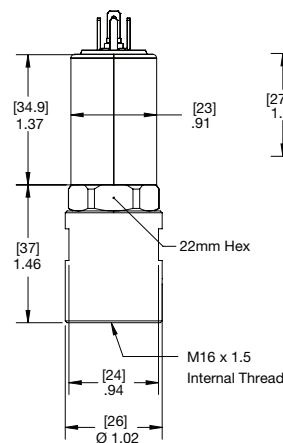
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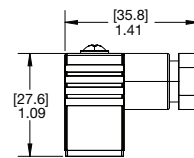
M18 Fitting Shown



F16 Fitting Shown



Optional Mate



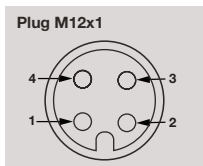
Data Sheet

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DIMENSIONS in [] are millimeters

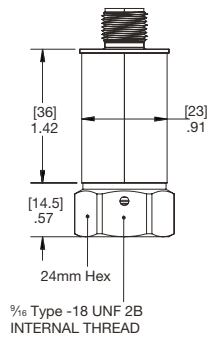
For reference only, consult Ashcroft for specific dimensional drawings

DIN EN M12 x 1 Plug Electrical Connection

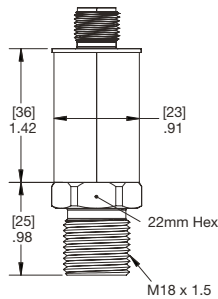


Electrical Configuration			
2 - Wire		3 - Wire	
1: UB +	Red	1: UB +	Red
2: nc	Green	4: nc	Green
3: Out	Black	2: UB -	Black
4: nc	White	3: Out	White

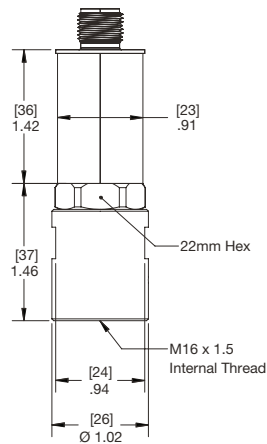
F09 Fitting Shown



M18 Fitting Shown

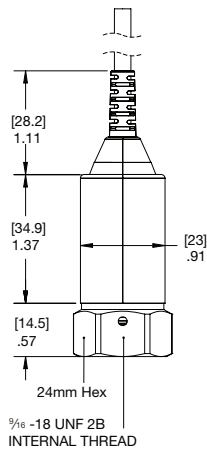


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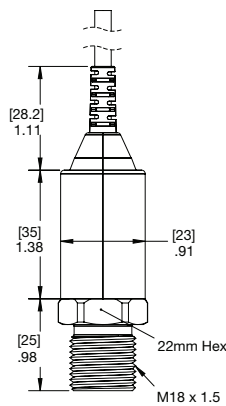


Cable Electrical Connection

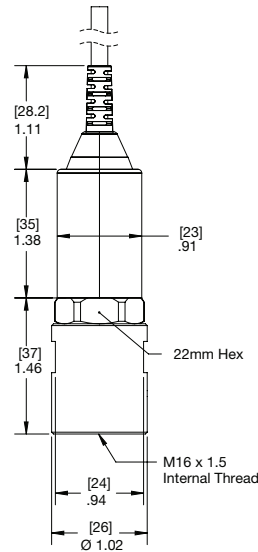
F09 Fitting Shown



M18 Fitting Shown



F16 Fitting Shown



Electrical Configuration			
2 - Wire		3 - Wire	
1: UB +	Red	1: UB +	Red
2: Out	Black	2: UB -	Black
3: nc	White	3: Out	White