Data Sheet

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

KEY BENEFITS

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

SPECIFICATIONS

Reference Temperature:	72ºF ±2ºF (21ºC ±1ºC)
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 -4ºF to 185ºF (-20ºC to 85ºC) 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)

FUNCTIONAL SPECIFICATIONS

Vibration Effects:	20gs, according to DIN EN 60068-2-6		
Shock Effects:	50gs, according to DIN-EN 60068-2-27		
Drop Test:	Withstands for 1 meter on concrete		
Response Time:	< 2 msec		
Position Effect:	< ±0.01% span		
Overpressue (F.S.):	Range	Proof	Burst
	30,000 to 36,000 psi	150% F.S.	180% F.S.
	60,000 to 72,000 psi	120% F.S.	150% F.S.
	2,000 to 2,500 bar	150% F.S.	180% F.S.
	4,000 to 5,000 bar	120% F.S.	150% F.S.

ELECTRICAL SPECIFICATIONS

Insulation Breakdown Voltage:	50 Vdc
Insulation Resistance:	>100 megohms at 100 Vdc

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OUTPUT SIGNALS AVAILABLE

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

304 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#	–XNH
Model						
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 - 4-20mA			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#	
Options (if including an option(s) must include an "X")						–X__
NH - SS tag						NH
NN - Paper tag						

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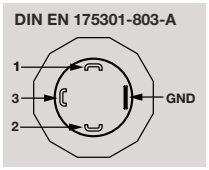
DIMENSIONS in [ ] are millimeters

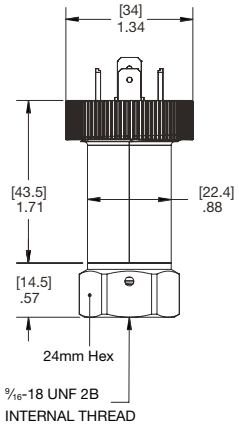
For reference only, consult Ashcroft for specific dimensional drawings

DIN EN 175301-803-A Electrical Connection

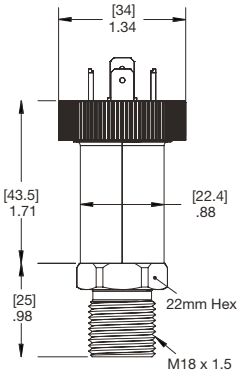


Electrical Configuration			
2 - Wire		3 - Wire	
1: UB +	Red	1: UB +	Red
2: Out	Black	2: UB -	Black
3: nc	White	3: Out	White
4: nc	Green	4: nc	Green

F09 Fitting Shown



M18 Fitting Shown



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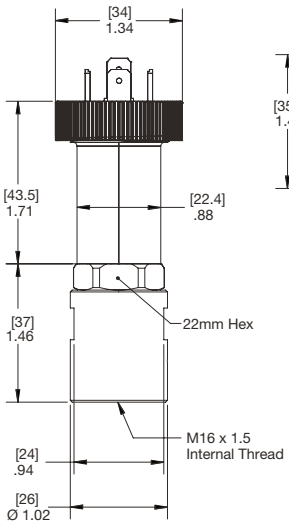
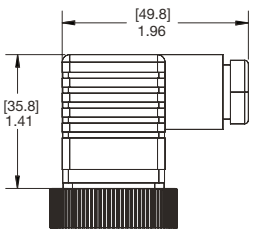
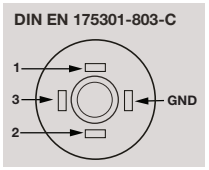


Optional Mate

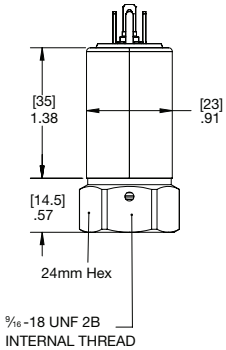


DIN EN 175301-803-C Electrical Connection



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

F09 Fitting Shown



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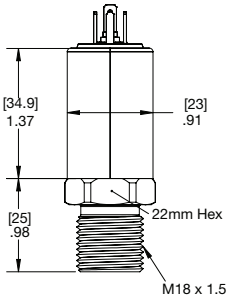

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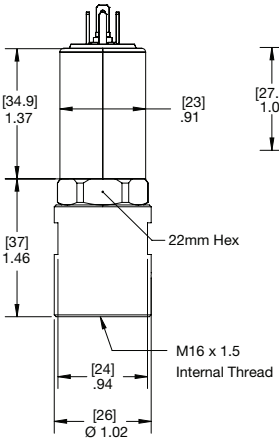
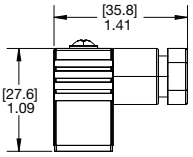


Optional Mate



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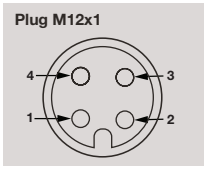
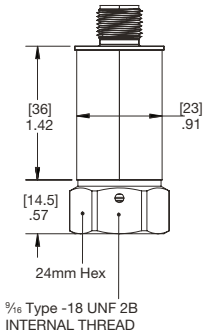
DIN EN M12 x 1 Plug Electrical Connection



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



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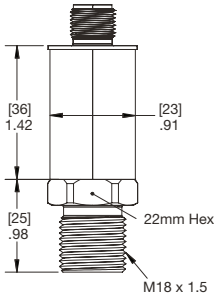

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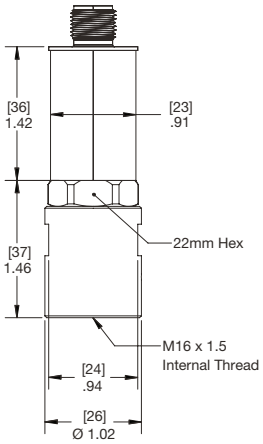
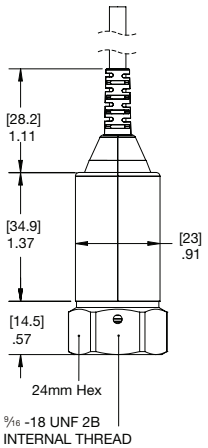


Cable Electrical Connection

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

F09 Fitting Shown



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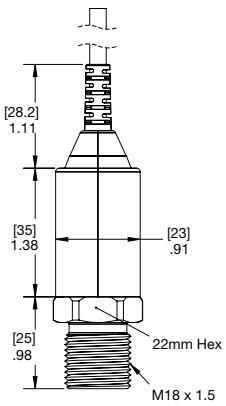

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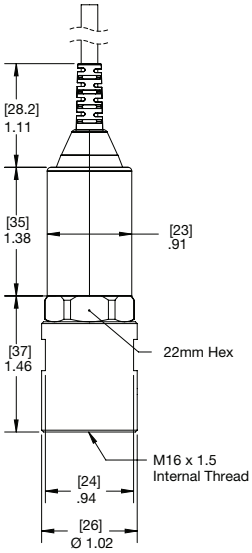

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