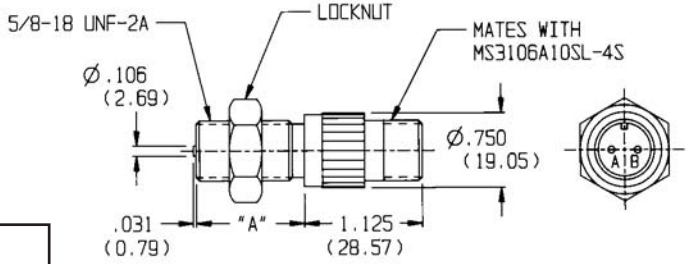
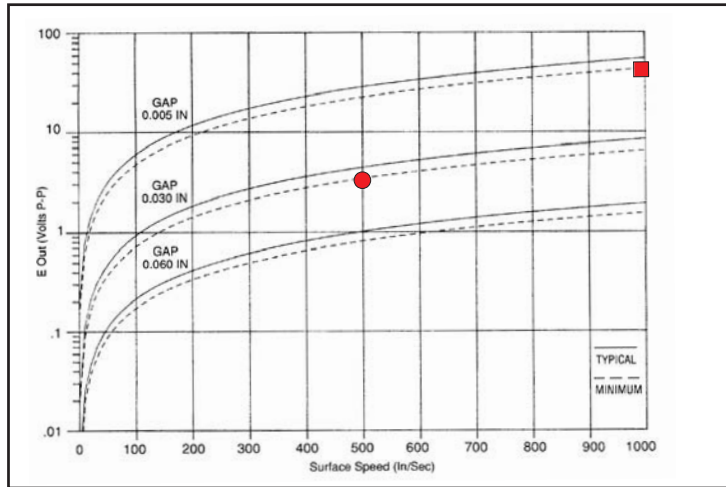


General Purpose

Ordering Part #	Thread Length (A)
70085-1010-001	1.125 (28.57)
70085-1010-003	2.625 (66.67)
70085-1010-018	3.625 (92.07)
70085-1010-118	5.000 (127.00)

(Select cable from group "A", see index)

Performance Curves



Specifications:

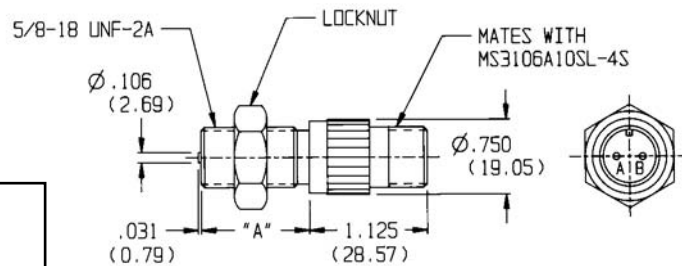
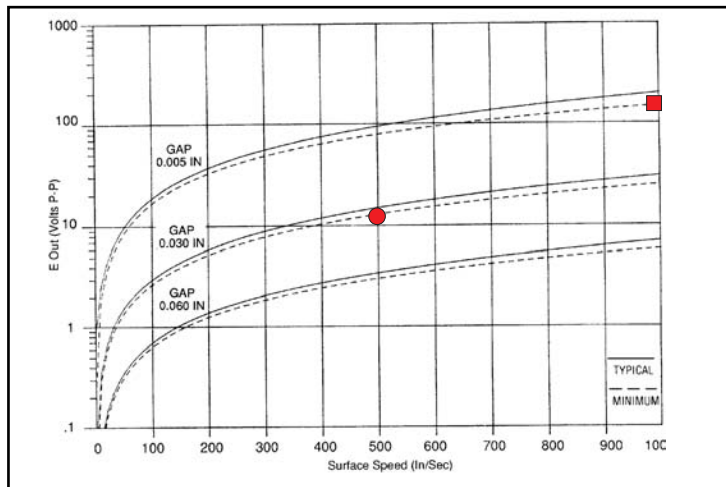
- Output Voltage (Standard): 40 V (P-P)
- Output Voltage (Guarantee Point): 3.4 V (P-P)
- DC Resistance: 130 ohms max.
- Typical Inductance: 33 mH ref.
- Output Polarity: Pin 'B' positive
- Operating Temperature: -55 to +107°C
- Net Weight: 5 oz. max.

High Sensitivity

Ordering Part #	Thread Length (A)
70085-1010-002	1.125 (28.57)
70085-1010-175	2.625 (66.67)
70085-1010-026	3.625 (92.07)
70085-1010-408	5.000 (127.00)

(Select cable from group "A", see index)

Performance Curves



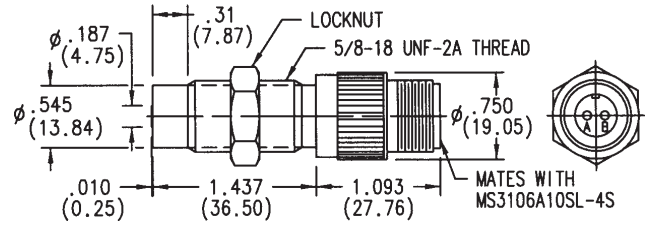
Specifications:

- Output Voltage (Standard): 150 V (P-P)
- Output Voltage (Guarantee Point): 12.9 V (P-P)
- DC Resistance: 1500 ohms max.
- Typical Inductance: 360 mH ref.
- Output Polarity: Pin 'B' positive
- Operating Temperature: -55 to +107°C
- Net Weight: 5 oz. max.

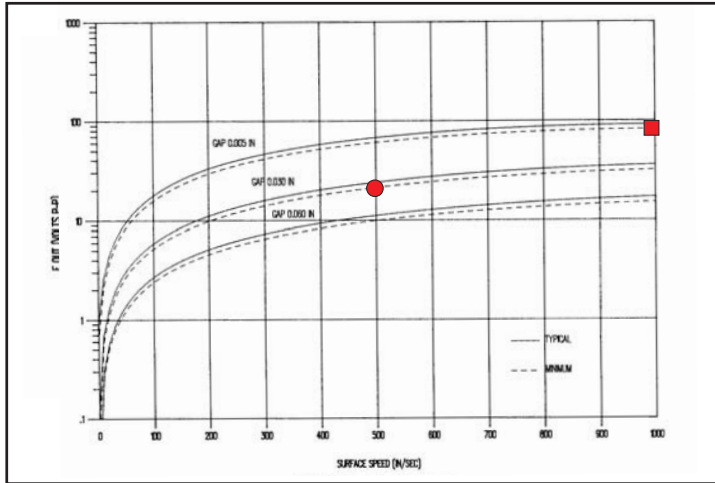
Dimensions in inches and (mm).

Power Output

Ordering Part # **Thread Length (A)**
 70085-1010-028 1.437 (36.50)
 (Select cable from group "A", see index)



Performance Curves



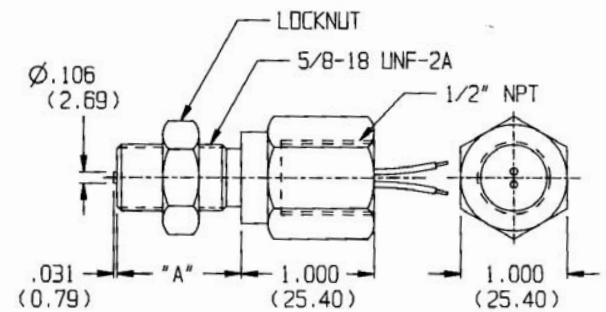
Based on 8 D.P. Gear

Specifications:

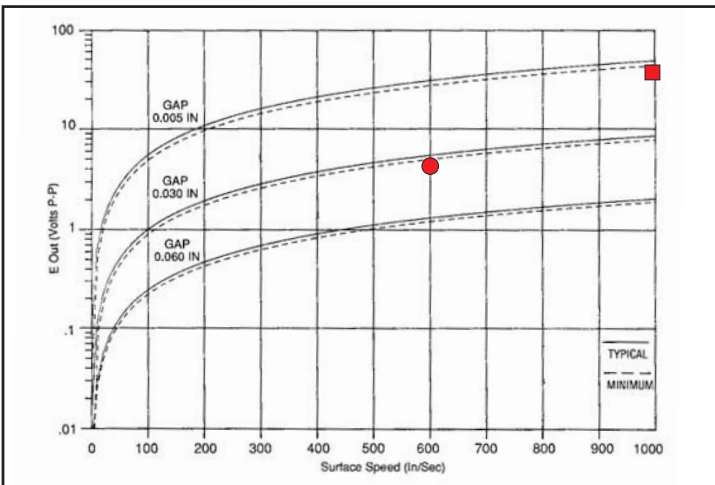
- Output Voltage (Standard): 75 V (P-P)
- Output Voltage (Guarantee Point): 21.5 V (P-P)
- DC Resistance: 210 ohms max.
- Typical Inductance: 50 to 95 mH ref.
- Output Polarity: Pin "B" positive
- Operating Temperature: -73 to +107° C
- Net Weight: 2.2 oz. max.

Conduit Fitting – General Purpose

Ordering Part # **Thread Length (A)**
 70085-1010-004 1.125 (28.57)
 70085-1010-469 2.750 (69.85)



Performance Curves



Based on 20 D.P. Gear

Specifications:

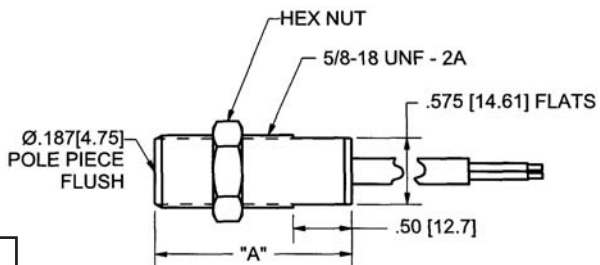
- Output Voltage (Standard): 43 V (P-P)
- Output Voltage (Guarantee Point): 4.3 V (P-P)
- DC Resistance: 130 ohms max.
- Typical Inductance: 32-46 mH ref.
- Output Polarity: Red lead positive
- Operating Temperature: -73 to +107° C
- Lead length: 10 ft (3.05 m)
- Net Weight: 16 oz. max.

AI-Tek Instruments, Cheshire, CT USA

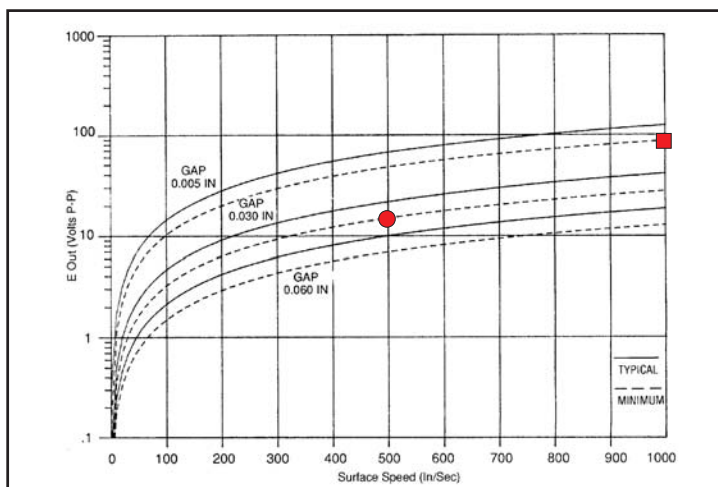
Dimensions in inches and (mm).

Full Thread – Power Output

Ordering Part #	Thread Length (A)
70085-1010-131	1.80 (45.72)
70085-1010-214	3.06 (77.72)



Performance Curves



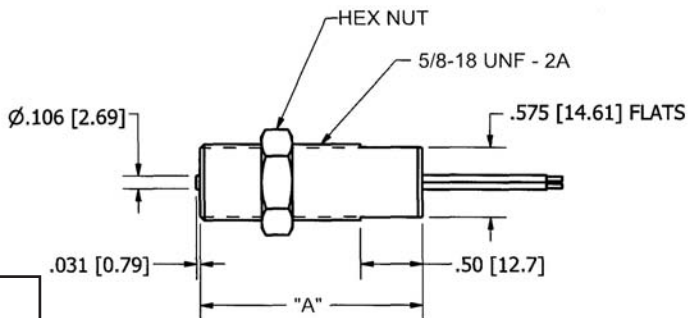
Based on 8 D.P. Gear

Specifications:

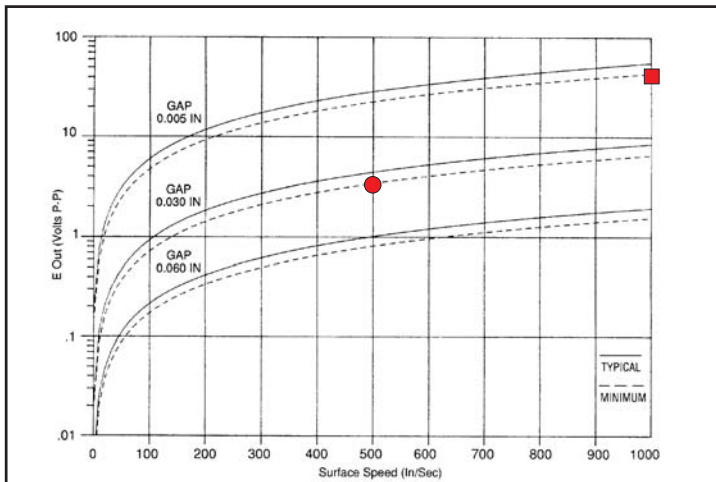
- Output Voltage (Standard): 120 V (P-P)
- Output Voltage (Guarantee Point): 15.1 V (P-P)
- DC Resistance: 250 ohms max.
- Typical Inductance: 40-60 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -55 to +107° C
- Cable Length: 10 ft (3.05 m)
- Net Weight: 5 oz. max.

Full Thread – General Purpose

Ordering Part #	Thread Length (A)
70085-1010-078	1.80 (45.72)
70085-1010-137	3.06 (77.72)



Performance Curves



Based on 20 D.P. Gear

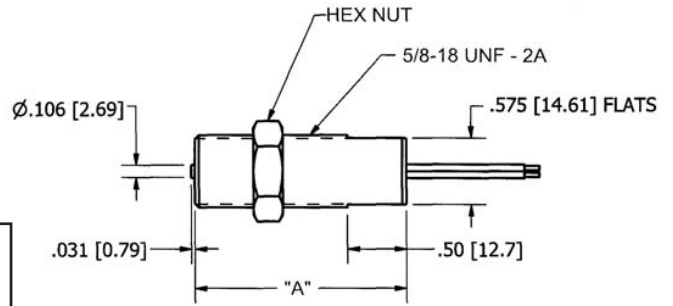
Specifications:

- Output Voltage (Standard): 40 V (P-P)
- Output Voltage (Guarantee Point): 3.4 V (P-P)
- DC Resistance: 130 ohms max.
- Typical Inductance: 33 mH ref.
- Output Polarity: white lead positive
- Operating Temperature: -55 to +107° C
- Lead Length: -078, 12 in (30.5 cm)
- 137, 24 in (60.9 cm)
- Net Weight: 3 oz. max.

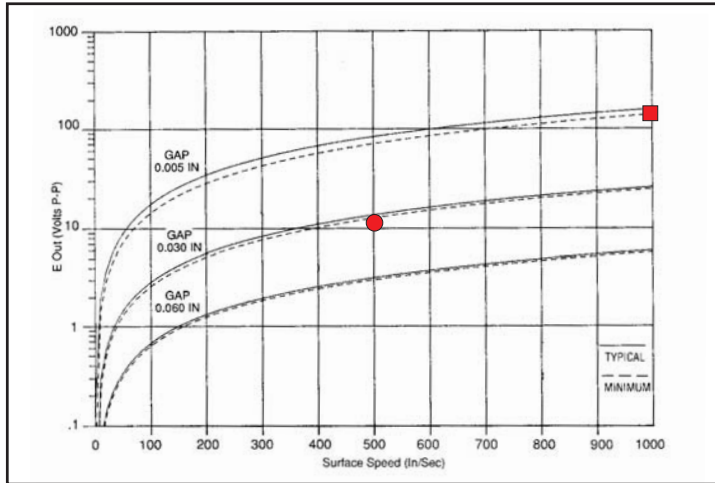
Dimensions in inches and (mm).

Full Thread – High Sensitivity

Ordering Part #	Thread Length (A)
70085-8080-003	1.80 (45.72)
70085-1010-220	3.06 (77.72)



Performance Curves



Based on 20 D.P. Gear

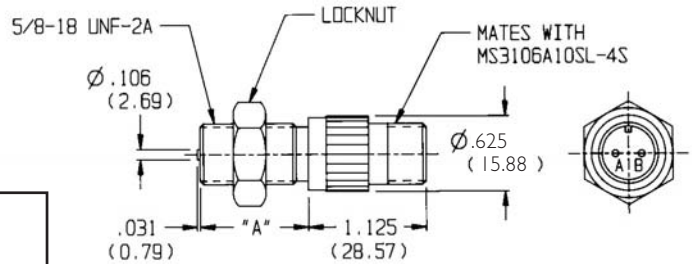
Specifications:

- Output Voltage (Standard): 150 V (P-P)
- Output Voltage (Guarantee Point): 12.8 V (P-P)
- DC Resistance: 1430 ohms max.
- Typical Inductance: 500 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -55 to + 107°C
- Lead Length: -003, 12 in (30.5 cm)
- 220, 36 in (91.4 cm)
- Net Weight: 3 oz. max.

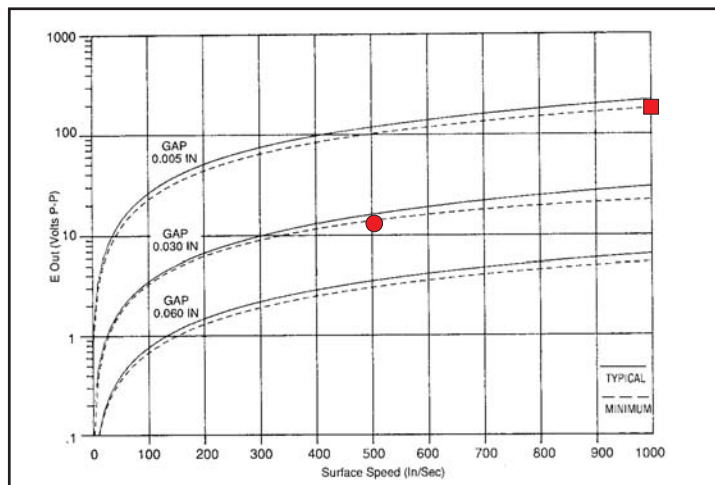
Molded – High Sensitivity

Ordering Part #	Thread Length (A)
70084-1713-111	1.125 (28.57)

(Select cable from group "A", see index)



Performance Curves



Based on 20 D.P. Gear

Specifications:

- Output Voltage (Standard): 190 V (P-P)
- Output Voltage (Guarantee Point): 13.9 V (P-P)
- DC Resistance: 1200 ohms max.
- Typical Inductance: 400 mH ref.
- Output Polarity: Pin 'B' positive
- Operating Temperature: -40 to +150° C
- Net Weight: 2 oz. max.

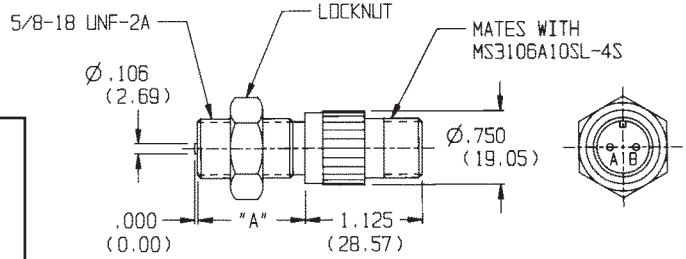
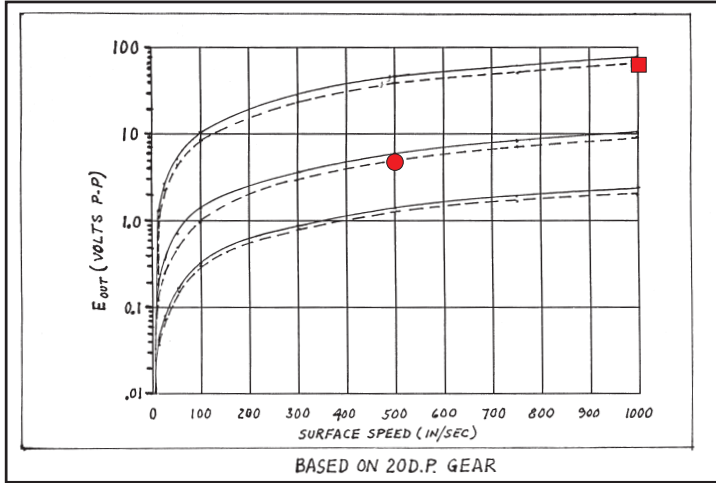
Dimensions in inches and (mm).

Molded

Ordering Part #	Thread Length (A)
70085-1010-421	2.475 (62.87)
70085-1010-425	3.000 (76.20) * M16 x 1.5 Thd.
70085-1010-424	4.493 (114.12)

(Select cable from group "A", see index)

Performance Curves **



* M16x1.5 Thd.

Specifications:

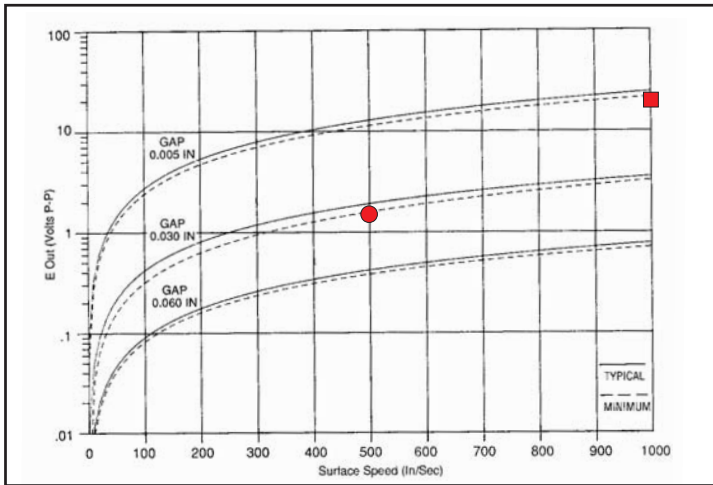
- Output Voltage (Standard): 63 V (P-P)
- Output Voltage (Guarantee Point): 4.9V (P-P)
- DC Resistance: 250 ohms max.
- Typical Inductance: 63 mH ref.
- Output Polarity: Pin 'B' positive
- Operating Temperature: -55 to +107° C
- Net Weight: 5 oz. max.

Dimensions in inches and (mm).

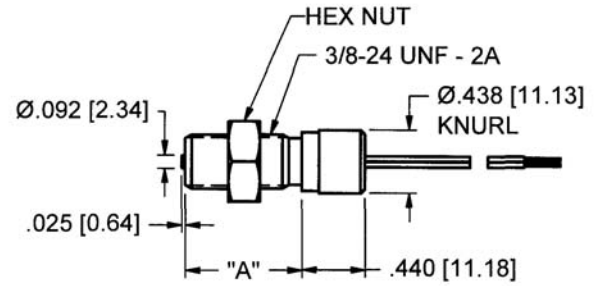
General Purpose

Ordering Part #	Thread Length (A)
70085-1010-007	.812 (20.62)
70085-1010-056	3.625 (92.08)

Performance Curves



Based on 20 D.P. Gear



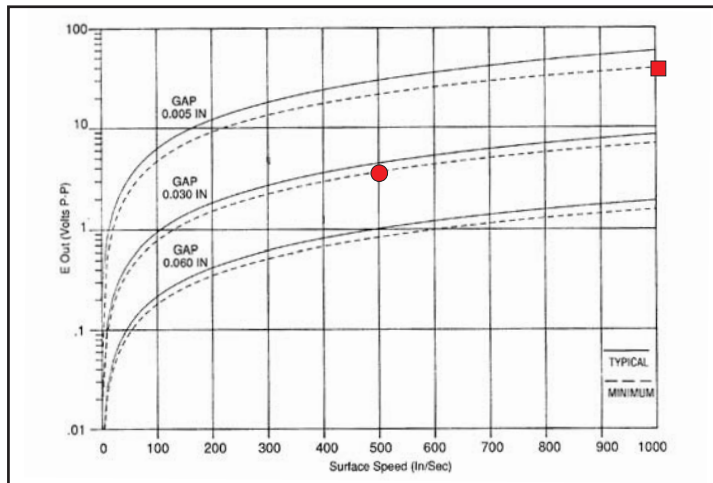
Specifications:

- Output Voltage (Standard): 21 V (P-P)
- Output Voltage (Guarantee Point): 1.6 V (P-P)
- DC Resistance: 125 ohms max.
- Typical Inductance: 22 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -55 to +107°C
- Lead Length: 6 in (15.2 cm)
- Net Weight: 2 oz. max.

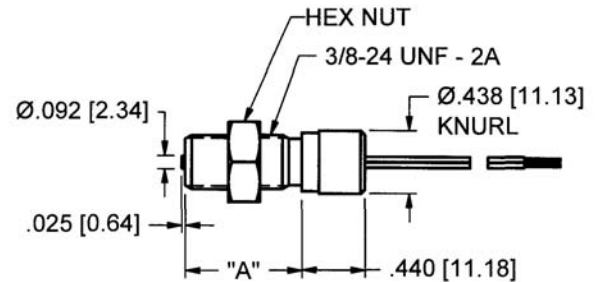
High Sensitivity

Ordering Part #	Thread Length (A)
70085-1010-086	.812 (20.62)
70085-1010-355	.812 (20.62)

Performance Curves



Based on 20 D.P. Gear



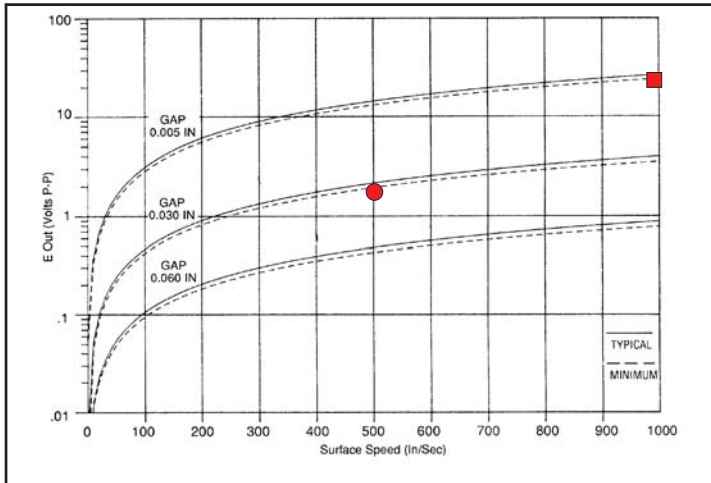
Specifications:

- Output Voltage (Standard): 55 V (P-P)
- Output Voltage (Guarantee Point): 4.2V (P-P)
- DC Resistance: 960 ohms max.
- Typical Inductance: 125 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -55 to +107°C
- Lead Length: -086, 18 in (45.7 cm)
- Cable Length: -355, 40 in (101.6 cm)
- Net Weight: 2 oz. max.

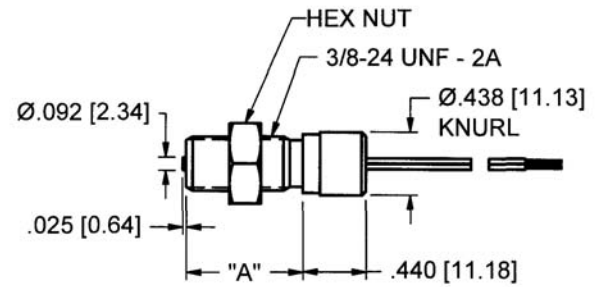
General Purpose - High Temperature

Ordering Part #	Thread Length (A)
70085-1010-041	.812 (20.62)
70085-1010-428	1.500 (38.10)
70085-1010-458	3.625 (92.08)

Performance Curves



Based on 20 D.P. Gear



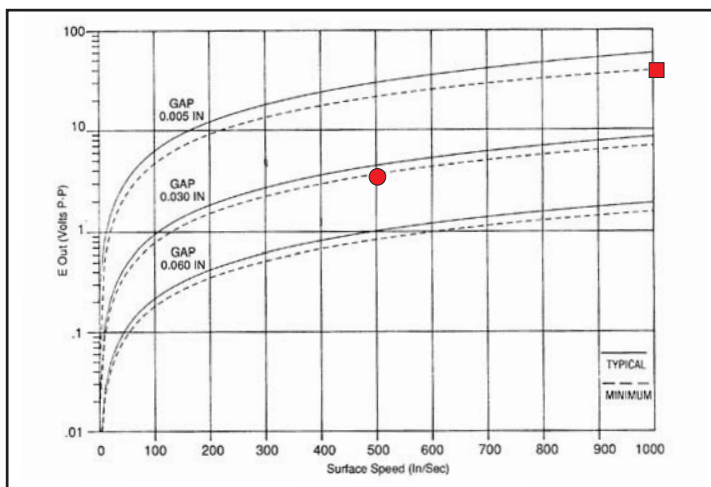
Specifications:

- Output Voltage (Standard): 24 V (P-P)
- Output Voltage (Guarantee Point): 2.0 V (P-P)
- DC Resistance: 125 ohms max.
- Typical Inductance: 21 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -73 to +232°C
- Lead Length: 40 in (1 m)
- Net Weight: 2 oz. max.

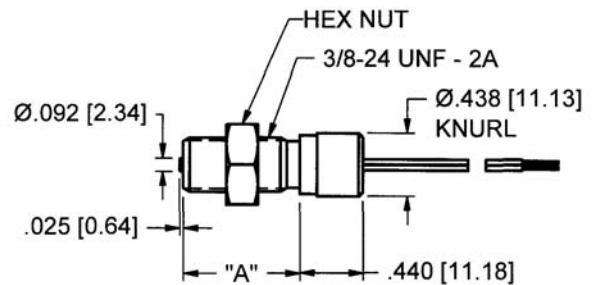
High Sensitivity - High Temperature

Ordering Part #	Thread Length (A)
70085-1010-174	.812 (20.62)

Performance Curves



Based on 20 D.P. Gear



Specifications:

- Output Voltage (Standard): 55 V (P-P)
- Output Voltage (Guarantee Point): 3.6V (P-P)
- DC Resistance: 705 ohms max.
- Typical Inductance: 150 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -65 to +220°C
- Cable Length: 60 in (1.5 m)
- Net Weight: 2 oz. max.

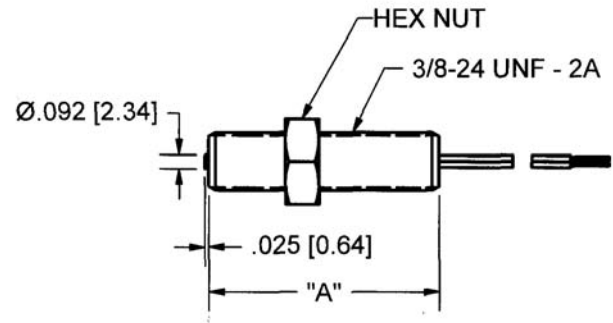
Dimensions in inches and (mm).

Passive Speed Sensors

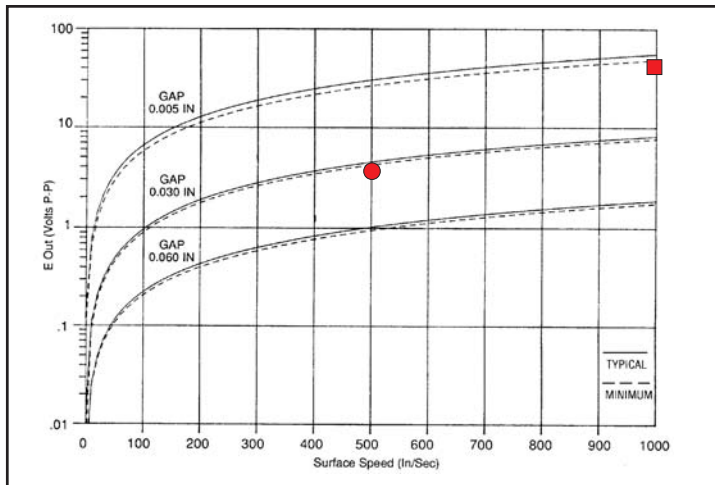
3/8 – 24 FAMILY

Full Thread – High Sensitivity

Ordering Part #	Thread Length (A)	
70085-1010-120	1.250	(31.75)
70085-8080-001	1.500	(38.10)



Performance Curves



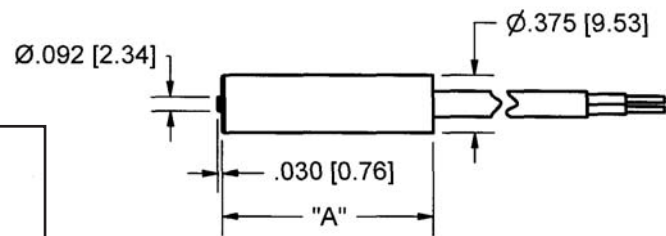
Based on 20 D.P. Gear

Specifications:

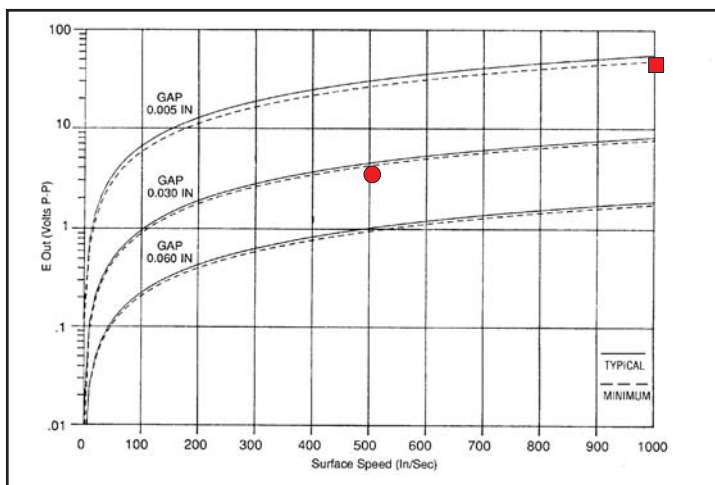
- Output Voltage (Standard): 55 V (P-P)
- Output Voltage (Guarantee Point): 4.2 V (P-P)
- DC Resistance: 960 ohms max.
- Typical Inductance: 125 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -55 to +107°C
- Lead Length: 6 in (15.2cm)
- Net Weight: 1 oz. max.

Smooth Body – High Sensitivity

Ordering Part #	Length (A)	
70085-1010-314	1.375	(34.93)
70085-8080-004	2.500	(63.50)



Performance Curves



Based on 20 D.P. Gear

Specifications:

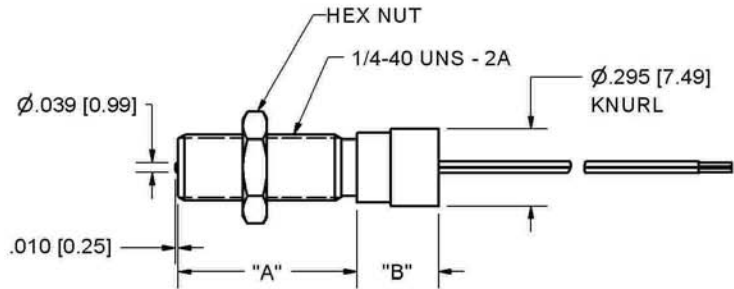
- Output Voltage (Standard): 55 V (P-P)
- Output Voltage (Guarantee Point): 4.2 V (P-P)
- DC Resistance: 960 ohms max.
- Typical Inductance: 125 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -30 to +85°C
- Lead Length: -004, 6 in (15.2cm)
- Cable Length: -314, 10ft (3.05m)
- Net Weight: 3 oz. max.

AI-Tek Instruments, Cheshire, CT USA

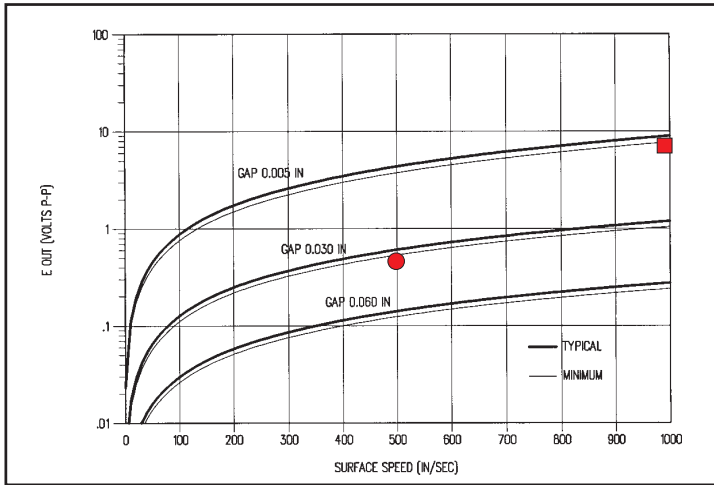
Dimensions in inches and (mm).

General Purpose - High Temperature

Ordering Part #	Thread	Length (A)	(B)
70085-1010-024	.687	(17.45)	.313 (7.95)
70085-1010-472 *	.687	(17.45)	.500 (12.70)
70085-1010-227	1.687	(42.85)	.313 (7.95)



Performance Curves



Based on 20 D.P. Gear

Specifications:

- Output Voltage (Standard): 4.7 V (P-P)
- Output Voltage (Guarantee Point): 0.4 V (P-P)
- DC Resistance: 125 ohms max.
- Typical Inductance: 5-12 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -73 to 232°C
- Lead Length: 8 in (20.3 cm)
- Cable Length: -472, 60 in (1.5 m) *
- Net Weight: 2 oz. max.

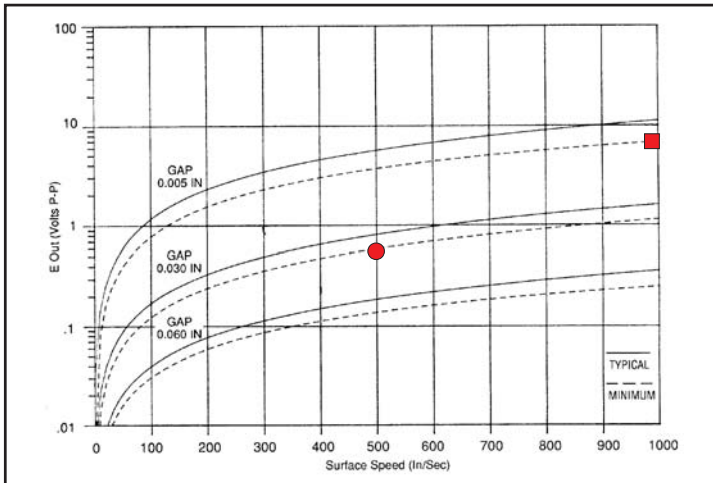
* Egress is a 2-conductor, AWG #26, shielded, Teflon cable, with 3" long shrink tubing over housing and cable for extra protection. Extra locknut provided.

Dimensions in inches and (mm).

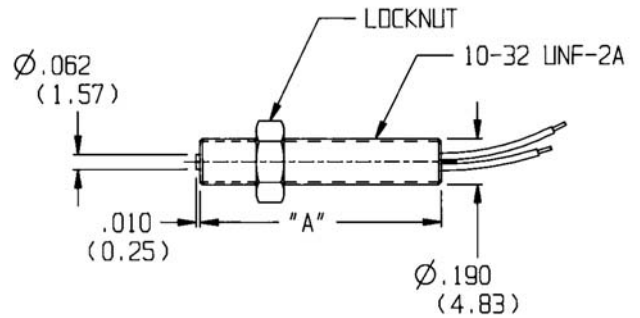
High Sensitivity

Ordering Part #	Thread Length (A)
70085-1010-037	.500 (12.70)
70085-1010-299	1.250 (31.75)

Performance Curves



Based on 20 D.P. Gear



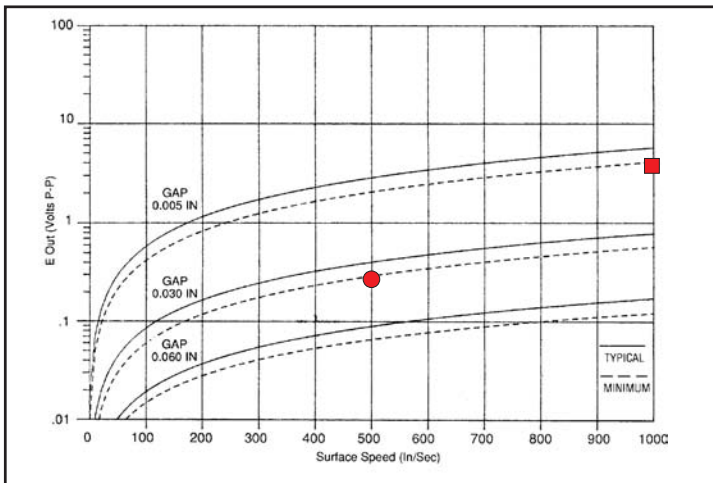
Specifications:

- Output Voltage (Standard): 13 V (P-P)
- Output Voltage (Guarantee Point): .6 V (P-P)
- DC Resistance: 190 ohms max.
- Typical Inductance: 10 mH, ref.
- Output Polarity: White lead positive
- Operating Temperature: -55 to +107°C
- Lead Length: 18 in (45.7 cm)
- Net Weight: 1 oz. max.

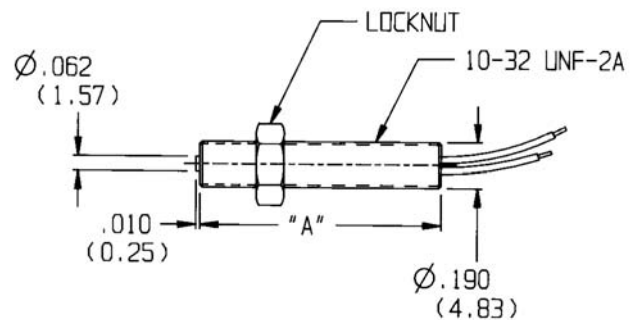
General Purpose – High Temperature

Ordering Part #	Thread Length (A)
70085-1010-182	.500 (12.70)
70085-1010-289	1.250 (31.75)

Performance Curves



Based on 20 D.P. Gear



Specifications:

- Output Voltage (Standard): 6 V (P-P)
- Output Voltage (Guarantee Point): .3 V (P-P)
- DC Resistance: 50 ohms max.
- Typical Inductance: 2 mH, ref.
- Output Polarity: White lead positive
- Operating Temperature: -73 to +150°C
- Lead Length: 18 in (45.7 cm)
- Net Weight: 1 oz. max.

AI-Tek Instruments, Cheshire, CT USA

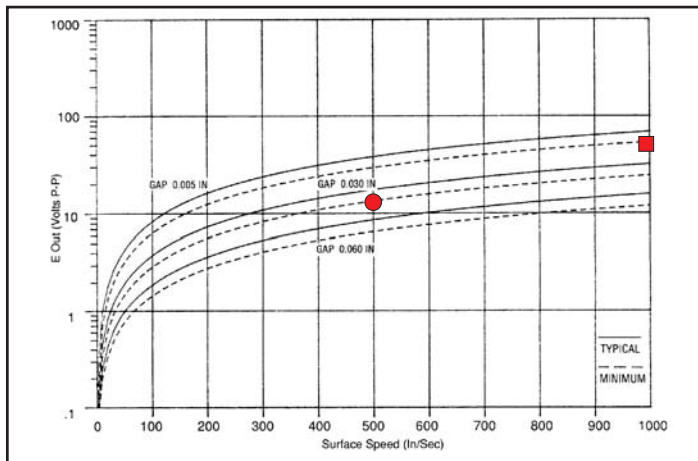
Dimensions in inches and (mm).

UL/ATEX/CSA Sensors

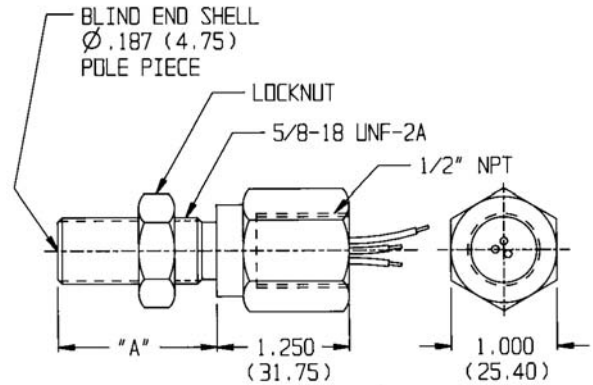
Ordering Part #	Thread Length (A)	
70085-1010-081	1.500	(38.10)
70085-1010-411	1.875	(47.63)
70085-1010-329	2.750	(69.85)
70085-1010-330	4.000	(101.60)
70085-1010-412	6.000	(152.40)

Rating: UL and CSA listed for hazardous locations. Class I, Div 1, Groups A, B, C & D; Class II, Div 1, Groups E, F, G. Temp Code T3C. ATEX Group II, Category 3G, Zone 2

Performance Curves



Based on 8 D.P. Gear



Specifications:

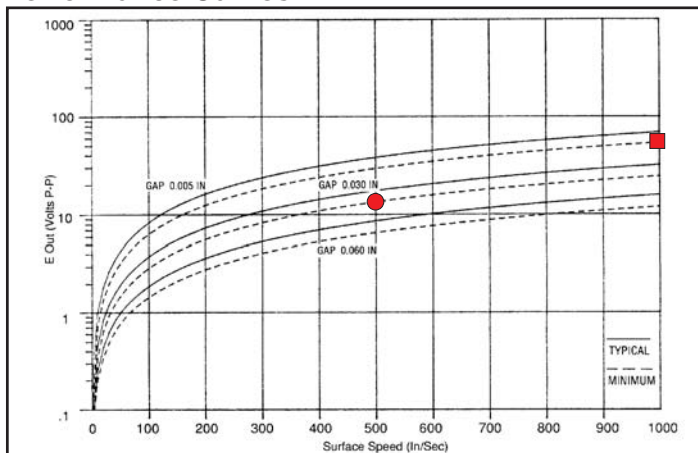
- Output Voltage (Standard): 54 V (P-P)
- Output Voltage (Guarantee Point): 13.4 V (P-P)
- DC Resistance: 240 ohms max.
- Typical Inductance: 30 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -65 to 100°C
- Lead Length: 10 ft (3.05 m)
- Housing Ground: Green/Yellow Tracer
- Net Weight: 14 oz. max.

UL/ATEX/CSA Sensors

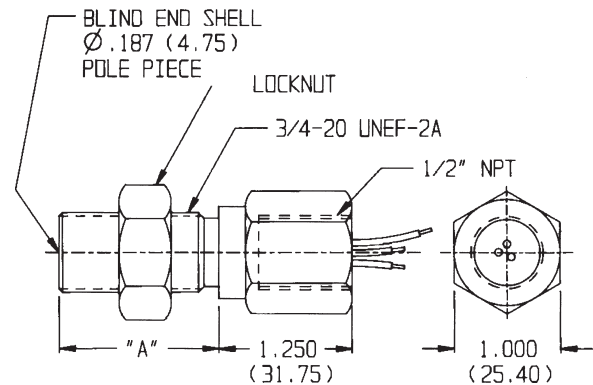
Ordering Part #	Thread Length (A)	
70085-1010-413	1.500	(38.10)
70085-1010-005	1.875	(47.63)
70085-1010-327	2.750	(69.85)
70085-1010-328	4.000	(101.60)
70085-1010-414	6.000	(152.40)

Rating: UL and CSA listed for hazardous locations. Class I, Div 1, Groups A, B, C & D; Class II, Div 1, Groups E, F, G. Temp Code T3C. ATEX Group II, Category 3G, Zone 2

Performance Curves



Based on 8 D.P. Gear



Specifications:

- Output Voltage (Standard): 54 V (P-P)
- Output Voltage (Guarantee Point): 13.4 V (P-P)
- DC Resistance: 240 ohms max.
- Typical Inductance: 30 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -65 to +100°C
- Lead Length: 10 ft (3.05 m)
- Housing Ground: Green/Yellow Tracer
- Net Weight: 14 oz. max.

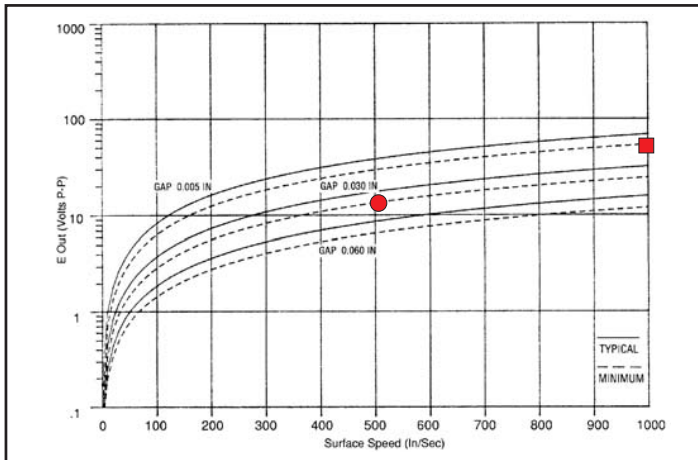
Dimensions in inches and (mm).

FM / ATEX Sensors

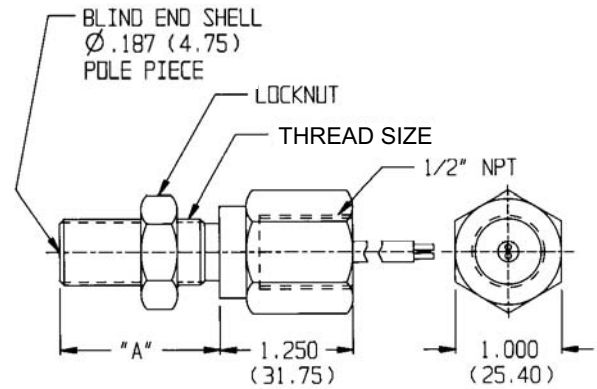
Ordering Part #	Thread Length (A)	Thread Size (B)
70085-1010-404	1.500 (38.10)	5/8-18 UNF-2A
70085-1010-544	1.875 (47.63)	5/8-18 UNF-2A
70085-1010-406	2.750 (69.85)	5/8-18 UNF-2A
70085-1010-417	4.000 (101.60)	5/8-18 UNF-2A
70085-1010-420	6.000 (152.40)	5/8-18 UNF-2A
70085-1010-541	1.875 (47.63)	3/4-20 UNEF-2A
70085-1010-542	2.750 (69.85)	3/4-20 UNEF-2A
70085-1010-540	4.000 (101.60)	3/4-20 UNEF-2A
70085-1010-543	6.000 (152.40)	3/4-20 UNEF-2A

Rating: FM listed Intrinsically Safe, Class I, Division 1, Groups A, B, C, D; ATEX Group II, Category 3G, Zone 2.

Performance Curves



Based on 8 D.P. Gear



Specifications:

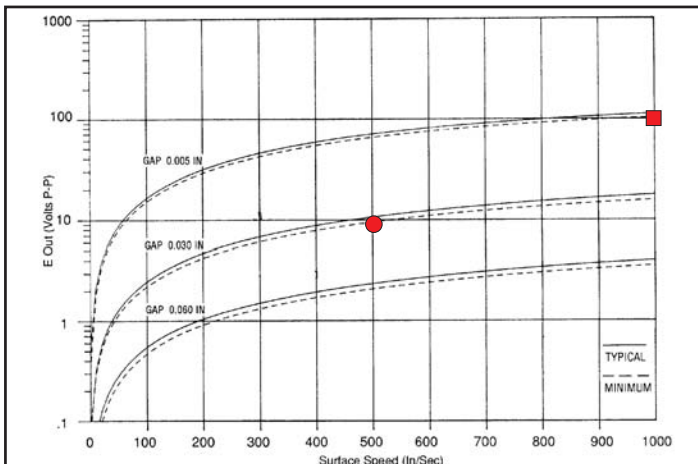
- Output Voltage (Standard): 60V (P-P)
- Output Voltage (Guarantee Point): 13.4V (P-P)
- DC Resistance: 210 ohms max.
- Typical Inductance: 75 mH max.
- Output Polarity: White lead positive
- Operating Temperature: -55 to +220°C
- Cable Length: 15 ft. (4.57m)
- Net Weight: 16 oz. max.

FM / ATEX Sensors

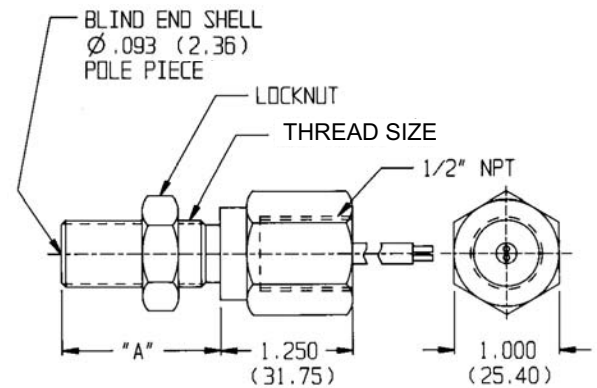
Ordering Part #	Thread Length (A)	Thread Size (B)
70085-1010-403	1.500 (38.10)	5/8-18 UNF-2A
70085-1010-415	4.000 (101.60)	5/8-18 UNF-2A
70085-1010-416	6.000 (152.40)	5/8-18 UNF-2A
70085-1010-405	2.750 (69.85)	3/4-20 UNEF-2A

Rating: FM listed Intrinsically Safe, Class I, Division 1, Groups A, B, C, D; ATEX Group II, Category 3G, Zone 2.

Performance Curves



Based on 20 D.P. Gear



Specifications:

- Output Voltage (Standard): 90 V (P-P)
- Output Voltage (Guarantee Point): 9.4 V (P-P)
- DC Resistance: 750 ohms max.
- Typical Inductance: 210 mH max.
- Output Polarity: White lead positive
- Operating Temperature: -55 to +232° C
- *Mounting Thread: -0405, 3/4 - 20 UNEF-2A
- Cable Length: 15 ft (4.57 m)
- Net Weight: 16 oz. max.

IEC EX Sensors

Ordering Part #	Thread Length (A)	Thread Size (B)	Cable Length (C)	Conduit Thread
70085-3030-111	1.500 (38.10)	5/8-18 UNF-2A	3 m	1/2 NPT
70085-3030-112	2.750 (68.85)	5/8-18 UNF-2A	3 m	1/2 NPT
70085-3030-113	4.000 (101.6)	5/8-18 UNF-2A	3 m	1/2 NPT
70085-3030-114	6.000 (152.4)	5/8-18 UNF-2A	3 m	1/2 NPT
70085-3030-211	1.500 (38.10)	5/8-18 UNF-2A	10 m	1/2 NPT
70085-3030-212	2.750 (68.85)	5/8-18 UNF-2A	10 m	1/2 NPT
70085-3030-213	4.000 (101.6)	5/8-18 UNF-2A	10 m	1/2 NPT
70085-3030-214	6.000 (152.4)	5/8-18 UNF-2A </td <td>10 m</td> <td>1/2 NPT</td>	10 m	1/2 NPT
70085-3030-222	2.750 (68.85)	3/4-20 UNEF-2A	10 m	1/2 NPT
70085-3030-235	1.575 (40.00)	M16 x 1.5 6g	10 m	G 1/2
70085-3030-237	3.937 (100.0)	M16 x 1.5 6g	10 m	G 1/2

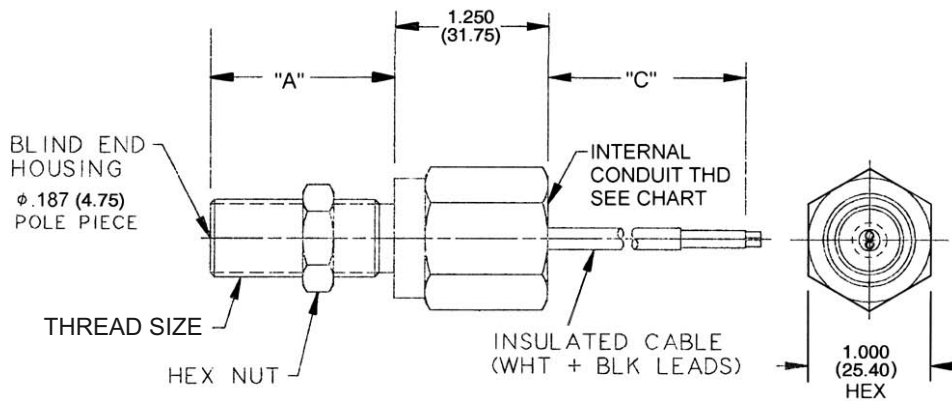


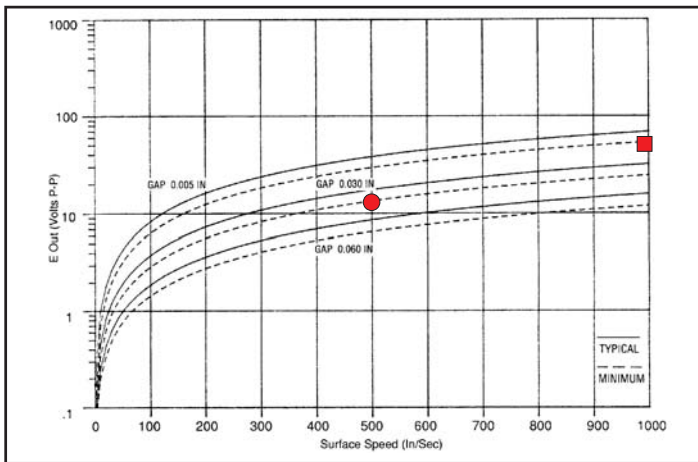
Figure 1: Dimension Drawing

Rating: ATEX and IEC Ex Equip Group II, Category 2G, Gas Group IIC, Zone 1

Sensor must be used with MTL 7764ac intrinsic barrier

User must install sensor in such a manner as to limit the output voltage to less than 12V Pk-Pk and a total energy of less than 26 microjoules

Performance Curves



Based on 8 D.P. Gear

Available in a range of inch and metric thread lengths and sizes and cable lengths of 3 or 10 meters. Consult factory for additional details.

Specifications:

- Output Voltage (Standard): 54 V (P-P)
- Output Voltage (Guarantee Point): 13.4 V (P-P)
- DC Resistance: 240 ohms max.
- Typical Inductance: 30 mH ref.
- Output Polarity: White lead positive
- Operating Temperature: -65 to 100°C
- Net Weight: 14 oz. max.