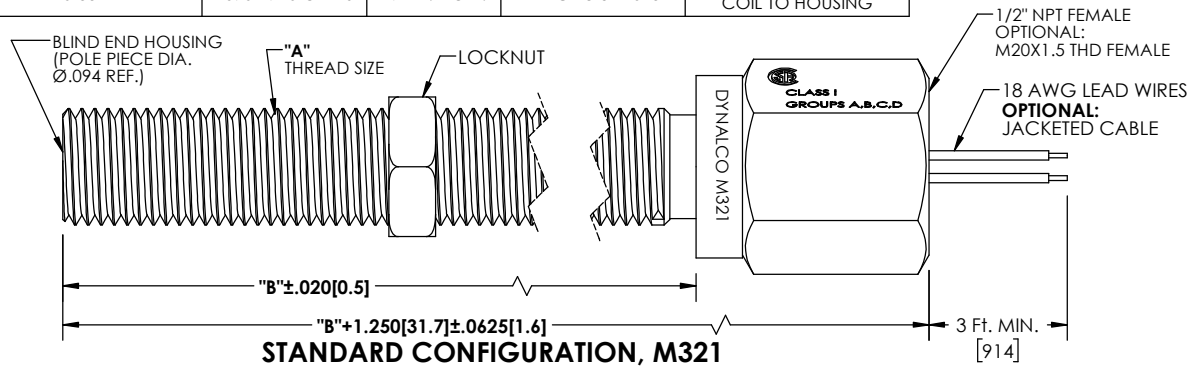
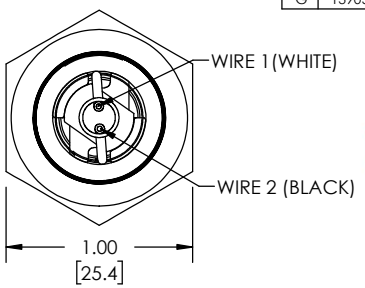
OUTPUT VOLTAGE ⚠1	DC RESISTANCE AT 75 °F	INDUCTANCE AT 1 KHZ	OUTPUT LEADS ⚠2	INSULATION RESISTANCE AT 500 VDC
20-35V P-P	1670-1710 OHMS	29mH. NOM.	AWG 18 UL 1015	100 MEGOHMS MIN. COIL TO HOUSING

REV	ECN	REVISION RECORD	DATE	DR	CK
A	11599	RELEASING PER AGENCY APPROVAL	12/18/19	PV	TT
B	11782	NOTE 11 ADDED	09/09/20	SS	PV
C	12358	COLUMN ADD FOR -QXX	06/02/22	PV	CS
D	12920	ADDED CE 2776 AND UKCA2503	05/24/23	PV	CS
E	13098	ADDED CML 21UKEX21085X	02/02/24	PC	--
G	13905	CERTIFICATION UPDATED FOR CSA	02/07/26	PV	CS



STANDARD CONFIGURATION, M321
(APPROVALS: Ex ia, Ex mb & Non-Incendive)



AGENCY APPROVALS:
ATEX, IECEx, NoA CERTIFIED

CE 2776 / IEC IECEx Ex

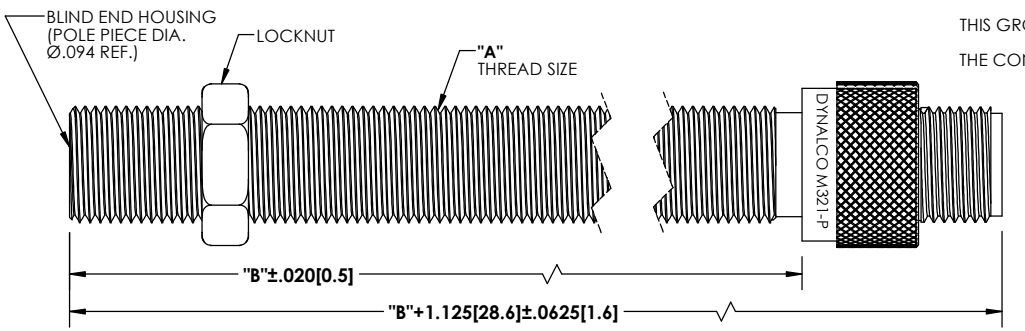
II 1 G
Ex ia IIC T4 Ga
Class I Zone 0 AEx ia IIC T4 Ga
IS Class I Div 1, Gr A B C D, T4
NI Class I Div 2, Gr A B C D, T4
-40 °C ≤ Tamb ≤ +80 °C

SA® C US

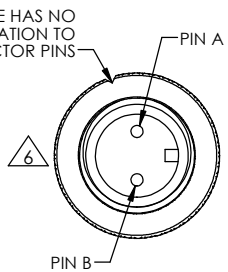
II 2 G
Ex mb IIC T4 Gb
Class I Zone 1, AEx mb IIC T4 Gb
Class I Div 2, Gr A B C D, T4
-40 °C ≤ Tamb ≤ +90 °C

UK CA 2503

CML 19ATEX2490X
IECEx CML 19.0182X
CML 21UKEX21085X
CSA 26CA80278336X



PIN CONFIGURATION, M321-P
(APPROVALS: Ex ia & Non-Incendive)



NOTES:

⚠1 TESTED AT 1000 INCHES/SECOND WITH AN 20 PITCH, 30 TOOTH GEAR, 0.005" CLEARANCE AND 100 KOHMS.

⚠2 WITH APPROACH OF FERROUS METAL, WHITE LEAD/PIN A IS POSITIVE WITH RESPECT TO BLACK LEAD/PIN B.

3. INSTRUMENT OR INSTALLATION MUST LIMIT GENERATED VOLTAGE TO 21V RMS (60 VOLTS PEAK TO PEAK) AND MAX. CURRENT TO 0.05 AMPS.
4. HOUSING: 303 STAINLESS STEEL, POTTING: EPOXY RESIN
5. OPTIMUM OPERATING AIR GAP: .005"[0.127] TO .025"[0.635]

⚠6 CABLE-CONNECTOR SOLD SEPARATELY FOR PIN CONFIGURATION. C101-XX (XX: 10 TO 100 FT; 10 FT INCREMENT)

7. AMBIENT TEMPERATURE RANGES:
   -40°F to +176°F (-40°C to +80°C) FOR INTRINSICALLY SAFE (Ex ia) INSTALLATIONS
   -40°F to +194°F (-40°C to +90°C) FOR ENCAPSULATION (Ex mb) INSTALLATIONS
8. DIMENSIONS ARE IN INCHES [MM]
9. MARKING: WIRE OUTPUT OPTION: MARKING IS LASR ETCHED ON BODY.
   PIN OUTPUT OPTION: LABEL WILL BE PROVIDED WHICH MUST BE ATTACHED NEAR PICKUP INSTALLATION.
10. FOR Ex mb, RATED VOLTAGE U = 28V, I = 93 mA
    FOR Ex ia, Ui = 28V and Ii = 93mA
11. REFER #145F-13228 FOR INSTALLATION INSTRUCTIONS BULLETIN OF M321

PRODUCT CONFIGURATOR

M321	-A	-L3.5	-P	-Qxx
BASE NUMBER	DIM "**A**" THREAD SIZE	DIM "**B**" THREAD LENGTH	ELECTRICAL CONNECTION	OPTIONS
M321 POLE PIECE DIAMETER: Ø.094"[2.38] Encapsulated (Ex mb); Zone 1,2 Intrinsically safe (Ex ia); Zone 0,1,2	**-A:** 5/8-18 UNF-2A - MIN. **-B**: 11/16-24 UNF-2A **-C**: 3/4-16 UNF-2A **-D**: 3/4-20 UNF-2A **-E**: M16 x 1.5-6g **-F**: M18 x 1.5-6g **-G**: M20 x 1.5-6g **-Z**: Custom thread (consult factory)	**-L1.875**: 1.875[47.6] (MIN.) **-L3.5:** 3.5[88.9] **-L4.5:** 4.5[114.3] **-L6**: 6[152.4] (MAX.) **-Lxx**: Custom length (consult factory. **xx**: in inches, and within indicated min and max lengths)	**-Wxx*:** 1/2" NPT Conduit Connection (18 AWG wire output) **-M20-Wxx*:** M20x1.5 Female Connection (18 AWG wire output) **-Jxx*:** 1/2" NPT Conduit Connection with 18AWG Jacketed Cable **-M20-Jxx*:** M20x1.5 Female Connection with 18AWG Jacketed Cable ***xx:** 3-100 Ft., 1 Ft increment **-P**: Pin-output ⚠4 (Only Intrinsically Safe "Ex ia" Approvals)	**-Qxx:** Private Label

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UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
DIMENSIONAL TOLERANCES:
FRACTIONAL ±1/64
ANGULAR: ± 1/2°
XX ±0.010
XXX ±0.005

THIRD ANGLE PROJECTION

DYNALCO®

MODEL:	M321	DRAWN	PV
DATE:	12/27/17	PATH: -	APPROVED JR
MATERIAL:	-	TITLE:	MAGNETIC PICKUP WITH HAZARDOUS AREA APPROVAL
FINISH:		SIZE B / DWG. NO.	800-0321 / REV G
DO NOT SCALE DRAWING		SCALE 1:2 / WEIGHT (Wired) 184 gm	SHEET 1 OF 1

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