



HAZ-LOC[®]

HAZARDOUS LOCATION
ELECTROHYDRAULIC SOLENOID COILS

Engineered for safety critical markets



MAGNET-SCHULTZ OF AMERICA
SPECIALISTS IN ELECTROMAGNETIC DEVICES



HARNESS THE *power*
OF COLLABORATIVE INNOVATION



Turning our knowledge into customer value



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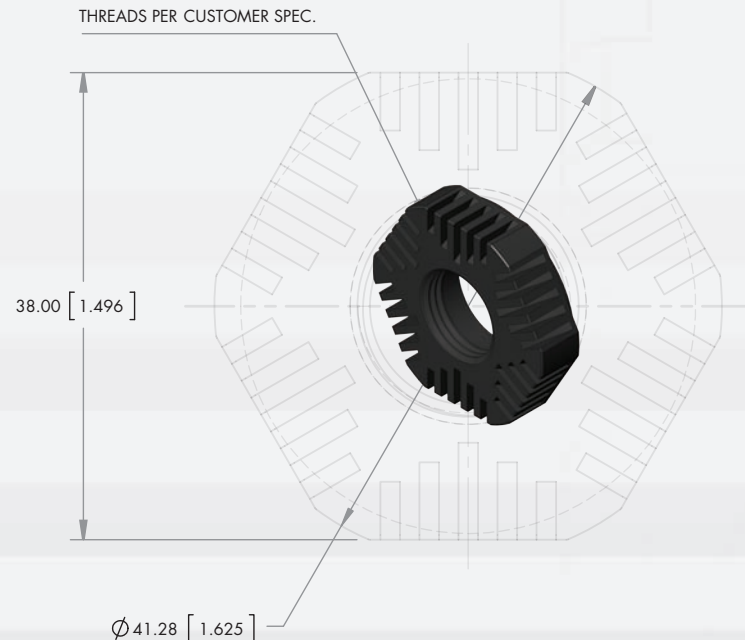
Magnet-Schultz of America (MSA), a leading innovator and manufacturer of Electromagnetic Devices, offers a new family of Electrohydraulic Coils designed and certified for use in hazardous location environments—including gas and dust atmospheres present in petroleum exploration and production, chemical processing, and facilities involving the transfer and storage of grain or other dry materials.

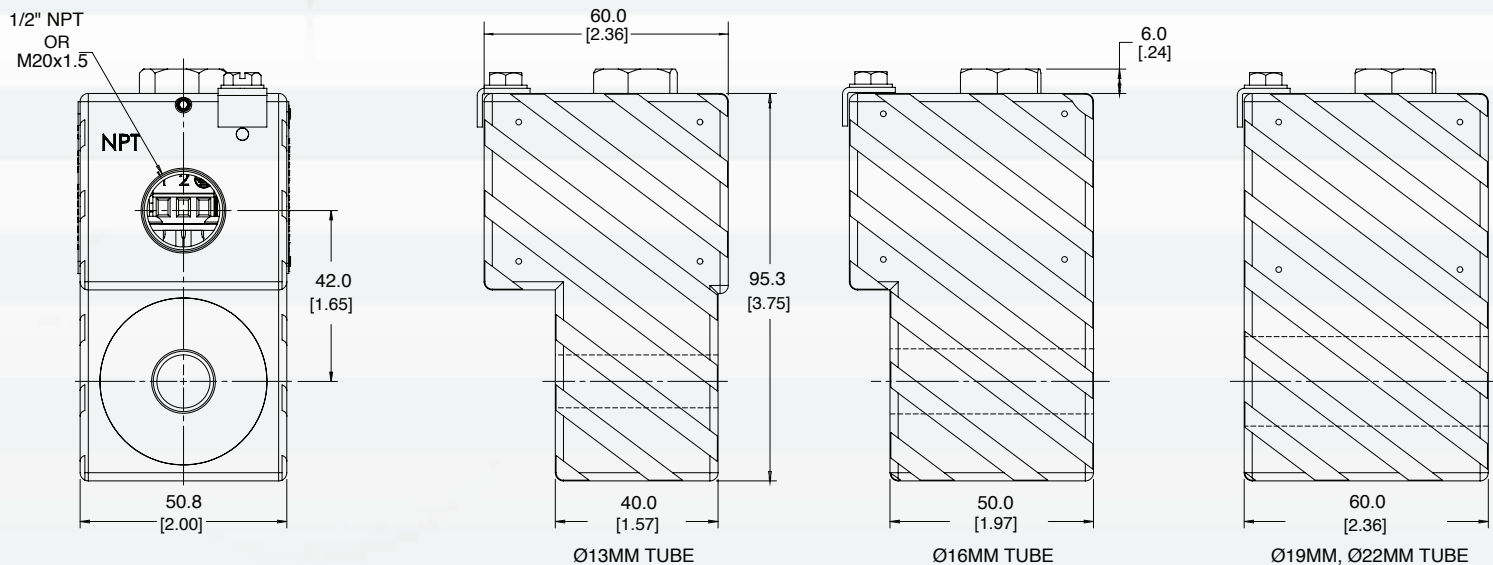
The HAZ-LOC coil family is designed to be mounted on any manufacturer's hydraulic valve which utilizes actuator pressure tube diameters of 13mm, 16mm, 19mm and/or 22mm.

MSA's collaborative innovation approach is perfectly suited to design and achieve certification for customized derivatives of the original HAZ-LOC coil family, enabling the resulting new coil to interface with customer specific actuator tube diameters and valve configurations. The product family is also adaptable to non-hydraulic valve applications.

We invite you to contact Magnet-Schultz of America to discuss how we can help resolve your hazardous location challenges.

HEAT-SINK COIL NUT





Thermal Classification *Class H (180°C)*

Double insulated magnet wire for greater safety

Corrosion Protection

- Zinc-Nickel electroplating with Trivalent Chromate
- Salt Fog requirements in accordance with ASTM B-117, 5% salt solution
- Exceeds AMS 2417: 1,000 hours to white rust, 1,500 hours to red rust

Coil Protection *Epoxy Encapsulation*

Water and Dust Ingression Rating **IP 66, NEMA 4X**

RoHS Compliant



COIL WATTAGE OPTIONS

TUBE SIZE	MAX AMBIENT TEMP	RATED WATTAGE (Rated Voltage @ 20°)	ATMOSPHERE GROUP	TEMPERATURE CODE
13 mm	40°C	22	G	T4
	80°C	9	G	T4
	40°C	19	D	T4
	80°C	7	D	T4
16 mm	40°C	23	G	T4
	80°C	10	G	T4
	40°C	21	D	T4
	80°C	7	D	T4
19 mm	40°C	28	G	T4
	80°C	13	G	T4
	40°C	19	D	T4
	80°C	7	D	T4
22 mm	40°C	27	G	T4
	80°C	13	G	T4
	40°C	22	D	T4
	80°C	8	D	T4

KEY: G = Gas; D = Dust & Gas

Learn more about MSA's HAZ-LOC® family of products—visit Magnet-SchultzAmerica.com, or contact us directly at 630.789.0600.

HAZARDOUS LOCATION CERTIFICATIONS AND RATINGS

RELEVANT GLOBAL LOCATION <i>Surface Applications Above Ground and Sea</i>	GOVERNING STANDARD	GAS RATINGS	DUST RATINGS
United States	NEC 500	Class I (Division 1) Group A, B, C, D, T4	Class II & III (Division 1) Group E, F, G, T4
Safety ratings in the US are governed under the National Electrical Code (NEC). There are two separate classification systems (NEC 500 and NEC 505). To ensure universal acceptance, MSA HAZ-LOC coils have been approved under both systems.			
United States	NEC 505	Class I (Zone 1) AEx d IIC T4 Gb	Class II (Zone 21) AEx tb IIIC T4 Db
Mandatory for Gulf of Mexico Class and Zone Rating. Most international markets require recognition under the International Electrotechnical Committee (IEC) Ex scheme.			
Canada	CEC/CSA	Ex d IIC T4 Gb (Zone 1)	Ex tb IIIC T4 Db (Zone 21)
Canadian safety ratings are regulated by the Canadian Electrical Code (CEC), closely following the US-NEC Standards. Similar to NEC 500, NEC 505 and ATAX Gas and Dust ratings.			
Europe	ATEX	 II 2 G Ex d IIC T4 Gb (Zone 1)	 II 2 D Ex tb IIIC T4 Db (Zone 21)
Similar to NEC 505 Gas and Dust ratings.			
International (Excluding Above Locations)	IECEX	Ex d IIC T4 Gb (Zone 1)	Ex tb IIIC T4 Db (Zone 21)
Similar to ATEX Gas and Dust ratings.			

SELECTING YOUR PART NUMBER

EXPLANATION	HAZ-LOC <i>Solenoid Coils</i>	CONDUIT <i>Inlet Thread</i>	DIMENSIONS <i>Coil (L) x Tube (D)</i>	VOLTAGE <i>Standard Ratings</i>	PCB CONFIGURATION	AMBIENT <i>Temp. Range (°C)</i>	TEMP. CODE	ATMOSPHERE GROUP
Certified Part Options	EX	M (M20 x 1.5) I (1/2" NPT)	40 mm x 13 mm 50 mm x 16 mm 60 mm x 19 mm 60 mm x 22 mm	12 VDC 24 VDC 120 VAC 240 VAC	AC DC TVS*- DC with TVS Diode Protection	-40° to +40° -40° to +80°	T4 (135°C)	D - Dust & Gas G - Gas
Example Part Number	EX	M	60 x 19	240	AC	80	T4	D
Example Part Description	HAZ-LOC Coil, M20 x 1.5 Thread for Conduit, 60 mm x 19 mm, 240 Volt AC, 80°C Max Ambient Temp and T4 Max Surface Temp 135°C D for use in gas or dust atmosphere							



Conforms to ANSI/ISA STD 60079-31, UL STDS 1203, 50, 50E, 60079-0 & 60079-1
Certified to CAN/CSA STD C22.2 Nos. 30, 25, 0.4, 0.5, 60079-0, 60079-1 & 60079-31
ETL Listed Mark is used with express written consent of Intertek Group plc.





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MSA and MSM are certified to ISO 9001:2008

