

# 磁电式转速传感器 (MPUs) 供感应原动机转速

## 功能

为控制原动机的转速，速度控制器需将实际转速与转速设定值相比较。通常用于感应实际转速的传感器叫磁电式转速传感器（MPU）。

当磁性材料的磁力线被原动机飞轮盘齿切割时，它会产生电压信号。电压信号转换的频率将会精确的表示原动机的转速。

## 安装

MPU通常采用机壳或支架形式安装于飞轮盘齿辐射线上。如果MPU必须安装于正对飞轮盘齿时，应注意与齿顶的间隙。

## MPU种类

磁电式转速传感器具有不同的长度和安装螺纹尺寸。详情如下页所示。

标准的MPU需要相应的接头，此接头不包括在基本的传感器中。因此订购时必须确认接头是否包括在内，除非为替换而订购的，可不订购接头。



- 产生频率电信号
- 发动机上简便安装
- 不需控制器供电
- 与所有的控制器匹配
- 可安装于危险场合

## 间隙设定

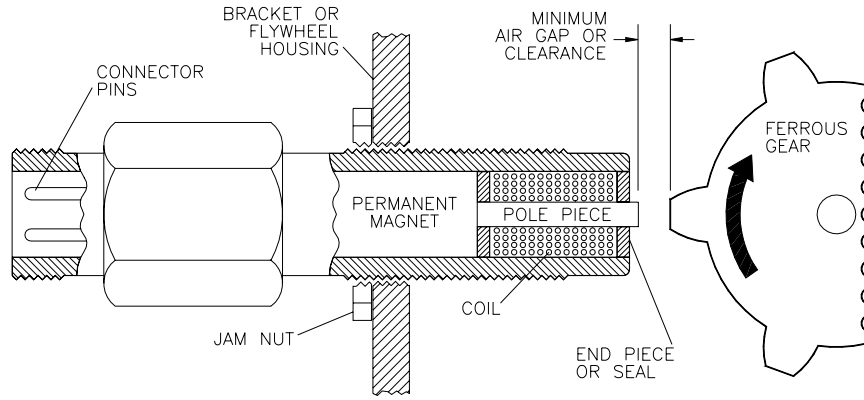
MPU和飞轮盘齿的间隙通常为0.25到1.02 mm (0.010 to 0.040英寸)。如果间隙过小，MPU将被损坏。正确安装的MPU能提供最大为50 Vac (rms)的感应电压；许多Woodward控制器要求在低速时的最小感应电压为1.5 Vac。MPU离飞轮盘齿越远，其感应的电压越小。如果间隙无法直接测量，则可以将传感器拧到底，顶住飞轮盘后，再将传感器退出一整圈约0.0555英寸（对于公制传感器约1.5 mm）。

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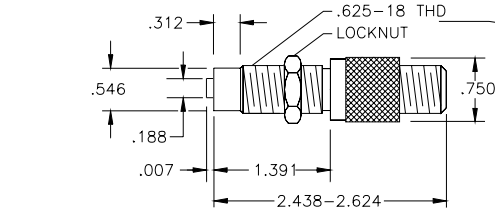


OUTPUT FREQUENCY OF MAGNETIC PICKUP IN HERTZ

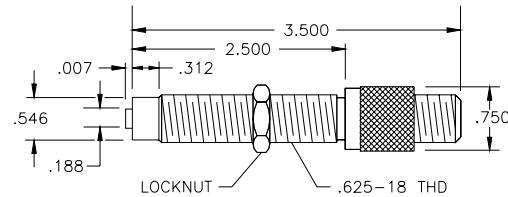
$$\text{Hz} = \frac{\text{NO. OF GEAR TEETH} \times \text{GEAR RPM}}{60}$$

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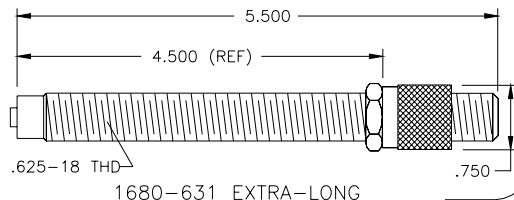
**磁电式转速传感器**



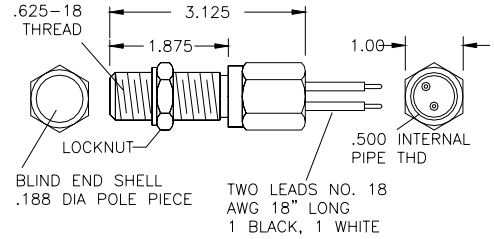
202-816 STANDARD SHORT MAGNETIC PICKUP



1680-622 STANDARD LONG MAGNETIC PICKUP



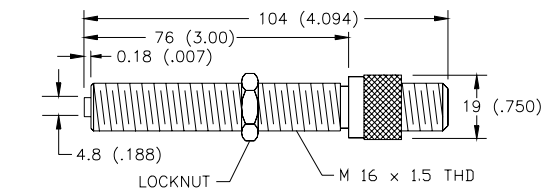
1680-631 EXTRA-LONG STANDARD MAGNETIC PICKUP



1680-609 EXPLOSION-PROOF MAGNETIC PICKUP (SEE NOTE BELOW)

NOTE:  
 1680-609 IS UL LISTED AND CSA CERTIFIED FOR HAZARDOUS LOCATION CLASS I, DIVISION 1, GROUPS A, B, C, D, CLASS II, DIVISION 1, GROUPS E, F, G.

MATING CONNECTOR



1680-649 STANDARD METRIC THREAD PICKUP

020-101  
 04-6-2

**外型尺寸**

更多信息参见手册 82510.



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