

## Magnetic Pick-Up Sensors

RELIABLE MEASUREMENT OF REVOLUTION AND SPEED

# REVOLUTION AFTER REVOLUTION

Magnetic pick-up sensors are electromagnetic devices that sense a sudden change in a magnetic field. Used in a variety of applications—from heavy-duty trucks to refrigeration units, small utility vehicles, farm equipment and even wood-chipping units—sensors are designed to reliably measure revolution and speed.

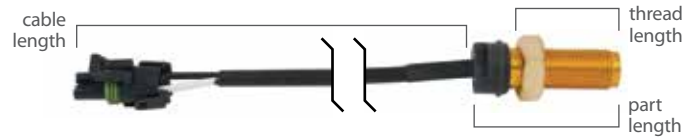
Magnetic pick-up sensors can be easily mounted to the spindle flange of the axle or the rear of the transmission. They can be used either as a speedometer sensor or as a tachometer sensor when mounted on the flywheel housing. In either application, the device senses a sudden change in the magnetic field caused by a metal protrusion on a rotating shaft, slot on a wheel disc, teeth of a gear or metal indicator on a material handling system. The sensor generates a sine wave for transmission to the speedometer, tachometer, or controller.

### FEATURES:

- High-output voltage signal
- Versatile design for use as a speedometer or tachometer sensor
- Superior performance at high temperatures; outperforms semiconductor-type devices
- Aluminum-threaded sleeve for greater durability
- Protective molded thermoset compound completely covers interior components and will not soften or deform in high-temperature applications
- Sturdier than plastic sensors, which may have thin hollow areas
- Reliable heavy-duty wiring harness available
- Very long service life; sensor has no moving parts and is unaffected by dust and dirt
- Custom models available with terminal posts, cables, connectors or dual outputs



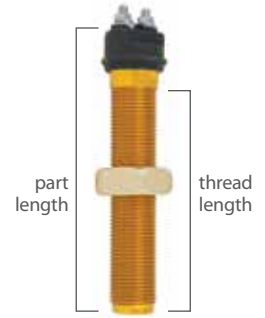
## Adjustable nut with cable (variable depth)



Midtronics Part Number	Diameter & Threads	Threaded Length	Body Length	Cable Length	Connector	Nominal Coil Resistance
5MT0598	3/4-16 UNF	2.29	3.16	12	Packard Electric #15300002	265 Ohm
5MT2004A	3/4-16 UNF	3.5	4.37	72	None	265 Ohm
5MT2005A	3/4-16 UNF	1.79	2.66	30.6	Packard Electric #12010973	690 Ohm
5MT2005B	3/4-16 UNF	1.79	2.66	18.6	Packard Electric #12010973	690 Ohm
5MT2005D	3/4-16 UNF	1.79	2.66	146	None	690 Ohm
5MT2005E	3/4-16 UNF	1.79	2.66	72	None	265 Ohm
5MT2005M	3/4-16 UNF	1.79	2.66	12	Packard Electric #15300002	690 Ohm
5MT2010A	3/4-16 UNF	2.29	3.75	72	None	265 Ohm
5MT2010B	3/4-16 UNF	2.29	3.75	120	None	265 Ohm
5MT2033	3/4-16 UNF	2.73	3.6	6	Packard Electric #12015792	265 Ohm
5MT2033C	3/4-16 UNF	2.56	3.6	17.7	Packard Electric #12010973	690 Ohm
5MT2033CF	3/4-16 UNF	2.56	3.6	17.7	Packard Electric #12010973	690 Ohm
5MT2033D	3/4-16 UNF	2.73	3.6	12	Cannon #120-1807-00	265 Ohm
5MT2033H	3/4-16 UNF	2.56	3.6	29.5	Packard Electric #12010973	690 Ohm
5MT2033K	3/4-16 UNF	2.56	3.6	12	Packard Electric #15300002	265 Ohm
5MT2033L	3/4-16 UNF	2.56	3.6	12	Packard Electric #12015792	265 Ohm
5MT2033M	3/4-16 UNF	2.56	3.6	12	Packard Electric #15300002	690 Ohm
5MT2033N	3/4-16 UNF	2.56	3.6	17.7	2-Way Trailer	690 Ohm
5MT2033P	3/4-16 UNF	2.56	3.6	20	None	1300 Ohm
5MT2033P01	3/4-16 UNF	2.56	3.6	20	2-Way Trailer	1300 Ohm
5MT2033S	3/4-16 UNF	2.56	3.6	17.7	Packard Electric #12010973	690 Ohm
5MT2033T	3/4-16 UNF	2.56	3.6	29.5	Packard Electric #15300002	690 Ohm
5MT2040	3/4-16 UNF	1.79	2.66	12	Packard Electric #15300002	265 Ohm
5MT2040E	3/4-16 UNF	1.79	2.66	12	Packard Electric #15300002	265 Ohm
5MT2041	3/4-16 UNF	2.56	3.6	12	Packard Electric #15300002	170 Ohm
5MT2047G	M16 X 1.5	2.29	3.16	6.55	Packard Electric #12015792	575 Ohm
5MT2048	3/4-16 UNF	2.56	3.6	17.7	Packard Electric #15300002	690 Ohm
5MT2049	3/4-16 UNF	2.56	3.6	17.7	Packard Electric #15300002	690 Ohm
5MT2283M	M18 X 1.5 necked down to .411	0.92	2.66	8	Packard Electric #15300002	290 Ohm
5MT2418M	3/4-16 UNF	1.91	2.66	12	Packard Electric #15300002	265 Ohm
5MT3105A	3/4-16 UNF	2.29	3.16	None	Mates with Deutsch #DT06-2S	690 Ohm
5MT3106A	3/4-16 UNF	2.29	3.16	4.25	Mates with Deutsch #DT06-2S	690 Ohm
5MT3233	3/4-16 UNF	2.29	3.66	None	Packard Electric #12066016. Mates with Packard #12162193 or #12040753	265 Ohm
5MT3233A (replaced by 5MT2004-3233)	3/4-16 UNF	2.29	3.66	None	Mates with Packard #12162193 or #12040753	690 Ohm
5MT3233V	M18 X 1.5	2.29	3.66	None	Packard Electric #12066016. Mates with Packard #12162193 or #12040753	265 Ohm
5MT3233W	M18 X 1.5	2.29	3.66	None	Packard Electric #12066016. Mates with Packard #12162193 or #12040753	690 Ohm
5MT3824	3/8-24	1.7	1.70	14.3	Packard Electric #12010973	700 Ohm

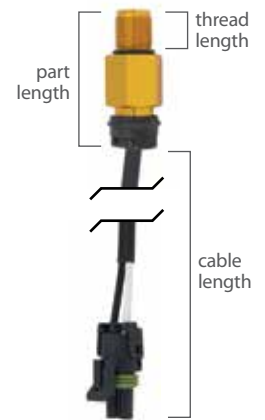
## Adjustable nut with #8 terminals (variable depth)

Midtronics Part Number	Diameter & Threads	Threaded Length	Body Length	Cable Length	Connector	Nominal Coil Resistance
5MT2002	3/4-16 UNF	1.16	2.03	None	8-32 NC Terminals	265 Ohm
5MT2004	3/4-16 UNF	3.5	4.37	None	8-32 NC Terminals	265 Ohm
5MT2005	3/4-16 UNF	1.79	2.66	None	8-32 NC Terminals	265 Ohm
5MT2005C	3/4-16 UNF	1.79	2.66	None	8-32 NC Terminals	265 Ohm
5MT2010	3/4-16 UNF	2.29	3.75	None	8-32 NC Terminals	265 Ohm
5MT2018	3/4-16 UNF	1.75	2.66	None	8-32 NC Terminals	370 Ohm
5MT2031	M16 X 1.5	2.29	3.16	None	M4 X 0.7 Terminals	675 Ohm
5MT2032	5/8-18 UNF	3.5	4.37	None	8-32 NC Terminals	675 Ohm



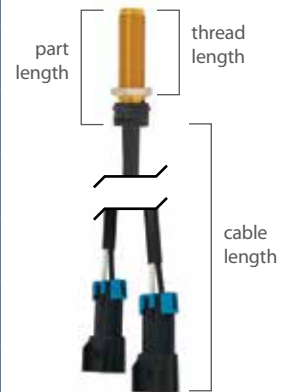
## Integral nut with cable (fixed depth)

Midtronics Part Number	Diameter & Threads	Threaded Length	Body Length	Cable Length	Connector	Nominal Coil Resistance
5MT2033A	3/4-16 UNF	1.03	2.66	18	Packard Electric #12015792	265 Ohm
5MT2033B	3/4-16 UNF	0.85	2.66	18	Packard Electric #12015792	265 Ohm
5MT2033J	3/4-16 UNF	0.85	2.65	17.7	Packard Electric #12010973	265 Ohm
5MT2033V	M18 X 1.5	0.984	2.66	18	Packard Electric #12015792	265 Ohm
5MT2033W	M18 X 1.5	2.29	3.66	18	Packard Electric #12015792	690 Ohm
5MT2033X	M18 X 1.5	0.984	2.66	17.7	Packard Electric #12010973	265 Ohm



## Adjustable nut with dual output leads (variable depth)

Midtronics Part Number	Diameter & Threads	Threaded Length	Body Length	Cable Length	Connector	Nominal Coil Resistance
5MT2036A	3/4-16 UNF	2.29	3.16	30	Packard Electric #12010973 Dual Outputs	L1=830 Ohm L2=1220 Ohm
5MT2036B	3/4-16 UNF	2.29	3.16	12.25	Packard Electric #15300002 Dual Outputs	L1=1000 Ohm L2=1000 Ohm
5MT2036C	3/4-16 UNF	2.29	3.16	12.25	Packard Electric #15300002 Dual Outputs	L1=270 Ohm L2=270 Ohm
5MT2036G	3/4-16 UNF	2.29	3.16	30	2-Way Trailer Dual Outputs	L1=830 Ohm L2=1220 Ohm
5MT2036M	3/4-16 UNF	2.56	3.6	17.7	Packard Electric #12010973 Dual Outputs	L1=1000 Ohm L2=1000 Ohm
5MT2036T	3/4-16 UNF	1.79	2.66	4.25	Mates with Deutsch #DT06-25 Dual Outputs	L1=400 Ohm L2=400 Ohm
5MT707037	None	N/A	2.74	10	Packard Electric #12010973 Metri-Pack 150	964 Ohm



## CUSTOMIZATION AVAILABLE:

- Wire harnesses
- Connectors
- Thread sizes and lengths
- Resistance
- Voltage output
- Labels
- Hardware
- Small or large orders welcome

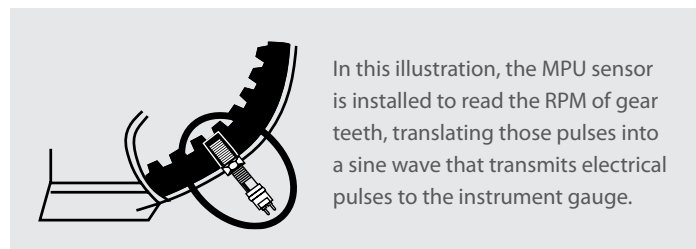
For more information or quotes on customization, please call 800.776.1995 (U.S. toll-free); 866.592.8053 (Canada toll-free), or 1.630.323.2800. Contact us by email at [net2@midtronics.com](mailto:net2@midtronics.com).



# PART NUMBER CONVERSION CHART

	Part No.	Midtronic No.
<b>Freightliner</b>	7EP2004	5MT2004
	7EP2005	5MT2005
	7EP2005A	5MT2005A
	7EP2005B	5MT2005B
	7EP2010	5MT2010
	7EP2032	5MT2032
	7EP2033	5MT2033
	7EP2033A	5MT2033A
	7EP2033B	5MT2033B
	7EP2033C	5MT2033C
	7EP2033CF	5MT2033CF
	7EP2033P	5MT2033P
	7EP2036M	5MT2036M
<b>International/ Navistar</b>	500435C92	5MT2033N
	556915C91	5MT2033C
	556916C91	5MT2005A
	557031C91	5MT2005B
	1658556C91	5MT2036A
	1669290C91	5MT2033H
	1671606C91	5MT2033T
	2018790C1	5MT3105A
	2503117C1	5MT3106A
	3528003C1	5MT3233A
<b>John Deere</b>	50197001	5MT2033B
	471862001	5MT2033J
	AH99637	5MT2018
	AM125581	5MT2033B
	AM137563	5MT2033B
	AT117092	5MT2031
<b>Mack</b>	54MT325	5MT2033D
	64MT283	5MT2283M
	64MT283AM	5MT2283M
	64MT283M	5MT2283M
	64MT337	5MT2033A
	64MT339	5MT2036M
	64MT410M	5MT2033M
	64MT411M	5MT2005M
	64MT412M	5MT2036B
	64MT413M	5MT2033K
	64MT418M	5MT2418M
	64MT423M	5MT2040
	64MT435	5MT2033K
	MAK64MT283BM	5MT2283M

	Part No.	Midtronic No.
<b>PACCAR</b>	104-102	5MT2004
	104-103	5MT2005
	104-106	5MT2010
	104-110	5MT2033C
	660-1-2	5MT2033P-01
<b>Stewart Warner</b>	990K	5MT2033S
	990M	5MT2005A
	990P	5MT2005B
	990R	5MT2036A
	990S	5MT2048
<b>Teleflex</b>	1507678	5MT2005
	768593	5MT2047G
<b>Tennant</b>	1189A70G01	5MT2010
	1189A70G02	5MT2004
	1189A70G03	5MT2005
	1189A70G04	5MT2002
<b>Thermo King</b>	11603-003	5MT2010
	13600-0013	5MT2033-01
	3083136	5MT2033A
	57713-0003	5MT2033B
	8029939	5MT2033V
	8076533	5MT3233
<b>Volvo</b>	8076534	5MT3233V
	8078108	5MT2033-01



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