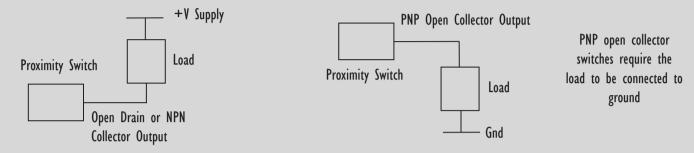


ELECTRONIC PROXIMITY SWITCHES

We currently have electronic proximity switches that use two different methods of detection, Hall Effect and GMR.

Being electronic sensors they do not have the advantage of voltage free switch contacts but they do have a range of electronic outputs to suit most requirements, including TTL Logic, Open collector and Open Drain. One of the benefits of Electronic Proximity Switches is that LED indicators can be incorporated into the unit to enable visual indication of the switch operation. GMR (Giant Magneto Resistive) Proximity Switches are more sensitive to magnetic fields and therefore have a greater switching distance. Open Drain and NPN open collector switches require the load to be connected to the supply voltage, as shown below.



MOSFET output versions are suitable for switching higher current loads.

Gear tooth sensors have the magnet within the housing and the output is switched by the proximity of ordinary ferrous material. Ideal for counting the teeth on a gear cog or flywheel. The PSS-S3-P2A0 GMR sensor is available with either TTL Logic output or high power MOSFET output and the option of inverting the output. With its greater switching distance it makes it a very versatile proximity switch.

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We also have a large network of worldwide agents. These can be seen on any of our websites, or on our company profile brochure.

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Electronic Proximity Switches

ASSEM

The Comus Group of Companies

COMUS



ELECTRONIC PROXIMITY SWITCHES	$\begin{array}{c c} & & & & & & & \\ \hline & & & & & & \\ \hline & & & &$	$\begin{array}{c} \underbrace{\frac{1}{2}}{0.279} \\ \underbrace{\frac{1}{20}}{0.279} \\ \underbrace{\frac{20}{0.279}}{0.276} \\ \underbrace{\frac{1}{9}}{0.276} \\ \underbrace{\frac{1}{9}}{0.276} \\ \underbrace{\frac{1}{9}}{0.276} \\ \underbrace{\frac{1}{9}}{0.279} \\ \underbrace{\frac{1}{9}}{0.$	$\begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \\ \end{array} \\ \hline \\ \hline$	$\begin{array}{c c} \bullet \\ \hline \\ \hline \\ \\ \\ \hline \\ \hline \\ \hline \\ \\ \hline \\ \\ \hline \\ \\ \hline \\ \hline \\ \hline \\ \hline \\ \\ \hline \hline \\ \hline \\ \hline \\ \hline \\ \hline \\$	$\begin{array}{c c} \bullet \\ \hline \\ \hline \\ \\ \\ \hline \\ \hline \\ \\ \\ \hline \\ \hline \\ \\ \hline \\ \hline \\ \hline \\ \\ \hline \\ \hline \\ \\ \hline \hline \\ \hline \hline \\ \hline \\ \hline \\ \hline \\ \hline \\$		300 (11.811) 35 (1.377) M12 thread	300 (11.811) 35 (1.377) M12 thread	MI2 thread	300 (11.811) 35 (1.377) M12 thread	M12 thread	M12 thread	Align dot with direction of gear wheel Grav Wiel Tree K View 'A' 10 10 10 10 10 10 10 10 10 10 10 10 10
Options / Features	• Reduced cost version of PSS-S3-P2A0 (low o/p current)	• Reverse voltage protection, LED o/p, High o/p current, Inverted o/p	• PNP + NPN Output	• 0.5A switching • Rugged Construction	PNP + NPN Output Rugged Construction	 Digital Output Rugged Construction 	• 0.5A switching • Rugged Construction	PNP + NPN Output Rugged Construction	 Digital Output Rugged Construction 	• 0.5A switching • Rugged Construction	• PNP + NPN Output • Rugged Construction	Digital Output Rugged Construction	• Gear Tooth sensor • Senses ferrous metal
Style	Rectangular						Threaded						
Туре	PSS-SI-PA02	PSS-S3-P2A0	PSS 255/30	PSSM 12S/30	PSSM 255/30	PSSM 25D/30	PTSP 12S/30	PTSP 255/30	PTSP 25D/30	PTS 125/30	PTS 255/30	PTS 25D/30	PGS 18/30
Suggested Magnet (see magnet catalogue)	MMPSM	PSSM	PSSM	PSMM	PSMM	PSMM	PTPM	PTPM	PTPM	PTSM	PTSM	PTSM	N/A
Sensor Type	GMR	GMR	Hall Effect	Hall Effect	Hall Effect	Hall Effect	Hall Effect	Hall Effect	Hall Effect	Hall Effect	Hall Effect	Hall Effect	Hall Effect
Supply Voltage VDC	5 - 24	5 - 24	5 - 24	5 - 24	5 - 24	5 - 24	5 - 24	5 - 24	5 - 24	5 - 24	5 - 24	5 - 24	5 - 24
Switching Voltage Max. VDC	30	35	25	25	25	5	5	25	5	5	25	5	25
Output Current Max. mA	20	2A	20	20	20	20	20	20	20	20	20	20	20
Output type	Open Collector	Open Drain	Open Collector	Open Collector	Open Collector	TTL Logic	TTL Logic	Open Collector	TTL Logic	TTL Logic	Open Collector	TTL Logic	Open Collector
Switching Distance Min. mm	25	25	8	8	8	8	8	10	10	8	10	10	3
Operating Temperature °C	-20 + 80	-20 + 80	-20 + 80	-20 + 80	-20 + 80	-20 + 80	-20 + 80	-20 + 80	-20 + 80	-20 + 80	-20 + 80	-20 + 80	-20 + 80
Case Material	Nylon 66	Nylon 66	Nylon 66	Aluminium	Aluminium	Aluminium	Acetal	Acetal	Acetal	Brass (Nickel Plated)	Brass (Nickel Plated)	Brass (Nickel Plated)	Brass (Nickel Plated)
Cable	3 x Round 0.14mm ² PVC covered Grey and insulated Brown / White	3 x Round 0.14mm ² PVC covered Grey and insulated Brown / White / Green	4 x Round 7/0.2mm ² screened and PVC insulated	3 x Round 0.14mm ² PVC covered Grey and insulate Brown / White / Green	d x Round 7/0.2mm ² screened and PVC insulated	3 x Round 0.14mm² PVC covered Grey and insulated Brown / White / Green	3 x Round 0.14mm² PVC covered Grey and insulated Brown / White / Green	4 x Round 7/0.2mm ² screened and PVC insulated	3 x Round 0.14mm² PVC covered Grey and insulate Brown / White / Green	3 x Round 0.14mm² dPVC covered Grey and insulated Brown / White / Green	4 x Round 7/0.2mm ² screened and PVC insulated	3 x Round 0.14mm ² PVC covered Grey and insulated Brown / White / Green	3 x Round 0.75mm ² Rubber covered Black and insulated Blue / Brown / Yellow (mains)
AWG to mm² Cross Reference table AWG mm² 30 0.05 28 0.08 26 0.14 24 0.25 22 0.34 21 0.38 18 0.75 17 1.0 16 1.5 14 2.5 2 35 10 6 8 10 6 16 2 35 1 50 2/0 70 3/0 95 4/0 120 300HCM 150 350HCM 185				ASSEMtech • PSSM 125/30	ASSEMtech • PSSM255/30	ASSEMtech • PSSM25D/30	ASSENTOCH	ASSEMTOCH					

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