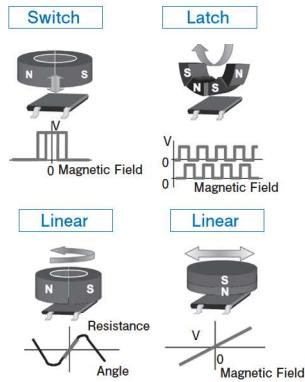


Magnetic Sensors

A variety of high-precision sensors supporting diverse motion and position detection.

Alps' high-precision magnetic sensors are based on advanced technologies in the areas of material development, thin film processes, design, and evaluation that were acquired through magnetic head development over the years. Capable of detecting a wide range of magnetic fields with high precision, these sensors improve layout flexibility inside electronic devices, helping to reduce the burden on set design. Space-saving designs, low power consumption and excellent operating temperature characteristics are other features. Alps provides a diverse range of magnetic sensors, such as switching output sensors, for detecting the opening and closing of doors or lids; latch output sensors, for detecting rotation of mechanical parts; and linear output sensors, for detecting linear motion, or the rotational speed and direction, of mechanical parts. The lineup also includes 90-degree phase difference two-phase output sensors supporting a range of different pole quantities and magnetization pitches with a single package.



Series	Type	Package specifications	Function	Drive voltage	Operating magnetic field
HGDE 	Switching	MAP (※1)	Single polarity / Single output Dual polarity / Single output Dual polarity / Dual output	1.6 to 3.6V	Hon 2.0mT (※2)
			Single polarity / Single output Dual polarity / Single output		
		SOT23	Single polarity / Single output Dual polarity / Single output	4.5 to 5.5V	
HGDF 	Switching	SOT23	Single polarity / Single output Dual polarity / Single output	4.5 to 5.5V	
HGDVST 	Switching	SOT-23-5	Single polarity / Single output	3.0 to 30.0V	2mT
HGPJPM 	Latch	MAP	1-phase alternating output	1.6 to 3.6V	Hon 1mT
HGPJDM 	Encoder	MAP (2in1 type)	2-phase alternating output	1.6 to 3.6V	Hon 1mT
HGPRDT 			2-phase alternating output (Flexible pitch)	3.0 to 30.0V	—
HGARAM 	Linear	MAP	Analog output	1.5 to 5.5V	—
HGARAP 	Angle	MSOP-8	Analog 2-phase (SIN/COS)	5.5V max.	—
HGARAN 					

※ 1 Some products can be provided halogen-free. Please contact an Alps sales representative for details.

※ 2 High and low sensitivity types are also available. Please contact an Alps sales representative for details.

• • • Automotive use