



**Honeywell**

THE POWER OF **CONNECTED**

# Speed Sensors

Product Range Guide



# For innovation that's well apart, there's only Honeywell

With more than 50,000 products ranging from snap-action, limit, toggle, and pressure switches to position, speed, pressure, and airflow sensors, Honeywell has one of the broadest sensing and switching portfolios.

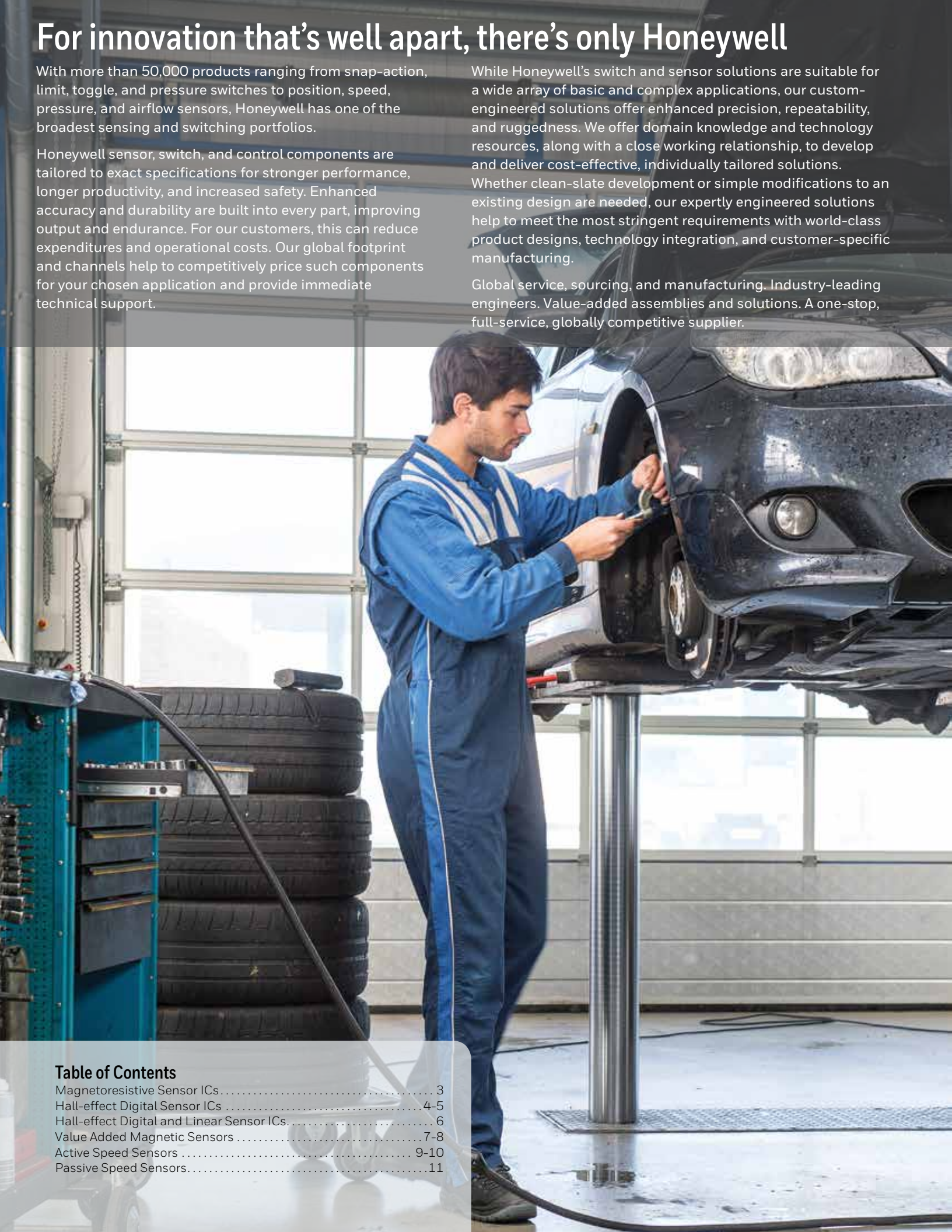
Honeywell sensor, switch, and control components are tailored to exact specifications for stronger performance, longer productivity, and increased safety. Enhanced accuracy and durability are built into every part, improving output and endurance. For our customers, this can reduce expenditures and operational costs. Our global footprint and channels help to competitively price such components for your chosen application and provide immediate technical support.

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Global service, sourcing, and manufacturing. Industry-leading engineers. Value-added assemblies and solutions. A one-stop, full-service, globally competitive supplier.

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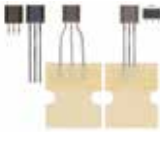


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# Magnetic Sensors | Magnetoresistive Sensor ICs

With a built-in magnetoresistive bridge integrated on silicon and encapsulated in a plastic package, magnetoresistive sensor ICs feature an integrated circuit that responds to low fields at large distances. Potential applications include laptops, material handling equipment, pneumatic cylinders, and battery-powered equipment including hand-held scanners, computers, and water/gas/electricity meters.



|                                    |    |   |                             |    |                                       |
|------------------------------------|---|--|--|---|--|
|                                    | <b>Nanopower Series</b>   | <b>Standard Power Series</b>   | <b>2SS52M Series</b>   | <b>VF401</b>  | <b>APS00B</b>  |
| <b>Description</b>                 | omnipolar MR sensor IC  | omnipolar MR sensor IC   | omnipolar MR digital sensor IC   | 2-wire MR fine pitch ring magnet sensor IC  | high resolution magnetic displacement sensor IC  |
| <b>Magnetic actuation type</b>     | omnipolar   | omnipolar  | omnipolar  | differential bridge   | analog, saturated mode   |
| <b>Package style<sup>1</sup></b>   | SOT-23  | <b>SM351RT, SM353RT:</b> SOT-23<br><b>SM451RT, SM453RT:</b> flat TO-92-style   | <b>SS552MT:</b> SOT-89B<br><b>all others:</b> leaded U-Pack in bulk or ammpack                                 | VF-401 flat TO-92-style   | SOIC-8   |
| <b>Supply voltage range</b>        | 1.65 Vdc to 5.5 Vdc   | 3 Vdc to 24 Vdc  | 3.8 Vdc to 30 Vdc  | 4.5 Vdc to 16 Vdc   | 1 Vdc to 12 Vdc  |
| <b>Supply current</b>              | <b>SM351LT:</b> 360 nA typ.<br><b>SM353LT:</b> 310 nA typ.  | 8 mA max.  | 11 mA max.   | <b>operate:</b> 16.8 mA max.<br><b>release:</b> 8.4 mA max.   | 7 mA max.  |
| <b>Output type</b>                 | <b>low:</b> 0.03 V typ.<br><b>high:</b> $V_s - 0.03$ V typ.   | digital sinking  | digital sinking  | digital sourcing  | $\sin(2\Theta)$ , $\cos(2\Theta)$  |
| <b>Operating temperature range</b> | -40°C to 85°C<br>[-40°F to 185°F]   | -40°C to 85°C<br>[-40°F to 185°F]  | -40°C to 150°C<br>[-40°F to 302°F]   | -40°C to 150°C<br>[-40°F to 302°F]  | -40°C to 150°C<br>[-40°F to 302°F]   |
| <b>Features</b>                    | high sensitivity: 7 Gauss typ., 11 Gauss max. (SM351LT), 14 Gauss typ., 20 Gauss max. (SM353LT); designed to accommodate applications with large air gaps, small magnetic fields and low power requirements | ultra-high sensitivity: 7 Gauss typ., 11 G Gauss max. (SM351RT, SM451R); very high sensitivity: 14 Gauss typ., 20 Gauss max. (SM353RT, SM453R) | omnipolar magnetics, sinking output, low Gauss operation (25 G max.), operating speed of 0 kHz to over 100 kHz | wide speed capability, output pattern independent of gap between target and sensor, improved insensitivity to run-out, tilt, and twist, reverse polarity protection | dual analog voltages respond to changes in magnetic field angle; sine and cosine output; accurate to 0,102 mm [0.004 in] |

<sup>1</sup>Dimensions:

- **SOT-23:** 2,8 mm x 2,9 mm [0.11 in x 0.11 in]
- **Flat TO-92-style:** 3,0 mm x 4,0 mm [0.12 in x 0.16 in] (not including leads)
- **VF-401 flat TO-92-style:** 3,0 mm x 4,06 mm [0.12 in x 0.16 in] (not including leads)
- **SOT-89B:** 4,2 mm x 4,5 mm [0.16 in x 0.18 in]
- **U-Pack:** 4,5 mm x 4,5 mm [0.18 in x 0.18 in] (not including leads)
- **SOIC-8:** 4,9 mm x 6,0 mm [0.19 in x 0.24 in]

# Magnetic Sensors | Hall-effect Digital Sensor ICs

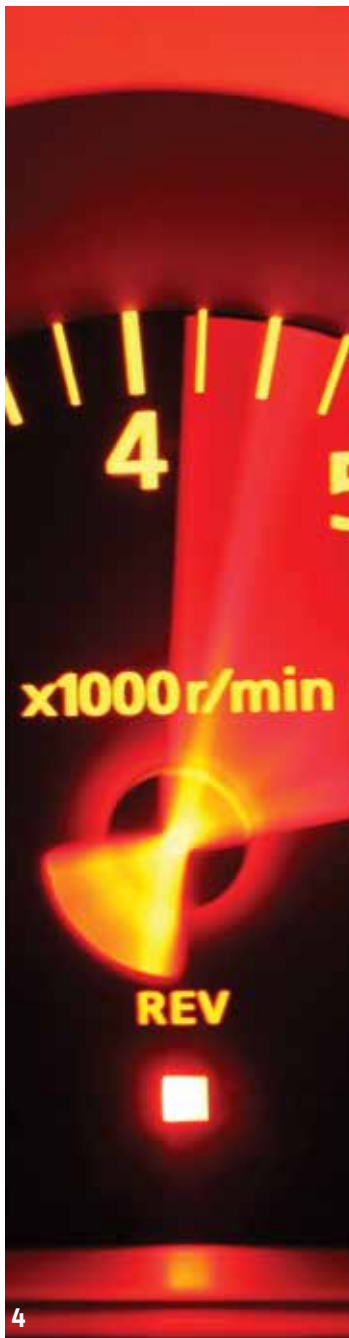
Constructed from a thin sheet of conductive material with output connections perpendicular to the direction of current flow. Include bipolar, latching, omnipolar, or unipolar magnetics in a variety of package styles. Energy-efficient micropower version for potential applications with low power requirements and/or battery operation.



|                                    | <b>SL353</b>  | <b>SS30AT, SS40A, SS50AT</b>   | <b>SS311PT, SS411P</b>  | <b>SS340RT, SS440R Series</b>  |
|------------------------------------|---|--|---|--|
| <b>Description</b>                 | micropower omnipolar Hall-effect digital sensor IC                                  | low-cost bipolar Hall-effect digital sensor IC   | low-cost bipolar Hall-effect digital sensor IC with built-in pull-up resistor           | low-cost unipolar Hall-effect digital sensor IC  |
| <b>Magnetic actuation type</b>     | omnipolar   | bipolar  | bipolar   | unipolar   |
| <b>Package style<sup>1</sup></b>   | SOT-23 (pocket tape and reel)   | <b>SS30AT:</b> SOT-23 (pocket tape and reel)<br><b>SS40A:</b> flat TO-92-style (bulk)<br><b>SS50AT:</b> SOT-89B (pocket tape and reel) | <b>SS311PT:</b> SOT-23 (pocket tape and reel)<br><b>SS411P:</b> flat TO-92-style (bulk) | <b>SS340RT:</b> SOT-23 (pocket tape and reel)<br><b>SS440R:</b> flat TO-92-style   |
| <b>Supply voltage</b>              | 2.2 Vdc to 5.5 Vdc  | 4.5 Vdc to 24 Vdc  | 2.7 Vdc to 7 Vdc  | <b>SS340RT &gt;125°C [247°F]:</b> 3 Vdc to 12 Vdc<br><b>all others:</b> 3 Vdc to 18 Vdc  |
| <b>Supply current</b>              | <b>SL353LT:</b> 1.8 m typ. at 2.8 Vdc<br><b>SL353HT:</b> 0.33 mA typ. at 2.8 Vdc    | 10 mA max.   | 14 mA max.  | 8 mA   |
| <b>Operating temperature range</b> | -40°C to 85°C [-40°F to 185°F]  | <b>SS40A:</b> -40°C to 125°C [-40°F to 257°F]<br><b>SS30AT, SS50AT:</b> -40°C to 125°C [-40°F to 257°F]                                | -40°C to 150°C [-40°F to 302°F]   | <b>SS340RT (3 Vdc to 24 Vdc):</b> -40°C to 125°C [-40°F to 257°F]<br><b>SS340RT (3 Vdc to 12 Vdc), SS440R (3 Vdc to 24 Vdc):</b> -40°C to 150°C [-40°C to 302°F] |
| <b>Features</b>                    | low supply voltage combined with very low average current reduces power consumption | high output current and speed capability, reverse polarity protection  | built-in pull-up resistor, low voltage, enhanced sensitivity                            | simple activation from a North pole (SS340RT) or South pole (SS440R), multiple magnetic sensitivities (high, medium, and low)                                    |

<sup>1</sup>Dimensions:

- **SOT-23:** 2,8 mm x 2,9 mm [0.11 in x 0.11 in]
- **Flat TO-92-style:** 3,0 mm x 4,0 mm [0.12 in x 0.16 in] (not including leads)
- **SOT-89B:** 4,2 mm x 4,5 mm [0.16 in x 0.18 in]







**SS345PT,  
SS445P**

**SS351AT,  
SS451A,  
SS551AT**

**SS360NT, SS360ST,  
SS360ST-10K,  
SS460S, SS460S-T2**

**VF360NT,  
VF360ST,  
VF460S**

**SS360PT,  
SS460P,  
SS460P-T2**

unipolar Hall-effect digital sensor IC with built-in pull-up resistor

low-cost omnipolar Hall-effect digital sensor IC

high sensitivity, latching Hall-effect digital sensor IC

high sensitivity, latching Hall-effect digital sensor IC

high sensitivity latching digital Hall-effect sensor IC with built-in pull-up resistor

unipolar

omnipolar

latching

latching

latching

**SS345PT:** SOT-23 (pocket tape and reel)  
**SS445P:** flat TO-92-style (bulk)

**SS351AT:** SOT-23 (pocket tape and reel)  
**SS451A:** flat TO-92-style (bulk)  
**SS551AT:** SOT-89B (pocket tape and reel)

**SS360NT, SS360ST, SS360ST-10K:** SOT-23 (pocket tape and reel)  
**SS460S:** flat TO-92-style (bulk)  
**SS460S-T2:** flat TO-92-style, formed leads (ammopack)

**VF360NT, VF360ST:** SOT-23 (pocket tape and reel)  
**VF460S:** flat TO-92-style (bulk)

**SS360PT:** SOT-23 (pocket tape and reel)  
**SS460P:** flat TO-92-style (bulk)  
**SS460P-T2:** flat TO-92-style, formed leads (ammopack)

2.7 Vdc to 7.0 Vdc

**SS351AT, SS551AT (-40°C to 125°C [-40°F to 257°F]):** 3 Vdc to 24 Vdc  
**SS351AT (150°C [302°F]):** 3 Vdc to 12 Vdc  
**SS451A (-40°C to 150°C [-40°F to 302°F]):** 3 Vdc to 24 Vdc

3 Vdc to 24 Vdc

3 Vdc to 24 Vdc

3 Vdc to 24 Vdc

14 mA

**3 V:** 5 mA max. at 25°C [77°F]  
**5 V:** 6 mA max. at 25°C [77°F]

8 mA max.

8 mA

10 mA

-40°C to 150°C [-40°F to 302°F]

-40°C to 150°C [-40°F to 302°F]

-40°C to 125°C [-40°F to 257°F]

-40°C to 150°C [-40°F to 302°F]

-40°C to 125°C [-40°F to 257°F]

simple activation from a North pole (SS345PT) or a South pole (SS445P)

built-in reverse polarity protection, typical operating point of 85 G at 25°C [77°F]

fastest response time in its class, no chopper stabilization

qualified to the AEC-Q100 standard for potential use in automotive applications, fastest response time in its class

fastest response time in its class, no chopper stabilization, operates from only 30 Gauss typical, at 25°C [77°F]

# Magnetic Sensors | Hall-effect Digital and Linear Sensor ICs

Potential applications are many, including closure detection; presence-absence, metering, and displacement sensing in laptops, drug carts and and battery-powered equipment such as hand-held scanners, computers, and water/gas/electricity meters; and speed and RPM sensing in brushless dc motors.



| Digital                            | <b>VF526DT</b>   |
|------------------------------------|--|
| <b>Description</b>                 | latching dual Hall-effect digital sensor IC with speed and direction outputs |
| <b>Magnetic actuation type</b>     | latching   |
| <b>Package style<sup>1</sup></b>   | SOT-89B (pocket tape and reel)   |
| <b>Supply voltage</b>              | 3.4 Vdc to 24 Vdc  |
| <b>Supply current</b>              | 14 mA max.   |
| <b>Output type</b>                 | digital sinking  |
| <b>Operating temperature range</b> | -40°C to 125°C [-40°F to 257°F]  |
| <b>Features</b>                    | latching magnetics, sinking output, tape and reel available                  |



| Linear                           | <b>SS490 Series</b>   | <b>SS39ET, SS49E, SS49E-F, SS49E-L, SS49E-T2, SS49E-T3, SS59ET</b>  |
|----------------------------------|---|---|
| <b>Description</b>               | Hall-effect linear sensor IC  | Hall-effect linear sensor IC  |
| <b>Magnetic actuation type</b>   | linear  | linear  |
| <b>Package style<sup>1</sup></b> | flat TO-92-style, surface mount (pocket tape and reel)<br>flat TO-92-style, standard straight leads (bulk)<br>flat TO-92-style, formed leads (ammopack)<br>flat TO-92-style, standard straight leads (ammopack) | <b>SS39ET:</b> SOT-23 (pocket tape and reel)<br><b>SS49E:</b> flat TO-92-style, standard straight leads (bulk)<br><b>SS49E-F:</b> flat TO-92-style, formed leads (bulk)<br><b>SS49E-L:</b> flat TO-92-style, long straight leads (bulk)<br><b>SS49E-T2:</b> flat TO-92-style, formed leads (ammopack)<br><b>SS49E-T3:</b> flat TO-92-style, standard straight leads (ammopack)<br><b>SS59ET:</b> SOT-89B (pocket tape and reel) |
| <b>Supply voltage</b>            | 4.5 Vdc to 10.5 Vdc   | 2.7 Vdc to 6.5 Vdc  |
| <b>Supply current</b>            | 10 mA   | 10 mA max.  |
| <b>Output type</b>               | ratiometric sinking or sourcing   | ratiometric sourcing  |
| <b>Operating temp. range</b>     | -40°C to 150°C [-40°F to 302°F]   | -40°C to 100°C [-40°F to 212°F]   |
| <b>Features</b>                  | linear magnetics, ratiometric sourcing output, positive temperature coefficient, different package styles   | linear magnetics, ratiometric sourcing output, low voltage operation, different package styles  |

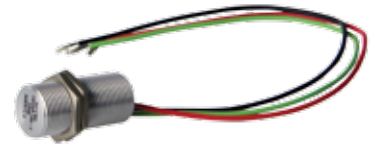
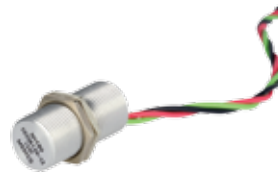
<sup>1</sup>Dimensions:

- **4-Pin SIP:** 3,6 mm x 5,1 mm [0.14 in x 0.20 in]
- **SOT-89B:** 4,2 mm x 4,5 mm [0.16 in x 0.18 in]
- **Flat TO-92-style:** 3,0 mm x 4,0 mm [0.12 in x 0.16 in] (not including leads)



# Magnetic Sensors | Value Added

Consist of Hall-effect or magnetoresistive sensor ICs packaged in plastic housings for use in corrosive environments, or aluminum housings for non-corrosive use. Include digital or linear position sensors (activated by an external magnet) and vane sensors (activated by a ferrous metal actuator). Choice of cable materials provides application flexibility.



| Series                      | 103SR (digital)  | 103SR (linear)   |
|-----------------------------|--|--|
| Description                 | Hall-effect digital position sensor  | Hall-effect linear position sensor   |
| Package material and style  | aluminum threaded barrel   | aluminum threaded barrel   |
| Magnetic actuation type     | unipolar, bipolar, latching  | linear   |
| Operation                   | proximity to external magnet   | proximity to external magnet   |
| Supply voltage range        | 4.5 Vdc to 24 Vdc  | 4.5 Vdc to 10.5 Vdc  |
| Supply current              | 4 mA to 10 mA (inclusive)  | 7 mA   |
| Output type                 | digital sinking  | ratiometric sinking/sourcing   |
| Operating temperature range | -40°C to 100°C [-40°F to 212°F]  | -40°C to 100°C [-40°F to 212°F]  |
| Dimensions                  | Ø11,9 mm x 25,4 mm<br>[15/32-2 x 1.0 in]   | Ø11,9 x 25,4 mm<br>[15/32-2 x 1.0 in]  |
| Features                    | unipolar, bipolar, and latching magnetics; sinking or sourcing output, aluminum housing, color-coded jacketed cable, adjustable mounting | linear magnetics, ratiometric sinking/sourcing output, aluminum housing, color-coded jacketed cable, adjustable mounting |



# Magnetic Sensors | Value Added

Potential applications include position and RPM sensing, cam and crankshaft speed and position, transmissions, tachometers, traction control, and sprocket speed in fitness and information technology, food and beverage environments, chemical plants, and refineries.



| Series                             | SR16/SR17   | SR3  | SR4   |
|------------------------------------|---|--|---|
| <b>Description</b>                 | low-cost Hall-effect vane sensor  | Hall-effect digital position sensor  | magnetoresistive digital position sensor                              |
| <b>Package material and style</b>  | SR16: plastic dual tower with variety of terminations<br>SR17: plastic side-mount wire exit | plastic threaded barrel  | plastic threaded barrel   |
| <b>Magnetic actuation type</b>     | -   | unipolar, bipolar  | omnipolar   |
| <b>Operation</b>                   | ferrous metal actuator  | proximity to external magnet   | proximity to external magnet  |
| <b>Supply voltage range</b>        | 3.8 Vdc to 30 Vdc   | 4.5 Vdc to 24 Vdc  | 3.8 Vdc to 30 Vdc   |
| <b>Supply current</b>              | 10 mA max.  | 10 mA  | 11 mA   |
| <b>Output type</b>                 | digital sinking   | digital sinking  | digital sinking   |
| <b>Operating temperature range</b> | -20°C to 85°C<br>[-4°F to 185°F]  | -40°C to 85°C<br>[-40°F to 185°F]  | -40°C to 85°C<br>[-40°F to 185°F]                                     |
| <b>Dimensions</b>                  | 24,6 mm x 12,4 mm<br>[0.97 in x 0.49 in]  | Ø12,4 mm x 25,4 mm<br>[0.49 in x 1.0 in]   | 19,0 mm H x 25,4 mm<br>[0.75 in H x 1.0 in]                           |
| <b>Features</b>                    | sinking output, non-contact position sensing, environmentally sealed, three terminations    | NEMA 3, 3R, 3S, 4, 4X, 12 and 13; unipolar and bipolar magnetics, sinking output; frequencies exceeding 100 Hz | NEMA 3, 3R, 3S, 4, 4X, 12 and 13; omnipolar magnetics, sinking output |





Use multiple technologies to detect a change in a rotating, ferrous metal target such as a gear, shaft or similar mechanism to create an electronic signal for control system interface. No moving parts - speed and direction sensing, or speed sensing only, is accomplished without contacting the target. Dual or single digital output versions available.



| Series                             | SNG-Q  | SNDH-T   | SNDH-H   |
|------------------------------------|--|--|--|
| <b>Description</b>                 | quadrature speed and direction sensor with 4-wire output   | quadrature speed and direction sensor with 4-wire output   | single Hall-effect speed sensor  |
| <b>Housing</b>                     | PBT  | stainless steel, plastic   | stainless steel, plastic   |
| <b>Supply voltage range</b>        | 4.5 V to 26 V  | 4.5 Vdc to 18 Vdc  | 4 Vdc to 24 Vdc,<br>4.5 Vdc to 24 Vdc,<br>6.5 Vdc to 24 Vdc  |
| <b>Supply current</b>              | 2 mA normal,<br>18 mA max.   | 18 mA max.   | 6 mA max.,<br>14 mA max.,<br>20 mA max.  |
| <b>Output type</b>                 | square wave  | square wave  | digital sinking  |
| <b>Operating frequency range</b>   | 3 Hz to 20 kHz   | 1 Hz to 15 kHz   | 0 Hz to 12 kHz,<br>0 Hz to 15 kHz,<br>2 Hz to 15 kHz   |
| <b>Operating temperature range</b> | -40°C to 150°C<br>[-40°F to 302°F]   | -40°C to 150°C<br>[-40°F to 302°F]   | -40°C to 150°C<br>[-40°F to 302°F] inclusive   |
| <b>Dimensions</b>                  | Ø15 mm x 35 mm L<br>[0.6 in x 1.38 in L]<br>Ø15 mm x 45 mm L<br>[0.6 in x 1.77 in L]   | Ø15 mm x 45 mm L<br>[0.6 in x 1.77 in L]   | various, depends upon individual catalog listing   |
| <b>Features</b>                    | design and manufacturing platform-based approach enables cost-competitiveness and mechanical and electrical configurability; designed for potential applications where enhanced accuracy is required to detect small target features | advanced performance dynamic offset self calibration, short circuit and reverse voltage protection, low jitter output, near zero speed | rotationally insensitive versions available, zero speed sensing versions available, range of connector options |



Provide true zero speed capability and precise switch point measurement. Speed sensor diagnostics provide information on air gap and sensor failure for increased reliability and functionality. Potential applications include cam/crank shafts, transmissions, tachometers, traction control, dynamometers, process control, and factory automation.



| Series                      | LCZ   | ZH10   |
|-----------------------------|---|--|
| Description                 | single Hall-effect zero speed sensor  | single Hall-effect zero speed sensor   |
| Housing                     | stainless steel   | aluminum   |
| Supply voltage range        | 4.5 Vdc to 26 Vdc   | 4 Vdc to 24 Vdc  |
| Supply current              | 20 mA   | 6 mA   |
| Output type                 | digital sinking   | digital sinking  |
| Operating frequency range   | 0 Hz to 15 kHz  | 0 Hz to 15 kHz   |
| Operating temperature range | -40°C to 125°C<br>[-40°F to 257°F]  | -40°C to 125°C<br>[-40°F to 257°F]   |
| Dimensions                  | Ø9,5 mm [3/8 in/0.375 in] and Ø15,9 mm [5/8 in/0.625 in], 50,8 mm [2.00 in] and 76,2 mm [3.00 in] lengths | Ø11,9 mm [15/32 in/0.46875 in] x 25,4 mm [1.00 in] L                                 |
| Features                    | omni-directional sensor to target, low power consumption, zero speed, digital output                      | omni-directional sensor to target, low power consumption, zero speed, digital output |



| Series                      | 584XX   |
|-----------------------------|---|
| Description                 | digital magnetic speed sensor   |
| Housing diameter            | 3/8, in 5/8 in; various lengths   |
| Supply voltage              | 5 Vdc to 30 Vdc   |
| Output signal               | digital square wave   |
| Output voltage range        | low: 350 mV max. at 20 mA max. current sink<br>high: $(R_L \times V_s) / (R_L + 2.2 \text{ k}\Omega)$   |
| Operating frequency (max.)  | 10 kHz, 50 kHz  |
| Housing material/style      | stainless steel/threaded  |
| Termination                 | MS3106A-10SL-3S (5/8 only) or preleaded   |
| Vibration                   | meets MIL-STD 202F, method 204D   |
| Operating temperature range | -40°C to 107°C [-40°F to 225°F]   |
| Features                    | produces constant amplitude output signals suitable for direct use in many digital and logic control applications, internal digital signal conditioning |



Passive Variable Reluctance Sensors (VRS) deliver direct conversion of actuator speed to an analog frequency. Transportation applications include engine, transmission, and wheel speed sensing. Industrial applications include electric motor speed, plant floor machinery, and pump RPM.



| Series   | VRS General Purpose   | VRS Hazardous Location  | VRS High Output  |
|--|---|---|--|
| <b>Description/<br/>potential applications</b> | used where medium to high speeds or in electrically noisy environments with relatively small air gaps exist | used where explosion-proof or intrinsically safe sensors are required | used where higher output voltages are needed, perform best at low to medium speeds with medium to high impedance loads (sealed front-end versions for use where the sensor is exposed to fluids, lubricants or adverse environmental conditions) |
| <b>Output voltage range</b>                    | 8 Vp-p to 40 Vp-p (inclusive)   | 30 Vp-p to 60 Vp-p (inclusive)  | 8 Vp-p to 190 Vp-p (inclusive)   |
| <b>Housing diameter</b>                        | 5/8 in, 3/8 in, 1/4 in, 10/32 in; various lengths   | 3/4 in, 5/8 in; various lengths                                       | 5/8 in, 3/8 in; various lengths  |
| <b>Housing material/style</b>                  | stainless steel/threaded or smooth  | stainless steel/ threaded   | stainless steel threaded or smooth   |
| <b>Termination</b>                             | MS3106 connector, preleaded   | MS3106 connector, preleaded   | MS3106 connector, preleaded  |
| <b>Operating temperature range</b>             | -55°C to 120°C [-67°F to 250°F] (inclusive)   | -73°C to 120°C [-100°F to 250°F] (inclusive)                          | -55°C to 150°C [-67°F to 300°F] (inclusive)  |



| Series   | VRS High Resolution   | VRS High Temperature   | VRS Power Output   |
|--|---|--|--|
| <b>Description/<br/>potential applications</b> | used where precise timing pulse is required, and/or fine pitch gears are used | used where the sensor is exposed to temperatures up to 260°C [450°F] (sealed front-end versions for use where the sensor is exposed to fluids, lubricants or adverse environmental conditions) | used where driving low resistance loads at large air gaps is required, and larger actuators are used |
| <b>Output voltage range</b>                    | 8 Vp-p to 190 Vp-p (inclusive)  | 4.7 Vp-p to 125 Vp-p (inclusive)   | 70 Vp-p (inclusive)  |
| <b>Housing diameter</b>                        | 5/8 in, 3/8 in; various lengths   | 5/8 in, 3/8 in, 1/4 in; various lengths  | 5/8 in; various lengths  |
| <b>Housing material/style</b>                  | stainless steel/threaded or smooth  | stainless steel threaded   | stainless steel, threaded  |
| <b>Termination</b>                             | MS3106 connector, preleaded   | MS3106 connector, preleaded  | MS3106 connector, preleaded  |
| <b>Operating temperature range</b>             | -55°C to 150°C [-67°F to 300°F] (inclusive)                                   | -73°C to 230°C [-100°F to 450°F] (inclusive)   | -55°C to 120°C [-67°F to 250°F]  |



## **Warranty/Remedy**

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship during the applicable warranty period. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items that Honeywell, in its sole discretion, finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While Honeywell may provide application assistance personally, through our literature and the Honeywell web site, it is buyer's sole responsibility to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this writing. However, Honeywell assumes no responsibility for its use.

## **Find out more**

To learn more about Honeywell's sensing and switching products, call **+1-815-235-6847**, email inquiries to **info.sc@honeywell.com**, or visit **sensing.honeywell.com**

## **Honeywell Sensing and Internet of Things**

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