

Specifications of A5S

Conformity to Standards	<p>Directives</p> <p>2014/30/EU (EMC Directive)</p> <p>2014/35/EU (Low Voltage Directive)</p> <p>2011/65/EU (RoHS Directive)</p> <p>2014/34/EU (ATEX Product Directive)</p> <p>US Standards: National Electrical Code (NEC) dated 2014</p> <p>UL 60079-0, UL 60079-11, UL 60079-15, UL 913 - 8th edition, UL 61010-1, edition 3</p> <p>Canadian Standards: Canadian Electrical Code (CEC) dated 2012</p> <p>CSA C22.2 Nos. 60079-0, 60079-11, 60079-15, 157-92, 213-1987, 61010-1-12, edition 3</p> <p>SIL3 acc. IEC 61508:2010, EN ISO 13849:2008</p>	<p>Standards</p> <p>EN 61000-6-2, EN 61000-6-4</p> <p>EN 61010-1</p> <p>EN 50581</p> <p>EN 60079-0, EN 60079-11, EN 60079-15, EN 60079-26</p>
Power Supply	<p>For A5S0 Sensors: Supply voltage +5 V...+30 V DC</p> <p>Current approx. 20 mA + load current (may increase with longer distance transmission and high signal frequency up to > 60 mA), Sensor safe against polarity error.</p> <p>For A5S1 Sensors: For Zone 0 or 1 supply voltage by Isolating Barrier D461.</p> <p>For Zone 2 supply voltage +6 V...+30 V DC / min. 40 mA*, max. 120 mA*, *depending on temperature class and connection type (see manual for details)</p>	
Signal Output	<p>Square wave with constant high and low level over the entire speed range.</p> <p>Push-pull amplifier output. Max. load 20 mA.</p> <p>Output is short circuit proof and protected versus polarity error.</p>	
Signal Frequency	<p>0 Hz...12 kHz, resp.</p> <p>0 Hz...25 kHz</p> <p>Its low end of 0 Hz allows to monitor the machine down to zero speed.</p>	
Signal Transmission	<p>Screened cable with a lead cross section of 0.5 mm² with R < 36Ω / km and C < 150 pF/m.</p> <p>Connect sensors A5S1... to the high level input of BRAUN units (response level of >7 / <4 V).</p>	
Protection Class for Hazardous Area	<p>For A5S0 Sensors: No protection required</p> <p>For A5S1 Sensors:</p>	<p>ATEX/IECEX certified for Ex ia IIC T4/T6 Ga (intrinsically safe)</p> <p>UL/CSA certified for Class I, Div 1, groups A, B, C, D (intrinsically safe) with supply voltage provided by BRAUN Isolating Barrier D461</p> <p>For A5S1...-n Sensors: ATEX/IECEX certified for Ex nA IIC T4/T6 Gc (non-incendive)</p> <p>UL/CSA certified for Class I, Div 2, groups A, B, C, D (non-incendive) with correct supply provided</p>
Protection Grade	IP 67, sealed stainless steel enclosure (1.4305)	
Connection Type	Plug-in connection (straight or angular), fixed PVC or Teflon [®] cable	
Ambient Temperature	<p>For A5S0 Sensors:</p> <p>With plug-in socket: -40...+125 °C (-40...+255 °F)</p> <p>With fixed PVC cable: -40...+85 °C (125 °C at the sensor tip)</p> <p>With fixed PVC cable: -5...+70 °C (125 °C at the sensor tip)</p> <p>With fixed Teflon[®] cable: -40...+125 °C</p> <p>For A5S1 Sensors (Ex ia and Ex nA) see specific brochure and manual for details</p>	
Dimensions	Depends on length and shaft diameter of the sensor	
Weight	Depends on length and shaft diameter of the sensor (plus fixed cable)	
Optional Accessories (cable with connector)	<p>L3A22BO-xm: PVC sensor connecting cable (3 leads) with straight plastic connector</p> <p>L3A23BO-xm: PVC sensor connecting cable (3 leads) with angular plastic connector</p> <p>L3T24MO-xm: Teflon[®] sensor connecting cable (3 leads) with straight metal connector</p> <p>L3T25MO-xm: Teflon[®] sensor connecting cable (3 leads) with angular metal connector</p> <p>L4A08BO-xm: PVC sensor connecting cable (4 leads) with straight plastic connector</p> <p>L4A06BO-xm: PVC sensor connecting cable (4 leads) with angular plastic connector</p> <p>L4T09MO-xm: Teflon[®] sensor connecting cable (4 leads) with straight metal connector</p> <p>L4T10MO-xm: Teflon[®] sensor connecting cable (4 leads) with angular metal connector</p> <p>x = cable length in m</p>	
Optional Accessories (connector only)	<p>Bi4F/01: Straight connector (plastic housing)</p> <p>Bi4F/02: Angular connector (plastic housing)</p> <p>Bi4F/05: Straight connector (metal housing)</p> <p>Bi4F/04: Angular connector (metal housing)</p>	