

Specifications of A5S

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