



SIMATIC S7, Digital input SM 326, 8 DI; 24 V DC, NAMUR, fail-safe  
 NAMUR input for SIMATIC S7 F-systems, up to Category 4 (EN 954-1)/  
 SIL3 (IEC61508)/PLE (ISO13849), 1x 40-pole

Supply voltage	
Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	160 mA
from backplane bus 5 V DC, max.	90 mA
Encoder supply	
Number of outputs	8
Type of output voltage	8.2 V DC
Power loss	
Power loss, typ.	4.5 W
Digital inputs	
Number of digital inputs	8
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	8
— up to 60 °C, max.	8
Input voltage	
• Type of input voltage	DC
Input current	
• for signal "0", max. (permissible quiescent current)	0.35 to 1.2 mA
• for signal "1", typ.	2.1 to 7 mA
Input delay (for rated value of input voltage)	
for NAMUR inputs	
— at "0" to "1", max.	1.2 to 3 ms
— at "1" to "0", max.	1.2 to 3 ms
Cable length	
• shielded, max.	200 m
• unshielded, max.	100 m
Interrupts/diagnostics/status information	
Alarms	
• Diagnostic alarm	Yes; Parameterizable
Diagnostics indication LED	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
Ex(i) characteristics	
Module for Ex(i) protection	Yes
maximum values for connecting terminals for gas group IIC	

• U <sub>o</sub> (no-load voltage), max.	10 V
• I <sub>o</sub> (short-circuit current), max.	13.9 mA
• P <sub>o</sub> (power output), max.	33.1 mW
• C <sub>o</sub> (permissible external capacity), max.	3 μF
• L <sub>o</sub> (permissible external inductivity), max.	80 mH
• U <sub>m</sub> (voltage at non-intrinsically safe connecting terminals), max.	60 V DC/30 V AC

### Potential separation

#### Potential separation digital inputs

• between the channels	Yes
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes

### Standards, approvals, certificates

#### Highest safety class achievable in safety mode

• acc. to EN 954	Cat. 4
• Performance level according to ISO 13849-1	PLe
• SIL acc. to IEC 61508	SIL 2 (single-channel), SIL 3 (two-channel)

#### Use in hazardous areas

• ATEX certificate	99 ATEX 2671 X
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### Ambient conditions

#### Ambient temperature during operation

• max.	60 °C
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### Connection method

required front connector	1x 40-pin
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### Dimensions

Width	80 mm
Height	125 mm
Depth	120 mm

### Weights

Weight, approx.	482 g
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**last modified:** 5/31/2021 