



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
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
Max. values of input circuits for gas group IIC (per channel)	
• Co (permissible external capacity), max.	3 µF
• Io (short-circuit current), max.	13.9 mA
• Lo (permissible external inductivity), max.	80 mH
• Po (power of load), max.	33.1 mW

- U<sub>o</sub> (output no-load voltage), max. 10 V
- T<sub>a</sub> (permissible ambient temperature), max. 60 °C

#### 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

- Test number KEMA 99 ATEX 2671 X

#### Connection method

required front connector 1x 40-pin

#### Dimensions

Width 80 mm  
 Height 125 mm  
 Depth 120 mm

#### Weights

Weight, approx. 482 g

**last modified:** 12/18/2020 