

SIMATIC S7, DIGITAL INPUT SM 326, 8 DI; DC 24V, NAMUR, FAILSAFE NAMUR INPUTS FOR SIMATIC S7 F SYSTEMS, UP TO CATEGORY 4 (EN954-1)/ SIL3 (IEC61508)/PLE (ISO13849), 1 X 40 PIN



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	

<ul style="list-style-type: none"> <li>• for signal "0", max. (permissible quiescent current)</li> </ul>	0.35 to 1.2 mA
<ul style="list-style-type: none"> <li>• for signal "1", typ.</li> </ul>	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	
<ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>	200 m
<ul style="list-style-type: none"> <li>• unshielded, max.</li> </ul>	100 m
Interrupts/diagnostics/status information	
Alarms	
<ul style="list-style-type: none"> <li>• Diagnostic alarm</li> </ul>	Yes; Parameterizable
Diagnostics indication LED	
<ul style="list-style-type: none"> <li>• Fail-safe operation</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Group error SF (red)</li> </ul>	Yes
Ex(i) characteristics	
Module for Ex(i) protection	Yes
Maximum values of input circuits (per channel)	
<ul style="list-style-type: none"> <li>• Co (permissible external capacity), max.</li> </ul>	3 µF
<ul style="list-style-type: none"> <li>• Io (short-circuit current), max.</li> </ul>	13.9 mA
<ul style="list-style-type: none"> <li>• Lo (permissible external inductivity), max.</li> </ul>	80 mH
<ul style="list-style-type: none"> <li>• Po (power of load), max.</li> </ul>	33.1 mW
<ul style="list-style-type: none"> <li>• Uo (output no-load voltage), max.</li> </ul>	10 V
<ul style="list-style-type: none"> <li>• Um (fault voltage), max.</li> </ul>	60 V DC/30 V AC
<ul style="list-style-type: none"> <li>• Ta (permissible ambient temperature), max.</li> </ul>	60 °C
Potential separation	
Potential separation digital inputs	
<ul style="list-style-type: none"> <li>• between the channels</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• between the channels and backplane bus</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• between the channels and the power supply of the electronics</li> </ul>	Yes
Isolation	
tested with	
<ul style="list-style-type: none"> <li>• Channels against backplane bus and load voltage L+</li> </ul>	1500 V AC
<ul style="list-style-type: none"> <li>• Channels among one another</li> </ul>	1500 V AC
<ul style="list-style-type: none"> <li>• Load voltage L+ against backplane bus</li> </ul>	500 V DC/350 V AC
Standards, approvals, certificates	
Highest safety class achievable in safety mode	

- acc. to EN 954
- SIL acc. to IEC 61508

Cat. 4  
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 482 g

**last modified:** 10/18/2017