

SIMATIC S7, DIGITAL INPUT SM 326, 24 DI; DC 24V, 40 PIN,  
FAILSAFE DIGITAL INPUTS FOR SIMATIC S7F SYSTEMS, WITH  
DIAGNOST. INTERRUPT

Supply voltage	
Rated value (DC)	24 V
Input current	
from load voltage L+ (without load), max.	450 mA
from backplane bus 5 V DC, max.	100 mA
Encoder supply	
Number of outputs	4; Isolated
Output current	
• Rated value	400 mA
Power loss	
Power loss, typ.	10 W
Digital inputs	
Number of digital inputs	24
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	24
— up to 60 °C, max.	24; (at 24 V) or 18 (at 28.8 V)
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	-30 to +5V
• for signal "1"	+11 to +30V
Input current	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	10 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	3.4 ms
— at "1" to "0", max.	3.4 ms
Cable length	
• shielded, max.	200 m
• unshielded, max.	100 m
Encoder	

<b>Connectable encoders</b>	
• 2-wire sensor — permissible quiescent current (2-wire sensor), max.	Yes; if short-circuit test is deactivated 2 mA
<b>Interrupts/diagnostics/status information</b>	
Diagnostic functions	Yes
Alarms	
• Diagnostic alarm	Yes
<b>Diagnostic messages</b>	
• Diagnostic information readable	Yes
<b>Diagnostics indication LED</b>	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
<b>Ex(i) characteristics</b>	
Maximum values of input circuits (per channel)	
• Ta (permissible ambient temperature), max.	60 °C
<b>Potential separation</b>	
Potential separation digital inputs	
• between the channels	Yes
• between the channels, in groups of	12
• between the channels and backplane bus	Yes
<b>Isolation</b>	
Isolation tested with	500 V DC/350 V AC
<b>Standards, approvals, certificates</b>	
Highest safety class achievable in safety mode	
• acc. to DIN VDE 0801	AK 6
• acc. to EN 954	Cat. 4
• SIL acc. to IEC 61508	SIL 3
<b>Connection method</b>	
required front connector	40-pin
<b>Dimensions</b>	
Width	80 mm
Height	125 mm
Depth	120 mm
<b>Weights</b>	
Weight, approx.	442 g
<b>last modified:</b>	08/12/2017