

SIMATIC S7, Digital output SM 326, F-DO 8x24 V DC/2A PM fail-safe digital output  
Switching to P-M potential up to Category 4 (EN 954-1)/ SIL3 (IEC61508)/PLE  
(ISO13849), 1x 40-pole

Supply voltage	
Rated value (DC)	24 V; 1L+
Reverse polarity protection	Yes
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> <li>Reverse polarity protection</li> </ul>	24 V; 2L+, 3L+ No
Input current	
from supply voltage 1L+, max.	75 mA
from load voltage 2L+ (without load), max.	100 mA
from load voltage 3L+ (without load), max.	100 mA
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	12 W
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes
Limitation of inductive shutdown voltage to	L+ (-33 V)
Switching capacity of the outputs	
<ul style="list-style-type: none"> <li>on lamp load, max.</li> </ul>	5 W
Output voltage	
<ul style="list-style-type: none"> <li>for signal "1", min.</li> </ul>	L+ (-1.0 V)
Output current	
<ul style="list-style-type: none"> <li>for signal "1" rated value</li> <li>for signal "1" permissible range for 0 to 40 °C, min.</li> <li>for signal "1" permissible range for 0 to 40 °C, max.</li> <li>for signal "1" permissible range for 40 to 60 °C, min.</li> <li>for signal "1" permissible range for 40 to 60 °C, max.</li> <li>for signal "0" residual current, max.</li> </ul>	2 A 7 mA 2 A; 2 A for horizontal installation, 1 A for vertical installation 7 mA 1 A; for horizontal installation 0.5 mA
Switching frequency	
<ul style="list-style-type: none"> <li>with resistive load, max.</li> <li>with inductive load, max.</li> <li>on lamp load, max.</li> </ul>	30 Hz 2 Hz 10 Hz
Total current of the outputs (per group)	
horizontal installation	
<ul style="list-style-type: none"> <li>— up to 40 °C, max.</li> <li>— up to 60 °C, max.</li> </ul>	7.5 A 5 A
vertical installation	
<ul style="list-style-type: none"> <li>— up to 40 °C, max.</li> </ul>	5 A
Cable length	
<ul style="list-style-type: none"> <li>shielded, max.</li> <li>unshielded, max.</li> </ul>	200 m; 200 m for SIL 3, AK 6, Cat 4 200 m
Interrupts/diagnostics/status information	
Alarms	
<ul style="list-style-type: none"> <li>Diagnostic alarm</li> </ul>	Yes; Parameterizable
Diagnoses	
<ul style="list-style-type: none"> <li>Diagnostic information readable</li> </ul>	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> <li>Fail-safe operation</li> <li>Group error SF (red)</li> </ul>	Yes Yes
Potential separation	

Potential separation digital outputs	
• between the channels	Yes
• between the channels, in groups of	4
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	Yes
Isolation	
Isolation tested with	500 V DC/350 V AC
Standards, approvals, certificates	
Highest safety class achievable in safety mode	
• acc. to EN 954	Cat. 4
• Performance level according to ISO 13849-1	e
• SIL acc. to IEC 61508	SIL 3
connection method	
required front connector	40-pin
Dimensions	
Width	80 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	465 g
<b>last modified:</b>	9/22/2023 