

SIMATIC S7-300, FM 354 SUBMODULE FOR POSITIONING WITH SERVOMOTORS, MODULE EXCHANGE W/O PG, PREQUISITE STEP7 V3.1 INCL. CONFIG. PACKAGE ON CD



### Supply voltage

#### Rated value (DC)

- 24 V DC

Yes

### Input current

#### Current consumption, max.

350 mA

### Encoder supply

#### 5 V encoder supply

- |                        |        |
|------------------------|--------|
| • 5 V                  | Yes    |
| • Output current, max. | 220 mA |
| • Cable length, max.   | 35 m   |

#### 24 V encoder supply

- |                        |        |
|------------------------|--------|
| • 24 V                 | Yes    |
| • Output current, max. | 300 mA |
| • Cable length, max.   | 100 m  |

### Power loss

#### Power loss, typ.

8 W

### Digital inputs

Number of digital inputs	4
Functions	Reference cams, flying actual value setting, flying measurement, start/stop positioning, external block change
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	-3 to +5V
• for signal "1"	+11 to +30V
Input current	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	6 mA; 6 to 15 mA
Digital outputs	
Number of digital outputs	4
Functions	Position reached: stop, axis travels forward, axis travels back, change M-function M97, change M-function M98, start enable, direct output via data record
Short-circuit protection	Yes
Output voltage	
• Rated value (DC)	24 V
• for signal "1", min.	UP -3 V
Output current	
• for signal "1" permissible range for 0 to 55 °C, max.	0.6 A; with UPmax
• for signal "0" residual current, max.	2 mA
Encoder	
Connectable encoders	
• Incremental encoder (symmetrical)	Yes
• Absolute encoder (SSI)	Yes
Encoder signals, incremental encoder (symmetrical)	
• Trace mark signals	A, notA, B, notB
• Zero mark signal	N, notN
• Input voltage	5 V difference signal (phys. RS 422)
• Input frequency, max.	1 MHz
Encoder signals, absolute encoder (SSI)	
• Input signal	5 V difference signal (phys. RS 422)
• Data signal	DATA, notDATA
• Clock signal	CL, notCL
• Telegram length, parameterizable	13, 21 or 25 bit
• Clock frequency, max.	1.25 Mbit/s
• Cable length, shielded, max.	100 m; 10 m at 1.25 Mbit/s, 100 m at max. 125 kbit/s
Drive interface	
Signal Input	

• Type	Input loop controller message, isolated (optocoupler)
• Function	"Drive ready"
• Input voltage, rated value (DC)	24 V
• Input voltage for signal "0"	-3 to +5V
• Input voltage for signal "1"	+15 to +30V
• Input current, for signal "1"	2 to 6 mA
<b>Analog drive</b>	
<b>Setpoint signal</b>	
— Rated voltage range	-10 to +10V
— Output current	-3 to +3 mA
— Cable length, max.	35 m
<b>Output controller enable</b>	
— Switching voltage, max.	50 V
— Switching current, max.	1 A
— Switching capacity, max.	30 V·A
<b>Potential separation</b>	
Potential separation digital inputs	
• Potential separation digital inputs	No
Potential separation digital outputs	
• Potential separation digital outputs	No
<b>Degree and class of protection</b>	
Degree of protection acc. to EN 60529	
• IP20	Yes
<b>Ambient conditions</b>	
Ambient temperature during operation	
• min.	0 °C
• max.	55 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
<b>Connection method</b>	
required front connector	1x 20-pin
<b>Dimensions</b>	
Width	80 mm
Height	125 mm
Depth	118 mm
<b>Weights</b>	
Weight, approx.	550 g
<b>last modified:</b>	10/17/2018