

Modicon MCM

Modular safety controller

Safe speed monitoring modules

Safe speed monitoring modules

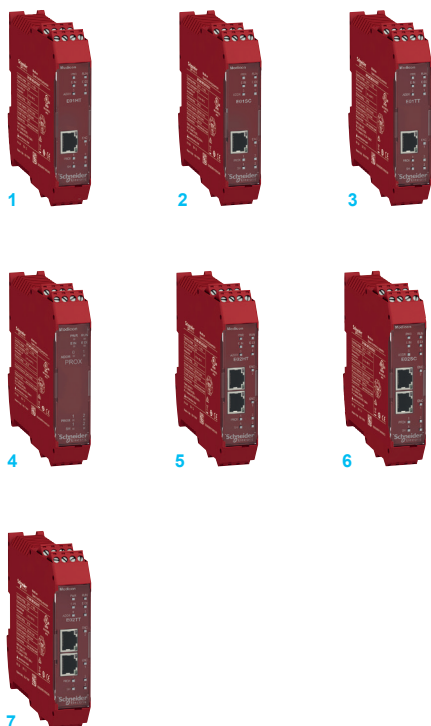
The safe speed monitoring modules are designed to monitor zero speed control, max speed (limited speed), speed range and direction.

- > Up to four logically selectable limited speed thresholds (freely configurable via **SoSafe Configurable** software) for each logical input (axis)
- > The safe speed monitoring modules (excluding XPSMCMEN0200) are equipped with RJ45 connectors (one or two depending on the model) for encoders and terminal blocks for proximity switches
- > Max input frequency: 500 kHz for encoder monitoring and 5 kHz for proximity sensors
- > The modules can be configured with incremental encoders and PNP/NPN proximity switches as described below:

Safe speed monitoring module reference (1)	Description	Connector type
1 XPSMCMEN0100HT XPSMCMEN0100HTG	> 1 input for HTL encoder + 1 or 2 proximity switches	1x RJ45 (ENC1) and terminal blocks for proximity sensor wiring
2 XPSMCMEN0100SC XPSMCMEN0100SCG	> 1 input for Sin/Cos encoder + 1 or 2 proximity switches	1x RJ45 (ENC1) and terminal blocks for proximity sensor wiring
3 XPSMCMEN0100TT XPSMCMEN0100TTG	> 1 input for TTL encoder + 1 or 2 proximity switches	1x RJ45 (ENC1) and terminal blocks for proximity sensor wiring
4 XPSMCMEN0200 XPSMCMEN0200G	> 2 inputs for proximity switches	Terminal blocks for proximity sensor wiring
5 XPSMCMEN0200HT XPSMCMEN0200HTG	> 1 or 2 inputs for HTL encoders + 1 or 2 proximity switches	2x RJ45 (ENC1/ENC2) and terminal blocks for proximity sensor wiring
6 XPSMCMEN0200SC XPSMCMEN0200SCG	> 1 or 2 inputs for Sin/Cos encoders + 1 or 2 proximity switches	2x RJ45 (ENC1/ENC2) and terminal blocks for proximity sensor wiring
7 XPSMCMEN0200TT XPSMCMEN0200TTG	> 1 or 2 inputs for TTL encoders + 1 or 2 proximity switches	2x RJ45 (ENC1/ENC2) and terminal blocks for proximity sensor wiring

- > The safe speed monitoring modules are connected to the safety controller via the backplane expansion connector.

(1) Safe relay output module or Safe speed monitoring module can be equipped with a spring clamp terminal block. The reference ends with a G.



Safe speed monitoring modules



XPSMCM●●●●●G: equipped with a spring clamp terminal block.



XPSMCMER0002



XPSMCMER0004



XPSMCMRO0004



XPSMCMRO0004DA



XPSMCMEN0100HT



XPSMCMEN0100SC



XPSMCMEN0100TT



XPSMCMEN0200



XPSMCMEN0200HT



XPSMCMEN0200SC



XPSMCMEN0200TT



XPSMCMCO0000S1



XPSMCMCO0000S2

Safe relay output modules

Description	Inputs	Outputs	Terminal block type	Reference	Weight kg/lb
Safe relay output modules (without expansion bus connection)	1 for Start/Restart interlock	2 relays for 1 output (2 NO + 1 NC)	Screw	XPSMCMER0002	0.250 0.55
			Spring clamp	XPSMCMER0002G	
	2 for Start/Restart interlock	4 relays for 2 independant outputs (4 NO + 2 NC)	Screw	XPSMCMER0004	0.300 0.66
			Spring clamp	XPSMCMER0004G	
Safe relay output modules (wiring with the backplane expansion connector)	4 for Start/Restart interlock	4 relays	Screw	XPSMCMRO0004	0.300 0.66
			Spring clamp	XPSMCMRO0004G	
	4 for Start/Restart interlock	4 relays with 8 status outputs	Screw	XPSMCMRO0004DA	0.330 0.73
			Spring clamp	XPSMCMRO0004DAG	

Safe speed monitoring modules

Description	Inputs (number & type) Connector type	Terminal block type	Reference	Weight kg/lb
Safe speed monitoring modules	■ 1 HTL encoder and 2 proximity sensor inputs (1) ■ 1x RJ45 (ENC1)	Screw	XPSMCMEN0100HT	0.280 0.62
		Spring clamp	XPSMCMEN0100HTG	
	■ 1 Sin/Cos encoder and 2 proximity sensor inputs (1) ■ 1x RJ45 (ENC1)	Screw	XPSMCMEN0100SC	0.280 0.62
		Spring clamp	XPSMCMEN0100SCG	
	■ 1 TTL encoder and 2 proximity sensor inputs (1) ■ 1x RJ45 (ENC1)	Screw	XPSMCMEN0100TT	0.280 0.62
		Spring clamp	XPSMCMEN0100TTG	
	■ 2 inputs for proximity switches (1) ■ None	Screw	XPSMCMEN0200	0.230 0.51
		Spring clamp	XPSMCMEN0200G	
	■ Up to 2 HTL encoders and 2 proximity sensor inputs (1) ■ 2x RJ45 (ENC1/ENC2)	Screw	XPSMCMEN0200HT	0.300 0.66
		Spring clamp	XPSMCMEN0200HTG	
	■ Up to 2 Sin/Cos encoders and 2 proximity sensor inputs (1) ■ 2x RJ45 (ENC1/ENC2)	Screw	XPSMCMEN0200SC	0.300 0.66
		Spring clamp	XPSMCMEN0200SCG	
	■ Up to 2 TTL encoders and 2 proximity sensor inputs (1) ■ 2x RJ45 (ENC1/ENC2)	Screw	XPSMCMEN0200TT	0.300 0.66
		Spring clamp	XPSMCMEN0200TTG	

Safe communication expansion modules

Description	Characteristics	Terminal block type	Reference	Weight kg/lb
Safe RS 485 bus expansion module for remote extension	1 connection interface: single channel transmitter/receiver network connection	Screw	XPSMCMCO0000S1	0.300 0.66
		Spring clamp	XPSMCMCO0000S1G	
	2 connections interface: dual channel transmitter/receiver network connection	Screw	XPSMCMCO0000S2	0.300 0.66
		Spring clamp	XPSMCMCO0000S2G	

(1) Proximity sensor connection via terminal blocks.