

SCHMERSAL 235 Series Metal Body Limit Switches

Features

- 16 models available
- 90-degree adjustable head, levers are adjustable to any angle on the operating shaft
- Die-Cast Zinc enclosure
- Fully assembled out of box
- Snap-action with constant contact pressure up to switching point
- M20 x 1.5 to 1/2" NPT conduit adapter
- Contact patterns similar to those of leading competitors

Schmersal 235 Series Metal Body Limit Switches										
Part Number	Price	Actuator Type	Snap Action Contacts	Travel to Operate Contacts	Total Travel	Actuating Force (min)	Switch Travel Diagram	Drawing Link *		
ZS-235-02Z	\$27.00	metal plunger	(2) N.C.	0.07 in [1.8 mm]	0.24 in [6mm]	79.66 lb-in [9 N*m]	Diagram 1	PDF		
ZS-235-11Z	\$27.00		(1) N.O./ (1) N.C.	0.1 in [2.5 mm]			Diagram 2	PDF		
ZR-235-02Z	\$29.00	metal plunger with plastic roller	(2) N.C.	0.07 in [1.8 mm]			Diagram 1	PDF		
ZR-235-11Z	\$29.00		(1) N.O./ (1) N.C.	0.1 in [2.5 mm]			Diagram 2	PDF		
Z4S-235-02Z	\$33.00	metal plunger with fixing nuts	(2) N.C.	0.07 in [1.8 mm]			0.37 in [9.3 mm]	79.66 lb-in [9 N*m]	Diagram 1	PDF
Z4S-235-11Z	\$33.00		(1) N.O./ (1) N.C.	0.1 in [2.5 mm]					Diagram 2	PDF
Z4R-235-02Z	\$36.00	metal plunger with plastic roller with fixing nuts	(2) N.C.	0.07 in [1.8 mm]					Diagram 1	PDF
Z4R-235-11Z	\$36.00		(1) N.O./ (1) N.C.	0.1 in [2.5 mm]					Diagram 2	PDF
ZV12H-235-02Z	\$41.00	side rotary lever with plastic roller	(2) N.C.	22°	70°	1.33 lb-in [0.15 N*m]			Diagram 3	PDF
ZV12H-235-11Z	\$41.00		(1) N.O./ (1) N.C.						Diagram 3	PDF
ZK-235-02Z	\$30.00	one-way horizontal lever with plastic roller	(2) N.C.	0.1 in [2.5 mm]	0.37 in [9.3 mm]	79.66 lb-in [9 N*m]			Diagram 5	PDF
ZK-235-11Z	\$30.00		(1) N.O./ (1) N.C.	0.14 in [3.6 mm]					Diagram 6	PDF
ZV7H-235-02Z	\$44.00	side rotary adjustable lever with plastic roller	(2) N.C.	22°	70°	1.33 lb-in [0.15 N*m]	Diagram 7	PDF		
ZV7H-235-11Z	\$44.00		(1) N.O./ (1) N.C.	30°			Diagram 8	PDF		
ZV10H-235-02Z	\$43.00	side rotary adjustable 6mm plastic rod	(2) N.C.	22°	70°		Diagram 7	PDF		
ZV10H-235-11Z	\$43.00		(1) N.O./ (1) N.C.	30°			Diagram 8	PDF		

* Weights are included on the drawing



ZS-235-02Z



ZR-235-02Z



Z4S-235-02Z



Z4R-235-02Z



ZV12H-235-02Z



ZK-235-02Z



ZV7H-235-02Z



ZV10H-235-02Z

235/236 Series Travel Diagrams

Switch Travel Diagrams

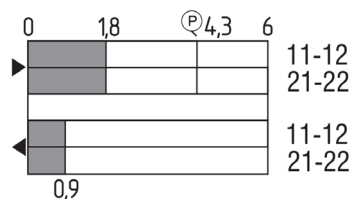


Diagram 1

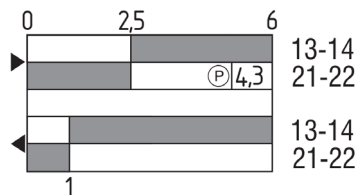


Diagram 2

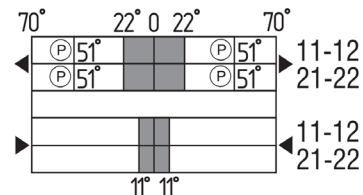


Diagram 3

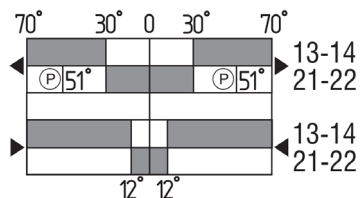


Diagram 4

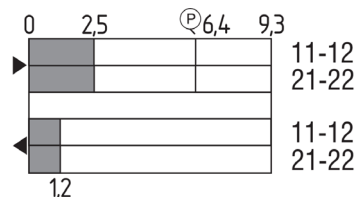


Diagram 5

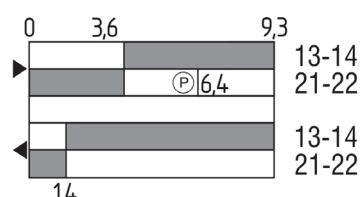


Diagram 6

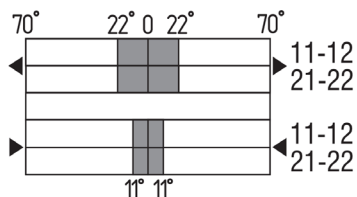


Diagram 7

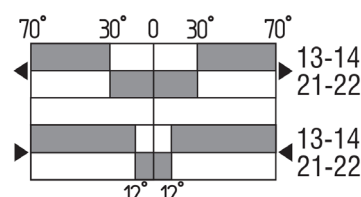


Diagram 8

Contact Travel Diagrams

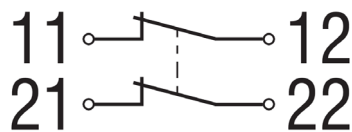


Diagram 1

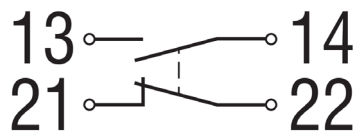


Diagram 2



SCHMERSAL 235/236 Series Specifications

Schmersal 235/236 Series Specifications		
Series	235	236
Environmental		
Degree of Protection	IP67	
Temperature Range	-30 to 80°C (-22 to 176°F)	
Mechanical Ratings		
Body Footprint (Without Actuator Head)	30mm x 30mm x 63.5 mm	30mm x 30mm x 58.5 mm
Mechanical Life	20 Million Operations	
Conduit Entrance	M20 x 1.5, each unit comes with a 1/2 in NPT adapter	
Enclosure Material	Die-cast zinc alloy	Plastic, Glass-fiber reinforced thermoplastic, self-extinguishing
Contact Blocks Rating		
Rated Impulse Withstand Voltage	6 kV	
Electrical Ratings	AC	AC-15 - 4A @ 230VAC Continuous: 10A @ 230VAC Required rated short-circuit current to EN60947-5-1 : 1,000A
	DC	DC-13 - 1A @ 24VDC
Maximum Switching Frequency	5,000 operations per hour, Switchover time: Max 5.5 ms, Bounce Duration: Max 3ms	
Contact Type	Change-over contact with double break, type 1 N.C. or 2 N.C. contacts, with galvanically separated contact bridges: snap-action, N.C. contacts with positive break	
Wiring Connections	AWG #14 through AWG #18 Wire	
Torque Requirements	Wiring Terminals: 7.1 in-lb (0.8 N•m)	
Safety Data		
General	02Z Series - Safety Function, Yes: Number of Safety Contacts: 2 11Z Series - Safety Function, Yes, Number of Safety Contacts 1, Number of Aux Contacts 1	
Safety Appraisal	Standards: ISO 13849-1, Mission Time 20 Year(s) Safety Outputs: B10d Normally-closed contact (N.C.), 20,000,000 Operations	
Agency Approvals	cULus E57648 all versions. All units are CE and Reach Compliant Standards: IEC 60947-5-1 : 2010, ISO 13849-1, BG-GS-ET-15, ISO 13849-1	