

Miniature MS Limit Switch



9007MS

The heavy-duty, miniature MS limit switch is completely encapsulated and intended for difficult applications such as machine tools, earth moving equipment, and general transportation. 9007MS04S0084

The switch has 40 mm mtg hole centers.

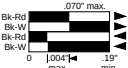
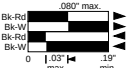
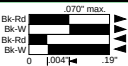
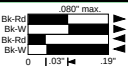
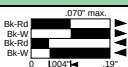
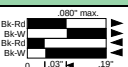
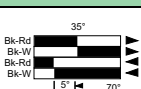
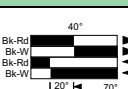
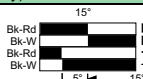
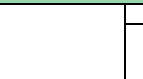
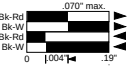
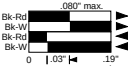
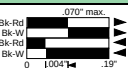
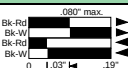
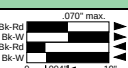
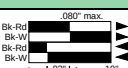
MS Circuit—Form C	Electrical Ratings/SPDT Form C (MS Type)		
	Silver Contacts		
1 N.O.—1 N.C.	Vac	Make	Break
	120	60 A	6 A
	240	30 A	3 A
	10.0 Amperes Continuous		
	DC Contact Rating: 5 A (Res), 28 Vdc		
	Gold Contacts		
	100 mA @ 125 Vac, 30 mA @ 28 Vdc		

ML Circuit—Form Z	Electrical Ratings/SPDT-DB Form Z (ML Type)		
	Silver Contacts		
1 N.O.—1 N.C.	Vac	Make	Break
	120	60 A	6 A
	240	30 A	3 A
	10.0 Amperes, Continuous		
	DC Contact Rating: 5 A (Res), 28 Vdc		

Table 21.10: Specifications

Temperature range (The minimum temperatures listed are based on the absence of freezing moisture or water.)	-4 °F to +221 °F (-20 °C to +105 °C) For -40 °F / -40 °C minimum temperature, see Forms 21 and 80 on page 21-9.
Enclosure rating	NEMA 1, 2, 4, 6, 6P, 12, 13, IP67
Vibration resistance	10 G (75–1200 Hz)
Shock resistance	35 G
Contact Characteristics	
Rated thermal current	10 A (standard)
Rated insulation voltage	300 Vac and Vdc (standard)
Gold contact switching ratings	0.1A, 24 Vdc; 0.24 VA
Cable	#18 AWG SJTO

Table 21.11: Selection (append prefix 9007 to the catalog number)

Description / Functional Diagram[1]	MS	ML	Operating Force/Torque	Contact Form	Contact Type	Catalog Number[2]
Top plunger						
			80 oz	SPDT Form C	Silver	MS01S0100
			80 oz	SPDT Form C	Gold	MS01G0100
			80 oz	SPDT Form Z	Silver	ML01S0100
Parallel roller plunger						
			80 oz	SPDT Form C	Silver	MS02S0100
			80 oz	SPDT Form C	Gold	MS02G0100
			80 oz	SPDT Form Z	Silver	ML02S0100
Cross roller plunger						
			80 oz	SPDT Form C	Silver	MS03S0100
			80 oz	SPDT Form C	Gold	MS03G0100
			80 oz	SPDT Form Z	Silver	ML03S0100
Rotary lever, CW and CCW						
 Not included (see Table 21.14 on page 21-9)			48 oz-in	SPDT Form C	Silver	MS04S0100
			48 oz-in	SPDT Form C	Gold	MS04G0100
			48 oz-in	SPDT Form Z	Silver	ML04S0100
Omnidirectional—wire whisker (NEMA 1, 2, 12, 13 only)						
			15 oz-in	SPDT Form C	Silver	MS05S0100
			15 oz-in	SPDT Form C	Gold	MS05G0100
Bushing mounted—top plunger						
			80 oz	SPDT Form C	Silver	MS06S0100
Bushing mounted—parallel roller plunger						
			80 oz	SPDT Form C	Silver	MS07S0100
			80 oz	SPDT Form C	Gold	MS07G0100
			80 oz	SPDT Form Z	Silver	ML07S0100
Bushing mounted—cross roller plunger						
			80 oz	SPDT Form C	Silver	MS08S0100
Adjustable top plunger						
			80 oz	SPDT Form C	Silver	MS09S0100
			80 oz	SPDT Form Z	Silver	ML09S0100

File
CCNE78403
NKCRFile
ClassLR 25490
3211-03

[1] If the application includes oil, bootbed switches are recommended. See page 21-9

[2] For available options and part number explanations, see page 21-9. Add options to the end of the catalog number. Up to three options may be added, if applicable.

Lever Arms and Options

Table 21.12: Selection—Booted Devices (append prefix 9007 to the catalog number)

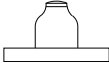
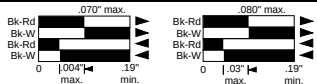
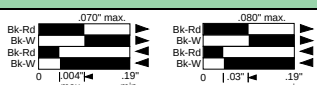
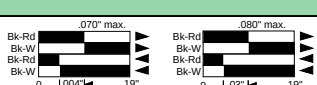
Description / Functional Diagram	MS	ML	Operating Force/ Torque	Contact Form	Contact Type	Catalog Number [3]/[4]
Booted top plunger						
			80 oz	SPDT Form C	Silver	MS10S0100
			80 oz	SPDT Form C	Gold	MS10G0100
			80 oz	SPDT Form Z	Silver	ML10S0100
Booted parallel roller plunger						
			80 oz	SPDT Form C	Silver	MS12S0100
			80 oz	SPDT Form Z	Silver	ML12S0100
Booted cross roller plunger						
			80 oz	SPDT Form C	Silver	MS13S0100

Table 21.13: Cable Length and General Options Designators: 9007MS01Sxxy

Replace xx and yy in the catalog number above with the designators in the tables below.
Some combinations of cable lengths and options are unavailable; consult Schneider Electric.

Cable Length (xx) [5]	Designator	General Options (yy) [3]	Designator
No cable [6]	00	#16 AWG SJTO cable (MS only)	02
3 ft—standard	01	Side entrance #18 AWG SJTO cable	06
6 ft	02	Gray #18 AWG SJTO cable	10
9 ft	03	Male 4 pin micro-connector in housing (DC type) (MS only)	54
12 ft	04	Male 5 pin micro-connector (DC type) (ML only)	55
18 ft	05	Low temperature (-40 °F / -40 °C), 9007MS04 (NEMA 1 only)	80
33 ft	13	Tapped holes in top of plunger housing (MS and ML)	81
		Male 4 pin micro-connector in housing (AC type) (MS only)	82
		Male 4-pin micro-connector in housing (AC type) (no cable)	84



Shown with side entrance cable, option 06



9007MS04S0084



Lever

Table 21.14: Style 7 Levers—0.75 in. (19 mm) diameter, nylon or steel roller (9007 prefix is not required on lever catalog numbers)

Length		Catalog Number 1/4 in. (6 mm) Wide		Catalog Number 1/2 in. (13 mm) Wide		Catalog Number 3/4 in. (19 mm) Wide	Catalog Number 1 in. (25 mm) Wide
inch	(mm)	Nylon	Steel	Nylon	Steel	Nylon	Nylon
0.875	(22.23)	7A2N	7A2	7B2N	7B2	—	—
1.375	(34.93)	7A3N	—	7B3N	—	7F3N	—
1.5	(38.10)	7A1N	7A1	7B1N	—	7F1N	7J1N
1.75	(44.45)	7A7N	—	—	—	—	—
2.00	(50.8)	7A4N	—	7B4N	—	7F4N	7J4N

NOTE: Lever tightening torque for mounting the lever on the shaft: minimum **17 lb-in.**

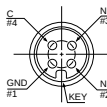
Other levers available. See catalog 9006CT1007. For inside (reverse) roller option at no charge, replace 7 with 7X (for example: 7A2N changes to 7XA2N).

Table 21.15: Specialty Arms (9007 prefix is not required on lever catalog numbers)

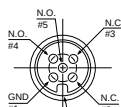
Description	Catalog Number
Style 7D adjustable length 1-3/8" to 3-3/8"—0.75" diameter, 1/4" wide, metal roller	7D
Style 7DN adjustable length 1-3/8" to 3-3/8"—0.75" diameter, 1/4" wide, nylon roller	7DN
Style 7S spring nylon, 6" rod, 0.3" diameter	7S
Style 7N nylon rod, 5" long, 0.3" diameter	7N

NOTE: Lever tightening torque for mounting the lever on the shaft: minimum **17 lb-in.**

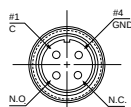
Male plug (face) pin-outs



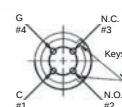
Option 54 (MS only)—DC



Option 55 (ML only)—DC



Option 12 (MS only)—AC or DC (3 Amps)



Option 82 (MS only)—AC



Option 84 (MS only)—AC

NOTE: DC connectors are rated 3 A, 250 Vac/Vdc.

[3] See available options below. Add to the end of the catalog number. Up to three options may be added, if applicable.

[4] This catalog number is for devices with a standard cable and no options. See page for other cable length selections and general options.

[5] See available options below. Add to the end of the catalog number. Up to three options may be added, if applicable.

[6] Use with options 54, 55, and 82.