



Industrial & Electrical Components

General Purpose
Micro Switch

Part No.

NV-21Z
NV-16Z

- Industry standard currents of 16A or 21A
- With long expectancy, reliability
- Variety of levers, terminals and operating forces
- Heat resistant available
- RoHS compliant

ORDERING INFORMATION

NV- ☐ ☐ ☐ ☐ ☐ ☐

① ② ③ ④ ⑤ ⑥

1. Ratings

21: 21A at 250VAC

16: 16A at 250VAC

2. Contact Gap

None: 1mm

3. Actuator

None: Pin plunger

Z: Hinge lever

W: Simulated roller lever

G: Hinge roller lever

4. Contact Form

None: SPDT

2: SPST-NC

3: SPST-NO

5. Terminals

A: Solder terminals

C: Quick-connect terminal (#250)

C2: Quick-cinnect terminal (#187)

6. Maximum Operating Force

6: 3.92N

5: 1.96N

4: 0.98N

RATINGS (REFERENCE VALUES)

Model	Reted voltage	No-inductive load				Inductive load			
		Resistive load		Lamp load		Inductive load		Motor load	
		NC	NO	NC	NO	NC	NO	NC	NO
NV-21	AC250V	21A		3A		12A		6A	
	DC8V	21A		5A		12A		7A	
	DC30V	14A		5A		12A		5A	
	DC125V	0.6A		0.1A		0.6A		0.1A	
	DC250V	0.3A		0.05A		0.3A		0.05A	
NV-16	AC250V	16A		2A		10A		6A	
	DC8V	16A		4A		10A		7A	
	DC30V	10A		4A		10A		5A	
	DC125V	0.6A		0.1A		0.6A		0.1A	
	DC250V	0.3A		0.05A		0.3A		0.05A	

TECHNICAL DATA

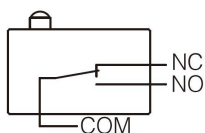
Item Type		NV-21Z / NV-16Z
Allowable operating speed		0.1mm~1m/s
Operating frequency	Mechanical	600 times/min
	Electrical	30 times/min
Insulation resistance		Min.:100MΩ (above DC500C)
Contact resistance		Max.:30mΩ initial value
Dielectric strength	BTW same polarity terminals	AC1000V 50/60Hz 1min
	BTW current-carrying parts	AC1500V 50/60Hz 1min
	BTW terminal & metal parts	AC1500V 50/60Hz 1min
Vibration resistance	Malfunction	10~55Hz double amplitude 1.5mm
Shock resistance	Durable	1,000 m/s ² (approx. 100G) max.
	Malfunction	300 m/s ² (approx. 30G) max
Expected life	Mechanical life	1x10 ⁶ (60 operations/minute)
	Electrical life	1x10 ⁵ (30 operations/minute)
Protection degree		IEC IP40
Ambient operation temperature		-20℃~+125℃
Ambient humidity		60%RH
Contact material		silver alloy
Weight		Approx. 6.2 g (plunger models)

CONTACT SPECIFICATION

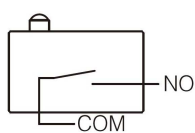
Item		NV-21Z	NV-16Z
Specification		Rivet	
Material		Silver alloy	
Gap (Standard value)		0.5mm	
Inrush current	NC	50A max.	40A max.
	NO		
Minimum applicable load		160mA at 5VDC	

CONTACT FORM

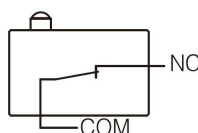
SPDT



SPST- NO

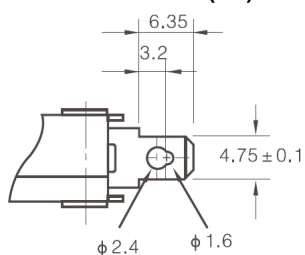


SPST- NC

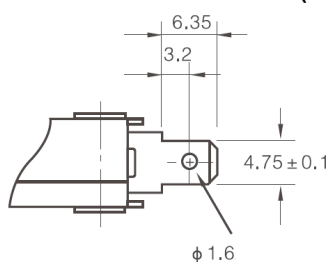


TERMINAL

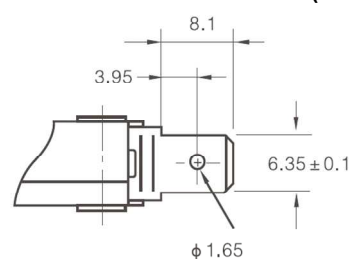
Solder terminal (A)



Quick-connect terminal #187(4.8 x 0.5)



Quick-connect terminal #250 (6.3 x 0.8)



SAFETY APPROVAL

UL61058

CSA-C22.2 No.61058-1

Rated voltage	NV-21	NV-16
AC125V	21A	16A
AC250V		

ENEC

(EN61058-1)

Rated voltage	NV-21	NV-16
AC125V	21A	16A
AC250V		

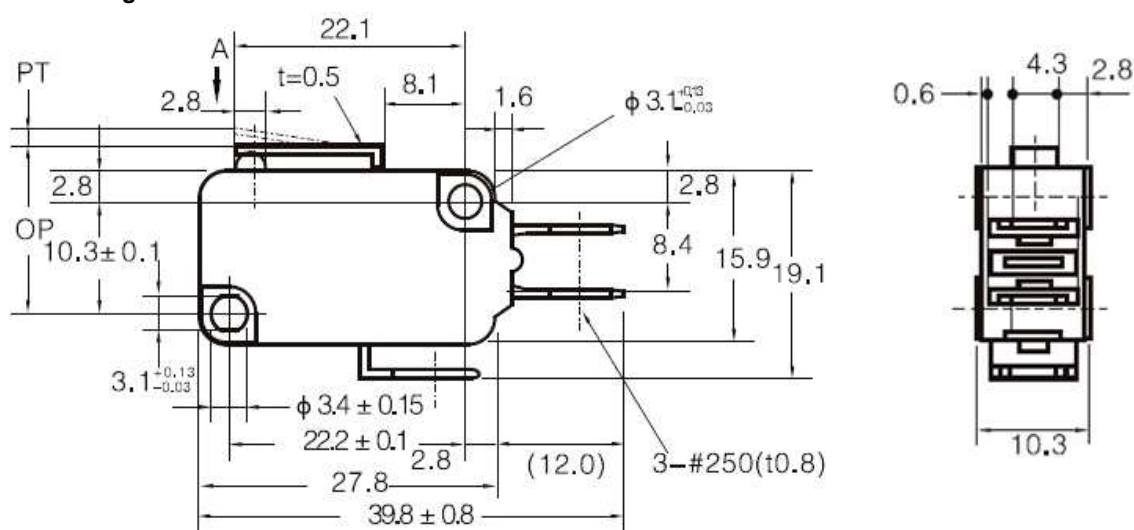
CQC

(GB15092.1)

Rated voltage	NV-21	NV-16
AC125V	21(6)A	16(4)A
AC250V		

DIMENSIONS (mm)

Short Hinge Lever Models

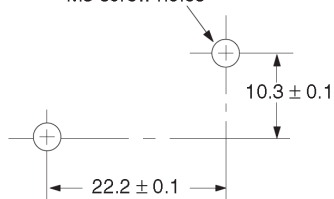


OPERATING CHARACTERISTICS

Operating performance	NV-21Z	NV-16Z
OF max.	3.92N	1.96N
RF min.	0.49N	0.49N
PT max.	1.2mm	
OT min.	1.0mm	
MD max.	0.6mm	
OP	15.2 ± 0.5mm	

MOUNTING HOLES

Two, 3.1-dia. mounting holes or M3 screw holes



All switches may be panel mounted using M3 mounting screws with plane washers or spring washers to securely mount the switch.

Tighten the screws to a torque of 0.39 to 0.59 N·m.