



SERIES 1080 - MINIATURE SNAP-ACTION SWITCHES

TO 21 (8) A 250 V AC



PRODUCT FEATURES

- The precise mounting of the moving contact part (milled bearing blade) offers optimum snap-action even with slow actuation
- Wide range of ratings from 3 (1) A 250 V AC to 21 (8) A 250 V AC
- Versions with gold plated contacts for signal current applications
- Various auxiliary actuators, two suspension points

ON REQUEST

- Low operating forces (≤ 0.15 N)
- Customized additional actuators
- Plug terminal 4.8 x 0.5 mm

Design	DIN 41635 A
Mechanical life endurance	2E6 (basic type 1080) 20E4 (basic type 1085)
Contact resistance (new condition)	< 100 mOhm (1 A 12 V DC)
Insulation resistance (new condition)	> 100 MOhm (500 V DC)
Proof tracking	250 PTI
Protection type	IP 40 (actuator side)
Ambient temperature	-40 °C ... +125 °C
Flammability	UL 94 V-0
Glow wire test temperature	850 °C
Material actuator additional actuator housing terminals	PETP glass fiber-reinforced stainless steel PA glass fiber-reinforced / PETP glass fiber-reinforced silver plated / CuZn
Bounce time	< 10 ms
Approval marks	 /  / 

Suitable for appliances of protection class II under compliance with the installation conditions required on the equipment side

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH 'N' DRIVE



										
21 (8) A 250 V AC 1E4										
16 (8) A 250 V AC 1E4										
16 (4) A 250 V AC 5E4										
16 (4) A 250 V AC 25E3										
10 (4) A 250 V AC 25E3										
6 (2) A 250 V AC 5E4										
4 (4) A 250 V AC 5E4										
3 (1) A 250 V AC 5E4										
3 (1) A 250 V AC 25E3										
21 A 250 V AC 2 HP										
21 A 125 V AC 1 HP										
16 A 250 V AC 1/2 HP										
16 A 125 - 250 V AC 1/2 HP										
16 A 125 V AC 1/3 HP										
10 A 250 V AC 1/3 HP										
10 A 125 V AC 1/8 HP										
3 A 125 - 250 V AC										
Terminal type										
Terminal description										
Contact material										
Operating force (N)										
Operating position (OP) (mm)										
Difference travel max. (mm)										
Free position (FP) max. (mm)										
Permissible total travel position (TP) (mm)										
Actuator description										
Lever drawing										
Contact distance (mm)										
EN 60335 cap. 30 conform "G"										
Stock version										



Technical drawing of a mechanical part, showing a side view and a front view. The side view includes dimensions: 10.3, 3.1, 20.25, 16.2, 15.9, 3.3, 22.2, 27.8, and a hole diameter of Ø3.1. The front view includes dimensions: 10.3, 4, and 10.

Technical drawing of a mechanical part, showing a side view and a cross-sectional view. The side view includes dimensions: 10.3, 3.1, 3.3, 22.2, 27.8, 20.25, 16.8, $\varnothing 3.1$, 11.5, 5, 10.2, and 15.9. The cross-sectional view shows dimensions: 10.3, 4, and 15.9. The part features a central shaft with a hole, a flange, and a base with a mounting hole.

Technical drawing of a mechanical part, likely a bracket or support, showing dimensions in millimeters. The drawing includes a side view and a cross-sectional view.

Dimensions:

- Overall width: 10.3
- Overall height: 27.8
- Top horizontal distance: 20.25
- Top horizontal distance: 16.8
- Top horizontal distance: 83.1
- Top horizontal distance: 10.9
- Top horizontal distance: 7
- Top horizontal distance: 15.9
- Top horizontal distance: 10.3
- Top horizontal distance: 4
- Top horizontal distance: 3.1
- Top horizontal distance: 3.3
- Top horizontal distance: 22.2
- Top horizontal distance: 4

Technical drawing of a mechanical part, showing a side view and a front view. The side view (left) includes dimensions: 10.3 (height), 3.1 (width), 20.25 (length), 8.4 (width), 15.9 (height), 3.3 (width), 22.2 (length), and 27.8 (length). The front view (right) includes dimensions: 10.3 (height), 4 (width), and 8.2 (height). The part features a central cylindrical section with a flange and a smaller cylindrical section on the right. There are also two small circular features on the left side.

Technical drawing of the 1000 series ball valve, showing front and side views with dimensions in mm.

Front View Dimensions:

- Top flange diameter: 20.25
- Top flange thickness: 2.8
- Ball diameter: $\varnothing 3.1$
- Stem diameter: 10.3
- Stem length (from top flange): 3.1
- Stem length (from bottom flange): 3.3
- Bottom flange thickness: 5
- Bottom flange diameter: 19.35
- Bottom flange to stem connection: 0.8
- Stem length (from bottom flange to ball): 14.4
- Stem length (from bottom flange to top flange): 22.2
- Overall height: 27.8

Side View Dimensions:

- Top flange diameter: 10.3
- Top flange thickness: 4
- Stem diameter: 4.7
- Stem length (from top flange): 15.9
- Stem length (from bottom flange): 3.3
- Bottom flange thickness: 1.1
- Bottom flange diameter: 19.35
- Bottom flange to stem connection: 5
- Stem length (from bottom flange to ball): 19.35
- Stem length (from bottom flange to top flange): 27.8
- Overall height: 27.8

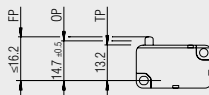
Bottom View Dimensions:

- Bottom flange diameter: 19.35
- Bottom flange thickness: 5
- Bottom flange to stem connection: 19.35
- Stem length (from bottom flange to ball): 19.35
- Stem length (from bottom flange to top flange): 27.8
- Overall height: 27.8



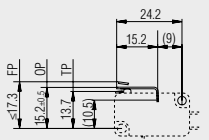
SERIES 1080 - MINIATURE SNAP-ACTION SWITCHES

T0 21 (8) A 250 V AC

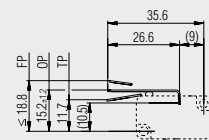


FP: free position
OP: operating position
TP: permissible total travel position

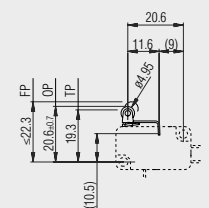
Switching positions



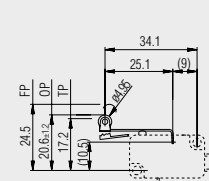
L01: straight lever
191.080.091



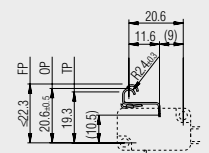
L02: straight lever
191.080.101



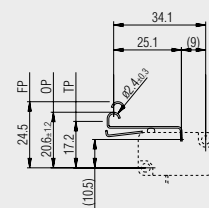
L11: roller lever
191.079.013



L12: roller lever
191.079.023



L21: simulated roller
191.080.451



L22: simulated roller
191.080.471

Auxiliary actuators

ROCKER SWITCHES

PUSHBUTTON SWITCHES

TOGGLE SWITCHES

SLIDE SWITCHES

ROTARY SWITCHES

FOOT SWITCHES

TACT AND KEY SWITCHES

SNAP-ACTION SWITCHES

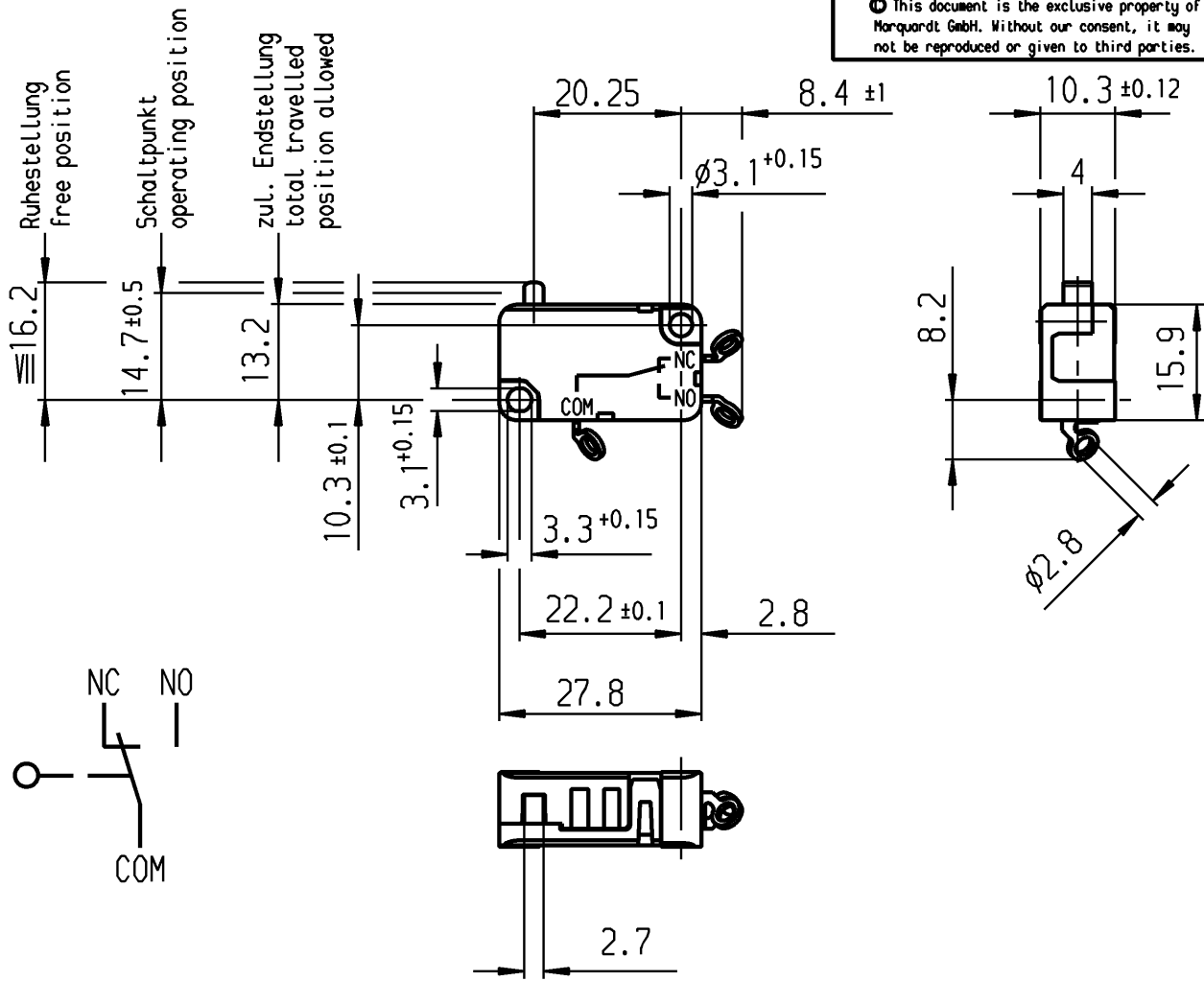
MICRO-SIGNAL SWITCHES

SENSORS

ECO

PUSH'N'DRIVE

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**Aufschrift
Marking**

**Wechsler 1-polig
single pole changeover**

MARQUARDT (M)

1080 µ 40T125
16(4)/250~25E3
16(8)/250~10E3 

16A 125V AC 1/2HP
16A 250V AC 1/2HP
R109 

Schalt-Betätigungkraft ≤ 1.0 N
actuating force
Rückschaltkraft ≥ 0.3 N
release force
Differenzweg ≤ 0.3 mm
movement differential
Schutzklasse nach DIN 40 050 IP 40
protection class

Herstelljahr/-woche nach
year and week of production acc. to DIN EN 60062

Allgemeintoleranzen/UNTOLERANCED DIMENSIONS						PROJECTION 		Pause COPY	Blatt SHEET		Zeichn./DRAWING NO. K 1080.0103	
Für Längen und Radien FOR LENGTHS AND RADII. ±		Abmaße in mm für Nennmaßbereich in mm ALL DIMENSIONS ARE IN MILLIMETRES			Für Winkel FOR ANGLE ± 2°				Original DIN A4	Maßstab SCALE 1:1		
		bis/UP TO 6	über/OVER 6 bis/UP TO 30	über/OVER 30								
		0.2	0.3									
d	32882	03.12.01	vor	i				0	10	20	30 mm	Schnappschalter Snap Action Switch
c	24233	15.01.98	gc	h			gez./DRAWN BY 15.03.94 mk					
b	23384	07.06.95	mk	g			Ersatz für/REPLACEMENT OF					
a	22987	04.10.94	mk	f	63606	07.07.09					mtr	
				e	60742	27.10.08	mp					MARQUARDT Marquardt GmbH, D-78604 Rietheim-Weilheim
Ausg. ISSUE	Änderung REVISION	gez. DRAWN BY		Ausg. ISSUE	Änderung REVISION	gez. DRAWN BY						

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