

AVC Series – Anti-Vandal Illuminated Capacitive Switches

Applications

- Bath Accessories.
- Automotive Electronics.
- Strict Access Control Systems.
- Shipping Equipment.
- Medical Equipment.
- Horticulture.



TE Connectivity is pleased to introduce its AVC Series of Anti-Vandal illuminated Capacitive Pushbutton Switches. These IP68 rated Anti-Vandal switches are available in 16mm, 19mm, and 22mm diameter bushings for a wide range of possible applications. In addition, the AVC series of switches are characterised by 500mm long leads for more convenient installation.

Features

- Zero Actuation Force.
- Flat Button Type.
- Momentary and Locking Actuation Available.
- Independent LED Control (2 or 3 colors).
- Operating Life Up to 50 Million Cycles.

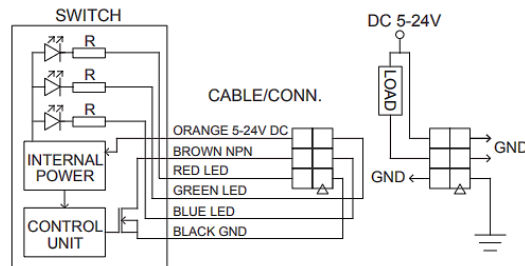
The AVC Switches are characterised by contact rating of 5-24VDC / 1A.

AVC Series – Type Classification

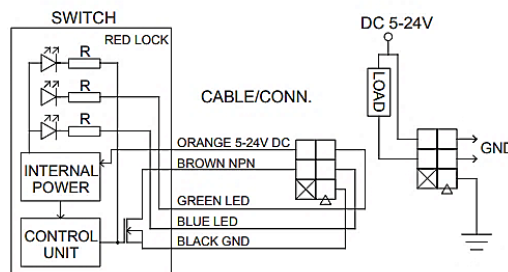
Type	AVC16	AVC19	AVC22	
Bushing Size	16mm	19mm	22mm	
Actuation	Locking/Momentary			
Rating	5-24VDC / 1A			
Contact Resistance	1Ω Max.			
Illumination Power Consumption	10mA Max.			
Operating Life	50 Million Cycles.			
Sealing	Silicone, Epoxy.			
Wire Leads	26AWG 500mm+2.54 2x3 Connector	26AWG 500mm+2.54 1x6 Connector		
Lead Length	500mm			
Packaging	ESD Bag, Paper Box			

Circuits:

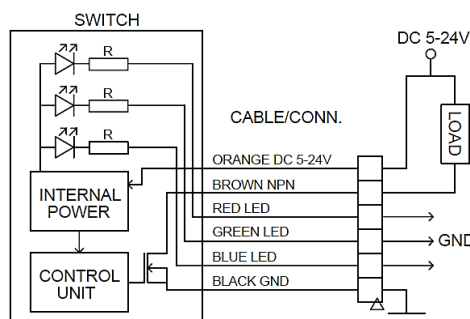
-“**D**” Color LED RGB (Red + Green + Blue) application diagram (Only for 16mm Bushing)



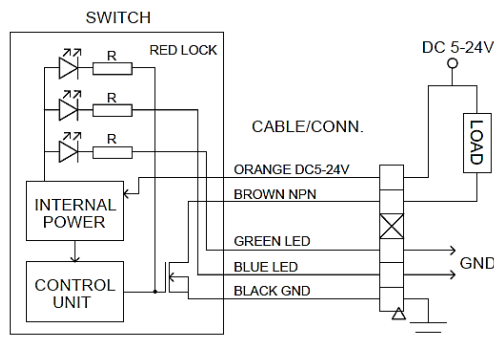
-“**3**” Color LED Red Lock (Green + Blue) application diagram (Only for 16mm Bushing)



-“**D**” Color LED RGB (Red + Green + Blue) application diagram (Only for 19/22mm Bushing)

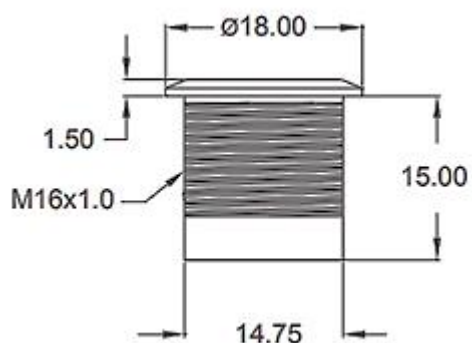


-“**3**” Color LED Red Lock (Green + Blue) application diagram (Only for 19/22mm Bushing)

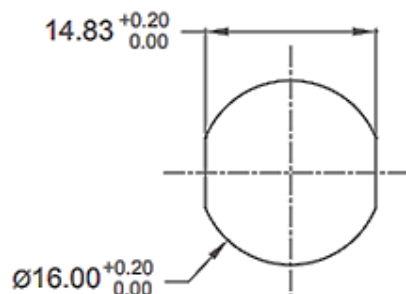


Bushings and Button Types:

-16mm, Flat Button

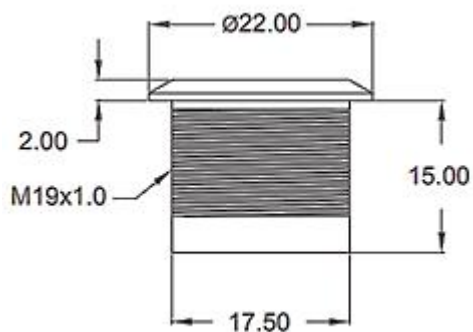


Panel Cut-out

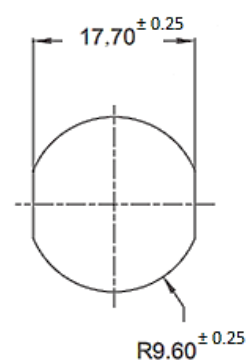


Max. Panel Thickness: 8.0mm

-19mm, Flat Button

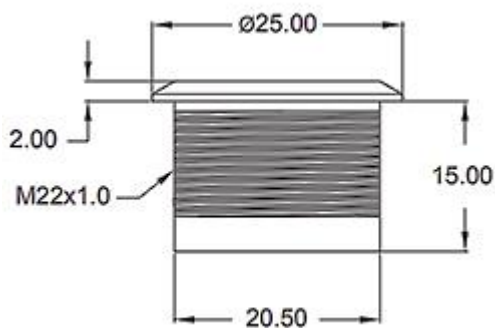


Panel Cut-out

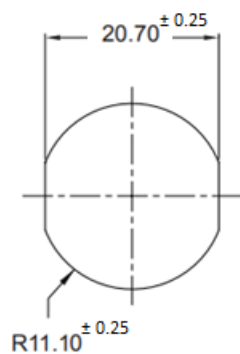


Max. Panel Thickness: 10.0mm

-22mm, Flat Button



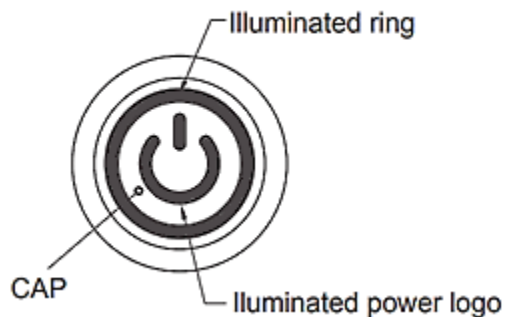
Panel Cut-out



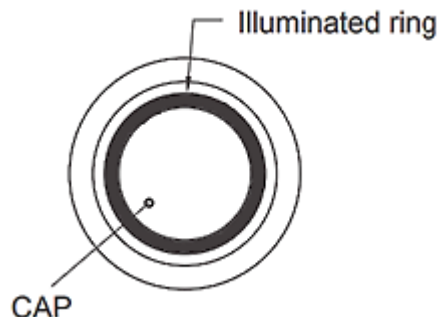
Max. Panel Thickness: 10.0mm

Light Types:

-“**E1**” Illuminated Ring and Power logo

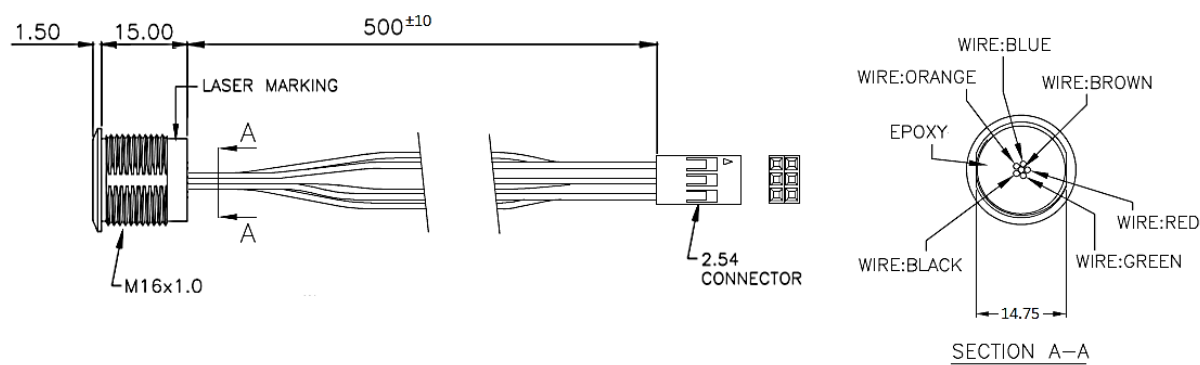


-“**E0**” Illuminated Ring

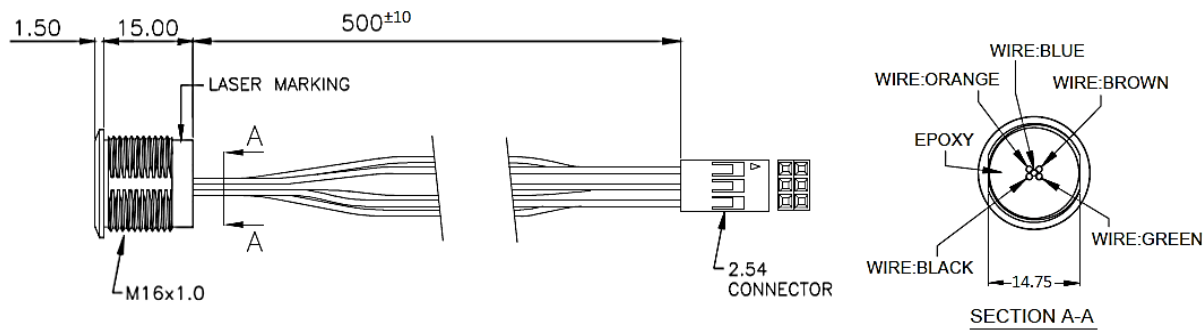


Wire leads:

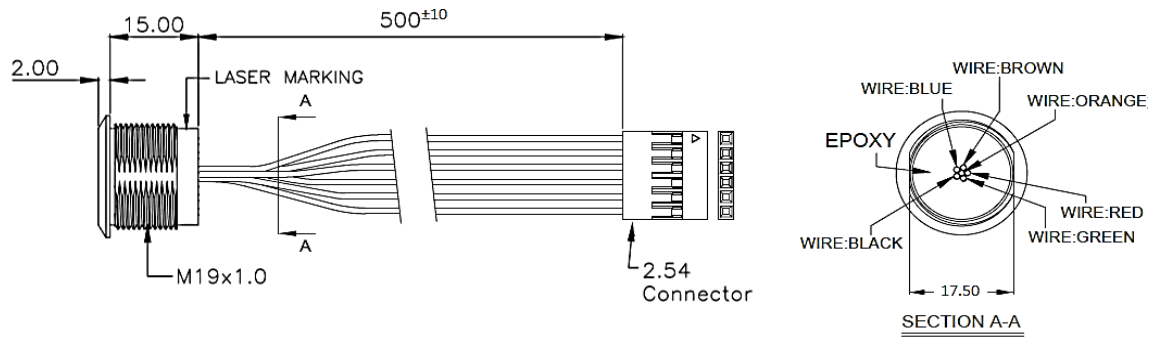
-“**F**” 16mm Bushing, Flat Button, LED Color: RGB (Red + Green + Blue)



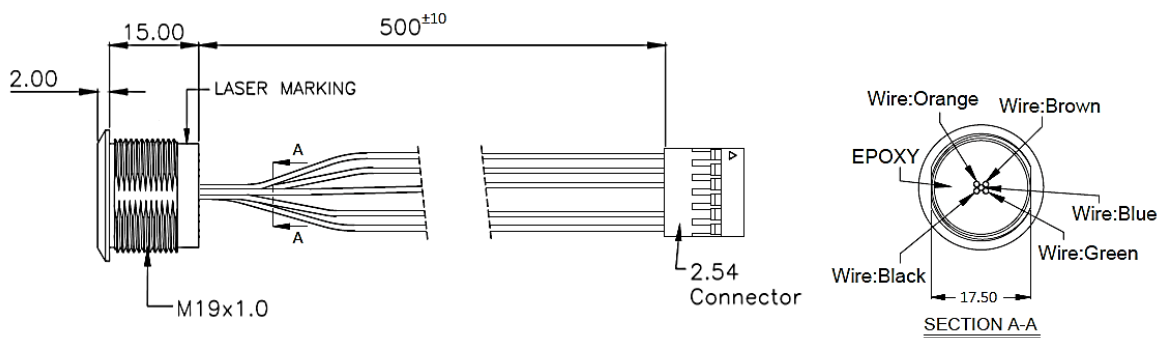
-“**F**” 16mm Bushing, Flat Button, LED Color: Red Lock (Green + Blue)



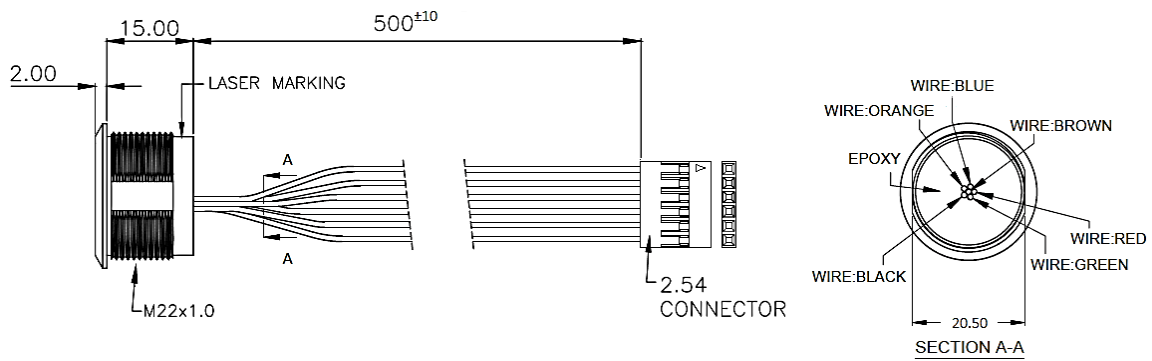
-“F” 19mm Bushing, Flat Button, LED Color: RGB (Red + Green + Blue)



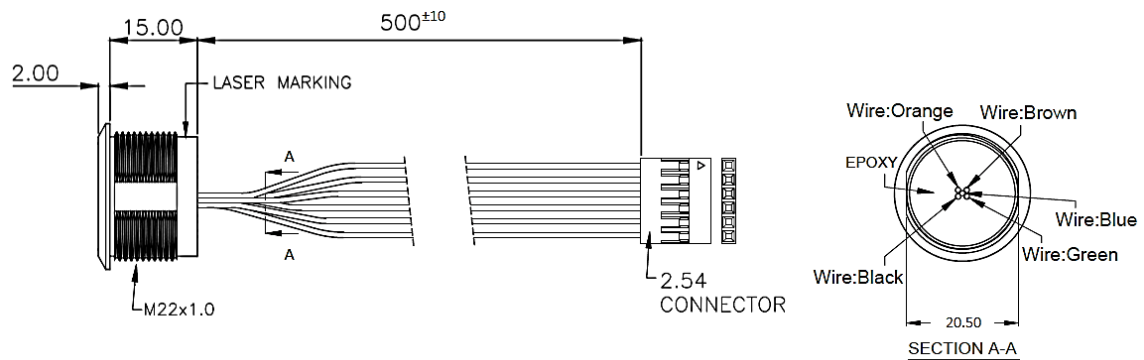
-“F” 19mm Bushing, Flat Button, LED Color: Red Lock (Green + Blue)



-“F” 22mm Bushing, Flat Button, LED Color: RGB (Red + Green + Blue)



-“F” 22mm Bushing, Flat Button, LED Color: Red Lock (Green + Blue)



1. Style

1.1 Operating Temperature Range: -20 °C to +65°C

1.2 Storage Temperature Range: -40 °C to +85°C

2. Current Range: 1A, 5-24VDC Max.

3. Type of Actuation: Locking / Momentary

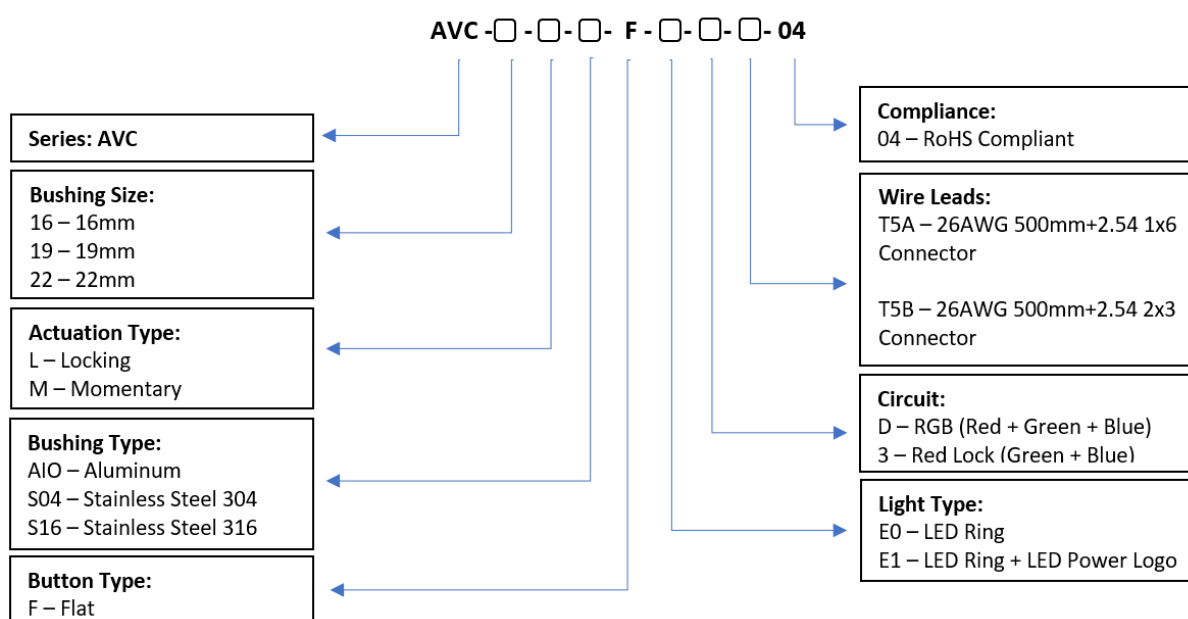
4. Test Sequence:

	Item	Description	Test Conditions	Requirements
Appearance	1	Visual Examination	By visual examination without any pressure or testing.	There shall be no defects that affect the performance of the product.
Electrical Performance	2	Contact Resistance	At 1A, 5VDC. For transistor resistance from drain to source.	1Ω Max.
	3	Current Rating	1 Hour with 5Ω resistor.	1A / 5VDC.
	4	Power consumption w/o illumination	Without LED	2mA Max.
	5	Illumination power consumption	Red, Green and Blue Color (RGB) illumination	10mA Max.
	6	Operating life	Life cycle tester with Touch pen	50 Million cycles.
	7	Cable retention force to switch	Force Analyzer	10KG Min.

Environmental Endurance	9	Operating temperature	1) Low Temperature: -20±3°C, 96 Hours. 2) High temperature: 65±3°C, 96 Hours.	As shown in items 2 to 6.
	10	IP68	As per parameters specified by IEC 60529 standards.	Pass.
	11	Salt Spray Testing	Following the test set forth below the sample shall be left in normal temperature and humidity conditions for 1 hour before the measurements are made: 1) Temperature: 35±2°C 2) The ratio of salt-water: 5%. 3) The spray amount of salt-water: 1 to 2 ml/h. 4) Time: 48 hours	The testing standard based on bubble, crack, and magnifying glass with gauge.

4. Packaging: ESD bag, paper box.

Part numbering – How to order



-Example PN: AVC16LAIOFE1DT5B04

PN List

Smart PN	Bushing Size	Actuation Type	Bushing Type	LED Illumination	Circuit	Wire Leads	MOQ	TE PN
AVC16LAIOFE1DT5B04	16mm	Locking	Aluminum	Ring + Logo	RGB	500mm+2.54 2x3	100	2342833-1
AVC16LAIOFE13T5B04	16mm	Locking	Aluminum	Ring + Logo	Red Lock	500mm+2.54 2x3	100	2342833-2
AVC16LAIOFE0DT5B04	16mm	Locking	Aluminum	Ring	RGB	500mm+2.54 2x3	100	2342832-1
AVC16LAIOFE03T5B04	16mm	Locking	Aluminum	Ring	Red Lock	500mm+2.54 2x3	100	2342832-2
AVC16LS04FE1DT5B04	16mm	Locking	Stainless Steel 304	Ring + Logo	RGB	500mm+2.54 2x3	100	2342833-3
AVC16LS04FE13T5B04	16mm	Locking	Stainless Steel 304	Ring + Logo	Red Lock	500mm+2.54 2x3	100	2342833-4
AVC16LS04FE0DT5B04	16mm	Locking	Stainless Steel 304	Ring	RGB	500mm+2.54 2x3	100	2342832-3
AVC16LS04FE03T5B04	16mm	Locking	Stainless Steel 304	Ring	Red Lock	500mm+2.54 2x3	100	2342832-4
AVC16LS16FE1DT5B04	16mm	Locking	Stainless Steel 316	Ring + Logo	RGB	500mm+2.54 2x3	100	2342833-5
AVC16LS16FE13T5B04	16mm	Locking	Stainless Steel 316	Ring + Logo	Red Lock	500mm+2.54 2x3	100	2342833-6
AVC16LS16FE0DT5B04	16mm	Locking	Stainless Steel 316	Ring	RGB	500mm+2.54 2x3	100	2342832-5
AVC16LS16FE03T5B04	16mm	Locking	Stainless Steel 316	Ring	Red Lock	500mm+2.54 2x3	100	2342832-6
AVC16MAIOFE1DT5B04	16mm	Momentary	Aluminum	Ring + Logo	RGB	500mm+2.54 2x3	100	2342833-7
AVC16MAIOFE0DT5B04	16mm	Momentary	Aluminum	Ring	RGB	500mm+2.54 2x3	100	2342832-7
AVC16MS04FE1DT5B04	16mm	Momentary	Stainless Steel 304	Ring + Logo	RGB	500mm+2.54 2x3	100	2342833-8
AVC16MS04FE0DT5B04	16mm	Momentary	Stainless Steel 304	Ring	RGB	500mm+2.54 2x3	100	2342832-8
AVC16MS16FE1DT5B04	16mm	Momentary	Stainless Steel 316	Ring + Logo	RGB	500mm+2.54 2x3	100	2342833-9
AVC16MS16FE0DT5B04	16mm	Momentary	Stainless Steel 316	Ring	RGB	500mm+2.54 2x3	100	2342832-9
AVC19LAIOFE1DT5A04	19mm	Locking	Aluminum	Ring + Logo	RGB	500mm+2.54 1x6	100	2342835-1
AVC19LAIOFE13T5A04	19mm	Locking	Aluminum	Ring + Logo	Red Lock	500mm+2.54 1x6	100	2342835-2
AVC19LAIOFE0DT5A04	19mm	Locking	Aluminum	Ring	RGB	500mm+2.54 1x6	100	2342834-1
AVC19LAIOFE03T5A04	19mm	Locking	Aluminum	Ring	Red Lock	500mm+2.54 1x6	100	2342834-2
AVC19LS04FE1DT5A04	19mm	Locking	Stainless Steel 304	Ring + Logo	RGB	500mm+2.54 1x6	100	2342835-3
AVC19LS04FE13T5A04	19mm	Locking	Stainless Steel 304	Ring + Logo	Red Lock	500mm+2.54 1x6	100	2342835-4
AVC19LS04FE0DT5A04	19mm	Locking	Stainless Steel 304	Ring	RGB	500mm+2.54 1x6	100	2342834-3
AVC19LS04FE03T5A04	19mm	Locking	Stainless Steel 304	Ring	Red Lock	500mm+2.54 1x6	100	2342834-4
AVC19LS16FE1DT5A04	19mm	Locking	Stainless Steel 316	Ring + Logo	RGB	500mm+2.54 1x6	100	2342835-5
AVC19LS16FE13T5A04	19mm	Locking	Stainless Steel 316	Ring + Logo	Red Lock	500mm+2.54 1x6	100	2342835-6
AVC19LS16FE0DT5A04	19mm	Locking	Stainless Steel 316	Ring	RGB	500mm+2.54 1x6	100	2342834-5
AVC19LS16FE03T5A04	19mm	Locking	Stainless Steel 316	Ring	Red Lock	500mm+2.54 1x6	100	2342834-6
AVC19MAIOFE1DT5A04	19mm	Momentary	Aluminum	Ring + Logo	RGB	500mm+2.54 1x6	100	2342835-7
AVC19MAIOFE0DT5A04	19mm	Momentary	Aluminum	Ring	RGB	500mm+2.54 1x6	100	2342834-7
AVC19MS04FE1DT5A04	19mm	Momentary	Stainless Steel 304	Ring + Logo	RGB	500mm+2.54 1x6	100	2342835-8
AVC19MS04FE0DT5A04	19mm	Momentary	Stainless Steel 304	Ring	RGB	500mm+2.54 1x6	100	2342834-8
AVC19MS16FE1DT5A04	19mm	Momentary	Stainless Steel 316	Ring + Logo	RGB	500mm+2.54 1x6	100	2342835-9
AVC19MS16FE0DT5A04	19mm	Momentary	Stainless Steel 316	Ring	RGB	500mm+2.54 1x6	100	2342834-9
AVC22LAIOFE1DT5A04	22mm	Locking	Aluminum	Ring + Logo	RGB	500mm+2.54 1x6	100	2342837-1
AVC22LAIOFE13T5A04	22mm	Locking	Aluminum	Ring + Logo	Red Lock	500mm+2.54 1x6	100	2342837-2
AVC22LAIOFE0DT5A04	22mm	Locking	Aluminum	Ring	RGB	500mm+2.54 1x6	100	2342836-1
AVC22LAIOFE03T5A04	22mm	Locking	Aluminum	Ring	Red Lock	500mm+2.54 1x6	100	2342836-2
AVC22LS04FE1DT5A04	22mm	Locking	Stainless Steel 304	Ring + Logo	RGB	500mm+2.54 1x6	100	2342837-3
AVC22LS04FE13T5A04	22mm	Locking	Stainless Steel 304	Ring + Logo	Red Lock	500mm+2.54 1x6	100	2342837-4
AVC22LS04FE0DT5A04	22mm	Locking	Stainless Steel 304	Ring	RGB	500mm+2.54 1x6	100	2342836-3
AVC22LS04FE03T5A04	22mm	Locking	Stainless Steel 304	Ring	Red Lock	500mm+2.54 1x6	100	2342836-4
AVC22LS16FE1DT5A04	22mm	Locking	Stainless Steel 316	Ring + Logo	RGB	500mm+2.54 1x6	100	2342837-5
AVC22LS16FE13T5A04	22mm	Locking	Stainless Steel 316	Ring + Logo	Red Lock	500mm+2.54 1x6	100	2342837-6
AVC22LS16FE0DT5A04	22mm	Locking	Stainless Steel 316	Ring	RGB	500mm+2.54 1x6	100	2342836-5
AVC22LS16FE03T5A04	22mm	Locking	Stainless Steel 316	Ring	Red Lock	500mm+2.54 1x6	100	2342836-6
AVC22MAIOFE1DT5A04	22mm	Momentary	Aluminum	Ring + Logo	RGB	500mm+2.54 1x6	100	2342837-7
AVC22MAIOFE0DT5A04	22mm	Momentary	Aluminum	Ring	RGB	500mm+2.54 1x6	100	2342836-7
AVC22MS04FE1DT5A04	22mm	Momentary	Stainless Steel 304	Ring + Logo	RGB	500mm+2.54 1x6	100	2342837-8
AVC22MS04FE0DT5A04	22mm	Momentary	Stainless Steel 304	Ring	RGB	500mm+2.54 1x6	100	2342836-8
AVC22MS16FE1DT5A04	22mm	Momentary	Stainless Steel 316	Ring + Logo	RGB	500mm+2.54 1x6	100	2342837-9
AVC22MS16FE0DT5A04	22mm	Momentary	Stainless Steel 316	Ring	RGB	500mm+2.54 1x6	100	2342836-9