2

EDS Factory Sealed and EFS Tumbler Switches: Explosionproof, Dust-Ignitionproof

UNILETS® for Use with Threaded Metal Conduit.

Applications

- Designed to prevent arcing of enclosed switches in ignitable atmospheres during connect and disconnect operation of lighting and light power loads
- For use in classified areas where ignitable vapors, gases or highly combustible dusts are present.
- For installation in chemical and petrochemical plants, refineries, and other process industries.

Features:

All Tumbler Switches

- EDS and EFS enclosures have external mounting lugs for ease of mounting.
- Smooth, rounded integral bushing in each hub protects conductor insulation.
- Enclosures furnished with internal ground screw.
- 20-ampere and 30-ampere units available for use with 120-277 Volt A.C.

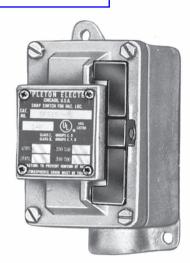
Features:

EDS Factory Sealed Tumbler Switches

- Factory sealed switches are designed to a U.L. standard so that any arcing devices are within a chamber which *contains* any explosions. EDS tumbler switch devices are approved for installation without additional external sealing fittings.
- 1/2" and 3/4" single gang units suitable for Class I, Group B, in addition to Class I, Groups C and D; Class II, Groups E, F and G; and Class III.
- Switch is enclosed in separate sealing chamber.
- Smooth double-face, accurately ground surfaces on sealing chamber flange mate with cover and body to provide positive flame-tight construction.
- Sealing chamber has prewired factory sealed pigtail leads to switch.
- Corrosion-resistant, strong stainless steel hex-head cap screws attach cover/body/sealing chamber assembly for approved flame-tight construction.
- Threaded stainless steel operating handle provides positive corrosionresistant operation.
- Choice of Front-Operating or Side Rocker Arm Handle—each may be locked in ON or OFF position.

EDS Factory Sealed Tumbler Switches





Front Operated

Rocker Arm Operated

EFS Non-Sealed Tumbler Switches



Front Operated



Rocker Arm Operated



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EDS Factory Sealed and EFS Tumbler Switches: Explosionproof, Dust-Ignitionproof

UNILETS® for Use with Threaded Metal Conduit.

Features:

EFS Non-Sealed Tumbler Switches

- Smooth ground mating surfaces assure flame-tight joint between cover and mounting enclosure.
- Stainless steel hex-head cap screws for attaching cover to mounting enclosure.
- Choice of Front-Operating or Side Rocker Arm Handle—each may be locked in ON or OFF position.
- Each handle has close-tolerance threaded stainless steel shaft to meet Explosionproof requirements.
- Enclosures furnished with internal ground screw.

Standard Materials

- EDS tumbler switches: malleable iron body and cover with aluminum sealing chamber. Handle is nylon 6/6.
- EFS tumbler switches: malleable iron body and cover.

Standard Finishes

• EDS and EFS tumbler switches: triple-coat—(1) zinc electroplate, (2) dichromate, and (3) epoxy powder coat.

Compliances:

- UL Standard 894.
- Class I, Div. 1 and 2; Class II, Div.
 1 and 2. See listing pages for specific groups. Conduit seals are required in Class I areas unless unit is factory sealed.
- Appleton malleable iron products conform to ASTM A47-77, Grade 32510, which has the following properties; tensile strength, 50,000 psi; yield, 32,000 psi; and elongation, 10%.
- Appleton aluminum products are produced from a high strength copper-free (4/10 of 1% max.) alloy.

Product Cross Reference:

• For classified-location push button, pilot light and selector switch control stations, see Catalog Section M.



EDS factory sealed tumbler switch—shows separate sealing chamber and switch construction.





EDS and EFS choice of handles—front-operated or rocker arm handle.



EDS and EFS handles may be locked in ON or OFF position.

Ordering Information for "Custom" EDS and EFS Units

Devices, covers and bodies may be ordered separately so that a *different* EDS Chamber/Switch Assembly or EFS Switch may be used in *each* gang.

Order components separately as follows: (1) select body catalog number, (2) select cover catalog number, and (3) select switch or switch assembly catalog number (1-pole, 2-pole, 3-way or 4-way available in listings).

How to Order Hub Arrangements

Simply send sketch indicating sizes and locations for brazed hubs on body or bodies selected from catalog listings. Orient sketch so that cover opening faces front and mounting lugs face upward and downward (box wall opposite cover should be referred to as the *back* of box).

See Catalog Section M, Page 23, for additional ordering information.

Bodies and Hubs Available

- EDS and EFS tumbler switches may be ordered in single thru five gang deep malleable iron blank bodies with brazed hubs as specified at any location
- EDS and EFS tumbler switches may be ordered with tandem malleable iron boxes with additional brazed hubs as specified.
- Standard EDS and EFS malleable iron single and two gang tumbler switches may be ordered with additional brazed hubs as specified.
- EDS and EFS single and two gang tumbler switches may be ordered with aluminum boxes with additional brazed hubs as specified.



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Class I, Div. 1 and 2, Groups B\(^\),C,D Class II, Div. 1 and 2, Groups E,F,G Class III NEMA 7 B CD.9EFG

EDS Factory Sealed Tumbler Switches: Front Operated; Explosionproof, Dust-Ignitionproof

Malleable Iron Body and Cover.
UNILETS® for Use with Threaded Metal Conduit.
Furnished with Internal Ground Screw.

	Hub		Catalog	Number†		
	Size, Inches	Switch	Dead-End	Feed-Thru		
	Single Gang 20-Ampere—120-27	77 Volt A.C.*				
	1/2 1/2 1/2 1/2	1-Pole 2-Pole 3-Way 4-Way	EDS150-F1 EDS150-F2 EDS150-F3W EDS150-F4W	EDSC150-F1 EDSC150-F2 EDSC150-F3W EDSC150-F4W		
	3/4 3/4 3/4 3/4	1-Pole 2-Pole 3-Way 4-Way	EDS175-F1 EDS175-F2 EDS175-F3W EDS175-F4W	EDSC175-F1 EDSC175-F2 EDSC175F3W EDSC175F4W		
Dead-End	1 1 1 1	1-Pole 2-Pole 3-Way 4-Way	EDS110-F1 EDS110-F2 EDS110-F3W EDS110-F4W	EDSC110-F1 EDSC110-F2 EDSC110-F3W EDSC110-F4W		
	30-Ampere—120-27 3/4 3/4	1-Pole 2-Pole	EDS175-F13 EDS175-F23	EDSC175-F13 EDSC175-F23		
Feed-Thru	3/4 1 1 1	3-Way 1-Pole 2-Pole 3-Way	EDS175-F3W3 EDS110-F13 EDS110-F23 EDS110-F3W3	EDSC175-F3W3 EDSC110-F13 EDSC110-F23 EDSC110-F3W3		
	Two Gang 20-Ampere—120-277 Volt A.C.*					
Dead-End	1/2 1/2 1/2 1/2	1-Pole 2-Pole 3-Way 4-Way	EDS250-F1 	EDSC250-F1 EDSC250-F2 EDSC250-F3W EDSC250-F4W		
	3/4 3/4 3/4 3/4	1-Pole 2-Pole 3-Way 4-Way	EDS275-F1 ——— EDS275-F3W ————	EDSC275-F1 EDSC275-F2 EDSC275F3W EDSC275F4W		
	1 1 1 1	1-Pole 2-Pole 3-Way 4-Way	EDS210-F1 EDS210-F2 EDS210-F3W EDS210-F4W	EDSC210-F1 EDSC210-F2 EDSC210-F3W EDSC210-F4W		

[†] For Aluminum Backbox and Cover, add Suffix - A.

Feed-Thru

Shaded area indicates items suitable for Class I, Group B, as well as Class I, Groups C and D; Class II, Groups E,F,G; and Class III.

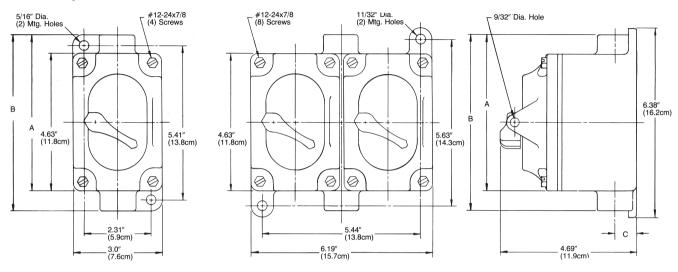


^{* 20} Amp-1 HP at 120 Volt A.C. and 2 HP at 240 Volt A.C. **30 Amp-2 HP at 120 Volt A.C. or 240 Volt A.C.

Dimensions: EDS Factory Sealed Tumbler Switches

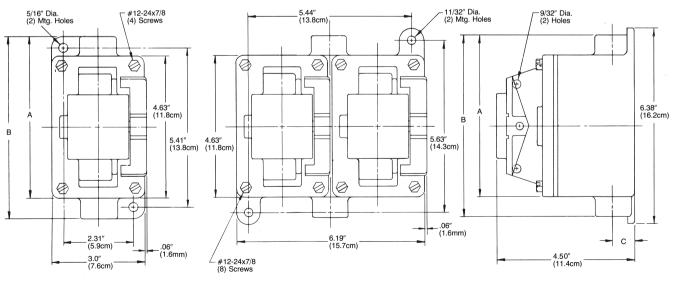
See Catalog Section M for Tandem Body Dimensions.

EDS Front Operated Tumbler Switches



Hub	Dimensions in Inches			Dimensions In Centimeters		
Inches	Α	В	С	Α	В	С
1/2 & 3/4	5.38	6.13	.78	13.7	15.6	2.0
1	5.50		.94	14.0	16.0	2.4

EDS Rocker Arm Operated Tumbler Switches



Hub	Dimensions in Inches			Dimensions In Centimeters		
Inches	Α	В	С	Α	В	С
1/2 & 3/4 1		6.13 6.31		13.7 14.0	15.6 16.0	2.0 2.4

