N **501.141 Flexible Cables, Class I, Division 2.** Flexible cables installed in Class I, Division 2 locations shall comply with 501.141(A) and (B).

N **(A) Permitted Uses.** Flexible cables shall be permitted to be installed in accordance with 501.141(A)(1) and (A)(2).

N **(1) Other Than Nonincendive Field Wiring Applications.** Flexible cables in other than nonincendive field wiring applications shall be permitted in accordance with the following:

(1) Flexible cables shall be permitted to connect two pieces of electrical equipment by means of a cable assembly installed in accordance with 501.141(B)(2)(a) or (B)(2)(b).
(2) Flexible cables shall be permitted to connect a piece of electrical equipment to the premises wiring by means of a cable assembly installed in accordance with 501.141(B)(2)(c).

N **(2) Nonincendive Field Wiring Applications.** Flexible cables in nonincendive field wiring applications shall be permitted to be used in accordance with 501.10(B)(3).

N **(B) Installation.** If flexible cables are used as permitted in 501.141(A), the associated cable assemblies shall comply with 501.141(B)(1) through (B)(3).

N **(1) Cable Types.** Listed Type P cables shall comply with 501.141(A)(1) and shall be installed as required in Part II of Article 337. The associated cable assemblies shall comply with the requirements of 501.141(B)(2).

N **(2) Termination Means.** Terminations shall comply with 501.141(B)(2)(a), (B)(2)(b), or (B)(2)(c).

(a) *Connecting Two Devices or Pieces of Electrical Utilization Equipment Together.* The cable connectors on each end of the cable shall be listed for use in Class I, Division 2 locations and listed for the type of cable being used.

(b) *Connecting Two Devices or Pieces of Electrical Utilization Equipment Together.* A cable connector listed for Class I, Division 2 and listed for the type of cable being used shall be used on one end and a fitting listed for the type of protection and the type of cable being used shall be used on the other end.

(c) *Connecting an Electrical Device or Utilization Equipment to Premises Wiring.* The cable connectors used on both ends shall be listed for Class I, Division 2 locations and for the type of cable being used. On one end of the cable, the cable connector shall also be listed for the type of protection.

N **(3) Disconnection.** Flexible cable shall be installed in accordance with 501.141(B)(3)(a) through (B)(3)(c) to protect against the disconnection of the cable connectors when energized.

(a) *Switch.* A switch complying with the requirements of 501.105(B)(2) shall be provided to disconnect power so that cable connectors are not depended on as a disconnecting means.

(b) *Cable Connectors Mechanically or Electrically Interlocked.* Switches shall not be required where the cable connectors are interlocked mechanically or electrically, or are otherwise designed to ensure the cable connectors cannot be separated when energized and cannot be energized when separated.

(c) *Warning Label.* The fixed equipment and the cable assembly shall both carry a label warning against plugging or unplugging when energized, with both labels as close to the cable connector termination as possible.

501.145 Receptacles and Attachment Plugs, Class I, Division 1 and Division 2. Receptacles and attachment plugs shall be listed for the location, except as permitted by 501.105(B)(6).

(A) Receptacles. Receptacles shall be part of the premises wiring, except as permitted by 501.140(A).

Δ **(B) Attachment Plugs.** Attachment plugs shall be of the type that provides connection to the equipment grounding conductor of a permitted flexible cord.

Exhibit 501.14 shows an explosionproof receptacle and attachment plug with an interlocking switch. The design of this device is such that when the switch is in the "on" position, the plug cannot be removed. Also, the switch cannot be placed in the "on" position when the plug has been removed. The plug is to be used with Type S or equivalent extra-hard-service flexible cord having an EGC.

Exhibit 501.15 shows a 30-ampere, 4-pole receptacle and attachment plug assembly that is suitable for use without a switch. The design is such that the mating parts of the receptacle and plug are enclosed in a chamber that seals the arc and, by delayed-action construction, prevents complete removal of the plug until the arc or hot metal has cooled.

501.150 Signaling, Alarm, Remote-Control, and Communications Systems.

(A) Class I, Division 1. In Class I, Division 1 locations, all apparatus and equipment of signaling, alarm, remote-control, and communications systems, regardless of voltage, shall be

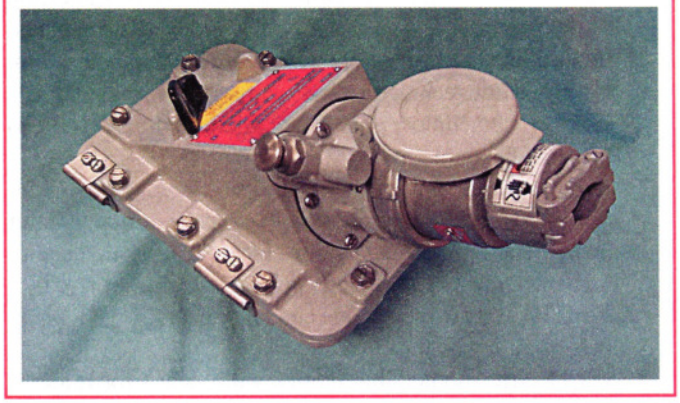

EXHIBIT 501.14 A receptacle and attachment plug of the explosionproof type with an interlocking switch. *(Courtesy of Appleton™, Emerson Electric Co.)*