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Sealant Cartridge Guns  
Data Sheet  
AD16 Series

2020/ 21



Dispensing Solutions for Sealants,  
Silicones, RTVs, Gels, Compounds, Resins

<https://www.adhesivedispensing.co.uk>

# Sealant Cartridge Manual Applicator Guns

## AD16 Series Manual Cartridge Guns

Aluminium and Steel, Threaded Retainer



## Features

- Portable
- Requires no air or power supply
- Available in a wide range of sizes
- Lightweight
- Rugged, heavy gauge metal construction
- Easy to operate
- Dispenses a wide range of sealants & adhesives
- Handles thick, viscous materials
- Ideal for aerospace grade sealants

Lightweight manual cartridge applicator guns in sizes 2.5oz (75cc), 6oz (177cc), 8oz (237cc), 10oz (310ml), 12oz (355cc) and 20oz (591cc). Metal handle to threaded steel sleeve retainer. This gun is used with all industry standard dispensing cartridges including Techkits and Semkits as well as pre-filled silicone caulk tubes.

Part Code	Description
AD16-25	2.5oz (75cc/ml) Applicator Gun
AD16-60	6oz (177cc/ml) Applicator Gun
AD16-80	8oz (237cc/ml) Applicator Gun
AD16-110	10oz (310cc/ml) Applicator Gun
AD16-120	12oz (355cc/ml) Applicator Gun
AD16-20	20oz (591cc/ml) Applicator Gun



The AD16 gun is a hand operated, high quality metal dispensing gun designed to accept cartridges for the manual application of sealants, adhesives, potting compounds, and other materials packaged in disposable cartridges or Techkit, Semkit multi-component materials. They are excellent for the in-field application of most silicones, sealants, adhesives, pastes, and other materials. The ratchet handle is made of metal for tough, durable, long-term use.

A threaded retainer sleeve provides a tight fit into the ratchet handle, permitting uninterrupted operation. Custom size retainers accommodate 2.5, 6, 8, 10 and 12 ounce size disposable cartridges. Cartridges allow use of standard nozzles. Needle tip adapters can also be used with the cartridges for attachment of all standard needle tips.

Filled cartridges are inserted into the cartridge gun threaded metal retainer. This ensures the cartridge does not move under constant use from hand pressure. Available in 6 sizes, 2.5oz, 6oz, 8oz, 10oz, 12oz and 20oz. All of our products are industrial grade and are covered by our no-quibble One Year warranty.

The guns are robust and handle most liquids and pastes dispensed from them. Order just the gun only or with kits that included (10) each of the compatible size dispensing cartridges, plungers, caps and nozzles.

General Use: Guns are portable and can be used in a factory production or in an assembly department as well as for repair and re-work. Guns are commonly used in the field for repair or maintenance applications..

Common Applications: Dots and beads of solder paste, Aerospace sealant application, dots and beads of solder flux, grease to bearings, PVA glue to furniture joints, RTV to seal seams, silicone dots to bond products, Gasket sealant repair, shots of roach insecticides, general adhesive applications. AD16 guns have a Commodity Tariff Code 82055980.

# Sealant Cartridge Components

## Cartridges

Supplied in sealed packs with labels and batch codes



Disposable plastic cartridges are available in 2.5, 6, 8, 10, 12, 20 and 32 oz. (approximate metric value 75, 177, 237, 310 355, 591, 960cc). Available in high-density natural polyethylene (HDPE) which is more rigid plastic and low density polyethylene (LDPE) which is a softer grade plastic.

All sizes are fitted with a 1/4" NPT (6mm) female thread dispensing orifice for leak free nozzle or fitting attachment. Standard natural or other colours - black for UV cure.

## Cartridge Plungers

Supplied in sealed packs with labels and batch codes



Cartridge plungers ensure that the pressure is evenly spread across the fluid surface to provide consistent dispensing. Wiping edges prevent dripping and eliminate material waste by wiping the cartridge walls clean, as fluid is dispensed. The plunger is inserted into the cartridge once filled (or pre-inserted when bottom filling) and it moves down the inner walls under pressure to ensure all liquid material is dispensed without waste.

Plungers can be used at pressures up to 100psi, for example when used with a pneumatic cartridge gun system. Dispensing without a plunger inserted can result in unreliable dispensing deposits, as the supplied air pressure can become trapped inside the fluid, resulting in void pockets. In addition, moisture found in the air, can affect the properties of the fluid.

All plungers are industry compliant silicone and chloride free, low friction polyethylene. Supplied in sealed and labelled packs.

Part Code	Description
TS25C	2.5oz (75cc/ml) HDPE Natural
TS25C-LD	2.5oz (75cc/ml) LDPE Natural
TS25C-GREEN	2.5oz (75cc/ml) HDPE Green
TS60C	6oz (177cc/ml) HDPE Natural
TS60C-LD	6oz (177cc/ml) LDPE Natural
TS60C-BLACK	6oz (177cc/ml) HDPE Black
TS60C-GREEN	6oz (177cc/ml) HDPE Green
TS80C	8oz (237cc/ml) HDPE Natural
TS80C-LD	8oz (237cc/ml) LDPE Natural
TS110C	10oz (310cc/ml) HDPE Natural
TS110C-LD	10oz (310cc/ml) LDPE Natural
TS110C-BLACK	10oz (310cc/ml) HDPE Black
TS120C	12oz (355cc/ml) HDPE Natural
TS120C-LD	12oz (355cc/ml) LDPE Natural
TS120C-BLACK	12oz (355cc/ml) HDPE Black
TS120C-GREEN	12oz (355cc/ml) HDPE Green
TS20C	20oz (591cc/ml) HDPE Natural
TS20C-BLACK	20oz (591cc/ml) HDPE Black
TS32C	32oz (960cc/ml) HDPE Natural

*“Cartridges can be used with manual, pneumatic & battery powered applicators”.*



Part Code	Description
TS1WP	Natural LDPE Plunger For 2.5, 6, 8 and 12oz Cartridges
TS1PB	Black LDPE Plunger For 2.5, 6, 8 and 12oz Cartridges
TS1P	Blue LDPE Plunger For 2.5, 6, 8 and 12oz Cartridges
TS1WP-RIB	Natural MDPE Plunger For 2.5, 6, 8 and 12oz Cartridges
TS2P	White MDPE Plunger For 10oz (310ml) Cartridges
TS2PW-1000	Natural MDPE Plunger For 10oz (310ml) Cartridges
TS2P-BLACK	Black MDPE Plunger For 10oz (310ml) Cartridges
TS20P	White MDPE Plunger For 20 and 32oz Cartridges
TS20P-LD	Natural LDPE Plunger For 20 and 32oz Cartridges
229221	Natural LDPE Plunger For 20 and 32oz Cartridges

\* Plungers are available in sealed packs of 10, 500 or 1000 pieces. Optional cartridge/ plunger kits are available that include the same number of parts in the same pack. Also, some cartridges are available with plungers supplied pre-inserted and ready for filling.

*“A good combination is to use HDPE cartridges with LDPE plungers or vice versa”.*



# Sealant Cartridge Components

## Cartridges/ Plunger Kits

Supplied in sealed packs with labels and batch codes



Cartridges and plungers supplied in the same kit. Supplied as separate cartridges and plungers or certain options for the plungers to be supplied pre-inserted in the cartridge ready for filling.

Part Code	Description
TS25CKIT	2.5oz HDPE Natural Cartridge with TS1PB Black Plunger
TS25CP	2.5oz HDPE Natural Cartridge with TS1P Blue Plunger
TS25CP-LD	2.5oz LDPE Natural Cartridge with TS1P Blue Plunger
TS25CP-LDX	2.5oz LDPE Natural Cartridge with TS1PB Black Plunger
TS25CPB-LD	2.5oz LDPE Natural Cartridge with TS1PB Black Plunger Pre-inserted
TS25CWP	2.5oz HDPE Natural Cartridge with TS1WP Natural Plunger
TS60CKIT	6oz HDPE Natural Cartridge with TS1PB Black Plunger
TS60C-RIB	6oz HDPE Natural Cartridge with TS1WP-RIB Clear Plunger
TS60CP	6oz HDPE Natural Cartridge with TS1P Blue Plunger
TS60CP-LD	6oz LDPE Natural Cartridge with TS1P Blue Plunger
TS80CKIT	8oz HDPE Natural Cartridge with TS1PB Black Plunger
TS110CKIT	10oz HDPE Natural Cartridge with TS2PB Black Plunger
TS110CP	10oz HDPE Natural Cartridge with TS2P White Plunger Pre-Inserted
TS120CKIT	12oz HDPE Natural Cartridge with TS1PB Black Plunger
TS120CP	12oz HDPE Natural Cartridge with TS1PB Black Plunger

## Cartridge Tip Caps & End Flange Caps

Supplied in sealed packs with labels and batch codes



**Tip Caps**  
 Part ID: TS3P  
 Colour: Red  
 Part ID: AD6P  
 Colour: Red  
 Part ID: AD6PB  
 Colour: Blue

**End Flange Caps**  
 Part ID: TS2C  
 2.5oz, 6oz, 8oz, 12oz  
 Part ID: TS4C  
 10oz Only  
 Part ID: TS6C  
 20oz, 32oz

*“Tip caps and end caps are fully reusable”.*



Cartridges feature a 1/4" NPT (6mm) female thread dispensing orifice and can be sealed using red or blue tip cap. These allow a leak free seal for cartridge filling and shipping. Red end flange caps push over the top lip of the cartridge to seal. All parts are made from polyethylene. Supplied in sealed and labelled packs.

## Luer Lock Tip Adapter Fittings

Supplied in sealed packs (1) part.



**Part ID: TSD931-7PK**  
 Material: Polypro  
 Thread: 1/4" NPT Male  
 Hole Outlet: 4mm  
 Colour: White  
 Outlet: Male Luer Lock  
 Max. Pressure: 100 PSI

**Part ID: TSD931-7M**  
 Material: Nickel Brass  
 Thread: 1/4" NPT Male  
 Hole Outlet: 4mm  
 Colour: Silver  
 Outlet: Male Luer Lock  
 Max Pressure: 100 PSI












Tip adapters convert the outlet of all cartridges allowing the use of all luer lock precision tips and fittings. Thread size of 1/4" NPT. Available in polypropylene or metal.

# Sealant Cartridge Components

## Cartridge Nozzles








Supplied in sealed packs with labels and batch codes

### Dispense Nozzles

<b>2.5"/63.5mm length Orifice</b>	
	<b>TS216</b> 0.063"/1.6mm
	<b>TS218</b> 0.125"/3.18mm
	<b>TS218-LD</b> 0.125"/3.18mm
<b>4"/101.6mm length</b>	
	<b>TS416</b> 0.063"/1.6mm
	<b>TS416-LD</b> 0.063"/1.6mm
	<b>TS418</b> 0.125"/3.18mm
	<b>TS432</b> 0.031"/0.79mm
	<b>TS432-LD</b> 0.031"/0.79mm
	<b>TS490</b> 0.094"/2.39mm
<b>6" length/152.4mm</b>	
	<b>TS616</b> 0.063"/1.6mm
	<b>TS618</b> 0.125"/3.18mm



### Specialty

	<b>TS1050</b>	<b>A</b> 0.06"/1.52mm <b>B</b> 0.5"/12.7mm
	<b>TS1050-45</b>	<b>A</b> 0.06"/1.52mm <b>B</b> 0.5"/12.7mm
	<b>TS1075</b>	<b>A</b> 0.13"/3.30mm <b>B</b> 0.75"/19.05mm
	<b>TS1100</b>	<b>A</b> 0.13"/3.30mm <b>B</b> 1"/25.4mm
	<b>TS1175</b>	<b>A</b> 0.13"/3.30mm <b>B</b> 1.75"/44.45mm
	<b>TS3106</b>	<b>A</b> 0.11"/2.79mm <b>B</b> 0.35"/8.89mm <b>C</b> 0.06"/1.52mm
	<b>TS3206</b>	<b>A</b> 0.11"/2.79mm <b>B</b> 0.35"/8.89mm <b>C</b> 0.06"/1.52mm

Industrial grade nozzles for use with dispensing cartridges. All feature a 1/4" NPT industry thread for secure attachment to cartridges. Made from silicone-free safe plastics. Use nozzles for applying most glues, adhesives, pastes, gels, greases, silicones, sealants, epoxies and other assembly fluids. Supplied in sealed packs of 10, 500 or 1000 pieces.

### Metal Nozzles

Supplied in sealed packs with labels and batch codes



Part Code	Description
AD7SS-1.5	7G, ID: 3.81mm, OD: 4.45mm
AD8SS-1.5	8G, ID: 3.28mm, OD: 4.04mm
AD10SS-1.5	10G, ID: 2.69mm, OD: 3.40mm
AD12SS-1.5	12G, ID: 2.18mm, OD: 2.77mm
AD14SS-1.5	14G, ID: 1.64mm, OD: 2.10mm
AD16SS-1.5	16G, ID: 1.20mm, OD: 1.65mm

Precision machined metal nozzles with a 1/4" thread for use with all cartridges. Choice of blunt need gauge size. All are 1.5" long tubes. Supplied (each). Nickel brass hub to stainless steel cannula.

*"We build these metal nozzles to order. 1.5" long tubes are held in stock but any custom length tube can be made".*



# Sealant Cartridge Components

## Precision General Purpose Dispensing Tips

Supplied in sealed boxes of (50) tips



The TE needle series consist of a stainless-steel shaft with a double helix polypropylene hub. This premier line of dispensing needles is burr-free, and electro-polished shaft for unobstructed and consistent material flow. In addition they are silicone and chloride free.

Details listed here are for our standard 0.5" Long (12.7mm). Also available in tube lengths of 0.25", 1.0", 1.5" and 2.0".

### Part Code Description

AD712050	12GA, Blue, 2.26mm ID, 2.77mm OD
AD713050	13GA, Red, 1.78mm ID, 2.54mm OD
AD714050	14GA, Olive, 1.55mm ID, 1.83mm OD
AD715050	15GA, Amber, 1.37mm ID, 1.65mm OD
AD716050	16GA, Grey, 1.19mm ID, 1.45mm OD
AD717050	17GA, Yellow, 1.04mm ID, 1.40mm OD
AD718050	18GA, Green, 0.84mm ID, 1.27mm OD
AD720050	20GA, Pink, 0.61mm ID, 0.91mm OD
AD721050	21GA, Purple, 0.51mm ID, 0.81mm OD
AD722050	22GA, Blue, 0.41mm ID, 0.71mm OD
AD723050	23GA, Orange, 0.33mm ID, 0.64mm OD
AD725050	25GA, Red, 0.25mm ID, 0.51mm OD
AD726050	26GA, Peach, 0.24mm ID, 0.45mm OD
AD727050	27GA, Clear, 0.20mm ID, 0.41mm OD
AD730050	30GA, Lavender, 0.15mm ID, 0.30mm OD
AD732050	32GA, Yellow, 0.10mm ID, 0.23mm OD
AD734025	34GA, Lime, 0.08mm ID, 0.21mm OD

## Smooth Flow Tapered Dispensing Tips

Supplied in sealed boxes of (50) tips



Tapered tips are typically used with gels because the smooth flow design allows materials to travel with less restriction. All tips are burr-free and provide high levels of consistency from tip to tip.



*"The design of taper tips reduces back pressure when dispensing very thick pastes".*

### Part Code Description

AD14TT	14GA, Olive, 1.55mm ID, Stiff Plastic
AD16TT	16GA, Grey, 1.19mm ID, Stiff Plastic
AD18TT	18GA, Green, 0.84mm ID, Stiff Plastic
AD20TT	20GA, Pink, 0.61mm ID, Stiff Plastic
AD22TT	22GA, Blue, 0.41mm ID, Stiff Plastic
AD25TT	25GA, Red, 0.25mm ID, Stiff Plastic
AD27TT	27GA, Clear, 0.20mm ID, Stiff Plastic
TN27E	27GA, Orange, 0.20mm ID, Stiff Plastic
AD30TT	30GA, Lavender, 0.10mm ID, Stiff Plastic
AD34TT	34GA, Lime, 0.08mm ID, Stiff Plastic

## Aluminium Hub Dispensing Tips

Supplied in sealed boxes of (50) tips



Aluminium hub tips improve the application of aggressive fluids and solvents. The soldered aluminium hub and stainless steel shaft will withstand the chemicals.



*"Another useful tip for aggressive solvents are our TSS all-metal types - on our website".*

### Part Code Description

TS14-1/2MPK	14GA, 1.55mm ID, 1.82mm OD, 0.5" Long
TS14-1MPK	14GA, 1.55mm ID, 1.82mm OD, 1.0" Long
TS14-2MPK	14GA, 1.55mm ID, 1.82mm OD, 2.0" Long
TS15-1/2MPK	15GA, 1.37mm ID, 1.69mm OD, 0.5" Long
TS15-1MPK	15GA, 1.37mm ID, 1.69mm OD, 1.0" Long
TS15-15MPK	15GA, 1.37mm ID, 1.69mm OD, 1.5" Long
TS16-1MPK	16GA, 1.19mm ID, 1.45mm OD, 1.0" Long
TS18-1/2MPK	18GA, 0.84mm ID, 1.27mm OD, 0.5" Long
TS20-1/2MPK	20GA, 0.71mm ID, 1.14mm OD, 0.5" Long
TS22-1/2MPK	22GA, 0.41mm ID, 0.71mm OD, 0.5" Long

Industrial Grade Safe    Silicone Free Components    Available from stock

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