

SPRAY CHARACTERISTICS

- The SDX series nozzles produce a hollow cone spray pattern with uniform particle size distribution even at low operating pressures.
- Flow rates are certified to be within $\pm 5\%$ of rated capacity at 69 Bar.G. and within $\pm 5^\circ$ of rated spray angle when tested with water.
- Unique, patented single inlet, spiral swirl chamber offers increased nozzle life, improved product uniformity, density or solubility.
- Minimal friction due to nozzle design permitting 10-20% lower operating pressure than conventional slotted distributor nozzle for equivalent atomisation quality.
- Extended pump life due to lower operating pressure.
- Reduction in fine particles is possible due to lower pressure requirements.

CONSTRUCTION AND MATERIALS

- Eight part construction (see part and material list below).
- Nozzle bodies, screw pins and adaptors are available in 316 Stainless Steel. Other materials available on special request.
- Orifice discs are easily removable and are available in Tungsten Carbide, Chrome Carbide and Ceramic as standard.
- Swirl chambers are standard in Tungsten Carbide, Hardened Stainless Steel or Ceramic.
- End plates are available in Tungsten Carbide, Chrome Carbide and Ceramic.
- Combined swirl chamber/end plate is available in Tungsten Carbide only.
- Seals are available in Nylon, PTFE, Copper, Hard Fibre and Aluminium.

ORDER EXAMPLE

Please indicate all component parts and materials when ordering.

Max. Design Pressure: 500 Bar.G.
Max. Design Temperature: 540°C (Metal Seals),
150°C (Other Seals).

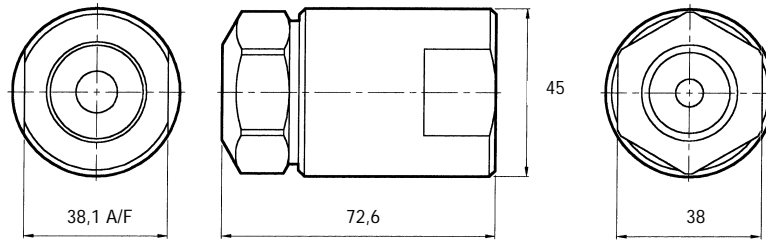


NOZZLE ASSEMBLY

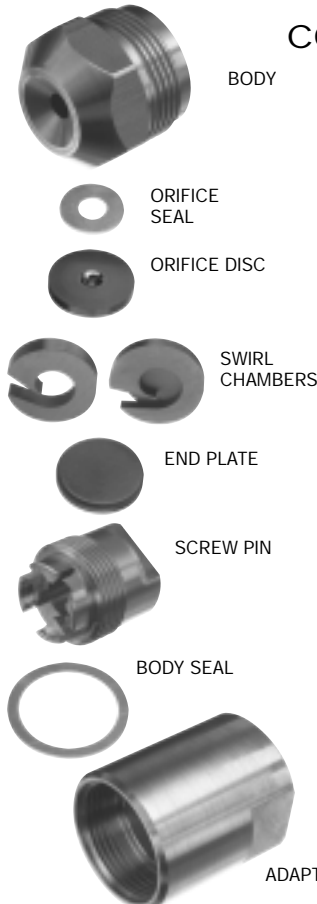
ADAPTOR

WEIGHTS

Assembly Size	Weight (g)
1/4"	680
3/8"	666
1/2"	640
3/4"	612



COMPONENT PARTS, MATERIALS AND WEIGHTS



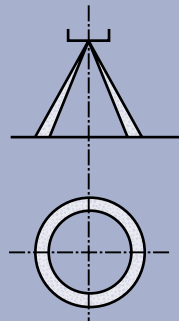
Description	Part No.	Material	Weight (g)
Body	29776	316 SS	153,0
Orifice Seal	29772-1	Nylon	-
	29772-3	Aluminium	-
	29772-6	PTFE	-
	29772-7	Hard Fibre	-
	29772-4	Copper	-
Orifice Disc	703-XXX*	Tungsten Carbide	11,4
	704-XXX	Chrome Carbide	11,4
	608-XXX	Ceramic	-
Swirl Chamber	29794-XX*	Hardened SS	8,5
Swirl Chamber	31212-XX	Tungsten Carbide	17,0
Swirl Chamber	30655-XX	Ceramic	-
Swirl Chamber with End Plate combined	W01380-XX	Tungsten Carbide	28,4
End Plate	W05366	Tungsten Carbide	11,4
	29953	Chrome Carbide	11,4
	34430	Ceramic	-
Screw Pin	29777	316 Stainless Steel	91,0
Body Seal	29773-1	Nylon	-
	29773-3	Aluminium	-
	29773-6	PTFE	-
	29773-7	Hard Fibre	-
	29773-4	Copper	-
1/4" BSPT Female Adaptor	29775-9	316 Stainless Steel	370,0
3/8" BSPT Female Adaptor	29775-11		
1/2" BSPT Female Adaptor	29775-13		
3/4" BSPT Female Adaptor	29775-15		

* Specify orifice size and swirl chamber suffix from capacity chart.

SPRAY DRYING

TYPE SDX

Contact our Helpline for any special requirements:
Tel: +44 (0) 151 424 6821
Fax: +44 (0) 151 495 1043
e-mail: sales@delavan.co.uk
Web: www.delavan.co.uk



The following are various special bodies, adaptors and tools that are available for the SDX nozzle range.

CONE FACED BODIES

These are designed to prevent build up of sprayed product on the nozzle face and are available with cone angles of 70°, 80° and 90°. Special angles are available on request.

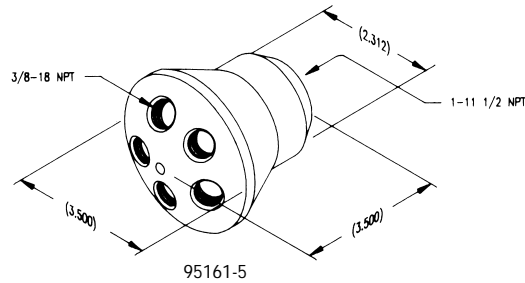
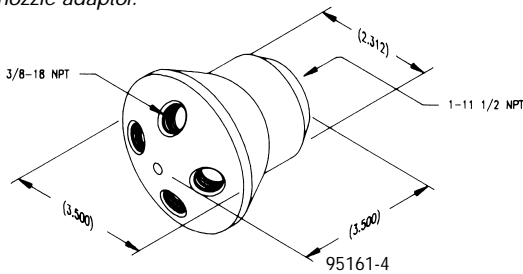
CONE FACED BODY PART NUMBERS

Nozzle Type	70°	80°	90°
SDX	20319-1	20319-2	20319-3
SDXIII	W11882-1	W11882-2	W11882-3



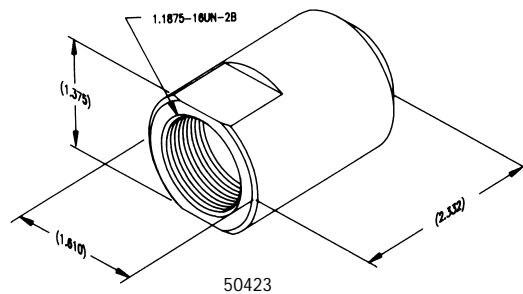
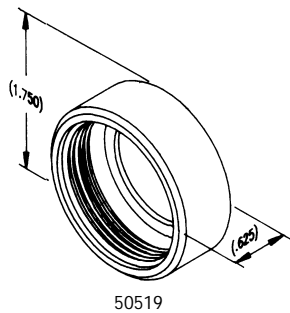
MULTIPLE NOZZLE ADAPTORS

Where spray dryers permit, special adaptors are available to provide multiple nozzle installations. These have a 1" NPTF inlet with 3/8" NPTF outlets so that nipples can be fitted on to which the nozzles will be mounted. The part numbers are 95161-4 for the four nozzle adaptor and 95161-5 for the five nozzle adaptor.



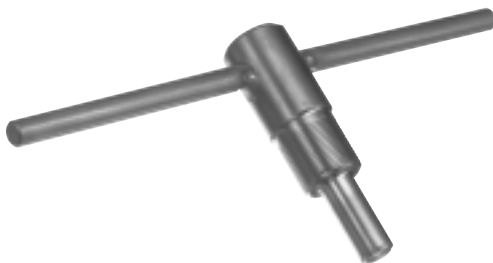
THREAD GUARDS

These are designed to protect the threads and sealing surfaces during cleaning of the SDX bodies and SDX III adaptors. The part numbers are 50519 for the SDX and 50423 for the SDX III.



ASSEMBLY TOOLS

Part number 36386 for changing Mini-SDX orifice discs.



36386

Part number W15307 for insertion and removal of SDX and SDX III swirl chambers.



W15307

There is an additional tool number W15336 which is designed for removal of orifice discs which have become embedded with product.

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