

# Air Nozzles and Jets

## Drastically Reduce Compressed Air Consumption

ITW Vortec's blowoff nozzles and jets are designed to reduce compressed air consumption and noise drastically, compared to open jets.

To accomplish these impressive air savings, we incorporate the proven Transvector® amplification principle in our nozzle and jet designs. When compressed air enters the nozzle or jet, it fills a chamber with only one exit path – a 0.002" (0.051mm) annular orifice. As air passes through this orifice, it accelerates to 1000 feet (304.8m) per second, entraining free surrounding air as it exits. The result is airflow volume up to 25 times more than compressed air supplied.

**Reduce your operating costs significantly with our nozzles and jets.**

	VORTEC MODEL 1201 NOZZLE	1/4" X 1' LENGTH COPPER TUBE
Air Consumption	9 SCFM	42 SCFM
Annual operating cost/8 hour shift	\$324	\$1512
<b>Annual cost savings</b>	<b>\$1188</b>	










Data based on 100 PSIG operating pressure and \$0.30/1000 SCF compressed air cost.



**ITW Vortec**  
Innovative Compressed Air Technologies

- Lowers operating costs and saves energy
- Helps meet OSHA noise specifications
- Meets OSHA dead-end pressure specifications
- Wide range of styles and thrust performance
- Patented design amplifies air
- Big savings when replacing open copper tube jets

**Nozzles are an excellent replacement for open copper tubes, flex-line and other nozzles not designed to save air. A full range of styles, with designs compatible to most installations, is available.**

MODEL NO.	DESCRIPTION	THRUST (POWER) OZ. AT 12"	AIR CONSUMPTION SCFM (SLPM)	FEATURES
1200 Nozzle 1200 N Nozzle 1200 SS Nozzle 	Adjustable output flow and thrust. 1/8" NPT(M) fitting	3 to 21	8 (226) to 26 (736)	Threaded connection – ideal for installing on blowguns and manifolds. Adjustable micrometer dial sets airflow and thrust. Available in aluminum (1200), nylon tip (1200 N) or stainless steel (1200 SS).
1201 Nozzle 	1/4" OD, copper tubing	6	9 (255)	Compact size. Permanently mounted on copper tubing – can be bent, flared, used with compression fittings or soldered.
1201F-12 	3/8" OD, flexible rubber shaft 1/8" NPT(M) fitting.	6	9 (255)	Compact size. Permanently mounted on flexible hose. Holds position under full line pressure. Perfect for areas with limited space.
1202 Nozzle 	1/4" OD, copper tubing, high thrust	20	23 (651)	Compact size. Permanently mounted on copper tubing – can be bent, flared, used with compression fittings or soldered.
1203 Nozzle 	3/8" OD, copper tubing.	9	13 (368)	Permanently mounted on copper tubing – can be bent, flared, used with compression fittings or soldered.
1204 Nozzle 	1/2" OD, flexible rubber shaft. 1/8" NPT(M) fitting.	9	13 (368)	Permanently mounted on flexible hose. Holds position under full line pressure. Excellent replacement for flex-line used for blowoff.
1205 Nozzle 	3/8" OD, copper tubing, high thrust.	28	31 (877)	Permanently mounted on copper tubing – can be bent, flared, used with compression fittings or soldered.
1206 Nozzle 	11/16" OD, high thrust, flexible rubber shaft. 1/4" NPT(M)	28	31 (877)	Permanently mounted on flexible hose. Holds position under full line pressure. Excellent replacement for flex-line used for blowoff.
1220 Nozzle 	3/4" NPT(M), maximum thrust	72	120 (3396)	Threaded connection – ideal for maximum thrust applications such as large surface blowoff. Perfect for paving, roofing and construction uses.

Specifications are at 100 PSIG (6.9 Bar) except 1220 Nozzle is at 40 PSIG (2.7 Bar).

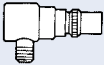



**Airstream Size:**

MODEL(S)	AT NOZZLE	12" FROM NOZZLE
1200, 1200N, 1200 SS	5/8" (16mm)	3 1/2" (89mm)
1201, 1202, 1201F-12	3/16" (5mm)	3 1/4" (82mm)
1203, 1204, 1205, 1206	1/4" (6mm)	3 1/4" (82mm)



**Jets are round-throated air amplifiers; one end provides a strong airflow while the other creates suction as free air is entrained. Since jets output a more concentrated, targeted volume of air than nozzles, they are ideal for water, solvents or light oil stripping applications**

**Amplification 4:1**

MODEL NO.	DESCRIPTION	THRUST (POWER) OZ. AT 12"	AIR CONSUMPTION SCFM (SPLM)
909 Jet 	Adjustable output flow and thrust 1/8" NPT(M) fitting.	2 to 17	5 (142) to 21 (594)
901 Jet 	1/8" NPT(M) fitting.	6	8 (226)
901B Jet 	1/8" NPT(M) fitting. 3/4" diameter suction and discharge, for conveying	6	8 (226)
901D Jet 	1/8" NPT(M) fitting.	14	17 (481)

***ITW Vortec  
nozzles and jets  
deliver precise  
airflows and are  
ideal for  
cleaning, drying,  
cooling, parts  
movement or  
ejection.***

Specifications are at 100 PSIG (6.9 Bar). All jets are brass and can be shimmed (except Model 909) to vary the thrust and air consumption.

**Annual Blowoff Cost Calculation Guide**

Use these formulas to determine and compare the annual operating cost of your current blowoffs versus ITW Vortec alternatives.

**Quick method:**

Assuming:

- 100 PSIG operating pressure.
- \$0.30 per 1000 SCF compressed air cost.
- 250 work days/year.

Calculate operating cost/shift by multiplying air consumption (SCFM) by 36.

Example:

9 SCFM (air consumption) x 36 = \$324 (annual operating cost/shift).

**For other operating conditions, follow these calculations:**

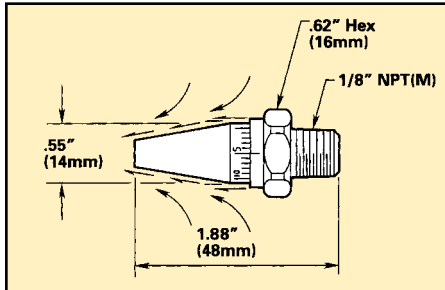
- \_\_\_ SCFM x 60 minutes = \_\_\_ SCFH
- \_\_\_ SCFH x \_\_\_ Hours of operation/day = \_\_\_ SCF/day.
- \_\_\_ SCF/day x \_\_\_ Days of operation/year = \_\_\_ SCF/year.
- \_\_\_ SCF/year x \$ \_\_\_ /1000 SCF = \$ \_\_\_ Annual operating cost.

**Airstream Size:**

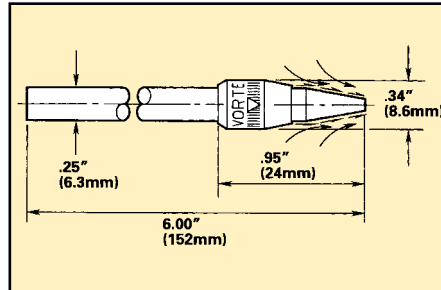
MODEL	AT JET	12" FROM JET
909	3/8" (10mm)	3" (76mm)
901	5/8" (16mm)	3 1/2" (89mm)
901B	5/8" (16mm)	3 1/4" (89mm)
901D	3/8" (10mm)	3" (76mm)



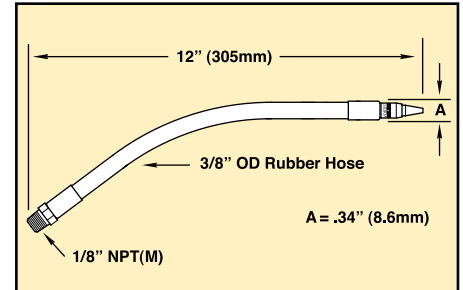
***For assistance in selecting the appropriate model for your requirements, call our Technical Service Department at 800-441-7475.***



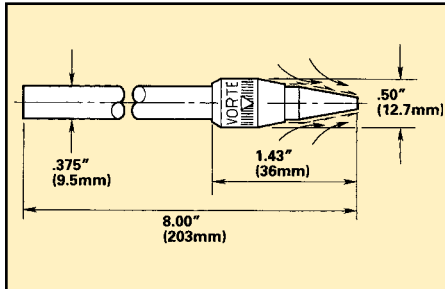
Model 1200, Model 1200N and 1200SS Nozzles



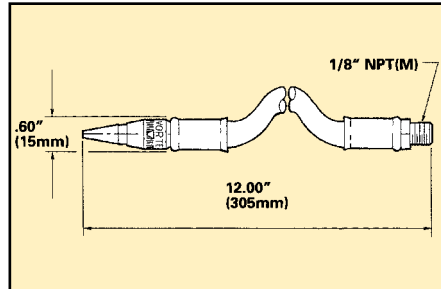
Model 1201 and Model 1202 Nozzles



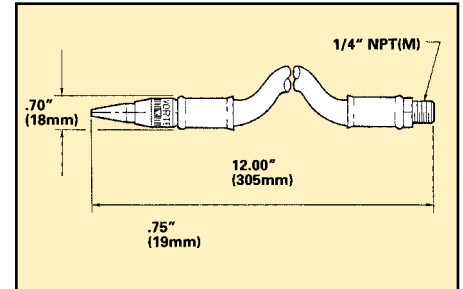
Model 1201F-12 Nozzle



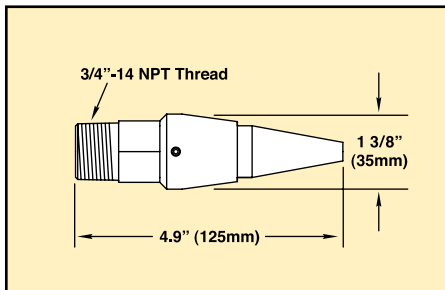
Model 1203 and Model 1205 Nozzles



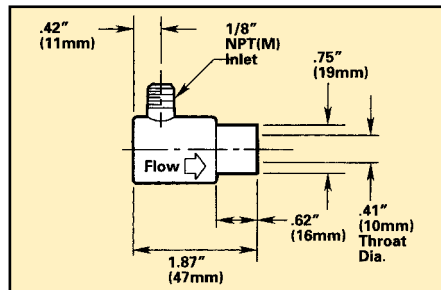
Model 1204 Nozzle



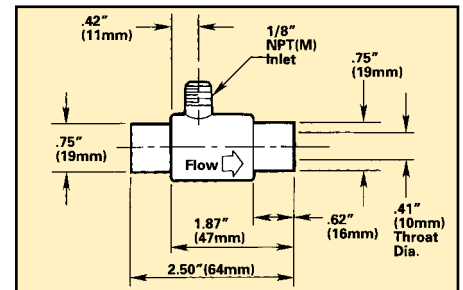
Model 1206 Nozzle



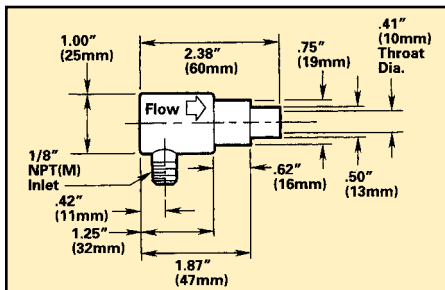
Model 1220 Nozzle



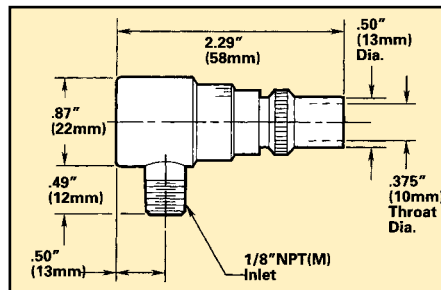
Model 901 Transvector Jet



Model 901B Transvector Jet



Model 901D Transvector Jet



Model 909 Transvector Set Jet



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Reference the Product Guide catalog and/or ITW Vortec invoice  
Conditions of Sale for complete information and warranty terms.

Due to a policy of continuous development we reserve the  
right to change specifications without notice.



Model 9401 Blow Gun

The design of our blow gun makes it comfortable to hold and includes a convenient hang-up hook. Model 9401 has a 1/4 inch NPT (F) inlet thread and a 1/8 inch NPT (F) outlet thread. Includes a Model 1200 Adjustable Nozzle.