

## Sapphire nozzle 297



### Properties and advantages

- Long lifetime
- Constant jet quality
- Accurate cutting accuracy
- Narrow cutting width
- High cutting performance
- Swiss Quality

### Applications

- Pure water:** paper, cardboard, corrugated cardboard, wood, plastics, food, bakery product, frozen foods, meat, fish, composite materials, vehicle parts such as carpets, door panels, shock absorbers, dashboards, instrument panels, rear window shelves, etc.
- Abrasive:** metal, titanium, Aluminium, stone, marble, granite, ceramic, reinforced concrete, cement, mineral wool, shatterproof-, safety- and bulletproof glass, wood, plastics, composite materials, vehicle and aircraft parts, etc.

### Description

The sapphire nozzle type 297 can be used as a pure water cutting nozzle or as an abrasive cutting nozzle. The nozzle has a sealing angle of 59°.

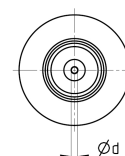
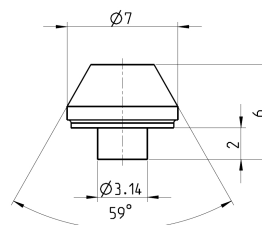
*This product is compatible with the following brands or products:*

- Autoline-2
- R = Pure water jet cutting nozzles, aiming accuracy 100% tested  
 RX = Pure water jet cutting nozzles, aiming accuracy not tested  
 A = Abrasive cutting nozzles, aiming accuracy 100% tested  
 AX = Abrasive cutting nozzles, aiming accuracy not tested

ART. NO. (1)	ARTICLE	DESCRIPTION
31028._ _	Pure water	R / RX
31029._ _	Abrasive	A / AX

### Test of the aiming accuracy

- The distance from the nozzle to the target mark is 100 mm.
- The test pressure is 50 bar.
- Testing of the aiming accuracy is only carried out if requested by the customer.



CHARACTERISTICS	TYPE
	297
Operating pressure (bar)	max. 4000
Operating temp. (°C)	max. 150°

## Performance

ART. NO.	NOZZLE ØD MM	PRESSURE IN PSI / BAR			
		psi 36250	psi 43500	psi 50750	psi 58000
		bar 2500	bar 3000	bar 3500	bar 4000
		FLOW RATE IN L/MIN			
___0080	0.08	0.129	0.140	0.151	0.160
___0100	0.10	0.201	0.219	0.235	0.250
___0125	0.125	0.315	0.343	0.368	0.391
___0150	0.15	0.453	0.493	0.529	0.563
___0175	0.175	0.617	0.671	0.721	0.766
___0200	0.20	0.806	0.877	0.941	1.000
___0250	0.25	1.259	1.370	1.471	1.563
___0275	0.275	1.524	1.658	1.779	1.891
___0300	0.30	1.813	1.973	2.118	2.250
___0350	0.35	2.468	2.685	2.882	3.063
___0400	0.40	3.223	3.508	3.765	4.001
___0450	0.45	4.080	4.439	4.765	5.064
___0500	0.50	5.037	5.481	5.882	6.251
___0550	0.55	6.094	6.632	7.118	7.564
___0600	0.60	7.253	7.892	8.471	9.002
___0650	0.65	8.512	9.262	9.941	10.565
___0700	0.70	9.872	10.742	11.530	12.253
___0750	0.75	11.333	12.331	13.236	14.066
___0800	0.80	12.894	14.030	15.059	16.004
___0850	0.85	14.556	15.839	17.000	18.067
___0900	0.90	16.319	17.757	19.059	20.254
___0950	0.95	18.182	19.785	21.236	22.568
___1000	1.00	20.147	21.922	23.530	25.006

## Order example

ART. NO. (1)	ART. NO. (2)	DESCRIPTION	
31028. __	___0080	R	31028.0080_R