

Sapphire nozzle 258

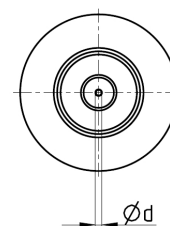
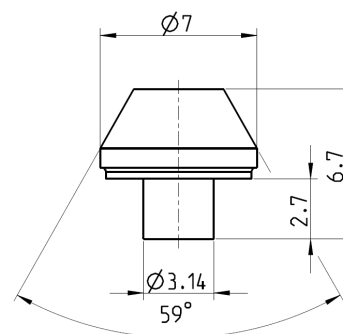
The sapphire nozzle type 258 can be used as a pure water or abrasive cutting nozzle. The nozzle has a sealing angle of 59°.



- Type 27
- LS-2

Features and advantages

- Long service life
- Constant jet quality
- Precise cutting accuracy
- Small cutting width
- High cutting performance
- Swiss Quality



Applications

Clean water: Paper, cardboard, corrugated cardboard, wood, plastics, food, baked goods, frozen food, meat, fish, composite materials, vehicle parts such as carpets, door panels, bumpers, dashboards, instrument panels, parcel shelves, etc.

Abrasive: Metal, titanium, aluminum, stone, marble, granite, ceramics, reinforced concrete, plaster, rock wool, laminated, safety and bulletproof glass, wood, plastics, composite materials, vehicle and aircraft parts, etc.

R = Pure water cutting nozzles, accuracy 100% tested
RX = Pure water cutting nozzles, accuracy not tested

A = Abrasive cutting nozzles, accuracy 100% tested
AX = Abrasive cutting nozzles, accuracy not tested

EXECUTION	ARTICLE	DESCRIPTION
Pure water	31076._ _	R / RX
Abrasive	31077._ _	A / AX

Examination

- The distance between the nozzle and the target mark is 100 mm.
- The test pressure is 50 bar.
- The 100% test is carried out at the customer's request.

Specifications



**Operating pressure (bar)
max.**

4000



**Operating temperature (°C)
max.**

150

ART. NR.	DÜSEN Ød mm	Bezeichnung	DRUCK in psi / bar			
			psi36250	psi43500	psi50750	psi58000
			bar2500	bar3000	bar3500	bar4000
			DURCHFLUSSMENGE in l/min			
31056.0080_R	0.08	R	0.129	0.140	0.151	0.160
31056.0080_RX	0.08	RX	0.129	0.140	0.151	0.160
31056.0100_R	0.10	R	0.201	0.219	0.235	0.250
31056.0100_RX	0.10	RX	0.201	0.219	0.235	0.250
31056.0125_R	0.125	R	0.315	0.343	0.368	0.391
31056.0125_RX	0.125	RX	0.315	0.343	0.368	0.391
31056.0150_R	0.15	R	0.453	0.493	0.529	0.563
31056.0150_RX	0.15	RX	0.453	0.493	0.529	0.563
31056.0175_R	0.175	R	0.617	0.671	0.721	0.766
31056.0175_RX	0.175	RX	0.617	0.671	0.721	0.766
31056.0200_R	0.20	R	0.806	0.877	0.941	1.000
31056.0200_RX	0.20	RX	0.806	0.877	0.941	1.000
31056.0250_R	0.25	R	1.259	1.370	1.471	1.563
31056.0250_RX	0.25	RX	1.259	1.370	1.471	1.563
31056.0275_R	0.275	R	1.524	1.658	1.779	1.891
31056.0275_RX	0.275	RX	1.524	1.658	1.779	1.891
31056.0300_R	0.30	R	1.813	1.973	2.118	2.250
31056.0300_RX	0.30	RX	1.813	1.973	2.118	2.250
31056.0350_R	0.35	R	2.468	2.685	2.882	3.063
31056.0350_RX	0.35	RX	2.468	2.685	2.882	3.063
31056.0400_R	0.40	R	3.223	3.508	3.765	4.001
31056.0400_RX	0.40	RX	3.223	3.508	3.765	4.001
31056.0450_R	0.45	R	4.080	4.439	4.765	5.064
31056.0450_RX	0.45	RX	4.080	4.439	4.765	5.064

ART. NR.	DÜSEN Ød mm	Bezeichnung	DRUCK in psi / bar			
			psi36250	psi43500	psi50750	psi58000
			bar2500	bar3000	bar3500	bar4000
			DURCHFLUSSMENGE in l/min			
31056.0500_R	0.50	R	5.037	5.481	5.882	6.251
31056.0500_RX	0.50	RX	5.037	5.481	5.882	6.251
31056.0550_R	0.55	R	6.094	6.632	7.118	7.564
31056.0550_RX	0.55	RX	6.094	6.632	7.118	7.564
31056.0600_R	0.60	R	7.253	7.892	8.471	9.002
31056.0600_RX	0.60	RX	7.253	7.892	8.471	9.002
31056.0650_R	0.65	R	8.512	9.262	9.941	10.565
31056.0650_RX	0.65	RX	8.512	9.262	9.941	10.565
31056.0700_R	0.70	R	9.872	10.742	11.530	12.253
31056.0700_RX	0.70	RX	9.872	10.742	11.530	12.253
31056.0750_R	0.75	R	11.333	12.331	13.236	14.066
31056.0750_RX	0.75	RX	11.333	12.331	13.236	14.066
31056.0800_R	0.80	R	12.894	14.030	15.059	16.004
31056.0800_RX	0.80	RX	12.894	14.030	15.059	16.004
31056.0850_R	0.85	R	14.556	15.839	17.000	18.067
31056.0850_RX	0.85	RX	14.556	15.839	17.000	18.067
31056.0900_R	0.90	R	16.319	17.757	19.059	20.254
31056.0900_RX	0.90	RX	16.319	17.757	19.059	20.254
31056.0950_R	0.95	R	18.182	19.785	21.236	22.568
31056.0950_RX	0.95	RX	18.182	19.785	21.236	22.568
31056.1000_R	1.00	R	20.147	21.922	23.530	25.006
31056.1000_RX	1.00	RX	20.147	21.922	23.530	25.006
31057.0080_A	0.08	A	0.129	0.140	0.151	0.160
31057.0080_AX	0.08	AX	0.129	0.140	0.151	0.160
31057.0100_A	0.10	A	0.201	0.219	0.235	0.250
31057.0100_AX	0.10	AX	0.201	0.219	0.235	0.250
31057.0125_A	0.125	A	0.315	0.343	0.368	0.391
31057.0125_AX	0.125	AX	0.315	0.343	0.368	0.391
31057.0150_A	0.15	A	0.453	0.493	0.529	0.563
31057.0150_AX	0.15	AX	0.453	0.493	0.529	0.563

ART. NR.	DÜSEN Ød mm	Bezeichnung	DRUCK in psi / bar			
			psi36250	psi43500	psi50750	psi58000
			bar2500	bar3000	bar3500	bar4000
			DURCHFLUSSMENGE in l/min			
31057.0175_A	0.175	A	0.617	0.671	0.721	0.766
31057.0175_AX	0.175	AX	0.617	0.671	0.721	0.766
31057.0200_A	0.20	A	0.806	0.877	0.941	1.000
31057.0200_AX	0.20	AX	0.806	0.877	0.941	1.000
31057.0250_A	0.25	A	1.259	1.370	1.471	1.563
31057.0250_AX	0.25	AX	1.259	1.370	1.471	1.563
31057.0275_A	0.275	A	1.524	1.658	1.779	1.891
31057.0275_AX	0.275	AX	1.524	1.658	1.779	1.891
31057.0300_A	0.30	A	1.813	1.973	2.118	2.250
31057.0300_AX	0.30	AX	1.813	1.973	2.118	2.250
31057.0350_A	0.35	A	2.468	2.685	2.882	3.063
31057.0350_AX	0.35	AX	2.468	2.685	2.882	3.063
31057.0400_A	0.40	A	3.223	3.508	3.765	4.001
31057.0400_AX	0.40	AX	3.223	3.508	3.765	4.001
31057.0450_A	0.45	A	4.080	4.439	4.765	5.064
31057.0450_AX	0.45	AX	4.080	4.439	4.765	5.064
31057.0500_A	0.50	A	5.037	5.481	5.882	6.251
31057.0500_AX	0.50	AX	5.037	5.481	5.882	6.251
31057.0550_A	0.55	A	6.094	6.632	7.118	7.564
31057.0550_AX	0.55	AX	6.094	6.632	7.118	7.564
31057.0600_A	0.60	A	7.253	7.892	8.471	9.002
31057.0600_AX	0.60	AX	7.253	7.892	8.471	9.002
31057.0650_A	0.65	A	8.512	9.262	9.941	10.565
31057.0650_AX	0.65	AX	8.512	9.262	9.941	10.565
31057.0700_A	0.70	A	9.872	10.742	11.530	12.253
31057.0700_AX	0.70	AX	9.872	10.742	11.530	12.253
31057.0750_A	0.75	A	11.333	12.331	13.236	14.066
31057.0750_AX	0.75	AX	11.333	12.331	13.236	14.066
31057.0800_A	0.80	A	12.894	14.030	15.059	16.004
31057.0800_AX	0.80	AX	12.894	14.030	15.059	16.004

ART. NR.	DÜSEN Ød mm	Bezeichnung	DRUCK in psi / bar			
			psi36250	psi43500	psi50750	psi58000
			bar2500	bar3000	bar3500	bar4000
			DURCHFLUSSMENGE in l/min			
31057.0850_A	0.85	A	14.556	15.839	17.000	18.067
31057.0850_AX	0.85	AX	14.556	15.839	17.000	18.067
31057.0900_A	0.90	A	16.319	17.757	19.059	20.254
31057.0900_AX	0.90	AX	16.319	17.757	19.059	20.254
31057.0950_A	0.95	A	18.182	19.785	21.236	22.568
31057.0950_AX	0.95	AX	18.182	19.785	21.236	22.568
31057.1000_A	1.00	A	20.147	21.922	23.530	25.006
31057.1000_AX	1.00	AX	20.147	21.922	23.530	25.006

FAQ

1. What applications is the sapphire nozzle 258 suitable for?

The 258 sapphire nozzle is designed for both pure water and abrasive cutting applications. It is suitable for a wide range of materials - from soft materials such as paper and plastics to hard materials such as metal, stone or ceramic.

2. What are the technical features of the sapphire nozzle 258?

The nozzle has a sealing angle of 59° and the designs type 27 and LS-2. This geometry ensures precise jet focusing and supports high cutting quality.

3. Which variants (R, RX, A, AX) are available?

- **R / A:** 100 % tested accuracy (pure water or abrasive)
- **RX / AX:** Not tested accuracy, but more cost-efficient option for less critical applications

4. What operating conditions are possible?

The 258 sapphire nozzle is designed for operating pressures of up to 4000 bar and temperatures of up to 150 °C, making it suitable for demanding industrial cutting processes.

5. What advantages does the sapphire nozzle 258 offer in use?

It offers a long service life, consistently high blasting quality and precise cuts with a narrow cutting width. This significantly increases efficiency and process reliability.