

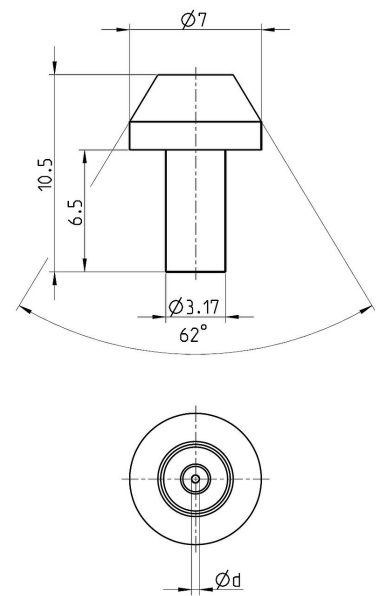
Sapphire nozzle 250

The sapphire nozzle type 250 can be used as a pure water or abrasive cutting nozzle. And has a sealing angle of 62°.

- Type 10
- Type U

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			
31076.0080_R	0.08	R	0.129	0.140	0.151	0.160
31076.0080_RX	0.08	RX	0.129	0.140	0.151	0.160
31076.0100_R	0.10	R	0.201	0.219	0.235	0.250
31076.0100_RX	0.10	RX	0.201	0.219	0.235	0.250
31076.0125_R	0.125	R	0.315	0.343	0.368	0.391
31076.0125_RX	0.125	RX	0.315	0.343	0.368	0.391
31076.0150_R	0.15	R	0.453	0.493	0.529	0.563
31076.0150_RX	0.15	RX	0.453	0.493	0.529	0.563
31076.0175_R	0.175	R	0.617	0.671	0.721	0.766
31076.0175_RX	0.175	RX	0.617	0.671	0.721	0.766
31076.0200_R	0.20	R	0.806	0.877	0.941	1.000
31076.0200_RX	0.20	RX	0.806	0.877	0.941	1.000
31076.0250_R	0.25	R	1.259	1.370	1.471	1.563
31076.0250_RX	0.25	RX	1.259	1.370	1.471	1.563
31076.0275_R	0.275	R	1.524	1.658	1.779	1.891
31076.0275_RX	0.275	RX	1.524	1.658	1.779	1.891
31076.0300_R	0.30	R	1.813	1.973	2.118	2.250
31076.0300_RX	0.30	RX	1.813	1.973	2.118	2.250
31076.0350_R	0.35	R	2.468	2.685	2.882	3.063
31076.0350_RX	0.35	RX	2.468	2.685	2.882	3.063
31076.0400_R	0.40	R	3.223	3.508	3.765	4.001
31076.0400_RX	0.40	RX	3.223	3.508	3.765	4.001
31076.0450_R	0.45	R	4.080	4.439	4.765	5.064
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31076.0500_R	0.50	R	5.037	5.481	5.882	6.251
31076.0500_RX	0.50	RX	5.037	5.481	5.882	6.251
31076.0550_R	0.55	R	6.094	6.632	7.118	7.564
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31076.0600_R	0.60	R	7.253	7.892	8.471	9.002
31076.0600_RX	0.60	RX	7.253	7.892	8.471	9.002
31076.0650_R	0.65	R	8.512	9.262	9.941	10.565
31076.0650_RX	0.65	RX	8.512	9.262	9.941	10.565
31076.0700_R	0.70	R	9.872	10.742	11.530	12.253
31076.0700_RX	0.70	RX	9.872	10.742	11.530	12.253
31076.0750_R	0.75	R	11.333	12.331	13.236	14.066
31076.0750_RX	0.75	RX	11.333	12.331	13.236	14.066
31076.0800_R	0.80	R	12.894	14.030	15.059	16.004
31076.0800_RX	0.80	RX	12.894	14.030	15.059	16.004
31076.0850_R	0.85	R	14.556	15.839	17.000	18.067
31076.0850_RX	0.85	RX	14.556	15.839	17.000	18.067
31076.0900_R	0.90	R	16.319	17.757	19.059	20.254
31076.0900_RX	0.90	RX	16.319	17.757	19.059	20.254
31076.0950_R	0.95	R	18.182	19.785	21.236	22.568
31076.0950_RX	0.95	RX	18.182	19.785	21.236	22.568
31076.1000_R	1.00	R	20.147	21.922	23.530	25.006
31076.1000_RX	1.00	RX	20.147	21.922	23.530	25.006
31077.0080_A	0.08	A	0.129	0.140	0.151	0.160
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FAQ

1. What applications is the sapphire nozzle 250 suitable for?

The sapphire nozzle 250 is designed for both pure water and abrasive cutting applications. It is suitable for soft materials such as paper, food or plastics as well as hard materials such as metal, stone or ceramic.

2. What is the difference between the R, RX, A and AX variants?

R and A stand for 100 % tested accuracy (pure water or abrasive). RX and AX are not tested for accuracy, but offer a more cost-effective alternative for less critical applications.

3. What advantages does the sapphire nozzle 250 offer in use?

The nozzle impresses with a long service life, consistently high jet quality and precise cutting with a narrow cutting width. This ensures high efficiency and cutting quality.

4. What operating conditions are designed for the sapphire nozzle 250?

The 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. How do I choose the right nozzle size?

The choice of nozzle size depends on the desired flow rate, pressure range and material. Smaller diameters ensure finer, more precise cuts, while larger diameters enable higher flow rates and therefore greater cutting performance.