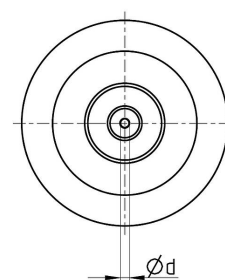
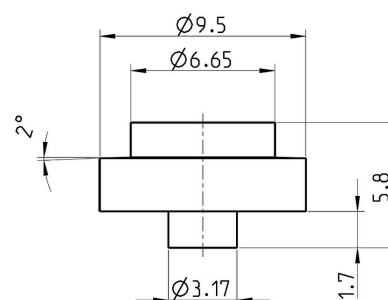


Sapphire nozzle 270

The sapphire nozzle type 270 can be used as a pure water or abrasive cutting nozzle. The nozzle is surface-dense and has only a very small 2° angle.

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 foods, 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, target accuracy 100% tested
AX = Abrasive cutting nozzles, target accuracy not tested

EXECUTION	ARTICLE	DESCRIPTION
Pure water	31044._ _	R / RX
Abrasive	31045._ _	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			
31044.0080_R	0.08	R	0.129	0.140	0.151	0.160
31044.0080_RX	0.08	RX	0.129	0.140	0.151	0.160
31044.0100_R	0.10	R	0.201	0.219	0.235	0.250
31044.0100_RX	0.10	RX	0.201	0.219	0.235	0.250
31044.0125_R	0.125	R	0.315	0.343	0.368	0.391
31044.0125_RX	0.125	RX	0.315	0.343	0.368	0.391
31044.0150_R	0.15	R	0.453	0.493	0.529	0.563
31044.0150_RX	0.15	RX	0.453	0.493	0.529	0.563
31044.0175_R	0.175	R	0.617	0.671	0.721	0.766
31044.0175_RX	0.175	RX	0.617	0.671	0.721	0.766
31044.0200_R	0.20	R	0.806	0.877	0.941	1.000
31044.0200_RX	0.20	RX	0.806	0.877	0.941	1.000
31044.0250_R	0.25	R	1.259	1.370	1.471	1.563
31044.0250_RX	0.25	RX	1.259	1.370	1.471	1.563
31044.0275_R	0.275	R	1.524	1.658	1.779	1.891
31044.0275_RX	0.275	RX	1.524	1.658	1.779	1.891
31044.0300_R	0.30	R	1.813	1.973	2.118	2.250
31044.0300_RX	0.30	RX	1.813	1.973	2.118	2.250
31044.0350_R	0.35	R	2.468	2.685	2.882	3.063
31044.0350_RX	0.35	RX	2.468	2.685	2.882	3.063
31044.0400_R	0.40	R	3.223	3.508	3.765	4.001
31044.0400_RX	0.40	RX	3.223	3.508	3.765	4.001
31044.0450_R	0.45	R	4.080	4.439	4.765	5.064
31044.0450_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			
31044.0500_R	0.50	R	5.037	5.481	5.882	6.251
31044.0500_RX	0.50	RX	5.037	5.481	5.882	6.251
31044.0550_R	0.55	R	6.094	6.632	7.118	7.564
31044.0550_RX	0.55	RX	6.094	6.632	7.118	7.564
31044.0600_R	0.60	R	7.253	7.892	8.471	9.002
31044.0600_RX	0.60	RX	7.253	7.892	8.471	9.002
31044.0650_R	0.65	R	8.512	9.262	9.941	10.565
31044.0650_RX	0.65	RX	8.512	9.262	9.941	10.565
31044.0700_R	0.70	R	9.872	10.742	11.530	12.253
31044.0700_RX	0.70	RX	9.872	10.742	11.530	12.253
31044.0750_R	0.75	R	11.333	12.331	13.236	14.066
31044.0750_RX	0.75	RX	11.333	12.331	13.236	14.066
31044.0800_R	0.80	R	12.894	14.030	15.059	16.004
31044.0800_RX	0.80	RX	12.894	14.030	15.059	16.004
31044.0850_R	0.85	R	14.556	15.839	17.000	18.067
31044.0850_RX	0.85	RX	14.556	15.839	17.000	18.067
31044.0900_R	0.90	R	16.319	17.757	19.059	20.254
31044.0900_RX	0.90	RX	16.319	17.757	19.059	20.254
31044.0950_R	0.95	R	18.182	19.785	21.236	22.568
31044.0950_RX	0.95	RX	18.182	19.785	21.236	22.568
31044.1000_R	1.00	R	20.147	21.922	23.530	25.006
31044.1000_RX	1.00	RX	20.147	21.922	23.530	25.006
31045.0080_A	0.08	A	0.129	0.140	0.151	0.160
31045.0080_AX	0.08	AX	0.129	0.140	0.151	0.160
31045.0100_A	0.10	A	0.201	0.219	0.235	0.250
31045.0100_AX	0.10	AX	0.201	0.219	0.235	0.250
31045.0125_A	0.125	A	0.315	0.343	0.368	0.391
31045.0125_AX	0.125	AX	0.315	0.343	0.368	0.391
31045.0150_A	0.15	A	0.453	0.493	0.529	0.563
31045.0150_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						
31045.0175_A	0.175	A	0.617	0.671	0.721	0.766
31045.0175_AX	0.175	AX	0.617	0.671	0.721	0.766
31045.0200_A	0.20	A	0.806	0.877	0.941	1.000
31045.0200_AX	0.20	AX	0.806	0.877	0.941	1.000
31045.0250_A	0.25	A	1.259	1.370	1.471	1.563
31045.0250_AX	0.25	AX	1.259	1.370	1.471	1.563
31045.0275_A	0.275	A	1.524	1.658	1.779	1.891
31045.0275_AX	0.275	AX	1.524	1.658	1.779	1.891
31045.0300_A	0.30	A	1.813	1.973	2.118	2.250
31045.0300_AX	0.30	AX	1.813	1.973	2.118	2.250
31045.0350_A	0.35	A	2.468	2.685	2.882	3.063
31045.0350_AX	0.35	AX	2.468	2.685	2.882	3.063
31045.0400_A	0.40	A	3.223	3.508	3.765	4.001
31045.0400_AX	0.40	AX	3.223	3.508	3.765	4.001
31045.0450_A	0.45	A	4.080	4.439	4.765	5.064
31045.0450_AX	0.45	AX	4.080	4.439	4.765	5.064
31045.0500_A	0.50	A	5.037	5.481	5.882	6.251
31045.0500_AX	0.50	AX	5.037	5.481	5.882	6.251
31045.0550_A	0.55	A	6.094	6.632	7.118	7.564
31045.0550_AX	0.55	AX	6.094	6.632	7.118	7.564
31045.0600_A	0.60	A	7.253	7.892	8.471	9.002
31045.0600_AX	0.60	AX	7.253	7.892	8.471	9.002
31045.0650_A	0.65	A	8.512	9.262	9.941	10.565
31045.0650_AX	0.65	AX	8.512	9.262	9.941	10.565
31045.0700_A	0.70	A	9.872	10.742	11.530	12.253
31045.0700_AX	0.70	AX	9.872	10.742	11.530	12.253
31045.0750_A	0.75	A	11.333	12.331	13.236	14.066
31045.0750_AX	0.75	AX	11.333	12.331	13.236	14.066
31045.0800_A	0.80	A	12.894	14.030	15.059	16.004
31045.0800_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			
31045.0850_A	0.85	A	14.556	15.839	17.000	18.067
31045.0850_AX	0.85	AX	14.556	15.839	17.000	18.067
31045.0900_A	0.90	A	16.319	17.757	19.059	20.254
31045.0900_AX	0.90	AX	16.319	17.757	19.059	20.254
31045.0950_A	0.95	A	18.182	19.785	21.236	22.568
31045.0950_AX	0.95	AX	18.182	19.785	21.236	22.568
31045.1000_A	1.00	A	20.147	21.922	23.530	25.006
31045.1000_AX	1.00	AX	20.147	21.922	23.530	25.006

FAQ

1. What is special about the 2° sealing angle of type 270?

The very small sealing angle of just 2° ensures a virtually flat seal. This ensures particularly stable and low-loss jet guidance.

2. What does "surface-dense" mean for this nozzle?

Surface-sealing means that the seal is not applied selectively, but over a surface. This improves the sealing effect and reduces wear and leakage.

3. For which applications is the Type 270 particularly suitable?

The nozzle is ideal for applications where maximum precision and consistent blasting quality are required - both in pure water and abrasive applications.

4. Can the Type 270 be used for both cutting processes?

Yes, the sapphire nozzle type 270 is designed for both pure water and abrasive cutting and can therefore be used for a wide range of applications.

5. What advantages does the type 270 offer compared to standard nozzle

Thanks to its special geometry (surface-dense and minimal angle), it offers particularly consistent beam quality, high cutting accuracy and a long service life.