## 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 280 can be used as a pure water or abrasive cutting nozzle. The nozzle has a sealing angle of $44^{\circ}$, on the technical design you can see that this nozzle contains 3 parts.

This product is compatible with the following brands or products:

- Type 18
- Type F
- Form 10

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 |
| :---: | :---: | :---: |
| 31040._- | Pure water | R/RX |
| 31041._- | 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.

Performance

| ART. NO. | NOZZLE ØD MM | PRESSURE IN PSI / BAR |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { psi } \\ 36250 \end{gathered}$ | $\begin{gathered} \text { psi } \\ 43500 \end{gathered}$ | $\begin{gathered} \text { psi } \\ 50750 \end{gathered}$ | $\begin{gathered} \text { psi } \\ 58000 \end{gathered}$ |
|  |  | $\begin{gathered} \text { bar } \\ 2500 \end{gathered}$ | $\begin{gathered} \text { bar } \\ 3000 \end{gathered}$ | $\begin{gathered} \text { bar } \\ 3500 \end{gathered}$ | $\begin{aligned} & \text { bar } \\ & 4000 \end{aligned}$ |
|  |  | 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 |  |
| :---: | :---: | :---: | :---: |
| 31040. _ | $\ldots-\ldots .0080$ | $R$ | 31040.0080_R |

