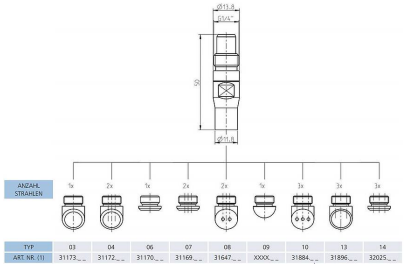
RSD

Ruby nozzle 6401



The high-performance nozzles for paper cutting from mvt AG are characterized by their service life, efficiency and quality. The extensive range of nozzles offers the right type for most commercially available paper cutting systems. The ruby insert used in particular guarantees a long service life and consistent jet quality.

Features and advantages

- Long service life
- Constant jet quality
- Highly concentrated water jet
- Point jet with high energy density
- Easier installation and removal thanks to HD high-pressure screw connection
- Good price-performance ratio
- Swiss Quality

Applications

MVT AG is a Swiss supplier of high-quality and precise components and systems for the industrial sector.

- Pulp and paper industry
- Industrial cleaning
- Corrugated board

Connection thread	Type	ART. NO. (1)	Number of jets
1/4" BSP	03	31173._ _	1
1/4" BSP	04	31172._ _	2
1/4" BSP	06	31170._ _	1
1/4" BSP	07	31169._ _	2
1/4" BSP	08	31647._ _	2
1/4" BSP	09	XXXX._ _	1
1/4" BSP	10	31884._ _	3
1/4" BSP	13	31896._ _	3
1/4" BSP	14	32025._ _	3

Specifications

Operating pressure (bar) max.

110

Operating temperature (°C) max.

150

ART. NO.	NOZZLE SIZE in US Gal/ min at 40 psi	NOZZLES Ød mm	Number of jets	PRESSURE in psi / bar psi580 bar40	psi725 bar50	psi870 bar60	psi1015 bar70	psi1160 bar80	psi1305 bar90	psi1450 bar100	psi1595 bar110
				FLOW RATE in l/min							
31173.0250	0012	0.25	1	0.179	0.200	0.219	0.236	0.253	0.268	0.282	0.296
31173.0300	0018	0.30	1	0.257	0.288	0.315	0.340	0.364	0.386	0.407	0.426
31173.0350	0024	0.35	1	0.350	0.392	0.429	0.463	0.495	0.525	0.553	0.580
31173.0400	0031	0.40	1	0.458	0.512	0.560	0.605	0.647	0.686	0.723	0.758
31173.0450	0040	0.45	1	0.579	0.647	0.709	0.766	0.818	0.868	0.915	0.959
31173.0500	0049	0.50	1	0.715	0.799	0.875	0.945	1.010	1.072	1.129	1.184
31173.0550	0059	0.55	1	0.865	0.967	1.059	1.144	1.223	1.297	1.366	1.433
31173.0600	0071	0.60	1	1.030	1.151	1.261	1.361	1.455	1.543	1.626	1.705
31173.0700	0096	0.70	1	1.401	1.567	1.716	1.853	1.980	2.100	2.213	2.321
31173.0800	0126	0.80	1	1.830	2.046	2.241	2.420	2.587	2.743	2.891	3.032
31173.0900	0159	0.90	1	2.317	2.590	2.836	3.063	3.274	3.472	3.659	3.837
31173.1000	0197	1.00	1	2.860	3.197	3.501	3.781	4.042	4.286	4.517	4.737
31172.0250	0012	0.25	2	0.358	0.400	0.438	0.472	0.506	0.536	0.564	0.592
31172.0300	0018	0.30	2	0.514	0.576	0.630	0.680	0.728	0.772	0.814	0.852
31172.0350	0024	0.35	2	0.700	0.784	0.858	0.926	0.990	1.050	1.106	1.160
31172.0400	0031	0.40	2	0.916	1.024	1.120	1.210	1.294	1.372	1.446	1.516
31172.0450	0040	0.45	2	1.158	1.294	1.418	1.532	1.636	1.736	1.830	1.918
31172.0500	0049	0.50	2	1.430	1.598	1.750	1.890	2.020	2.144	2.258	2.368
31172.0550	0059	0.55	2	1.730	1.934	2.118	2.288	2.446	2.594	2.732	2.866
31172.0600	0071	0.60	2	2.060	2.302	2.522	2.722	2.910	3.086	3.252	3.410
31172.0700	0096	0.70	2	2.802	3.134	3.432	3.706	3.960	4.200	4.426	4.642
31172.0800	0126	0.80	2	3.660	4.092	4.482	4.840	5.174	5.486	5.782	6.064

ART. NO.	NOZZLE SIZE in US Gal/ min at 40 psi	NOZZLES Ød mm	Number of jets	PRESSURE in psi / bar							
				psi580	psi725	psi870	psi1015	psi1160	psi1305	psi1450	psi1595
				bar40	bar50	bar60	bar70	bar80	bar90	bar100	bar110
				FLOW RATE in l/min							
31172.0900	0159	0.90	2	4.634	5.180	5.672	6.126	6.548	6.944	7.318	7.674
31172.1000	0197	1.00	2	5.720	6.394	7.002	7.562	8.084	8.572	9.034	9.474
31170.0250	0012	0.25	1	0.179	0.200	0.219	0.236	0.253	0.268	0.282	0.296
31170.0300	0018	0.30	1	0.257	0.288	0.315	0.340	0.364	0.386	0.407	0.426
31170.0350	0024	0.35	1	0.350	0.392	0.429	0.463	0.495	0.525	0.553	0.580
31170.0400	0031	0.40	1	0.458	0.512	0.560	0.605	0.647	0.686	0.723	0.758
31170.0450	0040	0.45	1	0.579	0.647	0.709	0.766	0.818	0.868	0.915	0.959
31170.0500	0049	0.50	1	0.715	0.799	0.875	0.945	1.010	1.072	1.129	1.184
31170.0550	0059	0.55	1	0.865	0.967	1.059	1.144	1.223	1.297	1.366	1.433
31170.0600	0071	0.60	1	1.030	1.151	1.261	1.361	1.455	1.543	1.626	1.705
31170.0700	0096	0.70	1	1.401	1.567	1.716	1.853	1.980	2.100	2.213	2.321
31170.0800	0126	0.80	1	1.830	2.046	2.241	2.420	2.587	2.743	2.891	3.032
31170.0900	0159	0.90	1	2.317	2.590	2.836	3.063	3.274	3.472	3.659	3.837
31170.1000	0197	1.00	1	2.860	3.197	3.501	3.781	4.042	4.286	4.517	4.737
31169.0250	0012	0.25	2	0.358	0.400	0.438	0.472	0.506	0.536	0.564	0.592
31169.0300	0018	0.30	2	0.514	0.576	0.630	0.680	0.728	0.772	0.814	0.852
31169.0350	0024	0.35	2	0.700	0.784	0.858	0.926	0.990	1.050	1.106	1.160
31169.0400	0031	0.40	2	0.916	1.024	1.120	1.210	1.294	1.372	1.446	1.516
31169.0450	0040	0.45	2	1.158	1.294	1.418	1.532	1.636	1.736	1.830	1.918
31169.0500	0049	0.50	2	1.430	1.598	1.750	1.890	2.020	2.144	2.258	2.368
31169.0550	0059	0.55	2	1.730	1.934	2.118	2.288	2.446	2.594	2.732	2.866
31169.0600	0071	0.60	2	2.060	2.302	2.522	2.722	2.910	3.086	3.252	3.410
31169.0700	0096	0.70	2	2.802	3.134	3.432	3.706	3.960	4.200	4.426	4.642
31169.0800	0126	0.80	2	3.660	4.092	4.482	4.840	5.174	5.486	5.782	6.064
31169.0900	0159	0.90	2	4.634	5.180	5.672	6.126	6.548	6.944	7.318	7.674
31169.1000	0197	1.00	2	5.720	6.394	7.002	7.562	8.084	8.572	9.034	9.474
31647.0250	0012	0.25	2	0.358	0.400	0.438	0.472	0.506	0.536	0.564	0.592
31647.0300	0018	0.30	2	0.514	0.576	0.630	0.680	0.728	0.772	0.814	0.852

ART. NO.	NOZZLE SIZE in US Gal/ min at 40 psi	NOZZLES Ød mm	Number of jets	PRESSURE in psi / bar							
				psi580	psi725	psi870	psi1015	psi1160	psi1305	psi1450	psi1595
				bar40	bar50	bar60	bar70	bar80	bar90	bar100	bar110
				FLOW RATE in l/min							
31647.0350	0024	0.35	2	0.700	0.784	0.858	0.926	0.990	1.050	1.106	1.160
31647.0400	0031	0.40	2	0.916	1.024	1.120	1.210	1.294	1.372	1.446	1.516
31647.0450	0040	0.45	2	1.158	1.294	1.418	1.532	1.636	1.736	1.830	1.918
31647.0500	0049	0.50	2	1.430	1.598	1.750	1.890	2.020	2.144	2.258	2.368
31647.0550	0059	0.55	2	1.730	1.934	2.118	2.288	2.446	2.594	2.732	2.866
31647.0600	0071	0.60	2	2.060	2.302	2.522	2.722	2.910	3.086	3.252	3.410
31647.0700	0096	0.70	2	2.802	3.134	3.432	3.706	3.960	4.200	4.426	4.642
31647.0800	0126	0.80	2	3.660	4.092	4.482	4.840	5.174	5.486	5.782	6.064
31647.0900	0159	0.90	2	4.634	5.180	5.672	6.126	6.548	6.944	7.318	7.674
31647.1000	0197	1.00	2	5.720	6.394	7.002	7.562	8.084	8.572	9.034	9.474
XXXX.0250	0012	0.25	1	0.179	0.200	0.219	0.236	0.253	0.268	0.282	0.296
XXXX.0300	0018	0.30	1	0.257	0.288	0.315	0.340	0.364	0.386	0.407	0.426
XXXX.0350	0024	0.35	1	0.350	0.392	0.429	0.463	0.495	0.525	0.553	0.580
XXXX.0400	0031	0.40	1	0.458	0.512	0.560	0.605	0.647	0.686	0.723	0.758
XXXX.0450	0040	0.45	1	0.579	0.647	0.709	0.766	0.818	0.868	0.915	0.959
XXXX.0500	0049	0.50	1	0.715	0.799	0.875	0.945	1.010	1.072	1.129	1.184
XXXX.0550	0059	0.55	1	0.865	0.967	1.059	1.144	1.223	1.297	1.366	1.433
XXXX.0600	0071	0.60	1	1.030	1.151	1.261	1.361	1.455	1.543	1.626	1.705
XXXX.0700	0096	0.70	1	1.401	1.567	1.716	1.853	1.980	2.100	2.213	2.321
XXXX.0800	0126	0.80	1	1.830	2.046	2.241	2.420	2.587	2.743	2.891	3.032
XXXX.0900	0159	0.90	1	2.317	2.590	2.836	3.063	3.274	3.472	3.659	3.837
XXXX.1000	0197	1.00	1	2.860	3.197	3.501	3.781	4.042	4.286	4.517	4.737
31884.0250	0012	0.25	3	0.537	0.600	0.657	0.708	0.759	0.804	0.846	0.888
31884.0300	0018	0.30	3	0.771	0.864	0.945	1.020	1.092	1.158	1.221	1.278
31884.0350	0024	0.35	3	1.050	1.176	1.287	1.389	1.485	1.575	1.659	1.740
31884.0400	0031	0.40	3	1.374	1.536	1.680	1.815	1.941	2.058	2.169	2.274
31884.0450	0040	0.45	3	1.737	1.941	2.127	2.298	2.454	2.604	2.745	2.877
31884.0500	0049	0.50	3	2.145	2.397	2.625	2.835	3.030	3.216	3.387	3.552

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				psi580	psi725	psi870	psi1015	psi1160	psi1305	psi1450	psi1595
				bar40	bar50	bar60	bar70	bar80	bar90	bar100	bar110
				FLOW RATE in l/min							
31884.0550	0059	0.55	3	2.595	2.901	3.177	3.432	3.669	3.891	4.098	4.299
31884.0600	0071	0.60	3	3.090	3.453	3.783	4.083	4.365	4.629	4.878	5.115
31884.0700	0096	0.70	3	4.203	4.701	5.148	5.559	5.940	6.300	6.639	6.963
31884.0800	0126	0.80	3	5.490	6.138	6.723	7.260	7.761	8.229	8.673	9.096
31884.0900	0159	0.90	3	6.951	7.770	8.508	9.189	9.822	10.416	10.977	11.511
31884.1000	0197	1.00	3	8.580	9.591	10.503	11.343	12.126	12.858	13.551	14.211
31896.0250	0012	0.25	3	0.537	0.600	0.657	0.708	0.759	0.804	0.846	0.888
31896.0300	0018	0.30	3	0.771	0.864	0.945	1.020	1.092	1.158	1.221	1.278
31896.0350	0024	0.35	3	1.050	1.176	1.287	1.389	1.485	1.575	1.659	1.740
31896.0400	0031	0.40	3	1.374	1.536	1.680	1.815	1.941	2.058	2.169	2.274
31896.0450	0040	0.45	3	1.737	1.941	2.127	2.298	2.454	2.604	2.745	2.877
31896.0500	0049	0.50	3	2.145	2.397	2.625	2.835	3.030	3.216	3.387	3.552
31896.0550	0059	0.55	3	2.595	2.901	3.177	3.432	3.669	3.891	4.098	4.299
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31896.0900	0159	0.90	3	6.951	7.770	8.508	9.189	9.822	10.416	10.977	11.511
31896.1000	0197	1.00	3	8.580	9.591	10.503	11.343	12.126	12.858	13.551	14.211
32025.0250	0012	0.25	3	0.537	0.600	0.657	0.708	0.759	0.804	0.846	0.888
32025.0300	0018	0.30	3	0.771	0.864	0.945	1.020	1.092	1.158	1.221	1.278
32025.0350	0024	0.35	3	1.050	1.176	1.287	1.389	1.485	1.575	1.659	1.740
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				bar40	bar50	bar60	bar70	bar80	bar90	bar100	bar110
				FLOW RATE in l/min							
32025.0900	0159	0.90	3	6.951	7.770	8.508	9.189	9.822	10.416	10.977	11.511
32025.1000	0197	1.00	3	8.580	9.591	10.503	11.343	12.126	12.858	13.551	14.211

FAQ

1. What is the ruby nozzle 6401 used for?

The 6401 ruby nozzle is mainly used in the pulp and paper industry, especially for precise paper cutting with waterjet technology. It is also suitable for applications in corrugated board production and for various industrial cleaning processes.

2. What advantages does the ruby insert of the ruby nozzle 6401 offer?

The integrated ruby insert ensures particularly high wear resistance and consistently precise jet quality. As a result, the water jet remains stably focused and enables efficient and consistent cutting performance over long operating times.

3. What connection options does the Ruby nozzle 6401 offer?

The Ruby nozzle 6401 is equipped with a **1/4" BSP connection thread** and can be supplied with different variants of **one, two or three water jets**. This allows it to be flexibly integrated into different paper cutting systems.

4. What operating conditions are suitable for the Ruby nozzle 6401?

The nozzle is designed for a maximum operating pressure of **80 bar** and a maximum operating temperature of **150 °C**. This makes it suitable for numerous industrial applications with high demands on reliability and precision.

5. Why is the Ruby nozzle 6401 easy to install?

Thanks to the **HD high-pressure screw connection**, the nozzle can be installed or removed quickly and easily. This reduces maintenance times and facilitates replacement within existing systems.