

Sapphire nozzle 082



Properties and advantages

- Long lifetime
- Constant jet quality
- High-power and focused water jet
- Needle jet with high energy density
- Easy to install and disassemble
- Swiss Quality

Applications

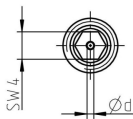
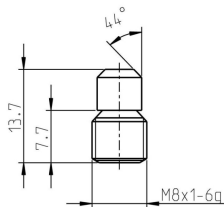
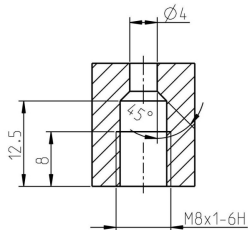
- Construction industry
- Iron, steel and metal industries
- Mechanical and apparatus engineering
- Cement and concrete industry
- Industrial cleaning
- Spray bars

Description

The mvt high-performance nozzle type 082 for surface treatment is characterised by its service life, efficiency and quality. Due to the external shapes, the nozzle can be installed in all customer-specific systems on the market.

The heart of the nozzle, its the sapphire that is completely manufactured by mvt AG, thus ensuring a consistent and high quality. All sapphire are checked for scratches, cracks and flow.

ART. NO. (1)
31200._ _



CHARACTERISTICS	TYPE
	082
Operating pressure (bar)	max. 2000
Operating temp. (°C)	max. 150°
Tightening torque (Nm)	max. 17

Performance

ART. NO.	NOZZLE SIZE IN US GAL/MIN AT 40 PSI	NOZZLE ØD MM	PRESSURE IN PSI / BAR							
			psi 1450	psi 2900	psi 4350	psi 5800	psi 7250	psi 10875	psi 14500	psi 21750
			bar 100	bar 200	bar 300	bar 400	bar 500	bar 750	bar 1000	bar 1500
			FLOW RATE IN L/MIN							
31200.0100	0002	0.10	0.045	0.064	0.078	0.090	0.100	0.122	0.141	0.171
31200.0125	0003	0.125	0.071	0.100	0.122	0.140	0.157	0.191	0.220	0.267
31200.0150	0004	0.15	0.102	0.143	0.175	0.202	0.226	0.275	0.316	0.385
31200.0175	0006	0.175	0.138	0.195	0.239	0.275	0.307	0.375	0.431	0.523
31200.0200	0008	0.20	0.181	0.255	0.312	0.359	0.401	0.489	0.563	0.684
31200.0250	0012	0.25	0.282	0.399	0.487	0.562	0.627	0.764	0.879	1.068
31200.0300	0018	0.30	0.407	0.574	0.702	0.809	0.903	1.101	1.266	1.538
31200.0350	0024	0.35	0.553	0.781	0.955	1.101	1.229	1.498	1.723	2.094
31200.0400	0031	0.40	0.723	1.020	1.247	1.438	1.605	1.957	2.251	2.735
31200.0450	0040	0.45	0.915	1.291	1.579	1.820	2.031	2.477	2.848	3.461
31200.0500	0049	0.50	1.129	1.594	1.949	2.247	2.507	3.058	3.517	4.273
31200.0550	0059	0.55	1.366	1.929	2.358	2.718	3.034	3.700	4.255	5.170
31200.0600	0071	0.60	1.626	2.296	2.807	3.235	3.611	4.404	5.064	6.153
31200.0650	0083	0.65	1.908	2.694	3.294	3.797	4.238	5.168	5.943	7.221
31200.0700	0096	0.70	2.213	3.125	3.820	4.403	4.915	5.994	6.892	8.375
31200.0750	0111	0.75	2.541	3.587	4.385	5.055	5.642	6.880	7.912	9.614
31200.0800	0126	0.80	2.891	4.081	4.990	5.751	6.419	7.828	9.002	10.939
31200.0850	0142	0.85	3.264	4.607	5.633	6.493	7.247	8.838	10.163	12.349
31200.0900	0159	0.90	3.659	5.165	6.315	7.279	8.124	9.908	11.394	13.844
31200.0950	0177	0.95	4.077	5.755	7.036	8.110	9.052	11.039	12.695	15.425
31200.1000	0196	1.00	4.517	6.377	7.796	8.986	10.030	12.232	14.066	17.091
31200.1100	0238	1.10	5.466	7.716	9.433	10.874	12.136	14.801	17.020	20.681
31200.1200	0283	1.20	6.505	9.183	11.226	12.941	14.443	17.614	20.255	24.612
31200.1300	0332	1.30	7.634	10.777	13.175	15.187	16.950	20.672	23.772	28.885
31200.1400	0385	1.40	8.854	12.498	15.280	17.613	19.658	23.975	27.570	33.499
31200.1500	0442	1.50	10.164	14.348	17.541	20.220	22.567	27.522	31.649	38.456
31200.1600	0503	1.60	11.564	16.325	19.958	23.005	25.676	31.314	36.009	43.754
31200.1700	0568	1.70	13.054	18.429	22.531	25.971	28.986	35.350	40.651	49.394
31200.1800	0637	1.80	14.635	20.661	25.259	29.116	32.497	39.632	45.574	55.376
31200.1900	0709	1.90	16.307	23.020	28.144	32.441	36.208	44.158	50.779	61.700
31200.2000	0786	2.00	18.068	25.507	31.185	35.946	40.119	48.928	56.265	68.366
31200.2100	0866	2.10	19.920	28.122	34.381	39.630	44.232	53.943	62.032	75.373
31200.2200	0951	2.20	21.863	30.864	37.733	43.495	48.544	59.203	68.080	82.723
31200.2300	1040	2.30	23.896	33.733	41.242	47.538	53.058	64.707	74.410	90.414
31200.2400	1132	2.40	26.019	36.730	44.906	51.762	57.772	70.456	81.021	98.447
31200.2500	1228	2.50	28.232	39.855	48.726	56.165	62.686	76.450	87.913	106.822
31200.2600	1328	2.60	30.536	43.107	52.702	60.749	67.802	82.688	95.087	115.538
31200.2700	1432	2.70	32.930	46.487	56.834	65.511	73.117	89.171	102.542	124.597
31200.2800	1540	2.80	35.414	49.994	61.122	70.454	78.634	95.899	110.278	133.997
31200.2900	1653	2.90	37.989	53.629	65.565	75.576	84.351	102.871	118.296	143.739
31200.3000	1768	3.00	40.654	57.391	70.165	80.878	90.268	110.088	126.595	153.823

ART. NO.	NOZZLE SIZE IN US GAL/MIN AT 40 PSI	NOZZLE ØD MM	PRESSURE IN PSI / BAR	
			psi 25375	psi 29000
			bar 1750	bar 2000
			FLOW RATE in l/min	
31200.0100	0002	0.10	0.184	0.196
31200.0125	0003	0.125	0.287	0.306
31200.0150	0004	0.15	0.414	0.441
31200.0175	0006	0.175	0.563	0.600
31200.0200	0008	0.20	0.736	0.784
31200.0250	0012	0.25	1.149	1.224
31200.0300	0018	0.30	1.655	1.763
31200.0350	0024	0.35	2.253	2.400
31200.0400	0031	0.40	2.943	3.134
31200.0450	0040	0.45	3.724	3.967
31200.0500	0049	0.50	4.598	4.897
31200.0550	0059	0.55	5.563	5.925
31200.0600	0071	0.60	6.621	7.052
31200.0650	0083	0.65	7.770	8.276
31200.0700	0096	0.70	9.012	9.598
31200.0750	0111	0.75	10.345	11.018
31200.0800	0126	0.80	11.770	12.536
31200.0850	0142	0.85	13.287	14.152
31200.0900	0159	0.90	14.897	15.866
31200.0950	0177	0.95	16.598	17.678
31200.1000	0196	1.00	18.391	19.588
31200.1100	0238	1.10	22.253	23.702
31200.1200	0283	1.20	26.483	28.207
31200.1300	0332	1.30	31.081	33.104
31200.1400	0385	1.40	36.046	38.393
31200.1500	0442	1.50	41.380	44.073
31200.1600	0503	1.60	47.081	50.146
31200.1700	0568	1.70	53.150	56.610
31200.1800	0637	1.80	59.587	63.466
31200.1900	0709	1.90	66.391	70.713
31200.2000	0786	2.00	73.564	78.353
31200.2100	0866	2.10	81.104	86.384
31200.2200	0951	2.20	89.012	94.807
31200.2300	1040	2.30	97.288	103.621
31200.2400	1132	2.40	105.932	112.828
31200.2500	1228	2.50	114.943	122.426
31200.2600	1328	2.60	124.322	132.416
31200.2700	1432	2.70	134.070	142.798
31200.2800	1540	2.80	144.185	153.571
31200.2900	1653	2.90	154.667	164.737
31200.3000	1768	3.00	165.518	176.294

Gasket Sold Separately

ART. NO.	MATERIAL	MAX. PRESSURE (BAR)
10042	Steel Inox	2000
10041	Brass	1500

Instructions

When manually operating high pressure guns and lances the repulsive force on the axis should not exceed 250N! If the repulsive force exceeds 150N, a support / body armour is required!

	< 150 N
	< 250 N
	> 250 N