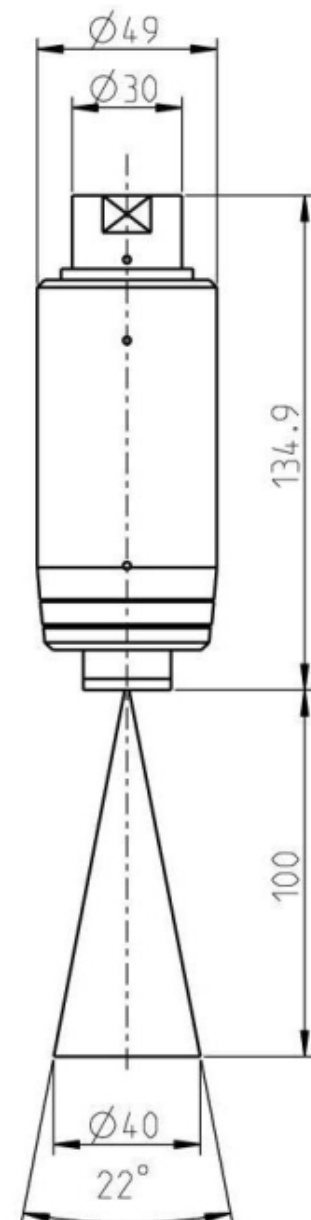


— Monro-Jet F1

Orbital nozzle Monro-Jet F1

MONRO-JET® nozzles combine the high power of the spot jet with the large area output of the flat jet. They can be used with all approved high pressure fittings and can be mounted on lances. The F1 model can be used up to an operating pressure of 1500 bar, and three different connection thread types are available. Thanks to their compact design, MONRO-JET® nozzles can be used for surface treatment and cleaning in both structural and civil engineering applications. **Features and benefits**

- Several times higher cleaning performance
- Consistent jet quality
- Long service life
- Lightweight, robust and reliable
- Easy installation and disassembly
- Swiss Quality



Applications

Nozzles combine the high power of the spot jet with the large area coverage of the flat jet.

- Baked goods
- Offshore applications
- Deburring and cleaning of castings
- Surface treatment
- Concrete removal
- Removal of surface coatings
- Removal of bitumen layers
- Paint removal

Connection thread	ART. NO. (1)
M14x1.5 LH HP	31306.__
M24x1.5 RH	31307.__
9/16"-18" UNF LH HP	31300.__

Specifications



**Operating pressure (bar)
max.**

1500



**Operating temperature (°C)
max.**

100



Rotor Ø (mm)

from 0.60 to 2.80

ART. NR.	Rotor Ø	TREIBROH R Ø	ANZAHL BOHRUNG EN	DRUCK in psi / bar				
				psi7250	psi10875	psi14500	psi18125	psi21750
				bar500	bar750	bar1000	bar1250	bar1500
DURCHFLUSSMENGE in l/min								
31306.0600	0.60	0.60	2	4.508	5.511	6.337	7.057	7.700
31306.0650	0.65	0.65	2	5.235	6.384	7.341	8.175	8.920
31306.0700	0.70	0.70	2	5.348	6.523	7.501	8.352	9.114
31306.0750	0.75	0.70	2	5.990	7.144	8.261	9.199	10.038
31306.0800	0.80	0.70	2	7.354	8.888	10.326	11.499	12.547
31306.0850	0.85	0.80	2	7.907	9.617	11.209	12.482	13.620
31306.0900	0.90	1.00	2	9.880	12.064	13.907	15.486	16.898
31306.0950	0.95	1.00	2	10.676	12.890	15.028	16.735	18.261
31306.1000	1.00	1.20	2	12.537	15.272	17.169	19.119	20.862
31306.1050	1.05	1.20	2	13.578	16.560	19.043	21.205	23.139
31306.1100	1.10	1.40	2	15.384	18.740	21.550	23.997	26.185
31306.1150	1.15	1.40	2	16.385	19.983	22.979	25.589	27.922

ART. NR.	Rotor Ø	TREIBROH R Ø	ANZAHL BOHRUNG EN	DRUCK in psi / bar				
				psi7250	psi10875	psi14500	psi18125	psi21750
				bar500	bar750	bar1000	bar1250	bar1500
DURCHFLUSSMENGE in l/min								
31306.1200	1.20	1.80	2	18.840	23.002	26.451	29.455	32.140
31306.1250	1.25	1.80	2	20.534	24.987	28.733	31.996	34.913
31306.1300	1.30	2.40	2	23.082	28.181	32.406	36.086	39.377
31306.1350	1.35	2.40	2	24.704	29.997	34.495	38.412	41.914
31306.1400	1.40	2.40	2	26.597	32.260	37.097	41.310	45.076
31306.1450	1.45	2.60	2	28.685	34.984	40.229	44.798	48.882
31306.1500	1.50	2.60	2	30.698	37.438	43.052	47.940	52.311
31306.1550	1.55	2.80	2	32.779	39.975	45.970	51.190	55.857
31306.1600	1.60	2.80	2	34.927	42.596	48.983	54.545	59.519
31306.1650	1.65	3.00	2	37.144	45.300	52.092	58.008	63.297
31306.1700	1.70	3.00	2	39.430	48.087	55.297	61.577	67.191
31306.1750	1.75	3.00	2	41.783	50.957	58.598	65.252	71.201
31306.1800	1.80	3.20	2	44.205	53.911	61.994	69.034	75.328
31306.1850	1.85	3.20	2	46.695	56.947	65.486	72.923	79.571
31306.1900	1.90	3.20	2	49.253	60.067	69.074	76.918	83.930
31306.1950	1.95	3.20	2	51.879	63.270	72.757	81.019	88.406
31306.2000	2.00	3.00	4	54.574	66.556	76.536	85.227	92.998
31306.2050	2.05	3.00	4	57.337	69.926	80.411	89.542	97.706
31306.2100	2.10	3.00	4	60.168	73.378	84.381	93.963	102.530
31306.2150	2.15	3.20	4	63.067	76.914	88.447	98.491	107.471
31306.2200	2.20	3.20	4	66.035	80.533	92.609	103.125	112.527
31306.2250	2.25	3.20	4	69.070	84.236	96.866	107.866	117.700
31306.2300	2.30	3.20	4	72.174	88.021	101.219	112.713	122.990
31306.2350	2.35	3.20	4	75.346	91.890	105.668	117.667	128.395
31306.2400	2.40	3.20	4	78.587	95.841	110.212	122.727	133.917
31306.2450	2.45	3.20	4	81.895	99.876	114.852	127.894	139.555
31306.2500	2.50	3.20	4	85.272	103.994	119.588	133.168	145.309
31306.2550	2.55	3.50	4	88.717	108.196	124.419	138.548	151.179

ART. NR.	Rotor Ø	TREIBROH R Ø	ANZAHL BOHRUNG EN	DRUCK in psi / bar				
				psi7250	psi10875	psi14500	psi18125	psi21750
				bar500	bar750	bar1000	bar1250	bar1500
				DURCHFLUSSMENGE in l/min				
31306.2600	2.60	3.50	4	92.230	112.480	129.346	144.034	157.166
31306.2650	2.65	3.50	4	95.812	116.848	134.369	149.627	163.269
31306.2700	2.70	3.50	4	99.461	121.299	139.487	155.327	169.488
31306.2750	2.75	3.50	4	103.179	125.833	144.701	161.133	175.824
31306.2800	2.80	3.50	4	106.965	130.451	150.011	167.045	182.276
31307.0600	0.60	0.60	2	4.508	5.511	6.337	7.057	7.700
31307.0650	0.65	0.65	2	5.235	6.384	7.341	8.175	8.920
31307.0700	0.70	0.70	2	5.348	6.523	7.501	8.352	9.114
31307.0750	0.75	0.70	2	5.990	7.144	8.261	9.199	10.038
31307.0800	0.80	0.70	2	7.354	8.888	10.326	11.499	12.547
31307.0850	0.85	0.80	2	7.907	9.617	11.209	12.482	13.620
31307.0900	0.90	1.00	2	9.880	12.064	13.907	15.486	16.898
31307.0950	0.95	1.00	2	10.676	12.890	15.028	16.735	18.261
31307.1000	1.00	1.20	2	12.537	15.272	17.169	19.119	20.862
31307.1050	1.05	1.20	2	13.578	16.560	19.043	21.205	23.139
31307.1100	1.10	1.40	2	15.384	18.740	21.550	23.997	26.185
31307.1150	1.15	1.40	2	16.385	19.983	22.979	25.589	27.922
31307.1200	1.20	1.80	2	18.840	23.002	26.451	29.455	32.140
31307.1250	1.25	1.80	2	20.534	24.987	28.733	31.996	34.913
31307.1300	1.30	2.40	2	23.082	28.181	32.406	36.086	39.377
31307.1350	1.35	2.40	2	24.704	29.997	34.495	38.412	41.914
31307.1400	1.40	2.40	2	26.597	32.260	37.097	41.310	45.076
31307.1450	1.45	2.60	2	28.685	34.984	40.229	44.798	48.882
31307.1500	1.50	2.60	2	30.698	37.438	43.052	47.940	52.311
31307.1550	1.55	2.80	2	32.779	39.975	45.970	51.190	55.857
31307.1600	1.60	2.80	2	34.927	42.596	48.983	54.545	59.519
31307.1650	1.65	3.00	2	37.144	45.300	52.092	58.008	63.297
31307.1700	1.70	3.00	2	39.430	48.087	55.297	61.577	67.191

ART. NR.	Rotor Ø	TREIBROH R Ø	ANZAHL BOHRUNG EN	DRUCK in psi / bar				
				psi7250	psi10875	psi14500	psi18125	psi21750
				bar500	bar750	bar1000	bar1250	bar1500
				DURCHFLUSSMENGE in l/min				
31307.1750	1.75	3.00	2	41.783	50.957	58.598	65.252	71.201
31307.1800	1.80	3.20	2	44.205	53.911	61.994	69.034	75.328
31307.1850	1.85	3.20	2	46.695	56.947	65.486	72.923	79.571
31307.1900	1.90	3.20	2	49.253	60.067	69.074	76.918	83.930
31307.1950	1.95	3.20	2	51.879	63.270	72.757	81.019	88.406
31307.2000	2.00	3.00	4	54.574	66.556	76.536	85.227	92.998
31307.2050	2.05	3.00	4	57.337	69.926	80.411	89.542	97.706
31307.2100	2.10	3.00	4	60.168	73.378	84.381	93.963	102.530
31307.2150	2.15	3.20	4	63.067	76.914	88.447	98.491	107.471
31307.2200	2.20	3.20	4	66.035	80.533	92.609	103.125	112.527
31307.2250	2.25	3.20	4	69.070	84.236	96.866	107.866	117.700
31307.2300	2.30	3.20	4	72.174	88.021	101.219	112.713	122.990
31307.2350	2.35	3.20	4	75.346	91.890	105.668	117.667	128.395
31307.2400	2.40	3.20	4	78.587	95.841	110.212	122.727	133.917
31307.2450	2.45	3.20	4	81.895	99.876	114.852	127.894	139.555
31307.2500	2.50	3.20	4	85.272	103.994	119.588	133.168	145.309
31307.2550	2.55	3.50	4	88.717	108.196	124.419	138.548	151.179
31307.2600	2.60	3.50	4	92.230	112.480	129.346	144.034	157.166
31307.2650	2.65	3.50	4	95.812	116.848	134.369	149.627	163.269
31307.2700	2.70	3.50	4	99.461	121.299	139.487	155.327	169.488
31307.2750	2.75	3.50	4	103.179	125.833	144.701	161.133	175.824
31307.2800	2.80	3.50	4	106.965	130.451	150.011	167.045	182.276
31300.0600	0.60	0.60	2	4.508	5.511	6.337	7.057	7.700
31300.0650	0.65	0.65	2	5.235	6.384	7.341	8.175	8.920
31300.0700	0.70	0.70	2	5.348	6.523	7.501	8.352	9.114
31300.0750	0.75	0.70	2	5.990	7.144	8.261	9.199	10.038
31300.0800	0.80	0.70	2	7.354	8.888	10.326	11.499	12.547
31300.0850	0.85	0.80	2	7.907	9.617	11.209	12.482	13.620

ART. NR.	Rotor Ø	TREIBROH R Ø	ANZAHL BOHRUNG EN	DRUCK in psi / bar				
				psi7250	psi10875	psi14500	psi18125	psi21750
				bar500	bar750	bar1000	bar1250	bar1500
				DURCHFLUSSMENGE in l/min				
31300.0900	0.90	1.00	2	9.880	12.064	13.907	15.486	16.898
31300.0950	0.95	1.00	2	10.676	12.890	15.028	16.735	18.261
31300.1000	1.00	1.20	2	12.537	15.272	17.169	19.119	20.862
31300.1050	1.05	1.20	2	13.578	16.560	19.043	21.205	23.139
31300.1100	1.10	1.40	2	15.384	18.740	21.550	23.997	26.185
31300.1150	1.15	1.40	2	16.385	19.983	22.979	25.589	27.922
31300.1200	1.20	1.80	2	18.840	23.002	26.451	29.455	32.140
31300.1250	1.25	1.80	2	20.534	24.987	28.733	31.996	34.913
31300.1300	1.30	2.40	2	23.082	28.181	32.406	36.086	39.377
31300.1350	1.35	2.40	2	24.704	29.997	34.495	38.412	41.914
31300.1400	1.40	2.40	2	26.597	32.260	37.097	41.310	45.076
31300.1450	1.45	2.60	2	28.685	34.984	40.229	44.798	48.882
31300.1500	1.50	2.60	2	30.698	37.438	43.052	47.940	52.311
31300.1550	1.55	2.80	2	32.779	39.975	45.970	51.190	55.857
31300.1600	1.60	2.80	2	34.927	42.596	48.983	54.545	59.519
31300.1650	1.65	3.00	2	37.144	45.300	52.092	58.008	63.297
31300.1700	1.70	3.00	2	39.430	48.087	55.297	61.577	67.191
31300.1750	1.75	3.00	2	41.783	50.957	58.598	65.252	71.201
31300.1800	1.80	3.20	2	44.205	53.911	61.994	69.034	75.328
31300.1850	1.85	3.20	2	46.695	56.947	65.486	72.923	79.571
31300.1900	1.90	3.20	2	49.253	60.067	69.074	76.918	83.930
31300.1950	1.95	3.20	2	51.879	63.270	72.757	81.019	88.406
31300.2000	2.00	3.00	4	54.574	66.556	76.536	85.227	92.998
31300.2050	2.05	3.00	4	57.337	69.926	80.411	89.542	97.706
31300.2100	2.10	3.00	4	60.168	73.378	84.381	93.963	102.530
31300.2150	2.15	3.20	4	63.067	76.914	88.447	98.491	107.471
31300.2200	2.20	3.20	4	66.035	80.533	92.609	103.125	112.527
31300.2250	2.25	3.20	4	69.070	84.236	96.866	107.866	117.700

ART. NR.	Rotor Ø	TREIBROH R Ø	ANZAHL BOHRUNG EN	DRUCK in psi / bar				
				psi7250	psi10875	psi14500	psi18125	psi21750
				bar500	bar750	bar1000	bar1250	bar1500
				DURCHFLUSSMENGE in l/min				
31300.2300	2.30	3.20	4	72.174	88.021	101.219	112.713	122.990
31300.2350	2.35	3.20	4	75.346	91.890	105.668	117.667	128.395
31300.2400	2.40	3.20	4	78.587	95.841	110.212	122.727	133.917
31300.2450	2.45	3.20	4	81.895	99.876	114.852	127.894	139.555
31300.2500	2.50	3.20	4	85.272	103.994	119.588	133.168	145.309
31300.2550	2.55	3.50	4	88.717	108.196	124.419	138.548	151.179
31300.2600	2.60	3.50	4	92.230	112.480	129.346	144.034	157.166
31300.2650	2.65	3.50	4	95.812	116.848	134.369	149.627	163.269
31300.2700	2.70	3.50	4	99.461	121.299	139.487	155.327	169.488
31300.2750	2.75	3.50	4	103.179	125.833	144.701	161.133	175.824
31300.2800	2.80	3.50	4	106.965	130.451	150.011	167.045	182.276

Instruction

When using high-pressure spray guns and lances manually, the recoil force to be absorbed in the longitudinal axis of the spraying device must not exceed 250N! If the recoil force exceeds 150N, a body support must be used!

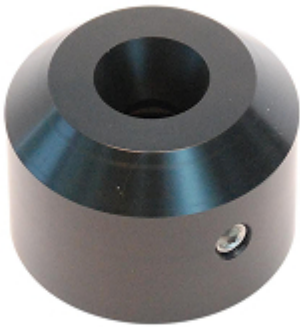
	< 150 N
	< 250 N
	> 250 N

Accessories



Assembly tool

Art. No. 10269



Plastic protective cap

Art. No. 31857

FAQ

1. What is the special advantage of MONRO-JET® nozzle technology?

MONRO-JET® nozzles combine the best of both worlds: They combine the high, punctual power of a spot jet with the large area performance of a flat jet. This allows you to achieve a cleaning performance that is several times higher while maintaining a constant jet quality - ideal for efficient work on large surfaces and precise processing in a single pass.

2. What pressures and temperatures is the MONRO-JET® F1 designed for?

The nozzle is designed for extreme operating conditions. It can be operated continuously at a maximum operating pressure of 1500 bar and at a maximum operating temperature of 100°C. This makes it ideal for demanding high-pressure cleaning and surface treatment.

3. In which areas can I use the MONRO-JET® F1?

Thanks to its robust design and performance, the F1 is extremely versatile. It is suitable for both building construction (e.g. paint removal, concrete removal) and civil engineering (e.g. removal of bitumen layers). Other typical applications include the deburring of castings, cleaning in the offshore sector and general surface treatment and coating removal.

4. Which connection threads are available for the MONRO-JET® F1?

To ensure maximum compatibility with different high-pressure systems, the F1 is available with three different connection thread types:

- M14x1.5 LH HP (left-hand thread)
- M24x1.5 RH (right-hand thread)
- 9/16"-18" UNF LH HP (American left-hand thread)

5. How do I find the right nozzle for my required flow rate?

The MONRO-JET® F1 offers a wide range of rotor diameters from 0.60 mm to 2.80 mm. The flow rate varies depending on the selected rotor and operating pressure. You can use our detailed table for each item (e.g. 31306, 31307) to find out the exact flow rate in liters per minute for pressures from 500 to 1500 bar. You are guaranteed to find the optimum nozzle for your pump performance.