



Flat Spray Ceramic Insert Nozzles

Models 30351-33384

FEATURES

- Ceramic insert is semi-fired, then machined, then final fired, offering an extremely close tolerance orifice.
- Precise machining of orifice eliminates microscopic roughness in bore leaving an extremely hard, polished surface.
- High Pressure flat spray angles available in 0°, 25° and 40° are ideal for chemical injection and other specialized cleaning needs.
- Brass or special 303SS case offers added durability at 3000 PSI and corrosion resistance for application diversity.

PROPER NOZZLE SELECTION

- Determine the pump RPM and resulting flow.
- Determine the desired system pressure.
- Determine the amount of by-pass required from regulating device (usually 5-10% of rated capacity.)
- **Deduct the minimum by-pass amount from the desired system flow** and select your nozzle from the chart.
- Determine spray angle best for the application and desired cleaning result.
- Check the pressure at the pump before commencing operation.
- Do not adjust regulating device for worn nozzle.
Replace nozzle commensurate with use.



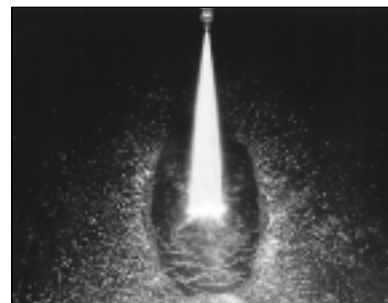
High Pressure Nozzle Spray

Provides a flat, consistent, distribution with gradually tapered edges to assure uniformity of overlap spray in multiple nozzle installations.



High Flow Nozzle Spray

Delivers an abundant, flat, rather coarse, evenly distributed atomizing spray for large surface coverage.



Descaler Nozzle Spray

Offers a flat, non-atomizing surface impingement with a razor sharp, scraping effect.

“Customer confidence is our greatest asset”

HI-PRESSURE - Ceramic 1/4" M					FLOW RATE DATA - GALLONS OF WATER PER MINUTE, STEADY FLOW, AT PSI SHOWN											
P.N.	SIZE	ANGLE	METRIC	MATL	PSI	200	300	400	500	600	700	800	900	1000	1500	2000
30351	2.0	0°	25	BB	0.4	0.43	0.57	0.71	0.77	0.80	0.89	0.90	1.0	1.2	1.4	
30356	3.0	25°	2537	BB	0.7	0.8	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.8	2.1	
30357	3.0	40°	4037	BB	0.7	0.8	1.0	1.1	1.2	1.3	1.3	1.4	1.54	1.8	2.1	
30360	4.0	25°	2549	BB	1.0	1.1	1.3	1.4	1.6	1.7	1.8	1.9	2.0	2.5	2.8	
30361	4.0	40°	4049	BB	1.0	1.1	1.3	1.4	1.6	1.7	1.8	1.9	2.0	2.5	2.8	
30364	4.5	25°	2556	BB	1.0	1.2	1.4	1.6	1.7	1.9	2.0	2.1	2.3	2.8	3.2	
30365	4.5	40°	4056	BB	1.0	1.2	1.4	1.6	1.7	1.9	2.0	2.1	2.3	2.8	3.2	
30367	5.0	25°	2562	BB	1.1	1.4	1.6	1.8	1.9	2.1	2.2	2.4	2.5	3.1	3.5	
30368	5.0	40°	4062	BB	1.1	1.4	1.6	1.8	1.9	2.1	2.2	2.4	2.5	3.1	3.5	
30372	5.5	25°	2568	BB	1.2	1.5	1.7	2.0	2.1	2.3	2.5	2.6	2.8	3.4	3.9	
30373	5.5	40°	4068	BB	1.2	1.5	1.7	2.0	2.1	2.3	2.5	2.6	2.8	3.4	3.9	
30374	6.0	25°	2574	BB	1.3	1.6	1.9	2.1	2.3	2.5	2.7	2.9	3.0	3.7	4.2	
30369	6.0	40°	4074	BB	1.3	1.6	1.9	2.1	2.3	2.5	2.7	2.9	3.0	3.7	4.2	
30370	7.0	25°	2587	BB	1.6	1.9	2.2	2.5	2.7	2.9	3.1	3.3	3.5	4.3	4.9	
30371	7.0	40°	4087	BB	1.6	1.9	2.2	2.5	2.7	2.9	3.1	3.3	3.5	4.3	4.9	
30380	8.0	0°	—	BB	1.8	2.2	2.5	2.8	3.1	3.4	3.6	3.8	4.0	4.9	5.7	
30381	8.0	25°	2599	BB	1.8	2.2	2.5	2.8	3.1	3.4	3.6	3.8	4.0	4.9	5.7	
30390	9.0	25°	2511	BB	2.0	2.5	2.9	3.2	3.5	3.8	4.0	4.3	4.5	5.5	6.4	
30392	10.0	25°	25124	BB	2.2	2.7	3.2	3.5	3.9	4.2	4.5	4.8	5.0	6.1	7.1	
30395	10.0	40°	40124	BB	2.2	2.7	3.2	3.5	3.9	4.2	4.5	4.8	5.0	6.1	7.1	
30393	15.0	40°	4059	BB	3.4	4.1	4.7	5.3	5.8	6.4	6.8	7.2	7.5	9.2	10.6	
30394	20.0	40°	4078	BB	4.5	5.5	6.3	7.1	7.8	8.4	9.0	9.5	10.0	12.2	14.2	
LO-PRESSURE - Ceramic 1/4" M					FLOW RATE DATA - GALLONS OF WATER PER MINUTE, STEADY FLOW, AT PSI SHOWN											
P.N.	SIZE	ANGLE	METRIC	MATL	PSI	100	150	200	250	300	350	400	450			
30393	15.0	40°	4059	BB		2.4	2.9	3.4	3.8	4.1	4.4	4.7	5.0			
30394	20.0	40°	4078	BB		3.2	3.9	4.5	5.0	5.5	5.9	6.3	6.7			
HI-PRESSURE - Ceramic 1/4" M					FLOW RATE DATA - GALLONS OF WATER PER MINUTE, STEADY FLOW, AT PSI SHOWN											
P.N.	SIZE	ANGLE	METRIC	MATL	PSI	1200	1500	1800	2000	2500	2800	3000				
33381	5.5	0°	68	BB		3.0	3.4	3.7	3.9	4.4	4.6	4.8				
33382	5.5	15°	1568	S		3.0	3.4	3.7	3.9	4.4	4.6	4.8				
33384	5.5	40°	4068	S		3.0	3.4	3.7	3.9	4.4	4.6	4.8				
HIGH FLOW - Ceramic 1/4" M					FLOW RATE DATA - GALLONS OF WATER PER MINUTE, STEADY FLOW, AT PSI SHOWN											
P.N.	SIZE	ANGLE	METRIC	MATL	PSI	100	250	500	600	700	800	1000	1200			
30751	15.0	25°	2559	BB		2.37	3.75	5.30	5.81	6.27	6.71	7.50	8.21			
30752	20.0	25°	2578	BB		3.20	5.00	7.10	7.80	8.40	9.00	10.0	10.8			
30753	30.0	25°	25117	BB		4.74	7.50	10.6	11.6	12.5	13.4	15.0	16.4			
30754	40.0	25°	25157	BB		6.32	10.00	14.14	15.49	16.73	17.89	20.00	21.91			
HIGH FLOW - Ceramic 3/8" M					FLOW RATE DATA - GALLONS OF WATER PER MINUTE, STEADY FLOW, AT PSI SHOWN											
P.N.	SIZE	ANGLE	METRIC	MATL	PSI	100	250	500	600	700	800	1000	1200			
30755	50.0	25°	25195	BB		7.91	12.5	17.68	19.36	20.92	22.36	25.00	27.39			
30756	60.0	25°	25235	BB		10.28	16.25	22.98	25.17	27.19	29.07	32.50	35.60			
30757	70.0	25°	25274	BB		11.07	17.50	24.75	27.11	29.28	31.30	35.00	38.34			

Material Codes: BB=Brass S=303SS

Products described hereon are covered by one or more of the following U.S. patents 3558244, 3652188, 3809508, 3920356, 3930756 and 5035580

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