

HydroWhirl® S

Tank Washing - Slotted Spray Nozzle

DESIGN FEATURES

- Cleans more quickly, and uses less water, spray media, or fluid and lower pressure than static tank washers
- Surface finish of 0.8 µm (microns) R_a or better: ideal for sanitary applications
- Laser-welded design for durability
- Stainless steel construction – corrosion-resistant material
- Connections: threaded, clip-on, and welded
- Made from FDA compliant materials for use in Clean-In-Place (CIP) applications

SPRAY CHARACTERISTICS

- Self-cleaning bearings
- Vigorous moving spray action
- Spray Angles: 360°, 90° Down*, 180° Up*, 180° Down, 270° Up, 270° Down, *Not available in all flow rates.

Flow rates: 1.26 to 90.9 gpm

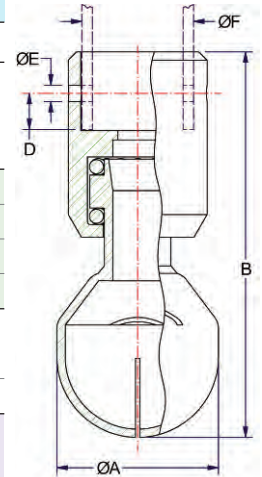
All HydroWhirl S nozzles are available with ATEX approval for Zone 0.



STANDARD CONNECTION SIZES Additional connection sizes available on request

Connection Type	Nozzle Number														
	HWS-20-3 HWS-20-4 HWS-20		HWS-30-5 HWS-30-6 HWS-30		HWS-40-7.5 HWS-40-8 HWS-40-9 HWS-40			HWS-40HF-11 HWS-40HF		HWS-50-16 HWS-50					
FNPT/G	-	1/4"	-	-	1/2"	-	1/2"	-	1"	-	-	-			
Pipe Clip On	1/8"	-	-	3/8"	-	-	3/4"	-	-	3/4"	-	-	1-1/4"	1-1/2"	-
Pipe Weld	-	1/4"	1/4"	-	1/2"	1/2"	-	1"	1/2"	-	1"	1"	-	-	2"
Dim F (in)	0.41	0.54	0.54	0.68	0.84	0.84	1.05	1.32	0.84	1.05	1.32	1.32	1.66	1.90	2.38
Tube Clip On	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tube Weld	3/8"	1/2"	3/8"	1/2"	3/4"	3/4"	1"	-	3/4"	1"	-	1"	1-1/4"	1-1/2"	2"
Dim F (in)	0.38	0.50	0.38	0.5	0.75	0.75	1.00	-	0.75	1.00	-	1.00	1.25	1.5	2.00
DIN Clip On**	DN8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIN Weld**	-	DN10	DN10	DN15	-	DN15	DN20	DN25	-	DN15	DN20	DN25	DN40	DN50	-
Dim F (mm)	10	13	13	19	19	23	29	-	19	23	29	-	41	53	-

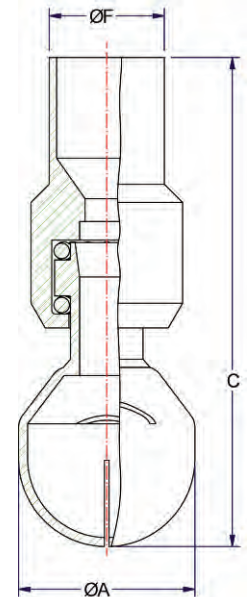
Optimal cleaning performance achieved between 30-50 PSI; maximum operating pressure is 150 PSI.



Threaded and Clip On Connections

HydroWhirl S Flow Rates* and Dimensions

Nozzle Number	GALLONS PER MINUTE @PSI						Dimensions (in)					Wt (oz)	Coverage Diameter (ft) @40 PSI
	10 PSI	20 PSI	30 PSI	40 PSI	50 PSI	60 PSI	A	B (NPT) B (G)	C	D (MAX)	E		
HWS-20-3	1.26	1.63	1.89	2.10	2.28	2.44	0.66	1.68	2.72	0.15	.086	0.88	4.9
HWS-20-4	2.14	2.79	3.26	3.64	3.97	4.26		1.96					
HWS-20	3.16	4.31	5.45	6.41	7.16	7.83		-					
HWS-30-5	2.31	3.29	4.12	4.80	5.37	5.88	1.1	2.38	3.28	0.21	.086	3.28	8
HWS-30-6	5.54	6.97	7.98	8.78	9.46	10.1		2.62					
HWS-30	5.70	8.10	9.96	11.5	12.9	14.3		-					
HWS-40-7.5	5.60	7.87	9.60	11.1	12.4	13.6	1.53	3.65	4.25	0.35	.156	10.8	11
HWS-40-8	6.39	8.96	10.9	12.6	14.1	15.4		3.94					
HWS-40-9	7.94	11.3	13.9	16.0	17.8	19.6		-					
HWS-40	9.08	13.1	16.1	18.3	20.3	22.2	-	-	-	-	-	-	-
HWS-40HF-11	12.2	17.1	20.8	24.1	26.9	29.4	1.53	3.65	4.25	0.35	.156	10.6	13
HWS-40HF	15.0	21.3	26.0	29.7	32.6	35.4		3.94					
HWS-50-16	24.2	33.8	41.4	47.8	53.4	58.5	2.72	6.21	7.09	0.35	.219	53.8	18
HWS-50	37.2	52.4	64.1	74.2	82.9	90.9		6.47					



Weld On Connections

Standard Materials: Nozzle: 316L Stainless Steel; Ball Bearings: 316 Stainless Steel

*Flow rates represent threaded connections with a 360° spray angle.

**Flow rates may vary for other connection types and spray angles.

**Per DIN 11866 Part A)