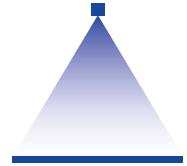


Disc type tips Series 690

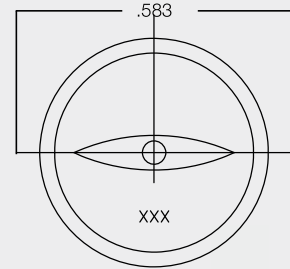


Features:

- Excellent for inexpensive headers with minimal clearance
- Orifices thread directly into pipe wall without any protrusion

Applications:

- Belt washing
- Web coating
- Spray washing of products on conveyors



Series 690

Spray angle at 40 psi	Ordering number	Material	Bore diameter (in.)	V̇ water [gal/min]								
				p [psi]								
				10 psi	20 psi	30 psi	liters per minute 2 bar	40 psi	60 psi	80 psi	100 psi	150 psi
0°	690.340	●	.031	-	-	-	-	0.16	0.19	0.22	0.25	0.30
	690.360	●	.040	-	-	0.21	0.80	0.25	0.29	0.34	0.38	0.46
	690.400	●	.046	-	0.22	0.27	1.00	0.31	0.38	0.44	0.49	0.60
	690.490	●	.032	0.26	0.37	0.46	1.70	0.53	0.65	0.75	0.83	1.02
	690.570	●	.076	0.40	0.57	0.70	2.60	0.81	0.99	1.14	1.28	1.56
690.650	●	.093	0.65	0.92	1.13	4.20	1.30	1.60	1.84	2.06	2.52	
35°	690.402	●	.046	-	0.22	0.27	1.00	0.31	0.38	0.44	0.49	0.60
	690.492	●	.062	0.26	0.37	0.46	1.70	0.53	0.65	0.75	0.83	1.02
	690.572	●	.076	0.40	0.57	0.70	2.60	0.81	0.99	1.14	1.28	1.56
	690.712	●	.111	0.92	1.29	1.59	5.90	1.83	2.24	2.59	2.89	3.54
	690.752	●	.125	1.19	1.69	2.07	7.70	2.39	2.93	3.38	3.78	4.63
690.872	●	.187	2.33	3.29	4.03	15.0	4.65	5.70	6.58	7.36	9.01	
50°	690.403	●	.046	-	0.22	0.27	1.00	0.31	0.38	0.44	0.49	0.60
	690.493	●	.062	0.26	0.37	0.46	1.70	0.53	0.65	0.75	0.83	1.02
	690.573	●	.076	0.40	0.57	0.70	2.60	0.81	0.99	1.14	1.28	1.56
	690.713	●	.111	0.92	1.29	1.59	5.90	1.83	2.24	2.59	2.89	3.54
	690.813	●	.156	1.19	1.69	2.07	7.70	2.39	2.93	3.38	3.78	4.63
	690.873	●	.187	2.33	3.29	4.03	15.0	4.65	5.70	6.58	7.36	9.01
	690.953	●	.218	3.52	4.98	6.10	22.7	7.04	8.62	9.96	11.13	13.64
	690.993	●	.250	4.73	6.69	8.19	30.5	9.46	11.59	13.38	14.96	18.32
65°	690.374**	●	.040	-	-	0.21	0.80	0.23	.28	0.32	0.36	0.44
	690.404	●	.046	-	0.22	0.27	1.00	0.31	0.38	0.44	0.49	0.60
	690.494	●	.062	0.26	0.37	0.46	1.70	0.53	0.65	0.75	0.83	1.02
	690.574*	●	.076	0.40	0.57	0.70	2.60	0.81	0.99	1.14	1.28	1.56
	690.714	●	.111	0.92	1.29	1.59	5.90	1.83	2.24	2.59	2.89	3.54
	690.754**	●	.125	1.19	1.69	2.07	7.70	2.39	2.93	3.38	3.78	4.63
	690.814**	●	.156	1.61	2.28	2.79	10.4	3.23	3.95	4.56	5.10	6.25
	690.874	●	.187	2.33	3.29	4.03	15.0	4.65	5.70	6.58	7.36	9.01
690.954	●	.218	3.52	4.98	6.10	22.7	7.04	8.62	9.96	11.13	13.64	
80°	690.345	●	.031	-	-	-	-	0.23	0.28	0.32	0.36	0.44
	690.405***	●	.046	-	0.22	0.27	1.00	0.31	0.38	0.44	0.49	0.60
	690.495	●	.062	0.26	0.37	0.46	1.70	0.53	0.65	0.75	0.83	1.02
	690.575	●	.076	0.40	0.57	0.70	2.60	0.81	0.99	1.14	1.28	1.56
	690.655	●	.093	0.65	0.92	1.13	4.20	1.30	1.60	1.84	2.06	2.52
	690.715	●	.111	0.92	1.29	1.59	5.90	1.83	2.24	2.59	2.89	3.54
	690.755	●	.125	1.19	1.69	2.07	7.70	2.39	2.93	3.38	3.78	4.63
	690.815	●	.156	1.61	2.28	2.79	10.4	3.23	3.95	4.56	5.10	6.25
	690.875	●	.187	2.33	3.29	4.03	15.0	4.65	5.70	6.58	7.36	9.01

¹ We reserve the right to supply material 316Ti or 316L under material no. 17.

Tungsten carbide available upon request

* 60° spray angle

** 70° spray angle

*** 75° spray angle



Assembly accessories can be found in Chapter 12 "Accessories".

Conversion formula for this series: $\dot{V}_2 = \dot{V}_1 \cdot \sqrt{\frac{p_2}{p_1}}$

Ordering example: Type 690.345 + Material code 17 = Ordering no. 690.345.17

