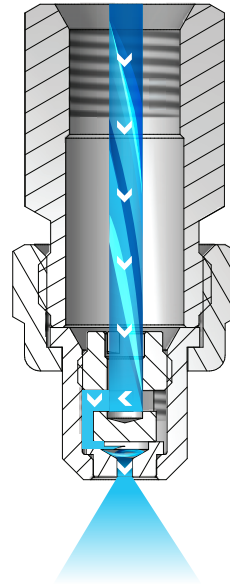


OVERVIEW: UNIJET

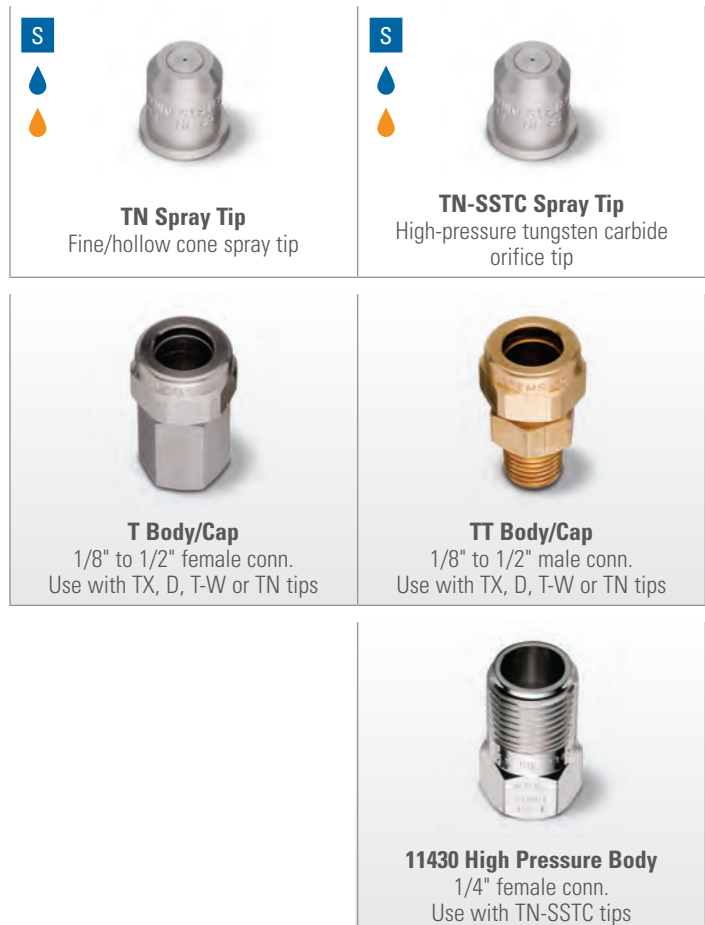
- Quick-connect nozzles reduce maintenance time – bodies remain on pipe/header
- Save on nozzle replacement costs – bodies can be reused, only spray tips are replaced; tips fit on male or female bodies
- Hollow cone spray pattern with a circular impact area
- Excellent atomization at relatively low pressures
- Spray angles: Standard – 13° to 114°, Wide – 130° to 140°
- Uniform spray distribution from 3.6 to 4,920 gph (13.2 to 17,760 lph)
- Operating pressures up to 400 psi (25 bar)
- Orifice inserts, cores and strainers are easily removed for inspection or cleaning
- TN versions provide very fine atomized sprays using liquid pressure alone; compressed air not required
 - Spray angles: Standard – 43° to 91°
 - Uniform spray distribution from .82 to 184 gph (3.1 to 701 lph)
 - Operating pressures up to 2000 psi (140 bar)



UniJet TX, D and TN Nozzles

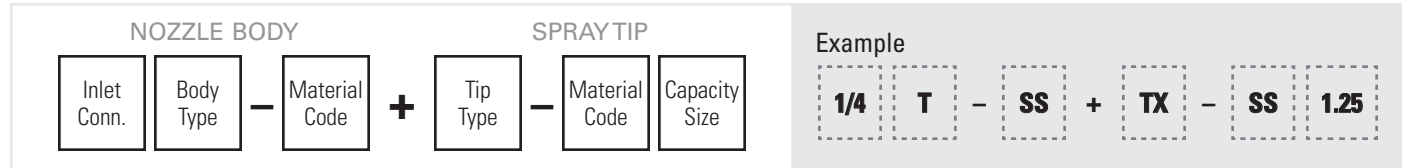
As the liquid passes through the nozzle, it is forced to pass through slots in the orifice. These slots make the liquid spin in a circle at a high speed as it exits the orifice, creating the hollow cone pattern.

UNIJET OPTIONS



ORDERING INFORMATION

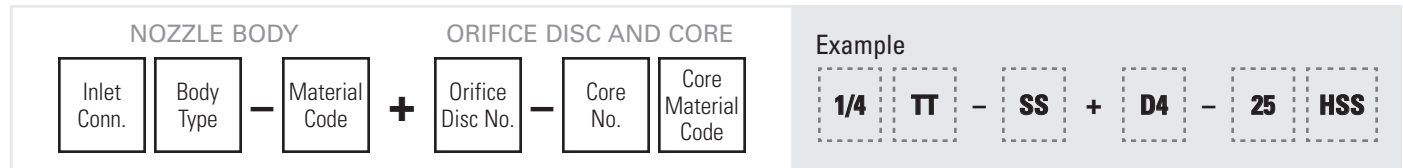
UNIJET



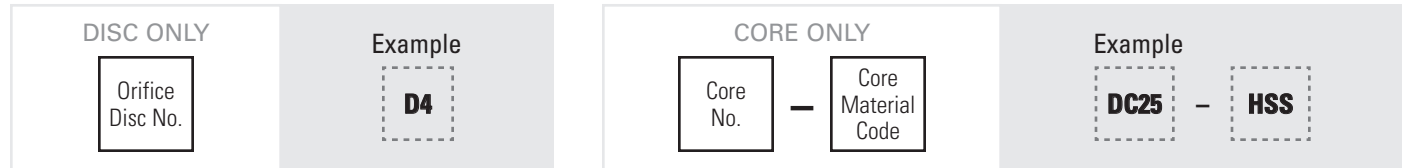
UniJet nozzle assemblies include a pre-sized wire mesh based on orifice diameter. When ordering just a UniJet spray tip, the mesh is not included. See Accessories, page F6 for a mesh selection guide and ordering information.

BSPT connections require the addition of a "B" prior to the nozzle body inlet connection.

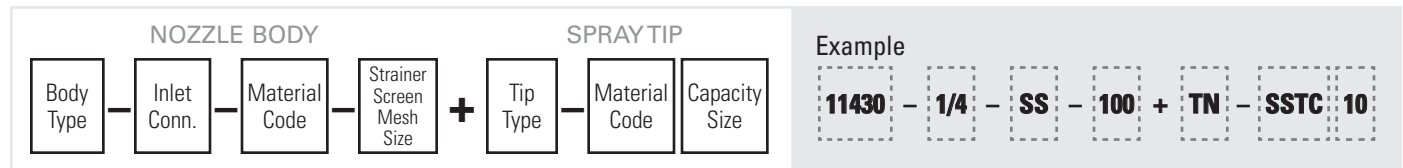
UNIJET – DISC AND CORE TYPE



BSPT connections require the addition of a "B" prior to the nozzle body inlet connection.



UNIJET HIGH PRESSURE



BSPT connections require the addition of a "B" prior to the nozzle body inlet connection.

QUICK REFERENCE GUIDE

Model	Connection	Connection Size (in.)	Materials	Page Number	
				Performance Data	Dimensions and Weights
T body	F	1/8 to 1/2	Brass, 303 stainless steel (SS)	—	D26
TT body	M			—	
11430 body	F	1/4	303 stainless steel (SS)	—	
TX spray tip	NA	NA	Brass, 303 stainless steel (SS)	D22	
D spray tip	NA	NA	Brass, 303 stainless steel (SS), Hardened stainless steel (HSS)	D23–D24	
T-W spray tip	NA	NA	Brass, 303 stainless steel (SS)	D22	
TN spray tip	NA	NA		D25	
TN-SSTC spray tip	NA	NA	303 stainless steel with tungsten carbide orifice (SSTC)	D25–D26	

F = female thread; M = male thread; NA = not applicable. There is no material code for brass. Leave material code blank when ordering. Other materials available upon request. For more dimensions and sizes, contact your sales engineer.

RELATIVE DROP SIZE
IN MICRONS

10 to 100

100 to 500

500 to 1000

1000 to 5000

Drop size will vary based on flow rate and pressure.



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อ. บางพลี จ. สมุทรปราการ 10540



S PERFORMANCE DATA:
STANDARD ANGLE SPRAY

Body Inlet Conn. (in.)	UniJet Tip Type	Capacity Size	Inlet Openings (mm)	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per hour)										Spray Angle (°)	
	TX				1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	10 bar	15 bar	25 bar	1.5 bar	3 bar	
1/4	●	.60	One .30 x .25	.36	—	—	—	2.7	3.4	3.6	4.3	5.3	6.8	—	—	
	●	1	One .41 x .38	.51	—	3.2	3.9	4.6	5.6	6.0	7.2	8.8	11.4	—	54	
	●	1.25	One .51 x .51	.56	—	4.0	4.9	5.7	7.0	7.5	9.0	11.0	14.2	—	59	
	●	1.5	One .61 x .51	.61	—	4.8	5.9	6.8	8.4	9.0	10.8	13.2	17.1	—	63	
	●	2	One .71 x .61	.71	5.6	6.4	7.9	9.1	11.2	12.1	14.4	17.7	23	40	68	
	●	2.5	One .76 x .74	.79	7.0	8.1	9.9	11.4	14.0	15.1	18.0	22	28	48	70	
	●	3	One .91 x .86	.86	8.4	9.7	11.8	13.7	16.8	18.1	22	26	34	57	72	
	●	4	One 1.0 x .86	1.0	11.2	12.9	15.8	18.2	22	24	29	35	46	61	73	
	●	5	Two .81 x .81	1.1	14.0	16.1	19.7	23	28	30	36	44	57	63	73	
	●	6	Two 1.0 x .81	1.2	16.8	19.3	24	27	34	36	43	53	68	65	74	
	●	8	Two 1.0 x .91	1.4	22	26	32	36	45	48	58	71	91	66	74	
	●	10	Two 1.3 x .76	1.5	28	32	39	46	56	60	72	88	114	68	75	
	●	12	Two 1.3 x .86	1.7	34	39	47	55	67	72	86	106	137	69	76	
	●	14	Two 1.4 x .86	1.8	39	45	55	64	78	84	101	124	160	70	76	
	●	18	Two 1.5 x .79	2.0	50	58	71	82	101	109	130	159	205	71	77	
	●	22	Two 1.7 x .76	2.2	61	71	87	100	123	133	159	194	251	71	78	
	●	26	Two 1.7 x .76	2.4	73	84	103	119	145	157	187	230	296	72	78	

Spray angle of all above tips is 80° at 100 psi (7 bar).

Other body types may be available. Contact your sales engineer for more information.

Highlighted column shows the rated pressure.

W PERFORMANCE DATA:
WIDE ANGLE SPRAY

Body Inlet Conn. (in.)	UniJet Tip Type	Capacity Size	Inlet Openings (mm)	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per hour)								Spray Angle (°)		
	T-W				0.7 bar	1 bar	1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	1.5 bar	3 bar	6 bar
1/4	●	T2W	Two .41 x .38	.79	—	—	5.6	6.4	7.9	9.1	11.2	12.1	130	140	136
	●	T3W	Two .51 x .48	.99	—	6.8	8.4	9.7	11.8	13.7	16.8	18.1	138	140	137
	●	T4W	Two .61 x .53	1.1	—	9.1	11.2	12.9	15.8	18.2	22	24	140	140	138
	●	T5W	Two .71 x .69	1.3	9.5	11.4	14.0	16.1	19.7	23	28	30	140	140	138
	●	T6W	Two .81 x .66	1.4	11.4	13.7	16.8	19.3	24	27	34	36	140	140	138
	●	T8W	Two .91 x .74	1.6	15.3	18.2	22	26	32	36	45	48	140	140	136
	●	T10W	Two 1.0 x .76	1.8	19.1	23	28	32	39	46	56	60	140	140	136
	●	T12W	Two 1.1 x .74	2.0	23	27	34	39	47	55	67	72	140	140	136

Other body types may be available. Contact your sales engineer for more information.

Highlighted column shows the rated pressure.



**S PERFORMANCE DATA:
STANDARD ANGLE SPRAY**

Body Inlet Conn. (in.)	UniJet Tip Type	Orifice Disc No. – Core No.	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)		
	D			0.7 bar	1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	10 bar	15 bar	20 bar	1.5 bar	3 bar	6 bar
1/4	●	D1-13	.79	–	–	.22	.26	.29	.34	.37	.43	.50	.57	–	51	62
	●	D1.5-13	.91	–	.17	.25	.29	.33	.39	.42	.48	.56	.63	38	55	66
	●	D2-13	1.0	–	.20	.29	.33	.37	.44	.48	.53	.63	.70	49	67	72
	●	D3-13	1.2	–	.21	.30	.35	.41	.48	.52	.59	.68	.77	53	70	75
	●	D4-13	1.6	.27	.38	.40	.47	.53	.63	.68	.76	.89	1.0	69	79	83
	●	D1-23	.79	–	–	.24	.28	.32	.38	.41	.46	.54	.61	–	47	58
	●	D1.5-23	.91	–	.19	.28	.34	.39	.46	.50	.58	.69	.78	34	51	62
	●	D2-23	1.0	–	.25	.37	.43	.49	.57	.62	.70	.83	.93	51	63	70
	●	D3-23	1.2	.25	.35	.39	.46	.52	.62	.67	.78	.93	1.1	58	69	75
	●	D4-23	1.6	.32	.45	.51	.61	.70	.83	.90	1.1	1.3	1.4	68	82	87
	●	D5-23	2.0	.37	.52	.59	.72	.82	.98	1.1	1.3	1.5	1.7	79	89	94
	●	D6-23	2.4	.42	.59	.69	.83	.95	1.2	1.3	1.5	1.8	2.0	84	93	98
	●	D1-25	.79	–	–	.33	.40	.45	.54	.58	.69	.83	.95	–	27	43
	●	D1.5-25	.91	–	–	.45	.53	.61	.73	.79	.91	1.1	1.2	–	38	49
	●	D2-25	1.0	–	.35	.51	.62	.71	.86	.93	1.1	1.3	1.5	39	51	58
	●	D3-25	1.2	.39	.55	.63	.75	.86	1.0	1.1	1.3	1.6	1.8	52	61	67
	●	D4-25	1.6	.57	.81	.94	1.1	1.3	1.6	1.7	2.0	2.4	2.8	67	74	80
	●	D5-25	2.0	.64	.91	1.1	1.4	1.6	1.9	2.1	2.4	2.9	3.3	73	79	84
	●	D6-25	2.4	.87	1.2	1.5	1.8	2.0	2.5	2.7	3.2	3.8	4.4	79	85	89
	●	D7-25	2.8	1.0	1.4	1.7	2.0	2.3	2.9	3.1	3.7	4.5	5.1	85	91	93
	●	D8-25	3.2	1.2	1.7	2.0	2.4	2.8	3.4	3.7	4.4	5.3	6.2	91	96	97
	●	D10-25	4.0	1.5	2.1	2.4	3.0	3.5	4.2	4.5	5.5	6.7	7.7	97	102	103
	●	D12-25	4.8	1.8	2.5	3.0	3.7	4.3	5.2	5.6	6.7	8.2	9.5	103	109	112
	●	D14-25	5.6	1.9	2.7	3.3	4.1	4.7	5.8	6.3	7.5	9.1	10.2	108	113	114

For nozzles using Orifice Disc Nos. 1, 1.5 and 2 or Core Nos. 13 and 23, Slotted Strainer No. 4514-20 equivalent to 25 mesh screen size is supplied. For all other larger capacity Discs and Cores, Slotted Strainer No. 4514-32 equivalent to 16 mesh screen size is supplied.

Other body types may be available. Contact your sales engineer for more information.

For additional information see Data Sheet 4498-1.

Highlighted column shows the rated pressure.



S PERFORMANCE DATA:
STANDARD ANGLE SPRAY

Body Inlet Conn. (in.)	UniJet Tip Type	Orifice Disc No. – Core No.	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per minute)										Spray Angle (°)		
	D			0.7 bar	1.5 bar	2 bar	3 bar	4 bar	6 bar	7 bar	10 bar	15 bar	20 bar	1.5 bar	3 bar	6 bar
1/4	●	D1-45	.79	–	–	–	.48	.56	.67	.72	.84	1.0	1.2	–	22	34
	●	D1.5-45	.91	–	–	.53	.64	.74	.90	.97	1.1	1.4	1.7	–	33	44
	●	D2-45	1.0	–	.45	.66	.80	.91	1.1	1.2	1.4	1.7	2.0	32	46	55
	●	D3-45	1.2	–	.51	.74	.91	1.0	1.3	1.4	1.6	2.0	2.3	40	53	60
	●	D4-45	1.6	.67	.95	1.1	1.4	1.6	2.0	2.2	2.5	3.1	3.6	62	69	72
	●	D5-45	2.0	.87	1.2	1.5	1.8	2.0	2.5	2.7	3.2	3.9	4.5	67	73	76
	●	D6-45	2.4	1.1	1.6	1.9	2.3	2.7	3.3	3.6	4.3	5.3	6.1	73	79	81
	●	D7-45	2.8	1.3	1.8	2.2	2.7	3.1	3.9	4.2	5.0	6.2	7.2	81	86	87
	●	D8-45	3.2	1.6	2.3	2.7	3.3	3.9	4.8	5.2	6.2	7.6	8.9	86	90	90
	●	D10-45	4.0	2.0	2.8	3.5	4.4	5.0	6.2	6.7	8.0	9.8	11.5	90	93	93
	●	D12-45	4.8	2.5	3.5	4.4	5.3	6.2	7.6	8.2	9.8	12.1	14.0	97	100	102
	●	D14-45	5.6	2.8	4.0	4.9	6.0	7.0	8.6	9.3	11.2	13.6	15.9	101	104	105
	●	D16-45	6.4	3.3	4.7	5.7	7.1	8.2	10.2	11.0	13.2	16.3	19.1	108	111	112
	●	D1-46	.79	–	–	–	.58	.66	.81	.87	1.0	1.3	1.5	–	13	15
	●	D1.5-46	.91	–	–	–	.84	.97	1.2	1.3	1.5	1.8	2.1	–	15	17
	●	D2-46	1.0	–	–	.89	1.1	1.2	1.5	1.6	1.9	2.2	2.5	–	18	21
	●	D3-46	1.2	–	.68	1.0	1.3	1.5	1.8	1.9	2.3	2.8	3.2	14	20	24
	●	D4-46	1.6	1.1	1.6	1.8	2.2	2.5	3.2	3.5	4.0	4.9	5.7	23	29	33
	●	D5-46	2.0	1.4	2.0	2.5	3.0	3.5	4.3	4.6	5.6	6.8	7.9	33	39	42
	●	D6-46	2.4	2.1	3.0	3.6	4.4	5.0	6.2	6.7	8.0	9.8	11.4	42	48	50
	●	D7-46	2.8	–	3.1	4.5	5.5	6.3	7.8	8.4	10.0	12.3	13.8	48	53	56
	●	D8-46	3.2	–	–	5.9	7.2	8.3	10.2	11.0	13.2	16.3	18.8	–	60	62
	●	D10-46	4.0	–	–	7.9	9.7	11.3	13.8	14.9	17.9	22	25	–	66	68
	●	D1-56	.79	–	–	–	–	.67	.82	.89	1.0	1.3	1.5	–	–	13
	●	D1.5-56	.91	–	–	–	–	1.0	1.2	1.3	1.5	1.8	2.1	–	–	15

For nozzles using Orifice Disc Nos. 1, 1.5 and 2 or Core Nos. 13 and 23, Slotted Strainer No. 4514-20 equivalent to 25 mesh screen size is supplied. For all other larger capacity Discs and Cores, Slotted Strainer No. 4514-32 equivalent to 16 mesh screen size is supplied.

Other body types may be available. Contact your sales engineer for further information.

For additional information see Data Sheet 4498-1.

Highlighted column shows the rated pressure.



**S PERFORMANCE DATA:
STANDARD ANGLE SPRAY**

Body Inlet Conn. (in.)	UniJet Tip Type	Capacity Size	Orifice Dia. Nom. (mm)	Core No.	Flow Rate Capacity (liters per hour)										Spray Angle (°)		
	TN				2 bar	3 bar	4 bar	7 bar	15 bar	20 bar	35 bar	45 bar	80 bar	3 bar	6 bar	20 bar	
1/4	●	.30	.41	106	—	—	—	—	—	3.1	4.0	4.6	6.1	—	—	51	
	●	.40	.41	108	—	—	—	—	—	4.1	5.4	6.1	8.2	—	—	58	
	●	.60	.41	206	—	—	—	3.6	5.3	6.1	8.1	9.2	12.2	—	35	65	
	●	1	.51	210	—	3.9	4.6	6.0	8.8	10.2	13.5	15.3	20	45	62	72	
	●	1.5	.51	216	4.8	5.9	6.8	9.0	13.2	15.3	20	23	31	65	70	72	
	●	2	.71	216	6.4	7.9	9.1	12.1	17.7	20	27	31	41	70	75	77	
	●	3	.71	220	9.7	11.8	13.7	18.1	26	31	40	46	61	65	70	73	
	●	4	1.1	220	12.9	15.8	18.2	24	35	41	54	61	82	72	81	84	
	●	6	1.1	225	19.3	24	27	36	53	61	81	92	122	73	79	81	
	●	8	1.5	225	26	32	36	48	71	82	108	122	163	85	89	91	
	●	10	1.6	420	32	39	46	60	88	102	135	153	204	82	84	86	
	●	12	1.9	420	39	47	55	72	106	122	162	183	245	78	82	85	
	●	14	1.9	421	45	55	64	84	124	143	189	214	285	85	88	90	
	●	18	1.9	422	58	71	82	109	159	183	243	275	367	81	84	86	
	●	22	1.9	625	71	87	100	133	194	224	297	336	449	70	72	75	
	●	26	2.2	625	84	103	119	157	230	265	351	398	530	73	74	77	

Other body types may be available. Contact your sales engineer for more information.

Highlighted column shows the rated pressure.

**S PERFORMANCE DATA:
STANDARD ANGLE SPRAY**

Body Inlet Conn. (in.)	UniJet Tip Type	Capacity Size	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per hour)					Approximate Spray Pattern Dia. (at 30 cm distance) (cm)
	TN-SSTC			25 bar	50 bar	80 bar	100 bar	140 bar	
1/4	●	.60	.41	6.8	9.7	12.2	13.7	16.2	7.6
	●	.80	.34	9.1	12.9	16.3	18.2	22	7.6
	●	.90	.41	10.3	14.5	18.3	21	24	7.6
	●	1	.51	11.4	16.1	20	23	27	8.9
	●	1.5	.51	17.1	24	31	34	40	8.9
	●	1.8	.64	21	29	37	41	49	11.4
	●	2	.71	23	32	41	46	54	11.4
	●	3	.71	34	48	61	68	81	15.2

Spray pattern diameter is based on liquid with viscosity of 20 seconds #3 Zahn Cup spraying at 1600 psi (110 bar).

Coverage will vary with viscosities and pressures. Tabulated capacities are based on water.

Other body types may be available. Contact your sales engineer for more information.

Calibration pressure = 40 psi (3 bar).



PAWIN Engineering Co., Ltd.

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อ. บางพลี จ. สมุทรปราการ 10540



PERFORMANCE DATA: STANDARD ANGLE SPRAY

Body Inlet Conn. (in.)	UniJet Tip Type	Capacity Size	Orifice Dia. Nom. (mm)	Flow Rate Capacity (liters per hour)					Approximate Spray Pattern Dia. (at 30 cm distance) (cm)
	TN-SSTC			25 bar	50 bar	80 bar	100 bar	140 bar	
1/4	●	4	1.1	46	64	82	91	108	20.3
	●	6	1.1	68	97	122	137	162	25.4
	●	8	1.5	91	129	163	182	216	30.5
	●	9	1.5	103	145	183	205	243	35.6
	●	10	1.6	114	161	204	228	270	40.6
	●	12	1.9	137	193	245	274	324	45.7
	●	14	1.9	160	226	285	319	378	35.6
	●	15	2.1	171	242	306	342	405	40.6
	●	16	2.2	182	258	326	365	432	45.7
	●	18	1.9	205	290	367	410	485	40.6
	●	20	2.1	228	322	408	456	539	45.7
	●	22	1.9	251	355	449	501	593	30.5
	●	24	2.1	274	387	489	547	647	33
	●	26	2.2	296	419	530	593	701	35.6

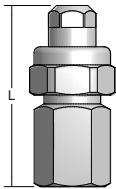
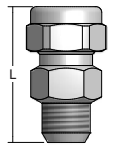
Spray pattern diameter is based on liquid with viscosity of 20 seconds #3 Zahn Cup spraying at 1600 psi (110 bar).

Coverage will vary with viscosities and pressures. Tabulated capacities are based on water.

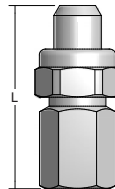
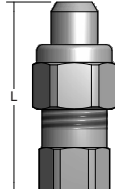
Other body types may be available. Contact your sales engineer for more information.

Calibration pressure = 40 psi (3 bar).

DIMENSIONS AND WEIGHTS

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	T (F) + TX TT (M) + TX	1/4	47.6	13/16	0.07
	T (F) + T-W TT (M) + T-W	1/4	47.6	13/16	0.07
	T (F) + D TT (M) + D	1/4	38.1	13/16	0.07

Based on the largest/heaviest version of each type.

Nozzle	Nozzle Type	Inlet Conn. (in.)	L (mm)	Hex. (in.)	Net Weight (kg)
	T (F) + TN TT (M) + TN	1/4	48.4	13/16	0.07
	T (F) + TN-SSTC TT (M) + TN-SSTC	1/4	48.4	13/16	0.07
	11430 (F) + TN-SSTC	1/4	49.2	13/16	0.07

Based on the largest/heaviest version of each type.