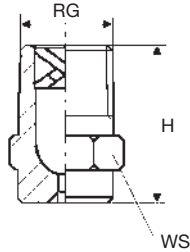


FULL CONE NOZZLES

D



TWO-PIECE NOZZLES

D type nozzles offer a simple and efficient design for a full cone nozzle, that is a wide passage X- style vane assembled into a male threaded body. For sizes up to 3/8" the vane is locked in place, which allows the nozzle to be fitted under any possible orientation without the risk of the vane falling out.

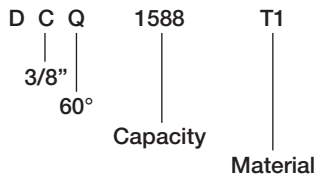
D type nozzles are offered with capacities ranging from 1.18 to 1470 lpm, a full choice of spray angles, and connections from 1/8" to 4". Normally stocked in the materials listed below, they are often manufactured on request in several super-alloys.

- Materials      B1    AISI 303 Stainless steel
- B31   AISI 316L Stainless steel
- T1    Brass

How to make up the nozzle code

The coding for D type nozzles uses the second digit to indicate the connection thread size.

Therefore, according to the desired thread size and material, the code for a D type nozzle is to be given as in the following example.



The table below gives coding and dimensions for different thread sizes, for nozzles shown both on this page and the next page.

Thread size coding table

RG inch	Code	H mm	WS mm
1/8	DA	19.5	12.0
1/4	DB	22.0	14.0
3/8	DC	25.0	17.0
1/2	DD	33.0	22.0

Spray angle 45°

DAM	DBM	DCM	DDM	Code	D mm	D1 mm	Capacity at different pressure values (lpm) (bar)						
							0.7	1.0	2.0	3.0	5.0	7.0	10
•				1118 xx	1.1	1.0	0.57	0.68	0.96	1.18	1.52	1.80	2.15
•				1147 xx	1.2	1.1	0.71	0.85	1.20	1.47	1.90	2.25	2.68
•				1188 xx	1.3	1.2	0.91	1.09	1.54	1.88	2.43	2.87	3.43
•				1212 xx	1.4	1.2	1.02	1.22	1.73	2.12	2.74	3.24	3.87
•				1235 xx	1.5	1.3	1.14	1.36	1.92	2.35	3.03	3.59	4.29
•				1294 xx	1.7	1.5	1.42	1.70	2.40	2.94	3.80	4.49	5.37
	•	•		1370 xx	2.0	1.8	1.79	2.14	3.02	3.70	4.78	5.65	6.76
	•	•		1470 xx	2.1	2.0	2.27	2.71	3.84	4.70	6.07	7.18	8.58
	•	•		1588 xx	2.3	2.0	2.84	3.39	4.80	5.88	7.59	8.98	10.7
	•	•		1659 xx	2.5	2.2	3.18	3.80	5.38	6.59	8.51	10.1	12.0
	•	•	•	1740 xx	2.7	2.3	3.57	4.27	6.04	7.40	9.55	11.3	13.5
			•	1835 xx	2.8	2.6	4.03	4.82	6.82	8.35	10.8	12.8	15.2
			•	1940 xx	3.0	3.0	4.54	5.43	7.68	9.40	12.1	14.4	17.2
			•	2105 xx	3.2	3.2	5.07	6.06	8.57	10.5	13.5	16.0	19.2
			•	2117 xx	3.4	3.3	5.65	6.75	9.55	11.7	15.1	17.9	21.4
			•	2147 xx	3.8	3.7	7.10	8.49	12.0	14.7	19.0	22.5	26.8
			•	2188 xx	4.3	4.3	9.08	10.9	15.4	18.8	24.3	28.7	34.3
			•	2235 xx	5.0	4.5	11.4	13.6	19.2	23.5	30.3	35.9	42.9

Spray angle 60°

DAQ	DBQ	DCQ	DDQ	Code	D	D1	0.7	1.0	2.0	3.0	5.0	7.0	10
•				1118 xx	1.2	0.8	0.57	0.68	0.96	1.18	1.52	1.80	2.15
•				1147 xx	1.3	1.0	0.71	0.85	1.20	1.47	1.90	2.25	2.68
•				1188 xx	1.4	1.1	0.91	1.09	1.54	1.88	2.43	2.87	3.43
•				1212 xx	1.5	1.2	1.02	1.22	1.73	2.12	2.74	3.24	3.87
•				1235 xx	1.6	1.2	1.14	1.36	1.92	2.35	3.03	3.59	4.29
•	•			1294 xx	1.8	1.3	1.42	1.70	2.40	2.94	3.80	4.49	5.37
•	•			1370 xx	2.0	1.4	1.79	2.14	3.02	3.70	4.78	5.65	6.76
	•	•		1470 xx	2.4	1.9	2.27	2.71	3.84	4.70	6.07	7.18	8.58
	•	•		1588 xx	2.6	2.0	2.84	3.39	4.80	5.88	7.59	8.98	10.7
	•	•		1659 xx	2.7	2.0	3.18	3.80	5.38	6.59	8.51	10.1	12.0
	•	•		1740 xx	2.9	2.0	3.57	4.27	6.04	7.40	9.55	11.3	13.5
	•	•		1835 xx	3.2	2.8	4.03	4.82	6.82	8.35	10.8	12.8	15.2
	•	•		1940 xx	3.2	2.8	4.54	5.43	7.68	9.40	12.1	14.4	17.2
	•	•		2100 xx	3.4	3.0	5.07	6.06	8.57	10.5	13.5	16.0	19.2
	•	•	•	2117 xx	3.6	3.0	5.65	6.75	9.55	11.7	15.1	17.9	21.4
			•	2147 xx	4.0	3.3	7.10	8.49	12.0	14.7	19.0	22.5	26.8
			•	2188 xx	4.5	3.7	9.08	10.9	15.4	18.8	24.3	28.7	34.3
			•	2235 xx	5.2	4.5	11.4	13.6	19.2	23.5	30.3	35.9	42.9
			•	2294 xx	5.8	4.7	14.2	17.0	24.0	29.4	38.0	44.9	53.7

## FULL CONE NOZZLES

## D

## TWO-PIECE NOZZLES

Spray angle 90°

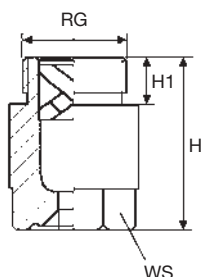
DAU	DBU	DCU	DDU	Code	D mm	D1 mm	Capacity at different pressure values							(lpm) (bar)
							0.7	1.0	2.0	3.0	5.0	7.0	10	
•				1118 xx	1.2	0.8	0.57	0.68	0.96	1.18	1.52	1.80	2.15	
•				1147 xx	1.3	1.0	0.71	0.85	1.20	1.47	1.90	2.25	2.68	
•				1188 xx	1.4	1.2	0.91	1.09	1.54	1.88	2.43	2.87	3.43	
•				1212 xx	1.5	1.2	1.02	1.22	1.73	2.12	2.74	3.24	3.87	
•				1235 xx	1.6	1.3	1.14	1.36	1.92	2.35	3.03	3.59	4.29	
•	•			1294 xx	1.8	1.3	1.42	1.70	2.40	2.94	3.80	4.49	5.37	
•	•			1370 xx	2.0	1.4	1.79	2.14	3.02	3.70	4.78	5.65	6.76	
	•	•		1470 xx	2.3	1.8	2.27	2.71	3.84	4.70	6.07	7.18	8.58	
	•	•		1588 xx	2.6	1.8	2.84	3.39	4.80	5.88	7.59	8.98	10.7	
	•	•		1659 xx	2.7	2.0	3.18	3.80	5.38	6.59	8.51	10.1	12.0	
	•	•		1740 xx	2.9	2.0	3.57	4.27	6.04	7.40	9.55	11.3	13.5	
	•	•		1835 xx	3.3	2.0	4.03	4.82	6.82	8.35	10.8	12.8	15.2	
	•	•		1940 xx	3.3	2.4	4.54	5.43	7.68	9.40	12.1	14.4	17.2	
	•	•		2105 xx	3.5	2.6	5.07	6.06	8.57	10.5	13.5	16.0	19.2	
		•		2117 xx	3.7	2.7	5.65	6.75	9.55	11.7	15.1	17.9	21.4	
		•		2147 xx	4.0	3.2	7.10	8.49	12.0	14.7	19.0	22.5	26.8	
		•		2164 xx	4.1	3.2	7.92	9.47	13.4	16.4	21.2	25.1	29.9	
			•	2188 xx	4.7	3.2	9.08	10.9	15.4	18.8	24.3	28.7	34.3	
			•	2235 xx	5.2	3.8	11.4	13.6	19.2	23.5	30.3	35.9	42.9	
			•	2294 xx	5.8	3.8	14.2	17.0	24.0	29.4	38.0	44.9	53.7	
			•	2370 xx	6.4	3.8	17.9	21.4	30.2	37.0	47.8	56.5	67.6	

Spray angle 120°

DAW	DBW	DCW	DDW	Code	D	D1	0.7	1.0	2.0	3.0	5.0	7.0	10
•				1118 xx	1.2	0.8	0.57	0.68	0.96	1.18	1.52	1.80	2.15
•				1147 xx	1.3	0.9	0.71	0.85	1.20	1.47	1.90	2.25	2.68
•				1188 xx	1.5	1.0	0.91	1.09	1.54	1.88	2.43	2.87	3.43
•				1212 xx	1.6	1.1	1.02	1.22	1.73	2.12	2.74	3.24	3.87
•				1235 xx	1.6	1.2	1.14	1.36	1.92	2.35	3.03	3.59	4.29
•				1294 xx	1.9	1.3	1.42	1.70	2.40	2.94	3.80	4.49	5.37
•				1370 xx	2.1	1.4	1.79	2.14	3.02	3.70	4.78	5.65	6.76
	•	•		1470 xx	2.4	1.6	2.27	2.71	3.84	4.70	6.07	7.18	8.58
	•	•		1588 xx	2.7	1.8	2.84	3.39	4.80	5.88	7.59	8.98	10.7
	•	•		1659 xx	3.0	1.8	3.18	3.80	5.38	6.59	8.51	10.1	12.0
	•	•		1740 xx	3.1	1.9	3.57	4.27	6.04	7.40	9.55	11.3	13.5
	•	•		1835 xx	3.3	1.9	4.03	4.82	6.82	8.35	10.8	12.8	15.2
	•	•		1940 xx	3.5	1.9	4.54	5.43	7.68	9.40	12.1	14.4	17.2
	•	•		2105 xx	3.7	2.3	5.07	6.06	8.57	10.5	13.5	16.0	19.2
		•		2117 xx	3.8	2.4	5.65	6.75	9.55	11.7	15.1	17.9	21.4
		•		2147 xx	4.2	2.7	7.10	8.49	12.0	14.7	19.0	22.5	26.8
		•		2164 xx	4.4	2.7	7.92	9.47	13.4	16.4	21.2	25.1	29.9
			•	2188 xx	4.6	3.1	9.08	10.9	15.4	18.8	24.3	28.7	34.3
			•	2235 xx	5.3	3.3	11.4	13.6	19.2	23.5	30.3	35.9	42.9
			•	2294 xx	5.9	4.1	14.2	17.0	24.0	29.4	38.0	44.9	53.7
			•	2370 xx	6.6	4.7	17.9	21.4	30.2	37.0	47.8	56.5	67.6

## FULL CONE NOZZLES

## D



## TWO-PIECE NOZZLES/LARGE CAPACITY

The larger nozzles in the D series are widely used in the industry, for a wide variety of applications. They maintain the simple design of the smaller nozzles, with the inherent resistance to clogging due to design of the X-vane, and are often manufactured out of high quality alloys and special plastic materials.

**Materials**  
**B1** AISI 303 Stainless steel  
**B31** AISI 316L Stainless steel  
**T1** Brass  
 On request special materials are quoted

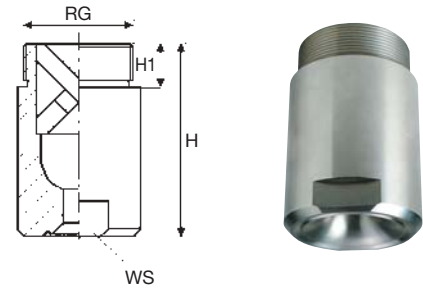
Code	RG inch	D mm	D1 mm	Capacity at different pressure values						Dimensions mm			
				0.7	1.0	2.0	3.0	5.0	7.0	10	H	H1	WS
60°	3/4	4.8	3.5	11.4	13.6	19.2	23.5	30.3	35.9	42.9	43	16	27
		5.5	4.5	14.2	17.0	24.1	29.5	38.1	45.1	53.9			
		6.0	4.5	17.9	21.4	30.2	37.0	47.8	56.5	67.6			
		7.0	4.5	22.7	27.1	38.4	47.0	60.7	71.8	85.8			
	1	7.0	5.6	22.7	27.1	38.4	47.0	60.7	71.8	85.8	58	18	36
		7.8	5.6	28.5	34.1	48.2	59.0	76.2	90.1	108			
		9.5	5.6	35.7	42.7	60.4	74.0	95.5	113	135			
	1 1/4	9.5	5.6	35.7	42.7	60.4	74.0	95.5	113	135	74	19	41
		12.5	6.0	57.0	68.1	96.3	118	152	180	215			
	1 1/2	13.0	9.0	71.0	84.9	120	147	190	225	268	85	19	50
		15.0	9.0	90.8	109	154	188	243	287	343			
	2	16.0	11.0	114	136	192	235	303	359	429	106	24	60
		17.0	11.1	142	170	240	294	380	449	537			
	2 1/2	17.5	11.1	179	214	302	370	478	565	676	128	27	75
		23.0	11.1	227	271	384	470	607	718	858			
	3	28.0	14.3	284	339	480	588	759	898	1074	153	30	85
		29.0	17.5	357	427	604	740	955	1130	1351			
	3 1/2	36.0	17.5	454	543	768	940	1214	1436	1716	190	32	105
39.0		19.0	568	678	959	1175	1517	1795	2145				
4	39.0	19.0	568	678	959	1175	1517	1795	2145	205	36	110	

Code	RG inch	D mm	D1 mm	Capacity at different pressure values						Dimensions mm			
				0.7	1.0	2.0	3.0	5.0	7.0	10	H	H1	WS
90°	3/4	5.8	3.0	14.2	17.0	24.1	29.5	38.1	45.1	53.9	43	16	27
		6.4	4.5	17.9	21.4	30.2	37.0	47.8	56.5	67.6			
		8.0	4.5	22.7	27.1	38.4	47.0	60.7	71.8	85.8			
	1	8.6	4.5	28.5	34.1	48.2	59.0	76.2	90.1	108	58	18	36
		9.3	5.0	35.7	42.7	60.4	74.0	95.5	113	135			
		9.9	6.0	40.3	48.2	68.2	83.5	108	128	152			
	1 1/4	13.0	6.0	57.0	68.1	96.3	118	152	180	215	74	19	41
		16.0	6.0	71.0	84.9	120	147	190	225	268			
	1 1/2	14.5	9.0	90.8	109	154	188	243	287	343	85	19	50
		16.6	11.0	114	136	192	235	303	359	429			
	2	18.0	11.0	142	170	240	294	380	449	537	106	24	60
		25.0	11.0	179	214	302	370	478	565	676			
	2 1/2	27.0	11.1	227	271	384	470	607	718	858	128	27	75
		30.0	14.3	284	339	480	588	759	898	1074			
	3	30.0	17.5	357	427	604	740	955	1130	1351	153	30	85
		32.5	17.5	420	502	710	870	1123	1329	1588			
	3 1/2	35.5	17.5	454	543	768	940	1214	1436	1716	190	32	105
		39.0	19.0	568	678	959	1175	1517	1795	2145			
4	42.8	25.4	710	849	1200	1470	1898	2245	2684	205	36	110	

## FULL CONE NOZZLES

## D

## TWO-PIECE NOZZLES/LARGE CAPACITY



	Code	RG inch	D mm	D1 mm	Capacity at different pressure values							Dimensions mm		
					0.7	1.0	2.0	3.0	5.0	7.0	10	H	H1	WS
120°	<b>DEW 2295 xx</b>	3/4	5.1	3.0	14.2	17.0	24.1	29.5	38.1	45.1	53.9	43	16	27
	<b>DEW 2370 xx</b>		6.5	3.5	17.9	21.4	30.2	37.0	47.8	56.5	67.6			
	<b>DEW 2470 xx</b>		8.5	4.5	22.7	27.1	38.4	47.0	60.7	71.8	85.8			
	<b>DFW 2590 xx</b>	1	11.5	4.5	28.5	34.1	48.2	59.0	76.2	90.1	108	58	18	36
	<b>DFW 2740 xx</b>		12.0	4.5	35.7	42.7	60.4	74.0	95.5	113	135			
	<b>DFW 2830 xx</b>		13.0	5.6	40.3	48.2	68.2	83.5	108	128	152			
	<b>DGW 3118 xx</b>	1 1/4	13.5	6.0	57.0	68.1	96.3	118	152	180	215	74	19	41
	<b>DGW 3147 xx</b>		17.0	6.0	71.0	84.9	120	147	190	225	268			
	<b>DHW 3188 xx</b>	1 1/2	20.0	9.0	90.8	109	154	188	243	287	343	85	19	50
	<b>DKW 3235 xx</b>	2	18.0	11.0	114	136	192	235	303	359	429	106	24	60
	<b>DKW 3294 xx</b>		19.0	11.0	142	170	240	294	380	449	537			
	<b>DKW 3370 xx</b>		21.3	11.0	179	214	302	370	478	565	676			
	<b>DLW 3470 xx</b>	2 1/2	23.5	11.1	227	271	384	470	607	718	858	128	27	75
	<b>DLW 3588 xx</b>		26.5	14.3	284	339	480	588	759	898	1074			
	<b>DMW 3740 xx</b>	3	29.5	17.5	357	427	604	740	955	1130	1351	153	30	85
	<b>DMW 3870 xx</b>		32.0	17.5	420	502	710	870	1123	1329	1588			
<b>DNW 3940 xx</b>	3 1/2	33.5	17.5	454	543	768	940	1214	1436	1716	190	32	105	
<b>DNW 4117 xx</b>		37.0	19.0	568	678	959	1175	1517	1795	2145				
<b>DPW 4147 xx</b>		4	42.0	25.4	710	849	1200	1470	1898	2245				2684