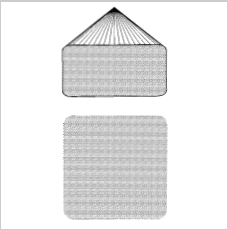
Ugelli a cono pieno sezione quadrata, angolo ampio
Wide angle full cone square-shaped spray nozzles

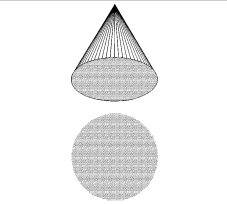


FWSQ - FFWSQ - BTM - FFZWSQ

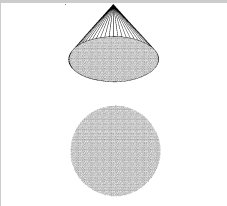
Tabella delle portate - *Capacity chart*

Ugello - *Nozzle*				Orifizio	Pass. libero	Pressione - *Pressure (Bar)*												Angolo di spruzzo *Spray angle*		
Attacco *Pipe conn.*	Femmina *Female*	Maschio *Male*	Codice *Code*	*Orifice* Ø Nom. mm	*Max free pas.* Ø Nom. mm	0,5	0,7	1	1,5	2	2,5	3	4	5	6	7	10			
						Portata - *Capacity (l/min)*												0,5Bar	1Bar	5Bar
1/4" 3/8"		FF-BTM-FFZ FF-BTM-FFZ	14 WSQ	3,57	1,59	4,60	5,33	6,24	7,45	8,45	9,31	10,09	11,44	12,61	13,66	14,61	17,08	99°	101°	93°
			17 WSQ	3,97	1,59	5,59	6,48	7,57	9,04	10,26	11,31	12,25	13,89	15,32	16,59	17,75	20,74	99°	101°	93°
			20 WSQ	4,37	2,38	6,58	7,62	8,91	10,64	12,07	13,30	14,41	16,34	18,02	19,51	20,88	24,40	104°	110°	94°
			24 WSQ	4,76	2,38	7,89	9,15	10,69	12,77	14,48	15,96	17,29	19,61	21,62	23,42	25,05	29,28	104°	110°	94°
			27 WSQ	5,16	2,78	8,88	10,29	12,03	14,36	16,29	17,96	19,45	22,06	24,32	26,35	28,18	32,95	104°	110°	98°
1/2"		FF-BTM-FFZ	30 WSQ	5,56	2,78	9,87	11,43	13,36	15,96	18,10	19,96	21,61	24,51	27,03	29,27	31,32	36,61	104°	110°	102°
			35 WSQ	5,95	3,18	11,51	13,34	15,59	18,62	21,12	23,28	25,21	28,60	31,53	34,15	36,53	42,71	104°	110°	102°
			40 WSQ	6,35	3,18	13,16	15,24	17,82	21,28	24,13	26,61	28,82	32,68	36,04	39,03	41,75	48,81	104°	110°	102°
			45 WSQ	6,35	3,57	14,80	17,15	20,04	23,94	27,15	29,93	32,42	36,77	40,54	43,91	46,97	54,91	104°	110°	102°
			50 WSQ	6,75	3,97	16,44	19,05	22,27	26,60	30,16	33,26	36,02	40,85	45,05	48,79	52,19	61,01	104°	110°	102°
3/4"	F	FF-BTM-FFZ	71 WSQ	9,92	4,37	23,02	26,67	31,18	37,23	42,23	46,56	50,43	57,20	63,06	68,30	73,07	85,41	105°	110°	102°
1"	F	FF-BTM-FFZ	130 WSQ	13,10	5,56	42,43	49,16	57,46	68,62	77,82	85,81	92,94	105,40	116,22	125,87	134,66	157,40	107°	110°	107°
1 1/4"	F	FF-BTM-FFZ	190 WSQ	15,48	5,56	61,50	71,26	83,30	99,47	112,81	124,39	134,72	152,80	168,47	182,46	195,20	228,18	108°	111°	109°
1 1/2"	F	FF-BTM-FFZ	290 WSQ	18,26	7,94	92,09	106,69	124,72	148,94	168,92	186,25	201,72	228,79	252,26	273,21	292,28	341,65	109°	114°	109°
2"	F	FF-BTM-FFZ	560 WSQ	25,00	11,11	180,88	209,58	244,99	292,55	331,81	365,85	396,24	449,40	495,50	536,66	574,11	671,11	110°	114°	109°
2 1/2"	F	FF-BTM-FFZ	830 WSQ	31,75	14,29	269,68	312,46	365,25	436,17	494,70	545,44	590,75	670,01	738,75	800,11	855,95	1.000,56	110°	115°	109°
3"	F	FF-BTM-FFZ	1070 WSQ	34,93	17,46	365,05	422,97	494,43	590,43	669,65	738,35	799,67	906,97	1.000,01	1.083,08	1.158,67	1.354,41	110°	115°	109°

Ugelli a cono pieno
Full cone spray nozzles



EA - EEA



EAW - EEAW

EA - EEA - EAW - EEAW

CARATTERISTICHE DI SPRUZZO
Getto a cono pieno, buona nebulizzazione, distribuzione uniforme su tutta la superfice coperta e proiezione ad angolo retto rispetto all'ingresso. I tipi EAW e EEAW formano un getto con un angolo di copertura di 120°.

COSTRUZIONE
Costruiti in tre pezzi con testina di spruzzo e diffusore interno rimovibili per facilitare eventuali operazioni di pulizia. Forniti con filettatura Gas conica (BSPT - UNI 339). Filettature diverse: NPT, Gas cilindrica (BSPP - UNI 338), ecc. sono fornite su specifica richiesta.

MATERIALI STANDARD
Ottone, acciaio inox AISI 303, acciaio inox AISI 316 e PVC. Materiali diversi sono forniti a richiesta. (Vedi pag. 3)

APPLICAZIONI TIPICHE
Lavaggio aria, gas, metalli, minerali, fumi, frutta e verdura. Raffreddamenti e tempre, protezione antincendio, abbattimento schiume, controllo polveri, ecc.

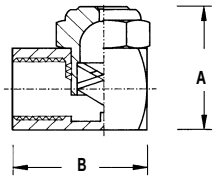
SPRAY CHARACTERISTICS
These offer a well atomized full cone right angle projection spray pattern with distribution uniformity throughout the covered surface area. The EAW and EEAW series offer a wider spray angle range up to about 120°.

CONSTRUCTION
They are manufactured as three-piece units assembled with a body as well as orifice cap and internal vane being both removable to allow easier eventual nozzle cleaning. All the nozzles are threaded Gas tapered (BSPT - UNI 339). Different threadings: NPT, Gas parallel (BSPP - UNI 338), etc. are supplied under special request.

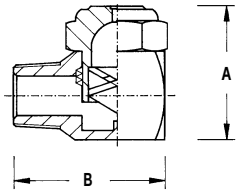
STANDARD MATERIALS
Brass, stainless steel AISI 303, stainless steel AISI 316 and PVC. Other different product materials are achievable upon specific request basis. (See page 3 for list)

TYPICAL APPLICATIONS
Air, gas, metal, mineral, smoke, fruit and vegetable washing, cooling and hardening, fire protection, foam control, dust control, etc.

Tipi - EA - EEA - *Types*



EA



EEA

Per ordinare - *To order*

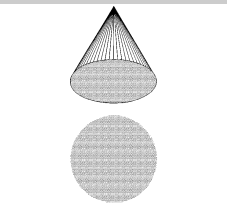
Specificare: - *Specify:*

3/8"	EEA	20	SS	=	3/8EEA20SS
Attacco *Pipe connection*	Tipo *Type*	Codice *Code*	Materiale* *Material**		Esempio *Example*

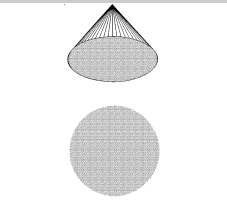
*** Vedi Pag. 3 - *See page 3 for list***

Dimensioni massimo ingombro *Maximum dimensions*

Attacco *Pipe connection*	Ugello tipo - *Nozzle type*			
	EA - EAW		EEA - EEAW	
	A mm	B mm	A mm	B mm
1/8"	25	24	25	24
1/4"	31	30	32	30
3/8"	37	34	37	34
1/2"	52	41	52	42



EA - EEA



EAW - EEAW

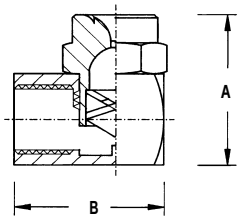
Ugelli a cono pieno
Full cone spray nozzles

EA - EEA - EAW - EEAW

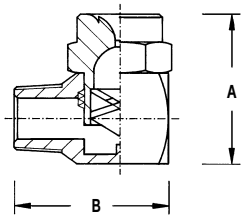
Tabella delle portate - EA - EEA - *Capacity chart*

Ugello - *Nozzle*				Orifizio	Pass. libero	Pressione - *Pressure* (Bar)													Angolo di spruzzo		
Attacco	Femmina	Maschio	Codice	*Orifice*	*Free passage*	0,3	0,5	0,7	1	1,5	2	2,5	3	4	5	6	7	10	Spray angle		
Pipe connect.	*Female*	*Male*	*Code*	Ø Nom. mm	Ø Nom. mm	Portata - *Capacity (l/min)*													*0,5 Bar*	*1,5 Bar*	*5Bar*
1/8"	EA	EEA	**2**	1,19	1,02	0,52	0,65	0,76	0,90	1,08	1,23	1,37	1,48	1,69	1,88	2,04	2,19	2,58	43°	50°	46°
			3	1,59	1,02	0,78	0,98	1,14	1,35	1,62	1,85	2,05	2,23	2,54	2,81	3,06	3,28	3,87	52°	65°	59°
			3,5	1,59	1,27	0,90	1,14	1,33	1,57	1,89	2,16	2,39	2,60	2,96	3,28	3,57	3,83	4,51	43°	50°	46°
			4	1,98	1,02	1,03	1,31	1,52	1,80	2,16	2,47	2,73	2,97	3,39	3,75	4,08	4,38	5,16	77°	84°	79°
			5	1,98	1,27	1,29	1,63	1,91	2,24	2,70	3,08	3,41	3,71	4,24	4,69	5,10	5,47	6,44	52°	65°	59°
			6	2,38	1,27	1,55	1,96	2,29	2,69	3,24	3,70	4,10	4,45	5,08	5,63	6,12	6,57	7,73	69°	74°	68°
1/4"	EA	EEA	**6,5**	2,38	1,59	1,68	2,12	2,48	2,92	3,51	4,01	4,44	4,83	5,51	6,10	6,63	7,12	8,38	45°	50°	46°
			10	2,78	1,59	2,59	3,27	3,81	4,49	5,40	6,17	6,83	7,42	8,47	9,38	10,20	10,95	12,89	58°	67°	61°
			12,5	3,18	1,59	3,23	4,08	4,76	5,61	6,76	7,71	8,54	9,28	10,59	11,73	12,75	13,68	16,11	69°	74°	68°
3/8"	EA	EEA	**9,5**	2,78	2,38	2,46	3,10	3,62	4,26	5,13	5,86	6,49	7,05	8,05	8,91	9,69	10,40	12,25	45°	50°	46°
			15	3,57	2,38	3,88	4,90	5,72	6,73	8,11	9,25	10,24	11,14	12,71	14,07	15,30	16,42	19,33	64°	67°	61°
			20	3,97	2,78	5,17	6,53	7,62	8,98	10,81	12,33	13,66	14,85	16,94	18,76	20,40	21,89	25,78	76°	80°	73°
			22	4,76	2,78	5,69	7,19	8,38	9,87	11,89	13,56	15,02	16,33	18,64	20,64	22,44	24,08	28,36	87°	90°	82°
1/2"	EA	EEA	**16**	3,57	3,18	4,14	5,23	6,10	7,18	8,65	9,87	10,93	11,88	13,55	15,01	16,32	17,51	20,62	48°	50°	46°
			25	4,76	3,18	6,46	8,17	9,53	11,22	13,51	15,41	17,07	18,56	21,18	23,46	25,50	27,37	32,22	64°	67°	61°
			32	5,16	3,57	8,27	10,45	12,20	14,36	17,29	19,73	21,85	23,76	27,11	30,02	32,64	35,03	41,25	72°	75°	68°
			40	6,75	3,57	10,34	13,07	15,25	17,95	21,62	24,66	27,32	29,70	33,88	37,53	40,80	43,79	51,56	88°	91°	83°
			50	6,75	3,97	12,93	16,33	19,06	22,44	27,02	30,83	34,15	37,12	42,35	46,91	51,00	54,73	64,45	91°	94°	86°

Tipi ad angolo ampio - EAW - EEAW - *Wide angle spray nozzle types*



EAW



EEAW

Tabella delle portate - EAW - EEAW - *Capacity chart*

Ugello - *Nozzle*				Orifizio	Pass. libero	Pressione - *Pressure* (Bar)													Angolo di spruzzo		
Attacco	Femmina	Maschio	Codice	*Orifice*	*Free passage*	0,3	0,5	0,7	1	1,5	2	2,5	3	4	5	6	7	10	Spray angle		
Pipe connect.	*Female*	*Male*	*Code*	Ø Nom. mm	Ø Nom. mm	Portata - *Capacity (l/min)*													*1 Bar*	*3 Bar*	*5 Bar*
1/8"	EA	EEA	**4,3 W**	1,98	1,02	1,13	1,41	1,64	1,92	2,30	2,61	2,88	3,12	3,55	3,92	4,25	4,55	5,33	120°	120°	102°
			5,6 W	2,38	1,02	1,47	1,84	2,13	2,50	2,99	3,40	3,75	4,07	4,62	5,10	5,53	5,92	6,94	120°	120°	102°
			8 W	2,38	1,27	2,09	2,63	3,05	3,57	4,27	4,86	5,36	5,81	6,60	7,29	7,90	8,46	9,91	120°	120°	103°
1/4"	EA	EEA	**10 W**	2,78	1,27	2,62	3,28	3,81	4,46	5,34	6,07	6,70	7,27	8,25	9,11	9,88	10,58	12,39	120°	120°	103°
			12 W	3,18	1,27	3,14	3,94	4,57	5,36	6,41	7,28	8,04	8,72	9,91	10,94	11,86	12,70	14,87	120°	120°	103°
			14 W	3,57	1,59	3,66	4,60	5,33	6,25	7,48	8,50	9,38	10,17	11,56	12,76	13,83	14,81	17,35	120°	120°	103°
3/8"	EA	EEA	**17 W**	3,97	1,59	4,45	5,58	6,48	7,59	9,08	10,32	11,39	12,35	14,03	15,49	16,80	17,99	21,07	120°	120°	103°
			20 W	4,37	2,38	5,23	6,56	7,62	8,93	10,69	12,14	13,40	14,53	16,51	18,23	19,76	21,16	24,79	120°	121°	104°
			24 W	4,76	2,38	6,28	7,88	9,15	10,71	12,82	14,57	16,08	17,44	19,81	21,87	23,71	25,39	29,74	120°	120°	104°
			27 W	5,16	2,78	7,07	8,86	10,29	12,05	14,43	16,39	18,09	19,62	22,29	24,61	26,68	28,57	33,46	120°	120°	106°
1/2"	EA	EEA	**30 W**	5,56	2,78	7,85	9,85	11,43	13,39	16,03	18,21	20,10	21,80	24,76	27,34	29,64	31,74	37,18	120°	120°	108°
			35 W	5,95	3,18	9,16	11,49	13,34	15,62	18,70	21,24	23,45	25,43	28,89	31,90	34,58	37,03	43,38	120°	121°	108°
			40 W	6,35	3,18	10,47	13,13	15,24	17,85	21,37	24,28	26,81	29,06	33,02	36,45	39,52	42,32	49,57	120°	120°	108°
			45 W	6,35	3,57	11,78	14,77	17,15	20,09	24,04	27,31	30,16	32,70	37,15	41,01	44,46	47,61	55,77	120°	120°	110°
			50 W	6,75	3,97	13,08	16,41	19,05	22,32	26,71	30,35	33,51	36,33	41,27	45,57	49,40	52,90	61,96	120°	120°	112°