

Ugelli a cono pieno sezione quadrata, angolo ampio

Wide angle full cone square-shaped spray nozzles

FWSQ - FFWSQ - BTM - FFZWSQ

CARATTERISTICHE DI SPRUZZO

Getto a cono pieno con sezione quadrata e angolo ampio studiato per ottenere la massima copertura possibile, distribuzione uniforme su tutta la superficie e buona nebulizzazione.

COSTRUZIONE

I tipi FWSQ, FFWSQ, BTM e FFZWSQ sono costruiti in due pezzi da barra e con diffusori interni fissi montati a pressione.

I tipi FWSQ nella versione in metallo, con grandi portate e attacchi da 1/4" e maggiori vengono ricavati da fusione ed hanno il diffusore interno rimovibile. Forniti con filettatura Gas conica (BSPT - UNI 339). Filettature diverse: NPT, Gas cilindrica (BSPP - UNI 338), ecc. sono fornite su specifica richiesta.

MATERIALI STANDARD

Gli ugelli FWSQ con attacchi da 1/4" e maggiori sono ricavati da fusione di acciaio inox AISI 316 o da barra nella versione in PVC.

Tutti gli altri modelli vengono forniti in ottone, acciaio inox AISI 303, acciaio inox AISI 316 e PVC. Materiali diversi vengono forniti a richiesta. (Vedi pag. 3)

APPLICAZIONI TIPICHE

Lavaggio prodotti, raffreddamento e tempra, protezione antincendio, lavaggio aria e gas, lavatori di liscivie, scrubbers, ecc.

SPRAY CHARACTERISTICS

These offer a full cone square-shaped spray pattern with a well built wide angle necessary to provide the largest possible coverage and distribution uniformity throughout the surface area as well as good atomization.

CONSTRUCTION

The FWSQ, FFWSQ, BTM and FFZWSQ models are two-piece bar stock-type units with a pressure-mounted and consequently, fixed internal vane. The large capacity metal-made FWSQ series, threaded 1/4" and over, are also two-piece units but cast types with removable internal vanes.

All the above stated nozzles are Gas tapered (BSPT - UNI 339) threaded. Different threadings: NPT, Gas parallel (BSPP - UNI 338) are obtainable under specific request.

STANDARD MATERIALS

Cast stainless steel AISI 316 and PVC bar-stock types for the large capacity (1/4" and over) FWSQ series. Brass, stainless steel AISI 303, stainless steel AISI 316 and PVC for all the other models.

Different product materials can be ordered upon special request. (See page 3 for list)

TYPICAL APPLICATIONS

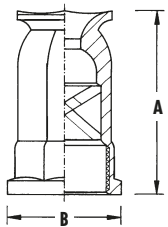
Product washing, cooling and hardening, fire protection, air and gas washing, leaching, scrubbers, etc.

Tipi - Types

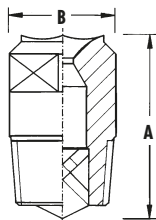


FWSQ

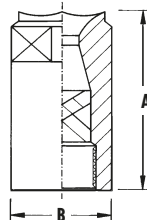
Da fusione
Cast type



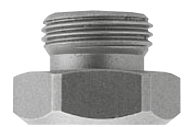
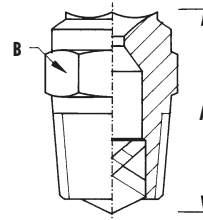
FFWSQ



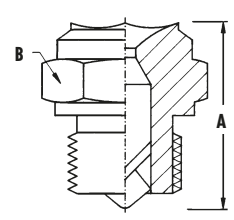
FWSQ



BTM



FFZWSQ



Per ordinare - To order

Specificare: - Specify:

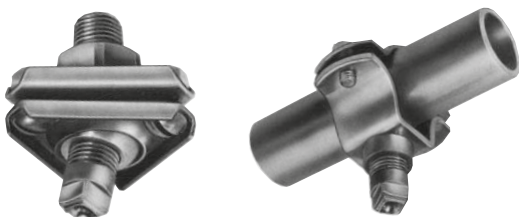
| | | | | | |
|----------------------------|--------------|----------------|---------------------------|---|--------------------|
| 1/4" | FF | 14WSQ | BR | = | 1/4FF14WSQBR |
| Attacco Pipe connection | Tipo Type | Codice Code | Materiale * Material * | | Esempio Example |

* Vedi Pag. 3 - See page 3 for list

Dimensioni max ingombro - Max dimensions

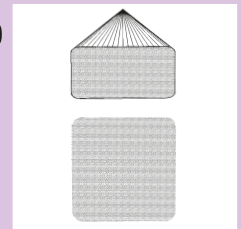
| Attacco Pipe connection | Ugello tipo - Nozzle type | | | | | | | |
|-------------------------------|---------------------------|---------|-------|--------|------|--------|--------|---------|
| | FWSQ | | FFWSQ | | BTM | | FFZWSQ | |
| | A mm | B mm | A mm | B mm | A mm | B mm | A mm | B mm |
| 1/8" | | | 23 | 13 dia | 18 | 11 hex | 22 | 14 hex |
| 1/4" | | | 23 | 14 dia | 25 | 14 hex | 22 | 17 hex |
| 3/8" | | | 24 | 17 dia | 26 | 18 hex | 30 | 19 hex |
| 1/2" | | | 29 | 21 dia | 32 | 21 hex | 43 | 27 hex |
| 3/4" | 68 | 33 dia | 39 | 27 dia | 36 | 27 hex | 50 | 32 hex |
| 1" | 68 | 38 dia | 51 | 33 dia | 50 | 38 hex | 58 | 41 hex |
| 1 1/4" | 88 | 53 dia | 70 | 43 dia | | | 74 | 50 hex |
| 1 1/2" | 103 | 59 dia | 85 | 48 dia | | | 85 | 60 hex |
| 2" | 137 | 78 dia | 106 | 60 dia | | | 106 | 70 dia |
| 2 1/2" | 162 | 87 dia | 128 | 75 dia | | | 128 | 85 dia |
| 3" | 196 | 105 dia | 153 | 90 dia | | | 153 | 100 dia |

Installazioni tipiche - Typical installations



Ugelli a cono pieno sezione quadrata, angolo ampio

Wide angle full cone square-shaped spray nozzles



FWSQ - FFWSQ - BTM - FFZWSQ

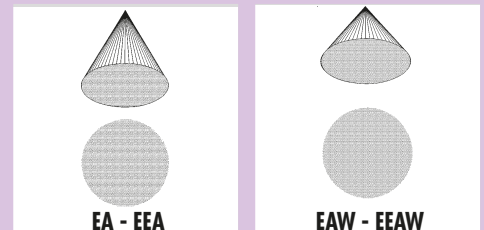
Tabella delle portate - Capacity chart

| Ugello - Nozzle | | | | Orifizio Orifice Ø Nom. mm | Pass. libero Max free pas. Ø Nom. mm | Pressione - Pressure (Bar) | | | | | | | | | | | Angolo di spruzzo Spray angle | | | |
|-----------------------|-------------------|--------------------------|----------------|----------------------------------|--|----------------------------|--------|--------|--------|--------|--------|--------|--------|----------|----------|----------|----------------------------------|--------|------|------|
| Attacco Pipe conn. | Femmina Female | Maschio Male | Codice Code | | | 0,5 | 0,7 | 1 | 1,5 | 2 | 2,5 | 3 | 4 | 5 | 6 | 7 | 10 | 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



CARATTERISTICHE DI SPRUZZO

Getto a cono pieno, buona nebulizzazione, distribuzione uniforme su tutta la superficie 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.

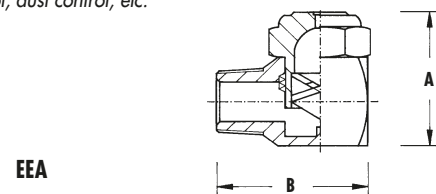
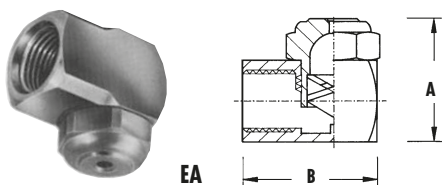
STANDARD MATERIALS

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



Dimensioni max ingombro Max 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 |

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