Dräger - your marine safety specialist

Fire fighting nozzles
Catalogue

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Safety on board

As a Total Care Service organization Dräger would like to team up with your company as the service company for the annual service and maintenance for the following Fire fighting, Rescue & Safety (FRS) equipment.

Our scope of service capablities includes (but is not limited to):
- portable and wheeled fire extinguishers
- fixed fire suppression systems and foam systems
- fire hoses and spray nozzles
- survival suits and lifejackets
- portable and fixed gas detection
- breathing protection and breathing compressors and fireman's outfits

ONE PARTNER FOR ALL FRS SOLUTIONS

Dräger has readily available resources to send qualified service teams and offshore containers offshore which have the skills to perform the required service on the above equipment in one visit.

This not only reduces overhead in organizing service and travelling of technicians but also gives you one point of contact for all maintenance, certification and related administration.

SAFETY MANAGEMENT SYSTEM

Our technicians all have offshore experience, and are trained to the required standards. Dräger is in possession of a ISO9001 certificate, has a Safety Management System in place and is an approved service organization for major class societies.

DEDICATED TO THE OFFSHORE WORLD

Years of experience and highly trained and certified technicians make Dräger an authority on fire fighting, rescue and safety projects for the marine and offshore industries. Our organization has a strong global presence and meets all of the requirements of high safety and quality standards.

Dräger Marine & Offshore is located in Rotterdam, Aberdeen and Stavanger. Dräger is available 24 hours a day, seven days a week and 365 days a year.

Meeting our customers needs is the cornerstone of our organization. We clearly understand that long-lasting relationships are built upon mutual trust and proven reliability.

DRÄGER INTERNATIONAL

Dräger was founded in 1889 in Lübeck, Germany. Dräger is one of the world's leading suppliers of personal protective equipment, gas detection technology, and interdisciplinary system solutions for total hazard management. The company, with more than 13,500 employees, has global sales of over 500 million euros.

Dräger. Technology for life.

Advanced service system

MONITORING MAINTENANCE

Dräger uses advanced ERP planning and registration software by Microsoft Navision®, which offers:
- Barcode marking of all equipment
- Equipment will be integrated into our ERP system
- ERP system equipped with service planning software
- One click overview of service to be performed per rig, per year
- Annual budget forecasting for up to five years

ADVANTAGES

- Every service action can be planned
- One overview of all equipment on board of all rigs
- One overview of service performed on a unit basis
- Certificates produced straight from the system

Every single item is registered:
- Barcode
- Serial number
- Type of equipment
- Manufacturer
- Lifetime of equipment
- Service actions required
- Special surveys

MOBILE WORKSHOP ON BOARD

Dräger has DNV approved offshore service containers, fully equipped with test equipment, spare parts and replacements, to perform FRS service on board of a platform.

The containers have been equipped with a computerized Dräger SCBA test bench and other test equipment. Service of fire fighting, life saving appliances such as life jackets and survival suits, portable and fixed gas detection equipment, hospital oxygen systems etc can all be performed on board.

Alongside the test equipment these containers have enough spare parts and new equipment to be able to carry out repairs and/or replace defective equipment as required.

FRS CERTIFICATE PORTAL

Dräger offers you the FRS Certificate Portal:
- Review, print, download and e-mail certificates in a digital online environment
- 24/7 availability, all you need is an Internet connection
- All certificates are clearly organized per order
- Only one login code needed for complete overview of all installaltions / locations / vessels
- This service is free of charge
- Registration via www.draeger-mo.com

This service is meant for everybody who manages FRS certificates on board of your rig.

Total Care FRS service contract concepts

In some cases it can be desirable to use service contracts to have a stable overview of what can be expected from service costs in the future. Dräger has developed two concepts offering a variable degree of certainty about future maintenance (and replacement) costs. We are able to offer contracts where the variables of service cost and replacements can be contractually bound. The contracts are developed to offer two degrees of certainty and are named as described in the following paragraph.

DRÄGER OFFSHORE SERVICE CONCEPTS

Dräger offers two service contract solutions to accommodate different customer requirements:
- Dräger Premium
- Dräger Life Cycle Management

These concepts form the basis for installment of service contracts, offering multiple levels of security on future FRS service spending.

DRÄGER PREMIUM

An Dräger Premium contract takes away uncertainty about current and future service costs and requires less administrative involvement of the customer.

Dräger-Premium covers all annual service needs:
- Deployment of offshore container to rig location
- Deployment of Dräger service technicians
- Includes all agreed FRS service activities
- Possibility to include discount on product groups and parts
- One-stop onboard service and maintenance of all FRS equipment
- Fully equipped offshore container, including all service equipment
- Small stock of new replacements present in container
- Spare parts and replacements are not included

DRÄGER PREMIUM ADVANTAGES

- One annual visit to service all FRS equipment
- Includes all mandatory service actions for the included equipment
- No backflow of service intervals
- One PO and one invoice per rig / per year
- Less administrative involvement of customer

DRÄGER LIFE CYCLE MANAGEMENT

The most advanced service contract is the Dräger Life Cycle Management contract.

Dräger LCM covers your concerns about FRS service and replacement to one service provider:

Dräger-Premium package plus:
- Replacement of the equipment at the end of the life cycle (excluding replacement of fixed equipment: hydrants, CO2 installations, etc.)
- Replacements of spare parts
- Standardization of equipment by replacement with latest standards and approvals
- Exchange equipment when necessary
- Requires preparation to implement
- An exact FRS inventory list per rig is required
- Easy to maintain / extent / decrease

DRÄGER LIFE CYCLE MANAGEMENT ADVANTAGES

- Only one visit to the rig
- Less involvement of crew in the service activities
- No additional spare part costs
- The equipment is up to date and in optimal condition
- Equipment to the latest technical/approval standards
- Crew members are more easily redistributed between rigs (because of standarization of equipment)

Rental equipment and training

RENTAL EQUIPMENT

Via a rental pool Dräger makes all the safety-relevant equipment required (during shutdown) available to you, from communications technology or gas detection devices to personal protection equipment.

Renting devices – with predictable rental rates – is the ideal solution for clearlydefined projects. If necessary, we provide you with detailed advice which devices you should keep available in which numbers.

You can trust our experience and expect realistic projections. 10 additional gas detection devices, 20 fallarrest belts and a ladder – not everything can be scheduled down to the day. No problem. We take care of it for you.

We record all material movements in our database. This documentation enables easy controlling and also forms the basis for traceable invoicing.

TRAINING

Complete safety does not end with the purchase of safety equipment – in fact it is only the beginning!

To be effective, operators need to be competent and empowered in the use, testing and troubleshooting of safety equipment. That's where effective training is an essential addition to a user's safety regime.

With over 100 years experience in safety, Dräger is able to bring a wealth of knowledge in the use of equipment and best practice procedures in response to hazardous situations.

With a comprehensive range of training programmes for the oil and gas industry we can help to ensure your equipment and personnel are always ready – whatever the situation. Courses can be customised to suit specific requirements, known hazards or unusual applications and conducted at operational sites.

If preferred, they can also be carried out at our purpose built training facilities using simulated environments including crawl galleries and confined spaces.

Courses cover both theory and hands on use of equipment in practical applications; testing; maintenance and troubleshooting - for everything from gas detection set up and calibration – both fixed and portable; breathing apparatus; drugs and alcohol detection and first aid.

Quality, safety and liability

QUALITY

We guarantee that the offered services are performed to the very highest standards. The quality of our work and our organization is safeguarded by a certified Quality Management System ISO 9001:2000, ISO14001 and OHSAS18001.

During a contract period Dräger always commits itself to keep the Quality Management System certified and valid. In addition, we welcome an audit by your quality manager at any time.

SAFETY

Safety on board is a key consideration for all professional operators. It is therefore reassuring that our service technicians are all in possession of a basic safety certificate. They understand the possible risks on board and they know what is expected from them to ensure the safety for themselves, your crew and your assets.

Our safety management system ensures that our procedures and our behavior are regularly monitored and adjusted where required. Of course it is possible to audit our safety system. Please ask your safety manager to contact us at any time to make an appointment.

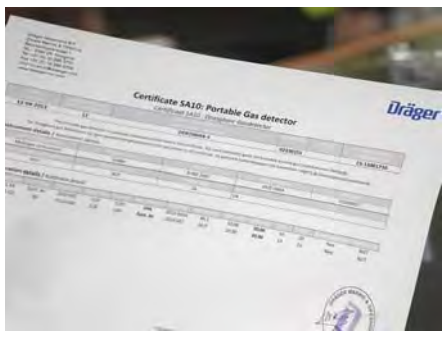
LIABILITY INSURANCE

As part of the world wide operating Dräger group (www.draeger.com) our organization is in possession of a liability insurance which cover our activities. On request we can sent you a copy of the insurance policy.

CUSTOMER SATISFACTION

We are your Fire fighting, Rescue and Safety partner who will provide solutions to meet your needs.
We clearly understand that long-lasting relationships are built upon mutual trust and proven reliability.
Therefor customer satisfaction is a key performance indicator for us.

We constantly monitor our customer satisfaction level and strive to improve our performance, our procedures and general behavior based on your feedback.
We have a procedure in place which offers you the opportunity to share your suggestions and/or concerns.



UGELLO SPRAY MEDIA VELOCITÀ – RV
SPRAY NOZZLE AVERAGE VELOCITY – RV

Descrizione

Il Mod. RV è un ugello a cono pieno a media velocità che viene impiegato nei sistemi water spray a diluvio per realizzare sistemi di raffreddamento, spegnimento o abbattimento vapori. Il Mod. RV è disponibile in ottone, bronzo, bronzo alluminio ed acciaio inox AISI 316, con angoli di apertura del getto a scelta fra 60° - 180° ed attacco al processo da 1/2" o 3/4" filettato BSP o NPT.

Description

The Mod. RV is a full cone average velocity nozzle used in deluge water spray systems designed for fire suppression, cooling or vapour containments. The Mod. RV is available in brass, bronze, Aluminium bronze and stainless steel AISI 316, with dispersion angles ranging from 60° to 180° and process connections of 1/2" or 3/4" threaded BSP or NPT.

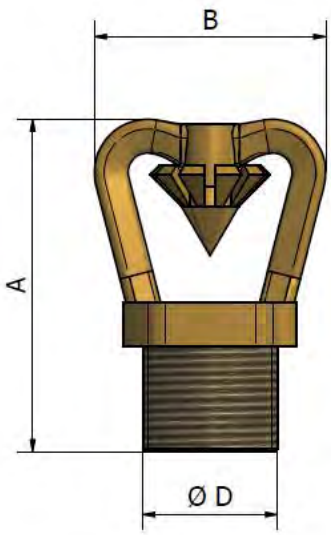
Caratteristiche tecniche	Technical characteristics

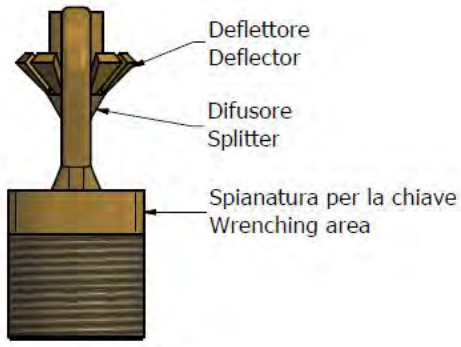
• Materiale corpo a scelta tra:
  • Ottone
  • Bronzo EN 1982 – CC491K
  • Nickel Alluminio Bronzo EN 1982 - CC333G
  • Acciaio inox AISI 316
• Dimensioni disponibili:
  • 1/2”
  • 3/4”
• Attacco filettato disponibile:
  • M. BSP
  • M. NPT
• Angoli di dispersione:
  • 60°, 65°, 80°, 90°, 95°, 100°, 110°, 120°,125°, 130°, 140°, 150°, 160° o 180°
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene
• Pressione di progetto 16 bar
	• Body material to be selected among:
	  • Brass
	  • Bronze EN 1982 – CC491K
	  • Nickel Aluminum Bronze EN 1982 - CC333G
	  • Stainless Steel AISI 316
	• Available sizes:
	  • 1/2”
	  • 3/4”
	• Available connection threaded:
	  • M. BSP
	  • M. NPT
	• Dispersion angles:
	  • 60°, 65°, 80°, 90°, 95°, 100°, 110°, 120°,125°, 130°, 140°, 150°, 160° o 180°
	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
	• Design pressure: 16 bar

Finitura: • Al naturale	**Finish:** • Natural

Dimensioni e Pesi

Dimensions and Weights





Ø D		A mm	B mm	Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm									Fattore Factor K
				1 bar	1.5 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	10 bar	
1/2"	3/4"	70	50	6,7	8,2	9,5	11,6	13,4	15,0	16,4	17,7	21,2	6,7 (1)
				9,0	11,0	12,7	15,6	18,0	20,1	22,0	23,8	28,5	9 (1)
				11,5	14,1	16,3	19,9	23,0	25,7	28,2	30,4	36,4	11,5 (1)
				15,8	19,4	22,3	27,4	31,6	35,3	38,7	41,8	50,0	15,8 (1)
				18,0	22,0	25,5	31,2	36,0	40,2	44,1	47,6	56,9	18 (1)
				23,0	28,2	32,5	39,8	46,0	51,4	56,3	60,9	72,7	23 (1)
				27,0	33,1	38,2	46,8	54,0	60,4	66,1	71,4	85,4	27 (1)
				31,0	38,0	43,8	53,7	62,0	69,3	75,9	82,0	98,0	31 (1)
				41,0	50,2	58,0	71,0	82,0	91,7	100,4	108,5	129,7	41 (1)
				52,0	63,7	73,5	90,1	104,0	116,3	127,4	137,6	164,4	52 (1)
				64,0	78,4	90,5	110,9	128,0	143,1	156,8	169,3	202,4	64
				95,0	116,4	134,4	164,5	190,0	212,4	232,7	251,3	300,4	95

Opzioni

- Cromatura
- Tappo di protezione
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- Chrome plated
- Blow cap
- For additional options or special versions contact SA Fire Protection

Nota:

(1) Prevedere sulla linea principale un filtro in accordo ai requisiti di NFPA 15

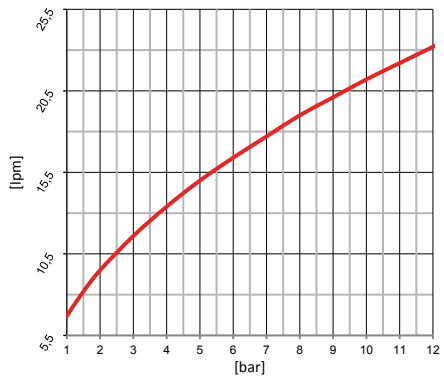
Note:

(1) Main pipe line strainer is required according to NFPA 15 requirements

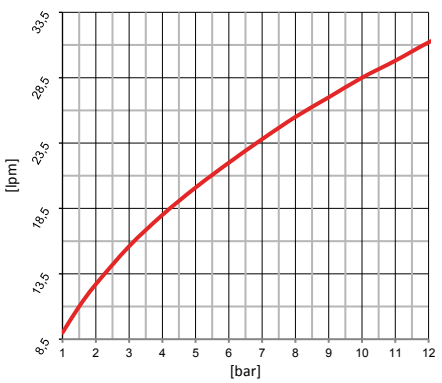
Diagrammi Prestazioni | **Performance Diagrams**

Pressione (bar) / Portata (l/min) - Pressure (bar) / Flow Rate (lpm)

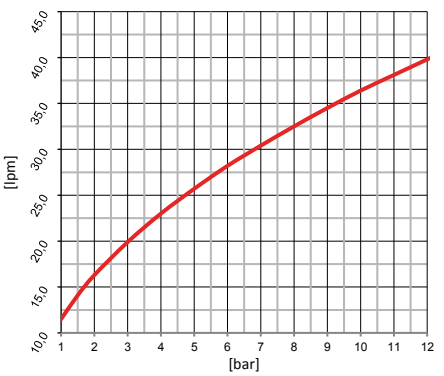
Fattore / Factor (K= 6.7)



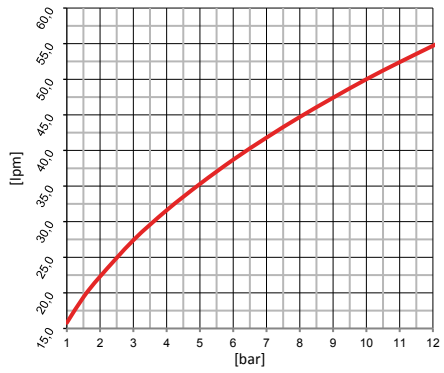
Fattore / Factor (K= 9)



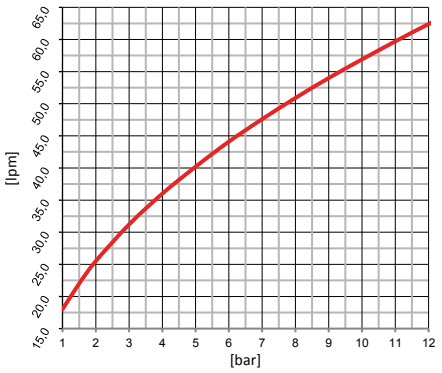
Fattore / Factor (K= 11.5)



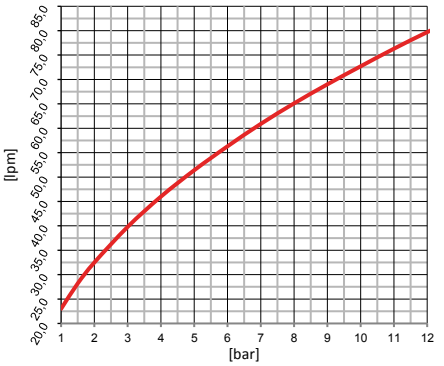
Fattore / Factor (K= 15.8)



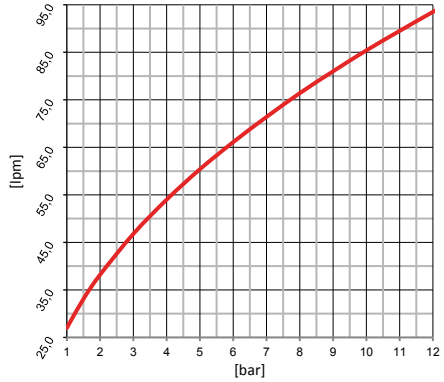
Fattore / Factor (K= 18)



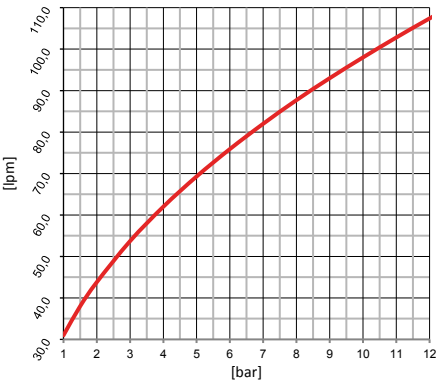
Fattore / Factor (K=23)



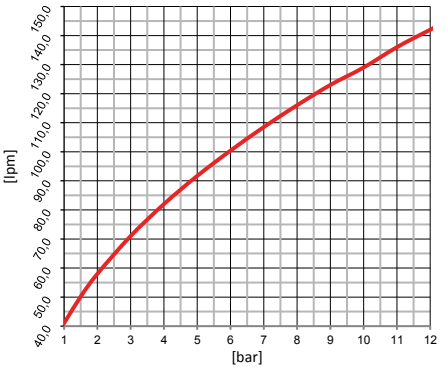
Fattore / Factor (K= 27)



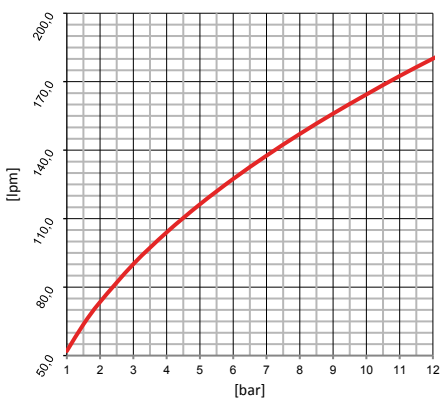
Fattore / Factor (K= 31)



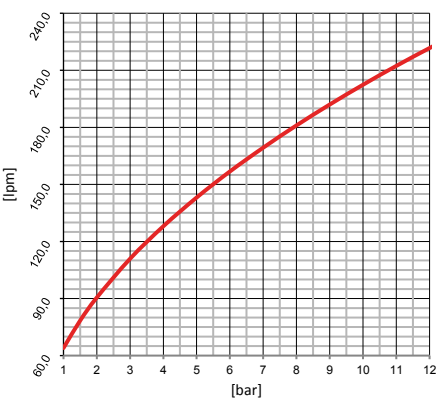
Fattore / Factor (K= 41)



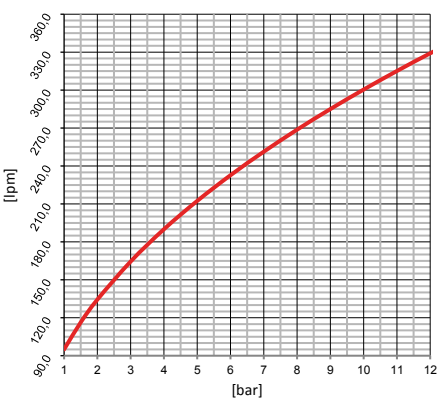
Fattore / Factor (K= 52)



Fattore / Factor (K= 64)



Fattore / Factor (K= 95)



Codice Identificativo
Identification Form

OPZIONI / OPTIONS

Mod. | RV | | | | / | | / | | / | | |
1 2 3 4 5 6 7 8

Quantità / Quantity

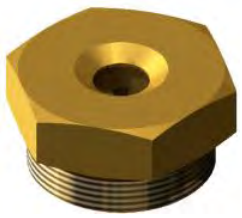
UGELLO CONO PIENO MEDIA VELOCITÀ RV / SPRAY NOZZLE FULL CONE AVERAGE VELOCITY RV

CORPO BODY	1	Tipologia Type	Ugello a cono pieno a media velocità Spray nozzle with full cone average velocity			RV ■	
	2	Materiale Material	Ottone Brass			COT ☐	Materiale standard Standard material
			Bronzo EN 1982 – CC491K Bronze EN 1982 – CC491K			CBG10 ☐	
			Nichel Alluminio Bronzo EN 1982 - CC333G Nickel Aluminum Bronze EN 1982 - CC333G			CBA10 ☐	
			Acciaio inox AISI 316 Stainless steel AISI 316			CAI12 ☐	
	3	Dimensione Size	1/2”			M ☐	
			3/4”			QQQ ☐	
	4	Connessione Connection	BSP			BSP ☐	
			NPT			NPT ☐	
POSRTATA FLOW RATE	5	Fattore K $((l/min)/\sqrt{bar})$ K factor $(lpm/\sqrt{bar})$	6,7 ☐	9 ☐	11,5 ☐	15,8 ☐	
			18 ☐	23 ☐	27 ☐	27 ☐	
			31 ☐	41 ☐	52 ☐	64 ☐	
			95 ☐				
			Altre portate Other flow rates			K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.
ANGOLO DI SPRAY SPRAY ANGLE	6	Angolo di Spray Spray Angle	60° ☐	65° ☐	80° ☐	90° ☐	
			95° ☐	100° ☐	110° ☐	120° ☐	
			125° ☐	130° ☐	140° ☐	150° ☐	
			160° ☐	180° ☐			
			Altre angolazioni Other spray angles			A ☐	Specificare in Note l’angolazione di spray richiesta Specify in Notes the required spray angle
OPZIONI OPTIONS	7	Finitura Finish	Cromatura Chrome plated			FC ☐	
	8	Tappo di protezione Moisture protection cap	Tappo di protezione Moisture protection cap			TP ☐	

NOTE NOTES	

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
EMESSO / ISSUED: DATA / DATE:	CONTROLLATO / CHECKED: DATA / DATE:	APPROVATO / APPROVED: DATA / DATE:	

UGELLO SPRAY ALTA VELOCITÀ – IF
SPRAY NOZZLE HIGH VELOCITY – IF



“A”

“B”

Descrizione

Il Mod. IF è un ugello a cono pieno ad alta velocità che viene impiegato nei sistemi water spray a diluvio per realizzare sistemi di raffreddamento, spegnimento o abbattimento vapori. Il Mod. IF è disponibile in ottone, bronzo, bronzo alluminio ed acciaio inox AISI 316, con angoli di apertura del getto a scelta tra 45° - 120° ed attacco al processo da 1/2”, 3/4”, 1”, 1 1/4”, 1 1/2”, 2” o 2 1/2” filettato BSP o NPT.

Description

The Mod. IF is a full cone high velocity nozzle used in deluge water spray systems designed for fire suppression, cooling or vapour containments. The Mod. IF is available in brass, bronze, Al-bronze and stainless steel AISI 316, with dispersion angles ranging from 45° to 120° and process connections of 1/2”, 3/4”, 1”, 1 1/4”, 1 1/2”, 2” or 2 1/2” threaded BSP or NPT.

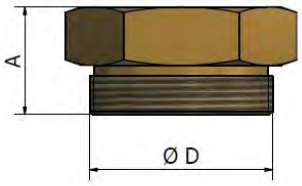
Caratteristiche tecniche	Technical characteristics

• Materiale corpo a scelta tra:
  • Ottone
  • Bronzo EN 1982 – CC491K
  • Nickel Alluminio Bronzo EN 1982 - CC333G
  • Acciaio inox AISI 316
• Attacco filettato disponibile:
  • M. BSP
  • M. NPT
• Angoli di dispersione:
  • 45°, 60°, 90° o 120°
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene
• Pressione di progetto 16 bar
	• Body material to be selected among:
	  • Brass
	  • Bronze EN 1982 – CC491K
	  • Nickel Aluminum Bronze EN 1982 - CC333G
	  • Stainless Steel AISI 316
	• Available connection threaded:
	  • M. BSP
	  • M. NPT
	• Dispersion angles:
	  • 45°, 60°, 90° or 120°
	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
	• Design pressure: 16 bar

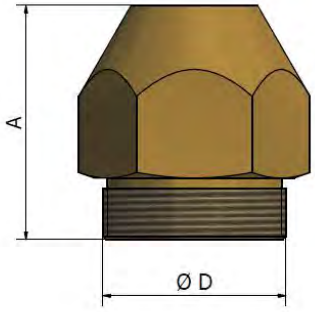
Finitura: • Al naturale	**Finish:** • Natural

Dimensioni e Pesi

Dimensions and Weights



"A"



"B"

Ø D	A mm		Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm									Fattore Factor K
	"A"	"B"	1 bar	1.5 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	10 bar	
1/2"	27	27	9,0	11,0	12,7	15,6	18,0	20,1	22,0	23,8	28,5	9 (1)
			11,5	14,1	16,3	19,9	23,0	25,7	28,2	30,4	36,4	11.5 (1)
			14,0	17,1	19,8	24,2	28,0	31,3	34,3	37,0	44,3	14 (1)
3/4"	28	38	18,0	22,0	25,5	31,2	36,0	40,2	44,1	47,6	56,9	18 (1)
			22,5	27,6	31,8	39,0	45,0	50,3	55,1	59,5	71,2	22.5 (1)
			28,0	34,3	39,6	48,5	56,0	62,6	68,6	74,1	88,5	28 (1)
1"	28	50	35,0	42,9	49,5	60,6	70,0	78,3	85,7	92,6	110,7	35 (1)
			45,0	55,1	63,6	77,9	90,0	100,6	110,2	119,1	142,3	45
1 1/4"	30	62	70,0	85,7	99,0	121,2	140,0	156,5	171,5	185,2	221,4	70
1 1/2"	35	77	90,0	110,2	127,3	155,9	180,0	201,2	220,5	238,1	284,6	90
			112,0	137,2	158,4	194,0	224,0	250,4	274,3	296,3	354,2	112
			142,0	173,9	200,8	246,0	284,0	317,5	347,8	375,7	449,0	142
2"	44	99	180,0	220,5	254,6	311,8	360,0	402,5	440,9	476,2	569,2	180
			223,0	273,1	315,4	386,2	446,0	498,6	546,2	590,0	705,2	223
			268,0	328,2	379,0	464,2	536,0	599,3	656,5	709,1	847,5	268
			357,0	437,2	504,9	618,3	714,0	798,3	874,5	944,5	1128,9	357
2 1/2"	52	124	280,0	342,9	396,0	485,0	560,0	626,1	685,9	740,8	885,4	280

Opzioni

- Cromatura
- Tappo di protezione
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- Chrome plated
- Blow cap
- For additional options or special versions contact SA Fire Protection

Nota:

(1) Prevedere sulla linea principale un filtro in accordo ai requisiti di NFPA 15

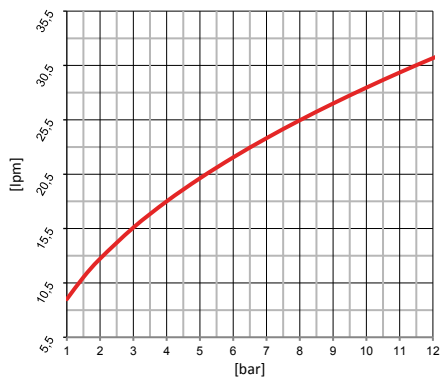
Note:

(1) Main pipe line strainer is required according to NFPA 15 requirements

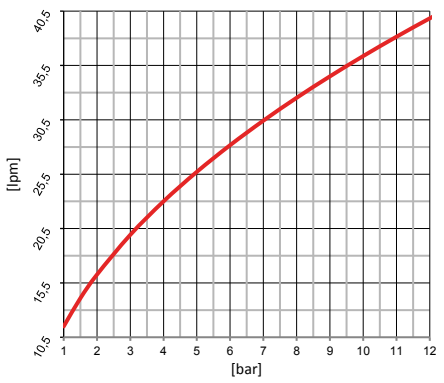
Diagrammi Prestazioni | **Performance Diagrams**

Pressione (bar) / Portata (l/min)
Pressure (bar) / Flow Rate (lpm)

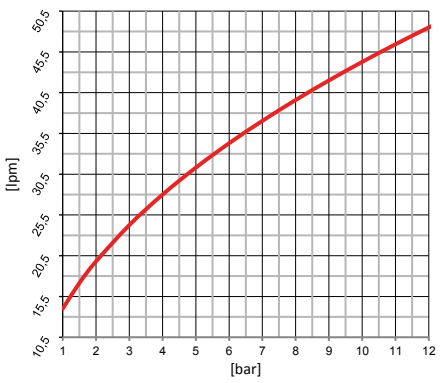
Fattore / Factor (K= 9)



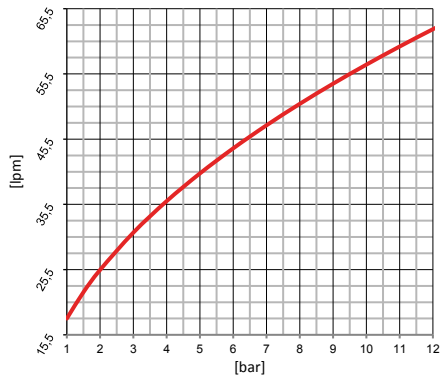
Fattore / Factor (K= 11.5)



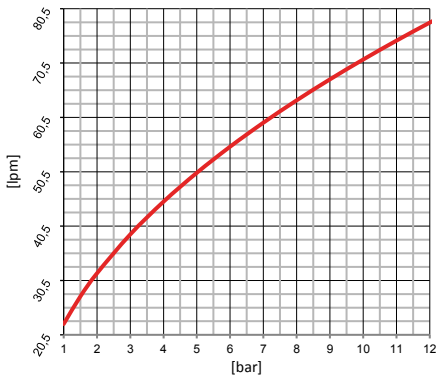
Fattore / Factor (K= 14)



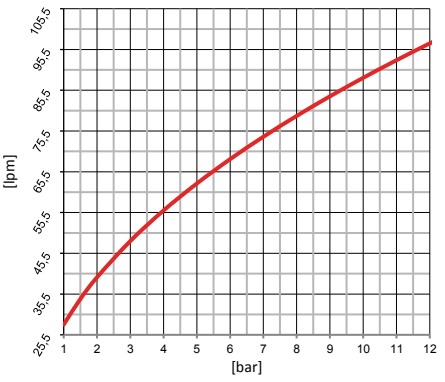
Fattore / Factor (K= 18)



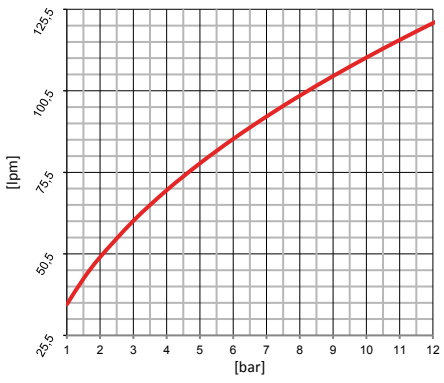
Fattore / Factor (K= 22.5)



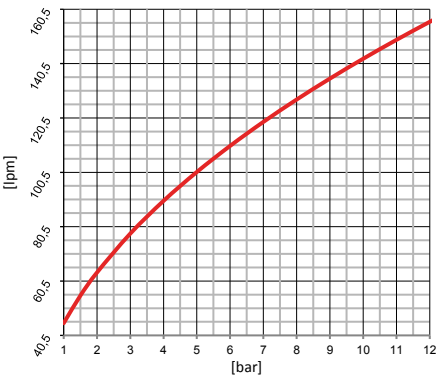
Fattore / Factor (K= 28)



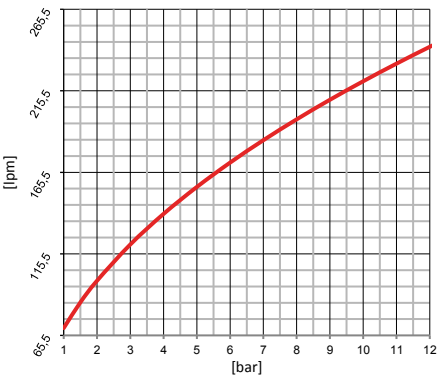
Fattore / Factor (K= 35)



Fattore / Factor (K= 45)



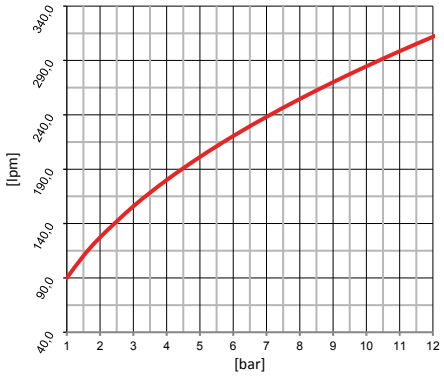
Fattore / Factor (K= 70)



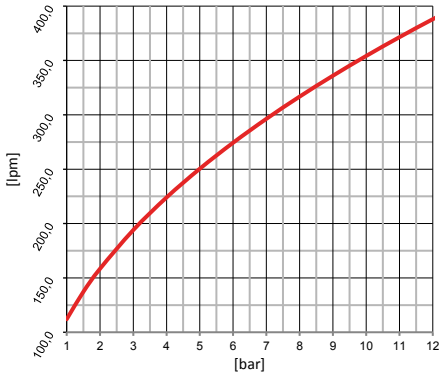
Diagrammi Prestazioni | **Performance Diagrams**

Pressione (bar) / Portata (l/min)
Pressure (bar) / Flow Rate (lpm)

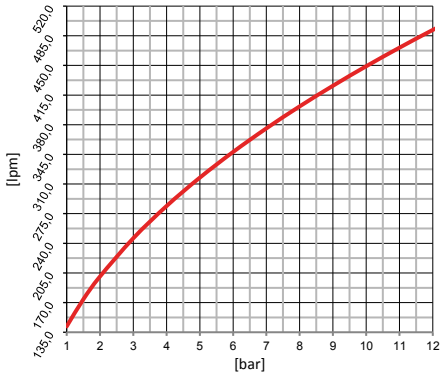
Fattore / Factor (K= 90)



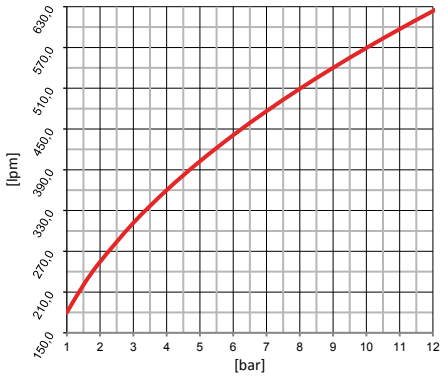
Fattore / Factor (K= 112)



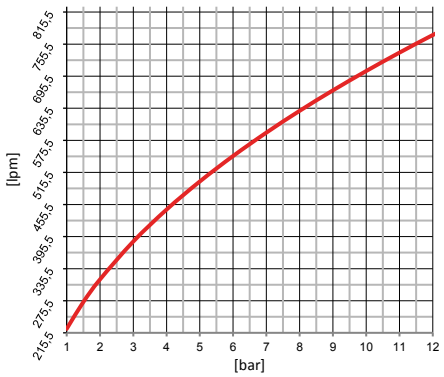
Fattore / Factor (K= 142)



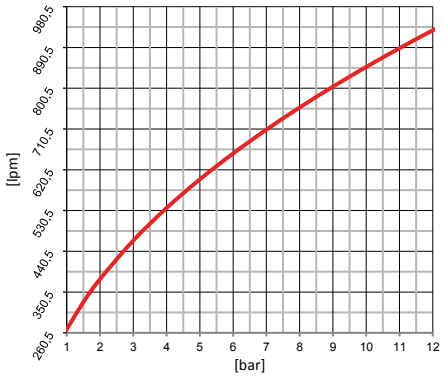
Fattore / Factor (K= 180)



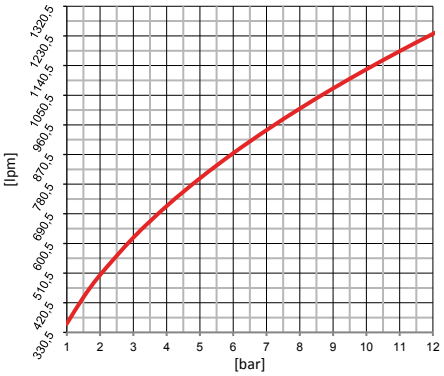
Fattore / Factor (K= 223)



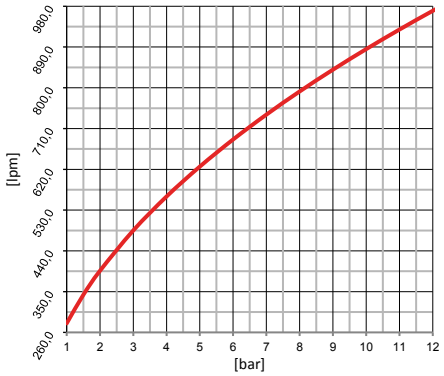
Fattore / Factor (K= 268)



Fattore / Factor (K= 357)



Fattore / Factor (K= 280)



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Codice Identificativo
Identification Form

OPZIONI / OPTIONS

Mod. [1][2][3][4] / [5] / [6] / [7][8]

Quantità / Quantity

UGELLO CONO PIENO ALTA VELOCITÀ IF / SPRAY NOZZLE FULL CONE HIGH VELOCITY IF

CORPO BODY	1	Tipologia Type	Ugello a cono pieno ad alta velocità “A” Spray nozzle with full cone high velocity “A”			IFA ☐	
			Ugello a cono pieno ad alta velocità “B” Spray nozzle with full cone high velocity “B”			IFB ☐	
	2	Materiale Material	Ottone Brass			COT10 ☐	
			Bronzo EN 1982 – CC491K Bronze EN 1982 – CC491K			CBG10 ☐	
			Nichel Alluminio Bronzo EN 1982 - CC333G Nickel Aluminum Bronze EN 1982 - CC333G			CBA10 ☐	
			Acciaio inox AISI 316 Stainless steel AISI 316			CAI12 ☐	
	3	Dimensione Size	1/2”	3/4”	1”	M ☐	QQQ ☐ 1 ☐
			1 1/4”	1 1/2”	2”	1Q ☐	1M ☐ 2 ☐
			2 1/2”			2M ☐	
	4	Connessione Connection	BSP			BSP ☐	
			NPT			NPT ☐	
POSRTATA FLOW RATE	5	Fattore K $((l/min)/\sqrt{bar})$ K factor $(lpm/\sqrt{bar})$	357 ☐	280 ☐	268 ☐ 223 ☐	180 ☐	142 ☐
			112 ☐	90 ☐	70 ☐ 45 ☐	35 ☐	28 ☐
			22,5 ☐	18 ☐	14 ☐ 11,5 ☐	9 ☐	
			Altre portate Other flow rates			K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.
ANGOLO DI SPRAY SPRAY ANGLE	6	Angolo di spray Spray Angle	45° ☐	60° ☐	90° ☐	120° ☐	
			Altre angolazioni Other spray angles			A ☐	Specificare in Note l’angolazione di spray richiesta Specify in Notes the required spray angle
OPZIONI OPTIONS	7	Finitura Finish	Cromatura Chrome plated			FC ☐	
	8	Tappo di protezione Moisture protection cap	Tappo di protezione Moisture protection cap			TP ☐	

NOTE
NOTES

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
EMESSO / ISSUED: DATA / DATE:	CONTROLLATO / CHECKED: DATA / DATE:	APPROVATO / APPROVED: DATA / DATE:	

UGELLO SPRAY A LAMA PIATTA – NF
SPRAY NOZZLE FLAT JET – NF

Descrizione

Il Mod. NF è un ugello a lama piatta che viene impiegato nei sistemi water spray a diluvio per realizzare sistemi di raffreddamento e barriere d'acqua, con angolo di deflessione pari a 75°. Il Mod. NF è disponibile in ottone, bronzo, bronzo alluminio ed acciaio inox AISI 316, con angoli di apertura del getto a scelta tra 90° - 180° ed attacco al processo da 1/2" o 3/4" filettato BSP o NPT.

Description

The Mod. NF is a flat jet nozzle used in deluge water spray systems designed for cooling systems and water curtains, with deflection angle 75°. The Mod. NF is available in brass, bronze, aluminium bronze and stainless steel AISI 316, with dispersion angles ranging from 90° - 180° and process connections of 1/2" or 3/4" threaded BSP or NPT.

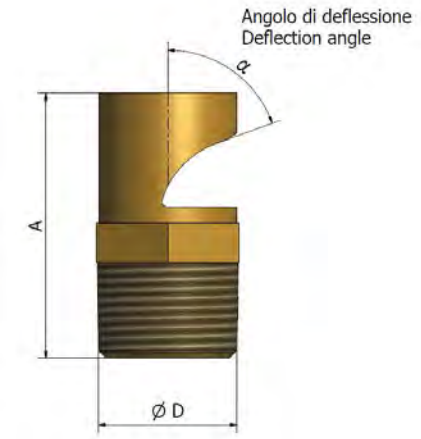
Caratteristiche tecniche	Technical characteristics

• Materiale corpo a scelta tra:
  • Ottone
  • Bronzo EN 1982 – CC491K
  • Nickel Alluminio Bronzo EN 1982 - CC333G
  • Acciaio inox AISI 316
• Dimensioni disponibili:
  • 1/2”
  • 3/4”
• Attacco filettato disponibile:
  • M. BSP
  • M. NPT
• Angoli di dispersione:
  • 90°, 120°, 140°, 170° o 180°
• Angolo di deflessione 75°
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene
• Pressione di progetto 16 bar
	• Body material to be selected among:
	  • Brass
	  • Bronze EN 1982 – CC491K
	  • Nickel Aluminum Bronze EN 1982 - CC333G
	  • Stainless Steel AISI 316
	• Available sizes:
	  • 1/2”
	  • 3/4”
	• Available connection threaded:
	  • M. BSP
	  • M. NPT
	• Dispersion angles:
	  • 90°, 120°, 140°, 170° o 180°
	• Deflection angle 75°
	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
	• Design pressure: 16 bar

Finitura: • Al naturale	**Finish:** • Natural

Dimensioni e Pesi

Dimensions and Weights



Ø D		A mm	Angolo di flessione Deflection angle α	Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm									Fattore Factor K
				1 bar	1.5 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	10 bar	
1/2"	3/4"	50	75°	6,7	8,2	9,5	11,6	13,4	15,0	16,4	17,7	21,2	6,7 (1)
				9,0	11,0	12,7	15,6	18,0	20,1	22,0	23,8	28,5	9 (1)
				11,5	14,1	16,3	19,9	23,0	25,7	28,2	30,4	36,4	11,5 (1)
				13,7	16,8	19,4	23,7	27,4	30,6	33,6	36,2	43,3	13,7 (1)
				15,8	19,4	22,3	27,4	31,6	35,3	38,7	41,8	50,0	15,8 (1)
				18,0	22,0	25,5	31,2	36,0	40,2	44,1	47,6	56,9	18 (1)
				23,0	28,2	32,5	39,8	46,0	51,4	56,3	60,9	72,7	23 (1)
				27,0	33,1	38,2	46,8	54,0	60,4	66,1	71,4	85,4	27 (1)
				31,0	38,0	43,8	53,7	62,0	69,3	75,9	82,0	98,0	31 (1)
				41,0	50,2	58,0	71,0	82,0	91,7	100,4	108,5	129,7	41 (1)
				52,0	63,7	73,5	90,1	104,0	116,3	127,4	137,6	164,4	52 (1)
				54,0	66,1	76,4	93,5	108,0	120,7	132,3	142,9	170,8	54 (1)
				64,0	78,4	90,5	110,9	128,0	143,1	156,8	169,3	202,4	64
				75,0	91,9	106,1	129,9	150,0	167,7	183,7	198,4	237,2	75
				95,0	116,4	134,4	164,5	190,0	212,4	232,7	251,3	300,4	95

Opzioni

- Cromatura
- Tappo di protezione
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- Chrome plated
- Blow cap
- For additional options or special versions contact SA Fire Protection

Nota:

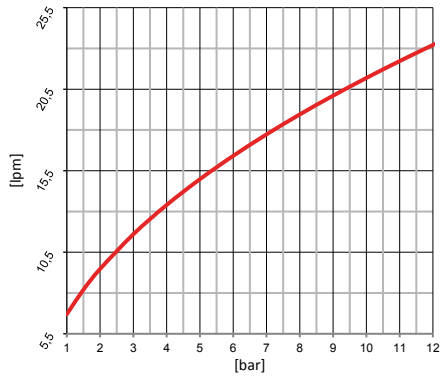
(1) Prevedere sulla linea principale un filtro in accordo ai requisiti di NFPA 15

Note:

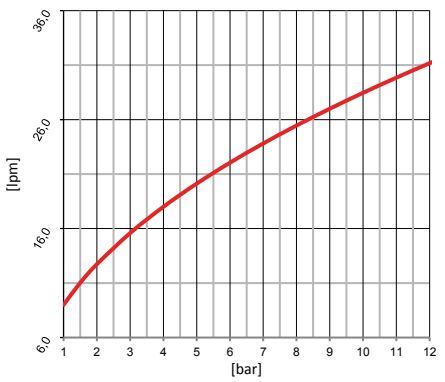
(1) Main pipe line strainer is required according to NFPA 15 requirements

Pressione (bar) / Portata (l/min)
Pressure (bar) / Flow Rate (lpm)

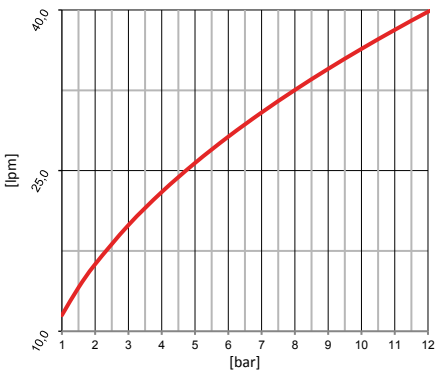
Fattore / Factor (K= 6.7)



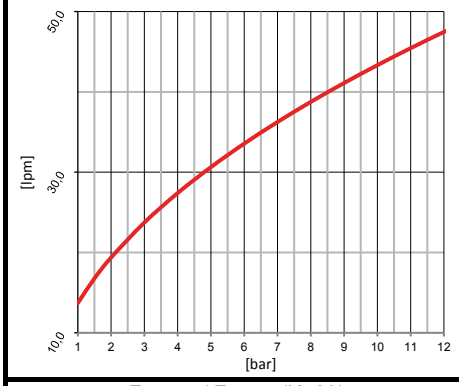
Fattore / Factor (K= 9)



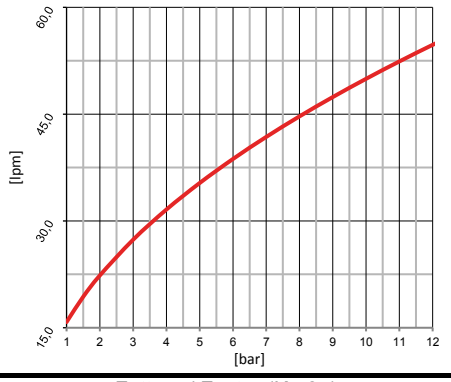
Fattore / Factor (K= 11.5)



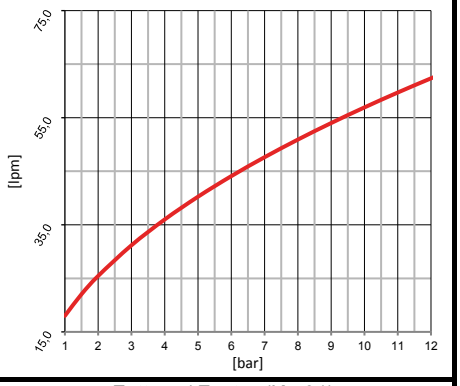
Fattore / Factor (K= 13.7)



Fattore / Factor (K= 15.8)



Fattore / Factor (K= 18)



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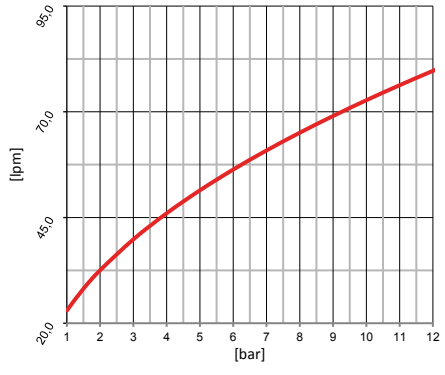

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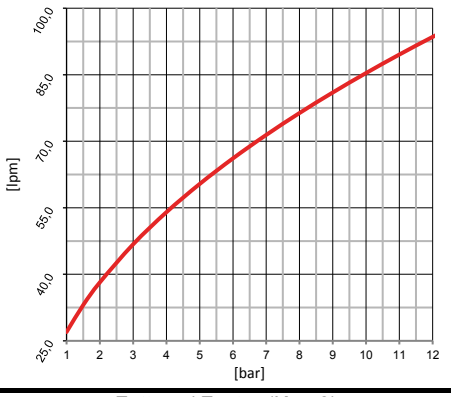

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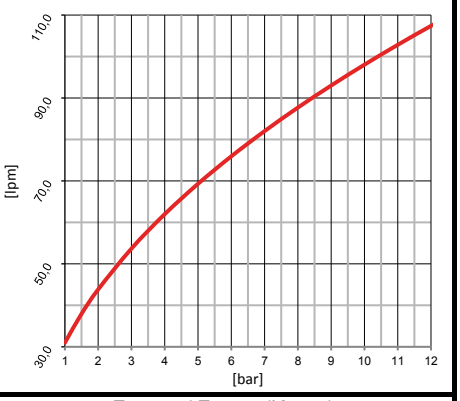

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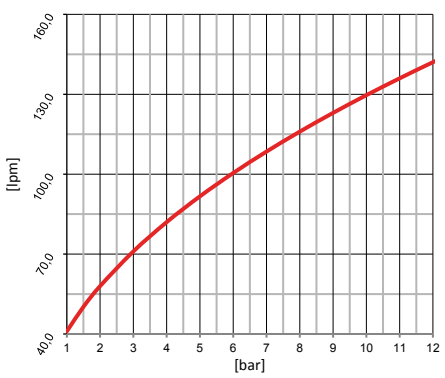

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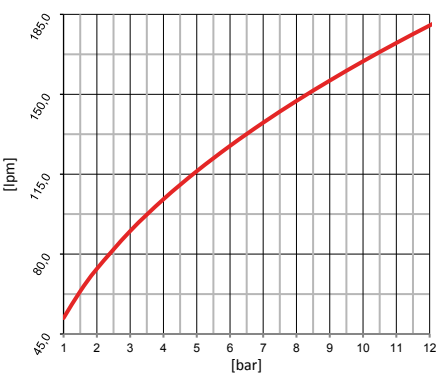
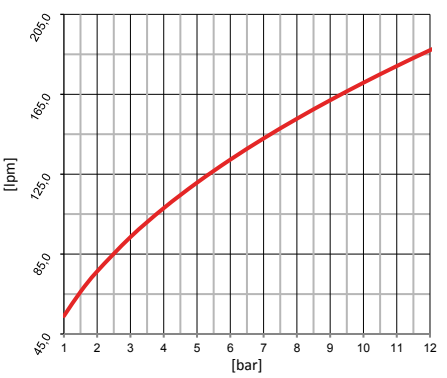
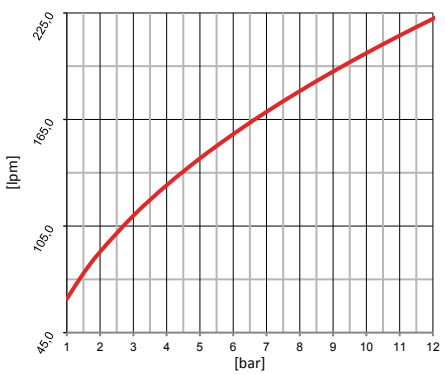


Fattore / Factor (K= 54)

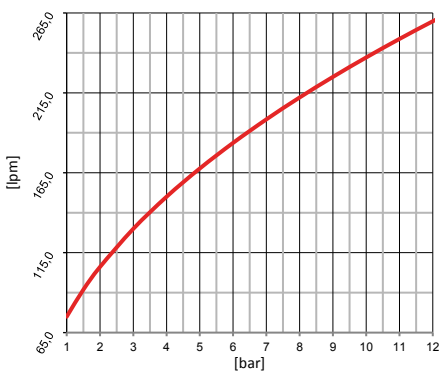


Pressione (bar) / Portata (l/min)
Pressure (bar) / Flow Rate (lpm)

Fattore / Factor (K= 64)



Fattore / Factor (K= 75)



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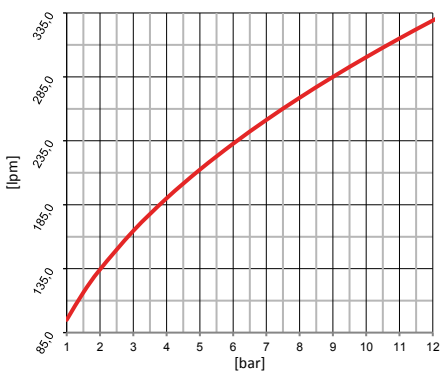


Codice Identificativo
Identification Form

OPZIONI / OPTIONS

Mod. | NF | | | | / | | / | | / | | |
1 2 3 4 5 6 7 8

Quantità / Quantity

UGELLO SPRAY A LAMA PIATTA NF / SPRAY NOZZLE FLAT JET NF

CORPO BODY	1	Tipologia Type	Ugello a lama piatta Flat jet nozzle		NF ■	
	2	Materiale Material	Ottone Brass		COT10 ☐	
			Bronzo EN 1982 – CC491K Bronze EN 1982 – CC491K		CBG10 ☐	
			Nichel Alluminio Bronzo EN 1982 - CC333G Nickel Aluminium Bronze EN 1982 - CC333G		CBA10 ☐	
			Acciaio inox AISI 316 Stainless steel AISI 316		CAI12 ☐	
	3	Dimensione Size	1/2”		M ☐	
			3/4”		QQQ ☐	
	4	Connessione Connection	BSP		BSP ☐	
			NPT		NPT ☐	
POSRTATA FLOW RATE	5	Fattore K $((l/min)/\sqrt{bar})$ K factor $((lpm)/\sqrt{bar})$	6,7 ☐	9 ☐	11,5 ☐	13,7 ☐	15,8 ☐	
			18 ☐	23 ☐	27 ☐	31 ☐	41 ☐	
			52 ☐	54 ☐	64 ☐	75 ☐	95 ☐	
			Altre portate Other flow rates				K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.
ANGOLO DI SPRAY SPRAY ANGLE	6	Angolo di Spray Spray Angle	90° ☐	120° ☐	140° ☐	170° ☐	180° ☐	
			Altre angolazioni Other spray angles				A ☐	Specificare in Note l’angolazione di spray richiesta Specify in Notes the required spray angle
OPZIONI OPTIONS	7	Finitura Finish	Cromatura Chrome plated				FC ☐	
	8	Tappo di protezione Moisture protection cap	Tappo di protezione Moisture protection cap				TP ☐	

NOTE
NOTES

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
EMESSO / ISSUED: DATA / DATE:	CONTROLLATO / CHECKED: DATA / DATE:	APPROVATO / APPROVED: DATA / DATE:	

UGELLO SPRAY A LAMA PIATTA – N
SPRAY NOZZLE FLAT JET – N

Descrizione

Il Mod. N è un ugello a lama piatta che viene impiegato nei sistemi water spray a diluvio per realizzare sistemi di raffreddamento e barriere d'acqua, con angolo di deflessione pari a 90°. Il Mod. N è disponibile in ottone, bronzo, bronzo alluminio ed acciaio inox AISI 316, con angoli di apertura del getto a scelta tra 90° - 180° ed attacco al processo da 1/2" o 3/4" filettato BSP o NPT.

Description

The Mod. N is a flat jet nozzle used in deluge water spray systems designed for cooling systems and water curtains, with deflection angle 90°. The Mod. N is available in brass, bronze, aluminium bronze and stainless steel AISI 316, with dispersion angles ranging from 90° - 180° and process connections of 1/2" or 3/4" threaded BSP or NPT.

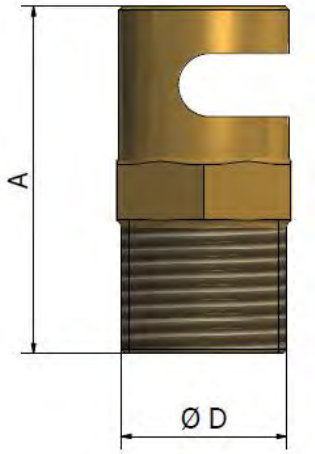
Caratteristiche tecniche	Technical characteristics

• Materiale corpo a scelta tra:
  • Ottone
  • Bronzo EN 1982 – CC491K
  • Nickel Alluminio Bronzo EN 1982 - CC333G
  • Acciaio inox AISI 316
• Dimensioni disponibili:
  • 1/2”
  • 3/4”
• Attacco filettato disponibile:
  • M. BSP
  • M. NPT
• Angoli di dispersione:
  • 90°, 120°, 140°, 170° o 180°
• Angolo di deflessione 90°
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene
• Pressione di progetto 16 bar
	• Body material to be selected among:
	  • Brass
	  • Bronze EN 1982 – CC491K
	  • Nickel Aluminum Bronze EN 1982 - CC333G
	  • Stainless Steel AISI 316
	• Available sizes:
	  • 1/2”
	  • 3/4”
	• Available connection threaded:
	  • M. BSP
	  • M. NPT
	• Dispersion angles:
	  • 90°, 120°, 140°, 170° o 180°
	• Deflection angle 90°
	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
	• Design pressure: 16 bar

Finitura: • Al naturale	**Finish:** • Natural

Dimensioni e Pesi

Dimensions and Weights



Ø D		A mm	Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm								Fattore Factor K
			1 bar	1.5 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	10 bar	
1/2"	3/4"	44	6,7	8,2	9,5	11,6	13,4	15,0	16,4	17,7	21,2	6,7 (1)
			9,0	11,0	12,7	15,6	18,0	20,1	22,0	23,8	28,5	9 (1)
			11,5	14,1	16,3	19,9	23,0	25,7	28,2	30,4	36,4	11,5 (1)
			13,7	16,8	19,4	23,7	27,4	30,6	33,6	36,2	43,3	13,7 (1)
			15,8	19,4	22,3	27,4	31,6	35,3	38,7	41,8	50,0	15,8 (1)
			18,0	22,0	25,5	31,2	36,0	40,2	44,1	47,6	56,9	18 (1)
			23,0	28,2	32,5	39,8	46,0	51,4	56,3	60,9	72,7	23 (1)
			27,0	33,1	38,2	46,8	54,0	60,4	66,1	71,4	85,4	27 (1)
			31,0	38,0	43,8	53,7	62,0	69,3	75,9	82,0	98,0	31 (1)
			41,0	50,2	58,0	71,0	82,0	91,7	100,4	108,5	129,7	41 (1)
			52,0	63,7	73,5	90,1	104,0	116,3	127,4	137,6	164,4	52 (1)
			54,0	66,1	76,4	93,5	108,0	120,7	132,3	142,9	170,8	54 (1)
			64,0	78,4	90,5	110,9	128,0	143,1	156,8	169,3	202,4	64
			75,0	91,9	106,1	129,9	150,0	167,7	183,7	198,4	237,2	75
			95,0	116,4	134,4	164,5	190,0	212,4	232,7	251,3	300,4	95

Opzioni

- Cromatura
- Tappo di protezione
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- Chrome plated
- Blow cap
- For additional options or special versions contact SA Fire Protection

Nota:

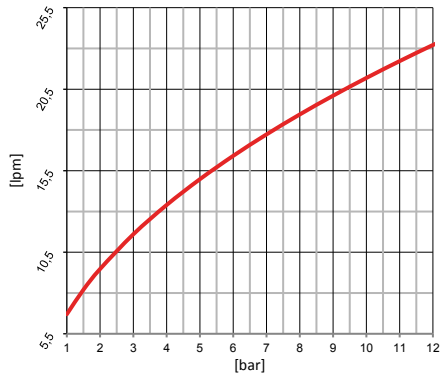
(1) Prevedere sulla linea principale un filtro in accordo ai requisiti di NFPA 15

Note:

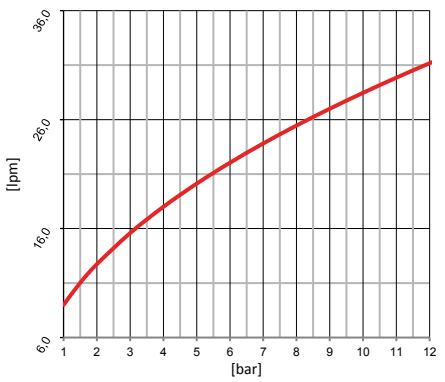
(1) Main pipe line strainer is required according to NFPA 15 requirements

Pressione (bar) / Portata (l/min)
Pressure (bar) / Flow Rate (lpm)

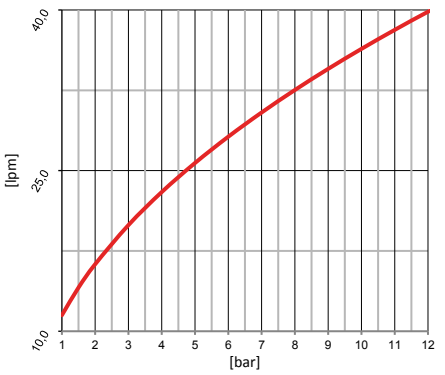
Fattore / Factor (K= 6.7)



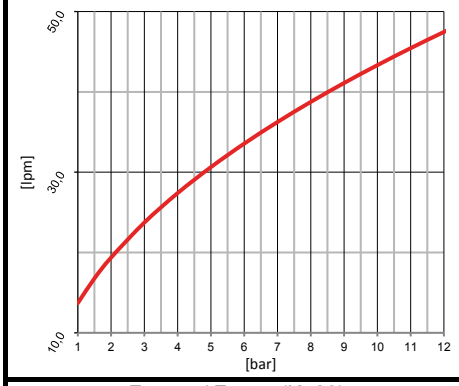
Fattore / Factor (K= 9)



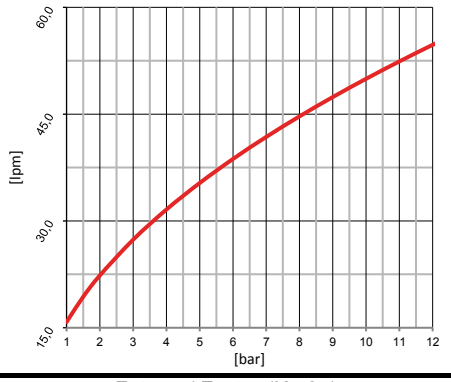
Fattore / Factor (K= 11.5)



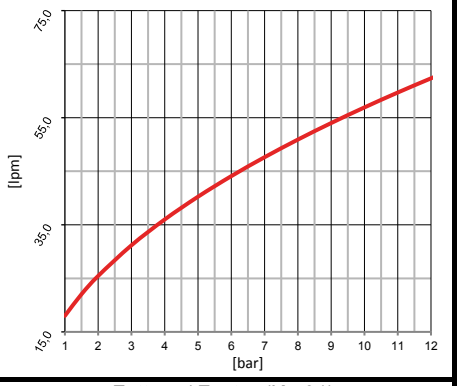
Fattore / Factor (K= 13.7)



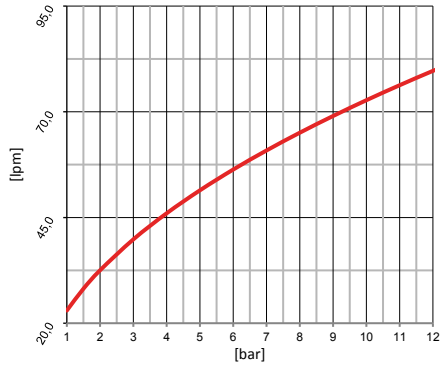
Fattore / Factor (K= 15.8)



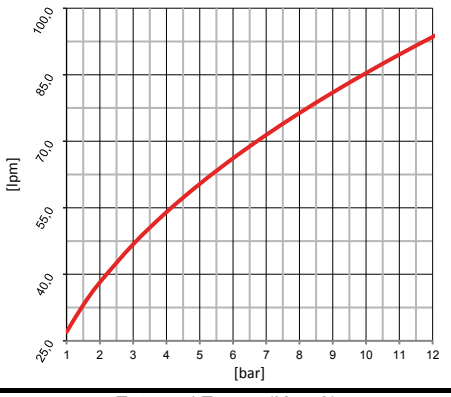
Fattore / Factor (K= 18)



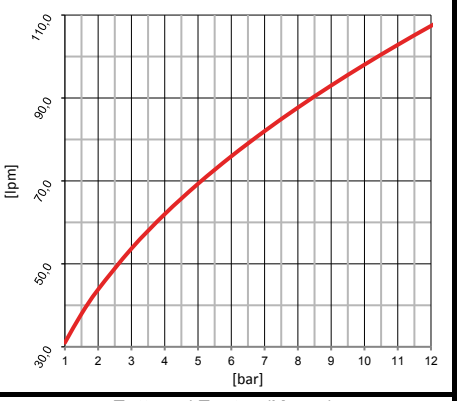
Fattore / Factor (K=23)



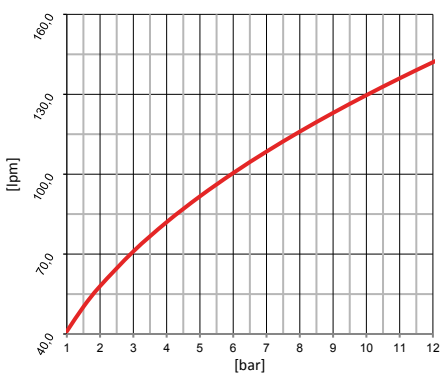
Fattore / Factor (K= 27)



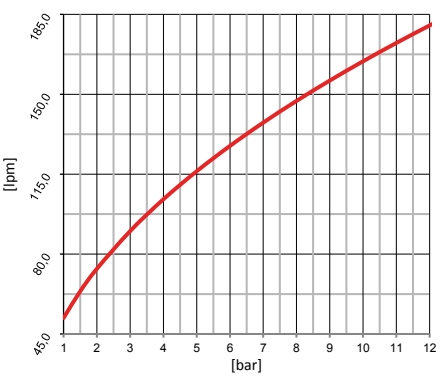
Fattore / Factor (K= 31)



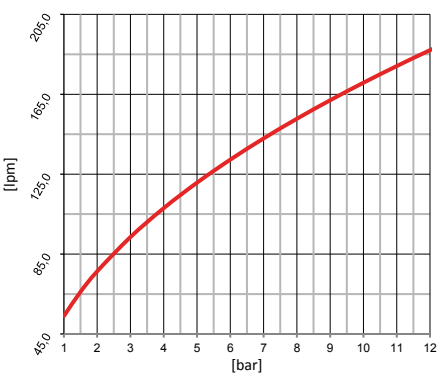
Fattore / Factor (K= 41)

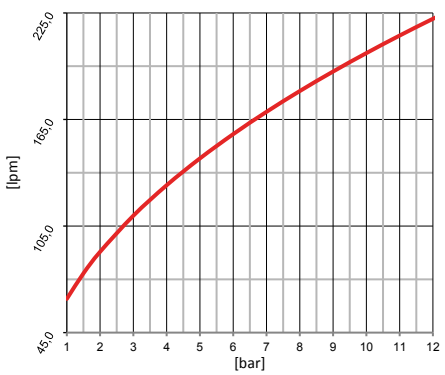
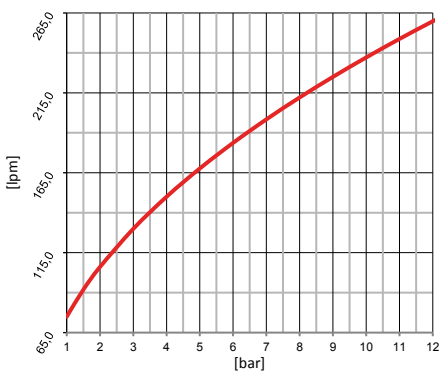
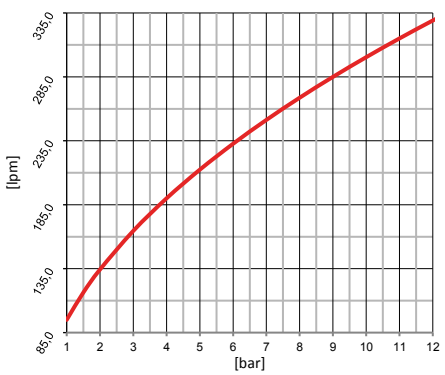


Fattore / Factor (K= 52)



Fattore / Factor (K= 54)



Pressione (bar) / Portata (l/min) Pressure (bar) / Flow Rate (lpm)		
Fattore / Factor (K= 64)	Fattore / Factor (K= 75)	Fattore / Factor (K= 95)
		

Codice Identificativo
Identification Form

OPZIONI / OPTIONS

Mod. | N | | | | / | | / | | / | | |
1 2 3 4 5 6 7 8

Quantità / Quantity

UGELLO SPRAY A LAMA PIATTA N / SPRAY NOZZLE FLAT JET N

CORPO BODY	1	Tipologia Type	Ugello a lama piatta Flat jet nozzle				N ■	
	2	Materiale Material	Ottone Brass				COT10 ☐	
			Bronzo EN 1982 – CC491K Bronze EN 1982 – CC491K				CBG10 ☐	
			Nichel Alluminio Bronzo EN 1982 - CC333G Nickel Aluminium Bronze EN 1982 - CC333G				CBA10 ☐	
			Acciaio inox AISI 316 Stainless steel AISI 316				CAI12 ☐	
	3	Dimensione Size	1/2”				M ☐	
			3/4”				QQQ ☐	
	4	Connessione Connection	BSP				BSP ☐	
			NPT				NPT ☐	
POSRTATA FLOW RATE	5	Fattore K $((l/min)/\sqrt{bar})$ K factor $((lpm)/\sqrt{bar})$	6,7 ☐	9 ☐	11,5 ☐	13,7 ☐	15,8 ☐	
			18 ☐	23 ☐	27 ☐	31 ☐	41 ☐	
			52 ☐	54 ☐	64 ☐	75 ☐	95 ☐	
			Altre portate Other flow rates				K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.
ANGOLO DI SPRAY SPRAY ANGLE	6	Angolo di Spray Spray Angle	90° ☐	120° ☐	140° ☐	170° ☐	180° ☐	
			Altre angolazioni Other spray angles				A ☐	Specificare in Note l’angolazione di spray richiesta Specify in Notes the required spray angle
OPZIONI OPTIONS	7	Finitura Finish	Cromatura Chrome plated				FC ☐	
	8	Tappo di protezione Moisture protection cap	Tappo di protezione Moisture protection cap				TP ☐	

NOTE
NOTES

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
EMESSO / ISSUED: DATA / DATE:	CONTROLLATO / CHECKED: DATA / DATE:	APPROVATO / APPROVED: DATA / DATE:	

UGELLO SPRAY A GETTO PIATTO – IM
SPRAY NOZZLE FLAT JET – IM

Descrizione

Il Mod. IM è un ugello a getto piatto ad alta velocità che viene impiegato nei sistemi water spray a diluvio per realizzare sistemi di raffreddamento, spegnimento o abbattimento vapori. Il Mod. IM è disponibile in ottone, bronzo, bronzo alluminio ed acciaio inox AISI 316, con angoli di apertura del getto a scelta tra 30° - 120° ed attacco al processo da 1/2", o 3/4" filettato BSP o NPT.

Description

The Mod. IM is a flat jet high velocity nozzle used in deluge water spray systems designed for fire suppression, cooling or vapour containments. The Mod. IM is available in brass, bronze, Aluminum bronze and stainless steel AISI 316, with dispersion angles ranging from 30° to 120° and process connections of 1/2" or 3/4" threaded BSP or NPT.

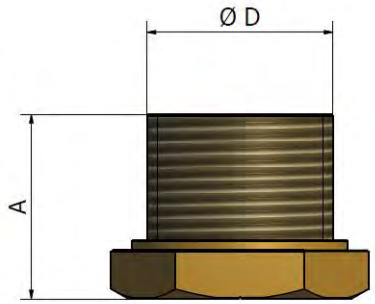
Caratteristiche tecniche	Technical characteristics

• Materiale corpo a scelta tra:
  • Ottone
  • Bronzo EN 1982 – CC491K
  • Nickel Alluminio Bronzo EN 1982 - CC333G
  • Acciaio inox AISI 316
• Dimensioni disponibili:
  • 1/2”
  • 3/4”
• Attacco filettato disponibile:
  • M. BSP
  • M. NPT
• Angoli di dispersione:
  • 30°, 45°, 60°, 80°, 90° o 120°
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene
• Pressione di progetto 16 bar
	• Body material to be selected among:
	  • Brass
	  • Bronze EN 1982 – CC491K
	  • Nickel Aluminum Bronze EN 1982 - CC333G
	  • Stainless Steel AISI 316
	• Available sizes:
	  • 1/2”
	  • 3/4”
	• Available connection threaded:
	  • M. BSP
	  • M. NPT
	• Dispersion angles:
	  • 30°, 45°, 60°, 80°, 90° o 120°
	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
	• Design pressure: 16 bar

Finitura: • Al naturale	**Finish:** • Natural

Dimensioni e Pesi

Dimensions and Weights



Ø D		A mm	Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm								Fattore Factor K
			1 bar	1.5 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	10 bar	
1/2"	3/4"	15	5,6	6,9	7,9	9,7	11,2	12,5	13,7	14,8	17,7	5,6
			7,2	8,8	10,2	12,5	14,4	16,1	17,6	19,0	22,8	7,2
			8,9	10,9	12,6	15,4	17,8	19,9	21,8	23,5	28,1	8,9
			11,2	13,7	15,8	19,4	22,4	25,0	27,4	29,6	35,4	11,2
			14,0	17,1	19,8	24,2	28,0	31,3	34,3	37,0	44,3	14,0
			17,7	21,7	25,0	30,7	35,4	39,6	43,4	46,8	56,0	17,7
			28,3	34,7	40,0	49,0	56,6	63,3	69,3	74,9	89,5	28,3
			35,0	42,9	49,5	60,6	70,0	78,3	85,7	92,6	110,7	35,0
			45,0	55,1	63,6	77,9	90,0	100,6	110,2	119,1	142,3	45,0
			80,0	98,0	113,1	138,6	160,0	178,9	196,0	211,7	253,0	80,0
			90,0	110,2	127,3	155,9	180,0	201,2	220,5	238,1	284,6	90,0

Opzioni

- Cromatura
- Tappo di protezione
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- Chrome plated
- Blow cap
- For additional options or special versions contact SA Fire Protection

Nota:

(1) Prevedere sulla linea principale un filtro in accordo ai requisiti di NFPA 15

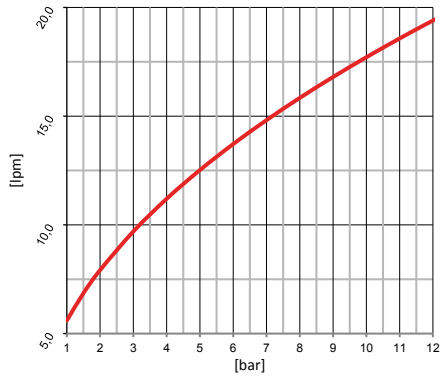
Note:

(1) Main pipe line strainer is required according to NFPA 15 requirements

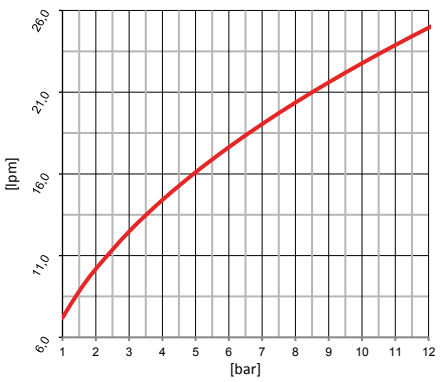
Diagrammi Prestazioni | **Performance Diagrams**

Pressione (bar) / Portata (l/min)
Pressure (bar) / Flow Rate (lpm)

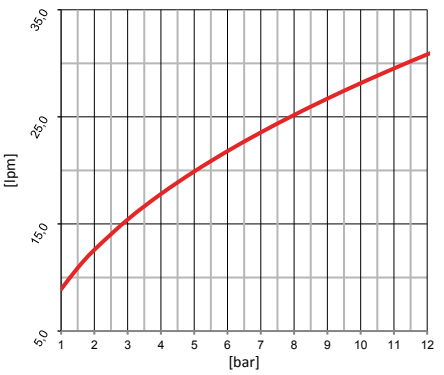
Fattore / Factor (K= 5.6)



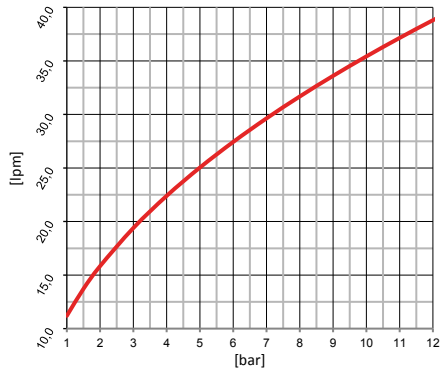
Fattore / Factor (K= 7.2)



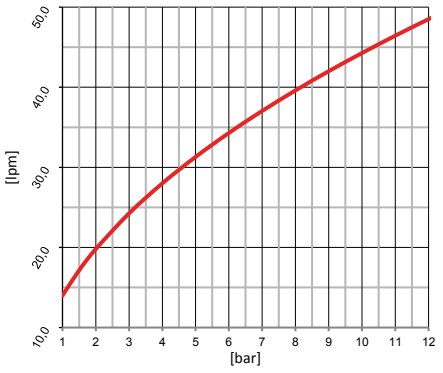
Fattore / Factor (K= 8.9)



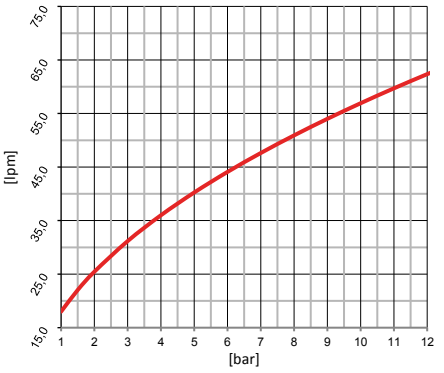
Fattore / Factor (K= 11.2)



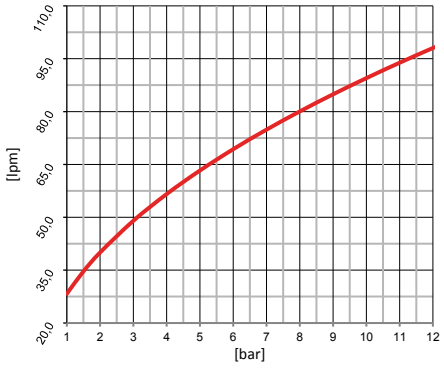
Fattore / Factor (K= 14)



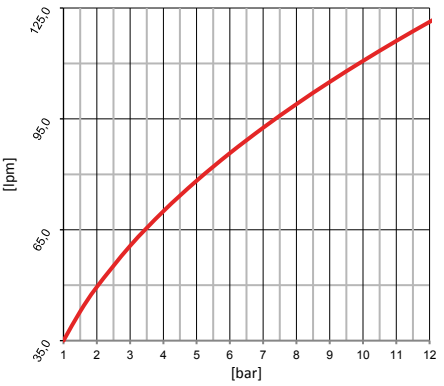
Fattore / Factor (K= 17.7)



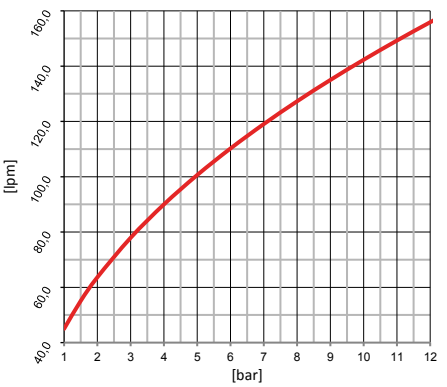
Fattore / Factor (K=28.3)



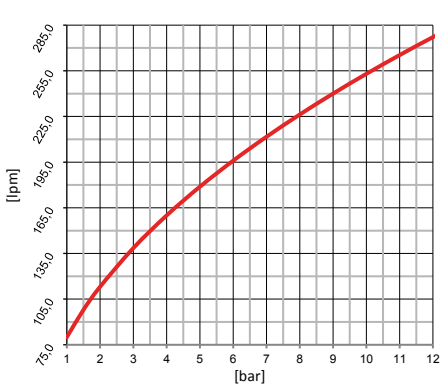
Fattore / Factor (K= 35)



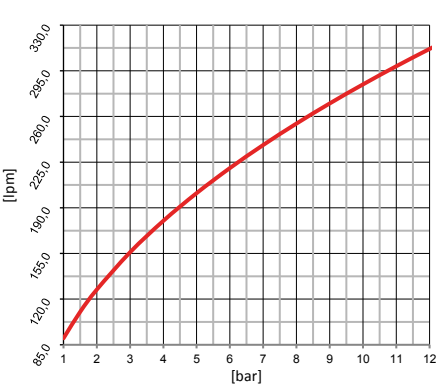
Fattore / Factor (K= 45)



Fattore / Factor (K= 80)



Fattore / Factor (K= 90)



-

Codice Identificativo
Identification Form

OPZIONI / OPTIONS

Mod.	IM				/		/		/		
	1	2	3	4		5		6		7	8

Quantità / Quantity

UGELLO SPRAY A GETTO PIATTO IM / SPRAY NOZZLE FLAT JET IM

CORPO BODY	1	Tipologia Type	Ugello spray a getto piato Spray nozzle flat jet				IM ■	
	2	Materiale Material	Ottone Brass				COT10 ☐	
			Bronzo EN 1982 – CC491K Bronze EN 1982 – CC491K				CBG10 ☐	
			Nichel Alluminio Bronzo EN 1982 - CC333G Nickel Aluminum Bronze EN 1982 - CC333G				CBA10 ☐	
			Acciaio inox AISI 316 Stainless steel AISI 316				CAI12 ☐	
	3	Dimensione Size	1/2”				M ☐	
			3/4”				QQQ ☐	
	4	Connessione Connection	BSP				BSP ☐	
			NPT				NPT ☐	
POSRTATA FLOW RATE	5	Fattore K $((l/min)/\sqrt{bar})$ K factor $(lpm/\sqrt{bar})$	5,6 ☐	7,2 ☐	8,9 ☐		11,2 ☐	
			14 ☐	17,7 ☐	28,3 ☐		35 ☐	
			45 ☐	80 ☐	90 ☐			
			Altre portate Other flow rates				K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.
ANGOLO DI SPRAY SPRAY ANGLE	6	Angolo di Spray Spray Angle	30° ☐	45° ☐	60° ☐		80° ☐	
			90° ☐	120° ☐				
			Altre angolazioni Other spray angles				A ☐	Specificare in Note l’angolazione di spray richiesta Specify in Notes the required spray angle
OPZIONI OPTIONS	7	Finitura Finish	Cromatura Chrome plated				FC ☐	
	8	Tappo di protezione Moisture protection cap	Tappo di protezione Moisture protection cap				TP ☐	

NOTE
NOTES

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
EMESSO / ISSUED: DATA / DATE:	CONTROLLATO / CHECKED: DATA / DATE:	APPROVATO / APPROVED: DATA / DATE:	

UGELLO A CAMPANA – UC
BELL NOZZLE – UC

Mod. UC/A

Mod. UC/B

Descrizione

Il Mod. UC è un ugello a campana impiegato nei sistemi water spray a diluvio per realizzare sistemi di raffreddamento, spegnimento o abbattimento vapori. L'ugello a campana viene installato sulla sommità di serbatoi a tetto galleggiante e serbatoi di stoccaggio, rivolto verso l'alto. Il Mod. UC è disponibile in acciaio al carbonio ed acciaio inox AISI 316, con angoli di apertura del getto a scelta tra 150° o 180° ed attacco al processo flangiato ANSI o UNI.

Description

The Mod. UC is a flat jet high velocity nozzle used in deluge water spray systems designed for fire suppression, cooling or vapour containments. The bell nozzle is installed on the top of fixed roof tanks and storage tanks, in upright position. The Mod. UC is available in carbon steel and stainless steel AISI 316, with dispersion angles 150° or 180° and process connection flanged ANSI or UNI.

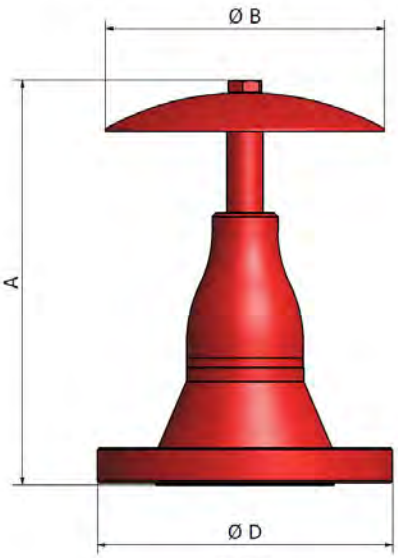
Caratteristiche tecniche	Technical characteristics

• Materiale corpo a scelta tra:
  • Acciaio al carbonio ASTM A 234 WPB
  • Acciaio inox AISI 316
• Asta in acciaio inox
• Campana in acciaio inox
• Flangia di alimentazione ANSI o UNI a scelta tra:
  • Acciaio al carbonio
  • Acciaio inox AISI 316
• Angoli di dispersione:
  • 150° o 180°
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene
• Pressione di progetto 16 bar
	• Body material to be selected among:
	  • Carbon steel ASTM A 234 WPB
	  • Stainless Steel AISI 316
	• Stainless steel rod
	• Stainless steel bell
	• Inlet flange ANSI or UNI to be selected among:
	  • Carbon steel
	  • Stainless Steel AISI 316
	• Dispersion angles:
	  • 150° or 180°
	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
	• Design pressure: 16 bar

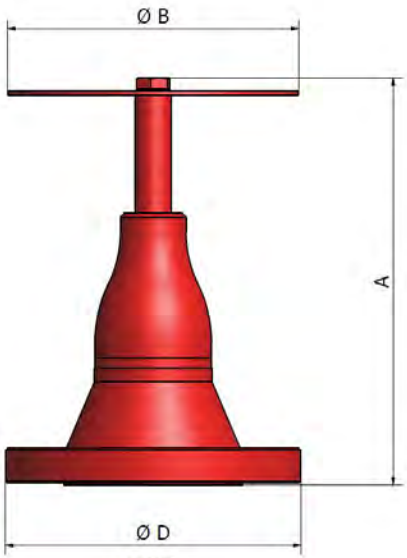
Ciclo verniciatura standard SA: • Pulizia manuale con solvente • Primer epossidico 60 µm • Intermedio epossidico 30 µm • Finitura poliuretanico 30 µm • Spessore totale film secco 120 µm +/-10% • Colore rosso RAL 3000	**Painting system standard SA:** • Manual cleaning solvent • Epoxy primer 60 µm • Epoxy Intermediate 30 µm • Polyurethane finish 30 µm • Total thickness 120 µm dry film +/-10% • Colour red RAL 3000

Dimensioni e Pesi

Dimensions and Weights



UC/A



UC/B

Ø D	A mm	Ø B mm	Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm				Fattore Factor K
			1 bar	3 bar	5 bar	7 bar	
1 1/2”	180	150	72	125	161	190	72
			110	191	246	291	110
			175	303	391	463	175
2”	210	150	175	303	391	463	175
			218	378	487	577	218
			290	502	648	767	290
3”	240	230	378	655	845	1000	378
			460	797	1029	1217	460
4”	260	290	585	1013	1308	1548	585
			718	1244	1605	1900	718
			842	1458	1883	2228	842
			1140	1975	2549	3016	1140
6”	320	430	1235	2139	2762	3268	1235
			1730	2996	3868	4577	1730
			2200	3811	4919	5821	2200

Opzioni

- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- For additional options or special versions contact SA Fire Protection

Codice Identificativo
Identification Form

OPZIONI/OPTIONS

Mod. [ ] [ ] / [ ] [ ] [ ] / [ ] / [ ]
1 2 3 4 5 6 7

Quantità / Quantity [ ]

UGELLO A CAMPANA UC / BELL NOZZLE UC

CORPO BODY	1	Tipologia Type	Ugello a campana angolo 150° tipo UC/A Bell nozzle angle 150° type UC/A	UC/A ☐	
			Ugello a campana angolo 180° tipo UC/B Bell nozzle angle 180° type UC/B	UC/B ☐	
	2	Materiale Material	Acciaio al carbonio ASTM A 234 WPB Carbon steel ASTM A 234 WPB	CAC41 ☐	
			Acciaio inox AISI 316 Stainless steel AISI 316	CAI42 ☐	
FLANGIA FLANGE	3	Materiale Material	Acciaio al carbonio Carbon steel	FAC20 ☐	
			Acciaio inox AISI 316 Stainless steel AISI 316	FAI22 ☐	
	4	Tipologia Type	ANSI 150 RF	150RF ☐	Tipologia standard Standard type
			ANSI 150 FF	150FF ☐	
			UNI PN16	UNI ☐	
			Altro Other	C ☐	Specificare in Note la tipologia di flangia richiesta. Specify in Notes the type of flange requested.
	5	Dimensione Size	DN 40 1 1/2”	1M ☐	
			DN 50 2”	2 ☐	
			DN 80 3”	3 ☐	
			DN 100 4”	4 ☐	
			DN 150 6”	6 ☐	
POSRTATA FLOW RATE	6	Fattore K $((l/min)/\sqrt{bar})$ K factor $(lpm/\sqrt{bar})$	72 ☐ / 110 ☐ / 175 ☐	218 ☐	
			290 ☐ / 378 ☐ / 460 ☐	585 ☐	
			718 ☐ / 842 ☐ / 1140 ☐	1235 ☐	
			1730 ☐ / 2200 ☐		
			Altre portate Other flow rates	K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.
OPZIONI OPTIONS	7	Angolo di Spray Spray Angle	Altre angolazioni Other spray angles	A ☐	Specificare in Note l’angolazione di spray richiesta Specify in Notes the required spray angle

NOTE
NOTES

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
EMESSO / ISSUED: DATA / DATE:	CONTROLLATO / CHECKED: DATA / DATE:	APPROVATO / APPROVED: DATA / DATE:	

UGELLO ACQUA/SCHIUMA BASSA ESPANSIONE – US
LOW EXPANSION WATER/FOAM NOZZLE – US

USPE

USUP

Descrizione

Il Mod. US è un ugello acqua/schiuma con aspirazione aria che viene impiegato nei sistemi a diluvio acqua/schiuma a bassa espansione. Il Mod. US è disponibile in bronzo o bronzo alluminio, con attacco al processo da 1/2” o 3/4” filettato BSP o NPT.

Il Mod. US è disponibile in due configurazioni, USPE per installazione verso il basso e USUP per installazione verso l’alto.

Description

The Mod. US is an air-aspirating water/foam nozzle used in low expansion foam/water deluge systems. The Mod. US is available in bronze or Aluminum bronze, with process connections of 1/2” or 3/4” threaded BSP or NPT.

The Mod. US is available in two configurations, USPE for pendent installation and USUP for upright installation.

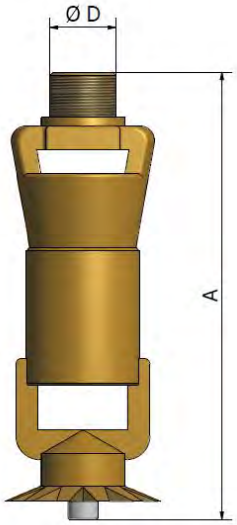
Caratteristiche tecniche	Technical characteristics

• Corpo a scelta tra:
  • Bronzo EN 1982 – CC491K
  • Nickel Alluminio Bronzo EN 1982 - CC333G
• Rapporto espansione 1/7 (Varia con il tipo di schiumogeno)
• Dimensioni disponibili:
  • 1/2”
  • 3/4”
• Attacco filettato disponibile:
  • M. BSP
  • M. NPT
• Angolo di dispersione ~ 90°
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene
• Pressione di progetto 16 bar
	• Body to be selected among:
	  • Bronze EN 1982 – CC491K
	  • Nickel Aluminum Bronze EN 1982 - CC333G
	• Expansion ratio 1/7 (May vary depending on the foam concentrate)
	• Available sizes:
	  • 1/2”
	  • 3/4”
	• Available connection threaded:
	  • M. BSP
	  • M. NPT
	• Dispersion angle ~ 90°
	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
	• Design pressure 16 bar

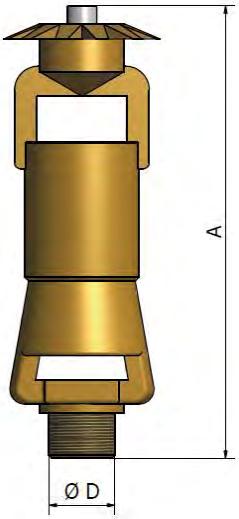
Finitura: • Al naturale	**Finish:** • Natural

Dimensioni e Pesi

Dimensions and Weights



USPE



USUP

Ø D		A mm	Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm						Fattore Factor K
			3 bar	4 bar	5 bar	6 bar	7 bar	8 bar	
1/2"	3/4"	150	23,2	26,8	30,0	32,8	35,5	37,9	13,4
			30,8	35,6	39,8	43,6	47,1	50,3	17,8
			38,6	44,6	49,9	54,6	59,0	63,1	22,3
			46,4	53,6	59,9	65,6	70,9	75,8	26,8
			61,8	71,4	79,8	87,4	94,5	101,0	35,7
			69,6	80,4	89,9	98,5	106,4	113,7	40,2
			79,7	92,0	102,9	112,7	121,7	130,1	46
3/4"			92,8	107,2	119,9	131,3	141,8	151,6	53,6
			108,3	125,0	139,8	153,1	165,4	176,8	62,5
			116,0	134,0	149,8	164,1	177,3	189,5	67
			154,7	178,6	199,7	218,7	236,3	252,6	89,3

Opzioni

- Cromatura
- Tappo di protezione
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

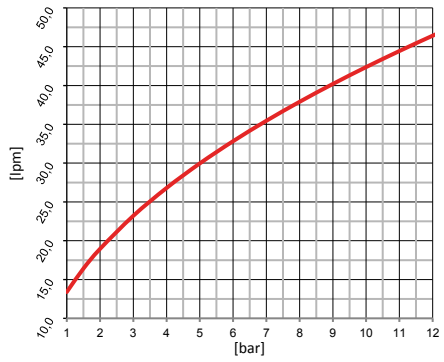
Optional

- Chrome plated
- Blow cap
- For additional options or special versions contact SA Fire Protection

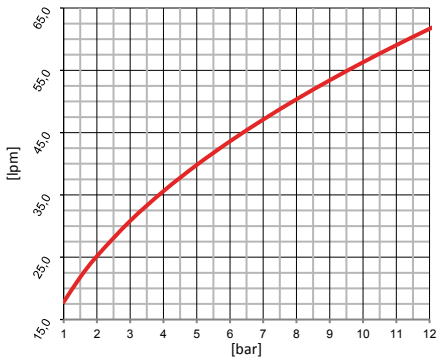
Diagrammi Prestazioni | **Performance Diagrams**

Pressione (bar) / Portata (l/min)
Pressure (bar) / Flow Rate (lpm)

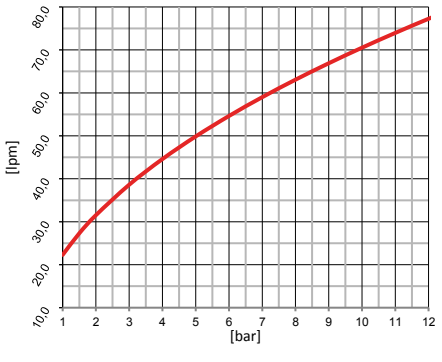
Fattore / Factor (K= 13.4)



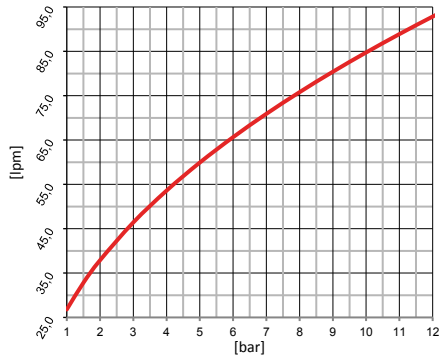
Fattore / Factor (K= 17.8)



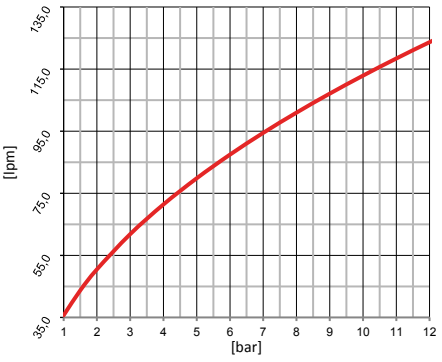
Fattore / Factor (K= 22.3)



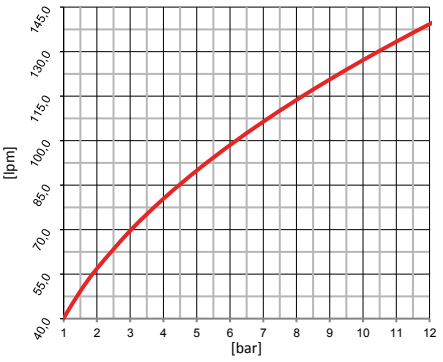
Fattore / Factor (K= 26.8)



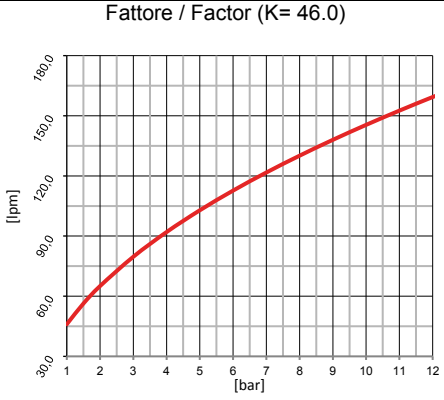
Fattore / Factor (K= 35.7)



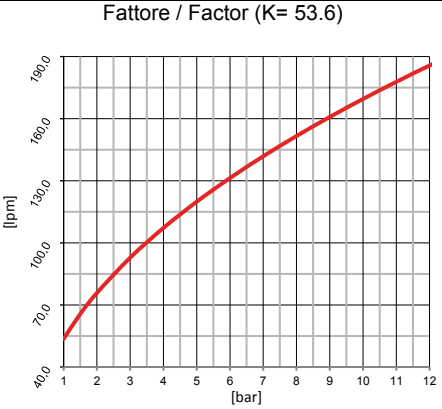
Fattore / Factor (K= 40.2)



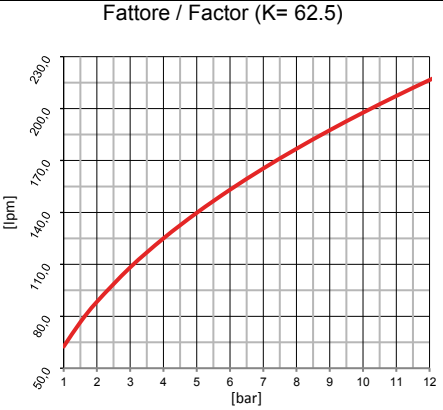
Fattore / Factor (K= 46.0)



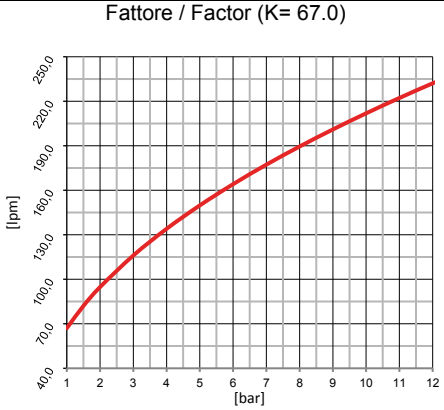
Fattore / Factor (K= 53.6)



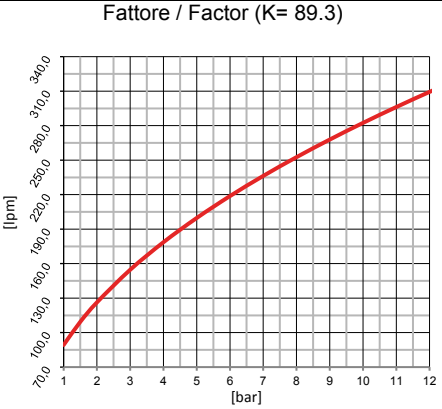
Fattore / Factor (K= 62.5)



Fattore / Factor (K= 67.0)



Fattore / Factor (K= 89.3)



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Codice Identificativo
Identification Form

OPZIONI / OPTIONS

Mod. [ ] [ ] [ ] [ ] / [ ] / [ ] [ ]
1 2 3 4 5 6 7

Quantità / Quantity [ ]

UGELLO ACQUA/SCHIUMA BASSA ESPANSIONE US / LOW EXPANSION WATER/FOAM NOZZLE US

CORPO BODY	1	Tipologia Type	Ugello acqua/schiuma Pendent Water/foam nozzle Pendent		USPE ☐	
			Ugello acqua/schiuma Upright Water/foam nozzle Upright		USUP ☐	
	2	Materiale Material	Bronzo EN 1982 – CC491K Bronze EN 1982 – CC491K		CBG10 ☐	
			Nichel Alluminio Bronzo EN 1982 - CC333G Nickel Aluminum Bronze EN 1982 - CC333G		CBA10 ☐	
	3	Dimensione Size	1/2”		M ☐	
			3/4”		QQQ ☐	
	4	Connessione Connection	BSP		BSP ☐	
			NPT		NPT ☐	
POSRTATA FLOW RATE	5	Fattore K $((l/min)/\sqrt{bar})$ K factor $(lpm/\sqrt{bar})$	13,4 ☐	17,8 ☐ 22,3 ☐	26,8 ☐	
			35,7 ☐	40,2 ☐ 46,0 ☐	53,6 ☐	
			62,5 ☐	67,0 ☐ 89,3 ☐		
			Altre portate Other flow rates		K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.
OPZIONI OPTIONS	6	Finitura Finish	Cromatura Chrome plated		FC ☐	
	7	Tappo Cap	Tappo di protezione Moisture protection cap		TP ☐	

NOTE
NOTES

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
EMESSO / ISSUED: DATA / DATE:	CONTROLLATO / CHECKED: DATA / DATE:	APPROVATO / APPROVED: DATA / DATE:	

UGELLO SCHIUMA BASSA ESPANSIONE – USBE
LOW EXPANSION FOAM NOZZLE – USBE

Mod. USBEA

Mod. USBEB

Descrizione

Il Mod. USBE è un ugello schiuma con aspirazione aria che viene impiegato nei sistemi a diluvio acqua/schiuma a bassa espansione. Il Mod. USBE è disponibile in acciaio inox AISI 316 con attacco al processo da 3/4" o 1", filettato maschio oppure femmina BSP o NPT.

Il Mod. USBE è disponibile in due configurazioni, USBEA senza deflettore e USBEB con deflettore.

Description

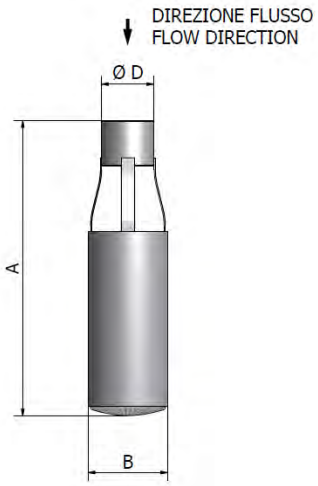
The Mod. USBE is an air-aspirating foam nozzle used in low expansion foam/water deluge systems. The Mod. USBE is available in stainless steel AISI 316 with process connections of 3/4" or 1", male or female threaded BSP or NPT.

The Mod. USBE is available in two configurations, USBEA without deflector and USBEB with deflector.

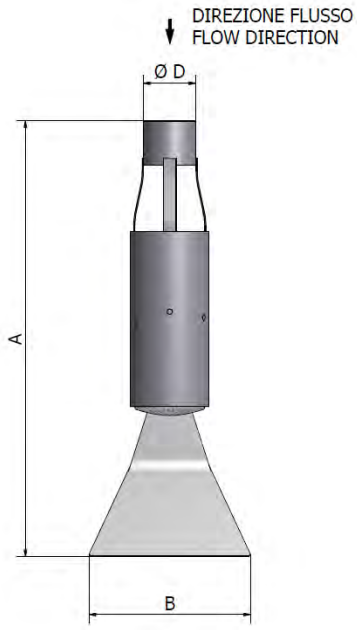
Caratteristiche tecniche	Technical characteristics
• Corpo in acciaio inox AISI 316	• Body stainless steel AISI 316
• Corpo ugello in acciaio inox AISI 316	• Nozzle body in stainless steel AISI 316
• Rete in acciaio inox AISI 316	• Net in stainless steel AISI 316
• Dimensioni disponibili:	• Available sizes:
– 3/4”	– 3/4”
– 1”	– 1”
• Attacco filettato disponibile:	• Available connection threaded:
– M. BSP	– M. BSP
– F. BSP	– F. BSP
– M. NPT	– M. NPT
– F. NPT	– F. NPT
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
• Pressione di progetto 16 bar	• Design pressure: 16 bar
Finitura:	**Finish:**
• Al naturale	• Natural

Dimensioni e Pesi

Dimensions and Weights



USBEA



USBEB

Ø D		A mm		B mm		Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm						Resa schiuma (1) Foam production (1) l/min – 5 bar	Fattore Factor K
		USBEA	USBEB	USBEA	USBEB	3 bar	4 bar	5 bar	6 bar	7 bar	8 bar		
3/4"	1”	224	335	60	123	50	58	65	71	77	82	390	29
						53	62	69	76	82	87	414	31
						93	107	120	131	142	151	720	53.7
						130	150	168	184	198	212	840	75

Opzioni

- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- For additional options or special versions contact SA Fire Protection

Nota:

(1) Dipende dal tipo di schiumogeno

Note:

(1) Depending on foam concentrate type

Codice Identificativo
Identification Form

Mod. [ ] [ ] [ ] / [ ]
1 2 3 4

Quantità / Quantity [ ]

UGELLO SCHIUMA BASSA ESPANSIONE USBE/ LOW EXPANSION FOAM NOZZLE USBE

CORPO BODY	1	Tipologia Type	Ugello schiuma bassa espansione senza deflettore Low expansion foam nozzle without deflector	USBEA ☐	
			Ugello schiuma bassa espansione con deflettore Low expansion foam nozzle with deflector	USBEB ☐	
	2	Dimensione Size	3/4”	QQQ ☐	
			1”	1 ☐	
	3	Connessione Connection	M. BSP	MBSP ☐	
			M. NPT	MNPT ☐	
			F. BSP	FBSP ☐	
			F. NPT	FNPT ☐	
POSRTATA FLOW RATE	4	Fattore K $((l/min)/\sqrt{bar})$ K factor $(lpm/\sqrt{bar})$	29 ☐ 31 ☐ 53,7 ☐	75 ☐	
			Altre portate Other flow rates	K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.

NOTE NOTES	

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
EMESSO / ISSUED: DATA / DATE:	CONTROLLATO / CHECKED: DATA / DATE:	APPROVATO / APPROVED: DATA / DATE:	

UGELLO ACQUA/SCHIUMA BASSA ESPANSIONE – UA
WATER/FOAM NOZZLE LOW EXPANSION – UA

Descrizione

Il Mod. UA è un ugello acqua/schiuma con aspirazione aria che viene impiegato nei sistemi a diluvio acqua/schiuma a bassa espansione. Il Mod. UA è disponibile in acciaio inox AISI 316, con attacco al processo da 1/2” o 3/4” filettato BSP o NPT.

Description

The Mod. UA is an air-aspirating water/foam nozzle used in low expansion foam/water deluge systems. The Mod. UA is available in stainless steel AISI 316, with process connections of 1/2” or 3/4” threaded BSP or NPT.

Caratteristiche tecniche	Technical characteristics

• Corpo acciaio inox AISI 316
• Dimensioni disponibili:
  • 1/2”
  • 3/4”
• Attacco filettato disponibile:
  • M. BSP
  • M. NPT
• Angoli di dispersione:
  • 120° o 140°
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene
• Rapporto di espansione 1/7 (1)
• Pressione di progetto 16 bar
	• Body stainless Steel AISI 316
	• Available sizes:
	  • 1/2”
	  • 3/4”
	• Available connection threaded:
	  • M. BSP
	  • M. NPT
	• Dispersion angles:
	  • 120° or 140°
	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
	• Expansion ratio 1/7 (1)
	• Design pressure: 16 bar

Finitura: • Al naturale	**Finish:** • Natural

Nota:	Note:
(1) Dipende dal tipo di schiumogeno	(1) Depending on foam concentrate type

Dimensioni e Pesi | Dimensions and Weights

Ø D		A mm	B mm	Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm								Fattore Factor K
				1 bar	2 bar	3 bar	4 bar	5 bar	6 bar	7 bar	8 bar	
1/2"	3/4"	70	74	6.6	9.3	11.4	13.2	14.8	16.2	17.5	18.7	6.6

Opzioni | Optional

- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection
- For additional options or special versions contact SA Fire Protection

Codice Identificativo
Identification Form

Mod. [1] [2] [3] / [4] / [5]

Quantità / Quantity [ ]

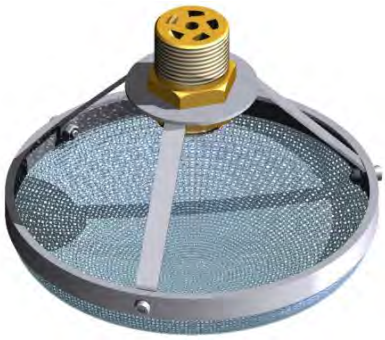
UGELLO ACQUA/SCHIUMA BASSA ESPANSIONE UA / WATER/FOAM NOZZLE LOW EXPANSION UA

CORPO BODY	1	Tipologia Type	Ugello acqua/schiuma bassa espansione Water/foam nozzle low expansion	UA ☐	
	2	Dimensione Size	1/2”	M ☐	
			3/4”	QQQ ☐	
	3	Connessione Connection	BSP	BSP ☐	
			NPT	NPT ☐	
POSRTATA FLOW RATE	4	Fattore K $((l/min)/\sqrt{bar})$ K factor $(lpm/\sqrt{bar})$	Fattore K= 6.6 K factor= 6.6	6.6 ☐	
			Altre portate Other flow rates	K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.
ANGOLO DI SPRAY SPRAY ANGLE	5	Angolo di Spray Spray Angle	120°	120° ☐	
			140°	140° ☐	
			Altre angolazioni Other spray angles	A ☐	Specificare in Note l’angolazione di spray richiesta Specify in Notes the required spray angle

NOTE NOTES

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
EMESSO / ISSUED: DATA / DATE:	CONTROLLATO / CHECKED: DATA / DATE:	APPROVATO / APPROVED: DATA / DATE:	

UGELLO SCHIUMA MEDIA ESPANSIONE – USME
MEDIUM EXPANSION FOAM NOZZLE – USME



Descrizione

Il Mod. USME è un ugello schiuma che viene impiegato nei sistemi a diluvio acqua/schiuma a media espansione. Il Mod. USME è disponibile in ottone con rete e struttura in acciaio inox AISI 316, con attacco al processo da 3/4” o 1” filettato BSP o NPT.

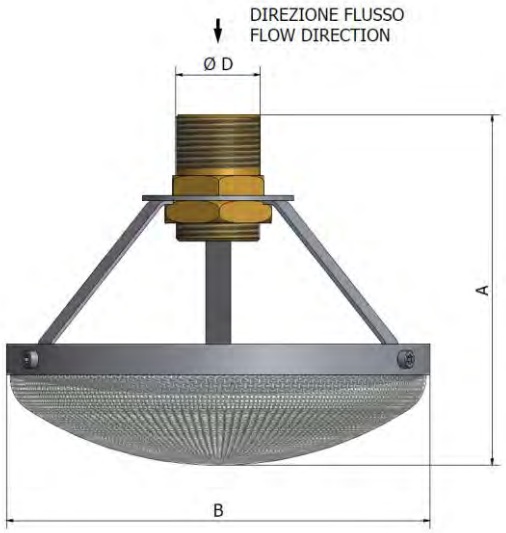
Description

The Mod. USME is a foam nozzle used in medium expansion foam/water deluge systems. The Mod. USME is available in brass with body and net in stainless steel AISI 316, with process connections of 3/4” or 1” threaded BSP or NPT.

Caratteristiche tecniche	Technical characteristics
• Corpo in acciaio inox AISI 316	• Body in stainless Steel AISI 316
• Ugello in ottone	• Nozzle in brass
• Rete in acciaio inox AISI 316	• Net in stainless steel AISI 316
• Dimensioni disponibili:	• Available sizes:
• 3/4”	• 3/4”
• 1”	• 1”
• Attacco filettato disponibile:	• Available connection threaded:
• M. BSP	• M. BSP
• M. NPT	• M. NPT
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
• Pressione di progetto 16 bar	• Design pressure: 16 bar
Finitura:	**Finish:**
• Al naturale	• Natural

Dimensioni e Pesi

Dimensions and Weights



Ø D	A mm	B mm	Portata ugello a differenti pressioni l/min Nozzle flow rate at different pressure lpm						Rapporto espansione Expansion ratio	Fattore Factor K
			3 bar	4 bar	5 bar	6 bar	7 bar	8 bar		
3/4"	150		48.5	56.0	62.6	68.6	74.1	79.2	1 : 57	28
1”	150		77.9	90.0	100.6	110.2	119.1	127.3	1 : 61	45

Opzioni

- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- For additional options or special versions contact SA Fire Protection

Nota:

(1) Il rapporto di espansione è inteso con aria pulita, salvo indicazione del produttore del liquido schiumogeno

Note:

(1) the expansion ratio is referred to clean air, if not otherwise instructed by the foam manufacturer

Codice Identificativo
Identification Form

Mod. [ ] [ ] [ ] / [ ]
1 2 3 4

Quantità / Quantity [ ]

UGELLO SCHIUMA MEDIA ESPANSIONE USME/ MEDIUM EXPANSION FOAM NOZZLE USME

CORPO BODY	1	Tipologia Type	Ugello schiuma media espansione Medium expansion foam nozzle	USME ☐	
	2	Dimensione Size	3/4”	QQQ ☐	
			1”	1 ☐	
	3	Connessione Connection	BSP	MBSP ☐	
			NPT	MNPT ☐	
POSRTATA FLOW RATE	4	Fattore K $((l/min)/\sqrt{bar})$ K factor $(lpm/\sqrt{bar})$	Fattore K= 28 K factor = 28	28 ☐	Ugello con attacco da 3/4” Nozzle connection 3/4”
			Fattore K= 45 K factor = 45	45 ☐	Ugello con attacco da 1” Nozzle connection 1”
			Altre portate Other flow rates	K ☐	Specificare in Note il fattore K richiesto oppure la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the required K factor or the flow rate required at a specific pressure.

NOTE NOTES

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
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SCHERMO IDRICO A BARRIERA – SIB
WATER CURTAIN NOZZLE – SIB

Descrizione

Il Mod. SIB è uno schermo idrico a barriera che viene impiegato in caso di incendio per realizzare un muro d'acqua allo scopo di contenere gli effetti dell'irraggiamento. Il Mod. SIB è disponibile in alluminio, con attacco al processo da 2" di tipo filettato BSP, attacco istantaneo oppure flangiato.

Description

The Mod. SIB is water curtain nozzle that is used to realize a water wall in order to contain the effects of irradiation in case of fire. The Mod. SIB is available aluminum, with process connections 2" threaded BSP, quick coupling or flanged.

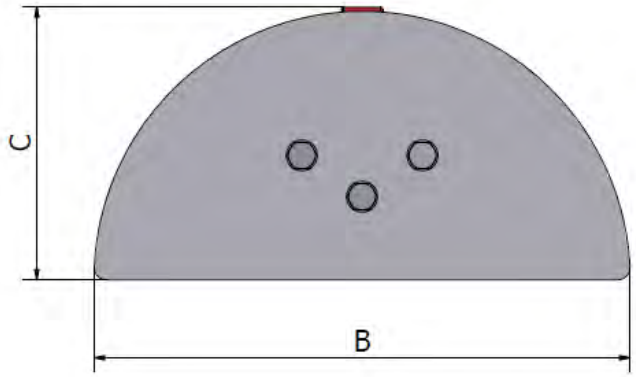
Caratteristiche tecniche	Technical characteristics

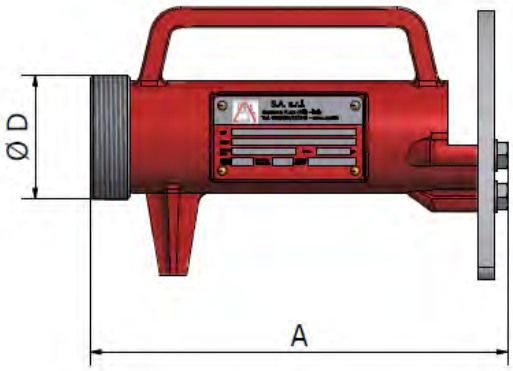
• Corpo in alluminio AS12
• Schermo in alluminio anticorodal
• Attacchi a scelta tra:
  • Attacco filettato: M. BSP
  • Attacco con raccordi istantanei:
  • UNI, BS 336, DSP, STORZ, GOST, NH, SMS, NOR
  • Attacco flangiato : ANSI o UNI
• Esecuzione idonea ad installazione esterna in ambiente marino e funzionamento con acqua mare e soluzioni schiumogene
• Pressione di progetto 16 bar
	• AS12 aluminium body
	• Anticorodal aluminium shield
	• Connections to be selected among:
	  • Threaded connection: M.BSP
	  • Quick couplings connection
	  • UNI, BS 336, DSP, STORZ, GOST, NH, SMS, NOR
	  • Flanged connection: ANSI or UNI
	• Suitable execution for external installation in marine environment and operation with sea water and foam solutions
	• Design pressure: 16 bar

Finitura: • Al naturale	**Finish:** • Natural

Dimensioni e Pesi

Dimensions and Weights





Ø D	A mm	B mm	C mm	Portata l/min Flow rate lpm		Altezza getto Jet height m		Larghezza getto Jet width m	
				5 bar	8 bar	5 bar	8 bar	5 bar	8 bar
2”	215	210	120	800	1100	8	9	24	29
	215	260	135	1400	1700	9	10	27	31

Opzioni

- Ciclo di verniciatura diverso dallo Standard SA
- Per ulteriori opzioni o versioni speciali contattare SA Fire Protection

Optional

- Painting system different from Standard SA
- For additional options or special versions contact SA Fire Protection

Codice Identificativo
Identification Form

OPZIONI / OPTIONS

Mod. | **SIB** | 1 | 2 | / | 3 | 4 | / | 5 |

Quantità / Quantity

SCHERMO IDRICO A BARRIERA SIB / WATER CURTAIN NOZZLE SIB

SCHERMO IDRICO WATER CURTAIN NOZZLE	1	Tipologia Type	Schermo idrico Water curtain nozzle		SIB ■	
	2	Portata a 5 bar Flow rate at 5 bar	800 l/min		80 ☐	
			1400 l/min		140 ☐	
			Altro Other		K ☐	Specificare in Note la portata desiderata riferita ad un valore determinato di pressione. Specify in Notes the flow rate required at a specific pressure.
CONNESSIONE CONNECTION	3	Tipologia Type	Filettato BSP Threaded BSP		BSP ☐	
			Raccordo istantaneo Quick coupling		RC ☐	Specificare in Pos. 4 la tipologia del raccordo richiesto. Specify in Pos. 4 the type required coupling
			Flangia Flange		FL ☐	Specificare in Pos. 4 la tipologia della flangia richiesta. Specify in Pos. 4 the type required flange
	4	Raccordi istantaei Quick coupling	UNI Italian	UNI 70	UNI 70 ☐	
			BS British		BS 336 ☐	
			STORZ German	STORZ 75	STORZ75 ☐	
			DSP French	DSP 65	DSP65 ☐	
			NH North American	NH 2 ½”	NH2M ☐	
			GOST Russian		GOST ☐	
			SMS Swedish		SMS ☐	
			NOR Norwegian	NOR 2 ½”	NOR2M ☐	
		Flangia Flange	ANSI 150lb RF	2”	RF2 ☐	
				2 1/2"	RF2M ☐	
			ANSI 150lb FF	2”	FF2 ☐	
				2 1/2"	FF2M ☐	
			UNI PN16	2”	UNI2 ☐	
				2 1/2"	UNI2M ☐	
			Altro Other		F ☐	Specificare in Note la tipologia di flangia e dimensione richiesta. Specify in Notes the type of flange requested.

Prosegue alla pagina seguente / Continue to the next page

OPZIONI OPTIONS					
	5	Verniciatura Painting	Verniciatura diversa da ciclo SA standard Painting system different for SA standard	C ☐	Specificare in Note il ciclo di verniciatura richiesto. Specify in Notes the painting procedure required.

NOTE NOTES

CLIENTE / CLIENT:	PROGETTO / PROJECT:	DOC. No.:	REV.:
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