



DIC ATEX



DIC INOX ATEX
Adatto per aria corrosiva / acida
Suitable for corrosive / acid air

DIC ATEX – DIC INOX ATEX

Aspiratori centrifughi pale avanti Forward curved blade centrifugal fans



Zone 1 II2G Ex IIB + H2 T4 Gb
HYDROGEN

DESCRIZIONE

Gli aspiratori centrifughi della serie DIC ATEX e DIC INOX ATEX sono costruiti e certificati in conformità alla Direttiva ATEX 2014/34/UE.

Sono specificatamente progettati per essere utilizzati in zona 1, ossia in aree o ambienti dove sia necessario garantire un elevato fattore di sicurezza contro le esplosioni dovute alla presenza di idrogeno (II2G). Il loro impiego è previsto per convogliare aria pulita con temperature comprese in un range da -20°C a +60°C (su richiesta, da -40°C a +60°C).

Trovano il loro impiego in tutte quelle applicazioni industriali dove siano richiesti piccoli volumi d'aria con alte pressioni. La serie è costituita da modelli con diametro girante da 100 a 180 mm. La cassa è facilmente orientabile, anche in sito, ogni 45°, compresi gli angoli 180° e 225°. DIC INOX ATEX è realizzato in acciaio Inox AISI 304 e adatto per convogliare aria corrosiva e/o acida.

COSTRUZIONE

- Cassa a spirale realizzata in lamiera d'acciaio protetta contro gli agenti atmosferici con vernici a polveri epossipolistetriche oppure in acciaio inossidabile AISI304.
- Girante a semplice aspirazione con pale curve in avanti (sirocco), a spessore costante, realizzata in lamiera zincata oppure in acciaio inossidabile AISI304.
- Boccaglio ottone.
- Esecuzione 5, [accoppiamento diretto con girante a sbalzo su motore flangiato].
- Motore separato dal flusso di aria convogliata.
- Orientamento standard LG 270°.
- Raccordo in aspirazione fornito in dotazione (non montato).

MOTORE

Motore antideflagrante asincrono trifase o monofase a norme internazionali IEC 60034, IEC 60072, ATEX 2014/34/UE, EMC 2014/30/UE, LVD 2014/35/UE, marcato CE, IP55 secondo la EN ISO 20653, classe F. Idoneo ad un servizio continuo (S1), Specificamente progettato per installazione in ambienti classificati come zona ATEX 1 con presenza di IDROGENO II2G (GAS) IIC (apparecchiature protette mediante custodie a prova d'esplosione "db" in accordo allo standard CEI EN IEC 60079-0, CEI EN 60079-1). Motore dotato di sistema di protezione da sovratemperatura con termistori tipo PTC conformi alle norme DIN 44081, DIN 44082, IEC 60034-11-2 e idoneo alla regolazione di velocità a mezzo di regolatore tipo inverter (per la versione trifase).

ACCESSORI

- Sedia portamotore lamiera / inox
- Rete di protezione per bocca aspirante e premente realizzata a norma UNI 12499 e protetta contro gli agenti atmosferici
- Raccordo per bocca premente.

DESCRIPTION

The centrifugal fans of the DIC ATEX and DIC INOX ATEX series are built and certified in compliance with the ATEX Directive 2014/34/UE. They are specifically designed to be used in zone 1, i.e. in areas or environments

where it is necessary to guarantee a high safety factor against explosions due to the presence of hydrogen (II2G).

They are suitable to convey clean air with a temperature included in a range from -20°C to +60°C (on request, from -40°C to +60°C).

They are ideal for all the industrial applications where small air volumes and high pressures are required.

The casing is easily adjustable, also on site, to the required discharge angle every 45°, including orientations 180° and 225°.

DIC INOX ATEX is made of stainless steel AISI304 and is suitable for conveying corrosive / acid air.

CONSTRUCTION

- Volute casing in steel sheet, protected against atmospheric agents by epoxy paint or in stainless steel AISI304 sheet.
- Single inlet, single gauge, forward curved impeller (sirocco type), in galvanized steel sheet or in stainless steel AISI304.
- Brass inlet.
- Execution 5 (with impeller directly coupled to flanged motor).
- Motor separated from the conveyed airflow.
- Standard orientation LG270°.
- Inlet connector supplied (disassembled).

MOTOR

Explosion-proof asynchronous three-phase or single-phase motor to international standards IEC 60034, IEC 60072, ATEX 2014/34/UE, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP55 to EN ISO 20653, class F. Suitable for continuous duty (S1). Specifically designed for installation in environments classified as ATEX zone 1 with the presence of HYDROGEN II2G (GAS) IIC (equipment protected by flame-proof enclosures "db" according to CEI EN IEC 60079-0, CEI EN 60079-1 standard). The motor includes an overtemperature protection system equipped with PTC thermistors in accordance with DIN 44081, DIN 44082, IEC 60034-11-2 and suitable for speed regulation by inverter-type controller (for three-phase version).

ACCESSORIES

- Motor support in steel or steel sheet
- Inlet and outlet protection guard manufactured according to UNI 12499 norm and protected against the atmospheric agents
- Outlet connector.

NORME | NORMS

EN 14986:2017
EN 1127-1
EN ISO 80079-36
EN ISO 80079-37

Attestato di Esame del Tipo
Type Examination Statement



IMQ 10 ATEX 018 X

A RICHIESTA UPON REQUEST

- Versioni a 60 Hz
- Classi di temperatura T5 e T6
- Versions at 60 Hz
- Temperature classes T5 and T6

VERSIONI | VERSIONS



DIC ATEX | DIC INOX ATEX
Zone 1
II2G Ex h IIB T4 Gb
GAS



DIC ATEX | DIC INOX ATEX
Zone 21
II2D Ex h IIB T135°C Db
DUST

PRESTAZIONI | PERFORMANCE

DIC ATEX | DIC INOX ATEX

Le prestazioni aerauliche sono rilevate in conformità alla norma EN ISO 5801/AMCA 210 con densità dell'aria standard avente peso specifico 1,2 Kg/m³.

Il livello di potenza sonora è ottenuto secondo la norma AMCA 300-08 in camera riverberante. Installazione D.

Le tolleranze sono conformi alla ISO 13348 e alla DIN 24166.

Alimentazione 230V/1Ph/50Hz o 400V/3Ph/50Hz

Air performances are measured according to EN ISO 5801 / AMCA 210 standard with air density with 1.2 kg/m³ specific weight.

The sound power level is obtained according to AMCA 300-08 in reverberating room. Installation D.

Tolerances comply with ISO13348 and DIN 24166.

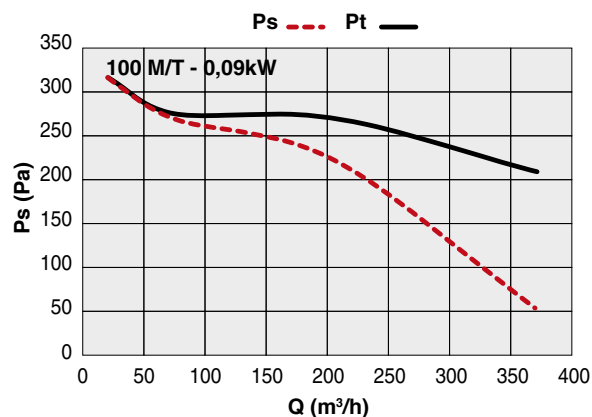
Power supply 230V/1Ph/50Hz or 400V/3Ph/50Hz.

DIC ATEX | DIC INOX ATEX 100

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IP/CL | IE3 | Mot. (Gr) |
|---------|--------------|---------------|---|---|---------|--------|-------|-----|-----------|
| 1XD0100 | DIC ATX | 100 | M | 2 | 0,06 | 0,80 | 55/F | - | 56 |
| 1XD0108 | DIC INOX ATX | | | | | | | | |
| 1XD0103 | DIC ATX | 100 | T | 2 | 0,09 | 0,53 | 55/F | - | 56 |
| 1XD0111 | DIC INOX ATX | | | | | | | | |

LIVELLI SONORI | SOUND LEVELS dB(A)

| Hz | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | TOT |
|-------|-----|----|-----|-----|-----|------|------|------|------|-----|
| 100/2 | LwA | 45 | 57 | 62 | 66 | 71 | 64 | 56 | 46 | 73 |
| | Lp | 34 | 46 | 51 | 55 | 60 | 53 | 45 | 35 | 62 |

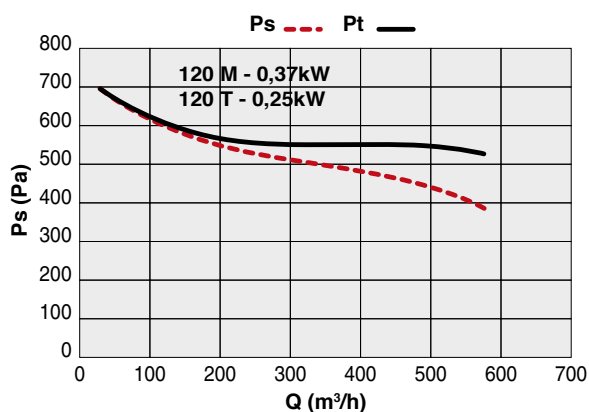


DIC ATEX | DIC INOX ATEX 120

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IP/CL | IE3 | Mot. (Gr) |
|---------|--------------|---------------|---|---|---------|--------|-------|-----|-----------|
| 1XD0101 | DIC ATX | 120 | M | 2 | 0,25 | 2,20 | 55/F | - | 63 |
| 1XD0109 | DIC INOX ATX | | | | | | | | |
| 1XD0104 | DIC ATX | 120 | T | 2 | 0,25 | 0,62 | 55/F | - | 63 |
| 1XD0112 | DIC INOX ATX | | | | | | | | |

LIVELLI SONORI | SOUND LEVELS dB(A)

| Hz | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | TOT |
|-------|-----|----|-----|-----|-----|------|------|------|------|-----|
| 120/2 | LwA | 44 | 54 | 68 | 73 | 69 | 74 | 69 | 65 | 78 |
| | Lp | 33 | 43 | 57 | 62 | 58 | 63 | 58 | 54 | 67 |

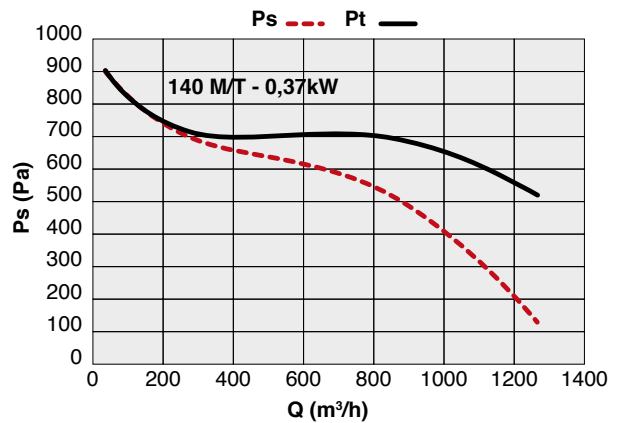


DIC ATEX | DIC INOX ATEX 140

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IP/CL | IE3 | Mot. (Gr) |
|---------|--------------|---------------|---|---|---------|--------|-------|-----|-----------|
| 1XD0102 | DIC ATX | 140 | M | 2 | 0,37 | 2,50 | 55/F | - | 71 |
| 1XD0110 | DIC INOX ATX | | | | | | | | |
| 1XD0105 | DIC ATX | 140 | T | 2 | 0,37 | 0,90 | 55/F | - | 71 |
| 1XD0113 | DIC INOX ATX | | | | | | | | |

LIVELLI SONORI | SOUND LEVELS dB(A)

| Hz | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | TOT |
|-------|-----|----|-----|-----|-----|------|------|------|------|-----|
| 140/2 | LwA | 52 | 60 | 75 | 77 | 77 | 78 | 76 | 70 | 84 |
| | Lp | 41 | 49 | 64 | 66 | 66 | 67 | 65 | 59 | 73 |

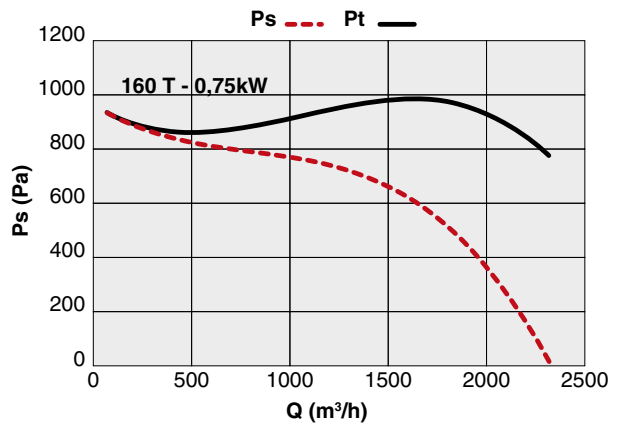


DIC ATEX | DIC INOX ATEX 160

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IP/CL | IE3 | Mot. (Gr) |
|---------|--------------|---------------|---|---|---------|--------|-------|-----|-----------|
| 1XD0106 | DIC ATX | 160 | T | 2 | 0,75 | 1,80 | 55/F | ✓ | 80 |
| 1XD0114 | DIC INOX ATX | | | | | | | | |

LIVELLI SONORI | SOUND LEVELS dB(A)

| Hz | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | TOT |
|-------|-----|----|-----|-----|-----|------|------|------|------|-----|
| 160/2 | LwA | 53 | 64 | 79 | 81 | 82 | 83 | 81 | 75 | 89 |
| | Lp | 42 | 53 | 68 | 70 | 71 | 72 | 70 | 64 | 78 |

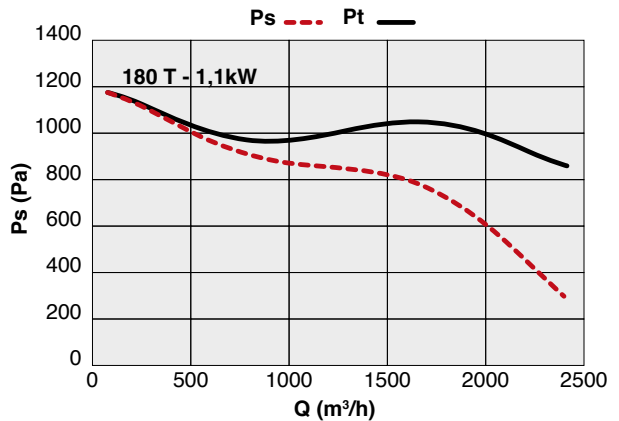


DIC ATEX | DIC INOX ATEX 180

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IP/CL | IE3 | Mot. (Gr) |
|---------|--------------|---------------|---|---|---------|--------|-------|-----|-----------|
| 1XD0107 | DIC ATX | 180 | T | 2 | 1,10 | 2,40 | 55/F | ✓ | 80 |
| 1XD0115 | DIC INOX ATX | | | | | | | | |

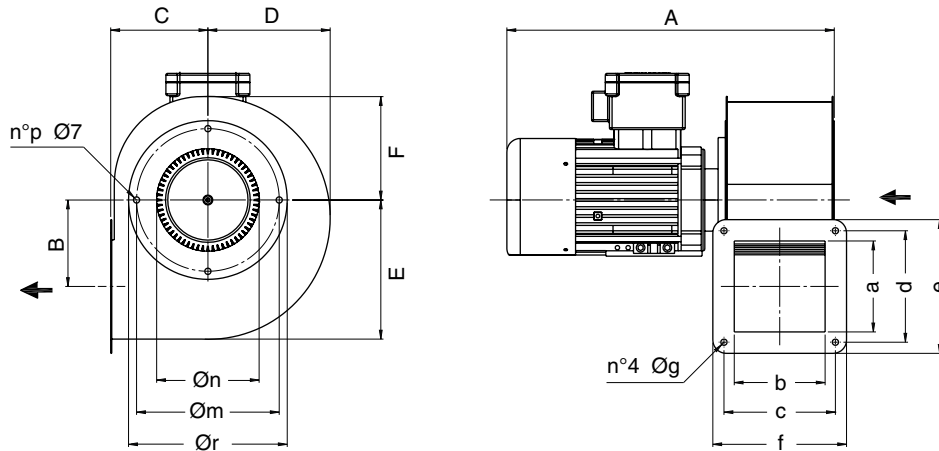
LIVELLI SONORI | SOUND LEVELS dB(A)

| Hz | | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | TOT |
|-------|-----|----|-----|-----|-----|------|------|------|------|-----|
| 180/2 | LwA | 61 | 71 | 83 | 85 | 87 | 86 | 84 | 78 | 92 |
| | Lp | 50 | 60 | 72 | 74 | 76 | 75 | 73 | 67 | 81 |



DIMENSIONI | DIMENSIONS mm

DIC ATEX | DIC INOX ATEX



DIC ATEX | DIC INOX ATEX

| TIPO TYPE | A | B | C | D | E | F | a | b | c | d | e | f | Øg | Øm | Øn | n°p | Ør |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
| 100 | 289 | 82 | 86 | 112 | 130 | 99 | 76 | 84 | 105 | 95 | 115 | 125 | 6 | 130 | 90 | 4 | 145 |
| 120 | 367 | 97 | 109 | 137 | 156 | 116 | 102 | 102 | 125 | 125 | 150 | 150 | 7 | 160 | 115 | 4 | 178 |
| 140 | 380 | 115 | 126 | 158 | 184 | 136 | 118 | 118 | 148 | 148 | 175 | 175 | 8 | 180 | 135 | 4 | 195 |
| 160 | 410 | 132 | 143 | 175 | 207 | 148 | 135 | 135 | 165 | 165 | 195 | 195 | 8 | 222 | 155 | 8 | 240 |
| 180 | 414 | 140 | 156 | 200 | 227 | 171 | 148 | 148 | 180 | 180 | 210 | 210 | 8 | 222 | 170 | 8 | 240 |

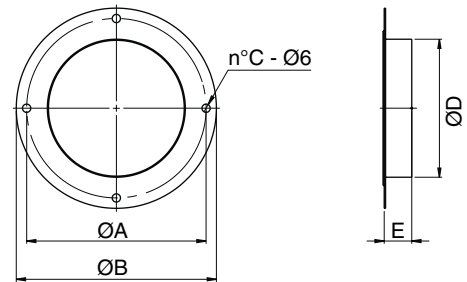
*La sedia portamotore è un accessorio. Il modello 100 monta un motore a forma B14, quindi senza piedini
 The motor support is an accessory. Model 100 has a motor shape B14, thus without feet

RACCORDO ASPIRANTE | INLET ADAPTOR

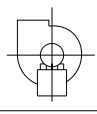

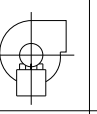
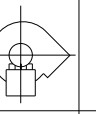
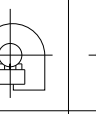
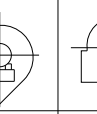
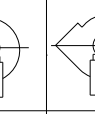

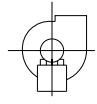
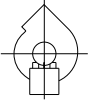
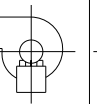
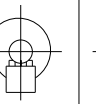
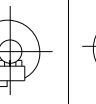
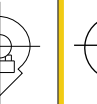
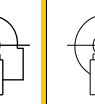
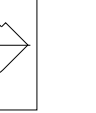
| TIPO TYPE | ØA | ØB | C | ØD | E | Kg |
|-------------|-----|-----|---|-----|----|-----|
| 100 | 130 | 145 | 4 | 100 | 20 | 0.2 |
| 120 | 160 | 180 | 4 | 125 | 20 | 0.2 |
| 140 | 180 | 200 | 4 | 125 | 30 | 0.4 |
| 160 | 222 | 238 | 8 | 160 | 40 | 0.4 |
| 180 | 222 | 238 | 8 | 160 | 40 | 0.4 |

Pesi indicativi | Indicative weights

N.B.: Raccordo in aspirazione fornito non montato
 Inlet adaptor supplied, not assembled



ORIENTAMENTO | DISCHARGE ANGLE

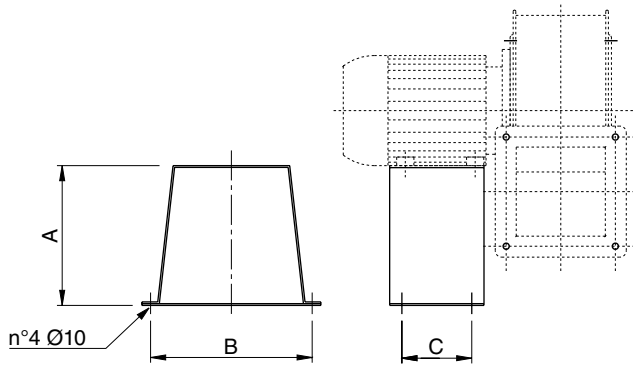
| | | | | | | | | |
|------------------------------------|---|---|---|---|--|---|---|---|
| Rotazione Rotation RD |  |  |  |  |  |  |  |  |
| Forma Form | 0° | 45° | 90° | 135° | 180° | 225° | 270° | 315° |
| Rotazione Rotation LG |  |  |  |  |  |  |  |  |

N.B.: Orientamento standard LG 270° - Orientamenti LG 45°, 135°, 225° e 315° non disponibili per DIC 100 e 120.

Standard discharge angles LG 270° - Discharge angles LG 45°, 135°, 225° e 315° not available on DIC 100 and 120.



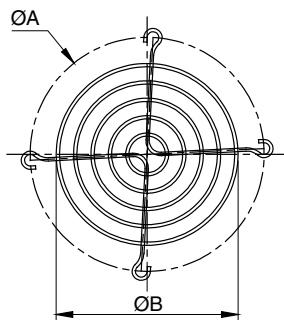
SEDIA PORTAMOTORE | MOTOR SUPPORT



| Code DIC ATEX | Code DIC INOX ATEX | Tipo Type | A | B | C | Kg |
|---------------|--------------------------|---|-----|-----|-----|-----|
| 1SE6007 | | 100 | 120 | 140 | 71 | 0,5 |
| 1SE6005 | | 120 | 160 | 185 | 80 | 1,0 |
| 1SE6017 | | 140 | 152 | 185 | 90 | 2,0 |
| 1SE6006 | a richiesta upon request | 160 - 180 grandezza motore 80 motor size 80 | 180 | 230 | 100 | 2,5 |
| 1SE6016 | | 160-180 grandezza motore 90 motor size 90 | 170 | 230 | 100 | 3,0 |

Dimensioni in mm - Pesi indicativi | Dimensions in mm - Indicative weights

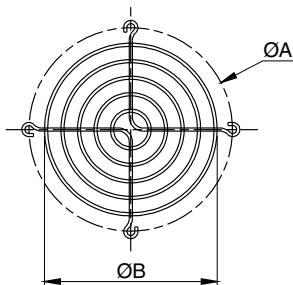
RETE BOCCA PREMENTE | OUTLET GUARD



| Code DIC ATEX | Code DIC INOX ATEX | Tipo Rete Guard Type | ØA | ØB | Kg |
|---------------|--------------------|----------------------|-----|-----|------|
| 5RE0109 | 5RE1109 | 100 | 142 | 110 | 0,06 |
| 5RE0111 | 5RE1111 | 120 | 177 | 131 | 0,12 |
| 5RE0113 | 5RE1113 | 140 | 209 | 152 | 0,13 |
| 5RE0115 | 5RE1115 | 160 | 233 | 194 | 0,15 |
| 5RE0117 | 5RE1117 | 180 | 255 | 194 | 0,2 |

Dimensioni in mm - Pesi indicativi | Dimensions in mm - Indicative weights

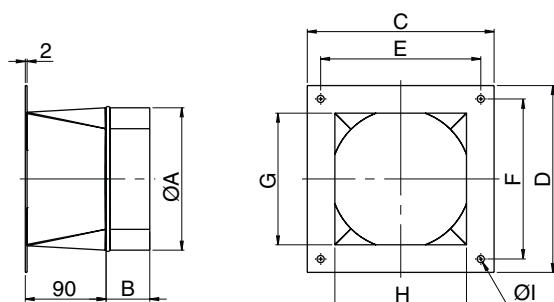
RETE BOCCA ASPIRANTE | INLET GUARD



| Code DIC ATEX | Code DIC INOX ATEX | Tipo Rete Guard Type | ØA | ØB | Kg |
|---------------|--------------------|----------------------|-----|-----|------|
| 5RE1500 | 5RE1511 | 100 | 130 | 110 | 0,06 |
| 5RE1501 | 5RE1512 | 120 | 160 | 131 | 0,12 |
| 5RE1502 | 5RE1513 | 140 | 180 | 152 | 0,12 |
| 5RE1503 | 5RE1509 | 160-180 | 222 | 194 | 0,15 |

Dimensioni in mm - Pesi indicativi | Dimensions in mm - Indicative weights

RACCORDO BOCCA PREMENTE | OUTLET CONNECTOR



| Code | Tipo Rete Guard Type | ØA | B | C | D | E | F | G | H | ØI | Kg |
|---------|----------------------|-----|----|-----|-----|-----|-----|-----|-----|----|------|
| 5RD1100 | 100 | 100 | 20 | 125 | 115 | 105 | 95 | 76 | 84 | 6 | 0,50 |
| 5RD1120 | 120 | 125 | 50 | 150 | 150 | 125 | 125 | 102 | 102 | 7 | 0,75 |
| 5RD1140 | 140 | 125 | 50 | 175 | 175 | 148 | 148 | 118 | 118 | 8 | 0,85 |
| 5RD1160 | 160 | 160 | 50 | 195 | 195 | 165 | 165 | 135 | 135 | 8 | 1,00 |
| 5RD1180 | 180 | 160 | 50 | 210 | 210 | 180 | 180 | 148 | 148 | 8 | 1,10 |

Dimensioni in mm - Pesi indicativi | Dimensions in mm - Indicative weights