



PN-L

Aspiratori centrifughi pale rovesce per aria pulita o leggermente polverosa

Backward curved blade centrifugal fans for clean or slightly dusty air



ErP 125/2009/CE



UE 327/2011

Conformi

Direttiva ErP 125/2009/CE e al Regolamento UE 327/2011

Comply

ErP Directive 125/2009/CE and EU Regulation 327/2011

Classifica | Classification:

FAN

VERSIONI | VERSIONS



PN-L ATEX

Versione antideflagrante secondo la Direttiva 2014/34/UE
Explosion-proof version according to Directive 2014/34/UE



PN-L INOX

Versione resistente all'azione corrosiva, realizzata con cassa, bocchaglio e girante in acciaio inossidabile AISI304/316 L
Corrosion-resistant version with casing, nozzle and impeller in AISI304/316L stainless steel



PN-L AT

Versione idonea al trasporto di gas caldi, max 150°C [PN-L/AT es 4] e max 300°C [PN-L/AT es 1-12]
Version suitable for transporting hot gases, max. 150°C [PN-L/AT arrangement 4] and max. 300°C [PN-L/AT arrangement 1-12]

DESCRIZIONE

I ventilatori della serie **PN-L** trovano la loro principale applicazione nell'impiantistica industriale e nel condizionamento.

GAMMA

Diametri da 400 a 630 mm
Portate da 4.700 a 32.400 m³/h
La serie prevede esecuzioni direttamente accoppiate (esecuzione 4) e a trasmissione (esecuzione 1, 9 e 12).

TEMPERATURA DI ESERCIZIO

Temperature da -10°C a +60°C nella configurazione standard, e fino a 300°C con costruzioni speciali.

COSTRUZIONE

- Cassa a spirale realizzata in lamiera d'acciaio e protetta contro gli agenti atmosferici con vernici a polveri epossipoliestiriche.
- Bocchaglio d'aspirazione con ampio raggio realizzato in lamiera d'acciaio e protetto contro gli agenti atmosferici con vernici a polveri epossipoliestiriche.
- Girante a semplice aspirazione con pale rovesce curve ad alto rendimento aerale, realizzata in lamiera e verniciata con vernici a polveri epossipoliestiriche. Sono previste versioni per alte velocità di rotazione in classe 3.
- Per esecuzione 1 - 9 - 12: supporto monoblocco realizzato in fusione di ghisa, con cuscinetti a sfera, progettati per agevolare le operazioni di lubrificazione. Cinghie di trasmissione, pulegge e supporto motore. Carter di protezione per le cinghie.

MOTORE

Motore asincrono trifase a norme internazionali IEC 60034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE e marcato CE IP55, classe F, idonei ad un servizio S1 (funzionamento continuo a carico costante).

ACCESSORI

- Controflangia per bocca aspirante
- Controflangia per bocca premente
- Rete di protezione per bocca aspirante
- Rete di protezione per bocca premente
- Giunto antivibrante per bocca aspirante
- Giunto antivibrante per bocca premente

DESCRIPTION

The **PN-L** series of fans are mainly used in industrial and air conditioning applications.

RANGE

Diameters from 400 to 630 mm
Airflow from 4,700 to 32,400 m³/h
The series includes directly coupled (version 4) and transmission versions (versions 1, 9 and 12).

OPERATING TEMPERATURE

Temperatures from -10°C to +60°C in the standard configuration, and up to 300°C with special constructions.

CONSTRUCTION

- Volute casing made of steel sheet and protected against atmospheric agents with epoxy paint.
- Wide radius suction nozzle made of sheet steel and protected against atmospheric agents with epoxy paint.
- Single inlet impeller with backward curved blades with high aerale efficiency, made of steel sheet and coated with epoxy paint. Versions for high-speed rotation in class 3 are available.
- For execution 1 - 9 - 12: mono-block support in cast iron with ball bearings, designed for easy lubrication. Pulleys, belts and motor support. Belt protection guard.

MOTOR

Asynchronous three-phase motors according to international standards IEC 60034, IEC 60072, EMC 2014/30/UE, LVD 2014/35/UE, CE marked, IP 55, class F, suitable to S1 service (continuous working at constant load).

ACCESSORIES

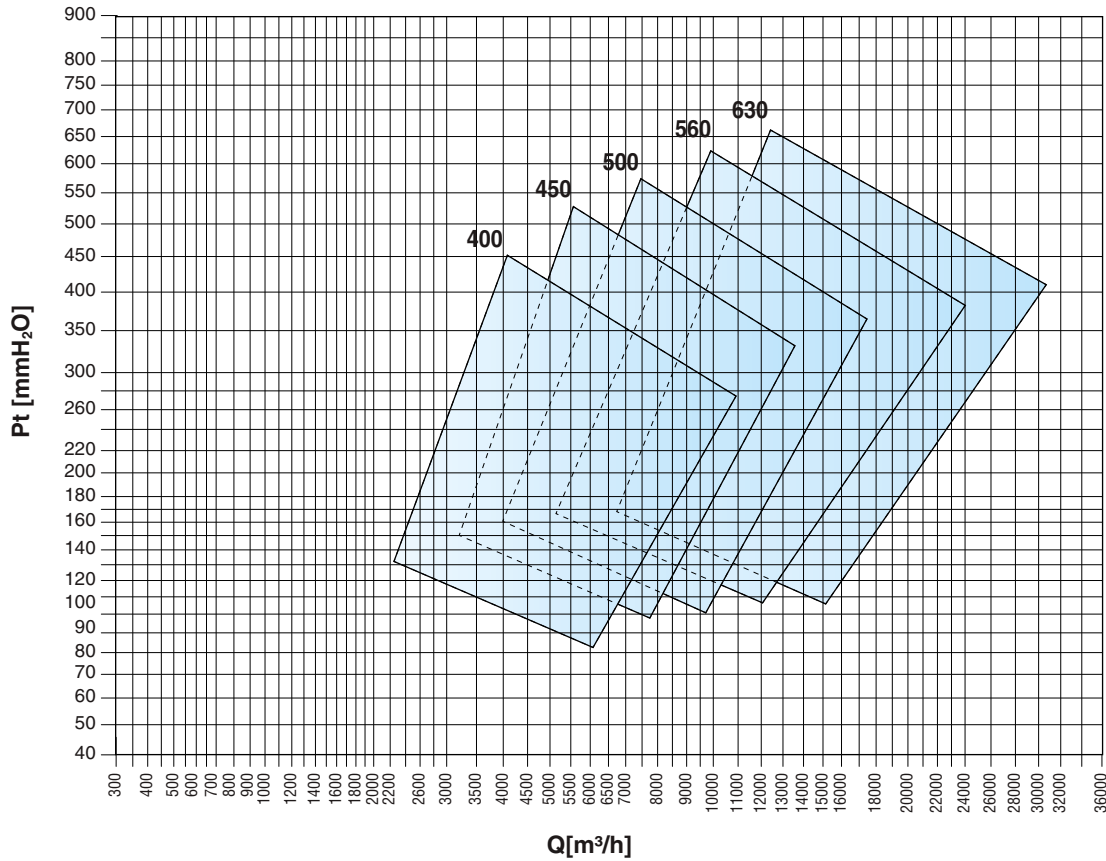
- Inlet counter-flange
- Outlet counter-flange
- Inlet protection guard
- Outlet protection guard
- Inlet flexible connector
- Outlet flexible connector

CAMPO D'IMPIEGO | OPERATION FIELD

PN-L

Questo grafico ha il solo scopo di rappresentare le aree di funzionamento dei modelli disponibili. Per una selezione precisa utilizzare i grafici prestazionali presenti di seguito oppure contattate il nostro servizio tecnico commerciale.

This graph is only meant to represent the operating areas of the available models. For an accurate selection please use the performance graphs below or contact our technical sales department.



| Grandezza ventilatore Fan size | RPM MAX | | |
|-----------------------------------|----------|-----------|------------|
| | Classe I | Classe II | Classe III |
| PN-L 400 | 3450 | 3900 | 4500 |
| PN-L 450 R | 3150 | 3600 | 4250 |
| PN-L 450 | 3050 | 3500 | 4000 |
| PN-L500 R | 2900 | 3300 | 3850 |
| PN-L 500 | 2750 | 3150 | 3700 |
| PN-L 560 R | 2550 | 2900 | 3550 |
| PN-L 560 | 2450 | 2800 | 3400 |
| PN-L 630 R | 2300 | 2600 | 3200 |
| PN-L 630 | 2200 | 2800 | 3000 |

VALORI RPM VALIDI FINO A 60°C RPM VALUES VALID UP TO 60°C

| Fra Between | E And | Declassare velocità Degrade speed |
|---------------|---------|--------------------------------------|
| 60°C | 100°C | 4% |
| 100°C | 150°C | 10% |
| 150°C | 200°C | 16% |
| 200°C | 250°C | 23% |
| 250°C | 300°C | 30% |
| 300°C | 350°C | 37% |
| 350°C | 400°C | 45% |
| 400°C | 450°C | 54% |
| 450°C | 500°C | 64% |

PRESTAZIONI | PERFORMANCE

PN-L

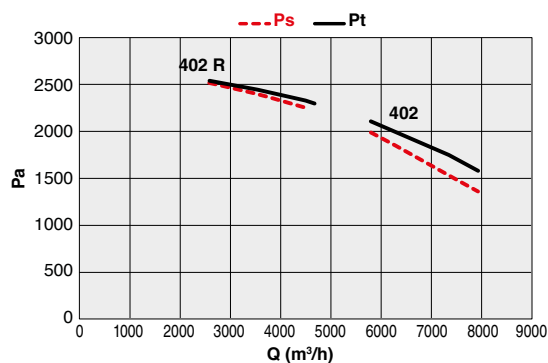
Le curve prestazionali rappresentate nel presente catalogo sono state ricavate eseguendo prove sui ventilatori in accordo alla normativa ISO 5801 "Metodi di prova e condizioni di accettazione" (che sostituisce la ISO 1053:1995 ed è in accordo con la UNI EN ISO 5801:2009). Per eseguire le prove i ventilatori sono stati installati secondo quanto previsto per la categoria B: con bocca d'aspirazione libera e bocca premente collegata al banco prova. L'efficienza dei ventilatori è conforme all'obiettivo del regolamento (UE) N.327/2011, come richiesto dalla Direttiva 2009/125/CE.

The performance curves given in this catalogue were calculated by performing tests on fans in compliance with ISO 5801 "Test methods and terms of acceptance" [which replaces UNI 10531:1995 and complies with UNI EN ISO 5801:2009]. To carry out the tests the fans were installed in compliance with the requirements for category B: with free inlet and outlet connected to the test station. The fan efficiency conforms to the objective of Regulation (EU) N.327/2011, as required by Directive 2009/125/EC.

LW La determinazione del livello di potenza sonora è stata condotta secondo la norma UNI EN ISO 3746:1997 (Metodo di controllo con una superficie avvolgente su un piano riflettente). Alle misure sono state applicate correzioni in funzione del rumore di fondo e del riverbero ambientale. Measurement of the sound power level was carried out in compliance with UNI EN ISO 3746:1997 (Survey method using an enveloping measurement surface over a reflecting plane). The measurements were subjected to corrections to take account of background noise and ambient reverberation levels.

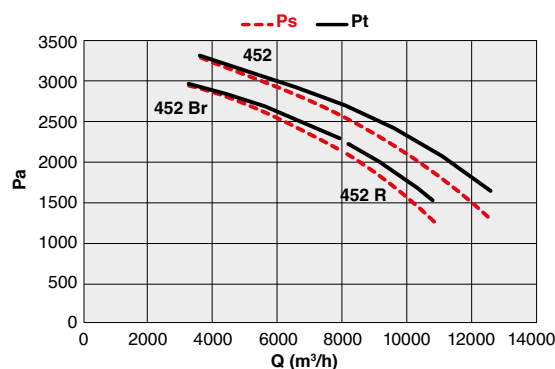
PN-L 402

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IE3 | IP/CL |
|---------|-----------|---------------|---|---|---------|--------|-----|-------|
| 7PN4009 | PN-L | 402 R | T | 2 | 4 | 7,10 | ✓ | 55/F |
| 7PN4010 | | 402 | T | 2 | 5,5 | 9,70 | ✓ | 55/F |



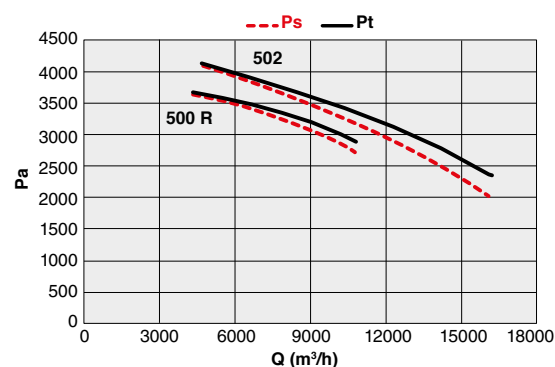
PN-L 452

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IE3 | IP/CL |
|---------|-----------|---------------|---|---|---------|--------|-----|-------|
| 7PN4503 | PN-L | 452 R | T | 2 | 7,5 | 13,10 | ✓ | 55/F |
| 7PN4504 | | 452 Br | T | 2 | 7,5 | 13,10 | ✓ | 55/F |
| 7PN4505 | | 452 | T | 2 | 11 | 18,70 | ✓ | 55/F |



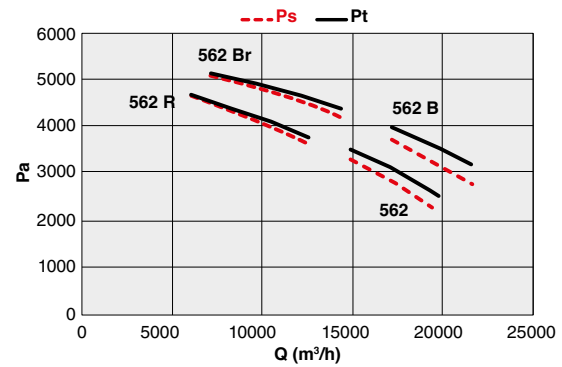
PN-L 500

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IE3 | IP/CL |
|---------|-----------|---------------|---|---|---------|--------|-----|-------|
| 7PN5001 | PN-L | 500 R | T | 2 | 11 | 18,70 | ✓ | 55/F |
| 7PN5003 | | 502 | T | 2 | 15 | 25,40 | ✓ | 55/F |



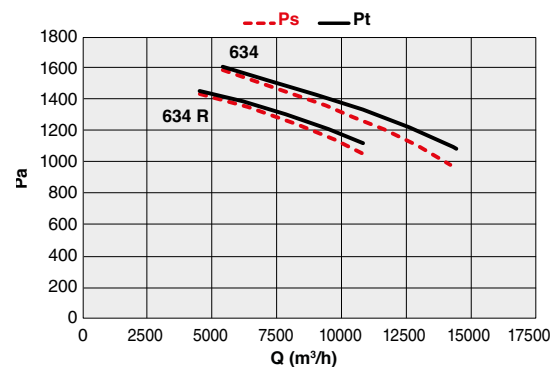
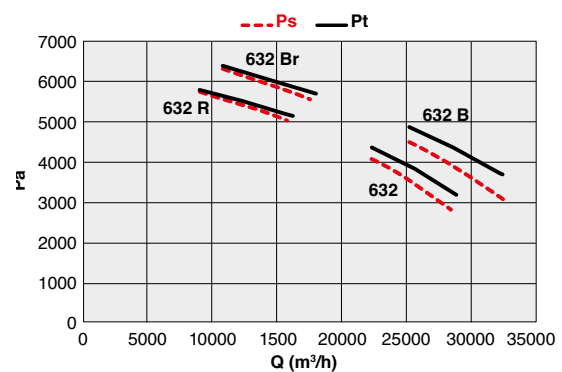
PN-L 560

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IE3 | IP/CL |
|---------|-----------|---------------|---|---|---------|--------|-----|-------|
| 7PN5600 | PN-L | 562 R | T | 2 | 18,5 | 30,80 | ✓ | 55/F |
| 7PN5601 | | 562 | T | 2 | 22 | 37,40 | ✓ | 55/F |
| 7PN5602 | | 562 Br | T | 2 | 22 | 37,40 | ✓ | 55/F |
| 7PN5603 | | 562 B | T | 2 | 30 | 51,00 | ✓ | 55/F |

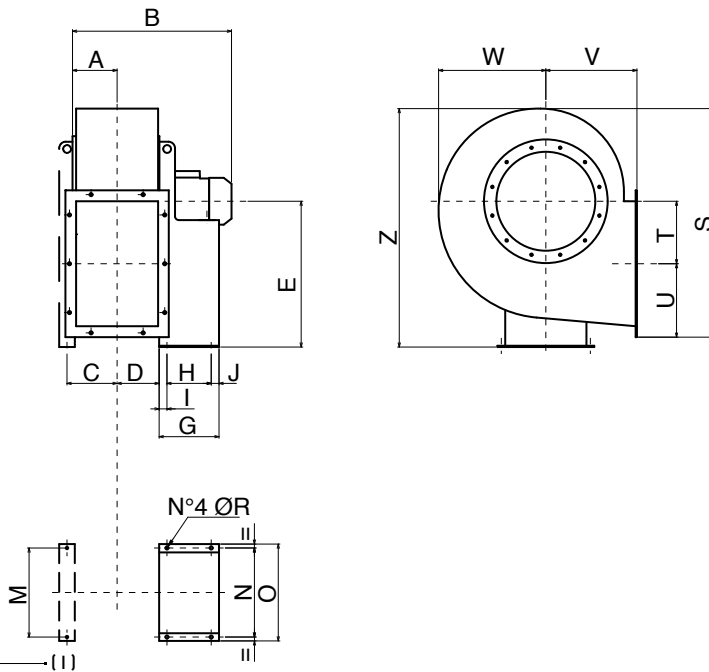


PN-L 600

| Code | Tipo Type | Modello Model | U | P | Pm (kW) | In (A) | IE3 | IP/CL |
|---------|-----------|---------------|---|---|---------|--------|-----|-------|
| 7PN6303 | PN-L | 632 R | T | 2 | 30 | 51,00 | ✓ | 55/F |
| 7PN6305 | | 632 | T | 2 | 37 | 61,90 | ✓ | 55/F |
| 7PN6306 | | 632 Br | T | 2 | 37 | 61,90 | ✓ | 55/F |
| 7PN6307 | | 632 B | T | 2 | 45 | 76,80 | ✓ | 55/F |
| 7PN6330 | | 634 R | T | 4 | 4 | 7,60 | ✓ | 55/F |
| 7PN6331 | | 634 | T | 4 | 5,5 | 6,60 | ✓ | 55/F |



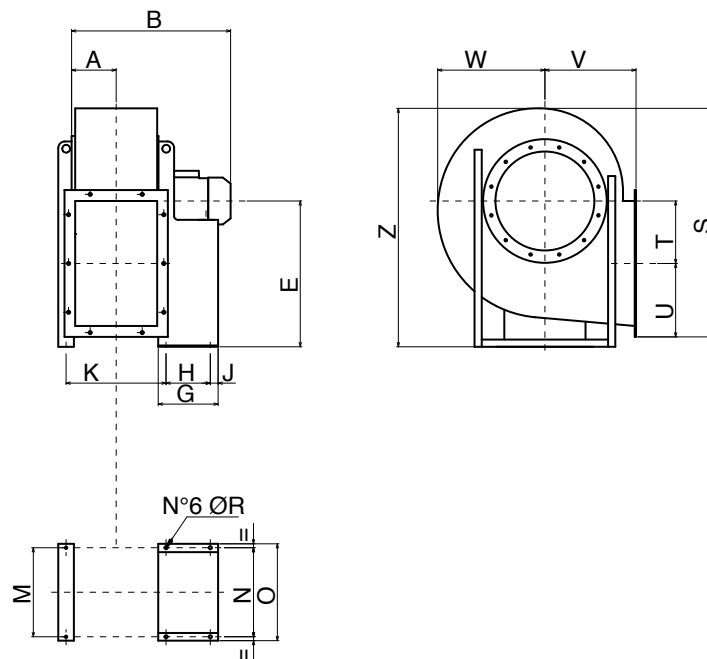
ESECUZIONE 4 ARRANGEMENT 4



PN-L 400-500

| TIPO TYPE | A | B | C | D | E | G | H | I | J | M | N | O | ØR | Z | S | T | U | V | W |
|-------------|-----|-----|-----|-----|-----|-----|-----|----|----|-----|-----|-----|----|------|-----|-----|-----|-----|-----|
| PN-L 402 R | 147 | 665 | 174 | 147 | 500 | 285 | 197 | 34 | 54 | 445 | 289 | 324 | 12 | 811 | 798 | 245 | 242 | 285 | 400 |
| PN-L 402 | 147 | 665 | 174 | 147 | 500 | 345 | 237 | 44 | 64 | 445 | 289 | 324 | 12 | 811 | 798 | 245 | 242 | 285 | 400 |
| PN-L 452 R | 163 | 751 | 191 | 165 | 560 | 345 | 237 | 44 | 64 | 495 | 337 | 372 | 12 | 914 | 895 | 275 | 267 | 320 | 445 |
| PN-L 452 Br | 163 | 751 | 191 | 165 | 560 | 345 | 237 | 44 | 64 | 495 | 337 | 372 | 12 | 914 | 895 | 275 | 267 | 320 | 445 |
| PN-L 452 | 163 | 751 | 191 | 165 | 560 | 446 | 337 | 55 | 54 | 495 | 337 | 372 | 12 | 914 | 895 | 275 | 267 | 320 | 445 |
| PN-L 502 R | 183 | 913 | 23 | 185 | 600 | 446 | 337 | 55 | 54 | 545 | 395 | 440 | 14 | 1001 | 997 | 303 | 294 | 360 | 502 |
| PN-L 502 | 183 | 913 | 23 | 185 | 600 | 446 | 337 | 55 | 54 | 545 | 395 | 440 | 14 | 1001 | 997 | 303 | 294 | 360 | 502 |

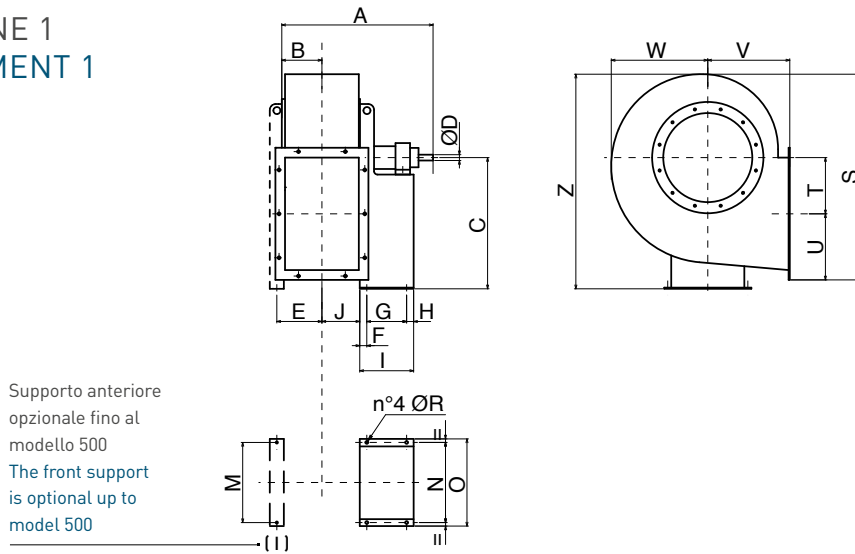
ESECUZIONE 4 ARRANGEMENT 4



PN-L 560-600

| TIPO TYPE | A | B | E | G | H | J | K | N | O | ØR | M | Z | S | T | U | V | W |
|-------------|-----|------|-----|-----|-----|----|-----|-----|-----|----|-----|------|------|-----|-----|-----|-----|
| PN-L 562 R | 205 | 1036 | 670 | 440 | 337 | 54 | 488 | 395 | 440 | 14 | 632 | 1154 | 1151 | 332 | 335 | 400 | 570 |
| PN-L 562 | 205 | 1072 | 670 | 464 | 357 | 37 | 509 | 434 | 488 | 17 | 632 | 1154 | 1151 | 332 | 335 | 400 | 570 |
| PN-L 562 Br | 205 | 1072 | 670 | 464 | 357 | 37 | 509 | 434 | 488 | 17 | 632 | 1154 | 1151 | 332 | 335 | 400 | 570 |
| PN-L 562 B | 205 | 1072 | 670 | 464 | 357 | 39 | 509 | 434 | 488 | 17 | 632 | 1154 | 1151 | 332 | 335 | 400 | 570 |
| PN-L 632 R | 230 | 1179 | 750 | 509 | 381 | 48 | 568 | 506 | 568 | 19 | 702 | 1290 | 1282 | 373 | 369 | 450 | 630 |
| PN-L 632 | 230 | 1179 | 750 | 509 | 381 | 48 | 568 | 506 | 568 | 19 | 702 | 1290 | 1282 | 373 | 369 | 450 | 630 |
| PN-L 632 Br | 230 | 1179 | 750 | 509 | 381 | 48 | 568 | 506 | 568 | 19 | 702 | 1290 | 1282 | 373 | 369 | 450 | 630 |
| PN-L 632 B | 230 | 1179 | 750 | 509 | 381 | 39 | 568 | 506 | 568 | 19 | 702 | 1290 | 1282 | 373 | 369 | 450 | 630 |
| PN-L 634 R | 230 | 845 | 750 | 280 | 197 | 54 | 517 | 289 | 324 | 12 | 702 | 1290 | 1282 | 373 | 369 | 450 | 630 |
| PN-L 634 | 230 | 845 | 750 | 340 | 237 | 64 | 527 | 337 | 372 | 12 | 702 | 1290 | 1282 | 373 | 369 | 450 | 630 |

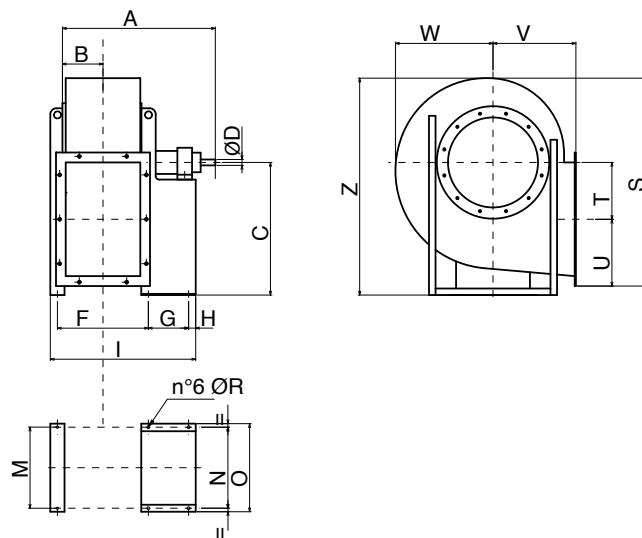
ESECUZIONE 1 ARRANGEMENT 1



PN-L 400-500

| TIPO TYPE | A | B | C | ØD | E | F | G | H | I | J | M | N | O | ØR | S | T | U | V | W | Z |
|-------------|------|-----|-----|----|-----|----|-----|----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|-----|------|
| PN-L 400 | 910 | 147 | 500 | 38 | 174 | 50 | 407 | 28 | 485 | 147 | 445 | 355 | 400 | 14 | 798 | 245 | 242 | 285 | 400 | 811 |
| PN-L 450 | 930 | 163 | 560 | 38 | 191 | 50 | 407 | 28 | 485 | 165 | 495 | 355 | 400 | 14 | 895 | 275 | 267 | 320 | 445 | 914 |
| PN-L 500 | 1084 | 183 | 600 | 42 | 23 | 50 | 477 | 33 | 560 | 185 | 545 | 364 | 418 | 17 | 997 | 303 | 294 | 360 | 502 | 1001 |

ESECUZIONE 1 ARRANGEMENT 1

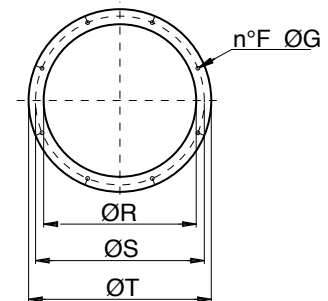


PN-L 560-630

| TIPO TYPE | A | B | C | ØD | F | G | H | I | M | N | O | ØR | S | T | U | V | W | Z |
|-------------|------|-----|-----|----|-----|-----|----|------|-----|-----|-----|----|------|-----|-----|-----|-----|------|
| PN-L 560 | 1177 | 205 | 670 | 48 | 488 | 477 | 33 | 1021 | 632 | 632 | 692 | 17 | 1151 | 332 | 335 | 400 | 570 | 1155 |
| PN-L 630 | 1233 | 230 | 750 | 48 | 537 | 477 | 33 | 1070 | 702 | 702 | 762 | 17 | 1282 | 373 | 369 | 450 | 630 | 1290 |

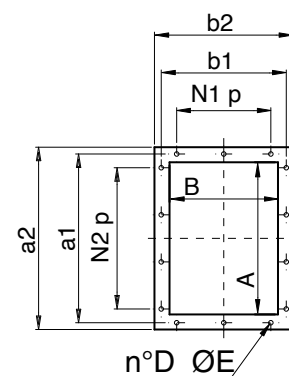
BOCCA ASPIRANTE | INTEL CONE

| TIPO TYPE | ØR | ØS | ØT | n° F | Ø G |
|-------------|-----|-----|-----|------|-----|
| PN-L 400 | 405 | 448 | 485 | 12 | 12 |
| PN-L 450 | 455 | 497 | 535 | 12 | 12 |
| PN-L 500 | 505 | 551 | 585 | 12 | 14 |
| PN-L 560 | 565 | 629 | 665 | 12 | 14 |
| PN-L 630 | 635 | 698 | 735 | 12 | 14 |



BOCCA PREMENTE | OUTLET CONE

| TIPO TYPE | A | B | a1 | b1 | a2 | b2 | N1 x p | N2 x p | n° D | Ø E |
|-------------|-----|-----|-----|-----|-----|-----|---------|---------|------|-----|
| PN-L 400 | 404 | 288 | 448 | 332 | 484 | 368 | 2 x 125 | 3 x 125 | 14 | 12 |
| PN-L 450 | 453 | 322 | 497 | 366 | 533 | 402 | 2 x 125 | 3 x 125 | 14 | 12 |
| PN-L 500 | 507 | 361 | 551 | 405 | 587 | 441 | 2 x 125 | 3 x 125 | 14 | 12 |
| PN-L 560 | 569 | 404 | 629 | 464 | 669 | 504 | 2 x 160 | 3 x 160 | 14 | 14 |
| PN-L 630 | 638 | 453 | 698 | 513 | 738 | 553 | 2 x 160 | 3 x 160 | 14 | 14 |



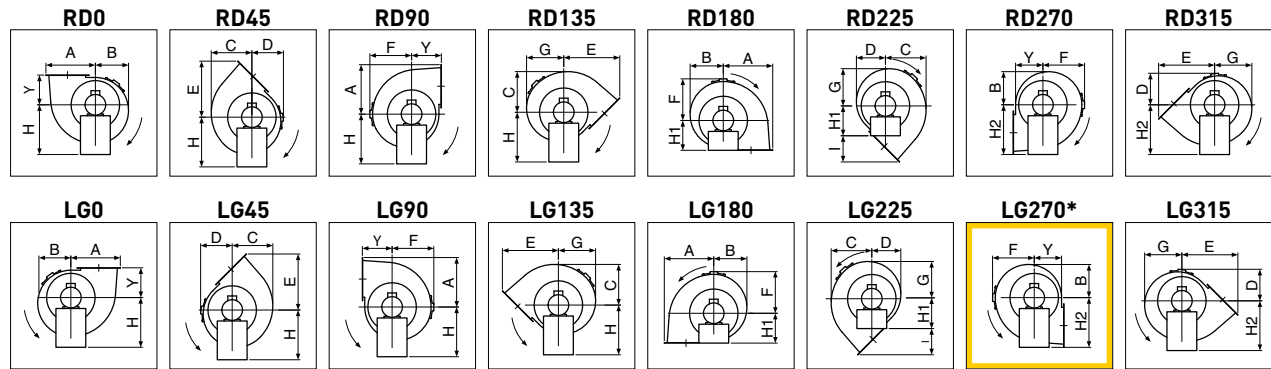
DIMENSIONI E ORIENTAMENTI mm

PN-L

DIMENSIONS AND DISCHARGE ANGLES

Dimensioni dei modelli secondo l'orientamento.

Dimensions of models according to the discharge angle.



* Versione standard | Standard version.

| TIPO TYPE | A | B | C | D | E | F | G | I | Y | H | H1 | H2 |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| PN-L 400 | 487 | 311 | 387 | 306 | 543 | 400 | 353 | 258 | 285 | 500 | 285 | 500 |
| PN-L 450 | 542 | 354 | 435 | 342 | 609 | 445 | 398 | 289 | 320 | 560 | 320 | 560 |
| PN-L 500 | 597 | 401 | 490 | 380 | 676 | 502 | 450 | 316 | 360 | 600 | 360 | 600 |
| PN-L 560 | 667 | 485 | 555 | 425 | 754 | 570 | 542 | 354 | 400 | 670 | 400 | 670 |
| PN-L 630 | 742 | 540 | 619 | 476 | 843 | 630 | 603 | 393 | 450 | 750 | 450 | 750 |

PESI | WEIGHTS

| Modello Model | Kg* |
|-----------------|-----|
| PN-L 402 R | 106 |
| PN-L 402 | 106 |
| PN-L 452 R | 124 |
| PN-L 452 Br | 127 |
| PN-L 452 | 127 |

* Pesi indicativi | Indicative weights

| Modello Model | Kg* |
|-----------------|-----|
| PN-L 502 R | 187 |
| PN-L 502 | 199 |
| PN-L 562 R | 220 |
| PN-L 562 | 273 |
| PN-L 562 Br | 275 |
| PN-L 562 B | 273 |

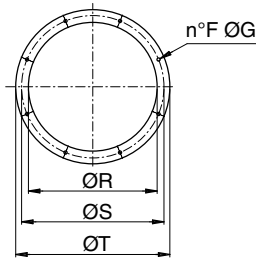
| Modello Model | Kg* |
|-----------------|-----|
| PN-L 632 R | 387 |
| PN-L 632 | 387 |
| PN-L 632 Br | 389 |
| PN-L 632 B | 387 |
| PN-L 634 R | 180 |
| PN-L 634 | 202 |



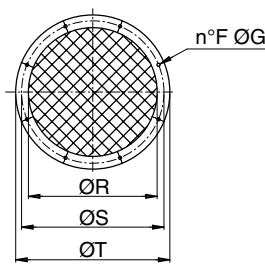
LATO ASPIRANTE | INLET SIDE

Flangia - Rete - Giunto | Flange - Guard - Flexible connector

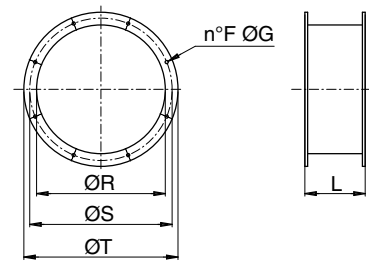
FLANGIA | FLANGE



RETE | GUARD



GIUNTO | FLEXIBLE CONNECTOR

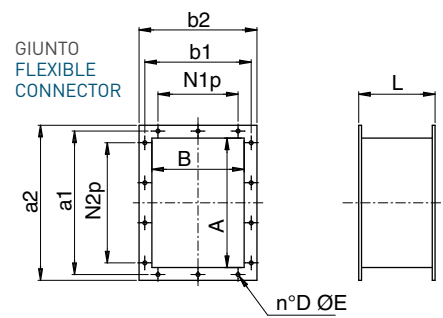
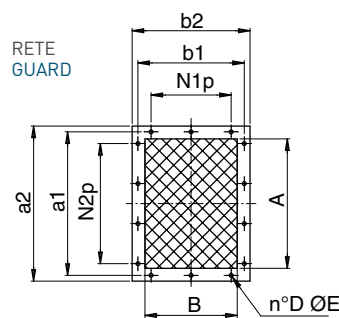
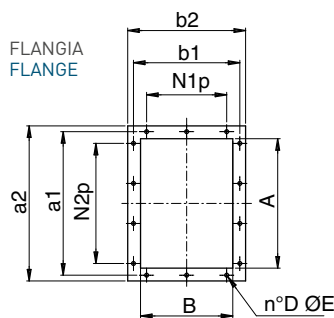


| Flangia Flange | Rete Guard | Giunto Connector | Tipo Type | ØR | ØS | ØT | F | ØG | L |
|-------------------|---------------|---------------------|--------------|-----|-----|-----|----|----|-----|
| 5B01347 | 5RE5606 | 5SU1102 | 400 | 405 | 448 | 485 | 12 | 12 | 145 |
| 5B08105 | 5RE1046 | 5SU1406 | 450 | 455 | 497 | 535 | 12 | 12 | 145 |
| 5B01380 | 5RE1180 | 5SU1180 | 500 | 505 | 551 | 585 | 12 | 14 | 180 |
| 5B08087 | 5RE1016 | 5SU8004 | 560 | 565 | 629 | 665 | 12 | 14 | 180 |
| 5B01391 | 5RE1013 | 5SU9000 | 630 | 635 | 698 | 735 | 12 | 14 | 180 |

Dimensioni in mm | Dimensions in mm

LATO PREMENTE | OUTLET SIDE

Flangia - Rete - Giunto | Flange - Guard - Flexible connector



| Flangia Flange | Rete Guard | Giunto Connector | Tipo Type | A | B | a1 | b1 | a2 | b2 | N1 x p | N2 x p | n° D | ø E | L |
|-------------------|---------------|---------------------|--------------|-----|-----|-----|-----|-----|-----|---------|---------|------|-----|-----|
| 5B01344 | 5RE1020 | 5SU4023 | 400 | 404 | 288 | 448 | 332 | 484 | 368 | 2 x 125 | 3 x 125 | 14 | 12 | 145 |
| 5B01348 | 5RE1006 | 5SU5601 | 450 | 453 | 322 | 497 | 366 | 533 | 402 | 2 x 125 | 3 x 125 | 14 | 12 | 145 |
| 5B01381 | 5RE1024 | 5SU1181 | 500 | 507 | 361 | 551 | 405 | 587 | 441 | 2 x 125 | 3 x 125 | 14 | 12 | 145 |
| 5B08104 | 5RE1004 | 5SU4021 | 560 | 569 | 404 | 629 | 464 | 669 | 504 | 2 x 160 | 3 x 160 | 14 | 14 | 180 |
| 5B01310 | 5RE1035 | 5SU1402 | 630 | 638 | 453 | 698 | 513 | 738 | 553 | 2 x 160 | 3 x 160 | 14 | 14 | 180 |

Dimensioni in mm | Dimensions in mm