



## NORRES INDUSTRIAL HOSES

RAW MATERIAL PROCESSING





Silo, silo vehicle/ silo truck, tanker/ tank truck: Silo charging, silo discharging

Recommended by NORRES customers:

|                        |                                 |
|------------------------|---------------------------------|
| AIRDUC® PUR 356 AS     | AIRDUC® PUR 356 FOOD REINFORCED |
| NORPLAST® PUR-C 386 AS | BARDUC® PUR-INOX 382 FOOD-AS    |
|                        | NORPLAST® PUR 387               |

Proven Alternatives:

|                              |
|------------------------------|
| AIRDUC® PUR 356 FOOD         |
| AIRDUC® PUR-INOX 356 FOOD-AS |

NORPLAST® PUR-C 387 AS



Screening machine/ sifting machine,  
vibration screening machine, tumbler  
screening machine, plansifter, windsifter



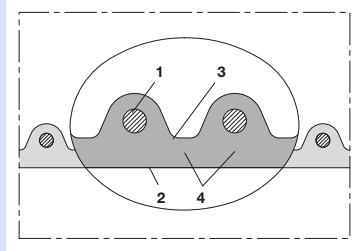
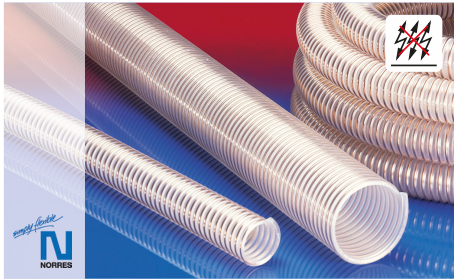
Recommended by NORRES customers:

PROTAPE® PUR-C 335 FOOD-AS FLAT

Proven Alternatives:

|                               |
|-------------------------------|
| PROTAPE® PUR 301 AS           |
| PROTAPE® PUR 330 AS           |
| PROTAPE® PUR 330 FOOD         |
| PROTAPE® PUR-INOX 330 FOOD-AS |





Antistatic polyurethane hose, super-heavy duty, microbe resistant

#### Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- plastic industry, conveying of granulates and powders: granulate conveying equipment, vacuum hopper/ conveyor, suction conveyor, dosing system, bulk-bag (big bag)-charging and discharging, shredder, mill, extruder, injection moulding machine
- suction vehicles: roof gravelling, roof gravel conveying
- vacuum truck, suction vehicle, dry suction truck: industrial cleaning, furnace cleaning
- suction excavator
- explosion hazard area
- agricultural industry: pneumatic grain conveyer
- concrete pump: outlet hose, discharge hose
- construction industry: rock drill, rock drilling machine
- raw material conveying hose for powders, granulates, sand, quartz, gravel, shards and chips/ shavings
- compressor, side channel blower, vacuum pump, pressure pump, pump
- paper mill, paper and pulp industry, packaging machine: edge strip suctioning system/ edge trim exhaust systems

- surface preparation: shot blasting/ sand blasting recovery (blasting chamber), ship yard, stripping machine, flooring preparation machine, grinding machine
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging
- silo, silo vehicle/ silo truck, tanker/ tank truck: conveying of wood pellets, plastic granulate, plastic powder

#### Properties

- super-heavy duty
- extremely abrasion-resistant with reinforcement underneath wire and narrow hose pitch
- very high pressure, vacuum and compression resistance
- microbe resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance  $<10^9 \Omega$  and in accordance with TRGS 727  $<2,5 \cdot 10^8 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: pneumatic transport of flammable dusts and bulk materials (Zone 20, 21, 22 inside), aspiration of combustible dusts (Zone 22 inside), for conveying

for flammable liquids (inside zone 0, 1, 2), for conveying for non-flammable liquids, for use in zone 1 and 2 (gases), for use in zone 0 (gases)

- according to DIN 26057 Type 4
- conforms to RoHS guideline

#### Temperature range

- -40°F to 195°F
- short time to 255°F

#### Design, material

AIRDUC® profile hose

1. spring steel wire firmly embedded in the wall
2. wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)
3. wall thickness 0.08 - 0.10 inch approximate
4. reinforcement of the primary abrasion areas

#### Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- special colors: full colored
- customer-specific branding

| I.D.        | O.D. | Pressure | Vacuum | Bending Radius | Weight  | Stock length | Further production lengths | Order No.     |
|-------------|------|----------|--------|----------------|---------|--------------|----------------------------|---------------|
| in / mm     | in   | psi      | inHG   | in             | lbs./ft | ft           | ft                         |               |
| 1.25 / 32   | 1.69 | 75.95    | 29.55  | 3.54           | 0.455   | -            | 25 50                      | 356-0032-0000 |
| 1.5 / 38    | 1.93 | 64.90    | 29.55  | 4.09           | 0.530   | 25 50        | -                          | 356-0038-0000 |
| - / 40      | 2.00 | 61.95    | 29.55  | 4.29           | 0.550   | 25 50        | -                          | 356-0040-0000 |
| 1.75 / 45   | 2.20 | 55.50    | 29.55  | 5.06           | 0.610   | -            | 25 50                      | 356-0045-0000 |
| - / 50      | 2.40 | 50.35    | 29.55  | 5.28           | 0.670   | -            | 25 50                      | 356-0050-0000 |
| 2 / 51      | 2.44 | 46.40    | 29.55  | 5.28           | 0.690   | 25 50        | -                          | 356-0051-0000 |
| - / 55      | 2.60 | 46.00    | 29.55  | 5.93           | 0.730   | -            | 25 50                      | 356-0055-0000 |
| 2.36 / 60   | 2.80 | 42.35    | 29.55  | 6.14           | 0.795   | 25 50        | -                          | 356-0060-0000 |
| 2.5 / 63-65 | 2.91 | 40.75    | 29.55  | 6.42           | 0.830   | 25 50        | -                          | 356-0063-0000 |
| - / 65      | 3.00 | 39.25    | 29.55  | 6.65           | 0.855   | -            | 25 50                      | 356-0065-0000 |
| - / 70      | 3.20 | 36.55    | 29.55  | 7.32           | 0.920   | 25 50        | -                          | 356-0070-0000 |
| - / 75      | 3.43 | 34.25    | 29.55  | 7.68           | 0.980   | -            | 25 50                      | 356-0075-0000 |
| 3 / 76      | 3.46 | 34.15    | 29.55  | 7.68           | 0.990   | 25 50        | -                          | 356-0076-0000 |
| - / 80      | 3.62 | 32.20    | 29.55  | 8.07           | 1.040   | -            | 25 50                      | 356-0080-0000 |
| - / 90      | 4.06 | 31.85    | 29.55  | 9.84           | 1.385   | -            | 25 50                      | 356-0090-0000 |
| - / 100     | 4.45 | 28.70    | 29.55  | 10.71          | 1.525   | -            | 25 50                      | 356-0100-0000 |
| 4 / 102     | 4.53 | 27.40    | 29.55  | 10.71          | 1.550   | 25 50        | -                          | 356-0102-0000 |
| - / 110     | 4.84 | 26.20    | 29.55  | 11.81          | 1.665   | -            | 25 50                      | 356-0110-0000 |
| 4.5 / 115   | 5.04 | 25.10    | 28.79  | 12.48          | 1.735   | -            | 25 50                      | 356-0115-0000 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.



| I.D.       | O.D.  | Pressure | Vacuum | Bending Radius | Weight  | Stock length | Further production lengths | Order No.     |
|------------|-------|----------|--------|----------------|---------|--------------|----------------------------|---------------|
| in / mm    | in    | psi      | inHG   | in             | lbs./ft | ft           | ft                         |               |
| 4.72 / 120 | 5,24  | 24.10    | 27.46  | 12.99          | 1.810   | -            | 25 50                      | 356-0120-0000 |
| - / 125    | 5,43  | 23.15    | 26.43  | 13.23          | 1.880   | -            | 25 50                      | 356-0125-0000 |
| 5 / 127    | 5,51  | 22.70    | 26.28  | 13.23          | 1.910   | 25 50        | -                          | 356-0127-0000 |
| - / 130    | 5,63  | 22.25    | 25.40  | 13.98          | 1.950   | -            | 25 50                      | 356-0130-0000 |
| 5.5 / 140  | 6,02  | 20.75    | 23.62  | 15.75          | 2.090   | 25 50        | -                          | 356-0140-0000 |
| - / 150    | 6,42  | 19.35    | 22.00  | 17.13          | 2.475   | -            | 25 50                      | 356-0150-0000 |
| 6 / 152    | 6,50  | 18.95    | 24.66  | 17.13          | 2.500   | 25 50        | -                          | 356-0152-0000 |
| 6.3 / 160  | 6,81  | 18.20    | 20.67  | 18.50          | 2.625   | -            | 25 50                      | 356-0160-0000 |
| - / 170    | 7,20  | 17.10    | 19.49  | 23.62          | 2.790   | -            | 25 50                      | 356-0170-0000 |
| - / 175    | 7,40  | 16.70    | 18.90  | 27.56          | 2.865   | -            | 25 50                      | 356-0175-0000 |
| - / 180    | 7,60  | 16.25    | 18.31  | 32.68          | 2.945   | -            | 25 50                      | 356-0180-0000 |
| - / 200    | 8,43  | 14.65    | 16.54  | 37.40          | 3.991   | -            | 25                         | 356-0200-0000 |
| 8 / 203    | 8,50  | 13.85    | 16.24  | 37.40          | 4.045   | 25 50        | -                          | 356-0203-0000 |
| - / 225    | 9,41  | 13.05    | 14.62  | 46.26          | 4.469   | -            | 25                         | 356-0225-0000 |
| - / 250    | 10,39 | 11.75    | 13.14  | 51.18          | 4.940   | -            | 25                         | 356-0250-0000 |
| - / 275    | 11,38 | 10.65    | 11.96  | 57.18          | 5.425   | -            | 25                         | 356-0275-0000 |
| - / 300    | 12,36 | 9.80     | 11.07  | 62.01          | 5.900   | -            | 25                         | 356-0300-0000 |

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## Accessories



CLAMP 216



CLAMP 211



CONNECT 228


CONNECT SAFETY  
CLAMP ASSEMBLY  
231

CONNECT PRESS  
ASSEMBLY 232

CONNECT MOULD  
ASSEMBLY 233

CONNECT THREAD  
FITTING 234

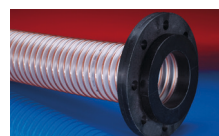

CONNECT 240 + 241



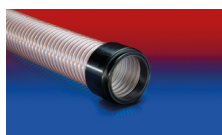
CONNECT 242



CONNECT 243



CONNECT 244


CONNECT 245 VAC-  
TRUCK


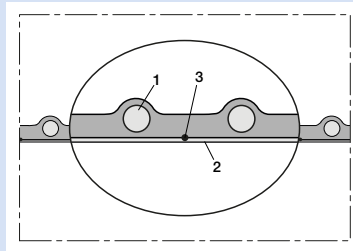
CONNECT 245



CONNECT 246

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## Antistatic polyurethane hose, heavy duty, grounding wire

### Applications

- flexible hose/ ducting for high volume of abrasive powder, bulk material, granulate and for gases
- vacuum conveying equipment, vacuum hopper, suction conveyor, dosing system
- plastic industry, conveying of granulates and powders: granulate conveying equipment, vacuum hopper/ conveyor, suction conveyor, dosing system, bulk-bag (big bag)-charging and discharging, shredder, mill, extruder, injection moulding machine
- explosion hazard area
- raw material conveying hose for powders, granulates, sand, quartz, gravel, shards and chips/shavings
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging
- silo, silo vehicle/ silo truck, tanker/ tank truck: conveying of wood pellets, plastic granulate, plastic powder

- wood pellet heating system: conveying of wood pellets

### Properties

- heavy duty
- highly abrasion resistant
- increased pressure and vacuum resistance
- good resistance to chemicals
- phthalate-free
- grounding wire for discharging of electrostatic charging
- electrical and surface resistance of the inliner  $<10^9 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: aspiration of combustible dust (zone 22 inside), for conveying of non-flammable liquids, for use in zone 1 and 2 (gases)
- conforms to RoHS guideline

### Temperature range

- 5°F to 160°F
- short time to 175°F

### Design, material

NORPLAST® full plastic hose

- hard plastic spiral integrated in the wall; spiral: rigid PVC
- smooth interior; wall: antistatic polyurethane inside layer 0.079 inch approximate, exterior soft PVC
- grounding wire

### Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- special colors: colored spiral, full colored
- customer-specific branding

| I.D.         | O.D. | Pressure  | Vacuum    | Bending Radius | Weight  | Stock length | Further production lengths | Order No.     |
|--------------|------|-----------|-----------|----------------|---------|--------------|----------------------------|---------------|
| in / mm      | in   | psi       | inHG      | in             | lbs./ft | ft           | ft                         |               |
| 1.25 / 32    | 1.54 | 72.50 (-) | 20.65 (-) | 6.51           | 0.300   | -            | 50 100                     | 386-0032-0000 |
| 1.5 / 38     | 1.81 | 72.50 (-) | 20.65 (-) | 7.70           | 0.395   | 50 100       | -                          | 386-0038-0000 |
| - / 40       | 1.92 | 72.50 (-) | 20.65 (-) | 8.07           | 0.415   | -            | 50 100                     | 386-0040-0000 |
| 1.75 / 44-45 | 2.09 | 72.50 (-) | 20.65 (-) | 8.99           | 0.505   | -            | 50 100                     | 386-0045-0000 |
| 2 / 50-51    | 2.32 | 72.50 (-) | 20.65 (-) | 10.00          | 0.590   | 50 100       | -                          | 386-0050-0000 |
| 2.36 / 60    | 2.72 | 72.50 (-) | 20.65 (-) | 11.83          | 0.710   | -            | 50 100                     | 386-0060-0000 |
| 2.5 / 63-65  | 2.83 | 72.50 (-) | 20.65 (-) | 12.39          | 0.760   | 50 100       | -                          | 386-0063-0000 |
| - / 70       | 3.11 | 72.50 (-) | 20.65 (-) | 13.67          | 0.860   | -            | 50 100                     | 386-0070-0000 |
| 3 / 75-76    | 3.35 | 72.50 (-) | 20.65 (-) | 14.77          | 0.980   | 50 100       | -                          | 386-0076-0000 |
| - / 80       | 3.54 | 58.00 (-) | 20.65 (-) | 15.59          | 1.095   | -            | 50 100                     | 386-0080-0000 |
| 3.5 / 89-90  | 3.94 | 58.00 (-) | 20.65 (-) | 17.43          | 1.305   | 50 100       | -                          | 386-0090-0000 |
| 4 / 100-102  | 4.41 | 58.00 (-) | 20.65 (-) | 19.63          | 1.550   | 50 100       | -                          | 386-0102-0000 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only. Additional information at [www.norres.com/us/technology-us/](http://www.norres.com/us/technology-us/)

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Accessories

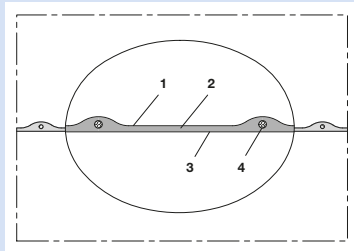
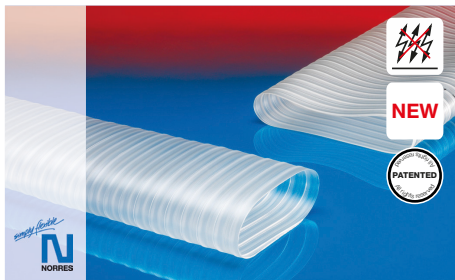


CLAMP 211



CONNECT 270-271

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Screening machine hose and compensator, vibration resistant

## Applications

- food industry, pharmaceutical industry: food, pharmaceutical
- conveying of dry foods e.g. rice, cereals, sugar, milk powder, powders, coffee, tea, grains, flour, frozen foods
- mixer, dryer, packaging machine, bulk-bag (big bag)-charging and discharging, mill
- explosion hazard area
- screening machine/ sifting machine, vibration screening machine, tumbler screening machine, plansifter, windsifter
- bellows, compensators

## Properties

- highly flexible
- abrasion-resistant
- vibration resistant

- Food grade wall, complies with: EU-Directive 10/2011 and EC 1935/2004, incl. the latest EU-Directive 2015/174, FDA 21 CFR 177.2600
- odorless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance  $<10^9 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: aspiration of combustible dust (zone 22 inside), for conveying of non-flammable liquids, for use in zone 1 and 2 (gases)
- manufacturing process acc. GMP EC 2023/2006
- conforms to RoHS guideline

- short time to 255°F

## Design, material

- patented PROTAPE® tape hose
1. wall interior and exterior smooth
  2. wall: permanently antistatic premium ether-polyurethane (Pre-PUR®)
  3. wall thickness 0.04 inch approximate; wall interior smooth
  4. grounding wire

## Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- customer-specific branding

## Temperature range

- -40°F to 195°F

| I.D.          | O.D.  | Pressure | Weight  | Stock length | Further production lengths | Order No.     |
|---------------|-------|----------|---------|--------------|----------------------------|---------------|
| in / mm       | in    | psi      | lbs./ft | ft           | ft                         |               |
| 2 / 50-51     | 2.17  | 8.40 (-) | 0.210   | 6            | -                          | 335-0050-0000 |
| 2.36 / 60     | 2.56  | 8.10 (-) | 0.250   | 6            | -                          | 335-0060-0000 |
| - / 80        | 3.35  | 7.40 (-) | 0.315   | 16           | 8                          | 335-0080-0000 |
| - / 85        | 3.54  | 6.95 (-) | 0.335   | 16           | 8                          | 335-0085-0000 |
| 4 / 100-102   | 4.13  | 5.95 (-) | 0.395   | 16           | 8                          | 335-0100-0000 |
| - / 110       | 4.50  | 5.45 (-) | 0.435   | 16           | 8                          | 335-0110-0000 |
| 4.5 / 114-115 | 4.72  | 5.15 (-) | 0.450   | -            | 8 16                       | 335-0115-0000 |
| 4.72 / 120    | 4.92  | 4.95 (-) | 0.470   | 16           | 8                          | 335-0120-0000 |
| 5 / 125-127   | 5.12  | 4.80 (-) | 0.490   | 16           | 8                          | 335-0125-0000 |
| 6 / 150-152   | 6.10  | 4.00 (-) | 0.590   | 16           | 8                          | 335-0150-0000 |
| - / 155       | 6.30  | 3.85 (-) | 0.605   | 16           | 8                          | 335-0155-0000 |
| 6.3 / 160     | 6.50  | 3.70 (-) | 0.625   | -            | 8 16                       | 335-0160-0000 |
| 6.5 / 165     | 6.69  | 3.65 (-) | 0.645   | 16           | 8                          | 335-0165-0000 |
| 7 / 178-180   | 7.28  | 3.35 (-) | 0.705   | 16           | 8                          | 335-0180-0000 |
| 8 / 200-203   | 8.07  | 2.95 (-) | 0.765   | 16           | 8                          | 335-0200-0000 |
| - / 205       | 8.27  | 2.90 (-) | 0.800   | 16           | 8                          | 335-0205-0000 |
| - / 220       | 8.86  | 2.70 (-) | 0.860   | -            | 8 16                       | 335-0220-0000 |
| - / 250       | 10.04 | 2.40 (-) | 0.975   | 16           | 8                          | 335-0250-0000 |
| - / 275       | 11.00 | 2.20 (-) | 1.070   | 16           | 8                          | 335-0275-0000 |
| 12 / 305      | 12.20 | 1.95 (-) | 1.190   | 16           | 8                          | 335-0305-0000 |
| - / 350       | 13.98 | 1.65 (-) | 1.365   | -            | 8 16                       | 335-0350-0000 |
| 16 / 405-406  | 16.14 | 1.50 (-) | 1.570   | 16           | 8                          | 335-0405-0000 |

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## Accessories



CLAMP 208



CLAMP 211

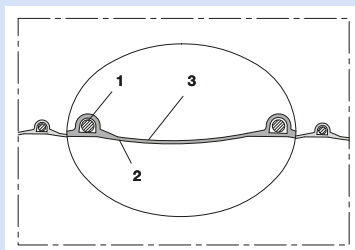
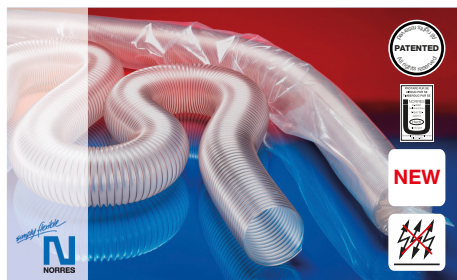


CONNECT 228



CONNECT 270-271

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Antistatic polyurethane hose, super-light weight, microbe resistant + flame-retardant

## Applications

- flexible hose/ ducting for gases and for abrasive dust, powder, fibers
- extraction unit, dust collection systems, filter system, oil mist extraction
- extraction arm
- chemical industry: chemical vapors, vapor return hose at loading arm, paint steam, spray mist extraction
- explosion hazard area
- animal stall, animal shed: barn ventilation
- bus, utility vehicle, caravan/ trailer, mobile home/ camper/ RV, boat, ship/ vessel/ marine, yacht: ventilation, heating
- clean room ventilation, semiconductor production machine
- bellows, compensators

## Properties

- super-light weight
- highly flexible + compressible 3:1

- abrasion-resistant
- microbe resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- flame-retardant according to: UL94-HB
- flame-retardant according to: DIN 4102-B1
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance  $<10^9 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: aspiration of combustible dust (zone 22 inside), for conveying of non-flammable liquids, for use in zone 1 and 2 (gases)
- conforms to the safety regulations of the German Wood Trade Association
- according to DIN 26057 Type 1
- conforms to RoHS guideline

## Temperature range

- 40°F to 195°F

- short time to 255°F

## Design, material

patented PROTAPE® tape hose

- spring steel wire integrated in the wall
- wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)
- wall thickness 0.02 inch approximate

## Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- special colors: partially colored, completely colored
- customer-specific branding
- ID 1"/25mm – 12"/305mm compressed packed in poly bag (low transportation cost / risk, minimum storage size), ID315 – 500mm not compressed

| I.D.          | O.D. | Pressure<br>DIN 26057<br>(50% Elongation) | Vacuum<br>DIN 26057<br>(axially fixed) | Bending<br>Radius | Weight  | Stock<br>length | Further<br>production<br>lengths | Order No.     |
|---------------|------|---|--|-------------------|---------|-----------------|----------------------------------|---------------|
| in / mm       | in   | psi                                       | inHG                                   | in                | lbs./ft | ft              | ft                               |               |
| 1.5 / 38      | 1.81 | 9.15 (27.05)                              | 7.23 (21.41)                           | 1.06              | 0.150   | 25 50           | -                                | 301-0038-0000 |
| - / 40        | 1.89 | 8.70 (25.65)                              | 6.94 (19.34)                           | 1.10              | 0.155   | -               | 25 50                            | 301-0040-0000 |
| 1.75 / 44-45  | 2.09 | 7.75 (22.85)                              | 6.20 (15.36)                           | 1.20              | 0.170   | -               | 25 50                            | 301-0045-0000 |
| 2 / 50-51     | 2.28 | 6.95 (20.60)                              | 5.02 (25.10)                           | 1.30              | 0.190   | 25 50           | -                                | 301-0050-0000 |
| 2.36 / 60     | 2.68 | 5.85 (17.20)                              | 4.28 (17.42)                           | 1.50              | 0.230   | -               | 25 50                            | 301-0060-0000 |
| 2.5 / 63-65   | 2.87 | 5.35 (15.90)                              | 3.84 (14.91)                           | 1.57              | 0.240   | 25 50           | -                                | 301-0065-0000 |
| - / 70        | 3.07 | 5.00 (14.70)                              | 3.69 (12.99)                           | 1.69              | 0.255   | -               | 25 50                            | 301-0070-0000 |
| 3 / 75-76     | 3.27 | 4.70 (13.80)                              | 3.40 (11.37)                           | 1.77              | 0.275   | 25 50           | -                                | 301-0075-0000 |
| - / 80        | 3.46 | 4.40 (12.90)                              | 3.25 (10.04)                           | 1.89              | 0.295   | -               | 25 50                            | 301-0080-0000 |
| 3.5 / 89-90   | 3.86 | 3.90 (11.45)                              | 2.81 (7.97)                            | 2.09              | 0.330   | 25 50           | -                                | 301-0090-0000 |
| 4 / 100-102   | 4.25 | 3.55 (10.35)                              | 1.62 (8.86)                            | 2.28              | 0.345   | 25 50           | -                                | 301-0100-0000 |
| - / 110       | 4.65 | 3.20 (9.45)                               | 1.48 (7.38)                            | 2.50              | 0.375   | -               | 25 50                            | 301-0110-0000 |
| 4.5 / 114-115 | 4.84 | 3.05 (9.00)                               | 1.48 (6.79)                            | 2.58              | 0.390   | 25 50           | -                                | 301-0115-0000 |
| 4.72 / 120    | 5.04 | 2.95 (8.65)                               | 1.33 (6.20)                            | 2.68              | 0.410   | -               | 25 50                            | 301-0120-0000 |
| 5 / 125-127   | 5.24 | 2.85 (8.25)                               | 1.33 (5.76)                            | 2.78              | 0.425   | 25 50           | -                                | 301-0125-0000 |
| - / 130       | 5.43 | 2.70 (8.00)                               | 1.18 (5.32)                            | 2.87              | 0.445   | -               | 25 50                            | 301-0130-0000 |
| 5.5 / 140     | 5.83 | 2.55 (7.40)                               | 1.18 (4.58)                            | 3.07              | 0.475   | 25 50           | -                                | 301-0140-0000 |
| 6 / 150-152   | 6.22 | 2.30 (6.90)                               | 1.03 (3.99)                            | 3.27              | 0.510   | 25 50           | -                                | 301-0150-0000 |
| 6.3 / 160     | 6.61 | 2.20 (6.45)                               | 1.03 (3.40)                            | 3.46              | 0.545   | -               | 25 50                            | 301-0160-0000 |
| 6.5 / 165     | 6.81 | 2.20 (6.30)                               | 1.03 (3.25)                            | 3.56              | 0.560   | -               | 25 50                            | 301-0165-0000 |
| 7 / 178-180   | 7.40 | 1.95 (5.75)                               | 0.89 (2.66)                            | 3.86              | 0.605   | 25 50           | -                                | 301-0180-0000 |
| 8 / 200-203   | 8.19 | 1.75 (5.20)                               | 0.74 (3.25)                            | 4.25              | 0.690   | 25 50           | -                                | 301-0200-0000 |
| - / 225       | 9.21 | 1.60 (4.65)                               | 0.59 (2.36)                            | 4.78              | 0.780   | -               | 25                               | 301-0225-0000 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.

| I.D.     | O.D.  | Pressure<br>DIN 26057<br>(50% Elongation)<br>psi | Vacuum<br>DIN 26057<br>(axially fixed)<br>inHG | Bending<br>Radius | Weight  | Stock<br>length | Further<br>production<br>lengths | Order No.     |
|----------|-------|--|--|-------------------|---------|-----------------|----------------------------------|---------------|
| in / mm  | in    |  |  | in                | lbs./ft | ft              | ft                               |               |
| - / 250  | 10.20 | 1.45 (4.15)                                      | 0.59 (1.92)                                    | 5.35              | 0.860   | -               | 25                               | 301-0250-0000 |
| 10 / 254 | 10.35 | 1.40 (4.05)                                      | 0.59 (1.77)                                    | 5.65              | 0.875   | 25              | -                                | 301-0254-0000 |
| 11 / 280 | 11.38 | 1.25 (3.70)                                      | 0.59 (1.48)                                    | 5.87              | 0.960   | -               | 25                               | 301-0280-0000 |
| - / 300  | 12.17 | 1.15 (3.50)                                      | 0.44 (1.18)                                    | 6.26              | 1.140   | -               | 25                               | 301-0300-0000 |
| 12 / 305 | 12.40 | 1.15 (3.40)                                      | 0.44 (1.18)                                    | 6.40              | 1.165   | 25              | -                                | 301-0305-0000 |
| - / 315  | 12.80 | 1.10 (3.25)                                      | 0.44 (1.03)                                    | 6.59              | 1.205   | -               | 25                               | 301-0315-0000 |
| - / 350  | 14.17 | 1.00 (2.95)                                      | 0.44 (0.74)                                    | 7.28              | 1.345   | -               | 25                               | 301-0350-0000 |
| 14 / 356 | 14.41 | 1.00 (2.90)                                      | 0.44 (0.74)                                    | 7.48              | 1.410   | 25              | -                                | 301-0356-0000 |
| - / 400  | 16.14 | 0.85 (2.60)                                      | 0.44 (0.59)                                    | 8.27              | 1.520   | -               | 25                               | 301-0400-0000 |
| - / 450  | 18.11 | 0.80 (2.30)                                      | 0.30 (0.44)                                    | 9.25              | 1.695   | -               | 25                               | 301-0450-0000 |
| - / 500  | 20.08 | 0.75 (2.10)                                      | 0.30 (0.44)                                    | 10.24             | 1.870   | -               | 25                               | 301-0500-0000 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only. Additional information at [www.norres.com/us/technology-us/](http://www.norres.com/us/technology-us/)

## Accessories



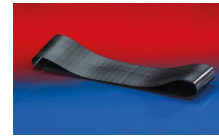
CLAMP 212


CLAMP 210 BRIDGE  
CLAMP


CLAMP 217



CLAMP 213



CONNECT 228



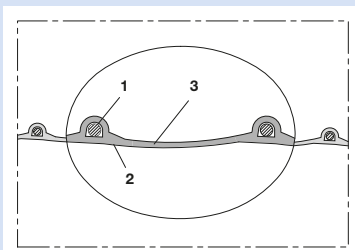
CONNECT 223



CONNECT 270-271

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.





Antistatic polyurethane hose, light weight,  
microbe resistant + flame-retardant

## Applications

- flexible hose/ ducting for gases and for abrasive dust, powder, fibers
- printed circuit board drilling machines (PCB)
- extraction unit, dust collection systems, filter system, oil mist extraction
- extraction arm
- chemical industry: chemical vapors, vapor return hose at loading arm, paint steam, spray mist extraction
- explosion hazard area
- textile industry, fiber extraction: spinning machine, knitting machine, weaving loom machine
- animal stall, animal shed: barn ventilation
- clean room ventilation, semiconductor production machine
- surface preparation: shot blasting/ sand blasting recovery (blasting chamber), ship yard, stripping machine, flooring preparation machine, grinding machine
- heating hose: exterior hose as protection hose

## Properties

- lightweight and reinforced
- highly flexible + compressible 3:1
- abrasion-resistant
- microbe resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- flame-retardant according to: UL94-HB
- flame-retardant according to: DIN 4102-B1
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance  $<10^9 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: aspiration of combustible dust (zone 22 inside), for conveying of non-flammable liquids, for use in zone 1 and 2 (gases)
- conforms to the safety regulations of the German Wood Trade Association
- conforms to RoHS guideline

## Temperature range

- 40°F to 195°F
- short time to 255°F

## Design, material

patented PROTAPE® tape hose

- spring steel wire integrated in the wall
- wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)
- wall thickness 0.025 inch approximate

## Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- special colors: partially colored, completely colored
- customer-specific branding

| I.D.<br>in / mm | O.D.<br>in | Pressure<br>DIN 26057<br>(50% Elongation)<br>psi | Vacuum<br>DIN 26057<br>(axially fixed)<br>inHG | Bending<br>Radius<br>in | Weight<br>lbs./ft | Stock<br>length<br>ft | Further<br>production<br>lengths<br>ft | Order No.     |
|-----------------|------------|--|--|-------------------------|-------------------|-----------------------|--|---------------|
| 1 / 25          | 1.25       | 23.30 (60.65)                                    | 15.95 (29.53)                                  | 3/4                     | 0.101             | 25 50                 | -                                      | 330-0025-1002 |
| - / 30          | 1.46       | 19.60 (50.75)                                    | 13.29 (29.53)                                  | 7/8                     | 0.121             | -                     | 25 50                                  | 330-0030-1002 |
| 1,25 / 32       | 1.54       | 18.35 (47.65)                                    | 12.40 (29.53)                                  | 0.91                    | 0.128             | -                     | 25 50                                  | 330-0032-1002 |
| 1.5 / 38        | 1.75       | 15.60 (40.25)                                    | 10.48 (22.74)                                  | 1.02                    | 0.148             | 25 50                 | -                                      | 330-0038-1002 |
| - / 40          | 1.85       | 14.80 (38.30)                                    | 9.89 (20.52)                                   | 1.06                    | 0.155             | -                     | 25 50                                  | 330-0040-1002 |
| 2 / 50-51       | 2.28       | 11.90 (30.75)                                    | 6.50 (25.69)                                   | 1.30                    | 0.249             | 25 50                 | -                                      | 330-0050-1002 |
| 2,36 / 60       | 2.68       | 9.95 (25.65)                                     | 5.32 (17.87)                                   | 1.50                    | 0.289             | -                     | 25 50                                  | 330-0060-1002 |
| 2.5 / 63-65     | 2.87       | 9.20 (23.70)                                     | 4.87 (15.36)                                   | 1.59                    | 0.309             | 25 50                 | -                                      | 330-0065-1002 |
| - / 70          | 3.07       | 8.55 (22.05)                                     | 4.58 (13.29)                                   | 1.69                    | 0.336             | -                     | 25 50                                  | 330-0070-1002 |
| 3 / 75-76       | 3.27       | 8.00 (20.60)                                     | 4.28 (11.66)                                   | 1.79                    | 0.356             | 25 50                 | -                                      | 330-0075-1002 |
| - / 80          | 3.46       | 7.45 (19.30)                                     | 3.99 (10.34)                                   | 1.89                    | 0.383             | -                     | 25 50                                  | 330-0080-1002 |
| 3.5 / 89-90     | 3.86       | 6.65 (17.20)                                     | 3.54 (8.27)                                    | 2.09                    | 0.423             | 25 50                 | -                                      | 330-0090-1002 |
| 4 / 100-102     | 4.25       | 6.00 (15.50)                                     | 2.36 (9.15)                                    | 2.28                    | 0.45              | 25 50                 | -                                      | 330-0100-1002 |
| - / 110         | 4.65       | 5.45 (14.05)                                     | 2.07 (7.68)                                    | 2.50                    | 0.491             | -                     | 25 50                                  | 330-0110-1002 |
| 4.5 / 114-115   | 4.84       | 5.20 (13.50)                                     | 2.07 (6.94)                                    | 2.58                    | 0.511             | 25 50                 | -                                      | 330-0115-1002 |
| 4,72 / 120      | 5.04       | 5.00 (12.90)                                     | 1.92 (6.50)                                    | 2.68                    | 0.531             | -                     | 25 50                                  | 330-0120-1002 |
| 5 / 125-127     | 5.24       | 4.85 (12.40)                                     | 1.92 (5.91)                                    | 2.78                    | 0.558             | 25 50                 | -                                      | 330-0125-1002 |
| - / 130         | 5.43       | 4.65 (11.95)                                     | 1.77 (5.46)                                    | 2.87                    | 0.578             | -                     | 25 50                                  | 330-0130-1002 |
| 5.5 / 140       | 5.83       | 4.30 (11.10)                                     | 1.62 (4.72)                                    | 3.07                    | 0.618             | 25 50                 | -                                      | 330-0140-1002 |
| 6 / 150-152     | 6.22       | 4.00 (10.35)                                     | 1.62 (4.13)                                    | 3.27                    | 0.665             | 25 50                 | -                                      | 330-0150-1002 |
| 6,3 / 160       | 6.61       | 3.75 (9.70)                                      | 1.48 (3.69)                                    | 3.46                    | 0.706             | -                     | 25 50                                  | 330-0160-1002 |
| - / 170         | 7.00       | 3.55 (9.15)                                      | 1.33 (3.25)                                    | 3.66                    | 0.746             | -                     | 25 50                                  | 330-0170-1002 |
| - / 175         | 7.20       | 3.50 (8.85)                                      | 1.33 (3.10)                                    | 3.76                    | 0.766             | -                     | 25 50                                  | 330-0175-1002 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.

| I.D.        | O.D.  | Pressure<br>DIN 26057<br>(50% Elongation)<br>psi | Vacuum<br>DIN 26057<br>(axially fixed)<br>inHG | Bending<br>Radius | Weight  | Stock<br>length | Further<br>production<br>lengths | Order No.     |
|-------------|-------|--|--|-------------------|---------|-----------------|----------------------------------|---------------|
| in / mm     | in    |  |  | in                | lbs./ft | ft              | ft                               |               |
| 7 / 178-180 | 7.40  | 3.35 (8.65)                                      | 1.33 (2.95)                                    | 3.86              | 0.786   | <b>25 50</b>    | -                                | 330-0180-1002 |
| 8 / 200-203 | 8.19  | 3.05 (7.75)                                      | 0.89 (3.25)                                    | 4.25              | 0.894   | <b>25 50</b>    | -                                | 330-0200-1002 |
| - / 225     | 9.17  | 2.70 (6.90)                                      | 0.74 (2.51)                                    | 4.74              | 0.995   | -               | 25                               | 330-0225-1002 |
| - / 250     | 10.16 | 2.40 (6.25)                                      | 0.74 (1.92)                                    | 5.24              | 1.102   | -               | 25                               | 330-0250-1002 |
| 10 / 254    | 10.31 | 2.40 (6.10)                                      | 0.74 (1.92)                                    | 5.31              | 1.115   | <b>25</b>       | -                                | 330-0254-1002 |
| 11 / 280    | 11.34 | 2.20 (5.60)                                      | 0.59 (1.48)                                    | 5.83              | 1.230   | -               | 25                               | 330-0280-1002 |
| - / 300     | 12.17 | 2.05 (5.20)                                      | 0.59 (1.48)                                    | 6.26              | 1.438   | -               | 25                               | 330-0300-1002 |
| 12 / 305    | 12.36 | 1.95 (5.10)                                      | 0.59 (1.48)                                    | 6.36              | 1.458   | <b>25</b>       | -                                | 330-0305-1002 |
| - / 315     | 12.76 | 1.95 (4.95)                                      | 0.59 (1.33)                                    | 6.56              | 1.505   | -               | 25                               | 330-0315-1002 |
| - / 350     | 14.13 | 1.75 (4.40)                                      | 0.59 (1.03)                                    | 7.24              | 1.673   | -               | 25                               | 330-0350-1002 |
| 14 / 356    | 14.37 | 1.65 (4.35)                                      | 0.44 (1.03)                                    | 7.36              | 1.700   | <b>25</b>       | -                                | 330-0356-1002 |
| - / 400     | 16.10 | 1.50 (3.90)                                      | 0.44 (0.74)                                    | 8.23              | 1.908   | -               | 25                               | 330-0400-1002 |
| - / 450     | 18.07 | 1.40 (3.50)                                      | 0.44 (0.74)                                    | 9.21              | 2.144   | -               | 25                               | 330-0450-1002 |
| - / 500     | 20.08 | 1.25 (3.10)                                      | 0.44 (0.59)                                    | 10.24             | 2.950   | -               | 25                               | 330-0500-1002 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only. Additional information at [www.norres.com/us/technology-us/](http://www.norres.com/us/technology-us/)

## Accessories



CLAMP 212


CLAMP 210 BRIDGE  
CLAMP


CLAMP 217



CLAMP 213



CONNECT 228

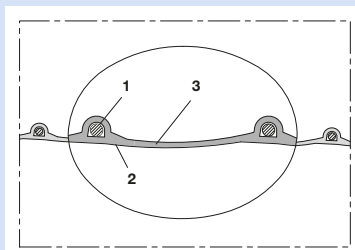


CONNECT 223



CONNECT 270-271

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.



Food hose and pharmaceutical hose, light weight

## Applications

- flexible hose/ ducting for gases and for abrasive dust, powder, fibers
- food industry, pharmaceutical industry: food, pharmaceutical
- conveying of dry foods e.g. rice, cereals, sugar, milk powder, powders, coffee, tea, grains, flour, frozen foods
- mixer, dryer, packaging machine, bulk-bag (big bag)-charging and discharging, mill
- extraction arm
- clean room ventilation, semiconductor production machine
- medical equipment/ medical technology, health-care sector: cable protection conduit, air supply hose, extraction hose

## Properties

- lightweight and reinforced

- highly flexible + compressible 3:1
- abrasion-resistant
- Approved by an independent testing laboratory for the complete hose acc. to EU-Directive 10/2011 and EC 1935/2004 and the latest EU-Directive 2015/174, food grade polyurethane, complies with: FDA 21 CFR 177.2600 and 178.2010
- Approval acc. to EU-Directive 10/2011 (food simulants A, B, C or E and D2) and EC 1935/2004
- odorless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- manufacturing process acc. GMP EC 2023/2006
- conforms to RoHS guideline

- short time to 255°F

## Design, material

patented PROTAPE® tape hose

- spring steel wire integrated in the wall
- wall: special premium ether-polyurethane (Pre-PUR®)
- wall thickness 0.025 inch approximate

## Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- customer-specific branding

## Temperature range

- 40°F to 195°F

| I.D.<br>in / mm | O.D.<br>in | Pressure<br>DIN 26057<br>(50% Elongation)<br>psi | Vacuum<br>DIN 26057<br>(axially fixed)<br>inHG | Bending<br>Radius<br>in | Weight<br>lbs./ft | Stock<br>length<br>ft | Further<br>production<br>lengths<br>ft | Order No.     |
|-----------------|------------|--|--|-------------------------|-------------------|-----------------------|--|---------------|
| 1 / 25          | 1.25       | 23.30 (60.65)                                    | 15.95 (29.53)                                  | 3/4                     | 0.101             | 25 50                 | -                                      | 330-0025-0000 |
| - / 30          | 1.46       | 19.60 (50.75)                                    | 13.29 (29.53)                                  | 7/8                     | 0.121             | -                     | 25 50                                  | 330-0030-0000 |
| 1.25 / 32       | 1.54       | 18.35 (47.65)                                    | 12.40 (29.53)                                  | 0.91                    | 0.128             | -                     | 25 50                                  | 330-0032-0000 |
| 1.5 / 38        | 1.75       | 15.60 (40.25)                                    | 10.48 (22.74)                                  | 1.02                    | 0.148             | 25 50                 | -                                      | 330-0038-0000 |
| - / 40          | 1.85       | 14.80 (38.30)                                    | 9.89 (20.52)                                   | 1.06                    | 0.155             | -                     | 25 50                                  | 330-0040-0000 |
| 1.75 / 44-45    | 2.05       | 13.20 (34.10)                                    | 8.86 (16.24)                                   | 1.16                    | 0.175             | -                     | 25 50                                  | 330-0045-0000 |
| 2 / 50-51       | 2.28       | 11.90 (30.75)                                    | 6.50 (25.69)                                   | 1.30                    | 0.249             | 25 50                 | -                                      | 330-0050-0000 |
| 2.36 / 60       | 2.68       | 9.95 (25.65)                                     | 5.32 (17.87)                                   | 1.50                    | 0.289             | -                     | 25 50                                  | 330-0060-0000 |
| 2.5 / 63-65     | 2.87       | 9.20 (23.70)                                     | 4.87 (15.36)                                   | 1.59                    | 0.309             | 25 50                 | -                                      | 330-0065-0000 |
| - / 70          | 3.07       | 8.55 (22.05)                                     | 4.58 (13.29)                                   | 1.69                    | 0.336             | -                     | 25 50                                  | 330-0070-0000 |
| 3 / 75-76       | 3.27       | 8.00 (20.60)                                     | 4.28 (11.66)                                   | 1.79                    | 0.356             | 25 50                 | -                                      | 330-0075-0000 |
| - / 80          | 3.46       | 7.45 (19.30)                                     | 3.99 (10.34)                                   | 1.89                    | 0.383             | -                     | 25 50                                  | 330-0080-0000 |
| 3.5 / 89-90     | 3.86       | 6.65 (17.20)                                     | 3.54 (8.27)                                    | 2.09                    | 0.423             | 25 50                 | -                                      | 330-0090-0000 |
| 4 / 100-102     | 4.25       | 6.00 (15.50)                                     | 2.36 (9.15)                                    | 2.28                    | 0.450             | 25 50                 | -                                      | 330-0100-0000 |
| - / 110         | 4.65       | 5.45 (14.05)                                     | 2.07 (7.68)                                    | 2.50                    | 0.491             | -                     | 25 50                                  | 330-0110-0000 |
| 4.5 / 114-115   | 4.84       | 5.20 (13.50)                                     | 2.07 (6.94)                                    | 2.58                    | 0.511             | 25 50                 | -                                      | 330-0115-0000 |
| 4.72 / 120      | 5.04       | 5.00 (12.90)                                     | 1.92 (6.50)                                    | 2.68                    | 0.531             | -                     | 25 50                                  | 330-0120-0000 |
| 5 / 125-127     | 5.24       | 4.85 (12.40)                                     | 1.92 (5.91)                                    | 2.78                    | 0.558             | 25 50                 | -                                      | 330-0125-0000 |
| - / 130         | 5.43       | 4.65 (11.95)                                     | 1.77 (5.46)                                    | 2.87                    | 0.571             | -                     | 25 50                                  | 330-0130-0000 |
| 5.5 / 140       | 5.83       | 4.30 (11.10)                                     | 1.62 (4.72)                                    | 3.07                    | 0.618             | 25 50                 | -                                      | 330-0140-0000 |
| 6 / 150-152     | 6.22       | 4.00 (10.35)                                     | 1.62 (4.13)                                    | 3.27                    | 0.665             | 25 50                 | -                                      | 330-0150-0000 |
| 6.3 / 160       | 6.61       | 3.75 (9.70)                                      | 1.48 (3.69)                                    | 3.46                    | 0.699             | -                     | 25 50                                  | 330-0160-0000 |
| - / 170         | 7.00       | 3.55 (9.15)                                      | 1.33 (3.25)                                    | 3.66                    | 0.746             | -                     | 25 50                                  | 330-0170-0000 |
| - / 175         | 7.20       | 3.50 (8.85)                                      | 1.33 (3.10)                                    | 3.76                    | 0.766             | -                     | 25 50                                  | 330-0175-0000 |
| 7 / 178-180     | 7.40       | 3.35 (8.65)                                      | 1.33 (2.95)                                    | 3.86                    | 0.786             | 25 50                 | -                                      | 330-0180-0000 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.



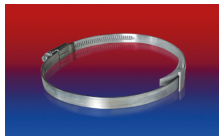
| I.D.        | O.D.  | Pressure<br>DIN 26057<br>(50% Elongation)<br>psi | Vacuum<br>DIN 26057<br>(axially fixed)<br>inHG | Bending<br>Radius | Weight  | Stock<br>length | Further<br>production<br>lengths | Order No.     |
|-------------|-------|--|--|-------------------|---------|-----------------|----------------------------------|---------------|
| in / mm     | in    |  |  | in                | lbs./ft | ft              | ft                               |               |
| 8 / 200-203 | 8.19  | 3.05 (7.75)                                      | 0.89 (3.25)                                    | 4.25              | 0.894   | 25              | -                                | 330-0200-0000 |
| - / 225     | 9.17  | 2.70 (6.90)                                      | 0.74 (2.51)                                    | 4.74              | 0.988   | -               | 25 50                            | 330-0225-0000 |
| - / 250     | 10.16 | 2.40 (6.25)                                      | 0.74 (1.92)                                    | 5.24              | 1.095   | -               | 25                               | 330-0250-0000 |
| 10 / 254    | 10.31 | 2.40 (6.10)                                      | 0.74 (1.92)                                    | 5.31              | 1.115   | 25              | -                                | 330-0254-0000 |
| 11 / 280    | 11.34 | 2.20 (5.60)                                      | 0.59 (1.48)                                    | 5.83              | 1.223   | -               | 25                               | 330-0280-0000 |
| - / 300     | 12.17 | 2.05 (5.20)                                      | 0.59 (1.48)                                    | 6.26              | 1.431   | -               | 25                               | 330-0300-0000 |
| - / 315     | 12.76 | 1.95 (4.95)                                      | 0.59 (1.33)                                    | 6.56              | 1.498   | -               | 25                               | 330-0315-0000 |
| - / 325     | 13.15 | 1.90 (4.80)                                      | 0.59 (1.33)                                    | 6.75              | 1.546   | -               | 25                               | 330-0325-0000 |
| - / 350     | 14.13 | 1.75 (4.40)                                      | 0.59 (1.03)                                    | 7.24              | 1.666   | -               | 25                               | 330-0350-0000 |
| - / 400     | 16.10 | 1.50 (3.90)                                      | 0.44 (0.74)                                    | 8.23              | 1.902   | -               | 25                               | 330-0400-0000 |
| - / 450     | 18.07 | 1.40 (3.50)                                      | 0.44 (0.74)                                    | 9.21              | 2.137   | -               | 25                               | 330-0450-0000 |
| - / 500     | 20.08 | 1.25 (3.10)                                      | 0.44 (0.59)                                    | 10.24             | 2.943   | -               | 25                               | 330-0500-0000 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only. Additional information at [www.norres.com/us/technology-us/](http://www.norres.com/us/technology-us/)

## Accessories



CLAMP 212


CLAMP 210 BRIDGE  
CLAMP


CLAMP 217



CLAMP 213



CONNECT 228

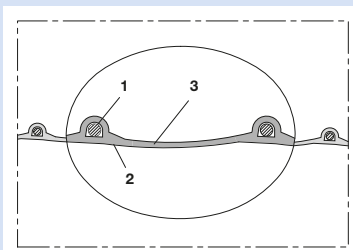
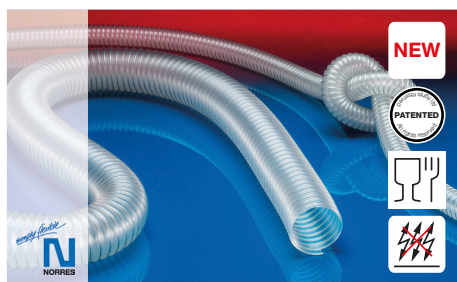


CONNECT 223



CONNECT 270-271

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.



Antistatic food hose and pharmaceutical hose, light weight, stainless steel (INOX)

## Applications

- flexible hose/ ducting for gases and for abrasive dust, powder, fibers
- food industry, pharmaceutical industry: food, pharmaceutical
- conveying of dry foods e.g. rice, cereals, sugar, milk powder, powders, coffee, tea, grains, flour, frozen foods
- mixer, dryer, packaging machine, bulk-bag (big bag)-charging and discharging, mill
- extraction arm
- explosion hazard area

## Properties

- lightweight and reinforced
- highly flexible + compressible 3:1
- abrasion-resistant
- Approved by an independent testing laboratory for the complete hose acc. to EU-Directive 10/2011 and EC 1935/2004 and the latest

EU-Directive 2015/174, food grade polyurethane, complies with: FDA 21 CFR 177.2600

- Approval acc. to EU-Directive 10/2011 (food simulant E) and EC 1935/2004
- odorless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance  $<10^9 \Omega$  and in accordance with TRGS 727  $<2,5 * 10^8 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: pneumatic transport of flammable dusts and bulk materials (Zone 20, 21, 22 inside), aspiration of combustible dusts (Zone 22 inside), for conveying for flammable liquids (inside zone 0, 1, 2), for conveying for non-flammable liquids, for use in zone 1 and 2 (gases), for use in zone 0 (gases)
- manufacturing process acc. GMP EC 2023/2006

- conforms to RoHS guideline

## Temperature range

- 40°F to 195°F

## Design, material

patented PROTAPE® tape hose

- spring steel wire integrated in the wall; spiral: stainless steel wire (INOX)
- wall: permanently antistatic premium ether-polyurethane (Pre-PUR®)
- wall thickness 0.025 inch approximate

## Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- customer-specific branding

| I.D.        | O.D.  | Pressure<br>DIN 26057<br>(50% Elongation) | Vacuum<br>DIN 26057<br>(axially fixed) | Bending<br>Radius | Weight  | Stock<br>length | Further<br>production<br>lengths | Order No.     |
|-------------|-------|---|--|-------------------|---------|-----------------|----------------------------------|---------------|
| in / mm     | in    | psi                                       | inHG                                   | in                | lbs./ft | ft              | ft                               |               |
| 1.5 / 38    | 1.75  | 15.60 (40.25)                             | 10.48 (22.74)                          | 1.02              | 0.148   | 25              | -                                | 330-0038-1018 |
| - / 40      | 1.85  | 14.80 (38.30)                             | 9.89 (20.52)                           | 1.06              | 0.161   | -               | 25                               | 330-0040-1018 |
| 2 / 50-51   | 2.28  | 11.90 (30.75)                             | 6.50 (25.69)                           | 1.30              | 0.255   | 25              | -                                | 330-0050-1018 |
| 2.36 / 60   | 2.68  | 9.95 (25.65)                              | 5.32 (17.87)                           | 1.50              | 0.296   | -               | 25                               | 330-0060-1018 |
| 2.5 / 63-65 | 2.87  | 9.20 (23.70)                              | 4.87 (15.36)                           | 1.59              | 0.316   | 25              | -                                | 330-0065-1018 |
| - / 70      | 3.07  | 8.55 (22.05)                              | 4.58 (13.29)                           | 1.69              | 0.343   | -               | 25                               | 330-0070-1018 |
| 3 / 75-76   | 3.27  | 8.00 (20.60)                              | 4.28 (11.66)                           | 1.79              | 0.370   | 25              | -                                | 330-0075-1018 |
| - / 80      | 3.46  | 7.45 (19.30)                              | 3.99 (10.34)                           | 1.89              | 0.390   | -               | 25                               | 330-0080-1018 |
| 4 / 100-102 | 4.25  | 6.00 (15.50)                              | 2.36 (9.15)                            | 2.28              | 0.464   | 25              | -                                | 330-0100-1018 |
| 5 / 125-127 | 5.24  | 4.85 (12.40)                              | 1.92 (5.91)                            | 2.78              | 0.571   | 25              | -                                | 330-0125-1018 |
| 6 / 150-152 | 6.22  | 4.00 (10.35)                              | 1.62 (4.13)                            | 3.27              | 0.679   | 25              | -                                | 330-0150-1018 |
| 6.3 / 160   | 6.61  | 3.75 (9.70)                               | 1.48 (3.69)                            | 3.46              | 0.719   | -               | 25                               | 330-0160-1018 |
| 7 / 178-180 | 7.40  | 3.35 (8.65)                               | 1.33 (2.95)                            | 3.86              | 0.806   | 25              | -                                | 330-0180-1018 |
| 8 / 200-203 | 8.19  | 3.05 (7.75)                               | 0.89 (3.25)                            | 4.25              | 0.907   | 25              | -                                | 330-0200-1018 |
| - / 250     | 10.16 | 2.40 (6.25)                               | 0.74 (1.92)                            | 5.24              | 1.122   | -               | 25                               | 330-0250-1018 |
| - / 300     | 12.13 | 2.05 (5.20)                               | 0.59 (1.48)                            | 6.22              | 1.458   | -               | 25                               | 330-0300-1018 |

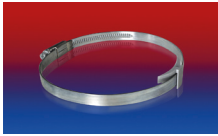
Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only. Additional information at [www.norres.com/us/technology-us/](http://www.norres.com/us/technology-us/)

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## Accessories



CLAMP 212



CLAMP 210 BRIDGE  
CLAMP



CLAMP 217



CLAMP 213



CONNECT 228



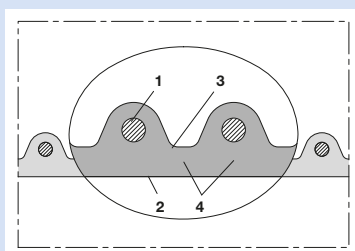
CONNECT 223



CONNECT 270-271

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.





## Electrically conductive polyurethane hose, super-heavy duty

### Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- vacuum truck, suction vehicle, dry suction truck: industrial cleaning, furnace cleaning
- explosion hazard area
- Coal mine, mine, tunnelling: ventilation, methane extraction
- raw material conveying hose for powders, granulates, sand, quartz, gravel, shards and chips/ shavings
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging

### Properties

- super-heavy duty
- extremely abrasion-resistant with reinforcement underneath wire and narrow hose pitch

- very high pressure, vacuum and compression resistance
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- electrically conductive wall: electrical and surface resistance  $<10^3 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: pneumatic transport of flammable dusts and bulk materials (Zone 20, 21, 22 inside), aspiration of combustible dusts (Zone 22 inside), for conveying for flammable liquids (inside zone 0, 1, 2), for conveying for non-flammable liquids, for use in zone 1 and 2 (gases), for use in zone 0 (gases)
- according to DIN 26057 Type 4
- conforms to RoHS guideline

### Temperature range

- $-40^{\circ}\text{F}$  to  $195^{\circ}\text{F}$

### Design, material

AIRDUC® profile hose

1. spring steel wire firmly embedded in the wall
2. wall: electrically conductive premium ester-polyurethane (Pre-PUR®)
3. wall thickness 0.08 - 0.10 inch approximate
4. reinforcement of the primary abrasion areas

### Delivery variants

- further diameters and lengths available on request
- black (standard)
- customer-specific branding

| I.D.        | O.D. | Pressure | Vacuum | Bending Radius | Weight  | Stock length | Further production lengths | Order No.     |
|-------------|------|----------|--------|----------------|---------|--------------|----------------------------|---------------|
| in / mm     | in   | psi      | inHG   | in             | lbs./ft | ft           | ft                         |               |
| 1.5 / 38    | 1.93 | 55.25    | 29.55  | 4.09           | 0.530   | 25 50        | -                          | 356-0038-1003 |
| - / 40      | 2.00 | 52.70    | 29.55  | 4.29           | 0.550   | -            | 25 50                      | 356-0040-1003 |
| - / 50      | 2.40 | 42.80    | 29.55  | 5.28           | 0.670   | -            | 25 50                      | 356-0050-1003 |
| 2 / 50-51   | 2.44 | 40.60    | 29.55  | 5.28           | 0.680   | 25 50        | -                          | 356-0051-1003 |
| 2.36 / 60   | 2.80 | 36.05    | 29.55  | 6.14           | 0.795   | -            | 25 50                      | 356-0060-1003 |
| 2.5 / 63-65 | 2.91 | 34.75    | 29.55  | 6.42           | 0.835   | 25 50        | -                          | 356-0063-1003 |
| - / 65      | 3.00 | 33.45    | 29.55  | 6.65           | 0.855   | -            | 25 50                      | 356-0065-1003 |
| - / 70      | 3.20 | 31.10    | 29.55  | 7.32           | 0.920   | -            | 25 50                      | 356-0070-1003 |
| - / 75      | 3.43 | 29.15    | 29.55  | 7.68           | 0.980   | -            | 25 50                      | 356-0075-1003 |
| 3 / 76      | 3.46 | 28.95    | 29.55  | 7.68           | 0.995   | 25 50        | -                          | 356-0076-1003 |
| - / 80      | 3.62 | 27.40    | 29.53  | 8.07           | 1.040   | -            | 25 50                      | 356-0080-1003 |
| - / 100     | 4.45 | 24.45    | 29.55  | 10.71          | 1.525   | -            | 25 50                      | 356-0100-1003 |
| 4 / 102     | 4.50 | 24.00    | 29.55  | 10.71          | 1.550   | 25 50        | -                          | 356-0102-1003 |

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Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.

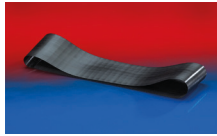
## Accessories



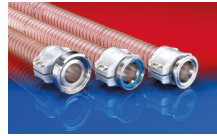
CLAMP 216



CLAMP 211

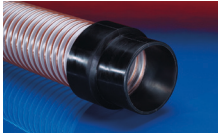


CONNECT 228

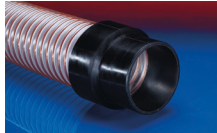

CONNECT SAFETY  
CLAMP ASSEMBLY  
231

CONNECT PRESS  
ASSEMBLY 232

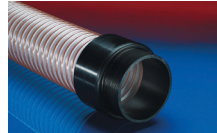
CONNECT MOULD  
ASSEMBLY 233

CONNECT THREAD  
FITTING 234


CONNECT 240 + 241



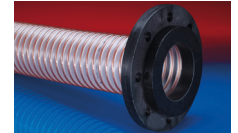
CONNECT 240 EC



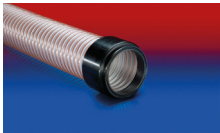
CONNECT 242



CONNECT 243



CONNECT 244

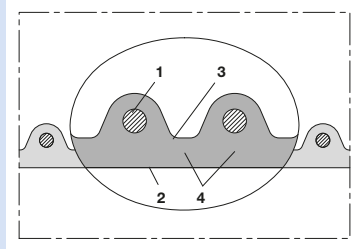
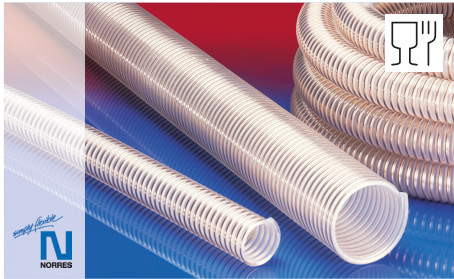


CONNECT 245



CONNECT 246

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## Food hose and pharmaceutical hose, super-heavy duty

### Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- food industry, pharmaceutical industry: food, pharmaceutical
- conveying of dry foods e.g. rice, cereals, sugar, milk powder, powders, coffee, tea, grains, flour, frozen foods
- vacuum conveying equipment, vacuum hopper, suction conveyor, dosing system
- pelleting machines/ tablet presses
- mixer, dryer, packaging machine, bulk-bag (big bag)-charging and discharging, mill
- agricultural industry: pneumatic grain conveyor
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport
- paper mill, paper and pulp industry: waste water, air extraction
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging
- silo, silo vehicle/ silo truck, tanker/ tank truck: conveying of e.g. rice, dry food, cereals, sugar,

milk powder, powders, coffee, tea, grains, flour, frozen foods

### Properties

- super-heavy duty
- extremely abrasion-resistant with reinforcement underneath wire and narrow hose pitch
- very high pressure, vacuum and compression resistance
- Approved by an independent testing laboratory for the complete hose acc. to EU-Directive 10/2011 and EC 1935/2004 and the latest EU-Directive 2015/174, food grade polyurethane, complies with: FDA 21 CFR 177.2600 and 178.2010
- Approval acc. to EU-Directive 10/2011 (food simulants A, B, C or E and D2) and EC 1935/2004
- odorless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- according to DIN 26057 Type 4

- manufacturing process acc. GMP EC 2023/2006
- conforms to RoHS guideline

### Temperature range

- -40°F to 195°F
- short time to 255°F

### Design, material

AIRDUC® profile hose

1. spring steel wire firmly embedded in the wall
2. wall: special premium ether-polyurethane (Pre-PUR®)
3. wall thickness 0.08 - 0.10 inch approximate
4. reinforcement of the primary abrasion areas

### Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- customer-specific branding

| I.D.      | O.D. | Pressure | Vacuum | Bending Radius | Weight  | Stock length | Further production lengths | Order No.     |
|-----------|------|----------|--------|----------------|---------|--------------|----------------------------|---------------|
| in / mm   | in   | psi      | inHG   | in             | lbs./ft | ft           | ft                         |               |
| 1.25 / 32 | 1.69 | 71.05    | 29.55  | 3.54           | 0.455   | 25 50        | -                          | 356-0032-1001 |
| 1.5 / 38  | 1.93 | 60.75    | 29.55  | 4.09           | 0.530   | 25 50        | -                          | 356-0038-1001 |
| - / 40    | 2.00 | 57.95    | 29.55  | 4.29           | 0.550   | -            | 25 50                      | 356-0040-1001 |
| - / 50    | 2.40 | 47.05    | 29.55  | 5.28           | 0.670   | -            | 25 50                      | 356-0050-1001 |
| 2 / 51    | 2.44 | 45.75    | 29.55  | 5.28           | 0.690   | 25 50        | -                          | 356-0051-1001 |
| 2.36 / 60 | 2.80 | 39.65    | 29.55  | 6.14           | 0.795   | -            | 25 50                      | 356-0060-1001 |
| 2.5 / 63  | 2.91 | 38.25    | 29.55  | 6.42           | 0.830   | 25 50        | -                          | 356-0063-1001 |
| - / 65    | 3.00 | 36.75    | 29.55  | 6.65           | 0.855   | -            | 25 50                      | 356-0065-1001 |
| - / 70    | 3.20 | 34.25    | 29.55  | 7.32           | 0.920   | -            | 25 50                      | 356-0070-1001 |
| - / 75    | 3.43 | 32.05    | 29.55  | 7.68           | 0.980   | -            | 25 50                      | 356-0075-1001 |
| 3 / 76    | 3.46 | 32.00    | 29.55  | 7.68           | 0.990   | 25 50        | -                          | 356-0076-1001 |
| - / 80    | 3.62 | 30.10    | 29.53  | 8.07           | 1.040   | -            | 25 50                      | 356-0080-1001 |
| - / 100   | 4.45 | 26.90    | 26.60  | 10.71          | 1.525   | -            | 25 50                      | 356-0100-1001 |
| 4 / 102   | 4.50 | 24.65    | 29.55  | 10.71          | 1.550   | 25 50        | -                          | 356-0102-1001 |
| - / 125   | 5.43 | 21.70    | 23.90  | 13.23          | 1.880   | -            | 25 50                      | 356-0125-1001 |
| 5 / 127   | 5.50 | 19.85    | 24.36  | 13.23          | 1.910   | 25 50        | -                          | 356-0127-1001 |
| - / 150   | 6.42 | 18.15    | 22.30  | 17.13          | 2.475   | -            | 25 50                      | 356-0150-1001 |
| 6 / 152   | 6.50 | 17.55    | 20.23  | 17.13          | 2.500   | 25 50        | -                          | 356-0152-1001 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only. Additional information at [www.norres.com/us/technology-us/](http://www.norres.com/us/technology-us/)

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.

## Accessories



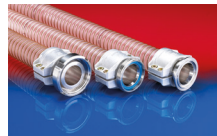
CLAMP 216



CLAMP 211



CONNECT 228


CONNECT SAFETY  
CLAMP ASSEMBLY  
231

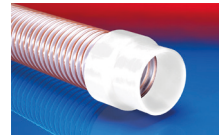
CONNECT PRESS  
ASSEMBLY 232

CONNECT MOULD  
ASSEMBLY 233

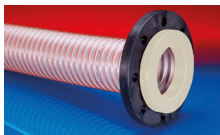
CONNECT THREAD  
FITTING 234

CONNECT TRI-CLAMP  
FITTING 245

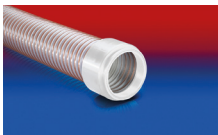
CONNECT DAIRY  
FITTING 247

CONNECT ASEPTIC  
FITTING 249

CONNECT 240 + 241  
FOOD


CONNECT 243 FOOD



CONNECT 244 FOOD

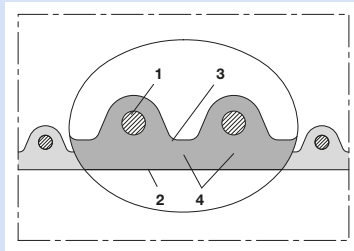


CONNECT 245 FOOD



CONNECT 246 FOOD

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.



Antistatic food hose and pharmaceutical hose, super-heavy duty, stainless steel (INOX)

## Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- food industry, pharmaceutical industry: food, pharmaceutical
- conveying of dry foods e.g. rice, cereals, sugar, milk powder, powders, coffee, tea, grains, flour, frozen foods
- vacuum conveying equipment, vacuum hopper, suction conveyor, dosing system
- pelleting machines/ tablet presses
- mixer, dryer, packaging machine, bulk-bag (big bag)-charging and discharging, mill
- agricultural industry: pneumatic grain conveyor
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport
- paper mill, paper and pulp industry: waste water, air extraction
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging

## Properties

- super-heavy duty
- extremely abrasion-resistant with reinforcement underneath wire and narrow hose pitch

- very high pressure, vacuum and compression resistance
- Approved by an independent testing laboratory for the complete hose acc. to EU-Directive 10/2011 and EC 1935/2004 and the latest EU-Directive 2015/174, food grade polyurethane, complies with: FDA 21 CFR 177.2600 and 178.2010
- Approval acc. to EU-Directive 10/2011 (food simulant E) and EC 1935/2004
- odorless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance  $<10^9 \Omega$  and in accordance with TRGS 727  $<2,5 \cdot 10^8 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: pneumatic transport of flammable dusts and bulk materials (Zone 20, 21, 22 inside), aspiration of combustible dusts (Zone 22 inside), for conveying for flammable liquids (inside zone 0, 1, 2), for conveying for non-flammable liquids, for use in zone 1 and 2 (gases), for use in zone 0 (gases)

- according to DIN 26057 Type 4
- manufacturing process acc. GMP EC 2023/2006
- conforms to RoHS guideline

## Temperature range

- -40°F to 195°F

## Design, material

AIRDUC® profile hose

1. spring steel wire firmly embedded in the wall; spiral: stainless steel wire (INOX)
2. wall: permanently antistatic premium ether-polyurethane (Pre-PUR®)
3. wall thickness 0.08 - 0.10 inch approximate
4. reinforcement of the primary abrasion areas

## Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- customer-specific branding

| I.D.        | O.D. | Pressure | Vacuum | Bending Radius | Weight  | Stock length | Further production lengths | Order No.     |
|-------------|------|----------|--------|----------------|---------|--------------|----------------------------|---------------|
| in / mm     | in   | psi      | inHG   | in             | lbs./ft | ft           | ft                         |               |
| 1.25 / 32   | 1.69 | 75.15    | 29.55  | 3.54           | 0.455   | 25           | -                          | 356-0032-1018 |
| 1.5 / 38    | 1.93 | 64.20    | 29.55  | 4.09           | 0.530   | 25           | -                          | 356-0038-1018 |
| - / 40      | 2.00 | 61.30    | 29.55  | 4.29           | 0.550   | -            | 25                         | 356-0040-1018 |
| - / 50      | 2.40 | 49.75    | 29.55  | 5.28           | 0.670   | -            | 25                         | 356-0050-1018 |
| 2 / 51      | 2.44 | 45.75    | 29.55  | 5.28           | 1.275   | 25           | -                          | 356-0051-1018 |
| 2.36 / 60   | 2.80 | 41.90    | 29.55  | 6.14           | 0.795   | -            | 25                         | 356-0060-1018 |
| 2.5 / 63-65 | 2.91 | 40.35    | 29.55  | 6.42           | 1.485   | 25           | -                          | 356-0063-1018 |
| - / 65      | 3.00 | 38.80    | 29.55  | 6.65           | 0.855   | -            | 25                         | 356-0065-1018 |
| - / 70      | 3.20 | 36.20    | 29.55  | 7.32           | 0.920   | -            | 25                         | 356-0070-1018 |
| - / 75      | 3.43 | 33.85    | 29.55  | 7.68           | 0.980   | -            | 25                         | 356-0075-1018 |
| 3 / 76      | 3.46 | 33.80    | 29.55  | 7.68           | 2.170   | 25           | -                          | 356-0076-1018 |
| - / 80      | 3.62 | 31.85    | 29.55  | 8.07           | 1.040   | -            | 25                         | 356-0080-1018 |
| 3.5 / 89-90 | 3.98 | 31.45    | 29.55  | 9.84           | 2.375   | 25           | -                          | 356-0089-1018 |
| - / 90      | 4.06 | 31.45    | 29.55  | 9.84           | 1.385   | -            | 25                         | 356-0090-1018 |
| - / 100     | 4.45 | 28.45    | 29.55  | 10.71          | 1.525   | -            | 25                         | 356-0100-1018 |
| 4 / 102     | 4.53 | 27.40    | 29.55  | 10.71          | 2.730   | 25           | -                          | 356-0102-1018 |
| - / 125     | 5.43 | 22.90    | 26.00  | 13.23          | 1.880   | -            | 25                         | 356-0125-1018 |
| 5 / 127     | 5.51 | 21.05    | 25.70  | 13.23          | 4.055   | 25           | -                          | 356-0127-1018 |
| - / 150     | 6.42 | 19.15    | 21.70  | 17.13          | 2.475   | -            | 25                         | 356-0150-1018 |
| 6 / 152     | 6.50 | 19.95    | 21.40  | 17.13          | 0.455   | 25           | -                          | 356-0152-1018 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.



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## Accessories



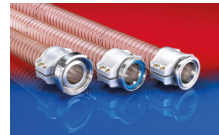
CLAMP 216



CLAMP 211



CONNECT 228



CONNECT SAFETY  
CLAMP ASSEMBLY  
231



CONNECT PRESS  
ASSEMBLY 232



CONNECT MOULD  
ASSEMBLY 233



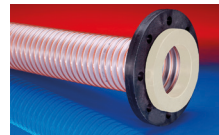
CONNECT THREAD  
FITTING 234



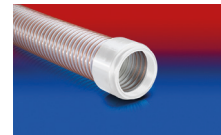
CONNECT 240 + 241  
FOOD



CONNECT 243 FOOD



CONNECT 244 FOOD

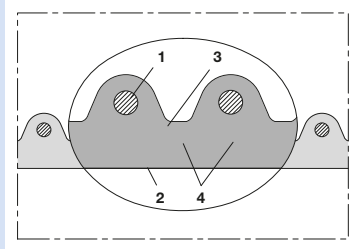
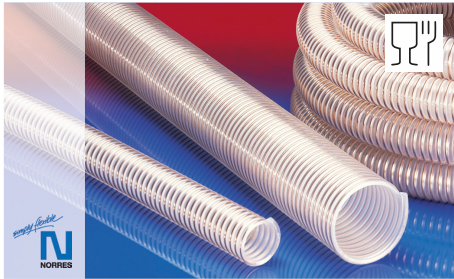


CONNECT 245 FOOD



CONNECT 246 FOOD

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.



Food hose and pharmaceutical hose, super-heavy duty and reinforced

## Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- food industry, pharmaceutical industry: food, pharmaceutical
- conveying of dry foods e.g. rice, cereals, sugar, milk powder, powders, coffee, tea, grains, flour, frozen foods
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport
- raw material conveying hose for powders, granulates, sand, quartz, gravel, shards and chips/ shavings
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging
- silo, silo vehicle/ silo truck, tanker/ tank truck: conveying of wood pellets, plastic granulate, plastic powder
- silo, silo vehicle/ silo truck, tanker/ tank truck: conveying of e.g. rice, dry food, cereals, sugar,

milk powder, powders, coffee, tea, grains, flour, frozen foods

## Properties

- super-heavy duty and reinforced
- extremely abrasion-resistant with reinforcement underneath wire and narrow hose pitch
- very high pressure, vacuum and compression resistance
- Approved by an independent testing laboratory for the complete hose acc. to EU-Directive 10/2011 and EC 1935/2004 and the latest EU-Directive 2015/174, food grade polyurethane, complies with: FDA 21 CFR 177.2600 and 178.2010
- Approval acc. to EU-Directive 10/2011 (food simulants A, B, C or E and D2) and EC 1935/2004
- odorless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- manufacturing process acc. GMP EC 2023/2006

- conforms to RoHS guideline

## Temperature range

- -40°F to 195°F
- short time to 255°F

## Design, material

AIRDUC® profile hose

1. spring steel wire firmly embedded in the wall
2. wall: special premium ether-polyurethane (Pre-PUR®)
3. wall thickness 0.12 - 0.14 inch approximate
4. reinforcement of the primary abrasion areas

## Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- customer-specific branding

| I.D.          | O.D. | Pressure | Vacuum | Bending Radius | Weight  | Stock length | Further production lengths | Order No.     |
|---------------|------|----------|--------|----------------|---------|--------------|----------------------------|---------------|
| in / mm       | in   | psi      | inHG   | in             | lbs./ft | ft           | ft                         |               |
| - / 50        | 2.64 | 58.95    | 29.55  | 7.44           | 1.000   | -            | 25 50                      | 356-0050-5100 |
| 2 / 51        | 2.68 | 55.85    | 29.55  | 7.58           | 1.010   | 25 50        | -                          | 356-0051-5100 |
| 2.36 / 60     | 3.03 | 50.10    | 29.55  | 8.50           | 1.185   | -            | 25 50                      | 356-0060-5100 |
| 2.5 / 63-65   | 3.15 | 48.30    | 29.55  | 8.84           | 1.220   | 25 50        | -                          | 356-0063-5100 |
| - / 65        | 3.20 | 46.55    | 29.55  | 9.04           | 1.270   | -            | 25 50                      | 356-0065-5100 |
| - / 75        | 3.62 | 40.85    | 29.55  | 10.10          | 1.370   | -            | 25 50                      | 356-0075-5100 |
| 3 / 76        | 3.43 | 40.60    | 29.55  | 10.24          | 1.400   | 25 50        | -                          | 356-0076-5100 |
| - / 80        | 3.82 | 38.50    | 29.55  | 10.63          | 1.545   | -            | 25 50                      | 356-0080-5100 |
| 3.5 / 89-90   | 4.17 | 34.50    | 29.55  | 11.59          | 1.910   | 25 50        | -                          | 356-0089-5100 |
| - / 90        | 4.21 | 34.50    | 29.55  | 11.69          | 1.950   | -            | 25 50                      | 356-0090-5100 |
| - / 100       | 4.61 | 31.25    | 29.55  | 12.76          | 2.150   | -            | 25 50                      | 356-0100-5100 |
| 4 / 102       | 4.69 | 29.10    | 29.55  | 12.99          | 2.190   | 25 50        | -                          | 356-0102-5100 |
| 4.5 / 114-115 | 5.20 | 27.40    | 27.17  | 14.35          | 2.445   | 25 50        | -                          | 356-0115-5100 |
| - / 125       | 5.59 | 25.30    | 24.95  | 15.43          | 2.655   | -            | 25 50                      | 356-0125-5100 |
| 5 / 127       | 5.67 | 24.85    | 24.81  | 15.65          | 2.695   | 25 50        | -                          | 356-0127-5100 |
| - / 150       | 6.57 | 21.25    | 22.44  | 18.09          | 3.395   | -            | 25 50                      | 356-0150-5100 |
| 6 / 152       | 6.65 | 19.65    | 22.15  | 18.31          | 3.435   | 25 50        | -                          | 356-0152-5100 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only. Additional information at [www.norres.com/us/technology-us/](http://www.norres.com/us/technology-us/)

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Accessories

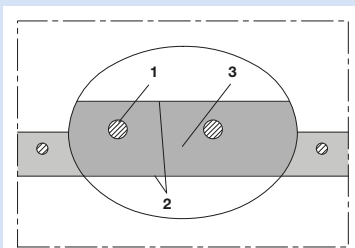


CLAMP 211



CONNECT 230

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.



Antistatic food hose and pharmaceutical hose, super-heavy duty and reinforced, smooth interior and exterior, stainless steel (INOX)

#### Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- food industry, pharmaceutical industry: food, pharmaceutical
- conveying of dry foods e.g. rice, cereals, sugar, milk powder, powders, coffee, tea, grains, flour, frozen foods
- vacuum conveying equipment, vacuum hopper, suction conveyor, dosing system
- pelleting machines/ tablet presses
- explosion hazard area
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging
- silo, silo vehicle/ silo truck, tanker/ tank truck: conveying of e.g. rice, dry food, cereals, sugar, milk powder, powders, coffee, tea, grains, flour, frozen foods

#### Properties

- super-heavy duty

- highly abrasion resistant
- very high pressure, vacuum and compression resistance
- Approved by an independent testing laboratory for the complete hose acc. to EU-Directive 10/2011 and EC 1935/2004 and the latest EU-Directive 2015/174, food grade polyurethane, complies with: FDA 21 CFR 177.2600
- Approval acc. to EU-Directive 10/2011 (food simulant E) and EC 1935/2004
- odorless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline, and chemicals
- very good low temperature flexibility
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance  $<10^9 \Omega$  and in accordance with TRGS 727  $<2,5 \cdot 10^8 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: pneumatic transport of flammable dusts and bulk materials (Zone 20, 21, 22 inside), aspiration of combustible dusts (Zone 22 inside), for conveying for flammable liquids (inside zone 0, 1, 2), for con-

veying for non-flammable liquids, for use in zone 1 and 2 (gases), for use in zone 0 (gases)

- manufacturing process acc. GMP EC 2023/2006
- conforms to RoHS guideline

#### Temperature range

- -40°F to 195°F

#### Design, material

BARDUC® design

1. spring steel wire spiral embedded in the wall; spiral: stainless steel wire (INOX)
2. smooth interior and exterior; wall: permanently antistatic premium ether-polyurethane (Pre-PUR®)
3. wall thickness 0.16 - 0.24 inch approximate depending on diameter

#### Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- customer-specific branding

| I.D.        | O.D. | Pressure  | Vacuum    | Bending Radius | Weight  | Stock length | Order No.     |
|-------------|------|-----------|-----------|----------------|---------|--------------|---------------|
| in / mm     | in   | psi       | inHG      | in             | lbs./ft | ft           |               |
| 1.25 / 32   | 1.57 | 79.75 (-) | 29.53 (-) | 5.67           | 0.300   | 25           | 382-0032-1014 |
| 1.5 / 38    | 1.81 | 79.75 (-) | 29.53 (-) | 6.73           | 0.395   | 25           | 382-0038-1014 |
| - / 40      | 1.89 | 79.75 (-) | 29.53 (-) | 7.09           | 0.435   | 25 50        | 382-0040-1014 |
| 2 / 50-51   | 2.28 | 72.50 (-) | 29.53 (-) | 8.86           | 0.645   | 25 50        | 382-0050-1014 |
| 2.36 / 60   | 2.68 | 72.50 (-) | 29.53 (-) | 10.63          | 0.755   | 25 50        | 382-0060-1014 |
| 2.5 / 63-65 | 2.87 | 72.50 (-) | 29.53 (-) | 11.52          | 0.815   | 25 50        | 382-0065-1014 |
| - / 70      | 3.07 | 72.50 (-) | 29.53 (-) | 12.40          | 0.865   | 25 50        | 382-0070-1014 |
| 3 / 75-76   | 3.27 | 72.50 (-) | 29.53 (-) | 13.29          | 0.925   | 25 50        | 382-0075-1014 |
| - / 80      | 3.46 | 58.00 (-) | 26.58 (-) | 14.17          | 0.980   | 25           | 382-0080-1014 |
| 4 / 100-102 | 4.33 | 58.00 (-) | 23.62 (-) | 19.69          | 1.210   | 25           | 382-0100-1014 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only. Additional information at [www.norres.com/us/technology-us/](http://www.norres.com/us/technology-us/)

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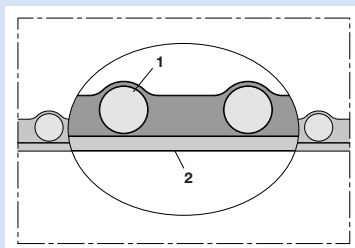
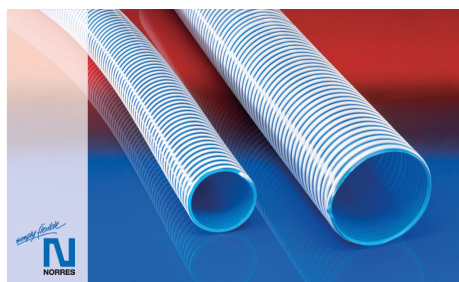
## Accessories



CLAMP 211

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. Additional information at [www.norres.com](http://www.norres.com). NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only.





Polyurethane hose, super-heavy duty

#### Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- suction vehicles: roof gravelling, roof gravel conveying
- vacuum truck, suction vehicle, dry suction truck: industrial cleaning, furnace cleaning
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport
- raw material conveying hose for powders, granulates, sand, quartz, gravel, shards and chips/shavings
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging
- silo, silo vehicle/ silo truck, tanker/ tank truck: conveying of wood pellets, plastic granulate, plastic powder

#### Properties

- external abrasion protection via external helix (saves floor space, prolong service life, easy to use)
- super-heavy duty
- extremely abrasion resistant
- very high pressure, vacuum and compression resistance
- good resistance to chemicals
- very good low temperature flexibility
- conforms to RoHS guideline

#### Temperature range

- -5°F to 160°F
- short time to 175°F

#### Design, material

NORPLAST® full plastic hose

1. hard plastic spiral integrated in the wall; spiral: rigid PVC
2. smooth interior; wall: premium polyurethane (Pre-PUR®), inside layer 0.079 inch approximate exterior soft PVC

#### Delivery variants

- further diameters and lengths available on request
- blue inner liner + transparent exterior wall (standard)
- special colors: colored spiral, full colored
- customer-specific branding

| I.D.                                     | O.D. | Pressure  | Vacuum    | Bending Radius | Weight  | Stock length | Order No.     |
|--|------|-----------|-----------|----------------|---------|--------------|---------------|
| in / mm                                  | in   | psi       | inHG      | in             | lbs./ft | ft           |               |
| <b>standard type, inliner blue</b>       |      |           |           |                |         |              |               |
| 3 / 75-76                                | 3.54 | 87.00 (-) | 26.60 (-) | 20.16          | 1.480   | 50 100       | 387-0076-0000 |
| 3.5 / 89-90                              | 4.13 | 79.75 (-) | 26.60 (-) | 23.43          | 1.745   | 50 100       | 387-0090-0000 |
| 4 / 100-102                              | 4.65 | 58.00 (-) | 26.60 (-) | 31.46          | 2.215   | 50 100       | 387-0102-0000 |
| 5 / 125-127                              | 5.71 | 43.50 (-) | 26.60 (-) | 40.81          | 2.820   | 50 100       | 387-0127-0000 |
| 6 / 150-152                              | 6.81 | 43.50 (-) | 26.60 (-) | 52.13          | 4.300   | 50 100       | 387-0152-0000 |
| <b>flexible type, inliner yellow</b>     |      |           |           |                |         |              |               |
| 5 / 125-127                              | 5.71 | 43.50 (-) | 26.60 (-) | 40.81          | 2.820   | 50 100       | 387-0127-6007 |
| <b>smooth exterior type, inliner red</b> |      |           |           |                |         |              |               |
| 5 / 125-127                              | 5.71 | 43.50 (-) | 26.60 (-) | 40.81          | 2.820   | 50 100       | 387-0127-6008 |

Positive and negative pressure ratings are the recommended maximum operating values. Products can be manufactured to meet higher operating values upon request. The bend radius is calculated from the center of the hose in an arched position. NORRES reserves the right to modify technical data at any time. Technical data based on tests at 68°F and are approx. values. Proper use and maintenance of NORRES hoses is the sole responsibility of purchaser and ultimate user of the product. The individual conditions, applications and the number of variables make firm recommendations technically impossible. This information is intended as a general guide only. Additional information at [www.norres.com/us/technology-us/](http://www.norres.com/us/technology-us/)

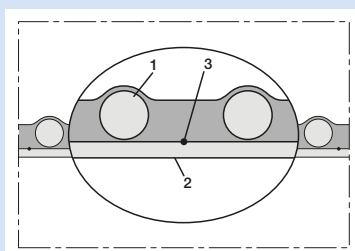
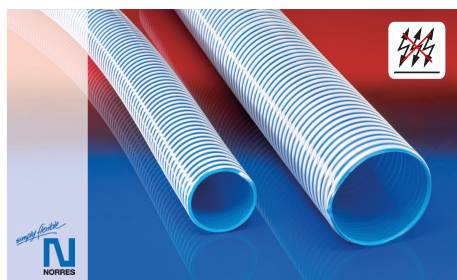
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## Accessories



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Antistatic polyurethane hose, super-heavy duty, grounding wire

## Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- vacuum truck, suction vehicle, dry suction truck: industrial cleaning, furnace cleaning
- explosion hazard area
- raw material conveying hose for powders, granulates, sand, quartz, gravel, shards and chips/ shavings
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging
- silo, silo vehicle/ silo truck, tanker/ tank truck: conveying of wood pellets, plastic granulate, plastic powder

## Properties

- external abrasion protection via external helix (saves floor space, prolong service life, easy to use)
- extremely abrasion resistant

- very high pressure, vacuum and compression resistance
- good resistance to chemicals
- very good low temperature flexibility
- grounding wire for discharging of electrostatic charging
- electrical and surface resistance of the inliner  $<10^9 \Omega$
- in accordance with ATEX 2014/34/EU (1999/92/EC) and German TRGS 727: pneumatic transport of flammable dusts and bulk materials (Zone 20, 21, 22 inside), aspiration of combustible dusts (Zone 22 inside), for conveying for flammable liquids (inside zone 0, 1, 2), for conveying for non-flammable liquids, for use in zone 1 and 2 (gases), for use in zone 0 (gases)
- conforms to RoHS guideline

## Temperature range

- -5°F to 160°F

- short time to 175°F

## Design, material

NORPLAST® full plastic hose

1. hard plastic spiral integrated in the wall; spiral: rigid PVC
2. smooth interior; wall: antistatic polyurethane inside layer 0.079 inch approximate, exterior soft PVC
3. grounding wire

## Delivery variants

- further diameters and lengths available on request
- blue inner liner + transparent exterior wall (standard)
- special colors: colored spiral, full colored
- customer-specific branding

| I.D.        | O.D. | Pressure  | Vacuum    | Bending Radius | Weight  | Stock length | Order No.     |
|-------------|------|-----------|-----------|----------------|---------|--------------|---------------|
| in / mm     | in   | psi       | inHG      | in             | lbs./ft | ft           |               |
| 3 / 75-76   | 3.62 | 87.00 (-) | 26.60 (-) | 20.16          | 1.480   | 50 100       | 387-0076-2878 |
| 3.5 / 89-90 | 4.21 | 79.75 (-) | 26.60 (-) | 23.43          | 1.745   | 50 100       | 387-0090-2878 |
| 4 / 100-102 | 4.72 | 58.00 (-) | 26.60 (-) | 31.46          | 2.215   | 50 100       | 387-0102-2878 |
| 5 / 125-127 | 5.79 | 43.50 (-) | 26.60 (-) | 40.81          | 2.820   | 50 100       | 387-0127-2878 |
| 6 / 150-152 | 6.89 | 43.50 (-) | 26.60 (-) | 52.13          | 4.300   | 50 100       | 387-0152-2878 |

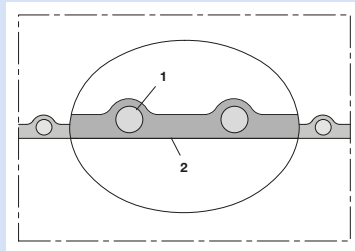
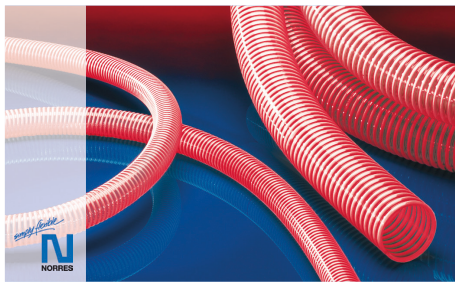
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## Accessories



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PVC hose, food hose and pharmaceutical hose, heavy duty

## Applications

- hose/ ducting for liquids and for powder, bulk material, granulate and for gases
- food industry, pharmaceutical industry: food, pharmaceutical
- vacuum conveying equipment, vacuum hopper, suction conveyor, dosing system
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport
- silo, silo vehicle/ silo truck, tanker/ tank truck: silo charging, silo discharging
- silo, silo vehicle/ silo truck, tanker/ tank truck: conveying of e.g. rice, dry food, cereals, sugar, milk powder, powders, coffee, tea, grains, flour, frozen foods

## Properties

- heavy duty
- Food grade wall, complies with: EU-Directive 10/2011 and EC 1935/2004
- good resistance to alkalis and acids
- good resistance to chemicals
- phthalate-free
- manufacturing process acc. GMP EC 2023/2006
- conforms to RoHS guideline

## Temperature range

- 25°F to 160°F
- short time to 175°F

## Design, material

NORPLAST® full plastic hose

1. hard plastic spiral integrated in the wall; spiral: rigid PVC
2. smooth interior and exterior; wall: high grade soft PVC

## Delivery variants

- further diameters and lengths available on request
- transparent + partially red colored (standard)
- special colors: colored spiral, full colored
- customer-specific branding

| I.D.         | O.D. | Pressure  | Vacuum    | Bending Radius | Weight  | Further production lengths | Order No.     |
|--------------|------|-----------|-----------|----------------|---------|----------------------------|---------------|
| in / mm      | in   | psi       | inHG      | in             | lbs./ft | ft                         |               |
| - / 20       | 1.02 | 72.50 (-) | 20.65 (-) | 4.17           | 0.170   | 50 100                     | 384-0020-1001 |
| 1 / 25       | 1.22 | 72.50 (-) | 20.65 (-) | 5.07           | 0.200   | 50 100                     | 384-0025-1001 |
| - / 30       | 1.42 | 72.50 (-) | 20.65 (-) | 5.98           | 0.240   | 50 100                     | 384-0030-1001 |
| 1.25 / 32    | 1.54 | 72.50 (-) | 20.65 (-) | 6.43           | 0.260   | 50 100                     | 384-0032-1001 |
| 1.36 / 35    | 1.65 | 72.50 (-) | 20.65 (-) | 6.97           | 0.295   | 50 100                     | 384-0035-1001 |
| 1.5 / 38     | 1.75 | 72.50 (-) | 20.65 (-) | 7.52           | 0.350   | 50 100                     | 384-0038-1001 |
| - / 40       | 1.89 | 72.50 (-) | 20.65 (-) | 7.97           | 0.370   | 50 100                     | 384-0040-1001 |
| 1.75 / 44-45 | 2.09 | 72.50 (-) | 20.65 (-) | 8.87           | 0.450   | 50 100                     | 384-0045-1001 |
| 2 / 50-51    | 2.36 | 72.50 (-) | 20.65 (-) | 9.96           | 0.540   | 50 100                     | 384-0051-1001 |
| 2.36 / 60    | 2.72 | 72.50 (-) | 20.65 (-) | 11.68          | 0.650   | 50 100                     | 384-0060-1001 |
| 2.5 / 63-65  | 2.83 | 72.50 (-) | 20.65 (-) | 12.22          | 0.700   | 50 100                     | 384-0063-1001 |
| - / 70       | 3.15 | 72.50 (-) | 20.65 (-) | 13.58          | 0.805   | 50 100                     | 384-0070-1001 |
| 3 / 75-76    | 3.39 | 72.50 (-) | 20.65 (-) | 13.76          | 0.925   | 50 100                     | 384-0076-1001 |
| - / 80       | 3.58 | 58.00 (-) | 20.65 (-) | 15.48          | 1.040   | 50 100                     | 384-0080-1001 |
| 3.5 / 89-90  | 4.00 | 58.00 (-) | 20.65 (-) | 17.39          | 1.245   | 50 100                     | 384-0090-1001 |
| 4 / 100-102  | 4.49 | 58.00 (-) | 20.65 (-) | 19.56          | 1.480   | 50 100                     | 384-0102-1001 |
| - / 110      | 4.84 | 58.00 (-) | 20.65 (-) | 21.10          | 1.715   | 50 100                     | 384-0110-1001 |
| 4.72 / 120   | 5.24 | 43.50 (-) | 16.25 (-) | 22.91          | 1.880   | 50 100                     | 384-0120-1001 |
| 5 / 125-127  | 5.43 | 43.50 (-) | 16.25 (-) | 23.81          | 2.015   | 50 100                     | 384-0125-1001 |
| 6 / 150-152  | 6.50 | 43.50 (-) | 14.75 (-) | 28.34          | 2.890   | 50                         | 384-0150-1001 |

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## Accessories



CLAMP 211



CONNECT 270-271

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