



## NORRES INDUSTRIAL HOSES SUCTION AND DISPOSAL VEHICLES



Suction excavator

Recommended by NORRES customers:

AIRDUC® PUR 356 AS

Proven Alternatives:

AIRDUC® PUR 357 VAC-TRUCK

AIRDUC® PUR 355 VAC-TRUCK ORANGE



Suction vehicle:

Sewer cleaning, sewage cleaning

Recommended by NORRES customers:

NORPLAST® PVC 389 SUPERELASTIC

Proven Alternatives:

AIRDUC® PUR 356 AS

NORPLAST® PVC 379 GREEN SUPERELASTIC

NORPLAST® PVC 389 SUPERELASTIC PLUS

Vacuum truck, suction vehicle:

Roof gravelling, roof gravel conveying

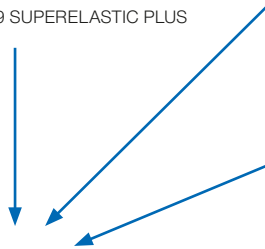
Recommended by NORRES customers:

AIRDUC® PUR 356 AS

NORPLAST® PUR 387

Proven Alternatives:

AIRDUC® PUR 355 VAC-TRUCK REINFORCED



Vacuum truck, suction vehicle, dry suction truck: Industrial cleaning, furnace cleaning

Recommended by NORRES customers:

AIRDUC® PUR 356 AS

NORPLAST® PUR 387

Proven Alternatives:

AIRDUC® PUR 355 VAC-TRUCK REINFORCED

AIRDUC® PUR 356 EC

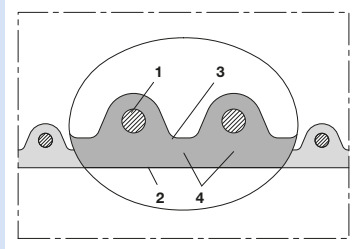
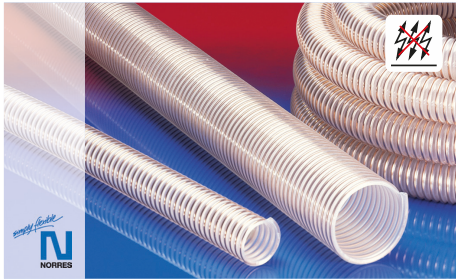
NORPLAST® PVC 389 SUPERELASTIC

NORPLAST® PVC 389 AS-SUPERELASTIC

NORPLAST® PVC 389 SUPERELASTIC PLUS

NORPLAST® PUR-C 387 AS





Antistatic polyurethane hose, super-heavy, 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 e.g. at 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°C to 90°C
- short time to 125°C

**Design, Material**

- AIRDUC® profile hose
1. spring steel wire firmly embedded in wall
  2. wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)
  3. wall thickness 2,0 to 2,5 mm approx.
  4. reinforcement of the primary abrasion areas

**Delivery variants**

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

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
1,25 / 32	43	5,235	1,000	90	0,680	10 15	356-0032-0000
1,5 / 38	49	4,475	1,000	104	0,790	10 15	356-0038-0000
- / 40	51	4,270	1,000	109	0,820	10 15	356-0040-0000
1,75 / 45	56	3,825	1,000	129	0,910	10 15 20	356-0045-0000
- / 50	61	3,470	1,000	134	1,000	10 15	356-0050-0000
2 / 51	62	3,200	1,000	134	1,020	10 15	356-0051-0000
- / 55	66	3,170	1,000	151	1,090	10 15	356-0055-0000
2,36 / 60	71	2,920	1,000	156	1,180	10 15	356-0060-0000
2,5 / 63-65	74	2,810	1,000	163	1,230	10 15	356-0063-0000
- / 65	76	2,705	1,000	169	1,270	10 15	356-0065-0000
- / 70	82	2,520	1,000	186	1,370	10 15	356-0070-0000
- / 75	87	2,360	1,000	195	1,460	10 15	356-0075-0000
3 / 76	88	2,355	1,000	195	1,470	10 15	356-0076-0000
- / 80	92	2,220	1,000	205	1,550	10 15	356-0080-0000
- / 90	103	2,195	1,000	250	2,060	10 15	356-0090-0000
- / 100	113	1,980	1,000	272	2,270	10 15	356-0100-0000
4 / 102	115	1,890	1,000	272	2,310	10 15	356-0102-0000
- / 110	123	1,805	1,000	300	2,480	10 15	356-0110-0000
4,5 / 115	128	1,730	0,975	317	2,580	10 15	356-0115-0000

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
4,72 / 120	133	1,660	0,930	330	2,690	10 15	356-0120-0000
- / 125	138	1,595	0,895	336	2,800	10 15 20	356-0125-0000
5 / 127	140	1,565	0,890	336	2,840	10 15	356-0127-0000
- / 130	143	1,535	0,860	355	2,900	10 15	356-0130-0000
5,5 / 140	153	1,430	0,800	400	3,110	10 15	356-0140-0000
- / 150	163	1,335	0,745	435	3,680	10 15	356-0150-0000
6 / 152	165	1,305	0,835	435	3,720	10 15	356-0152-0000
6,3 / 160	173	1,255	0,700	470	3,910	10 15	356-0160-0000
- / 170	183	1,180	0,660	600	4,150	10 15	356-0170-0000
- / 175	188	1,150	0,640	700	4,260	10 15	356-0175-0000
- / 180	193	1,120	0,620	830	4,380	10 15	356-0180-0000
- / 200	214	1,010	0,560	950	5,940	10 15	356-0200-0000
8 / 203	216	0,955	0,550	950	6,020	10 15	356-0203-0000
- / 225	239	0,900	0,495	1175	6,650	10	356-0225-0000
- / 250	264	0,810	0,445	1300	7,350	2,5 5 10	356-0250-0000
- / 275	289	0,735	0,405	1453	8,070	2,5 5 10	356-0275-0000
- / 300	314	0,675	0,375	1575	8,780	2,5 5 10	356-0300-0000

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

### Accessories



CLAMP 216



CLAMP 211



CONNECT 228



CONNECT SAFETY CLAMP ASSEMBLY 231



CONNECT PRESS ASSEMBLY 232



CONNECT MOULD ASSEMBLY 233



CONNECT THREAD FITTING 234



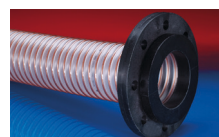
CONNECT 240 + 241



CONNECT 242



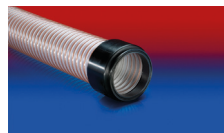
CONNECT 243



CONNECT 244



CONNECT 245 VAC-TRUCK

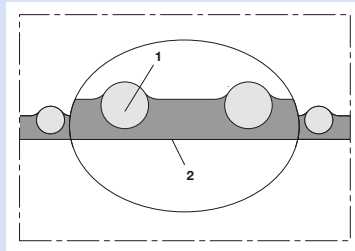
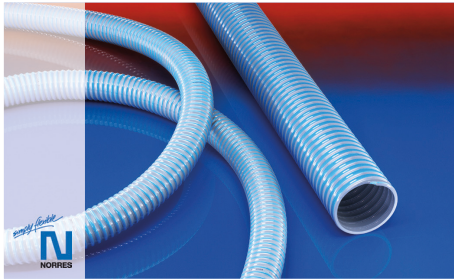


CONNECT 245



CONNECT 246

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



PVC hose, super-heavy, flexible at low temp. (down to -25°C)

**Applications**

- hose/ ducting for liquids and for powder, bulk material, granulate and for gases
- suction vehicle: sewer cleaning, sewage cleaning
- vacuum truck, suction vehicle, dry suction truck: industrial cleaning, furnace cleaning
- airport, airplane, rail vehicle, train, railway, boat, ship/ vessel, yacht: toilet discharging/ disposal
- agricultural industry: irrigation, fertilizers, insecticides
- agricultural industry: manure spreader, slurry spreader, slurry tanker

**Properties**

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

**Temperature Range**

- -25°C to 60°C

**Design, Material**

NORPLAST® full plastic hose

1. outer hard plastic spiral; spiral: rigid PVC
2. smooth interior; wall: high grade low temperature flexible soft PVC

**Delivery variants**

- further diameters and lengths available on request
- grey and blue partially Coloured (standard)
- special colours: coloured spiral, full coloured
- customer-specific branding

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
1 / 25	33	4,000	0,900	72,5	0,410	-	25 50	389-0025-1012
- / 30	38	3,500	0,900	90,0	0,550		25 50	389-0030-1012
1,25 / 32	40	3,500	0,900	94,0	0,600		25 50	389-0032-1012
1,36 / 35	44	3,200	0,900	102,5	0,630		25 50	389-0035-1012
1,5 / 38	47	3,000	0,900	111,0	0,700		25 50	389-0038-1012
- / 40	49	3,000	0,900	115,0	0,730		25 50	389-0040-1012
2 / 50-51	61	2,800	0,900	144,5	1,000		25 50	389-0051-1012
2,36 / 60	70	2,600	0,900	175,0	1,250		25 50	389-0060-1012
2,5 / 63-65	74	2,400	0,900	188,5	1,390		25 50	389-0063-1012
- / 70	81	2,200	0,900	195,0	1,600		25 50	389-0070-1012
3 / 75-76	87	2,000	0,900	222,0	1,700	<b>25 50</b>	-	389-0076-1012
- / 80	93	1,800	0,900	235,0	1,850		25 50	389-0080-1012
3,5 / 89-90	103	1,700	0,900	270,0	2,150	<b>10 30</b>	-	389-0090-1012
4 / 100-102	116	1,500	0,850	294,0	2,700	<b>10 30</b>	-	389-0102-1012
- / 110	124	1,350	0,600	325,0	3,000		30	389-0110-1012
4,72 / 120	135	1,250	0,600	350,0	3,350		30	389-0120-1012
5 / 125-127	142	1,200	0,600	366,5	3,600		10 30	389-0127-1012
6 / 150-152	170	1,000	0,600	449,0	5,000		10 20	389-0152-1012

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Accessories

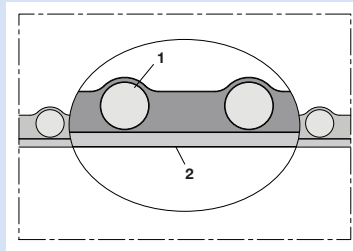
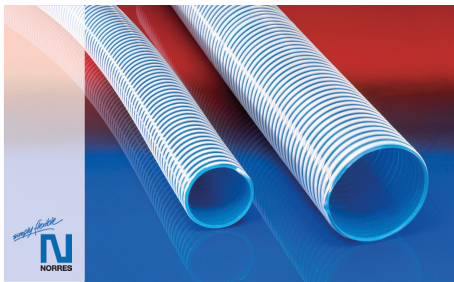


CLAMP 211



CONNECT 270-271

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Polyurethane hose, super-heavy

**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**

- -20°C to 70°C
- short time to 80°C

**Design, Material**

NORPLAST® full plastic hose

1. hard plastic spiral integrated in wall; spiral: rigid PVC
2. smooth interior; wall: premium polyurethane (Pre-PUR®), inside layer 2,0 mm approx. exterior soft PVC

**Delivery variants**

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

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
<b>standard type, inliner blue</b>							
3 / 75-76	90	6,000	0,900	512,0	2,200	13,5 30	387-0076-0000
3,5 / 89-90	105	5,500	0,900	595,0	2,600	13,5 30	387-0090-0000
4 / 100-102	118	4,000	0,900	799,0	3,300	13,5 30	387-0102-0000
5 / 125-127	145	3,000	0,900	1036,5	4,200	13,5 30	387-0127-0000
6 / 150-152	173	3,000	0,900	1324,0	6,400	13,5 20	387-0152-0000
<b>flexible type, inliner yellow</b>							
5 / 125-127	145	3,000	0,900	1036,5	4,200	13,5 30	387-0127-6007
<b>smooth exterior type, inliner red</b>							
5 / 125-127	145	3,000	0,900	1036,5	4,200	13,5 30	387-0127-6008

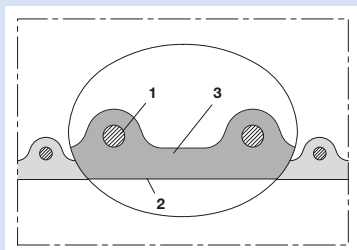
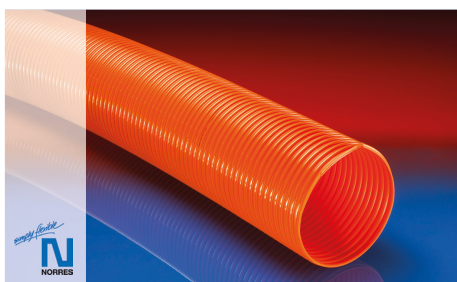
Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

Accessories



CLAMP 211

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Vacuum truck hose, heavy and reinforced, very flexible

## Applications

- suction excavator
- municipal vehicle: sweeper, sweeping machine

## Properties

- heavy duty and reinforced
- highly abrasion resistant
- microbe resistant
- good resistance to oil, gasoline and chemicals
- very good low temperature flexibility

- conforms to RoHS guideline

## Temperature Range

- -40°C to 90°C
- short time to 125°C

## Design, Material

AIRDUC® profile hose

1. spring steel wire firmly embedded in wall
2. wall: special premium polyurethane (Pre-PUR®)
3. wall thickness 2,5 mm approx.

4. reinforcement of the primary abrasion areas

## Delivery variants

- further diameters and lengths available on request
- orange (standard)
- special colours: transparent, full coloured
- customer-specific branding

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
8 / 200-203	213	0,600	0,120	316	5,130	5	355-0200-5202
10 / 254	267	0,482	0,075	407	6,510	5	355-0254-5202
- / 352	365	0,340	0,050	554	9,030	5	355-0352-5202

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

## Accessories



CLAMP 211



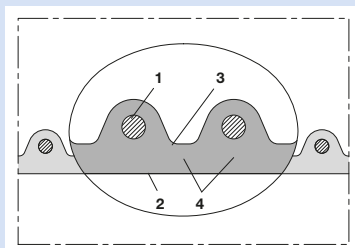
CONNECT 240 + 241



CONNECT 270-271

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.





Electrically conductive polyurethane hose, super-heavy

**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 <math><10^3 \Omega</math>
- 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 0 (gases), for use in zone 0 (gases)
- according to DIN 26057 Type 4
- conforms to RoHS guideline

**Temperature Range**

- -40°C to 90°C

**Design, Material**

AIRDUC® profile hose

1. spring steel wire firmly embedded in wall
2. wall: electrically conductive premium ester-polyurethane (Pre-PUR®)
3. wall thickness 2,0 to 2,5 mm approx.
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.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
1,5 / 38	49	3,810	1,000	104	0,790	10 15	356-0038-1003
- / 40	51	3,635	1,000	109	0,820	10 15	356-0040-1003
- / 50	61	2,950	1,000	134	1,000	10 15	356-0050-1003
2 / 50-51	62	2,800	1,000	134	1,010	10 15	356-0051-1003
2,36 / 60	71	2,485	1,000	156	1,180	10 15	356-0060-1003
2,5 / 63-65	74	2,395	1,000	163	1,240	10 15	356-0063-1003
- / 65	76	2,305	1,000	169	1,270	10 15	356-0065-1003
- / 70	82	2,145	1,000	186	1,370	10 15	356-0070-1003
- / 75	87	2,010	1,000	195	1,460	10 15	356-0075-1003
3 / 76	88	1,995	1,000	195	1,480	10 15	356-0076-1003
- / 80	92	1,890	1,000	205	1,550	10 15	356-0080-1003
- / 100	113	1,685	1,000	272	2,270	10 15	356-0100-1003
4 / 102	115	1,655	1,000	272	2,310	10 15	356-0102-1003

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

Accessories



CLAMP 216

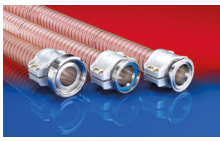


CLAMP 211



CONNECT 228

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



CONNECT SAFETY  
CLAMP ASSEMBLY  
231



CONNECT PRESS  
ASSEMBLY 232



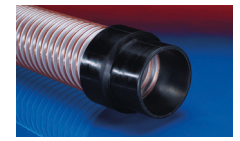
CONNECT MOULD  
ASSEMBLY 233



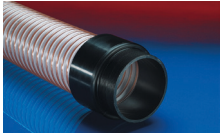
CONNECT THREAD  
FITTING 234



CONNECT 240 + 241



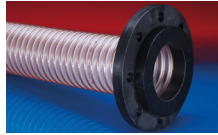
CONNECT 240 EC



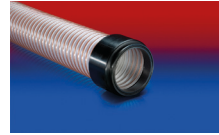
CONNECT 242



CONNECT 243



CONNECT 244

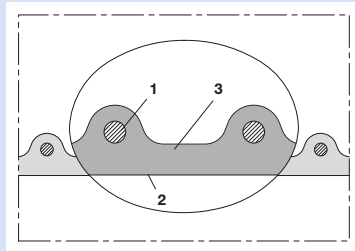
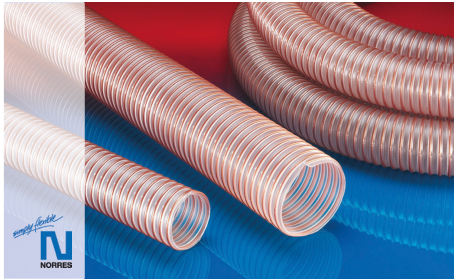


CONNECT 245



CONNECT 246

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Vacuum truck hose, heavy and reinforced

## Applications

- flexible 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
- concrete pump: outlet hose, discharge hose
- construction industry: rock drill, rock drilling machine

- extremely abrasion-resistant with reinforcement underneath wire
- increased pressure and vacuum resistance
- good resistance to oil, gasoline and chemicals
- very good low temperature flexibility
- conforms to RoHS guideline

## Temperature Range

- 40°C to 90°C
- short time to 125°C

- 2. wall: special premium ester-polyurethane (Pre-PUR®)
- 3. wall thickness 2,5 mm approx.

## Delivery variants

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

## Properties

- heavy duty and reinforced

## Design, Material

AIRDUC® profile hose

- spring steel wire firmly embedded in wall

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
- / 85	100	2,080	0,750	178	1,920	10	355-0085-2530
4 / 100-102	115	1,775	0,670	203	2,380	10 15	355-0100-2530
5 / 125-127	142	1,405	0,460	249	2,970	10 15	355-0127-2530
6 / 150-152	167	1,180	0,385	291	3,510	10 15	355-0152-2530

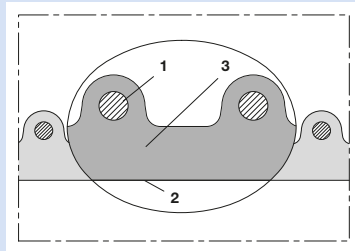
Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

## Accessories



CLAMP 211

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Vacuum truck hose, super-heavy and extremely reinforced

### Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- suction excavator
- 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

### Properties

- super-heavy duty and extremely reinforced

- extremely abrasion-resistant with extremely thick polyurethane wall
- very high pressure, vacuum and compression resistance
- good resistance to oil, gasoline and chemicals
- very good low temperature flexibility
- conforms to RoHS guideline

### Temperature Range

- -40°C to 90°C
- short time to 125°C

### Design, Material

AIRDUC® profile hose

1. spring steel wire firmly embedded in wall

2. wall: special premium ester-polyurethane (Pre-PUR®)
3. wall thickness 4,0 to 5,0 mm approx.

### Delivery variants

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

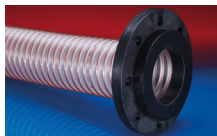
I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
4 / 100	123	3,015	1,000	550	3,72	10	357-0100-0000
5 / 127	148	2,445	0,930	672	4,53	10	357-0127-0000
6 / 152	175	2,055	0,775	974	5,35	10	357-0152-0000
8 / 200	223	1,560	0,700	1450	7,63	5	357-0200-0000
- / 250	273	1,255	0,560	1875	9,43	5	357-0250-0000

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

## Accessories

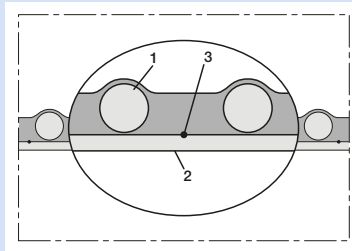
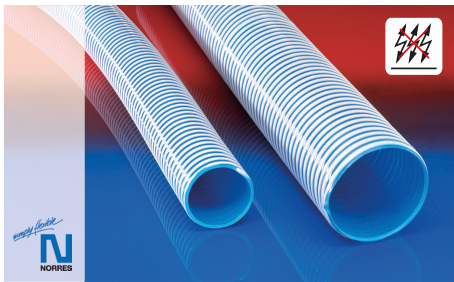


CLAMP 211



CONNECT 244

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Antistatic polyurethane hose, super-heavy, 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 <math><10^9 \Omega</math>
- 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**

- -20°C to 70°C

- short time to 80°C

**Design, Material**

NORPLAST® full plastic hose

1. hard plastic spiral integrated in wall; spiral: rigid PVC
2. smooth interior; Wall: antistatic polyurethane inside layer 2,0 mm approx., exterior soft PVC
3. grounding wire

**Delivery variants**

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

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
3 / 75-76	92	6,0	0,9	512,0	2,200	13,5 30	387-0076-2878
3,5 / 89-90	107	5,5	0,9	595,0	2,600	13,5 30	387-0090-2878
4 / 100-102	120	4,0	0,9	799,0	3,300	13,5 30	387-0102-2878
5 / 125-127	147	3,0	0,9	1036,5	4,200	13,5 30	387-0127-2878
6 / 150-152	175	3,0	0,9	1324,0	6,400	13,5 20	387-0152-2878

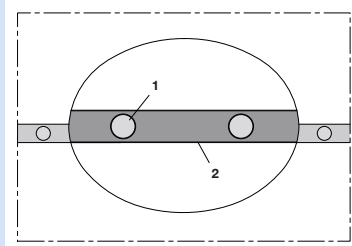
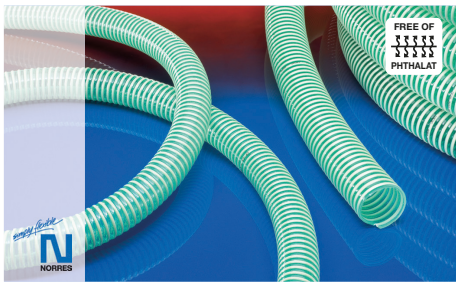
Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

Accessories



CLAMP 211

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



PVC hose, heavy, flexible at low temp. (down to -25°C)

### Applications

- flexible hose/ ducting for liquids and for powder, bulk material, granulate and for gases
- suction vehicle: sewer cleaning, sewage cleaning
- agricultural industry: irrigation, fertilizers, insecticides
- agricultural industry: manure spreader, slurry spreader, slurry tanker
- agricultural industry, conveying of seed and fertilizers: seeding machine, seed drill, drilling machine
- caravan/ trailer, mobile home/ camper/ RV, boat, ship/ vessel, yachts: sanitary installation, water supply

### Properties

- heavy duty
- good resistance to alkalis and acids
- good resistance to chemicals
- very good low temperature flexibility
- conforms to RoHS guideline

### Temperature Range

- 25°C to 60°C

### Design, Material

NORPLAST® full plastic hose

- hard plastic spiral integrated in wall; spiral: rigid PVC

2. smooth interior; wall: low temperature flexible soft PVC

### Delivery variants

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

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
<b>Standard Version</b>								
3/4 / 19	24	5,000	0,600	96,49	0,25	-	25 50	379-0019-0000
- / 20	25	5,000	0,600	101,0	0,260	<b>25 50</b>	-	379-0020-0000
1 / 25	30	5,000	0,600	123,4	0,320	<b>25 50</b>	-	379-0025-0000
- / 30	36	4,500	0,600	147,5	0,370	<b>25 50</b>	-	379-0030-0000
1,25 / 32	38	4,000	0,600	157,1	0,450	<b>25 50</b>	-	379-0032-0000
1,5 / 38	44	4,000	0,600	184,0	0,490	<b>25 50</b>	-	379-0038-0000
- / 40	46	3,000	0,500	193,0	0,630	<b>25 50</b>	-	379-0040-0000
2 / 50-51	58	3,000	0,500	242,4	0,890	<b>25 50</b>	-	379-0050-0000
<b>smaller bending radius , colour: transparent, spiral: grey</b>								
- / 30	36	4,000	0,600	125	0,340	<b>25 50</b>	-	379-0030-4726
1,25 / 32	38	4,000	0,600	130	0,36	<b>25 50</b>	-	379-0032-4726

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

## Accessories

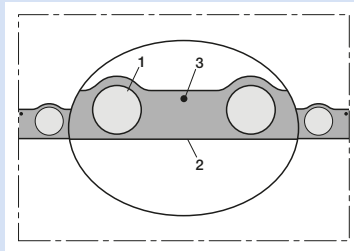


CLAMP 211



CONNECT 270-271

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Antistatic PVC hose, super-heavy, flexible at low temp., grounding wire (down to -25°C)

### Applications

- hose/ ducting for liquids and for powder, bulk material, granulate and for gases
- vacuum truck, suction vehicle, dry suction truck: industrial cleaning, furnace cleaning
- explosion hazard area

### Properties

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

- grounding wire for discharging of electrostatic charging
- 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)
- conforms to RoHS guideline

### Temperature Range

- -25°C to 60°C

### Design, Material

NORPLAST® full plastic hose

1. outer hard plastic spiral; spiral: rigid PVC
2. smooth interior; wall: high grade antistatic and low temperature flexible soft PVC
3. grounding wire

### Delivery variants

- further diameters and lengths available on request
- grey and blue partially Coloured (standard)
- special colours: coloured spiral, full coloured
- customer-specific branding

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
1 / 25	33	6,000	0,900	72,5	0,410	-	25 50	389-0025-2878
- / 30	38	6,000	0,900	90,0	0,550	-	25 50	389-0030-2878
1,25 / 32	40	6,000	0,900	94,0	0,600	-	25 50	389-0032-2878
1,36 / 35	44	5,000	0,900	102,5	0,630	-	25 50	389-0035-2878
1,5 / 38	47	5,000	0,900	111,0	0,700	-	25 50	389-0038-2878
- / 40	49	5,000	0,900	115,0	0,730	-	25 50	389-0040-2878
2 / 50-51	61	4,000	0,900	144,5	1,000	-	25 50	389-0051-2878
2,36 / 60	70	4,000	0,900	175,0	1,250	-	25 50	389-0060-2878
2,5 / 63-65	74	4,000	0,900	188,5	1,390	-	25 50	389-0063-2878
- / 70	81	3,000	0,900	195,0	1,600	-	25 50	389-0070-2878
3 / 75-76	87	3,000	0,900	222,0	1,700	<b>25 50</b>	-	389-0076-2878
- / 80	93	2,500	0,900	235,0	1,850	-	25 50	389-0080-2878
3,5 / 89-90	103	2,500	0,900	270,0	2,150	<b>10 30</b>	-	389-0090-2878
4 / 100-102	116	2,500	0,850	294,0	2,700	<b>10 30</b>	-	389-0102-2878
- / 110	124	2,000	0,850	325,0	3,000	-	30	389-0110-2878
4,72 / 120	135	2,000	0,850	350,0	3,350	-	30	389-0120-2878
5 / 125-127	142	2,000	0,850	366,5	3,600	-	10 30	389-0127-2878
6 / 150-152	170	2,000	0,800	449,0	5,000	-	10 20	389-0152-2878

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

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Accessories



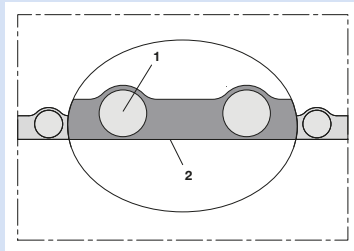
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CONNECT 270-271

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.





PVC hose, heavy, flexible at low temp.  
(down to -40°C)

**Applications**

- hose/ ducting for liquids and for powder, bulk material, granulate and for gases
- suction vehicle: sewer cleaning, sewage cleaning
- vacuum truck, suction vehicle, dry suction truck: industrial cleaning, furnace cleaning
- airport, airplane, rail vehicle, train, railway, boat, ship/ vessel, yacht: toilet discharging/ disposal
- agricultural industry: irrigation, fertilizers, insecticides
- agricultural industry: manure spreader, slurry spreader, slurry tanker

**Properties**

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

**Temperature Range**

- -40°C to 60°C

**Design, Material**

NORPLAST® full plastic hose

1. hard plastic spiral integrated in wall; spiral: impact-resistant modified rigid PVC
2. smooth interior; wall: high grade low temperature flexible soft PVC

**Delivery variants**

- further diameters and lengths available on request
- grey (standard)
- special colours: coloured spiral, full coloured
- customer-specific branding

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
1 / 25	33	4,000	0,800	72,5	0,410	-	25 50	389-0025-0000
- / 30	38	6,000	0,800	90,0	0,550		25 50	389-0030-0000
1,25 / 32	40	6,000	0,800	94,0	0,600		25 50	389-0032-0000
1,36 / 35	44	5,000	0,900	102,5	0,630		25 50	389-0035-0000
1,5 / 38	47	5,000	0,900	111,0	0,700		25 50	389-0038-0000
- / 40	49	5,000	0,800	115,0	0,730		25 50	389-0040-0000
2 / 50-51	61	4,000	0,700	144,5	1,000		25 50	389-0051-0000
2,36 / 60	70	4,000	0,700	175,0	1,250		25 50	389-0060-0000
2,5 / 63-65	74	2,100	0,900	188,5	1,390		25 50	389-0063-0000
- / 70	81	3,000	0,700	195,0	1,600		25 50	389-0070-0000
3 / 75-76	87	1,900	0,700	222,0	1,700	<b>25 50</b>	-	389-0076-0000
- / 80	93	1,800	0,700	235,0	1,850		25 50	389-0080-0000
3,5 / 89-90	103	2,500	0,900	270,0	2,150	<b>10 30</b>	-	389-0090-0000
4 / 100-102	116	1,500	0,850	294,0	2,700	<b>10 30</b>	-	389-0102-0000
- / 110	124	2,000	0,600	325,0	3,000		30	389-0110-0000
4,72 / 120	135	2,000	0,850	350,0	3,350		30	389-0120-0000
5 / 125-127	142	2,000	0,850	366,5	3,600		10 30	389-0127-0000
6 / 150-152	170	2,000	0,800	449,0	5,000		10 20	389-0152-0000

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data. Additional technical data at [www.norres.com/en/technology/](http://www.norres.com/en/technology/)

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Accessories

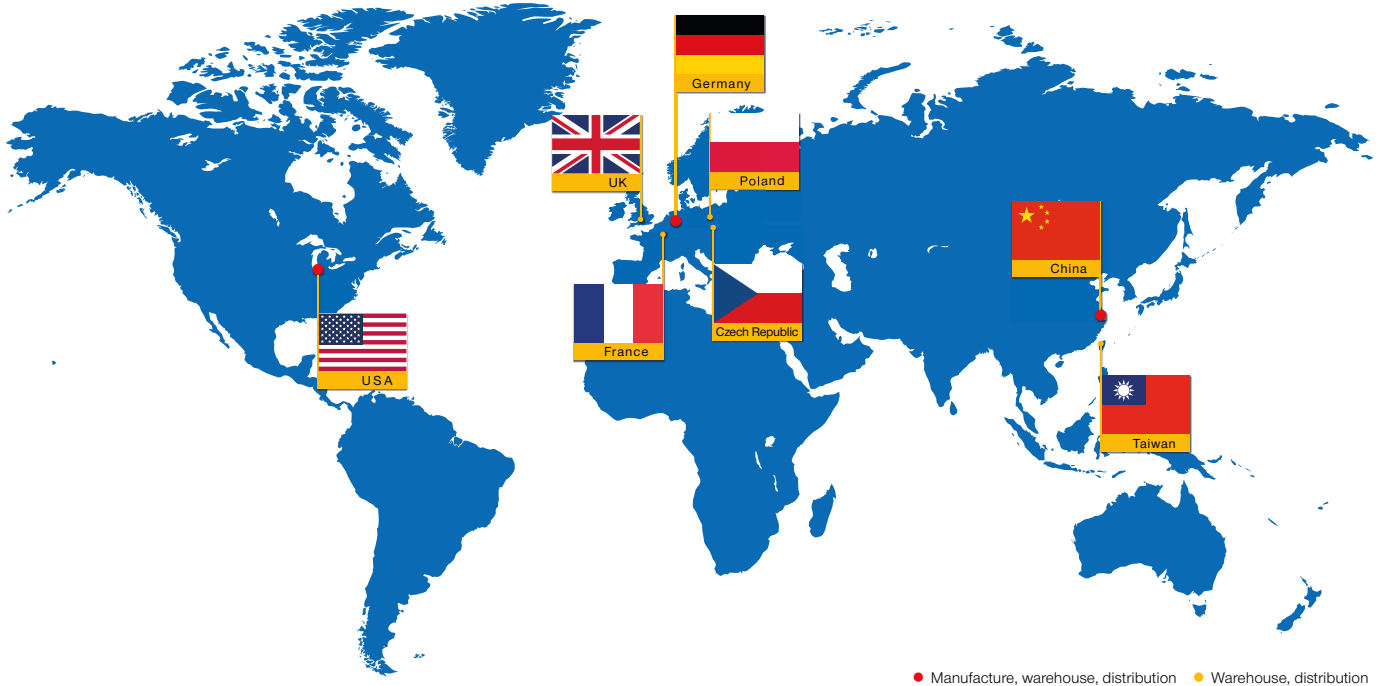


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CONNECT 270-271

Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at [www.norres.com](http://www.norres.com). The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



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