



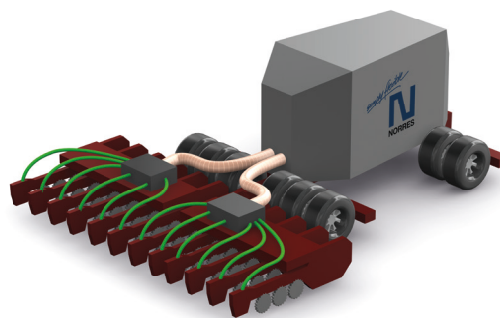
NORRES INDUSTRIAL HOSES

AGRICULTURAL INDUSTRY



Conveying of seed and fertilizers:
Seeding machine, seed drill, drilling machine

- AIRDUC® PUR 355 AS
- AIRDUC® PUR 355 FOOD
- NORPLAST® PVC 379 GREEN SUPERELASTIC



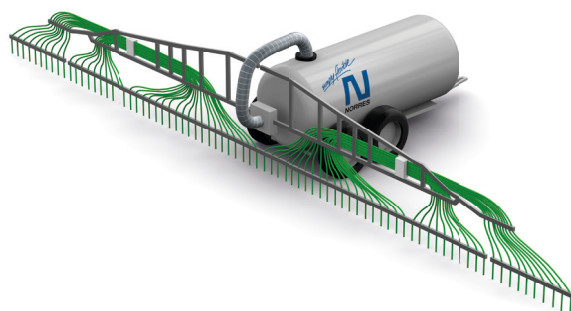
Pneumatic grain conveyer
Recommended by NORRES customers:

- AIRDUC® PUR 355 AS
- Proven Alternatives:
- AIRDUC® PUR 355 FOOD
- AIRDUC® PUR 356 AS
- AIRDUC® PUR 356 FOOD



Irrigation, fertilizers, insecticides

- BARDOC® PVC 381 FOOD
- NORPLAST® PVC 383
- NORPLAST® PVC 388 SUPERELASTIC
- NORPLAST® PVC 380 GREEN
- NORPLAST® PVC 379 GREEN SUPERELASTIC
- NORPLAST® PVC 389 SUPERELASTIC
- NORPLAST® PVC 389 SUPERELASTIC PLUS
- NORFLEX® PVC 440 HIGH PRESSURE



High pressure spraying hose e.g. for pesticides

- NORFLEX® PUR 441 ROBOTIC
- NORFLEX® PVC 440 HIGH PRESSURE



Manure spreader, slurry spreader, slurry tanker

- NORPLAST® PVC 379 GREEN SUPERELASTIC
- NORPLAST® PVC 389 SUPERELASTIC
- NORPLAST® PVC 389 SUPERELASTIC PLUS



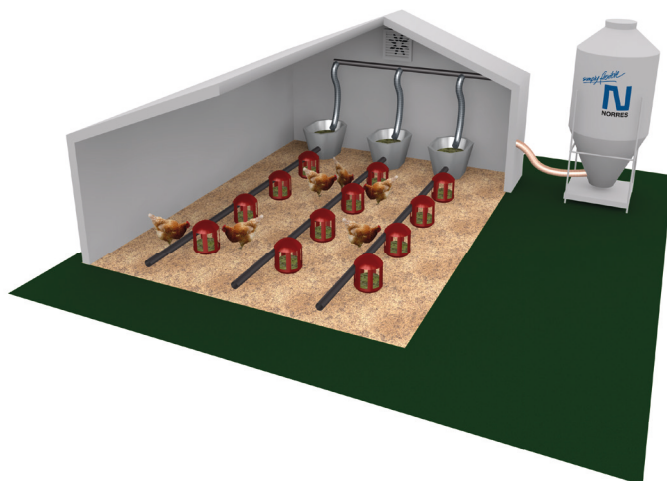
Animal stall, animal shed: Barn ventilation

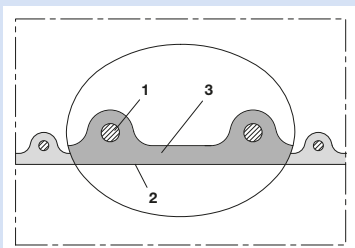
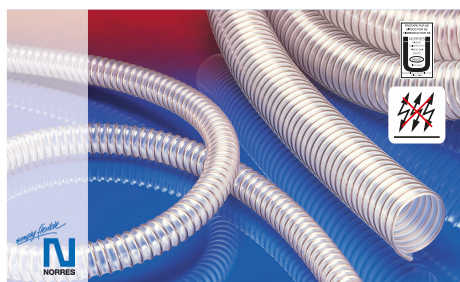
- PROTAPE® PUR 301 AS
- PROTAPE® PUR 330 AS
- PROTAPE® PVC 310
- PROTAPE® PVC 371



Animal stall, animal shed: Feedstuff conveying, feedstuff plant, animal feed transport

- AIRDUC® PUR 351 FOOD
- AIRDUC® PUR 355 FOOD
- NORPLAST® PUR 385 AS
- NORPLAST® PUR 387





Antistatic polyurethane hose, heavy, microbe resistant + flame-retardant

Applications

- flexible hose/ ducting for high throughput of abrasive powder, bulk material, granulate and for gases
- 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
- printed circuit board drilling machine (PCB)
- powder spraying, powder coating: e.g. printing industry
- offset printing machine: air supply, air supply cabinet
- industrial vacuum cleaners, vacuum cleaners
- explosion hazard area
- agricultural industry, conveying of seed and fertilizers: seeding machine, seed drill, drilling machine
- agricultural industry: pneumatic grain conveyor
- construction industry, road milling 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
- municipal vehicle: sweeper, sweeping machine
- municipal vehicle: lawn mower, slope mower, leaf blower/ leaf collector
- vacuum lifting equipment, vacuum handling system

Properties

- heavy duty
- highly abrasion resistant
- increased pressure and vacuum resistance
- microbe resistant
- good resistance to oil, gasoline and chemicals
- very good low temperature flexibility
- flame-retardant according to: UL94-V2
- flame-retardant according to: DIN 4102-B1
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance $<10^9 \Omega$ and in accordance with TRGS 727 $<2,5 * 10^6 \Omega$
- 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 the safety regulations of the German Wood Trade Association
- according to DIN 26057 Type 3
- conforms to RoHS guideline

Temperature Range

- 40°C to 90°C
- short time to 125°C

Design, Material

- AIRDUC® profile hose
- spring steel wire firmly embedded in wall
 - wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)
 - wall thickness 1,4 - 1,5 mm approx.

Delivery variants

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

I.D.	O.D.	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius mm	Weight kg/m	Dimensions in Stock m	Order No.
in / mm	mm						
- / 13	20	5,000 (11,3)	1,000 (1,00)	14	0,140	5 10 15	355-0013-0000
5/8 / 16	23	4,900 (9,35)	1,000 (1,00)	15	0,160	5 10 15	355-0016-0000
- / 18	25	4,405 (8,38)	1,000 (1,00)	16	0,170	5 10 15	355-0018-0000
- / 20	27	4,720 (9,00)	1,000 (1,00)	17	0,230	5 10 15 20	355-0020-0000
- / 22	29	4,330 (8,24)	1,000 (1,00)	18	0,250	5 10 15	355-0022-0000
1 / 25	32	3,855 (7,31)	1,000 (1,00)	20	0,280	5 10 15 20	355-0025-0000
- / 30	40	4,000 (7,59)	1,000 (1,00)	25	0,420	5 10 15	355-0030-0000
1,25 / 32	42	3,770 (7,15)	1,000 (1,00)	26	0,440	5 10 15 20	355-0032-0000
1,36 / 35	45	3,470 (6,56)	1,000 (1,00)	28	0,480	5 10 15	355-0035-0000
1,5 / 38	48	3,215 (6,07)	1,000 (1,00)	29	0,520	5 10 15 20	355-0038-0000
- / 40	50	3,065 (5,78)	1,000 (1,00)	30	0,540	5 10 15 20	355-0040-0000
- / 42	52	2,905 (5,53)	0,910 (1,00)	31	0,560	5 10 15	355-0042-0000
1,75 / 44-45	55	2,745 (5,16)	0,915 (1,00)	33	0,600	5 10 15	355-0045-0000
2 / 50-51	60	2,485 (4,67)	0,825 (1,00)	35	0,660	5 10 15 20 25	355-0050-0000
- / 55	65	2,270 (4,26)	0,750 (1,00)	38	0,720	5 10 15	355-0055-0000
2,36 / 60	70	2,090 (3,91)	0,685 (1,00)	40	0,780	5 10 15 20	355-0060-0000
2,5 / 63-65	75	1,935 (3,62)	0,635 (1,00)	43	0,840	5 10 15 20	355-0065-0000

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



I.D.	O.D.	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm			mm	kg/m	m	
- / 70	81	1,800 (3,37)	0,540 (1,00)	62	0,980	5 10 15	355-0070-0000
3 / 75-76	86	1,685 (3,15)	0,505 (1,00)	66	1,050	5 10 15	355-0075-0000
- / 80	91	1,585 (2,96)	0,475 (1,00)	69	1,110	5 10 15	355-0080-0000
3,5 / 89-90	101	1,415 (2,63)	0,420 (0,88)	76	1,250	5 10 15	355-0090-0000
4 / 100-102	111	1,275 (2,38)	0,390 (0,93)	83	1,490	5 10 15	355-0100-0000
- / 110	121	1,160 (2,16)	0,355 (0,77)	90	1,630	5 10 15	355-0110-0000
4,5 / 114-115	126	1,115 (2,07)	0,340 (0,71)	94	1,680	5 10 15	355-0115-0000
4,72 / 120	131	1,070 (1,99)	0,325 (0,65)	97	1,770	5 10 15	355-0120-0000
5 / 125-127	136	1,025 (1,91)	0,315 (0,60)	101	1,840	5 10 15	355-0125-0000
- / 130	141	0,985 (1,84)	0,300 (0,56)	104	1,910	5 10 15	355-0130-0000
5,5 / 140	151	0,920 (1,71)	0,280 (0,48)	111	2,030	5 10 15	355-0140-0000
6 / 150-152	161	0,860 (1,59)	0,270 (0,53)	118	2,410	5 10 15	355-0150-0000
6,3 / 160	171	0,805 (1,50)	0,255 (0,47)	125	2,560	5 10 15	355-0160-0000
- / 170	181	0,760 (1,41)	0,240 (0,41)	132	2,720	5 10 15	355-0170-0000
- / 175	186	0,735 (1,37)	0,230 (0,39)	136	2,790	5 10 15	355-0175-0000
7 / 178-180	191	0,715 (1,33)	0,225 (0,37)	139	2,870	5 10 15	355-0180-0000
8 / 200-203	213	0,645 (1,20)	0,150 (0,36)	156	3,120	5 10 15	355-0200-0000
- / 225	238	0,575 (1,07)	0,130 (0,28)	174	3,500	5 10	355-0225-0000
- / 250	263	0,520 (0,96)	0,120 (0,22)	191	3,880	5 10 15	355-0250-0000
10 / 254	267	0,510 (0,95)	0,115 (0,21)	194	3,950	5 10 15	355-0254-0000
- / 275	288	0,470 (0,87)	0,110 (0,18)	209	4,255	5 10	355-0275-0000
11 / 280	293	0,465 (0,86)	0,105 (0,17)	212	4,330	5 10	355-0280-0000
- / 300	313	0,435 (0,80)	0,090 (0,20)	226	5,160	5 10	355-0300-0000
12 / 305	318	0,425 (0,79)	0,090 (0,19)	230	5,245	5 10	355-0305-0000
- / 315	328	0,410 (0,76)	0,085 (0,17)	237	5,410	5 10	355-0315-0000
- / 325	338	0,400 (0,74)	0,085 (0,16)	244	5,580	5 10	355-0325-0000
13 / 330	343	0,395 (0,73)	0,080 (0,15)	247	5,670	5 10	355-0330-0000
- / 350	363	0,370 (0,69)	0,075 (0,13)	261	6,000	5 10	355-0350-0000
- / 400	413	0,325 (0,60)	0,070 (0,12)	296	8,020	5 10	355-0400-0000
- / 450	463	0,290 (0,54)	0,065 (0,09)	331	9,000	5 10	355-0450-0000
- / 500	514	0,260 (0,48)	0,055 (0,07)	367	10,000	5 10	355-0500-0000

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/

Accessories



CLAMP 212

CLAMP 216

CLAMP 212 EC

CLAMP 217

CLAMP 213

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. 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



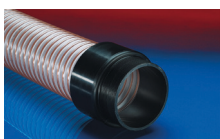
CONNECT MOULD ASSEMBLY 233



CONNECT THREAD FITTING 234



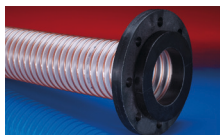
CONNECT 240 + 241



CONNECT 242



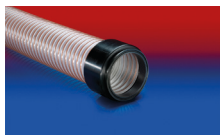
CONNECT 243



CONNECT 244



CONNECT 245 VAC-TRUCK



CONNECT 245



CONNECT 246

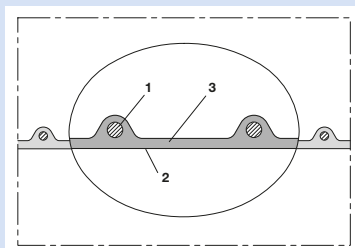
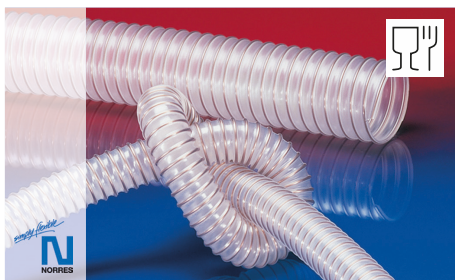


CONNECT 223



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Food hose and pharmaceutical hose, medium-heavy and reinforced

Applications

- flexible hose/ ducting for abrasive powder, bulk material, granulate and for gases
- food industry, pharmaceutical industry: foodstuff, 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
- mixer, dryer, packaging machine, bulk-bag (big bag)-charging and discharging, mill
- industrial vacuum cleaners, vacuum cleaners

Properties

- medium-heavy duty
- highly 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
- odourless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline and chemicals
- very good low temperature flexibility
- flame-retardant according to: UL94-HB
- manufacturing process acc. GMP EC 2023/2006
- conforms to RoHS guideline

Temperature Range

- 40°C to 90°C

- short time to 125°C

Design, Material

- AIRDUC® profile hose
- spring steel wire firmly embedded in wall
 - wall: special premium ether-polyurethane (Pre-PUR®)
 - wall thickness 1,0 mm approx.

Delivery variants

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

I.D.	O.D.	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius mm	Weight kg/m	Dimensions in Stock m	Order No.
in / mm	mm						
1 / 25	32	2,715 (5,85)	0,680 (1,00)	23	0,200	5 10 15 20	351-0025-0000
- / 30	38	2,290 (4,92)	0,470 (1,00)	27	0,260	5 10 15	351-0030-0000
1,25 / 32	40	2,155 (4,63)	0,440 (1,00)	28	0,280	5 10 15 20	351-0032-0000
1,36 / 35	43	1,975 (4,25)	0,405 (1,00)	30	0,300	5 10 15	351-0035-0000
1,5 / 38	46	1,830 (3,93)	0,370 (1,00)	32	0,320	5 10 15 20	351-0038-0000
- / 40	48	1,740 (3,74)	0,355 (1,00)	33	0,340	5 10 15 20	351-0040-0000
1,75 / 44-45	53	1,555 (3,33)	0,315 (1,00)	36	0,380	5 10 15	351-0045-0000
2 / 50-51	58	1,405 (3,01)	0,285 (1,00)	39	0,410	5 10 15 20	351-0050-0000
- / 55	63	1,280 (2,74)	0,255 (0,98)	42	0,450	5 10 15 20	351-0055-0000
2,36 / 60	68	1,175 (2,52)	0,235 (0,82)	45	0,490	5 10 15 20	351-0060-0000
2,5 / 63-65	73	1,090 (2,33)	0,220 (0,70)	48	0,530	5 10 15	351-0065-0000
- / 70	79	1,010 (2,17)	0,150 (0,84)	52	0,590	5 10 15	351-0070-0000
3 / 75-76	84	0,945 (2,03)	0,140 (0,73)	55	0,640	5 10 15 20	351-0075-0000
- / 80	89	0,890 (1,90)	0,130 (0,64)	58	0,680	5 10 15	351-0080-0000
3,5 / 89-90	99	0,790 (1,69)	0,115 (0,51)	64	0,750	5 10 15	351-0090-0000
4 / 100-102	109	0,715 (1,53)	0,110 (0,66)	70	0,970	5 10 15 20	351-0100-0000
- / 110	119	0,650 (1,39)	0,100 (0,54)	76	1,060	5 10 15	351-0110-0000
4,5 / 114-115	124	0,620 (1,33)	0,095 (0,50)	79	1,110	5 10 15	351-0115-0000
4,72 / 120	129	0,595 (1,28)	0,090 (0,45)	82	1,160	5 10 15	351-0120-0000
5 / 125-127	134	0,575 (1,23)	0,090 (0,42)	85	1,200	5 10 15	351-0125-0000
- / 130	139	0,550 (1,18)	0,085 (0,39)	88	1,250	5 10 15	351-0130-0000
5,5 / 140	149	0,510 (1,10)	0,080 (0,33)	94	1,340	5 10 15	351-0140-0000
6 / 150-152	159	0,480 (1,02)	0,065 (0,36)	100	1,520	5 10 15	351-0150-0000
6,3 / 160	169	0,450 (0,96)	0,065 (0,32)	106	1,610	5 10 15	351-0160-0000
- / 170	179	0,425 (0,90)	0,060 (0,28)	110	1,710	5 10 15	351-0170-0000
- / 175	184	0,410 (0,88)	0,060 (0,26)	115	1,760	5 10 15	351-0175-0000

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



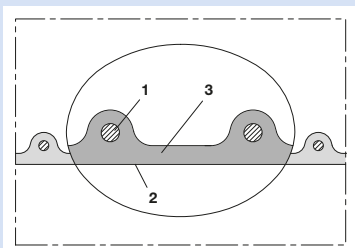
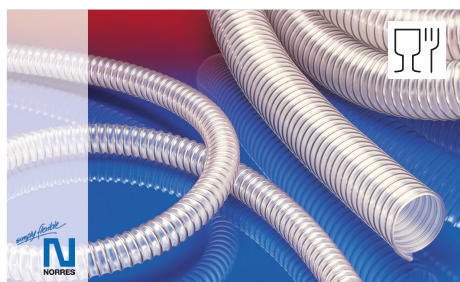
I.D.	O.D.	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm			mm	kg/m	m	
7 / 178-180	189	0,400 (0,85)	0,055 (0,24)	118	1,810	5 10 15	351-0180-0000
8 / 200-203	209	0,360 (0,77)	0,050 (0,19)	130	2,000	5 10 15	351-0200-0000
- / 225	234	0,320 (0,68)	0,040 (0,14)	145	2,160	5 10	351-0225-0000
- / 250	259	0,290 (0,62)	0,035 (0,11)	160	2,390	5 10 15	351-0250-0000
- / 275	284	0,260 (0,56)	0,035 (0,09)	175	2,630	5 10	351-0275-0000
11 / 280	289	0,260 (0,55)	0,030 (0,08)	178	2,670	5 10	351-0280-0000
- / 300	309	0,240 (0,51)	0,030 (0,07)	190	2,860	5 10	351-0300-0000
- / 315	324	0,230 (0,49)	0,030 (0,06)	199	3,000	5 10	351-0315-0000
- / 325	334	0,220 (0,47)	0,030 (0,06)	205	3,100	5 10	351-0325-0000
- / 350	359	0,205 (0,44)	0,025 (0,05)	220	3,330	5 10	351-0350-0000
- / 375	384	0,195 (0,41)	0,025 (0,05)	237	3,900	5 10	351-0375-0000
- / 400	409	0,180 (0,39)	0,025 (0,04)	250	4,270	5 10	351-0400-0000
- / 450	459	0,160 (0,34)	0,020 (0,03)	283	4,800	5 10	351-0450-0000
- / 500	509	0,145 (0,31)	0,020 (0,03)	315	5,330	5 10	351-0500-0000

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Accessories



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Food hose and pharmaceutical hose, heavy

Applications

- flexible hose/ ducting for high throughput of abrasive powder, bulk material, granulate and for gases
- food industry, pharmaceutical industry: foodstuff, 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
- airport, airplane, rail vehicle, train, railway, boat, ship/ vessel, yacht: toilet discharging/ disposal
- industrial vacuum cleaners, vacuum cleaners
- agricultural industry: pneumatic grain conveyer
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport

- paper mill, paper and pulp industry: waste water, air extraction
- industrial washing machine: washing water hose

Properties

- heavy duty
- highly abrasion resistant
- increased pressure and vacuum 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
- odourless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline and chemicals
- very good low temperature flexibility
- flame-retardant according to: UL94-V2
- according to DIN 26057 Type 3

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

Temperature Range

- 40°C to 90°C
- short time to 125°C

Design, Material

AIRDUC® profile hose

- spring steel wire firmly embedded in wall
- wall: special premium ether-polyurethane (Pre-PUR®)
- wall thickness 1,4 - 1,5 mm approx.

Delivery variants

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

I.D.	O.D.	Pressure DIN 26057 (50% Elongation)	Vacuum DIN 26057 (axially fixed)	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
- / 13	20	4,500 (8,59)	1,000 (1,00)	14	0,140	5 10 15	355-0013-1001
5/8 / 16	23	4,410 (7,14)	1,000 (1,00)	15	0,160	5 10 15	355-0016-1001
- / 20	27	4,250 (6,88)	1,000 (1,00)	17	0,230	5 10 15	355-0020-1001
- / 22	29	3,900 (6,31)	0,950 (1,00)	18	0,250	5 10 15	355-0022-1001
1 / 25	32	3,470 (5,61)	0,900 (1,00)	20	0,280	5 10 15	355-0025-1001
- / 30	40	3,600 (5,82)	0,880 (1,00)	25	0,420	5 10 15	355-0030-1001
1,25 / 32	42	3,395 (5,49)	0,875 (1,00)	26	0,440	5 10 15	355-0032-1001
1,36 / 35	45	3,125 (5,05)	0,870 (1,00)	28	0,480	5 10 15	355-0035-1001
1,5 / 38	48	2,895 (4,68)	0,865 (1,00)	29	0,520	5 10 15 20	355-0038-1001
- / 40	50	2,760 (4,46)	0,855 (1,00)	30	0,540	5 10 15	355-0040-1001
1,75 / 44-45	55	2,470 (3,99)	0,845 (1,00)	33	0,600	5 10 15	355-0045-1001
2 / 50-51	60	2,235 (3,61)	0,835 (1,00)	35	0,660	5 10 15	355-0050-1001
- / 55	65	2,045 (3,30)	0,790 (1,00)	38	0,720	5 10 15	355-0055-1001
2,36 / 60	70	1,880 (3,03)	0,730 (1,00)	40	0,780	5 10 15	355-0060-1001
2,5 / 63-65	75	1,740 (2,81)	0,675 (1,00)	43	0,840	5 10 15	355-0065-1001
- / 70	81	1,620 (2,61)	0,605 (1,00)	62	0,980	5 10 15	355-0070-1001
3 / 75-76	86	1,515 (2,45)	0,555 (1,00)	66	1,050	5 10	355-0075-1001
- / 80	91	1,425 (2,30)	0,505 (1,00)	69	1,110	5 10	355-0080-1001
3,5 / 89-90	101	1,270 (2,05)	0,385 (0,89)	76	1,250	5 10 15	355-0090-1001
4 / 100-102	111	1,150 (1,85)	0,355 (0,95)	83	1,490	5 10 15	355-0100-1001
- / 110	121	1,045 (1,69)	0,325 (0,78)	90	1,630	5 10 15	355-0110-1001
4,5 / 114-115	126	1,000 (1,61)	0,300 (0,71)	94	1,680	5 10 15	355-0115-1001
4,72 / 120	131	0,960 (1,55)	0,280 (0,65)	97	1,770	5 10 15	355-0120-1001

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



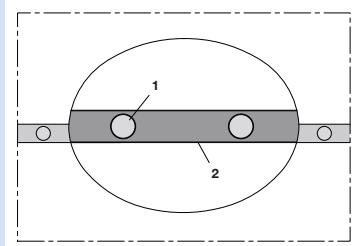
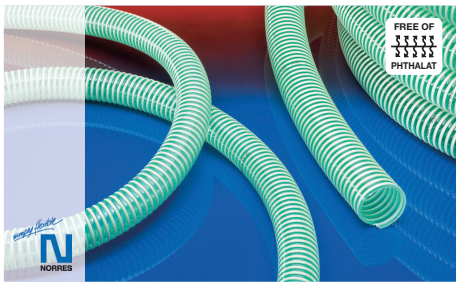
I.D. in / mm	O.D. mm	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius mm	Weight kg/m	Dimensions in Stock m	Order No.
5 / 125-127	136	0,925 (1,49)	0,265 (0,60)	101	1,840	5 10 15	355-0125-1001
- / 130	141	0,890 (1,43)	0,240 (0,56)	104	1,910	5 10 15	355-0130-1001
5,5 / 140	151	0,825 (1,33)	0,215 (0,48)	111	2,030	5 10 15	355-0140-1001
6 / 150-152	161	0,770 (1,24)	0,180 (0,56)	118	2,410	5 10 15	355-0150-1001
6,3 / 160	171	0,725 (1,17)	0,165 (0,49)	125	2,560	5 10 15	355-0160-1001
6,5 / 165	176	0,705 (1,13)	0,160 (0,46)	129	2,640	5 10 15	355-0165-1001
7 / 178-180	191	0,645 (1,04)	0,135 (0,39)	139	2,870	5 10 15	355-0180-1001
8 / 200-203	213	0,580 (0,94)	0,120 (0,35)	156	3,120	5 10	355-0200-1001
- / 250	263	0,465 (0,75)	0,075 (0,21)	191	3,880	5 10	355-0250-1001
- / 300	313	0,390 (0,63)	0,065 (0,19)	226	5,160	5 10	355-0300-1001

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/

Accessories

					
CLAMP 212	CLAMP 216	CLAMP 212 EC	CLAMP 217	CLAMP 213	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
					
CONNECT 223	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. 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
 1. 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	
Standard Version								
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	25 50	-	379-0020-0000
1 / 25	30	5,000	0,600	123,4	0,320	25 50	-	379-0025-0000
- / 30	36	4,500	0,600	147,5	0,370	25 50	-	379-0030-0000
1,25 / 32	38	4,000	0,600	157,1	0,450	25 50	-	379-0032-0000
1,5 / 38	44	4,000	0,600	184,0	0,490	25 50	-	379-0038-0000
- / 40	46	3,000	0,500	193,0	0,630	25 50	-	379-0040-0000
2 / 50-51	58	3,000	0,500	242,4	0,890	25 50	-	379-0050-0000
smaller bending radius , colour: transparent, spiral: grey								
- / 30	36	4,000	0,600	125	0,340	25 50	-	379-0030-4726
1,25 / 32	38	4,000	0,600	130	0,36	25 50	-	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/

Accessories

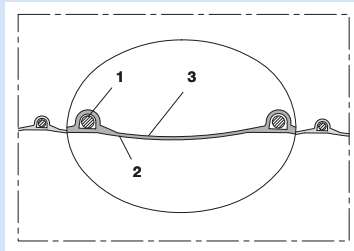
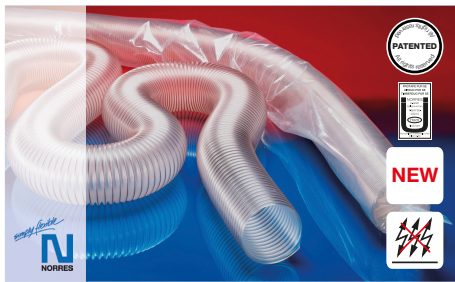


CLAMP 211



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



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

Applications

- flexible hose/ ducting for gases and for abrasive dust, powder, fibres
- extraction unit, dedusting system, filter system, oil mist extraction
- extraction arm
- chemical industry: chemical vapours, vapour 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 <math><10^9 \Omega</math>
- 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°C to 90°C
- short time to 125°C

Design, Material

- patented PROTAPE® tape hose
- spring steel wire integrated in wall
 - wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)
 - wall thickness 0,4 mm approx.

Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- special colours: partially coloured, completely coloured
- 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 DIN 26057 (50% Elongation)	Vacuum DIN 26057 (axially fixed)	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
1,5 / 38	46	0,630 (1,86)	0,245 (0,73)	27	0,220	5 10 15	301-0038-0000
- / 40	48	0,600 (1,77)	0,235 (0,66)	28	0,230	5 10 15	301-0040-0000
1,75 / 44-45	53	0,535 (1,58)	0,210 (0,52)	31	0,255	5 10 15	301-0045-0000
2 / 50-51	58	0,480 (1,42)	0,170 (0,85)	33	0,280	5 10 15	301-0050-0000
2,36 / 60	68	0,405 (1,19)	0,145 (0,59)	38	0,340	5 10 15	301-0060-0000
2,5 / 63-65	73	0,370 (1,09)	0,130 (0,51)	40	0,360	5 10 15	301-0065-0000
- / 70	78	0,345 (1,02)	0,125 (0,44)	43	0,380	5 10 15	301-0070-0000
3 / 75-76	83	0,325 (0,95)	0,115 (0,39)	45	0,410	5 10 15	301-0075-0000
- / 80	88	0,305 (0,89)	0,110 (0,34)	48	0,440	5 10 15	301-0080-0000
3,5 / 89-90	98	0,270 (0,79)	0,095 (0,27)	53	0,490	5 10 15	301-0090-0000
4 / 100-102	108	0,245 (0,71)	0,055 (0,30)	58	0,510	5 10 15	301-0100-0000
- / 110	118	0,220 (0,65)	0,050 (0,25)	63	0,560	5 10 15	301-0110-0000
4,5 / 114-115	123	0,210 (0,62)	0,050 (0,23)	66	0,580	5 10 15	301-0115-0000
4,72 / 120	128	0,205 (0,59)	0,045 (0,21)	68	0,610	5 10 15	301-0120-0000
5 / 125-127	133	0,195 (0,57)	0,045 (0,19)	71	0,630	5 10 15	301-0125-0000
- / 130	138	0,185 (0,55)	0,040 (0,18)	73	0,660	5 10 15	301-0130-0000
5,5 / 140	148	0,175 (0,51)	0,040 (0,15)	78	0,710	5 10 15	301-0140-0000
6 / 150-152	158	0,160 (0,48)	0,035 (0,13)	83	0,760	5 10 15	301-0150-0000
6,3 / 160	168	0,150 (0,45)	0,035 (0,12)	88	0,810	5 10 15	301-0160-0000
6,5 / 165	173	0,150 (0,43)	0,035 (0,11)	91	0,830	5 10 15	301-0165-0000
7 / 178-180	188	0,135 (0,40)	0,030 (0,09)	98	0,900	5 10 15	301-0180-0000
8 / 200-203	208	0,120 (0,36)	0,025 (0,11)	108	1,030	5 10 15	301-0200-0000
- / 225	234	0,110 (0,32)	0,020 (0,08)	122	1,160	5 10	301-0225-0000

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



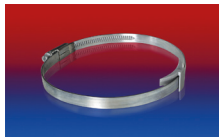
I.D.	O.D.	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius mm	Weight kg/m	Dimensions in Stock m	Order No.
in / mm	mm						
- / 250	259	0,100 (0,29)	0,020 (0,06)	136	1,280	5 10	301-0250-0000
10 / 254	263	0,095 (0,28)	0,020 (0,06)	144	1,300	5 10	301-0254-0000
11 / 280	289	0,085 (0,26)	0,020 (0,05)	149	1,430	5 10	301-0280-0000
- / 300	309	0,080 (0,24)	0,015 (0,04)	159	1,700	5 10	301-0300-0000
12 / 305	315	0,080 (0,23)	0,015 (0,04)	163	1,730	5 10	301-0305-0000
- / 315	325	0,075 (0,23)	0,015 (0,04)	168	1,790	5 10	301-0315-0000
- / 350	360	0,070 (0,20)	0,015 (0,03)	185	2,000	5 10	301-0350-0000
14 / 356	366	0,070 (0,20)	0,015 (0,03)	190	2,100	5 10	301-0356-0000
- / 400	410	0,060 (0,18)	0,015 (0,02)	210	2,260	5 10	301-0400-0000
- / 450	460	0,055 (0,16)	0,010 (0,02)	235	2,520	5 10	301-0450-0000
- / 500	510	0,050 (0,14)	0,010 (0,01)	260	2,780	5 10	301-0500-0000

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/

Accessories



CLAMP 212



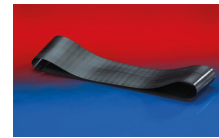
CLAMP 210 BRIDGE
CLAMP



CLAMP 217



CLAMP 213



CONNECT 228

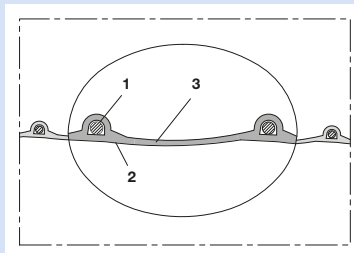
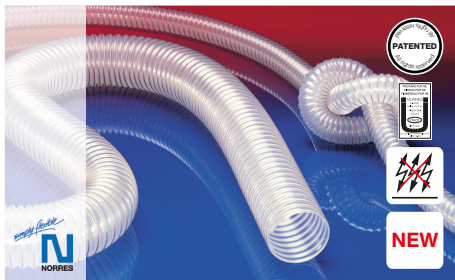


CONNECT 223



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



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

Applications

- flexible hose/ ducting for gases and for abrasive dust, powder, fibres
- printed circuit board drilling machine (PCB)
- extraction unit, dedusting system, filter system, oil mist extraction
- extraction arm
- chemical industry: chemical vapours, vapour 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 e.g. at 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 <math><10^9 \Omega</math>
- 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°C to 90°C
- short time to 125°C

Design, Material

- patented PROTAPE® tape hose
- spring steel wire integrated in wall
 - wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)
 - wall thickness 0,6 mm approx.

Delivery variants

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

I.D.	O.D.	Pressure DIN 26057 (50% Elongation)	Vacuum DIN 26057 (axially fixed)	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
1 / 25	32	1,605 (4,18)	0,540 (1,00)	20	0,15	5 10 15	330-0025-1002
- / 30	37	1,350 (3,50)	0,450 (1,00)	22	0,18	5 10 15	330-0030-1002
1,25 / 32	39	1,265 (3,29)	0,420 (1,00)	23	0,19	5 10 15	330-0032-1002
1,5 / 38	45	1,075 (2,78)	0,355 (0,77)	26	0,22	5 10 15	330-0038-1002
- / 40	47	1,020 (2,64)	0,335 (0,69)	27	0,23	5 10 15	330-0040-1002
2 / 50-51	58	0,820 (2,12)	0,220 (0,87)	33	0,37	5 10 15	330-0050-1002
2,36 / 60	68	0,685 (1,77)	0,180 (0,61)	38	0,43	5 10 15	330-0060-1002
2,5 / 63-65	73	0,635 (1,64)	0,165 (0,52)	41	0,46	5 10 15	330-0065-1002
- / 70	78	0,590 (1,52)	0,155 (0,45)	43	0,5	5 10 15	330-0070-1002
3 / 75-76	83	0,550 (1,42)	0,145 (0,40)	46	0,53	5 10 15	330-0075-1002
- / 80	88	0,515 (1,33)	0,135 (0,35)	48	0,57	5 10 15	330-0080-1002
3,5 / 89-90	98	0,460 (1,19)	0,120 (0,28)	53	0,63	5 10 15	330-0090-1002
4 / 100-102	108	0,415 (1,07)	0,080 (0,31)	58	0,67	5 10 15	330-0100-1002
- / 110	118	0,375 (0,97)	0,070 (0,26)	63	0,73	5 10 15	330-0110-1002
4,5 / 114-115	123	0,360 (0,93)	0,070 (0,24)	66	0,76	5 10 15	330-0115-1002
4,72 / 120	128	0,345 (0,89)	0,065 (0,22)	68	0,79	5 10 15	330-0120-1002
5 / 125-127	133	0,335 (0,86)	0,065 (0,20)	71	0,83	5 10 15	330-0125-1002
- / 130	138	0,320 (0,82)	0,060 (0,19)	73	0,86	5 10 15	330-0130-1002
5,5 / 140	148	0,295 (0,76)	0,055 (0,16)	78	0,92	5 10 15	330-0140-1002
6 / 150-152	158	0,275 (0,71)	0,055 (0,14)	83	0,99	5 10 15	330-0150-1002
6,3 / 160	168	0,260 (0,67)	0,050 (0,12)	88	1,05	5 10 15	330-0160-1002
- / 170	178	0,245 (0,63)	0,045 (0,11)	93	1,11	5 10 15	330-0170-1002
- / 175	183	0,240 (0,61)	0,045 (0,10)	96	1,14	5 10 15	330-0175-1002

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



I.D. in / mm	O.D. mm	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius mm	Weight kg/m	Dimensions in Stock m	Order No.
7 / 178-180	188	0,230 (0,59)	0,045 (0,10)	98	1,17	5 10 15	330-0180-1002
8 / 200-203	208	0,210 (0,54)	0,030 (0,11)	108	1,33	5 10 15	330-0200-1002
- / 225	233	0,185 (0,48)	0,025 (0,09)	121	1,48	5 10	330-0225-1002
- / 250	258	0,165 (0,43)	0,025 (0,07)	133	1,64	5 10	330-0250-1002
10 / 254	262	0,165 (0,42)	0,025 (0,06)	135	1,66	5 10	330-0254-1002
11 / 280	288	0,150 (0,38)	0,020 (0,05)	148	1,83	5 10	330-0280-1002
- / 300	309	0,140 (0,36)	0,020 (0,05)	159	2,14	5 10	330-0300-1002
12 / 305	314	0,135 (0,35)	0,020 (0,05)	162	2,17	5 10	330-0305-1002
- / 315	324	0,135 (0,34)	0,020 (0,05)	167	2,24	5 10	330-0315-1002
- / 350	359	0,120 (0,31)	0,020 (0,04)	184	2,49	5 10	330-0350-1002
14 / 356	365	0,115 (0,30)	0,015 (0,03)	187	2,53	5 10	330-0356-1002
- / 400	409	0,105 (0,27)	0,015 (0,02)	209	2,84	5 10	330-0400-1002
- / 450	459	0,095 (0,24)	0,015 (0,02)	234	3,19	5 10	330-0450-1002
- / 500	510	0,085 (0,21)	0,015 (0,02)	260	4,39	5 10	330-0500-1002

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/

Accessories



CLAMP 212



CLAMP 210 BRIDGE CLAMP



CLAMP 217



CLAMP 213



CONNECT 228

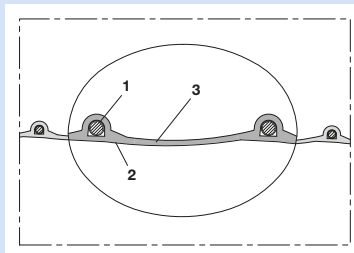


CONNECT 223



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Antistatic polyurethane hose, medium-heavy, microbe resistant + flame-retardant

Applications

- flexible hose/ ducting for high throughput of abrasive powder, bulk material, granulate and for gases
- extraction unit, dedusting system, filter system, oil mist extraction
- compressor, side channel blower, vacuum pump, pressure pump, pump
- municipal vehicle: sweeper, sweeping machine
- municipal vehicle: lawn mower, slope mower, leaf blower/ leaf collector

Properties

- medium-heavy duty
- highly abrasion resistant

- increased pressure and vacuum resistance
- microbe resistant
- good resistance to oil, gasoline and chemicals
- very good low temperature flexibility
- flame-retardant according to: DIN 4102-B1
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance <math><10^9 \Omega</math>
- conforms to RoHS guideline

Temperature Range

- 40°C to 90°C
- short time to 125°C

Design, Material

PROTAPE® tape hose

- spring steel wire integrated in wall; plastic coated spring steel wire
- wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)
- wall thickness 0,9 mm approx.

Delivery variants

- further lengths available on request
- transparent (standard)
- Imprint: <ID> antistatic + microbe resistant + flame retardant <neutral batch no.>

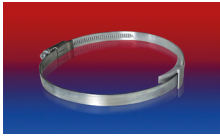
I.D. in / mm	O.D. mm	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius mm	Weight kg/m	Dimensions in Stock m	Order No.
- / 40	48	1,322 (3,92)	1,000 (1,00)	38	0,25	10	333-0040-0007
2 / 50-51	58	1,065 (3,16)	1,000 (1,00)	48	0,31	10	333-0050-0007
2,36 / 60	68	0,890 (2,64)	1,000 (1,00)	58	0,36	10	333-0060-0007
2,5 / 63-65	72	0,825 (2,44)	1,000 (1,00)	63	0,38	10	333-0065-0007
- / 70	78	0,768 (2,27)	1,000 (1,00)	68	0,42	10	333-0070-0007
3 / 75-76	83	0,718 (2,12)	1,000 (1,00)	73	0,44	10	333-0075-0007
- / 80	88	0,674 (1,99)	1,000 (1,00)	78	0,47	10	333-0080-0007
4 / 100-102	109	0,541 (1,60)	0,567 (0,71)	98	0,97	10	333-0100-0007
5 / 125-127	134	0,435 (1,28)	0,454 (0,57)	123	1,19	10	333-0125-0007
5,5 / 140	148	0,389 (1,14)	0,405 (0,50)	138	1,32	10	333-0140-0007
6 / 150-152	159	0,363 (1,07)	0,378 (0,47)	148	1,45	10	333-0150-0007
6,3 / 160	168	0,340 (1,00)	0,354 (0,45)	158	1,50	10	333-0160-0007
7 / 178-180	186	0,303 (0,89)	0,315 (0,40)	178	1,66	10	333-0180-0007
8 / 200-203	210	0,273 (0,80)	0,283 (0,36)	198	1,89	10	333-0200-0007
- / 250	258	0,219 (0,64)	0,236 (0,30)	248	2,32	10	333-0250-0007
- / 300	308	0,182 (0,54)	0,197 (0,25)	298	2,78	10	333-0300-0007

Accessories



CLAMP 212

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



CLAMP 210 BRIDGE
CLAMP



CLAMP 217



CLAMP 213



CONNECT 228

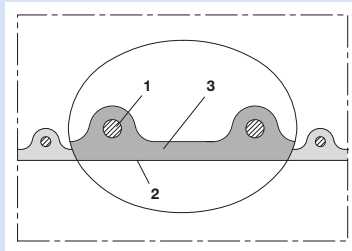
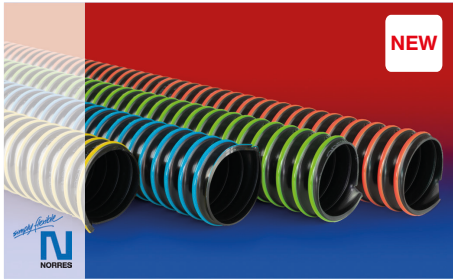


CONNECT 223



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Antistatic polyurethane hose, heavy, microbe resistant

Applications

- flexible hose/ ducting for high throughput of abrasive powder, bulk material, granulate and for gases
- 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
- printed circuit board drilling machine (PCB)
- powder spraying, powder coating: e.g. printing industry
- offset printing machine: air supply, air supply cabinet
- industrial vacuum cleaners, vacuum cleaners
- explosion hazard area
- agricultural industry, conveying of seed and fertilizers: seeding machine, seed drill, drilling machine
- agricultural industry: pneumatic grain conveyer
- construction industry, road milling 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
- municipal vehicle: sweeper, sweeping machine
- municipal vehicle: lawn mower, slope mower, leaf blower/ leaf collector
- vacuum lifting equipment, vacuum handling system

Properties

- heavy duty
- highly abrasion resistant
- increased pressure and vacuum 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 $<2,5 * 10^8 \Omega$
- 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 3
- conforms to RoHS guideline

Temperature Range

- 40°C to 90°C
- short time to 125°C

Design, Material

AIRDUC® profile hose

- spring steel wire firmly embedded in wall
- wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)
- wall thickness 1,4 - 1,5 mm approx.

Delivery variants

- further diameters and lengths available on request
- customer-specific branding
- Available in 5m, 10m and 15m lengths
- Wall black and colored helix: blue, green, red, yellow (standard)
- further colors on request

I.D. in / mm	O.D. mm	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius mm	Weight kg/m	Minimum Quantity m	Order No.
black + green							
1,25 / 32	42	3,770 (7,15)	1,000 (1,00)	26	0,440	150	355-0032-0997
1,5 / 38	48	3,215 (6,07)	1,000 (1,00)	29	0,520	150	355-0038-0997
- / 40	50	3,065 (5,78)	1,000 (1,00)	30	0,540	150	355-0040-0997
2 / 50-51	60	2,485 (4,67)	0,825 (1,00)	35	0,660	150	355-0050-0997
2,36 / 60	70	2,090 (3,91)	0,685 (1,00)	40	0,780	150	355-0060-0997
2,5 / 63-65	75	1,935 (3,62)	0,635 (1,00)	43	0,840	150	355-0065-0997
- / 70	81	1,800 (3,37)	0,540 (1,00)	62	0,980	150	355-0070-0997
3 / 75-76	86	1,685 (3,15)	0,505 (1,00)	66	1,050	100	355-0075-0997
- / 80	91	1,585 (2,96)	0,475 (1,00)	69	1,110	100	355-0080-0997
- / 85	96	1,545 (2,85)	0,465 (0,95)	73	1,205	100	355-0085-0997
4 / 100-102	111	1,275 (2,38)	0,390 (0,93)	83	1,490	100	355-0100-0997
5 / 125-127	136	1,025 (1,91)	0,315 (0,60)	101	1,840	100	355-0125-0997
5,5 / 140	151	0,920 (1,71)	0,280 (0,48)	111	2,030	80	355-0140-0997
6 / 150-152	161	0,860 (1,59)	0,270 (0,53)	118	2,410	80	355-0150-0997
6,3 / 160	171	0,805 (1,50)	0,255 (0,47)	125	2,560	80	355-0160-0997
8 / 200-203	213	0,645 (1,20)	0,150 (0,36)	156	3,120	60	355-0200-0997

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



I.D.	O.D.	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius mm	Weight kg/m	Minimum Quantity m	Order No.
in / mm	mm						
black + yellow							
1,25 / 32	42	3,770 (7,15)	1,000 (1,00)	26	0,440	150	355-0032-0998
1,5 / 38	48	3,215 (6,07)	1,000 (1,00)	29	0,520	150	355-0038-0998
- / 40	50	3,065 (5,78)	1,000 (1,00)	30	0,540	150	355-0040-0998
2 / 50-51	60	2,485 (4,67)	0,825 (1,00)	35	0,660	150	355-0050-0998
2,36 / 60	70	2,090 (3,91)	0,685 (1,00)	40	0,780	150	355-0060-0998
2,5 / 63-65	75	1,935 (3,62)	0,635 (1,00)	43	0,840	150	355-0065-0998
- / 70	81	1,800 (3,37)	0,540 (1,00)	62	0,980	150	355-0070-0998
3 / 75-76	86	1,685 (3,15)	0,505 (1,00)	66	1,050	100	355-0075-0998
- / 80	91	1,585 (2,96)	0,475 (1,00)	69	1,110	100	355-0080-0998
- / 85	96	1,545 (2,85)	0,465 (0,95)	73	1,205	100	355-0085-0998
4 / 100-102	111	1,275 (2,38)	0,390 (0,93)	83	1,490	100	355-0100-0998
5 / 125-127	136	1,025 (1,91)	0,315 (0,60)	101	1,840	100	355-0125-0998
5,5 / 140	151	0,920 (1,71)	0,280 (0,48)	111	2,030	80	355-0140-0998
6 / 150-152	161	0,860 (1,59)	0,270 (0,53)	118	2,410	80	355-0150-0998
6,3 / 160	171	0,805 (1,50)	0,255 (0,47)	125	2,560	80	355-0160-0998
8 / 200-203	213	0,645 (1,20)	0,150 (0,36)	156	3,120	60	355-0200-0998
black + red							
1,25 / 32	42	3,770 (7,15)	1,000 (1,00)	26	0,440	150	355-0032-0999
1,5 / 38	48	3,215 (6,07)	1,000 (1,00)	29	0,520	150	355-0038-0999
- / 40	50	3,065 (5,78)	1,000 (1,00)	30	0,540	150	355-0040-0999
2 / 50-51	60	2,485 (4,67)	0,825 (1,00)	35	0,660	150	355-0050-0999
2,36 / 60	70	2,090 (3,91)	0,685 (1,00)	40	0,780	150	355-0060-0999
2,5 / 63-65	75	1,935 (3,62)	0,635 (1,00)	43	0,840	150	355-0065-0999
- / 70	81	1,800 (3,37)	0,540 (1,00)	62	0,980	150	355-0070-0999
3 / 75-76	86	1,685 (3,15)	0,505 (1,00)	66	1,050	100	355-0075-0999
- / 80	91	1,585 (2,96)	0,475 (1,00)	69	1,110	100	355-0080-0999
- / 85	96	1,545 (2,85)	0,465 (0,95)	73	1,205	100	355-0085-0999
4 / 100-102	111	1,275 (2,38)	0,390 (0,93)	83	1,490	100	355-0100-0999
5 / 125-127	136	1,025 (1,91)	0,315 (0,60)	101	1,840	100	355-0125-0999
5,5 / 140	151	0,920 (1,71)	0,280 (0,48)	111	2,030	80	355-0140-0999
6 / 150-152	161	0,860 (1,59)	0,270 (0,53)	118	2,410	80	355-0150-0999
6,3 / 160	171	0,805 (1,50)	0,255 (0,47)	125	2,560	80	355-0160-0999
8 / 200-203	213	0,645 (1,20)	0,150 (0,36)	156	3,120	60	355-0200-0999
black + blue							
1,25 / 32	42	3,770 (7,15)	1,000 (1,00)	26	0,440	150	355-0032-0996
1,5 / 38	48	3,215 (6,07)	1,000 (1,00)	29	0,520	150	355-0038-0996
- / 40	50	3,065 (5,78)	1,000 (1,00)	30	0,540	150	355-0040-0996
2 / 50-51	60	2,485 (4,67)	0,825 (1,00)	35	0,660	150	355-0050-0996
2,36 / 60	70	2,090 (3,91)	0,685 (1,00)	40	0,780	150	355-0060-0996
2,5 / 63-65	75	1,935 (3,62)	0,635 (1,00)	43	0,840	150	355-0065-0996
- / 70	81	1,800 (3,37)	0,540 (1,00)	62	0,980	150	355-0070-0996
3 / 75-76	86	1,685 (3,15)	0,505 (1,00)	66	1,050	100	355-0075-0996
- / 80	91	1,585 (2,96)	0,475 (1,00)	69	1,110	100	355-0080-0996
- / 85	96	1,545 (2,85)	0,465 (0,95)	73	1,205	100	355-0085-0996
4 / 100-102	111	1,275 (2,38)	0,390 (0,93)	83	1,490	100	355-0100-0996
5 / 125-127	136	1,025 (1,91)	0,315 (0,60)	101	1,840	100	355-0125-0996
5,5 / 140	151	0,920 (1,71)	0,280 (0,48)	111	2,030	80	355-0140-0996
6 / 150-152	161	0,860 (1,59)	0,270 (0,53)	118	2,410	80	355-0150-0996

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



I.D. in / mm	O.D. mm	Pressure DIN 26057 (50% Elongation) bar	Vacuum DIN 26057 (axially fixed) bar	Bending Radius mm	Weight kg/m	Minimum Quantity m	Order No.
6,3 / 160	171	0,805 (1,50)	0,255 (0,47)	125	2,560	80	355-0160-0996
8 / 200-203	213	0,645 (1,20)	0,150 (0,36)	156	3,120	60	355-0200-0996

Accessories



CLAMP 212



CLAMP 216



CLAMP 212 EC



CLAMP 217



CLAMP 213



CONNECT 228



CONNECT SAFETY
CLAMP ASSEMBLY
231



CONNECT PRESS
ASSEMBLY 232



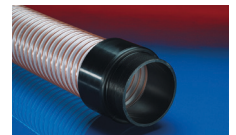
CONNECT MOULD
ASSEMBLY 233



CONNECT THREAD
FITTING 234



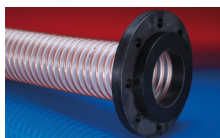
CONNECT 240 + 241



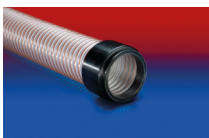
CONNECT 242



CONNECT 243



CONNECT 244



CONNECT 245



CONNECT 245 VAC-
TRUCK



CONNECT 246

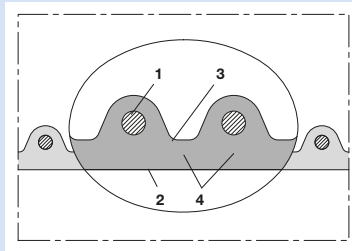


CONNECT 223



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



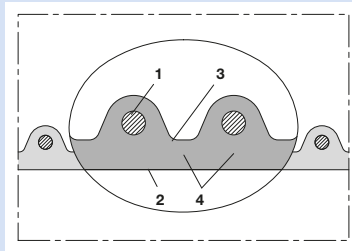
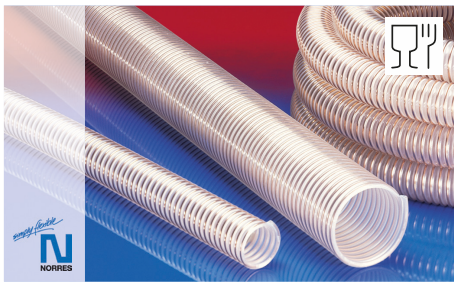
I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
4,72 / 120	133	1,660	0,930	330	2,690	10 15	356-0120-0000
- / 125	138	1,595	0,895	336	2,800	10 15 20	356-0125-0000
5 / 127	140	1,565	0,890	336	2,840	10 15	356-0127-0000
- / 130	143	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/

Accessories



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Food hose and pharmaceutical hose, super-heavy

Applications

- hose/ ducting for high throughput of extremely abrasive bulk material, granulate and stone
- food industry, pharmaceutical industry: foodstuff, 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 conveyer
- 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
- odourless 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°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 ether-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)
- 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	4,900	1,000	90	0,680	5 10 15	356-0032-1001
1,5 / 38	49	4,190	1,000	104	0,790	5 10 15	356-0038-1001
- / 40	51	3,995	1,000	109	0,820	5 10 15	356-0040-1001
- / 50	61	3,245	1,000	134	1,000	5 10 15	356-0050-1001
2 / 51	62	3,155	1,000	134	1,020	5 10 15	356-0051-1001
2,36 / 60	71	2,735	1,000	156	1,180	5 10 15	356-0060-1001
2,5 / 63	74	2,635	1,000	163	1,230	5 10 15	356-0063-1001
- / 65	76	2,535	1,000	169	1,270	5 10 15	356-0065-1001
- / 70	82	2,360	1,000	186	1,370	5 10 15	356-0070-1001
- / 75	87	2,210	1,000	195	1,460	5 10 15	356-0075-1001
3 / 76	88	2,205	1,000	195	1,480	5 10 15	356-0076-1001
- / 80	92	2,075	1,000	205	1,550	5 10 15	356-0080-1001
- / 100	113	1,855	1,000	272	2,270	5 10 15	356-0100-1001
4 / 102	115	1,70	1,000	272	2,310	5 10 15	356-0102-1001
- / 125	138	1,495	0,835	336	2,800	5 10 15	356-0125-1001
5 / 127	140	1,370	0,825	336	2,840	5 10 15	356-0127-1001
- / 150	163	1,250	0,695	435	3,680	5 10 15	356-0150-1001
6 / 152	165	1,210	0,685	435	3,720	5 10 15	356-0152-1001

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/

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Accessories



CLAMP 216



CLAMP 211



CONNECT 228



CONNECT SAFETY
CLAMP ASSEMBLY
231



CONNECT PRESS
ASSEMBLY 232



CONNECT MOULD
ASSEMBLY 233



CONNECT THREAD
FITTING 234



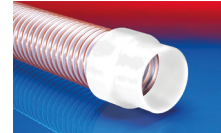
CONNECT TRI-CLAMP
FITTING 245



CONNECT DAIRY
FITTING 247



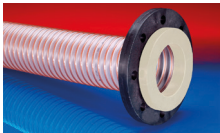
CONNECT ASEPTIC
FITTING 249



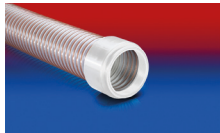
CONNECT 240 + 241
FOOD



CONNECT 243 FOOD
FOOD



CONNECT 244 FOOD

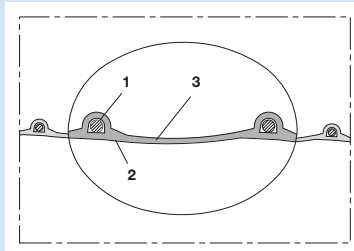


CONNECT 245 FOOD



CONNECT 246 FOOD

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



PVC hose, light

Applications

- flexible hose/ ducting for gases and for dust, powder, fibres
- extraction unit, dedusting system, filter system, oil mist extraction
- galvanic extraction
- chemical industry: chemical vapours, vapour return hose at loading arm, paint steam, spray mist extraction
- X-ray machine: cable protection conduit (special type on request)
- heating hose: exterior hose as protection hose

Properties

- light weight

- highly flexible + compressible 3:1
- good resistance to alkalis and acids
- good resistance to chemicals
- phthalate-free
- flame-retardant according to: UL94-HB
- conforms to RoHS guideline

Temperature Range

- 20°C to 70°C
- short time to 80°C

Design, Material

- patented PROTAPE® tape hose
- spring steel wire integrated in wall
 - wall: high grade soft PVC

3. wall thickness 0,6 mm approx.

Delivery variants

- further diameters and lengths available on request
- grey (standard)
- special colours: transparent, full coloured
- customer-specific branding
- ID >= 2"/50-51 mm compressed packed in poly bag (low transportation cost / risk, minimum storage size), ID < 2"/50-51 mm not compressed, wrapped in a coil

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	
- / 30	37	0,930	0,200	22	0,240	5 10 15	310-0030-0000
1,25 / 32	39	0,875	0,200	23	0,260	5 10 15	310-0032-0000
1,5 / 38	45	0,740	0,185	26	0,300	5 10 15	310-0038-0000
- / 40	47	0,705	0,180	27	0,320	5 10 15	310-0040-0000
2 / 50-51	58	0,410	0,155	33	0,310	5 10 15	310-0050-0000
- / 55	63	0,370	0,140	36	0,330	5 10 15	310-0055-0000
2,36 / 60	68	0,340	0,120	38	0,360	5 10 15	310-0060-0000
2,5 / 63-65	73	0,315	0,105	41	0,390	5 10 15	310-0065-0000
- / 70	78	0,295	0,090	43	0,420	5 10 15	310-0070-0000
3 / 75-76	83	0,275	0,085	46	0,450	5 10 15	310-0075-0000
- / 80	88	0,255	0,075	48	0,470	5 10 15	310-0080-0000
3,5 / 89-90	98	0,230	0,065	53	0,530	5 10 15	310-0090-0000
4 / 100-102	108	0,205	0,050	58	0,570	5 10 15	310-0100-0000
- / 110	118	0,185	0,045	63	0,620	5 10 15	310-0110-0000
4,5 / 114-115	123	0,180	0,045	66	0,650	5 10 15	310-0115-0000
4,72 / 120	128	0,170	0,045	68	0,680	5 10 15	310-0120-0000
5 / 125-127	133	0,165	0,035	71	0,710	5 10 15	310-0125-0000
- / 130	138	0,160	0,035	73	0,730	5 10 15	310-0130-0000
5,5 / 140	148	0,145	0,035	78	0,790	5 10 15	310-0140-0000
6 / 150-152	158	0,135	0,035	83	0,840	5 10 15	310-0150-0000
6,3 / 160	168	0,130	0,030	88	0,870	5 10 15	310-0160-0000
7 / 178-180	188	0,115	0,025	98	1,000	5 10 15	310-0180-0000
8 / 200-203	208	0,105	0,025	108	1,110	5 10	310-0200-0000
- / 225	233	0,090	0,015	121	1,250	5 10	310-0225-0000
- / 250	258	0,085	0,010	133	1,390	5 10	310-0250-0000
- / 300	309	0,070	0,010	159	1,950	5 10	310-0300-0000

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. Additional technical data at www.norres.com. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.

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/

Accessories



CLAMP 212



CLAMP 210 BRIDGE
CLAMP



CLAMP 217



CLAMP 213



CONNECT 228

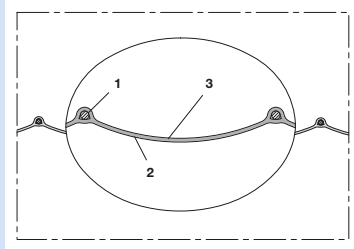


CONNECT 223



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



PVC ducting, (to +110°C)

Applications

- flexible hose/ ducting for gases
- welding fume extraction
- extraction arm
- animal stall, animal shed: barn ventilation
- construction industry: tunnel ventilation
- bus, utility vehicle, caravan/ trailer, mobile home/ camper/ RV, boat, ship/ vessel/ marine, yacht: ventilation, heating
- asbestos removal
- construction drying
- tent heating, airport gangway heating, heaters for construction sites
- clean room ventilation, semiconductor production machine

- heating system/ heater: fresh air supply

Properties

- fabric reinforced
- super-light weight
- highly flexible + compressible 6:1
- good resistance to alkalis and acids
- good resistance to chemicals
- flame-retardant wall according to: NF P 92-503 M2
- conforms to RoHS guideline

Temperature Range

- 10°C to 80°C
- short time to 110°C

Design, Material

PROTAPE® tape hose

- spring steel wire integrated in wall
- fabric-reinforced tape; wall: PVC coated fabric
- wall thickness 0,25 mm approx.

Delivery variants

- further diameters and lengths available on request
- grey (standard), black, white
- customer-specific branding
- compressed packed in poly bag (low transportation cost / risk, minimum storage size)

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	
Colour grey								
- / 40	43	0,300	0,170	23	0,100	6 10	-	371-0040-0000
2 / 50-51	54	0,240	0,145	29	0,120	6 10	-	371-0051-0000
2,36 / 60	63	0,200	0,110	33	0,140	6 10	-	371-0060-0000
3 / 75-76	79	0,160	0,080	41	0,180	6 10	-	371-0076-0000
- / 80	83	0,150	0,080	43	0,190	6 10	-	371-0080-0000
3,5 / 89-90	93	0,135	0,070	48	0,200	6 10	-	371-0090-0000
4 / 100-102	105	0,120	0,050	54	0,240	6 10	-	371-0102-0000
- / 110	113	0,110	0,045	58	0,270	6 10	-	371-0110-0000
5 / 125-127	130	0,095	0,035	67	0,320	6 10	-	371-0127-0000
5,5 / 140	143	0,085	0,035	73	0,350	6 10	-	371-0140-0000
6 / 150-152	155	0,080	0,035	79	0,370	6 10	-	371-0152-0000
6,3 / 160	163	0,075	0,020	83	0,440	6 10	-	371-0160-0000
7 / 178-180	183	0,065	0,020	93	0,540	6 10	-	371-0180-0000
8 / 200-203	206	0,060	0,020	105	0,600	6 10	-	371-0203-0000
10 / 254	258	0,045	0,015	131	0,790	6 10	-	371-0254-0000
12 / 305	309	0,040	0,010	157	0,950	6 10	-	371-0305-0000
14 / 356	360	0,035	0,010	182	1,110	6 10	-	371-0356-0000
16 / 405-406	410	0,030	0,005	207	1,280	6 10	-	371-0406-0000
20 / 508	514	0,025	0,005	260	1,560	6 10	-	371-0508-0000
Colour black								
1,5 / 38	41	0,315	0,175	22	0,095	-	7,5 15	371-0038-0001
- / 40	43	0,300	0,170	23	0,100	-	7,5 15	371-0040-0001
2 / 50-51	54	0,240	0,145	29	0,120	-	7,5 15	371-0051-0001
2,36 / 60	63	0,200	0,110	33	0,140	-	7,5 15	371-0060-0001
2,5 / 63-65	68	0,185	0,105	36	0,155	-	7,5 15	371-0065-0001

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. 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	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
3 / 75-76	79	0,160	0,080	41	0,180	-	7,5 15	371-0076-0001
- / 80	83	0,150	0,080	43	0,190	-	7,5 15	371-0080-0001
3,5 / 89-90	93	0,135	0,070	48	0,200	-	7,5 15	371-0090-0001
4 / 100-102	105	0,120	0,050	54	0,240	-	7,5 15	371-0102-0001
- / 110	113	0,110	0,045	58	0,270	-	7,5 15	371-0110-0001
4,5 / 114-115	118	0,105	0,040	61	0,285	-	7,5 15	371-0115-0001
5 / 125-127	130	0,095	0,035	67	0,320	-	7,5 15	371-0127-0001
5,5 / 140	143	0,085	0,035	73	0,350	-	7,5 15	371-0140-0001
6 / 150-152	155	0,080	0,035	79	0,370	-	7,5 15	371-0152-0001
6,3 / 160	163	0,075	0,020	83	0,440	-	7,5 15	371-0160-0001
6,5 / 165	168	0,075	0,020	86	0,465	-	7,5 15	371-0165-0001
7 / 178-180	183	0,065	0,020	93	0,540	-	7,5 15	371-0180-0001
8 / 200-203	206	0,060	0,020	105	0,600	-	7,5 15	371-0203-0001
- / 250	254	0,050	0,015	129	0,775	-	7,5 15	371-0250-0001
10 / 254	258	0,045	0,015	131	0,790	-	7,5 15	371-0254-0001
- / 300	304	0,040	0,010	154	0,935	-	7,5 15	371-0300-0001
12 / 305	309	0,040	0,010	157	0,950	-	7,5 15	371-0305-0001
- / 350	354	0,035	0,010	179	1,090	-	7,5	371-0350-0001
14 / 356	360	0,035	0,010	182	1,110	-	7,5	371-0356-0001
- / 400	404	0,030	0,010	204	1,260	-	7,5	371-0400-0001
16 / 405-406	410	0,030	0,005	207	1,280	-	7,5	371-0406-0001
- / 500	506	0,025	0,005	256	1,540	-	7,5	371-0500-0001
20 / 508	514	0,025	0,005	260	1,560	-	7,5	371-0508-0001
Colour white								
1,5 / 38	41	0,315	0,175	22	0,095	-	7,5 15	371-0038-0010
- / 40	43	0,300	0,170	23	0,100	-	7,5 15	371-0040-0010
2 / 50-51	54	0,240	0,145	29	0,120	-	7,5 15	371-0051-0010
2,36 / 60	63	0,200	0,110	33	0,140	-	7,5 15	371-0060-0010
2,5 / 63-65	68	0,185	0,105	36	0,155	-	7,5 15	371-0065-0010
3 / 75-76	79	0,160	0,080	41	0,180	-	7,5 15	371-0076-0010
- / 80	83	0,150	0,080	43	0,190	-	7,5 15	371-0080-0010
3,5 / 89-90	93	0,135	0,070	48	0,200	-	7,5 15	371-0090-0010
4 / 100-102	105	0,120	0,050	54	0,240	-	7,5 15	371-0102-0010
- / 110	113	0,110	0,045	58	0,270	-	7,5 15	371-0110-0010
4,5 / 114-115	118	0,105	0,040	61	0,285	-	7,5 15	371-0115-0010
5 / 125-127	130	0,095	0,035	67	0,320	-	7,5 15	371-0127-0010
5,5 / 140	143	0,085	0,035	73	0,350	-	7,5 15	371-0140-0010
6 / 150-152	155	0,080	0,035	79	0,370	-	7,5 15	371-0152-0010
6,3 / 160	163	0,075	0,020	83	0,440	-	7,5 15	371-0160-0010
6,5 / 165	168	0,075	0,020	86	0,465	-	7,5 15	371-0165-0010
7 / 178-180	183	0,065	0,020	93	0,540	-	7,5 15	371-0180-0010
8 / 200-203	206	0,060	0,020	105	0,600	-	7,5 15	371-0203-0010
- / 250	254	0,050	0,015	129	0,775	-	7,5 15	371-0250-0010
10 / 254	258	0,045	0,015	131	0,790	-	7,5 15	371-0254-0010
- / 300	304	0,040	0,010	154	0,935	-	7,5 15	371-0300-0010
12 / 305	309	0,040	0,010	157	0,950	-	7,5 15	371-0305-0010
- / 350	354	0,035	0,010	179	1,090	-	7,5	371-0350-0010
14 / 356	360	0,035	0,010	182	1,110	-	7,5	371-0356-0010
- / 400	404	0,030	0,010	204	1,260	-	7,5	371-0400-0010

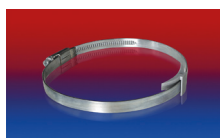
Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at www.norres.com. The right to make technical modifications is reserved. All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



I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Dimensions in Stock	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
16 / 405-406	410	0,030	0,005	207	1,280	-	7,5	371-0406-0010
- / 500	506	0,025	0,005	256	1,540	-	7,5	371-0500-0010
20 / 508	514	0,025	0,005	260	1,560	-	7,5	371-0508-0010

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/

Accessories



CLAMP 210 BRIDGE CLAMP



CLAMP 208



CONNECT 228

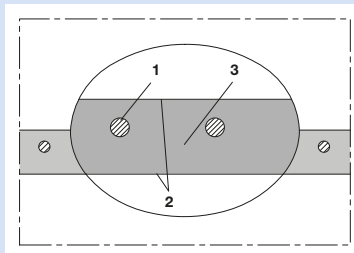
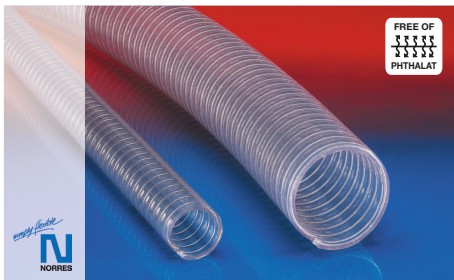


CONNECT 223



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



PVC hose, heavy, smooth interior and exterior, vacuum-proof

Applications

- hose/ ducting for liquids and for 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
- airport, airplane, rail vehicle, train, railway, boat, ship/ vessel, yacht: toilet discharging/ disposal
- agricultural industry: irrigation, fertilizers, insecticides
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport
- construction industry: lowering groundwater
- caravan/ trailer, mobile home/ camper/ RV, boat, ship/ vessel, yachts: sanitary installation, water supply

- compressor, side channel blower, vacuum pump, pressure pump, pump
- paper mill, paper and pulp industry: waste water, air extraction
- industrial washing machine: washing water hose
- vacuum lifting equipment, vacuum handling system

Properties

- heavy duty
- very high pressure, vacuum and compression resistance
- Food grade wall, complies with: EU-Directive 10/2011 and EC 1935/2004 and the latest EU-Directive 2015/174, according to FDA 21 CFR, according to FDA 21 CFR, 177.1210
- 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

- -20°C to 70°C
- short time to 80°C

Design, Material

BARDUC® design

1. spring steel wire spiral embedded in wall
2. smooth interior and exterior; wall: high grade soft PVC
3. wall thickness 3 to 8 mm approx., depending on diameter

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	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
- / 10	16	7,000	0,850	25	0,150	30 60	-	381-0010-0000
- / 12	18	6,000	0,850	30	0,210	30 60	-	381-0012-0000
- / 13	19	6,000	0,850	32	0,225	30 60	-	381-0013-0000
- / 14	20	6,000	0,850	33	0,250	30 60	-	381-0014-0000
5/8 / 16	22	6,000	0,850	37	0,265	30 60	-	381-0016-0000
- / 18	25	5,000	0,850	39	0,290	30 60	-	381-0018-0000
3/4 / 19	26	5,000	0,850	41	0,310	30 60	-	381-0019-0000
- / 20	27	5,000	0,850	45	0,320	30 60	-	381-0020-0000
- / 22	29	5,000	0,850	49	0,350	30 60	-	381-0022-0000
1 / 25	32	5,000	0,850	73	0,490	30 60	-	381-0025-0000
- / 30	37	4,000	0,850	75	0,575	30 60	-	381-0030-0000
1,25 / 32	40	4,000	0,850	79	0,695	30 60	-	381-0032-0000
1,36 / 35	43	4,000	0,850	83	0,750	30 60	-	381-0035-0000
1,5 / 38	46	4,000	0,850	91	0,810	15 30	-	381-0038-0000
- / 40	49	4,000	0,850	100	0,945	15 30	-	381-0040-0000
- / 42	51	4,000	0,800	104	0,970	15 30	-	381-0042-0000
1,75 / 44-45	54	4,000	0,800	118	1,105	15 30	-	381-0045-0000
- / 48	57	4,000	0,800	126	1,250	-	15 30	381-0048-0000
2 / 50-51	59	4,000	0,800	135	1,140	15 30	-	381-0050-0000
2,36 / 60	70	3,600	0,800	170	1,680	15 30	-	381-0060-0000

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. 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	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
2,5 / 63-65	76	3,600	0,800	228	1,795	15 30	-	381-0065-0000
- / 70	81	3,600	0,700	245	2,095	15 30	-	381-0070-0000
3 / 75-76	88	3,600	0,700	262	2,250	15 30	-	381-0076-0000
- / 80	93	3,600	0,700	275	2,540	10 20	-	381-0080-0000
3,5 / 89-90	103	3,600	0,700	315	2,840	10 20	-	381-0090-0000
4 / 100-102	115	3,600	0,700	413	3,350	10 20	-	381-0102-0000

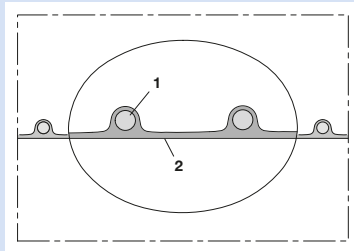
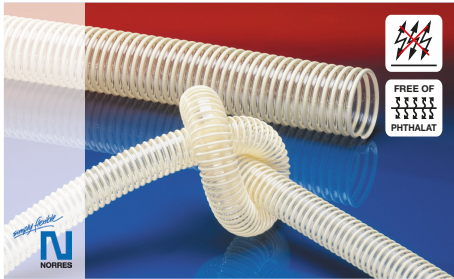
Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.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

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Antistatic polyurethane hose, light, microbe resistant

Applications

- flexible hose/ ducting for abrasive powder, bulk material, granulate and for gases
- welding mask: breathing air respirator, breathing hose (flexible type, black)
- textile industry, fiber extraction: spinning machine, knitting machine, weaving loom machine
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport
- construction industry: insulation-blowing system
- surface preparation: shot blasting/ sand blasting recovery e.g. at blasting chamber, ship yard, stripping machine, flooring preparation machine, grinding machine
- X-ray machine: cable protection conduit (special type on request)
- magnetic resonance scanner, MRI : cable protection conduit, air supply hose (special type on request)

- medical equipment/ medical technology, health-care sector: cable protection conduit, air supply hose, extraction hose
- municipal vehicle: sweeper, sweeping machine
- municipal vehicle: lawn mower, slope mower, leaf blower/ leaf collector
- scrubber, floor cleaning machine

Properties

- light weight
- abrasion-resistant
- microbe resistant
- good resistance to chemicals
- phthalate-free
- permanently antistatic wall: in accordance with ISO 8031 electrical and surface resistance <math><10^9 \Omega</math>
- conforms to RoHS guideline

Temperature Range

- 20°C to 70°C
- short time to 80°C

Design, Material

- NORPLAST® full plastic hose
- hard plastic spiral integrated in wall; spiral: rigid PVC
 - smooth interior; wall: permanently antistatic premium ester-polyurethane (Pre-PUR®)

Delivery variants

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

I.D. in / mm	O.D. mm	Over- pressure bar	Under- pressure bar	Bending Radius mm	Weight kg/m	Dimensions in Stock m	Further Production Lengths m	Order No.
Standard Version								
- / 20	26	1,000	0,250	15,0	0,100	10 20	-	385-0020-0000
1 / 25	31	1,000	0,250	17,5	0,130	10 20	-	385-0025-0000
- / 30	36	0,900	0,250	20,0	0,140	10 20	-	385-0030-0000
1,25 / 32	38	0,850	0,200	19,0	0,160	10 20	-	385-0032-0000
1,36 / 35	41	0,800	0,200	27,5	0,170	10 20	-	385-0035-0000
1,5 / 38	45	0,750	0,200	31,0	0,200	10 20	-	385-0038-0000
- / 40	47	0,750	0,200	40,0	0,210	10 20	-	385-0040-0000
1,75 / 44-45	52	0,650	0,200	42,5	0,250	10 20	-	385-0045-0000
2 / 50-51	58	0,500	0,200	45,0	0,290	10 20	-	385-0050-0000
2,36 / 60	68	0,500	0,160	50,0	0,430	10 20	-	385-0060-0000
2,5 / 63-65	71	0,450	0,160	48,5	0,460	10 20	-	385-0063-0000
- / 70	79	0,400	0,160	60,0	0,500	10 20	-	385-0070-0000
3 / 75-76	84	0,375	0,160	65,0	0,555	10 20	-	385-0075-0000
- / 80	89	0,350	0,160	70,0	0,590	10 20	-	385-0080-0000
3,5 / 89-90	100	0,300	0,140	80,0	0,670	10 20	-	385-0090-0000
4 / 100-102	110	0,280	0,130	90,0	0,750	10 20	-	385-0100-0000
- / 110	121	0,250	0,120	95,0	0,900	-	20	385-0110-0000
4,72 / 120	131	0,250	0,100	100,0	1,000	-	20	385-0120-0000
5 / 125-127	136	0,250	0,100	107,5	1,100	10 20	-	385-0125-0000
- / 130	141	0,200	0,090	105,0	1,200	-	20	385-0130-0000

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. 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	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
5,5 / 140	152	0,200	0,090	110,0	1,300	-	20	385-0140-0000
6 / 150-152	162	0,180	0,080	125,0	1,500	10 20	-	385-0150-0000
flexible type, black (none antistatic / none flame-retardant)								
- / 40	47	0,750	0,200	40,0	0,210	15	-	385-0040-1029
2 / 50-51	58	0,500	0,200	45,0	0,290	15	-	385-0050-1029

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/

Accessories



CLAMP 208



CONNECT 228

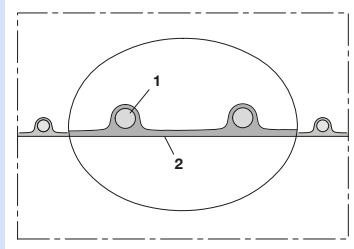
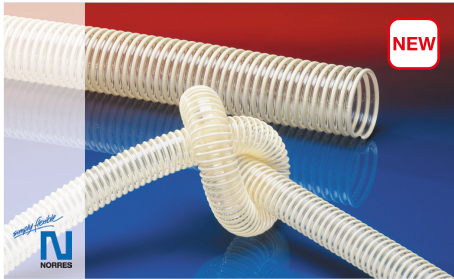


CONNECT 223



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Food hose and pharmaceutical hose, light

Applications

- flexible hose/ ducting for abrasive powder, bulk material, granulate and for gases
- food industry, pharmaceutical industry: foodstuff, 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
- animal stall, animal shed: feedstuff conveying, feedstuff plant, animal feed transport
- X-ray machine: cable protection conduit (special type on request)

- medical equipment/ medical technology, health-care sector: cable protection conduit, air supply hose, extraction hose

Properties

- light weight
- abrasion-resistant
- Food grade wall, complies with: EU-Directive 10/2011 and EC 1935/2004 and the latest EU-Directive 2015/174
- food grade wall, complies with: FDA 21 CFR 177.2600
- odourless and tasteless
- microbe and hydrolysis resistant
- good resistance to oil, gasoline and chemicals
- phthalate-free
- manufacturing process acc. GMP EC 2023/2006
- conforms to RoHS guideline

Temperature Range

- 20°C to 70°C
- short time to 80°C

Design, Material

- NORPLAST® full plastic hose
- hard plastic spiral integrated in wall; spiral: rigid PVC
 - smooth interior; wall: special premium ether-polyurethane (Pre-PUR®)

Delivery variants

- further diameters and lengths available on request
- 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	
- / 20	26	1,000	0,250	15,0	0,100	10 20	-	385-0020-1001
1 / 25	31	1,000	0,250	17,5	0,130	10 20	-	385-0025-1001
- / 30	36	0,900	0,250	20,0	0,140	10 20	-	385-0030-1001
1,25 / 32	38	0,850	0,200	19,0	0,160	10 20	-	385-0032-1001
1,36 / 35	41	0,800	0,200	27,5	0,170	10 20	-	385-0035-1001
- / 38	45	0,750	0,200	31,0	0,200	10 20	-	385-0038-1001
- / 40	47	0,750	0,200	40,0	0,210	10 20	-	385-0040-1001
1,75 / 44-45	52	0,650	0,200	42,5	0,250	10 20	-	385-0045-1001
2 / 50-51	58	0,500	0,200	45,0	0,290	10 20	-	385-0050-1001
2,36 / 60	68	0,500	0,160	50,0	0,430	10 20	-	385-0060-1001
2,5 / 63-65	71	0,450	0,160	48,5	0,460	10 20	-	385-0063-1001
- / 70	79	0,400	0,160	60,0	0,500	10 20	-	385-0070-1001
3 / 75-76	84	0,375	0,160	65,0	0,555	10 20	-	385-0075-1001
- / 80	89	0,350	0,160	70,0	0,590	10 20	-	385-0080-1001
3,5 / 89-90	100	0,300	0,140	80,0	0,670	10 20	-	385-0090-1001
4 / 100-102	110	0,280	0,130	90,0	0,750	10 20	-	385-0100-1001
- / 110	121	0,250	0,120	95,0	0,900	-	20	385-0110-1001
4,72 / 120	131	0,250	0,100	100,0	1,000	-	20	385-0120-1001
5 / 125-127	136	0,250	0,100	107,5	1,100	-	20	385-0125-1001
- / 130	141	0,200	0,090	105,0	1,200	-	20	385-0130-1001
5,5 / 140	152	0,200	0,090	110,0	1,300	-	20	385-0140-1001
6 / 150-152	162	0,180	0,080	125,0	1,500	-	20	385-0150-1001

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/

Accessories



CLAMP 208



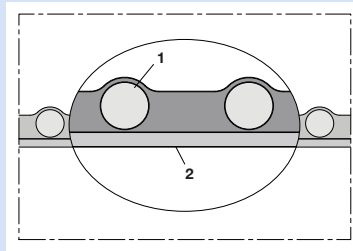
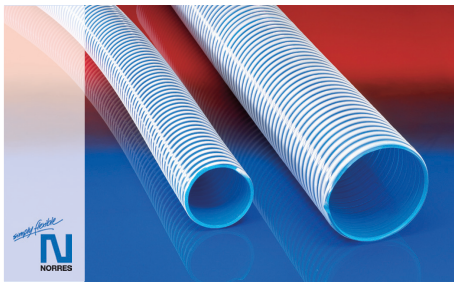
CONNECT 228



CONNECT 223



CONNECT 270-271



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. in / mm	O.D. mm	Over- pressure bar	Under- pressure bar	Bending Radius mm	Weight kg/m	Dimensions in Stock m	Order No.
standard type, inliner blue							
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
flexible type, inliner yellow							
5 / 125-127	145	3,000	0,900	1036,5	4,200	13,5 30	387-0127-6007
smooth exterior type, inliner red							
5 / 125-127	145	3,000	0,900	1036,5	4,200	13,5 30	387-0127-6008

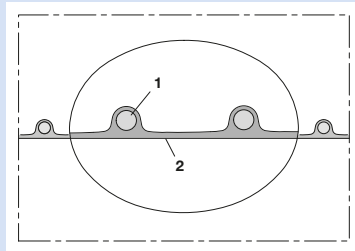
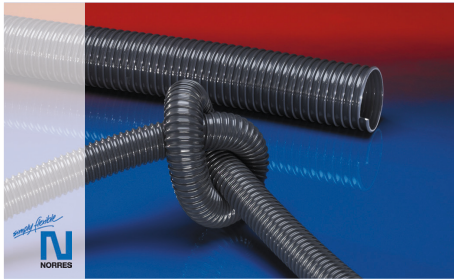
Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.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

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



PVC hose, light

Applications

- flexible hose/ ducting for gases and for dust, powder, fibres
- galvanic extraction
- agricultural industry: irrigation, fertilizers, insecticides
- caravan/ trailer, mobile home/ camper/ RV, boat, ship/ vessel, yachts: sanitary installation, water supply
- X-ray machine: cable protection conduit (special type on request)
- magnetic resonance scanner, MRI : cable protection conduit, air supply hose (special type on request)
- medical equipment/ medical technology, health-care sector: cable protection conduit, air supply hose, extraction hose

- scrubber, floor cleaning machine
- vacuum lifting equipment, vacuum handling system

Properties

- light weight
- good resistance to alkalis and acids
- good resistance to chemicals
- flame-retardant according to: UL94-V2
- conforms to RoHS guideline

Temperature Range

- 5°C to 60°C

Design, Material

NORPLAST® full plastic hose
 1. hard plastic spiral integrated in wall; spiral: rigid PVC
 2. smooth interior; wall: 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	
- / 20	26	1,000	0,250	15,0	0,120	-	25 50	383-0020-0000
1 / 25	31	1,000	0,250	17,5	0,160	25 50	-	383-0025-0000
- / 30	36	0,900	0,250	20,0	0,200	25 50	-	383-0030-0000
1,25 / 32	38	0,850	0,200	19,0	0,210	25 50	-	383-0032-0000
1,36 / 35	41	0,800	0,200	17,5	0,230	25 50	-	383-0035-0000
1,5 / 38	45	0,750	0,200	26,0	0,260	25 50	-	383-0038-0000
- / 40	47	0,750	0,200	30,0	0,280	25 50	-	383-0040-0000
1,75 / 44-45	52	0,650	0,200	32,5	0,350	25 50	-	383-0045-0000
2 / 50-51	58	0,500	0,200	35,0	0,430	25 50	-	383-0050-0000
2,36 / 60	68	0,500	0,160	40,0	0,500	25 50	-	383-0060-0000
2,5 / 63-65	71	0,450	0,160	38,5	0,520	25 50	-	383-0063-0000
- / 70	78	0,400	0,150	55,0	0,580	25 50	-	383-0070-0000
3 / 75-76	85	0,400	0,150	62,0	0,640	25 50	-	383-0076-0000
- / 80	89	0,350	0,150	70,0	0,750	25 50	-	383-0080-0000
3,5 / 89-90	100	0,300	0,140	80,0	0,850	15 30	-	383-0090-0000
4 / 100-102	110	0,280	0,130	90,0	0,970	15 30	-	383-0100-0000
- / 110	121	0,250	0,120	95,0	1,100	-	15 30	383-0110-0000
4,72 / 120	131	0,250	0,100	100,0	1,200	-	15 30	383-0120-0000
5 / 125-127	136	0,250	0,100	107,5	1,250	15 30	-	383-0125-0000
- / 130	141	0,200	0,090	105,0	1,300	-	15 30	383-0130-0000
5,5 / 140	152	0,200	0,090	105,0	1,450	-	15 30	383-0140-0000
6 / 150-152	162	0,180	0,080	105,0	1,600	15	-	383-0150-0000

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/

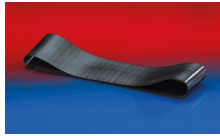
Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at www.norres.com. The right to make technical modifications is reserved. All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



Accessories



CLAMP 208



CONNECT 228

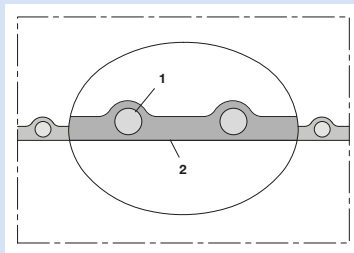
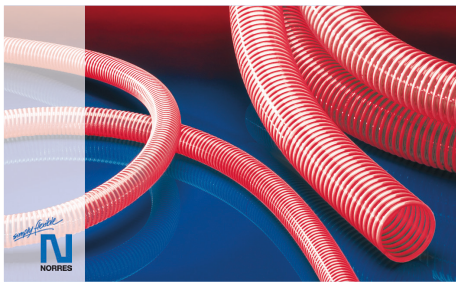


CONNECT 223



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



PVC hose, food hose and pharmaceutical hose, heavy

Applications

- hose/ ducting for liquids and for powder, bulk material, granulate and for gases
- food industry, pharmaceutical industry: foodstuff, 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

- -5°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 and exterior; wall: high grade soft PVC

Delivery variants

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

I.D.	O.D.	Over-pressure	Under-pressure	Bending Radius	Weight	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	
- / 20	26	5,000	0,700	105,8	0,250	25 50	384-0020-1001
1 / 25	31	5,000	0,700	128,8	0,300	25 50	384-0025-1001
- / 30	36	5,000	0,700	151,8	0,360	25 50	384-0030-1001
1,25 / 32	39	5,000	0,700	163,3	0,390	25 50	384-0032-1001
1,36 / 35	42	5,000	0,700	177,1	0,440	25 50	384-0035-1001
1,5 / 38	45	5,000	0,700	190,9	0,520	25 50	384-0038-1001
- / 40	48	5,000	0,700	202,4	0,550	25 50	384-0040-1001
1,75 / 44-45	53	5,000	0,700	225,4	0,670	25 50	384-0045-1001
2 / 50-51	60	5,000	0,700	253,0	0,800	25 50	384-0051-1001
2,36 / 60	69	5,000	0,700	296,7	0,970	25 50	384-0060-1001
2,5 / 63-65	72	5,000	0,700	310,5	1,040	25 50	384-0063-1001
- / 70	80	5,000	0,700	345,0	1,200	25 50	384-0070-1001
3 / 75-76	86	5,000	0,700	349,6	1,380	25 50	384-0076-1001
- / 80	91	4,000	0,700	393,3	1,550	25 50	384-0080-1001
3,5 / 89-90	102	4,000	0,700	441,6	1,850	25 50	384-0090-1001
4 / 100-102	114	4,000	0,700	496,8	2,200	25 50	384-0102-1001
- / 110	123	4,000	0,700	535,9	2,550	30	384-0110-1001
4,72 / 120	133	3,000	0,550	581,9	2,800	30	384-0120-1001
5 / 125-127	138	3,000	0,550	604,9	3,000	30	384-0125-1001
6 / 150-152	165	3,000	0,500	719,9	4,300	20	384-0150-1001

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/

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.

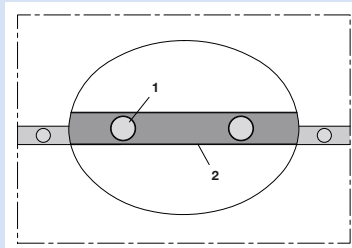
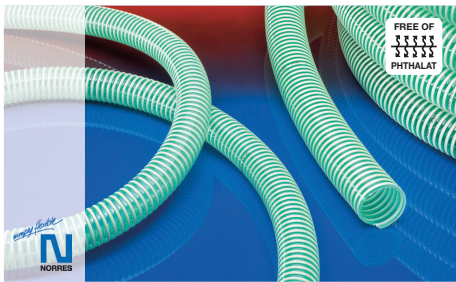
Accessories



CLAMP 211



CONNECT 270-271



PVC hose, heavy

Applications

- flexible hose/ ducting for liquids and for powder, bulk material, granulate and for gases
- airport, airplane, rail vehicle, train, railway, boat, ship/ vessel, yacht: toilet discharging/ disposal
- agricultural industry: irrigation, fertilizers, insecticides
- caravan/ trailer, mobile home/ camper/ RV, boat, ship/ vessel, yachts: sanitary installation, water supply

- good resistance to alkalis and acids
- good resistance to chemicals
- phthalate-free
- conforms to RoHS guideline

Temperature Range

- -5°C to 60°C

Design, Material

NORPLAST® full plastic hose
 1. hard plastic spiral integrated in wall; spiral: rigid PVC
 2. smooth interior; wall: soft PVC

Delivery variants

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

Properties

- heavy duty

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	
3/4 / 19	24	5,000	0,600	98,9	0,205	-	25 50	380-0019-0000
- / 20	25	5,000	0,600	103,5	0,210	25 50	-	380-0020-0000
1 / 25	30	5,000	0,600	126,5	0,270	25 50	-	380-0025-0000
- / 30	35	5,000	0,600	149,5	0,330	25 50	-	380-0030-0000
1,25 / 32	38	5,000	0,600	161,0	0,420	25 50	-	380-0032-0000
1,36 / 35	41	5,000	0,600	174,8	0,440	25 50	-	380-0035-0000
1,5 / 38	44	5,000	0,600	188,6	0,470	25 50	-	380-0038-0000
- / 40	46	5,000	0,600	197,8	0,510	25 50	-	380-0040-0000
1,75 / 44-45	52	5,000	0,600	223,1	0,580	25 50	-	380-0045-0000
2 / 50-51	58	5,000	0,600	248,4	0,700	25 50	-	380-0050-0000
- / 55	63	4,500	0,600	271,4	0,750	-	25 50	380-0055-0000
2,36 / 60	68	4,500	0,600	294,4	0,850	25 50	-	380-0060-0000
2,5 / 63-65	71	4,500	0,600	308,2	0,900	25 50	-	380-0063-0000
- / 70	78	4,000	0,600	340,4	1,050	25 50	-	380-0070-0000
3 / 75-76	85	4,000	0,600	370,3	1,150	25 50	-	380-0076-0000
- / 80	89	3,500	0,500	388,7	1,350	25 50	-	380-0080-0000
3,5 / 89-90	100	3,500	0,500	437,0	1,600	30	-	380-0090-0000
4 / 100-102	111	3,000	0,500	485,3	1,900	30	-	380-0100-0000

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/

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Accessories

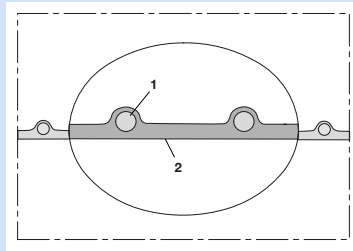


CLAMP 211



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



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

Applications

- hose/ ducting for liquids and for powder, bulk material, granulate and for gases
- agricultural industry: irrigation, fertilizers, insecticides
- vacuum lifting equipment, vacuum handling system

Properties

- medium-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

1. hard plastic spiral integrated in wall; spiral: 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	
- / 20	27	1,000	0,500	30,0	0,190	25	-	388-0020-0000
1 / 25	31	1,000	0,500	32,5	0,230	25 50	-	388-0025-0000
- / 30	36	1,000	0,500	40,0	0,280	-	25 50	388-0030-0000
1,25 / 32	38	1,000	0,500	44,0	0,300	25 50	-	388-0032-0000
1,36 / 35	41	1,000	0,500	47,5	0,340	-	25 50	388-0035-0000
1,5 / 38	45	1,000	0,500	51,0	0,390	25 50	-	388-0038-0000
- / 40	47	0,800	0,500	50,0	0,420	25 50	-	388-0040-0000
1,75 / 44-45	52	0,750	0,500	57,5	0,510	-	25 50	388-0045-0000
2 / 50-51	58	0,700	0,400	60,0	0,620	25 50	-	388-0050-0000
2,36 / 60	68	0,650	0,400	70,0	0,740	25 50	-	388-0060-0000
2,5 / 63-65	71	0,650	0,350	73,5	0,780	25 50	-	388-0063-0000
- / 70	79	0,500	0,350	85,0	0,890	-	25 50	388-0070-0000
3 / 75-76	85	0,400	0,350	92,0	1,010	25 50	-	388-0076-0000
- / 80	90	0,350	0,350	95,0	1,150	25 50	-	388-0080-0000
3,5 / 89-90	101	0,300	0,300	105,0	1,350	-	25	388-0090-0000
4 / 100-102	114	0,280	0,300	119,0	1,590	25	-	388-0102-0000
- / 110	122	0,250	0,300	130,0	1,830	-	25	388-0110-0000
4,72 / 120	132	0,200	0,300	140,0	2,000	-	25	388-0120-0000
5 / 125-127	139	0,200	0,250	146,5	2,130	25	-	388-0127-0000
6 / 150-152	164	0,180	0,250	174,0	2,950	25	-	388-0152-0000

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/

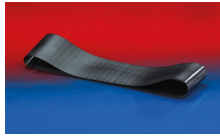
Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured through the inside of the hose arch. Additional technical data at www.norres.com. The right to make technical modifications is reserved. All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



Accessories



CLAMP 208



CONNECT 228

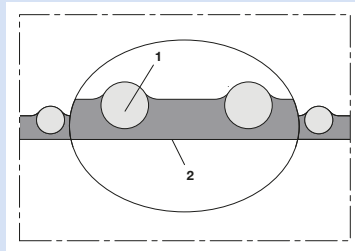
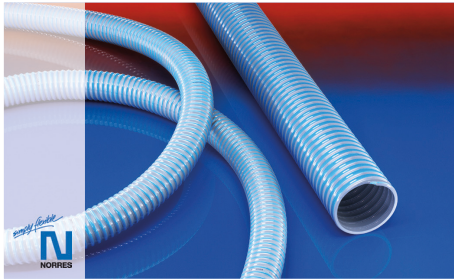


CONNECT 223



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. 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	25 50	-	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	10 30	-	389-0090-1012
4 / 100-102	116	1,500	0,850	294,0	2,700	10 30	-	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/

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Accessories

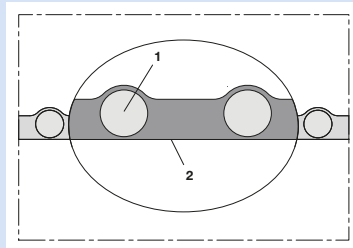


CLAMP 211



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. 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	25 50	-	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	10 30	-	389-0090-0000
4 / 100-102	116	1,500	0,850	294,0	2,700	10 30	-	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/

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Accessories

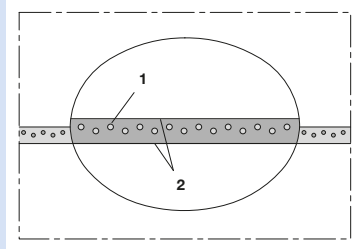


CLAMP 211



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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



Abrasion resistant polyurethane hose/
tubing for industrial robots, fabric reinforced
high pressure hose

Applications

- flexible hose/ ducting for liquids and for gases and for abrasive solids
- injection moulding tool cooling, cooling water supply
- agricultural industry: high pressure spraying hose e.g. for pesticides
- compressed air hose, cooling water hose, water hose
- fabric reinforced hose/ braided hose
- industrial robot, robotic, welding equipment, welding robot, welding gun: welding spot resistant hose, hose for dresspack for media as water and air
- heating hose: interior hose for media transfer

Properties

- fabric reinforced
- highly flexible
- highly abrasion resistant
- crush resistant
- good resistance to oil, gasoline and chemicals
- conforms to RoHS guideline

Temperature Range

- 35°C to 80°C

Design, Material

NORFLEX® design

1. fabric reinforced wall
2. smooth interior and exterior; wall: special premium polyurethane (Pre-PUR®)

Delivery variants

- further diameters and lengths available on request
- transparent (standard)
- grey (standard)
- black (standard)
- blue (standard)
- red (standard)
- yellow (standard)
- green (standard)
- special colours: full coloured
- customer-specific branding

I.D.	O.D.	Over-pressure	min. Burst Pressure	Bending Radius	Weight	Dimensions in Stock	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
Colour transparent								
1/4 / 6,4	12,7	20,000	80	22	0,128	-	50	441-9064-0005
3/8 / 9,4	16,0	20,000	80	55	0,153	-	50	441-9094-0005
1/2 / 12,8	19,5	20,000	80	69	0,230	-	50	441-9128-0005
5/8 / 16	24,5	20,000	75	117	0,308	-	50	441-9160-0005
3/4 / 19,5	28,5	20,000	50	140	0,411	-	50	441-9190-0005
Colour blue								
1/4 / 6,4	12,7	20,000	80	22	0,128	-	50	441-9064-0400
3/8 / 9,4	16,0	20,000	80	55	0,153	50	-	441-9094-0400
1/2 / 12,8	19,5	20,000	80	69	0,230	50	-	441-9128-0400
5/8 / 16	24,5	20,000	75	117	0,308	-	50	441-9160-0400
3/4 / 19,5	28,5	20,000	50	140	0,411	50	-	441-9190-0400
Colour grey								
1/4 / 6,4	12,7	20,000	80	22	0,128	-	50	441-9064-0401
3/8 / 9,4	16,0	20,000	80	55	0,153	-	50	441-9094-0401
1/2 / 12,8	19,5	20,000	80	69	0,230	-	50	441-9128-0401
5/8 / 16	24,5	20,000	75	117	0,308	-	50	441-9160-0401
3/4 / 19,5	28,5	20,000	50	140	0,411	-	50	441-9190-0401
Colour black								
1/4 / 6,4	12,7	20,000	80	22	0,128	-	50	441-9064-0402
3/8 / 9,4	16,0	20,000	80	55	0,153	50	-	441-9094-0402
1/2 / 12,8	19,5	20,000	80	69	0,230	50	-	441-9128-0402
5/8 / 16	24,5	20,000	75	117	0,308	-	50	441-9160-0402
3/4 / 19,5	28,5	20,000	50	140	0,411	-	50	441-9190-0402

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



I.D.	O.D.	Over-pressure	min. Burst Pressure	Bending Radius	Weight	Dimensions in Stock	Further Production Lengths	Order No.
in / mm	mm	bar	bar	mm	kg/m	m	m	
Colour red								
1/4 / 6,4	12,7	20,000	80	22	0,128	-	50	441-9064-0403
3/8 / 9,4	16,0	20,000	80	55	0,153	50	-	441-9094-0403
1/2 / 12,8	19,5	20,000	80	69	0,230	50	-	441-9128-0403
5/8 / 16	24,5	20,000	75	117	0,308	-	50	441-9160-0403
3/4 / 19,5	28,5	20,000	50	140	0,411	50	-	441-9190-0403
Colour green								
1/4 / 6,4	12,7	20,000	80	22	0,128	-	50	441-9064-0404
3/8 / 9,4	16,0	20,000	80	55	0,153	50	-	441-9094-0404
1/2 / 12,8	19,5	20,000	80	69	0,230	50	-	441-9128-0404
5/8 / 16	24,5	20,000	75	117	0,308	-	50	441-9160-0404
3/4 / 19,5	28,5	20,000	50	140	0,411	50	-	441-9190-0404
Colour yellow								
1/4 / 6,4	12,7	20,000	80	22	0,128	-	50	441-9064-0405
3/8 / 9,4	16,0	20,000	80	55	0,153	-	50	441-9094-0405
1/2 / 12,8	19,5	20,000	80	69	0,230	-	50	441-9128-0405
5/8 / 16	24,5	20,000	75	117	0,308	-	50	441-9160-0405
3/4 / 19,5	28,5	20,000	50	140	0,411	-	50	441-9190-0405

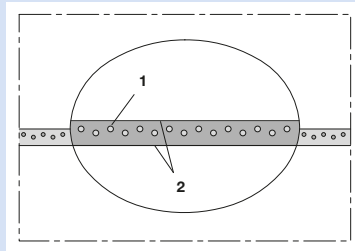
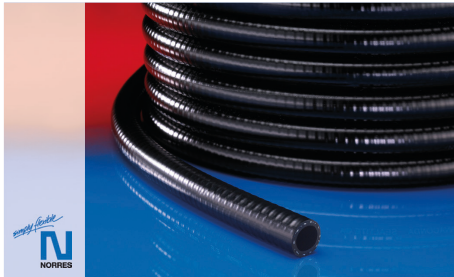
I.D. tolerance: < 13 mm +0,15 / -0,15 mm; > 13 mm +0,2 / -0,2 mm; O.D. tolerance: < 19,5 mm: +0,25 / -0,25 mm; > 19,5 mm: +0,25 / -0,25 mm; Overpressure and underpressure are recommended threshold operating values, products can be subjected to higher loads upon request. The bending radius is measured 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/

Accessories



CLAMP 208

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. The right to make technical modifications is reserved. All values determined at 20°C and are approx. data.



PVC hose/ tubing, fabric reinforced high pressure hose

Applications

- flexible hose/ ducting for liquids and for gases
- injection moulding tool cooling, cooling water supply
- agricultural industry: irrigation, fertilizers, insecticides
- agricultural industry: high pressure spraying hose e.g. for pesticides
- industrial washing machine: washing water hose
- compressed air hose, cooling water hose, water hose
- fabric reinforced hose/ braided hose
- industrial robot, robotic, welding equipment, welding robot, welding gun: welding spot resistant

hose, hose for dresspack for media as water and air

- heating hose: interior hose for media transfer

Properties

- fabric reinforced
- highly flexible
- crush resistant
- good resistance to alkalis and acids
- good resistance to chemicals
- conforms to RoHS guideline

Temperature Range

- 20°C to 60°C

Design, Material

NORFLEX® design

1. fabric reinforced wall
2. wall interior and exterior smooth; wall: soft PVC

Delivery variants

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

I.D.	O.D.	Over-pressure	Bending Radius	Weight	Production Lengths	Order No.
in / mm	mm	bar	mm	kg/m	m	
5/16 / 8	14	20	26	0,135	50	440-9080-0500
3/8 / 10	16	18	45	0,159	50	440-9100-0500
1/2 / 12,7	19	16	60	0,210	50	440-9127-0500
5/8 / 16	24	14	92	0,327	50	440-9160-0500
3/4 / 19	27	12	116	0,376	50	440-9190-0500
1 / 25	34	10	138	0,542	50	440-9250-0500
1 1/4 / 32	42	8	234	0,755	50	440-9320-0500

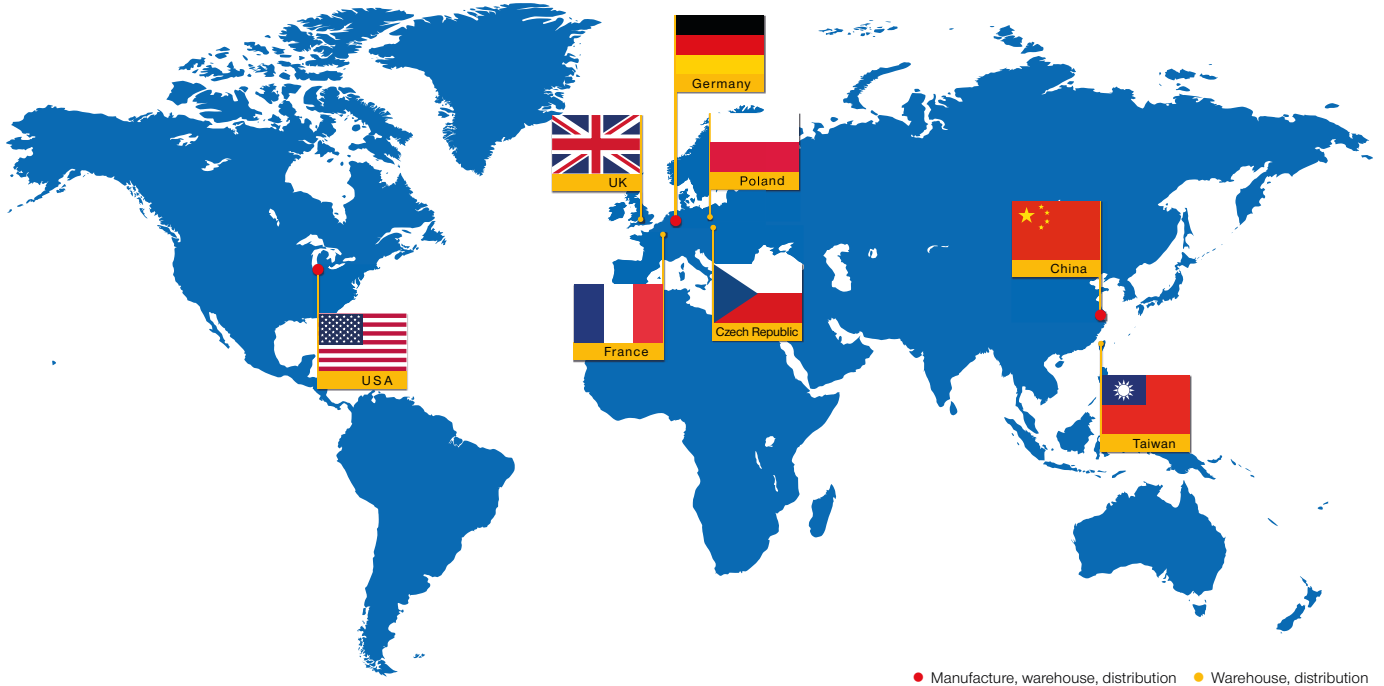
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