

PA 11 SPIRALER

PA 11 SPRIALS

Materiale:

- Polyamid 11 ST (PA03)
- Polyamid 11 HA (PA02)
- Polyamid 11 SF (PA05)

Material:

- Polyamide 11 ST (PA03)
- Polyamide 11 HA (PA02)
- Polyamide 11 SF (PA05)

Karakteristik:

Høj kvalitets pneumatisk spiral slange med særdeles gode mekaniske, termiske og kemiske egenskaber.

Characteristics:

High quality pneumatic spiral hose with particular good mechanical, thermal and chemical properties.

| | PA 11 ST | PA 11 HA | PA 11 SF | | PA 11 ST | PA 11 HA | PA 11 SF |
|--------------------------|------------------|------------------|-----------------|---------------------------|-----------------|-----------------|----------------|
| Kemisk bestand.: | God | God | God | Chemical resistance: | Good | Good | Good |
| Tryk bestandighed: | Særdeles god | Fremragende | God | Pressure resistance: | Very good | Excellent | Good |
| UV- og vejrbestandighed: | Fremragende | Fremragende | Fremragende | UV- & weather resistance: | Excellent | Excellent | Excellent |
| Service temperatur: | -40°C til +100°C | -40°C til +100°C | -40°C til +60°C | Working temp.: | -40°C to +100°C | -40°C to +100°C | -40°C to +60°C |
| Flammebestandighed: | HB (UL 94) | V2 (UL 94) | HB (UL 94) | Flame resistance: | HB (UL 94) | V2 (UL 94) | HB (UL 94) |
| Overfladehårdhed: | Shore D 63 | Shore D 72 | Shore D 53 | Surface hardness: | Shore D 63 | Shore D 72 | Shore D 53 |
| Elasticitetsmodul: | 350 MPa | 1.000 MPa | 190 MPa | Flexural modulus: | 350 MPa | 1.000 MPa | 190 MPa |
| Vandoptagelse: | < 1,6 % | < 1,9 % | < 1,0 % | Moisture absorption: | < 1,6 % | < 1,9 % | < 1,0 % |
| Norm: | DIN 74323 | | | Norms: | DIN 74323 | | |
| Fittings: | Pneumatisk | Pneumatisk | Pneumatisk | Fittings: | Pneumatic | Pneumatic | Pneumatic |

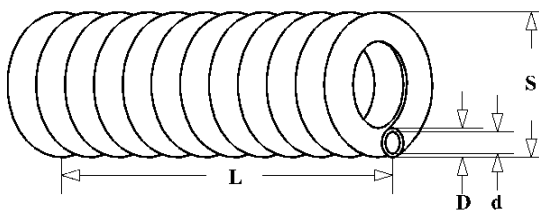
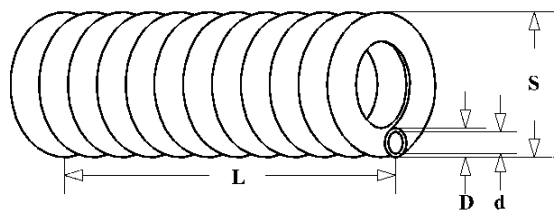


Dimension:

Standard: 15 meters arbejdslængde (30 meter slange)
Ingen lige ender
Specialiteter: Andre dimensioner og længder kan fremstilles efter ønske

Dimension:

Standard: 15 meters working length (30 meters hose)
No free ends
Specialities: Other dimensions are available as well as straight ends as per request



Dimension (fort.):

| Yder diameter på slangen (D) | Inder diameter på slangen (d) | Yder diameter på spiralen (S) | Længde på spiralen (L) |
|------------------------------|-------------------------------|-------------------------------|------------------------|
| mm | mm | mm | mm |
| 4 | 2 | 45 | 890 |
| 4 | 2,5 | 45 | 890 |
| 5 | 3,2 | 48 | 1200 |
| 6 | 4 | 72 | 870 |
| 6 | 4,5 | 72 | 870 |
| 8 | 6 | 92 | 1000 |
| 10 | 7,5 | 122 | 940 |
| 10 | 8 | 130 | 860 |
| 12 | 9 | 134 | 950 |
| 12 | 9,5 | 134 | 950 |
| 12 | 10 | 164 | 800 |
| 16 | 12 | 200 | 830 |

Dimension (fort.):

| Outside diameter of hose (D) | Inside diameter of hose (d) | Outside diameter of spiral hose (S) | Length of spiral hose (L) |
|------------------------------|-----------------------------|-------------------------------------|---------------------------|
| mm | mm | mm | mm |
| 4 | 2 | 45 | 890 |
| 4 | 2,5 | 45 | 890 |
| 5 | 3,2 | 48 | 1200 |
| 6 | 4 | 72 | 870 |
| 6 | 4,5 | 72 | 870 |
| 8 | 6 | 92 | 1000 |
| 10 | 7,5 | 122 | 940 |
| 10 | 8 | 130 | 860 |
| 12 | 9 | 134 | 950 |
| 12 | 9,5 | 134 | 950 |
| 12 | 10 | 164 | 800 |
| 16 | 12 | 200 | 830 |

Farve:

Standard: Natur, hvid, sort, grå, rød, orange, gul, grøn og blå
 Specialiteter: Speciel farver mod tillæg

Colour:

Standard: Natural, white, black, grey, red, orange, yellow, green and blue
 Specialities: Special colours at an additional charge

Print:

Slangerne kan printes med sort eller hvidt print mod 2,5 % tillæg

Print:

Black or white printing on hoses at an additional charge of 2,5%

Minimum ordre:

50 stk. pr. dimension og farve

Minimum order:

50 pieces per dimension and colour

Emballage:

Standard: Hver spiral er pakket i brunt papir
 Specialiteter: Efter forespørgsel

Packaging:

Standard: Each spiral is wrap in protective brown paper
 Specialities: Other length on request.

Se endvidere separat oversigt over emballage muligheder

Please see separate datasheet for packaging options

Typiske anvendelser:

- Pneumatik
- Automobil industrien
- Bremseslanger (luft)
- Industrielle formål

Typical applications:

- Pneumatic
- Automotive industry
- Airbrake tubes
- Industrial applications

Data oversigt: / Data overview:

PA 11 ST - PA 11 ST:

| Dimension (mm) | | Tolerance (mm)* | | Bøje / Bending radius (mm)** | Arbejdstryk (bar) Working pressure (bar) | | | | |
|----------------|--------|-----------------|----------|------------------------------|---|------|------|------|------|
| OD | ID | OD | ID | | 20°C | 30°C | 50°C | 60°C | 80°C |
| 4,0 | / 2,0 | +/- 0,1 | +/- 0,1 | 30 | 109 | 91 | 66 | 59 | 48 |
| 5,0 | / 3,0 | +/- 0,1 | +/- 0,1 | 45 | 82 | 68 | 49 | 44 | 36 |
| 6,0 | / 4,0 | +/- 0,1 | +/- 0,1 | 35 | 66 | 54 | 40 | 35 | 29 |
| 6,0 | / 4,5 | +/- 0,1 | +/- 0,1 | 40 | 47 | 39 | 28 | 25 | 21 |
| 7,0 | / 5,0 | +/- 0,1 | +/- 0,1 | 50 | 55 | 45 | 33 | 29 | 24 |
| 8,0 | / 6,0 | +/- 0,1 | +/- 0,1 | 60 | 47 | 39 | 28 | 25 | 21 |
| 10,0 | / 7,5 | +/- 0,1 | +/- 0,1 | 85 | 47 | 39 | 28 | 25 | 21 |
| 12,0 | / 9,0 | +/- 0,1 | +/- 0,1 | 125 | 47 | 39 | 28 | 25 | 21 |
| 12,0 | / 9,5 | +/- 0,1 | +/- 0,1 | | 38 | 32 | 23 | 20 | 17 |
| 16,0 | / 12,0 | +/- 0,15 | +/- 0,15 | 130 | 47 | 39 | 28 | 25 | 21 |

PA 11 HA - PA 11 HA:

| Dimension (mm) | | Tolerance (mm)* | | Bøje / Bending radius (mm)** | Arbejdstryk (bar) Working pressure (bar) | | | | |
|----------------|--------|-----------------|----------|------------------------------|---|------|------|------|------|
| OD | ID | OD | ID | | 20°C | 30°C | 50°C | 60°C | 80°C |
| 4,0 | / 2,0 | +/- 0,1 | +/- 0,1 | 30 | 109 | 91 | 66 | 59 | 48 |
| 5,0 | / 3,0 | +/- 0,1 | +/- 0,1 | 45 | 82 | 68 | 49 | 44 | 36 |
| 6,0 | / 4,0 | +/- 0,1 | +/- 0,1 | 35 | 66 | 54 | 40 | 35 | 29 |
| 6,0 | / 4,5 | +/- 0,1 | +/- 0,1 | 40 | 47 | 39 | 28 | 25 | 21 |
| 7,0 | / 5,0 | +/- 0,1 | +/- 0,1 | 50 | 55 | 45 | 33 | 29 | 24 |
| 8,0 | / 6,0 | +/- 0,1 | +/- 0,1 | 60 | 47 | 39 | 28 | 25 | 21 |
| 10,0 | / 7,5 | +/- 0,1 | +/- 0,1 | 85 | 47 | 39 | 28 | 25 | 21 |
| 12,0 | / 9,0 | +/- 0,1 | +/- 0,1 | 125 | 47 | 39 | 28 | 25 | 21 |
| 12,0 | / 9,5 | +/- 0,1 | +/- 0,1 | | 38 | 32 | 23 | 20 | 17 |
| 16,0 | / 12,0 | +/- 0,15 | +/- 0,15 | 130 | 47 | 39 | 28 | 25 | 21 |

PA 11 SF - PA 11 SF:

| Dimension (mm) | | Tolerance (mm) | | Bøje / Bending radius (mm) | Arbejdstryk (bar) Working pressure (bar) | | | | |
|----------------|--------|----------------|----------|----------------------------|---|------|------|------|------|
| OD | ID | OD | ID | | 20°C | 30°C | 50°C | 60°C | 80°C |
| 4,0 | / 2,0 | +/- 0,1 | +/- 0,1 | 10 | 39 | - | - | 20 | 16 |
| 5,0 | / 3,0 | +/- 0,1 | +/- 0,1 | 20 | 29 | - | - | 15 | 12 |
| 6,0 | / 4,0 | +/- 0,1 | +/- 0,1 | 20 | 23 | - | - | 12 | 10 |
| 6,0 | / 4,5 | +/- 0,1 | +/- 0,1 | | 17 | - | - | 9 | 7 |
| 7,0 | / 5,0 | +/- 0,1 | +/- 0,1 | | 19 | - | - | 10 | 8 |
| 8,0 | / 6,0 | +/- 0,1 | +/- 0,1 | 40 | 17 | - | - | 9 | 7 |
| 10,0 | / 7,5 | +/- 0,1 | +/- 0,1 | | 17 | - | - | 9 | 7 |
| 12,0 | / 9,0 | +/- 0,1 | +/- 0,1 | 50 | 17 | - | - | 9 | 7 |
| 12,0 | / 9,5 | +/- 0,1 | +/- 0,1 | 60 | 13 | - | - | 7 | 6 |
| 16,0 | / 12,0 | +/- 0,15 | +/- 0,15 | 80 | 17 | - | - | 9 | 7 |

Forklaring til oversigt:

Tolerance: Slangerne overholder som minimum tolerancerne fastlagt i DIN 16 982

Bøje radius: 90° bøjning med minimal deformation af slangen ved 20 °C

Arbejdstryk: Sikkerhedsfaktor 2,5 i forhold til sprængtryk

Explanation to overview:

Tolerance: *The hoses are produced in accordance with DIN 16 982*

Bending radius: *90° bending with minimal deformation of the hose at 20 °C*

Working pressure: *Safety factor 2,5 compared to burst pressure*