

TOP PERFORMANCE UNDER PRESSURE

SEMPERIT Hydraulic and Pressure Washer Hoses





SEMPERIT AT A GLANCE

Almost two centuries of experience, a worldwide presence, and a leading role in the rubber and plastics industry make Semperit your reliable partner.

Semperit AG Holding has been a worldwide leading supplier of natural rubber and plastic products for almost 190 years. We have achieved and maintained this position by focusing on high quality and reliability. Our partners appreciate these strengths, which have made Semperit a global player today.

Semperit products and services capitalise on global trends such as increasing health and hygiene requirements, and increasing industrialisation in emerging markets, supporting our continuous and sustainable growth. Over 9,500 people are employed in our medical and industrial sectors worldwide. With 22 production plants and numerous subsidiaries and sales offices, the Semperit Group has a presence in Europe, Asia, and America, with a diverse product portfolio that is equipped for the constant changes in these markets.

The business activities of Semperit are divided into two sectors: Medical and Industrial.

Our Strategy in a Word: Growth.

Targeting above average growth and a leading global market position for our products is our goal. To achieve this we will strengthen our core competencies, promote internationally, and develop cost leadership in order to become and remain the leader in our target markets.

In both the medical and industrial sectors, the signs point toward growth. Our goal will be to average double-digit turnover and earnings growth by 2015. These growth rates are to be achieved through the expansion of production capacity at existing locations and strategic acquisitions of other companies.

A True Global Player. Semperit is already an international company and further globalisation of the group will be driven by the continued expansion of existing sales channels, and by consistently opening new markets.

A Top Position in all Business Segments.

Semperit is a leading global supplier of high quality rubber and plastic products. This has been achieved through outstanding know-how in development, production, and sales.

We succeed through quality, service, and reliability and aim to achieve cost leadership through productivity gains and consistent cost management in all areas. This is the basis for the high level of acceptance of the Semperit brand by our customers.

SEMPERIT

MEDICAL SECTOR

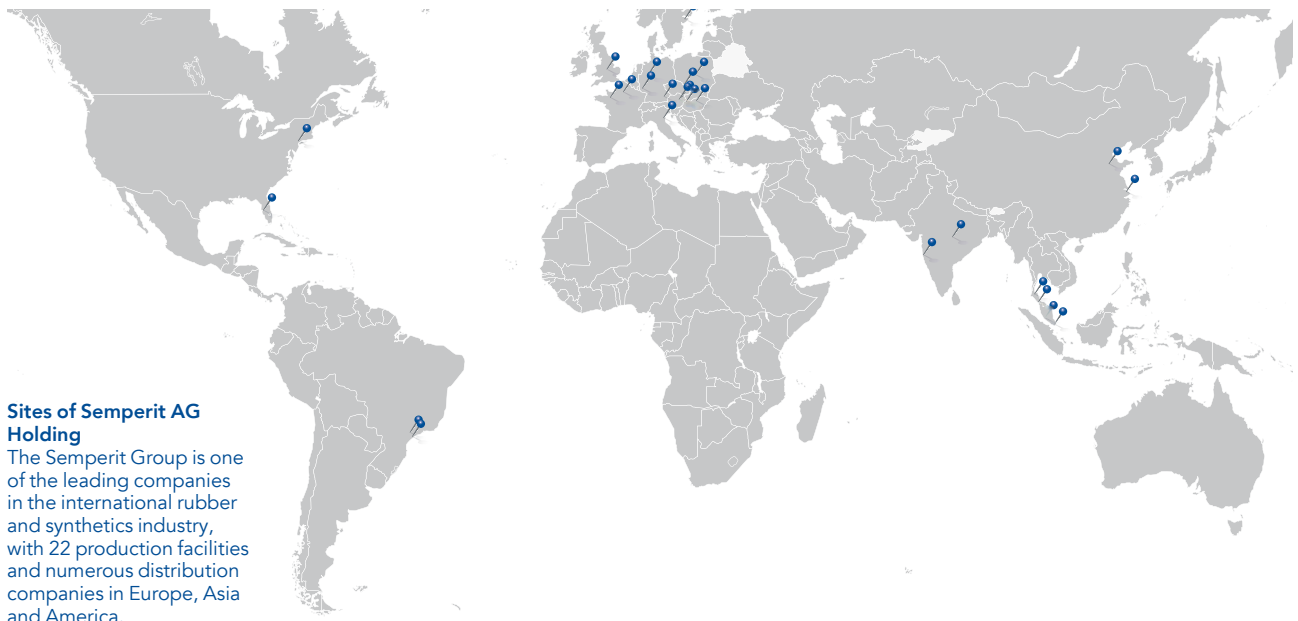
Sempermed examination, surgical and protective gloves

INDUSTRIAL

Semperflex hydraulic and industrial hoses, rubber sheeting

Sempertrans conveyor belts with textile or steel cord

Semperform escalator handrails, building construction profiles, cable car rings, rubber foils and railway superstructure products



We think ahead and act sustainably.

Sustainable corporate management has been a top priority at Semperit since it was founded nearly two centuries ago. Through this, we have created an economic, ecological, and social balance for our long-term success.

Innovation with Tradition. The on-going development of products and the continuing optimisation of production are of central importance for Semperit. The research and development centre in Wimpassing (Austria) acts as a think-tank for processes in all product areas, encouraging the constant exchange of experiences and ideas, which are fed back directly to our production areas as well as to the market. Through the innovations of today, Semperit is creating the foundation for tomorrow's success.

Customer oriented. Uncompromising quality, fair pricing, close-to-market products, and a global presence are expressions of the strong customer orientation at Semperit. We are also distinguished by our level of high reliability, and customers from around the world can rely on our top quality and the best service.

Sustainably Responsible. Sustainable actions and environmental management are part of the Semperit tradition and are deeply rooted in our strategy. We place great importance on fair working conditions, employee benefits, and promotion of the local economy. However, corporate responsibility goes far beyond direct business activities, and Semperit supports a range of social projects in the locations where we are based, as well as a number of global aid agencies.

SEMPERFLEX – TOP PERFORMANCE UNDER PRESSURE

Semperflex develops, produces, and distributes high quality hydraulic and industrial hoses, as well as elastomer sheeting, perfectly adapted for the needs of today's demanding markets.

Semperflex Hydraulic – Meter by meter, gives top performance

Semperflex Hydraulic's effective performance is characterized by its complete range of high quality application-oriented hydraulic hoses.

In addition to classic standardised hose types conforming to worldwide accepted standards, i.e. SAE J 517 and EN 853 to 857, Semperflex has further developed a range of compact hoses to its own specifications, with extraordinary performance values designed for modern high-performance hydraulic applications.

Our standard of products and services is recognized



worldwide as one of the best available in a variety of market segments such as construction, agriculture, material handling, mining, and high pressure cleaning. A globally connected international team of excellent development engineers and technicians, in combination with a worldwide quality control system certified to ISO 9001:2000, ensures our high quality level for today's and tomorrow's market demands.

Professional worldwide local sales offices enable us to react quickly on local customer feedback and market demands.





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A network of application specialists completes our service with expert consulting and advisory services for fittings, crimping, assemblies, and testing.

Our clear dedication to expand our operations throughout the world, with the aim of strengthening our position as one of the leading manufacturers of steel-reinforced hydraulic and pressure washer hoses, combined with the well proven products and high level of service make Semperflex a reliable partner for your current and future secure supply!

SEMPERFLEX – ALWAYS A RELIABLE PARTNER!



HOSES AND WORKING MEDIUM

Our hydraulic hoses are generally suitable for mineral and synthetic oil-based hydraulic fluids (HL, HLP, HLPD, HVLP), for oil-water emulsions (HFAE, HFAS, HFB), and for water-glycol solutions (HFC), as well as for vegetable and mineral oil-based lubricants. In individual cases, there may be use restrictions due to manufacturer-specific oil additives.

Not suitable for hydraulic fluids based on chlorinated hydrocarbons or phosphate esters (HFD-R/S/T)

Suitable for compressed air up to a maximum of 50 bar/ 80°C, with a restricted service lifetime.

In principle, they are suitable for biodegradable hydraulic fluids (bio-oils, HETG, HEPG, HEES), but this may be restricted by manufacturer-specific oil additives.




Caution: The hose's inner surface (inner liner) must be appropriate for the medium used in the application (oil, water, air), as otherwise the hose can be damaged or destroyed by the working medium or its contents and eventually fail, which can result in (partial or serious) material damage and personal injury.

For safety reasons, we invite your individual inquiries.

Semperjet: Overview of working pressure and bend radius on p. 17

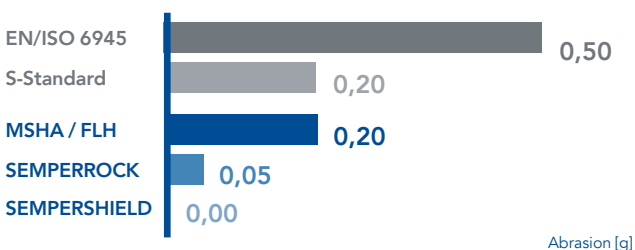
| DN | | | DIN EN 853 1 SN / SAE 100 R 15 [p. 8] | DIN EN 857 1 SC [p. 8] | SAE 100 R 17 [p. 8] | DIN EN 853 2 SN / SAE 100 R25 [p. 9] | DIN EN 857 2 SC [p. 9] | SAE 100 R 16-S [p. 9] | SEMPERPAC 1 SN-K [p. 10] | SEMPERPAC 2 SN-K [p. 10] | SEMPERSHIELD SSC [p. 10] | DIN EN 853 1 SN EHT [p. 11] | SEMPERPILOT [p. 11] | AGROFLEX [p. 11] | SUPERPAC SFC 2 [p. 12] | SUPERPAC SFC 3 [p. 12] | DIN EN 856 4 SP [p. 13] | DIN EN 856 4 SH [p. 13] | DIN EN 856 / SAE 100 R 12 [p. 13] | DIN EN 856 / SAE 100 R 13 [p. 14] | SAE 100 R 15 [p. 14] | FLEXLINE 4000 [p. 15] | 4 SH PREMIUM [p. 15] | R 15 PREMIUM [p. 15] | | |
|------------------------------|-------|------|--|---------------------------|------------------------|---|---------------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|--------------------------------|------------------------|---------------------|---------------------------|---------------------------|----------------------------|----------------------------|--------------------------------------|--------------------------------------|-------------------------|--------------------------|-------------------------|-------------------------|------|------|
| Working pressure [wp] in bar | | | | | | | | | | | | | | | | | | | | | | | | | | |
| mm | inch | dash | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | [wp] | |
| 6 | 1/4 | -4 | 225 | 225 | 210 | 400 | 400 | 400 | 290 | 450 | 400 | 225 | 125 | 210 | | | | | | | | | | | | |
| 8 | 5/16 | -5 | 215 | 215 | 210 | 350 | 350 | 350 | 250 | 420 | 375 | 215 | 125 | 210 | | | | | | | | | | | | |
| 10 | 3/8 | -6 | 180 | 180 | 210 | 330 | 330 | 330 | 230 | 385 | 350 | 180 | 125 | 210 | | 500 | 445 | | 280 | | | | 280 | | | |
| 12 | 1/2 | -8 | 160 | 160 | 210 | 275 | 275 | 275 | 200 | 345 | 300 | 160 | 125 | 210 | 380 | 470 | 425 | | 280 | | | | 280 | | | |
| 16 | 5/8 | -10 | 130 | 130 | 210 | 250 | 250 | 250 | 150 | 290 | 275 | 130 | | | 350 | 410 | 350 | | 280 | | | | 280 | | | |
| 19 | 3/4 | -12 | 105 | 105 | 210 | 215 | 215 | 215 | 125 | 280 | 235 | 105 | | | 375 | 350 | 350 | 420 | 280 | 350 | 420 | 280 | 430 | 425 | | |
| 25 | 1 | -16 | 88 | 88 | 210 | 165 | 165 | 165 | 110 | 200 | 185 | 88 | | | 230 | 310 | 320 | 380 | 280 | 350 | 420 | 280 | 400 | 425 | | |
| 31 | 1-1/4 | -20 | 63 | | | 125 | | | 100 | 175 | | 63 | | | | | 210 | 350 | 210 | 350 | 420 | | 360 | | | |
| 38 | 1-1/2 | -24 | 50 | | | 90 | | | | | | 50 | | | | | 185 | 290 | 175 | 350 | 420 | | | | | |
| 51 | 2 | -32 | 40 | | | 80 | | | | | | 40 | | | | | 165 | 250 | 175 | 350 | | | | | | |
| Bend radius [br] in mm | | | | | | | | | | | | | | | | | | | | | | | | | | |
| mm | inch | dash | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] | [br] |
| 6 | 1/4 | -4 | 100 | 75 | 50 | 100 | 75 | 50 | 40 | 45 | 75 | 100 | 30 | 45 | | | | | | | | | | | | |
| 8 | 5/16 | -5 | 115 | 85 | 55 | 115 | 85 | 55 | 55 | 60 | 85 | 115 | 40 | 50 | | | | | | | | | | | | |
| 10 | 3/8 | -6 | 125 | 90 | 65 | 125 | 90 | 65 | 65 | 70 | 90 | 125 | 50 | 60 | | 120 | 180 | | 125 | | | | 65 | | | |
| 12 | 1/2 | -8 | 180 | 130 | 90 | 180 | 130 | 90 | 80 | 90 | 130 | 180 | 60 | 85 | 130 | 160 | 230 | | 180 | | | | 90 | | | |
| 16 | 5/8 | -10 | 200 | 150 | 100 | 200 | 170 | 100 | 105 | 130 | 170 | 200 | | | 180 | 210 | 250 | | 200 | | | | 100 | | | |
| 19 | 3/4 | -12 | 240 | 180 | 120 | 240 | 200 | 120 | 120 | 160 | 200 | 240 | | | 260 | 300 | 280 | 240 | 240 | 240 | 265 | 120 | 210 | 210 | | |
| 25 | 1 | -16 | 300 | 230 | 150 | 300 | 250 | 150 | 160 | 210 | 250 | 300 | | | 240 | 310 | 340 | 340 | 300 | 300 | 330 | 155 | 220 | 220 | | |
| 31 | 1-1/4 | -20 | 420 | | | 420 | | | 300 | 300 | | 420 | | | | | 460 | 460 | 420 | 420 | 445 | | 240 | | | |
| 38 | 1-1/2 | -24 | 500 | | | 500 | | | | | | 500 | | | | | 560 | 560 | 500 | 500 | 530 | | | | | |
| 51 | 2 | -32 | 630 | | | 630 | | | | | | 630 | | | | | 660 | 700 | 630 | 630 | | | | | | |

MODULAR SYSTEM FOR HYDRAULIC HOSES

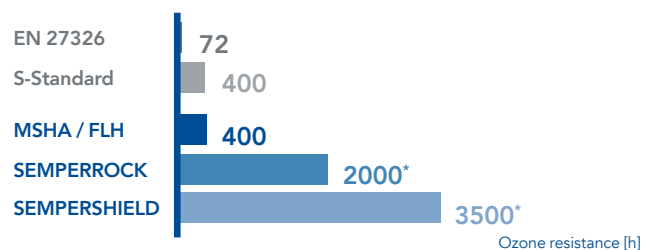
| 1 | HOSES | 2 | COVERS | 3 | BRANDINGS |
|---|--|---|--|---|---|
| |  <p>HOSE</p> <p>One Wire Braid Hydraulic Hoses Two Wire Braid Hydraulic Hoses Semperit Specialities Wire Braid Hydraulic Hoses Multispiral Hydraulic Hoses Semperit Specialities Multispiral Hydraulic Hoses</p> | + |  <p>COVER</p> <p>Standard Semperit Cover</p> <ul style="list-style-type: none"> Improved wear and abrasion resistance compared to EN/ISO requirements Improved ozone resistance compared to EN/ISO requirements <p>MSHA Cover</p> <ul style="list-style-type: none"> Mine Safety and Health Administration Standard Cover for Spiral Hoses Flame retardant <p>FLH Cover</p> <ul style="list-style-type: none"> Mining cover DSK and Loba approved Flame retardant MSHA approved <p>SEMPERROCK Cover</p> <ul style="list-style-type: none"> Very high wear and abrasion resistance Very high ozone resistance Very high weather and salt water resistance Flame retardant MSHA approved <p>SEMPERSHIELD Cover</p> <p>Double layer construction – rubber cover with UHMPE foil</p> <ul style="list-style-type: none"> Outstanding wear and abrasion resistance Outstanding ozone and UV resistance MSHA approved | + |  <p>BRANDING</p> <p>Embossed Branding</p> <p>Standard for Wire Braid Hoses (Except Sempershield cover), Pressure Washer Hoses, Spiral Hoses with FLH/DSK Cover</p> <p>Mylar Tape Branding</p> <p>Standard for Spiral hoses (except FLH Cover), Wire Braid Hoses with Sempershield Cover.</p> <p>Inkjet Branding</p> <p>Standard for 1SN EHT, Agroflox, Semperpilot</p> |

Please contact our sales department to discuss details.

ABRASION VALUES ACC. TO EN ISO 6945

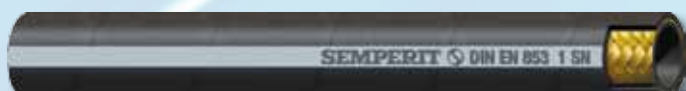


OZONE RESISTANCE ACC. TO EN 27326



* Extrapolated Values

ONE WIRE BRAID HYDRAULIC HOSES



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|-------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 10,9 | 13,0 | 225 | 3265 | 450 | 900 | 100 | 0,19 |
| 8 | 5/16 | 8,3 | 12,5 | 14,7 | 215 | 3120 | 430 | 860 | 115 | 0,22 |
| 10 | 3/8 | 9,9 | 14,8 | 16,8 | 180 | 2610 | 360 | 720 | 125 | 0,28 |
| 12 | 1/2 | 13,0 | 17,9 | 20,0 | 160 | 2320 | 320 | 640 | 180 | 0,36 |
| 16 | 5/8 | 16,4 | 21,0 | 23,2 | 130 | 1885 | 260 | 520 | 200 | 0,44 |
| 19 | 3/4 | 19,5 | 25,0 | 27,1 | 105 | 1525 | 210 | 420 | 240 | 0,56 |
| 25 | 1 | 26,0 | 32,9 | 35,1 | 88 | 1275 | 176 | 352 | 300 | 0,83 |
| 31 | 1-1/4 | 32,5 | 39,9 | 42,5 | 63 | 915 | 150 | 252 | 420 | 1,07 |
| 38 | 1-1/2 | 38,7 | 46,5 | 50,1 | 50 | 725 | 100 | 200 | 500 | 1,42 |
| 51 | 2 | 51,1 | 59,9 | 64,1 | 40 | 580 | 80 | 160 | 630 | 2,01 |

DIN EN 853 1 SN / SAE 100 R 1S

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

One braid of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 9,9 | 11,9 | 225 | 3265 | 450 | 900 | 75 | 0,16 |
| 8 | 5/16 | 8,3 | 11,7 | 13,7 | 215 | 3120 | 430 | 860 | 85 | 0,21 |
| 10 | 3/8 | 9,9 | 13,1 | 15,7 | 180 | 2610 | 360 | 720 | 90 | 0,26 |
| 12 | 1/2 | 13,0 | 16,6 | 19,5 | 160 | 2320 | 320 | 640 | 130 | 0,34 |
| 16 | 5/8 | 16,4 | 20,3 | 22,3 | 130 | 1885 | 260 | 520 | 150 | 0,39 |
| 19 | 3/4 | 19,5 | 24,0 | 26,0 | 105 | 1525 | 210 | 420 | 180 | 0,50 |
| 25 | 1 | 26,0 | 31,0 | 33,1 | 88 | 1275 | 176 | 352 | 230 | 0,74 |

DIN EN 857 1 SC

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

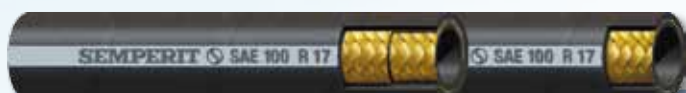
One braid of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 10,4 | 12,4 | 210 | 3000 | 420 | 840 | 50 | 0,16 |
| 8 | 5/16 | 8,3 | 12,0 | 14,1 | 210 | 3000 | 420 | 840 | 55 | 0,22 |
| 10 | 3/8 | 9,9 | 13,9 | 16,0 | 210 | 3000 | 420 | 840 | 65 | 0,27 |
| 12 | 1/2 | 13,0 | 17,6 | 19,5 | 210 | 3000 | 420 | 840 | 90 | 0,39 |
| 16 | 5/8 | 16,4 | 21,7 | 23,8 | 210 | 3000 | 420 | 840 | 100 | 0,61 |
| 19 | 3/4 | 19,5 | 25,5 | 27,6 | 210 | 3000 | 420 | 840 | 120 | 0,76 |
| 25 | 1 | 26,0 | 34,0 | 36,2 | 210 | 3000 | 420 | 840 | 150 | 1,27 |

SAE 100 R 17

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

One braid DN 06 – DN 12 and two braids DN 16 – DN 25 of high tensile steel wire

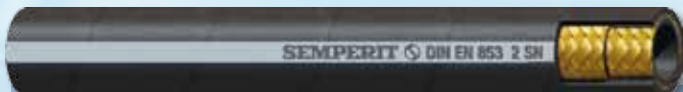
Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)

TWO WIRE BRAID HYDRAULIC HOSES



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|-------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 12,4 | 14,4 | 400 | 5800 | 800 | 1600 | 100 | 0,31 |
| 8 | 5/16 | 8,3 | 14,0 | 16,0 | 350 | 5075 | 700 | 1400 | 115 | 0,37 |
| 10 | 3/8 | 9,9 | 16,4 | 18,4 | 330 | 4785 | 660 | 1320 | 125 | 0,44 |
| 12 | 1/2 | 13,0 | 19,4 | 21,4 | 275 | 4000 | 550 | 1100 | 180 | 0,53 |
| 16 | 5/8 | 16,4 | 22,6 | 24,6 | 250 | 3625 | 500 | 1000 | 200 | 0,66 |
| 19 | 3/4 | 19,5 | 26,6 | 28,6 | 215 | 3120 | 430 | 860 | 240 | 0,84 |
| 25 | 1 | 26,0 | 34,5 | 37,1 | 165 | 2395 | 325 | 660 | 300 | 1,23 |
| 31 | 1-1/4 | 32,5 | 43,9 | 46,7 | 125 | 1815 | 250 | 500 | 420 | 1,77 |
| 38 | 1-1/2 | 38,7 | 51,1 | 54,5 | 90 | 1305 | 180 | 360 | 500 | 2,17 |
| 51 | 2 | 51,1 | 62,9 | 66,7 | 80 | 1160 | 160 | 320 | 630 | 2,79 |

DIN EN 853 2 SN / SAE 100 R2S

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Two braids of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 11,0 | 13,0 | 400 | 5800 | 800 | 1600 | 75 | 0,25 |
| 8 | 5/16 | 8,3 | 12,6 | 14,6 | 350 | 5075 | 700 | 1400 | 85 | 0,30 |
| 10 | 3/8 | 9,9 | 14,7 | 16,6 | 330 | 4785 | 660 | 1320 | 90 | 0,37 |
| 12 | 1/2 | 13,0 | 18,0 | 20,0 | 275 | 3990 | 550 | 1100 | 130 | 0,45 |
| 16 | 5/8 | 16,4 | 21,9 | 23,9 | 250 | 3625 | 500 | 1000 | 170 | 0,61 |
| 19 | 3/4 | 19,5 | 25,5 | 27,6 | 215 | 3120 | 430 | 860 | 200 | 0,76 |
| 25 | 1 | 26,0 | 32,9 | 35,6 | 165 | 2395 | 330 | 660 | 250 | 1,15 |

DIN EN 857 2 SC

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Two braids of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 11,7 | 13,7 | 400 | 5800 | 800 | 1600 | 50 | 0,25 |
| 8 | 5/16 | 8,3 | 13,0 | 15,0 | 350 | 5075 | 700 | 1400 | 55 | 0,27 |
| 10 | 3/8 | 9,9 | 15,1 | 17,0 | 330 | 4780 | 660 | 1320 | 65 | 0,36 |
| 12 | 1/2 | 13,0 | 18,3 | 20,5 | 275 | 3980 | 550 | 1100 | 90 | 0,46 |
| 16 | 5/8 | 16,4 | 21,9 | 23,9 | 250 | 3620 | 500 | 1000 | 100 | 0,63 |
| 19 | 3/4 | 19,5 | 25,5 | 27,7 | 215 | 3110 | 430 | 860 | 120 | 0,78 |
| 25 | 1 | 26,0 | 32,7 | 35,3 | 165 | 2390 | 330 | 660 | 150 | 1,16 |

SAE 100 R 16-S

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Two braids of high tensile steel wire

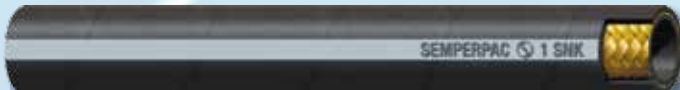
Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)

SPECIALITIES WIRE BRAID HYDRAULIC HOSES



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|-------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 10,1 | 12,0 | 290 | 4205 | 580 | 1160 | 40 | 0,17 |
| 8 | 5/16 | 8,3 | 11,4 | 13,6 | 250 | 3625 | 500 | 1000 | 55 | 0,21 |
| 10 | 3/8 | 9,9 | 13,6 | 15,9 | 230 | 3335 | 460 | 920 | 65 | 0,26 |
| 12 | 1/2 | 13,0 | 16,9 | 19,2 | 200 | 2900 | 400 | 800 | 80 | 0,34 |
| 16 | 5/8 | 16,4 | 20,3 | 22,3 | 150 | 2175 | 300 | 600 | 105 | 0,39 |
| 19 | 3/4 | 19,5 | 23,9 | 26,1 | 125 | 1815 | 250 | 500 | 120 | 0,50 |
| 25 | 1 | 26,0 | 31 | 33,1 | 110 | 1595 | 220 | 440 | 160 | 0,74 |
| 31 | 1-1/4 | 32,5 | 40,2 | 43,7 | 100 | 1450 | 200 | 400 | 300 | 1,28 |

Impuls tested up to 700.000 cycles!

SEMPERPAC 1 SN-K

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

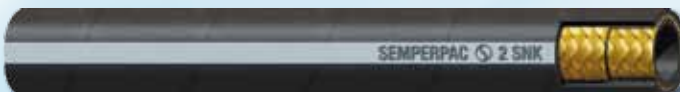
One braid of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|-------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 11,4 | 13,4 | 450 | 6525 | 900 | 1800 | 45 | 0,27 |
| 8 | 5/16 | 8,3 | 13,0 | 15,0 | 420 | 6090 | 840 | 1680 | 60 | 0,31 |
| 10 | 3/8 | 9,9 | 14,9 | 17,0 | 385 | 5585 | 770 | 1540 | 70 | 0,39 |
| 12 | 1/2 | 13,0 | 18,7 | 20,7 | 345 | 5000 | 690 | 1380 | 90 | 0,52 |
| 16 | 5/8 | 16,4 | 21,6 | 23,6 | 290 | 4205 | 580 | 1160 | 130 | 0,61 |
| 19 | 3/4 | 19,5 | 25,7 | 27,7 | 280 | 4060 | 560 | 1120 | 160 | 0,79 |
| 25 | 1 | 26,0 | 32,9 | 35,6 | 200 | 2900 | 400 | 800 | 210 | 1,15 |
| 31 | 1-1/4 | 32,5 | 40,5 | 43,5 | 175 | 2540 | 350 | 700 | 300 | 1,57 |

Impuls tested up to one million cycles! (DN31 to 200.000 Cycles)

SEMPERPAC 2 SN-K

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

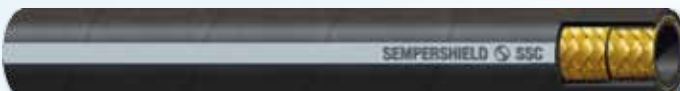
Two braids of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 11,0 | 13,0 | 400 | 5800 | 800 | 1600 | 75 | 0,27 |
| 8 | 5/16 | 8,3 | 12,6 | 14,6 | 375 | 5440 | 750 | 1500 | 85 | 0,31 |
| 10 | 3/8 | 9,9 | 14,7 | 17,1 | 350 | 5000 | 700 | 1400 | 90 | 0,39 |
| 12 | 1/2 | 13,0 | 18,0 | 20,0 | 300 | 4350 | 600 | 1200 | 130 | 0,48 |
| 16 | 5/8 | 16,4 | 21,9 | 24,0 | 275 | 4000 | 550 | 1100 | 170 | 0,64 |
| 19 | 3/4 | 19,5 | 25,6 | 27,5 | 235 | 3400 | 470 | 940 | 200 | 0,79 |
| 25 | 1 | 26,0 | 32,9 | 35,8 | 185 | 2680 | 370 | 740 | 250 | 1,22 |

SEMPERSHIELD SSC

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Two braids of high tensile steel wire

Cover:

Double layer construction – rubber cover with UHMPE foil – MSHA approved. Outstanding abrasion and ozone resistance

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)

SPECIALITIES WIRE BRAID HYDRAULIC HOSES



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|-------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 11,1 | 13,5 | 225 | 3265 | 450 | 900 | 100 | 0,23 |
| 8 | 5/16 | 8,3 | 12,7 | 15,1 | 215 | 3120 | 430 | 860 | 115 | 0,27 |
| 10 | 3/8 | 9,9 | 15,1 | 17,5 | 180 | 2610 | 360 | 720 | 125 | 0,36 |
| 12 | 1/2 | 13,0 | 18,3 | 20,6 | 160 | 2320 | 320 | 640 | 180 | 0,44 |
| 16 | 5/8 | 16,4 | 21,4 | 23,5 | 130 | 1885 | 260 | 520 | 200 | 0,50 |
| 19 | 3/4 | 19,5 | 25,4 | 27,8 | 105 | 1525 | 210 | 420 | 240 | 0,66 |
| 25 | 1 | 26,0 | 33,3 | 35,6 | 88 | 1275 | 176 | 352 | 300 | 0,93 |
| 31 | 1-1/4 | 32,5 | 40,3 | 42,2 | 63 | 915 | 150 | 250 | 420 | 1,14 |
| 38 | 1-1/2 | 38,7 | 47,3 | 51,3 | 50 | 725 | 100 | 200 | 500 | 1,80 |
| 51 | 2 | 51,1 | 60,5 | 63,3 | 40 | 580 | 80 | 160 | 630 | 2,01 |

DIN EN 853 1 SN EHT

Tube:

Synthetic rubber, resistant against hot oil, hydraulic fluids, mineral and synthetic oils, glycols, polyglycols and aqueous oil emulsions (up to 100°C)

Reinforcement:

One braid of high tensile steel wire

Cover:

Heat, abrasion and ozone resistant synthetic rubber, MSHA approved

Temperature range (medium):

-40°C to 135°C (up to 150°C peak temperatures)



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 9,9 | 11,5 | 125 | 1800 | 250 | 500 | 30 | 0,14 |
| 8 | 5/16 | 8,3 | 11,6 | 13,7 | 125 | 1800 | 250 | 500 | 40 | 0,22 |
| 10 | 3/8 | 9,9 | 12,9 | 14,4 | 125 | 1800 | 250 | 500 | 50 | 0,17 |
| 12 | 1/2 | 13,0 | 16,3 | 19,4 | 125 | 1800 | 250 | 500 | 60 | 0,34 |

SEMPERPILOT

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

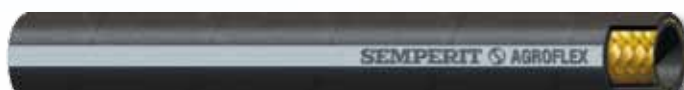
One braid of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: MSHA cover available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 9,9 | 12,0 | 210 | 3000 | 420 | 840 | 45 | 0,17 |
| 8 | 5/16 | 8,3 | 11,7 | 13,8 | 210 | 3000 | 420 | 840 | 50 | 0,22 |
| 10 | 3/8 | 9,9 | 13,2 | 15,8 | 210 | 3000 | 420 | 840 | 60 | 0,27 |
| 12 | 1/2 | 13,0 | 17,1 | 19,3 | 210 | 3000 | 420 | 840 | 85 | 0,39 |

AGROFLEX



Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

One braid of high tensile steel wire

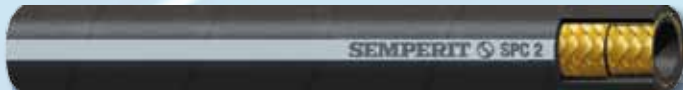
Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)

SPECIALITIES WIRE BRAID HYDRAULIC HOSES



| Nominal Ø | mm | inch | Inside Ø | mm | Braid Ø | mm | Outside Ø | mm | Working pressure | | Test pressure | bar | Burst pressure | bar | Bend radius | mm | Weight | kg/m |
|-----------|----|------|----------|------|---------|------|-----------|------|------------------|------|---------------|-----|----------------|------|-------------|-----|--------|------|
| | | | | | | | | | bar | psi | | | | | | | | |
| 12 | 12 | 1/2 | 13,0 | 13,0 | 19,4 | 19,4 | 21,4 | 21,4 | 380 | 5515 | 760 | 760 | 1520 | 1520 | 130 | 130 | 0,59 | 0,59 |
| 16 | 16 | 5/8 | 16,4 | 16,4 | 22,4 | 22,4 | 24,7 | 24,7 | 350 | 5080 | 700 | 700 | 1400 | 1400 | 180 | 180 | 0,72 | 0,72 |
| 25 | 25 | 1 | 26,0 | 26,0 | 34,0 | 34,0 | 35,8 | 35,8 | 230 | 3330 | 460 | 460 | 920 | 920 | 240 | 240 | 1,27 | 1,27 |

Impuls tested up to 400.000 Cycles!

SUPERPAC SPC 2

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

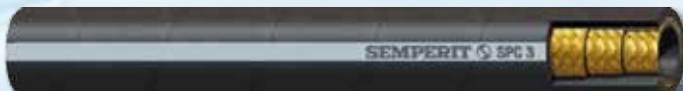
Two braids of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | mm | inch | Inside Ø | mm | Braid Ø | mm | Outside Ø | mm | Working pressure | | Test pressure | bar | Burst pressure | bar | Bend radius | mm | Weight | kg/m |
|-----------|----|------|----------|------|---------|------|-----------|------|------------------|------|---------------|------|----------------|------|-------------|-----|--------|------|
| | | | | | | | | | bar | psi | | | | | | | | |
| 10 | 10 | 3/8 | 9,9 | 9,9 | 16,8 | 16,8 | 20,9 | 20,9 | 500 | 7250 | 1000 | 1000 | 2000 | 2000 | 120 | 120 | 0,66 | 0,66 |
| 12 | 12 | 1/2 | 13,0 | 13,0 | 20,6 | 20,6 | 24,1 | 24,1 | 470 | 6820 | 940 | 940 | 1880 | 1880 | 160 | 160 | 0,89 | 0,89 |
| 16 | 16 | 5/8 | 16,4 | 16,4 | 24,0 | 24,0 | 27,8 | 27,8 | 410 | 5950 | 820 | 820 | 1640 | 1640 | 210 | 210 | 1,10 | 1,10 |
| 19 | 19 | 3/4 | 19,5 | 19,5 | 28,1 | 28,1 | 31,1 | 31,1 | 375 | 5440 | 750 | 750 | 1500 | 1500 | 260 | 260 | 1,33 | 1,33 |
| 25 | 25 | 1 | 26,0 | 26,0 | 36,2 | 36,2 | 38,8 | 38,8 | 310 | 4500 | 620 | 620 | 1240 | 1240 | 310 | 310 | 1,87 | 1,87 |

Impuls tested up to 400.000 Cycles!

SUPERPAC SPC 3

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Three braids of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | mm | inch | Inside Ø | mm | Braid Ø | mm | Outside Ø | mm | Working pressure | | Test pressure | bar | Burst pressure | bar | Bend radius | mm | Weight | kg/m |
|-----------|-----|-------|----------|-------|---------|----|-----------|-------|------------------|------|---------------|-----|----------------|-----|-------------|-----|--------|------|
| | | | | | | | | | bar | psi | | | | | | | | |
| 19 | 19 | 3/4 | 19,0 | 19,0 | - | - | 29,0 | 29,0 | 21 | 3000 | - | - | 84 | 84 | 95 | 95 | 0,60 | 0,60 |
| 25 | 25 | 1 | 25,4 | 25,4 | - | - | 35,4 | 35,4 | 17 | 250 | - | - | 68 | 68 | 125 | 125 | 0,70 | 0,70 |
| 31 | 31 | 1-1/4 | 31,8 | 31,8 | - | - | 41,8 | 41,8 | 14 | 200 | - | - | 56 | 56 | 160 | 160 | 0,90 | 0,90 |
| 38 | 38 | 1-1/2 | 38,1 | 38,1 | - | - | 49,0 | 49,0 | 10 | 140 | - | - | 40 | 40 | 200 | 200 | 1,10 | 1,10 |
| 51 | 51 | 2 | 51,0 | 51,0 | - | - | 62,0 | 62,0 | 7 | 100 | - | - | 28 | 28 | 255 | 255 | 1,35 | 1,35 |
| 63 | 63 | 2-1/2 | 63,5 | 63,5 | - | - | 76,5 | 76,5 | 5 | 70 | - | - | 20 | 20 | 315 | 315 | 1,90 | 1,90 |
| 76 | 76 | 3 | 76,2 | 76,2 | - | - | 89,2 | 89,2 | 5 | 70 | - | - | 20 | 20 | 380 | 380 | 2,50 | 2,50 |
| 89 | 89 | 3-1/2 | 89,0 | 89,0 | - | - | 102,0 | 102,0 | 5 | 70 | - | - | 20 | 20 | 400 | 400 | 2,80 | 2,80 |
| 102 | 102 | 4 | 102,0 | 102,0 | - | - | 116,0 | 116,0 | 5 | 70 | - | - | 20 | 20 | 510 | 510 | 3,80 | 3,80 |

SAE 100 R 4

Tube:

NBR, black, smooth, antistatic

Reinforcement:

Textile wrapped, zinc plated double steel wire helix (ID > 2 1/2" zinc plated steel wire helix)

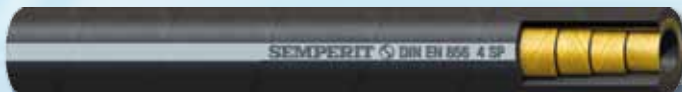
Cover:

SBR-EPDM, black, abrasion resistant, ozone resistant, cloth impression

Temperature range (medium):

-40°C to 100°C

MULTISPIRAL HYDRAULIC HOSES



| Nominal Ø | Inside Ø | Braid Ø | Outside Ø | Working pressure | | Test pressure | Burst pressure | Bend radius | Weight | |
|-----------|----------|---------|-----------|------------------|-----|---------------|----------------|-------------|--------|------|
| | | | | bar | psi | | | | | |
| 10 | 3/8 | 9,9 | 17,4 | 21,1 | 445 | 6455 | 890 | 1780 | 180 | 0,70 |
| 12 | 1/2 | 13,0 | 20,6 | 24,2 | 425 | 6165 | 850 | 1700 | 230 | 0,85 |
| 16 | 5/8 | 16,4 | 24,2 | 27,9 | 350 | 5075 | 780 | 1560 | 250 | 1,04 |
| 19 | 3/4 | 19,5 | 27,9 | 32,0 | 350 | 5075 | 770 | 1540 | 300 | 1,32 |
| 25 | 1 | 26,0 | 35,1 | 38,9 | 320 | 4640 | 640 | 1280 | 340 | 2,06 |
| 31 | 1-1/4 | 32,5 | 45,9 | 50,5 | 210 | 3045 | 480 | 960 | 460 | 3,14 |
| 38 | 1-1/2 | 38,7 | 52,1 | 56,8 | 185 | 2685 | 420 | 840 | 560 | 3,61 |
| 51 | 2 | 51,1 | 65,4 | 70,2 | 165 | 2395 | 330 | 660 | 660 | 5,13 |

DIN EN 856 4 SP

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Four high tensile steel wire spiral layers

Cover:

Abrasion and ozone resistant synthetic rubber – MSHA approved. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | Inside Ø | Braid Ø | Outside Ø | Working pressure | | Test pressure | Burst pressure | Bend radius | Weight | |
|-----------|----------|---------|-----------|------------------|-----|---------------|----------------|-------------|--------|------|
| | | | | bar | psi | | | | | |
| 19 | 3/4 | 19,5 | 28,3 | 31,9 | 420 | 6090 | 840 | 1680 | 280 | 1,43 |
| 25 | 1 | 26,0 | 35,4 | 38,7 | 380 | 5510 | 760 | 1520 | 340 | 2,20 |
| 31 | 1-1/4 | 32,5 | 42,3 | 45,2 | 350 | 5075 | 700 | 1380 | 460 | 2,58 |
| 38 | 1-1/2 | 38,7 | 49,2 | 53,4 | 290 | 4200 | 580 | 1160 | 560 | 3,30 |
| 51 | 2 | 51,1 | 63,2 | 67,3 | 250 | 3625 | 500 | 1000 | 700 | 4,94 |

DIN EN 856 4 SH

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Four high tensile steel wire spiral layers

Cover:

Abrasion and ozone resistant synthetic rubber – MSHA approved. Note: various covers available

Temperature range (medium):

-40°C to 100°C (max 120°C intermittent)



| Nominal Ø | Inside Ø | Braid Ø | Outside Ø | Working pressure | | Test pressure | Burst pressure | Bend radius | Weight | |
|-----------|----------|---------|-----------|------------------|-----|---------------|----------------|-------------|--------|------|
| | | | | bar | psi | | | | | |
| 10 | 3/8 | 9,9 | 17,4 | 20,4 | 280 | 4060 | 560 | 1120 | 125 | 0,66 |
| 12 | 1/2 | 13,0 | 20,6 | 24,1 | 280 | 4060 | 560 | 1120 | 180 | 0,83 |
| 16 | 5/8 | 16,4 | 24,2 | 27,8 | 280 | 4060 | 560 | 1120 | 200 | 1,04 |
| 19 | 3/4 | 19,5 | 27,9 | 31,0 | 280 | 4060 | 560 | 1120 | 240 | 1,25 |
| 25 | 1 | 26,0 | 35,1 | 38,4 | 280 | 4060 | 560 | 1120 | 300 | 1,86 |
| 31 | 1-1/4 | 32,5 | 44,1 | 46,6 | 210 | 3045 | 420 | 840 | 420 | 2,48 |
| 38 | 1-1/2 | 38,7 | 49,9 | 53,3 | 175 | 2540 | 350 | 700 | 500 | 2,83 |
| 51 | 2 | 51,1 | 63,7 | 66,6 | 175 | 2540 | 350 | 700 | 630 | 4,47 |

DIN EN 856 / SAE 100 R 12

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Four high tensile steel wire spiral layers

Cover:

Abrasion and ozone resistant synthetic rubber – MSHA approved. Note: various covers available

Temperature range (medium):

-40°C to 121°C

MULTISPIRAL HYDRAULIC HOSES



| Nominal Ø | Inside Ø | Braid Ø | Outside Ø | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m | |
|--------------|-------------|------------|--------------|------------------|-----|----------------------|-----------------------|-------------------|----------------|------|
| | | | | bar | psi | | | | | |
| 19 | 3/4 | 19,5 | 28,6 | 32,3 | 350 | 5075 | 700 | 1400 | 240 | 1,57 |
| 25 | 1 | 26,0 | 35,5 | 38,7 | 350 | 5075 | 700 | 1400 | 300 | 1,92 |
| 31 | 1-1/4 | 32,2 | 46,8 | 49,8 | 350 | 5075 | 700 | 1400 | 420 | 3,60 |
| 38 | 1-1/2 | 38,5 | 54,3 | 57,3 | 350 | 5075 | 700 | 1400 | 500 | 4,80 |
| 51 | 2 | 51,2 | 68,1 | 71,1 | 350 | 5075 | 700 | 1400 | 630 | 6,60 |

DIN EN 856 / SAE 100 R 13

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Four spiral layers DN 19 – DN 25 and six spiral layers DN 32 – DN 51 of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber – MSHA approved. Note: various covers available

Temperature range (medium):

-40°C to 121°C



| Nominal Ø | Inside Ø | Braid Ø | Outside Ø | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m | |
|--------------|-------------|------------|--------------|------------------|-----|----------------------|-----------------------|-------------------|----------------|------|
| | | | | bar | psi | | | | | |
| 19 | 3/4 | 19,5 | 28,3 | 31,9 | 420 | 6090 | 840 | 1680 | 265 | 1,43 |
| 25 | 1 | 26,0 | 35,4 | 38,7 | 420 | 6090 | 840 | 1680 | 330 | 2,16 |
| 31 | 1-1/4 | 32,2 | 48,0 | 51,3 | 420 | 6090 | 840 | 1680 | 445 | 2,96 |
| 38 | 1-1/2 | 38,5 | 56,3 | 59,6 | 420 | 6090 | 840 | 1680 | 530 | 5,10 |

SAE 100 R 15

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

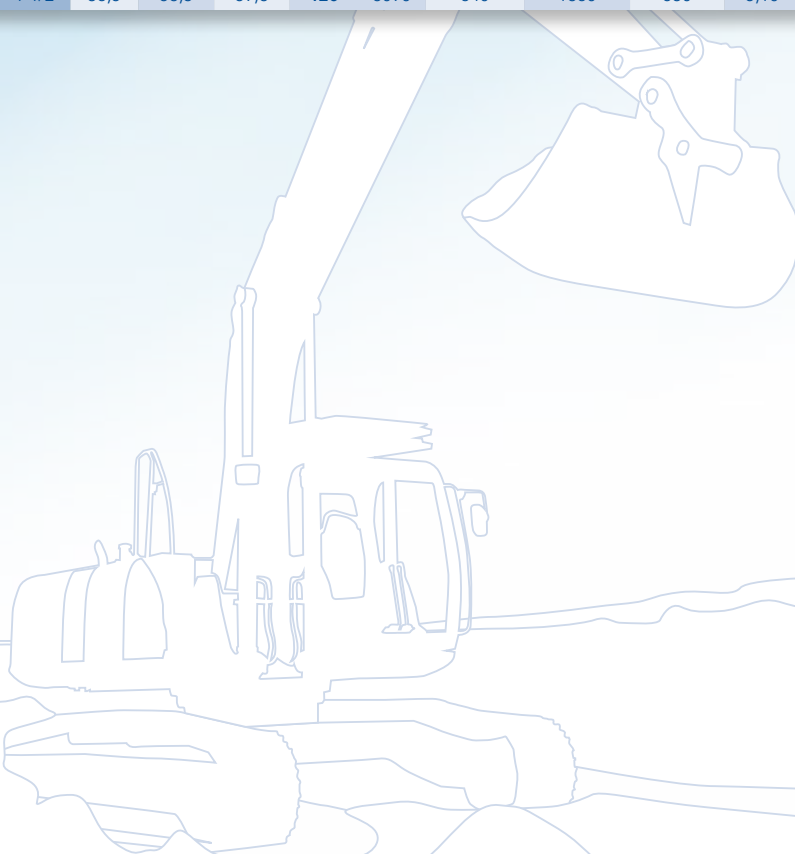
Four spiral layers DN 19 – DN 25 and six spiral layers DN 32 – DN 38 of high tensile steel wire

Cover:

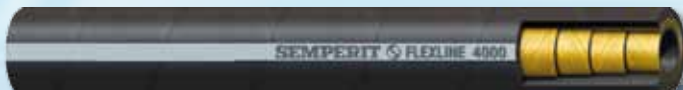
Abrasion and ozone resistant synthetic rubber – MSHA approved. Note: various covers available

Temperature range (medium):

-40°C to 121°C



SPECIALITIES MULTISPIRAL HYDRAULIC HOSES



| Nominal Ø | mm | inch | Inside Ø | mm | Braid Ø | mm | Outside Ø | mm | Working pressure | | Test pressure | bar | Burst pressure | bar | Bend radius | mm | Weight | kg/m |
|-----------|-----|------|----------|----|---------|----|-----------|----|------------------|------|---------------|-----|----------------|-----|-------------|----|--------|------|
| | | | | | | | | | bar | psi | | | | | | | | |
| 10 | 3/8 | | 9,9 | | 17,4 | | 20,4 | | 280 | 4060 | 560 | | 1120 | | 65 | | 0,66 | |
| 12 | 1/2 | | 13,0 | | 20,6 | | 24,1 | | 280 | 4060 | 560 | | 1120 | | 90 | | 0,83 | |
| 16 | 5/8 | | 16,4 | | 24,2 | | 27,8 | | 280 | 4060 | 560 | | 1120 | | 100 | | 1,04 | |
| 19 | 3/4 | | 19,5 | | 27,9 | | 31,0 | | 280 | 4060 | 560 | | 1120 | | 120 | | 1,25 | |
| 25 | 1 | | 26,0 | | 35,1 | | 38,4 | | 280 | 4060 | 560 | | 1120 | | 155 | | 1,86 | |

Impuls tested up to one million cycles!

FLEXLINE 4000

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Four high tensile steel wire spiral layers

Cover:

Abrasion and ozone resistant synthetic rubber – MSHA approved. Note: various covers available

Temperature range (medium):

-40°C to 121°C



| Nominal Ø | mm | inch | Inside Ø | mm | Braid Ø | mm | Outside Ø | mm | Working pressure | | Test pressure | bar | Burst pressure | bar | Bend radius | mm | Weight | kg/m |
|-----------|-------|------|----------|----|---------|----|-----------|----|------------------|------|---------------|-----|----------------|-----|-------------|----|--------|------|
| | | | | | | | | | bar | psi | | | | | | | | |
| 19 | 3/4 | | 19,5 | | 28,3 | | 31,9 | | 430 | 6235 | 860 | | 1720 | | 210 | | 1,43 | |
| 25 | 1 | | 26,0 | | 35,4 | | 38,7 | | 400 | 5800 | 800 | | 1600 | | 220 | | 2,08 | |
| 31 | 1-1/4 | | 32,5 | | 42,3 | | 45,2 | | 360 | 5220 | 720 | | 1440 | | 240 | | 2,58 | |

Impuls tested up to one million cycles!

4 SH PREMIUM

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Four high tensile steel wire spiral layers

Cover:

Abrasion and ozone resistant synthetic rubber – MSHA approved. Note: various covers available

Temperature range (medium):

-40°C to 121°C



| Nominal Ø | mm | inch | Inside Ø | mm | Braid Ø | mm | Outside Ø | mm | Working pressure | | Test pressure | bar | Burst pressure | bar | Bend radius | mm | Weight | kg/m |
|-----------|-----|------|----------|----|---------|----|-----------|----|------------------|------|---------------|-----|----------------|-----|-------------|----|--------|------|
| | | | | | | | | | bar | psi | | | | | | | | |
| 19 | 3/4 | | 19,5 | | 28,3 | | 31,9 | | 425 | 6160 | 850 | | 1700 | | 210 | | 1,43 | |
| 25 | 1 | | 26,0 | | 35,4 | | 38,7 | | 425 | 6160 | 850 | | 1700 | | 220 | | 2,16 | |

Impuls tested up to one million cycles!

R 15 PREMIUM

Tube:

Synthetic rubber, resistant against hydraulic fluids

Reinforcement:

Four high tensile steel wire spiral layers

Cover:

Abrasion and ozone resistant synthetic rubber – MSHA approved. Note: various covers available

Temperature range (medium):

-40°C to 121°C

SEMPERIT HOSES FOR PRESSURE WASHER APPLICATIONS

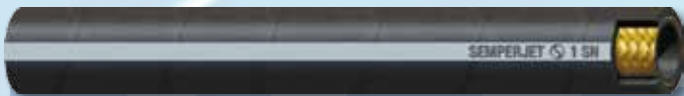
Semperit is one of the largest producers of pressure washer hoses worldwide, and is specialized in the production and marketing of these products. Leading brands rely on Semperit hoses in their equipment.

MODULAR SYSTEM FOR PRESSURE WASHER HOSES

| 1 | HOSES | 2 | COVERS | 3 | BRANDINGS |
|--|-------|--|--------|---|-----------|
|  <p>HOSE</p> <p>Semperjet 1SN + 2SN Typical after-sales market hoses for many applications</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Solid construction • Good service lifetime • Multifitting compability with dimensions following SAE100 /EN853 • Easy to crimp <p>Special compact construction</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Increased working pressure • Small diameters, low weight • Very flexible and light | |  <p>COVER</p> <p>Black Standard for Pressure Washer Hoses</p> <p>Blue</p> <p>Grey</p> <p>Antiabrasion (UHMPE foil) Pinpricked possible on special request</p> <p>All Covers wrapped</p> | |  <p>BRANDING</p> <p>Embossed Branding Standard for Pressure Washer Hoses</p> <p>Mylar Tape Branding</p> <p>Inkjet Branding</p> | |

Please contact our sales department to discuss details.

SEMPERJET



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 10,9 | 13 | 250 | 3625 | 450 | 900 | 100 | 0,19 |
| 8 | 5/16 | 8,3 | 12,5 | 14,7 | 220 | 3190 | 430 | 860 | 115 | 0,22 |
| 10 | 3/8 | 9,9 | 14,8 | 16,8 | 220 | 3190 | 360 | 720 | 125 | 0,28 |
| 12 | 1/2 | 13,0 | 17,9 | 20 | 220 | 3190 | 330 | 640 | 180 | 0,36 |
| 16 | 5/8 | 16,4 | 21,0 | 23,2 | 130 | 1885 | 260 | 520 | 200 | 0,42 |

SEMPERJET 1 SN

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

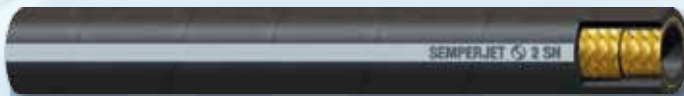
One braid of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: Black, blue and grey cover available

Temperature range (medium):

-10°C to 155°C



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 12,4 | 13,4 | 400 | 5800 | 800 | 1600 | 100 | 0,19 |
| 8 | 5/16 | 8,3 | 14,0 | 16,0 | 400 | 5800 | 700 | 1400 | 115 | 0,22 |
| 10 | 3/8 | 9,9 | 16,4 | 18,4 | 400 | 5800 | 660 | 1320 | 125 | 0,28 |
| 12 | 1/2 | 13,0 | 19,4 | 21,4 | 400 | 5800 | 600 | 1100 | 180 | 0,36 |

SEMPERJET 2 SN

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

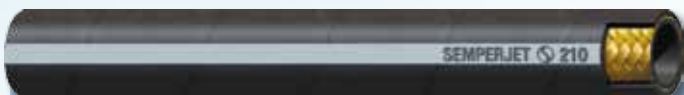
Two braids of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: Black, blue and grey cover available

Temperature range (medium):

-10°C to 155°C



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 10,0 | 11,5 | 210 | 3045 | 420 | 840 | 35 | 0,14 |

SEMPERJET 210

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

One braid of high tensile steel wire

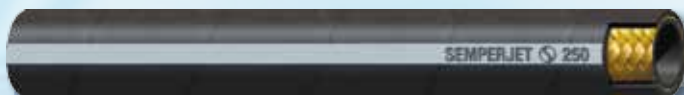
Cover:

Abrasion and weather resistant synthetic rubber. Note: black, blue or grey cover available

Temperature range (medium):

-10°C to 155°C

SEMPERJET



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 10,0 | 11,8 | 250 | 3625 | 500 | 1000 | 35 | 0,16 |
| 8 | 5/16 | 8,3 | 11,7 | 13,7 | 250 | 3625 | 500 | 1000 | 65 | 0,21 |
| 10 | 3/8 | 9,9 | 13,5 | 16,5 | 250 | 3625 | 475 | 950 | 75 | 0,29 |
| 12 | 1/2 | 13,0 | 17,1 | 19,6 | 250 | 3625 | 420 | 840 | 100 | 0,39 |

SEMPERJET 250

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

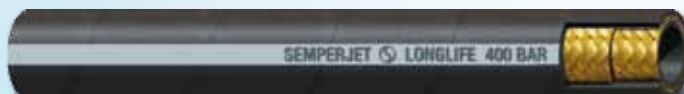
One braid of high tensile steel wire

Cover:

Abrasion and weather resistant synthetic rubber. Note: black, blue or grey cover available

Temperature range (medium):

-10°C to 155°C



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 11,0 | 13,0 | 400 | 5800 | 800 | 1600 | 75 | 0,25 |
| 8 | 5/16 | 8,3 | 12,4 | 14,6 | 400 | 5800 | 700 | 1400 | 85 | 0,30 |
| 10 | 3/8 | 9,9 | 14,7 | 16,6 | 400 | 5800 | 660 | 1320 | 90 | 0,37 |
| 12 | 1/2 | 13,0 | 18,0 | 20,0 | 400 | 5800 | 550 | 1100 | 130 | 0,46 |

SEMPERJET LONGLIFE 400

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

Two braids of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: Black, blue and grey cover available

Temperature range (medium):

-10°C to 155°C



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|----------------|---------------|-----------------|------------------|------|----------------------|-----------------------|-------------------|----------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 11,5 | 13,1 | 500 | 7250 | 800 | 1600 | 75 | 0,28 |
| 8 | 5/16 | 8,3 | 12,8 | 14,5 | 500 | 7250 | 840 | 1600 | 60 | 0,34 |
| 10 | 3/8 | 9,9 | 15,0 | 17,1 | 500 | 7250 | 770 | 1540 | 70 | 0,44 |
| 12 | 1/2 | 13,0 | 18,7 | 20,7 | 500 | 7250 | 690 | 1380 | 90 | 0,54 |

SEMPERJET LONGLIFE 500

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

Two braids of high tensile steel wire

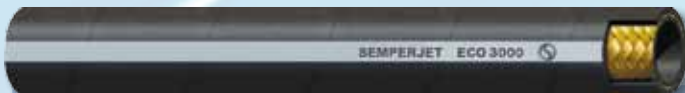
Cover:

Abrasion and weather resistant synthetic rubber. Note: black, blue or grey cover available

Temperature range (medium):

-10°C to 155°C

SEMPERJET ECO



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|-------------|------------|--------------|------------------|------|-------------------|--------------------|----------------|-------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 10,4 | 11,7 | 210 | 3000 | 315 | 630 | 35 | 0,18 |
| 8 | 5/16 | 8,3 | 11,9 | 13,6 | 210 | 3000 | 315 | 630 | 65 | 0,20 |
| 10 | 3/8 | 9,9 | 13,9 | 16,0 | 210 | 3000 | 315 | 630 | 75 | 0,26 |
| 12 | 1/2 | 13,0 | 17,6 | 19,6 | 210 | 3000 | 315 | 630 | 100 | 0,37 |

SEMPERJET ECO 3000

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

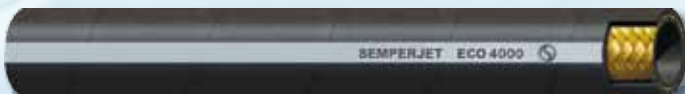
One braid of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: black, blue or grey cover available

Temperature range (medium):

-10°C to 155°C



| Nominal Ø | | Inside Ø mm | Braid Ø mm | Outside Ø mm | Working pressure | | Test pressure bar | Burst pressure bar | Bend radius mm | Weight kg/m |
|-----------|------|-------------|------------|--------------|------------------|------|-------------------|--------------------|----------------|-------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 10,4 | 11,8 | 276 | 4000 | 414 | 828 | 35 | 0,18 |
| 8 | 5/16 | 8,3 | 11,9 | 13,7 | 276 | 4000 | 414 | 828 | 65 | 0,20 |
| 10 | 3/8 | 9,9 | 13,9 | 16,1 | 276 | 4000 | 414 | 828 | 75 | 0,26 |
| 12 | 1/2 | 13,0 | 17,6 | 19,6 | 276 | 4000 | 414 | 828 | 100 | 0,37 |

SEMPERJET ECO 4000

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

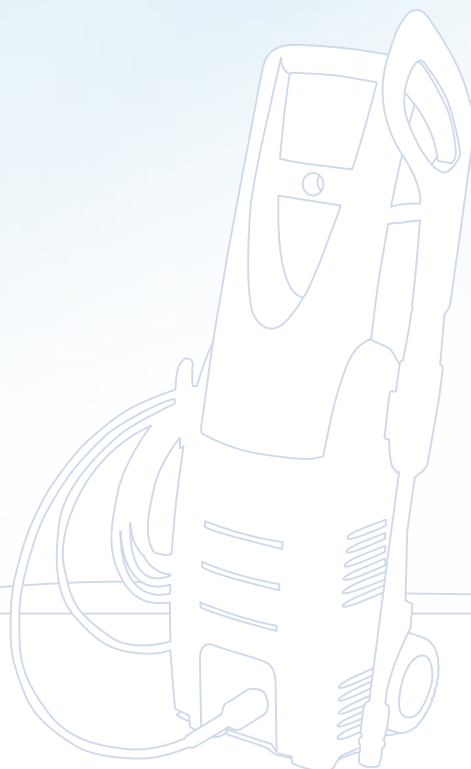
One braid of high tensile steel wire

Cover:

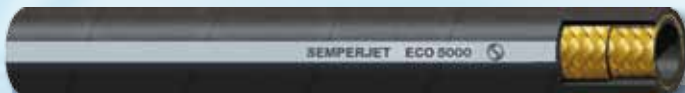
Abrasion and ozone resistant synthetic rubber. Note: black, blue or grey cover available

Temperature range (medium):

-10°C to 155°C



SEMPERJET ECO



| Nominal Ø | | Inside Ø _{mm} | Braid Ø _{mm} | Outside Ø _{mm} | Working pressure | | Test pressure _{bar} | Burst pressure _{bar} | Bend radius _{mm} | Weight _{kg/m} |
|-----------|------|------------------------|-----------------------|-------------------------|------------------|------|------------------------------|-------------------------------|---------------------------|------------------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 11,7 | 13,6 | 350 | 5000 | 525 | 1050 | 75 | 0,30 |
| 8 | 5/16 | 8,3 | 13,1 | 15,3 | 350 | 5000 | 525 | 1050 | 85 | 0,34 |
| 10 | 3/8 | 9,9 | 15,2 | 17,4 | 350 | 5000 | 525 | 1050 | 90 | 0,41 |
| 12 | 1/2 | 13,0 | 18,8 | 21,0 | 350 | 5000 | 525 | 1050 | 130 | 0,59 |

SEMPERJET ECO 5000

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

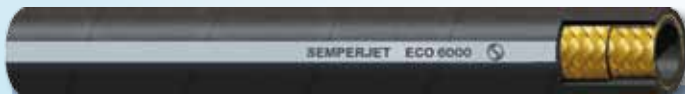
Two braids of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: black, blue or grey cover available

Temperature range (medium):

-10°C to 155°C



| Nominal Ø | | Inside Ø _{mm} | Braid Ø _{mm} | Outside Ø _{mm} | Working pressure | | Test pressure _{bar} | Burst pressure _{bar} | Bend radius _{mm} | Weight _{kg/m} |
|-----------|------|------------------------|-----------------------|-------------------------|------------------|------|------------------------------|-------------------------------|---------------------------|------------------------|
| mm | inch | | | | bar | psi | | | | |
| 6 | 1/4 | 6,6 | 11,7 | 13,6 | 414 | 6000 | 621 | 1242 | 75 | 0,30 |
| 8 | 5/16 | 8,3 | 13,1 | 15,3 | 414 | 6000 | 621 | 1242 | 85 | 0,34 |
| 10 | 3/8 | 9,9 | 15,2 | 17,4 | 414 | 6000 | 621 | 1242 | 90 | 0,41 |

SEMPERJET ECO 6000

Tube:

Synthetic rubber, resistant against cold and hot water with usual cleaning agents

Reinforcement:

Two braids of high tensile steel wire

Cover:

Abrasion and ozone resistant synthetic rubber. Note: black, blue or grey cover available

Temperature range (medium):

-10°C to 155°C

TYPE APPROVAL CERTIFICATES

Approval Types of Semperit Hoses:

| | |
|----------|---|
| LOBA | Landesoberbergamt NRW |
| DSK | Oberbergamt für das Saarland und Rheinland-Pfalz |
| GL | Germanischer Lloyd |
| BWB | Bundesamt f. Wehrtechnik u. Beschaffung |
| DNV | Det Norske Veritas |
| RINA | Registro Italiano Navale |
| BV | Bureau Veritas |
| MSHA | Mine Safety and Health Administration |
| TEST | Opiniujacej Atestujacej I Certyfikujacej Wyroby TEST Sp.z. o.o. |
| OPAVA | Technical Laboratories OPAVA |
| GOST | Gossudarstwenny Standart |
| DOZVIL | Sertifikat Vidpovidnosti Ukrainy |
| DIN 5510 | Approvals for Railways (Deutsche Bahn) |
| MA | Mining Certificate China |



SPECIFICATION OF HYDRAULIC HOSE LENGTH IN ONE SHIPMENT

If no specific hose lengths have been agreed on, the percentage of different lengths in any given delivery shall be as follows:

According to EN 853 – 857:

min. 80% in lengths over 20 m
max. 20% in lengths over 10 m to 20 m
max. 3% in lengths over 1 m to 10 m
no length of hose may be less than 1 m
Tolerance of the specified coil length is $\pm 2\%$

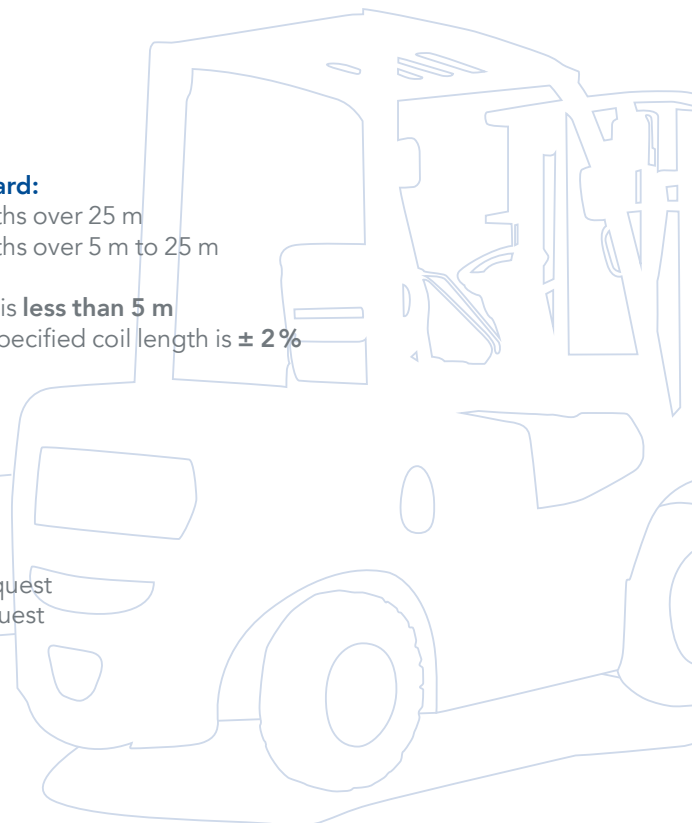


SEMPERIT standard:

min. 90% in lengths over 25 m
max. 10% in lengths over 5 m to 25 m
no length of hose is less than 5 m
Tolerance of the specified coil length is $\pm 2\%$

SPECIFICATION OF PRESSURE WASHER HOSE LENGTH IN ONE SHIPMENT

- Multiples of 10 m or according to specifications – prices on request
- Fixed lengths, cut and coiled, ready for crimping – prices on request



GENERAL INFORMATION ON THE USE OF OUR PRODUCTS

The choice of the correct type of hose is very important for proper and safe use in service.

Please check the suitability of the chosen product for the customer's specific applications, and instruct your customers accurately about the functional range of our products and their limitations.

However, the suitability of a chosen product for the customer's specific application can only be determined in individual cases and is dependent on the specific installation situation (especially the hose curvature), the combination with a coupling, and the compatibility of the medium with the inner surface of the hose (inner liner).

Please consult our home page www.semperflex.com for further information in detail. This brief overview does not replace specific advice in individual cases.

Please obtain specific advice in the event of any uncertainty!

The number of potential operating hours falls if the hose is used under unfavourable operating conditions. These include maximum operational pressure, maximum temperature, and minimum bending radius. When several of these factors coincide, the product deteriorates more rapidly and therefore must be replaced sooner.

Therefore please verify operating conditions regularly, and adapt your replacement cycle to them.

IMPORTANT NOTES

This catalogue has been carefully prepared to provide our customers with comprehensive information. The information contained within is the result of many years of testing and trials, or is based on the specifications of EN853, 856, 857 und SAE J 517.

The choice of the correct hose type is very important for proper and safe use in service. Please check the suitability of the chosen product for the customer's specific applications, and instruct your customers accurately about the functional range of our products and their limitations. The application, use, and processing of our products and products manufactured on the basis of our technical advice are beyond our control, and therefore entirely your own responsibility. Our advice does not release you from the obligation to check its validity and to test our products for their suitability in the intended processes and uses. All hoses must be regularly checked for operational safety. In the event of damage, in particular to the hose cover, hoses must be replaced for safety reasons. Operation under unfavourable operating conditions (maximum operational pressure, maximum temperature or minimum bending radius) may reduce service life significantly. Please adapt your replacement cycle accordingly! Our products are sold in accordance with our General Conditions of Sale and Delivery. The information contained herein at printing is current as of 03/2013, 1st edition. We continuously work to advance our products for our customers. Please keep yourself informed regularly about the most recent product specifications by contacting our specialised dealers or Semperit's application engineers.

We reserve the right to make amendments at any time.

IMPORTANT INFORMATION:

Incorrect product selection or improper installation of hoses can result in damage to or failure of the hose, (often serious) material damage, and personal injury. Particularly in applications with high operational pressures, non-compliance with specifications can result in a serious risk of injury! Therefore, in case of doubt, please seek specific advice!



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HYDRAULICS

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