

PH153 R1AT / SN

Application

MEDIUM Pressure Hydraulic Lines 40 to 250 bar and requires compact outer dia. For use with petroleum, synthetic or water based fluids in Hydraulic systems Suitable for Agricultural, Earthmoving & Material handling equipments and machineries/systems

② **PH153-3:** Hose Type -3 (3/16" or 4.8mm ID) is suitable for 250 bar working pressure (3625 psi) and up to 1000 bar burst pressure (14500 psi). It has a minimum bend radius of 90mm.

② **PH153-4:** Hose Type -4 (1/4" or 6.4mm ID) is suitable for 225 bar working pressure (3275 psi) and up to 900 bar burst pressure (13100 psi). Minimum bend radius: 100mm.

② **PH153-5:** Hose Type -5 (5/16" or 8.0mm ID) is suitable for 215 bar working pressure (3125 psi) and up to 860 bar burst pressure (12500 psi). Minimum bend radius: 105mm.

② **PH153-6:** Hose Type -6 (3/8" or 9.5mm ID) is suitable for 180 bar working pressure (2625 psi) and up to 720 bar burst pressure (10500 psi). Minimum bend radius: 130mm.

② **PH153-8:** Hose Type -8 (1/2" or 12.7mm ID) is suitable for 160 bar working pressure (2325 psi) and up to 640 bar burst pressure (9300 psi). Minimum bend radius: 180mm.

② **PH153-10:** Hose Type -10 (5/8" or 16.0mm ID) is suitable for 130 bar working pressure (1900 psi) and up to 520 bar burst pressure (7600 psi). Minimum bend radius: 200mm.

② **PH153-12:** Hose Type -12 (3/4" or 19.0mm ID) is suitable for 105 bar working pressure (1525 psi) and up to 420 bar burst pressure (6100 psi). Minimum bend radius: 240mm.

② **PH153-16:** Hose Type -16 (1" or 25.4mm ID) is suitable for 88 bar working pressure (1275 psi) and up to 352 bar burst pressure (5100 psi). Minimum bend radius: 300mm.

② **PH153-20:** Hose Type -20 (1-1/4" or 31.8mm ID) is suitable for 63 bar working pressure (915 psi) and up to 252 bar burst pressure (3660 psi). Minimum bend radius: 420mm.

② **PH153-24:** Hose Type -24 (1-1/2" or 38.1mm ID) is suitable for 50 bar working pressure (725 psi) and up to 200 bar burst pressure (2900 psi). Minimum bend radius: 500mm.

② **PH153-32:** Hose Type -32 (2" or 50.8mm ID) is suitable for 40 bar working pressure (580 psi) and up to 160 bar burst pressure (2320 psi). Minimum bend radius: 630mm.

② **PH153-40:** Hose Type -40 (2-1/2" or 63.5mm ID) is suitable for 36 bar working pressure (525 psi) and up to 200 bar burst pressure (2900 psi). Minimum bend radius: 760mm.

② **PH153-48:** Hose Type -48 (3" or 76.2mm ID) is suitable for 35 bar working pressure (508 psi) and up to 140 bar burst pressure (2030 psi). Minimum bend radius: 900mm.

Applicable Standard: Standard: SAE J517 – 100 R1 / EN 8531SN

Construction: Core: Oil & water resistant Synthetic rubber Reinforcement: Single steel wire braid Cover: Black Color, Synthetic rubber resistant to weather and abrasion, oil & ozone.

Temperature Range: Continuous: -40°C to +120°C Impulse Cycles : 150,000 Tested upto:
300,000 cycles, upto 1"l.D

PH154 – R2AT / 2SN

- Application

High Pressure Hydraulic Lines 80 to 415 bar and requires compact outer dia. For use with petroleum, synthetic or water based fluids in Hydraulic systems Suitable for Agricultural, Earthmoving & Material handling equipments and machineries/systems

Hose PH154-3 is suitable for up to **415 bar** working pressure (6010 psi), with a minimum burst pressure of **1660 bar** (24040 psi). It has a **3/16 inch** (4.8 mm) internal diameter and a **14.0 mm** outer diameter. Minimum bend radius is **90 mm**.

- **Hose PH154-4** supports a working pressure of **400 bar** (5800 psi), burst pressure of **1600 bar** (23200 psi), with a **1/4 inch** (6.4 mm) I.D. and **15.0 mm** O.D. It can bend at a minimum radius of **100 mm**.
- **Hose PH154-5** is rated for **350 bar** (5075 psi) working pressure and **1400 bar** (20300 psi) burst pressure. The I.D. is **5/16 inch** (8.0 mm) and O.D. is **16.5 mm**, with a bend radius of **115 mm**.
- **Hose PH154-6** is designed for **330 bar** (4800 psi) working and **1320 bar** (19200 psi) burst pressures, with **3/8 inch** (9.5 mm) I.D., **18.8 mm** O.D., and **130 mm** minimum bend radius.
- **Hose PH154-8** can handle **276 bar** (4000 psi) working and **1104 bar** (16000 psi) burst pressure, with **1/2 inch** (12.7 mm) I.D., **22.0 mm** O.D., and **180 mm** bend radius.
- **Hose PH154-10** supports **250 bar** (3625 psi) and bursts at **1000 bar** (14500 psi), with **5/8 inch** (16.0 mm) I.D., **25.2 mm** O.D., and **200 mm** bend radius.
- **Hose PH154-12** is suitable for **215 bar** (3100 psi) working and **860 bar** (12400 psi) burst pressure, with **3/4 inch** (19.0 mm) I.D., **29.2 mm** O.D., and **240 mm** minimum bend radius.
- **Hose PH154-16** can withstand **165 bar** (2400 psi) working and **660 bar** (9600 psi) burst pressure. It features **1 inch** (25.4 mm) I.D., **37.6 mm** O.D., and a **300 mm** bend radius.
- **Hose PH154-20** is built for **125 bar** (1800 psi) and bursts at **500 bar** (7200 psi), with **1.1/4 inch** (31.8 mm) I.D., **47.5 mm** O.D., and **420 mm** bend radius.
- **Hose PH154-24** supports **90 bar** (1300 psi) working and **360 bar** (5200 psi) burst pressures. I.D. is **1.1/2 inch** (38.1 mm), O.D. is **54.3 mm**, and bend radius is **500 mm**.
- **Hose PH154-32** is designed for **80 bar** (1160 psi) and bursts at **320 bar** (4640 psi), with **2 inch** (50.8 mm) I.D., **67.0 mm** O.D., and **630 mm** bend radius.
- **Hose PH154-40** can withstand **70 bar** (1015 psi) working and **280 bar** (4060 psi) burst pressure. It has a **2.1/2 inch** (63.5 mm) I.D., **83.0 mm** O.D., and **760 mm** bend radius.
- **Hose PH154-48** supports **55 bar** (798 psi) working and **220 bar** (3192 psi) burst pressure. With **3 inch** (76.2 mm) I.D., **96.0 mm** O.D., and **900 mm** bend radius.

Additional Information

- **Standard:** SAE J517 – 100 R2 / EN 853-2SN
- **Core:** Oil & water resistant synthetic rubber
- **Reinforcement:** Double steel wire braids
- **Cover:** Black synthetic rubber resistant to weather, abrasion, oil & ozone
- **Temperature Range:** -40°C to +120°C
- **Impulse Life:** Tested up to 400,000 cycles (up to 1" I.D.)

PH277 - 4SP Hose Specification Summary

Applicable Standard: **EN 856 - 4SP / ISO 3862**

Construction:

- **Inner Tube:** Black synthetic rubber resistant to oil and water.
- **Reinforcement:** Four high tensile steel wire spirals.
- **Cover:** Black synthetic rubber resistant to abrasion, weather, oil, and ozone.
- **Applications:** Suitable for medium pressure hydraulic lines (165–450 bar) and hydrostatic transmission lines with petroleum, synthetic, or water-based fluids. Commonly used in earthmoving and material handling equipment.

Hose Types & Pressure Ranges

- **PH277-04** (1/4"): Suitable for pressures up to **450 bar**, with a burst pressure of **1800 bar**.
- **PH277-06** (3/8"): Suitable for pressures up to **445 bar**, with a burst pressure of **1780 bar**.
- **PH277-08** (1/2"): Suitable for pressures up to **415 bar**, with a burst pressure of **1660 bar**.
- **PH277-10** (5/8"): Suitable for pressures up to **350 bar**, with a burst pressure of **1400 bar**.
- **PH277-12** (3/4"): Suitable for pressures up to **380 bar**, with a burst pressure of **1520 bar**.
- **PH277-16** (1"): Suitable for pressures up to **320 bar**, with a burst pressure of **1280 bar**.
- **PH277-20** (1 1/4"): Suitable for pressures up to **210 bar**, with a burst pressure of **840 bar**.
- **PH277-24** (1 1/2"): Suitable for pressures up to **185 bar**, with a burst pressure of **740 bar**.
- **PH277-32** (2"): Suitable for pressures up to **165 bar**, with a burst pressure of **660 bar**.

Hose Specifications – PH278-4SH

This document outlines the specifications for the **PH278-4SH high-pressure hydraulic hoses**, including working and burst pressure, dimensions, and applications.

Structured Hose Information

- **PH278-12:** Hose size 3/4 inch (19 mm ID) is suitable for working pressures up to **420 bar** and burst pressures up to **1680 bar**. It has an outer diameter of 32.2 mm and is used in earthmoving and hydrostatic systems.
 - **PH278-16:** Hose size 1 inch (25 mm ID) is suitable for working pressures up to **380 bar** and burst pressures up to **1520 bar**. The outer diameter is 38.7 mm.
 - **PH278-20:** Hose size 1 1/4 inch (31 mm ID) supports working pressures of up to **350 bar**, and burst pressures up to **1400 bar**. The outer diameter is 45.5 mm.
 - **PH278-24:** Hose size 1 1/2 inch (38 mm ID) is designed for **300 bar working pressure** and **1200 bar burst pressure**, with a 53.5 mm outer diameter.
 - **PH278-32:** Hose size 2 inches (51 mm ID) is rated for up to **250 bar working pressure** and **1000 bar burst pressure**, having an outer diameter of 68.1 mm.
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Application

These hoses are designed for **extra high pressure hydraulic lines** and **hydrostatic transmission systems** for use with petroleum-based, synthetic, or water-based fluids. Commonly used in **earthmoving and material handling machinery**.

Construction Details

- **Inner Tube:** Black synthetic rubber (resistant to oil and water)
- **Reinforcement:** Four high-tensile steel wire spirals
- **Outer Cover:** Abrasion, weather, oil, and ozone-resistant synthetic rubber

Temperature Range

- Continuous use: **-40°C to +100°C**
- Intermittent: **up to +120°C**
- Impulse cycles: **400,000 cycles**

Standards

- **EN 856 - 4SH**
- **ISO 3862**