

# **Hydraulic Accessories**

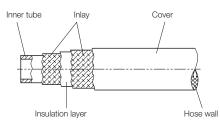
High-pressure hoses, connector blocks, couplings and plug-in connectors

# Hydraulic high-pressure hoses

assembled ready for connection max. operating pressure 250 / 500 bar

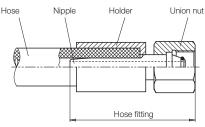


## Hose structure



Depending on operating pressure and nominal diameter, high-pressure hoses consist of one or several layers of wire or textile mesh or spiral inlays.

# Hose union



After pressing of the hose fittings at both ends the high-pressure hose is ready for connection.

## Application

High-pressure hoses are used for energy and signal transmission in hydraulic systems. Especially when connecting movable elements, but also for the connection of hydraulic subassemblies which are not fixed on a common base, e.g. power units and clamping fixtures.

## Service life

The application time including storage time should not exceed 6 years, the net storage time 2 years.

High temperatures, frequent motion cycles or high pulse frequencies can reduce the application time.

## Maintenance

Before putting into operation and then at least once a year, the high-pressure hoses have to be checked by an expert if they are still leakproof.

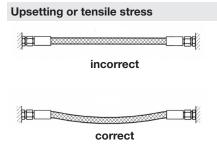
## Important notes

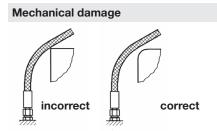
Inappropriate installation, use and maintenance can reduce the service life of high-pressure hoses.

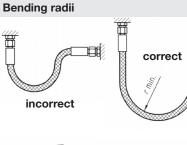
# Advantages Quadruple safety

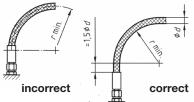
- Every desired length available
- Preferred lengths available from stock
- Marking with manufacturing date as per DIN EN
  ND 4 high-pressure hose in series with wire
  - braiding

# Mounting instructions

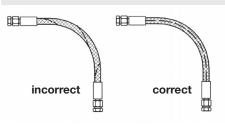




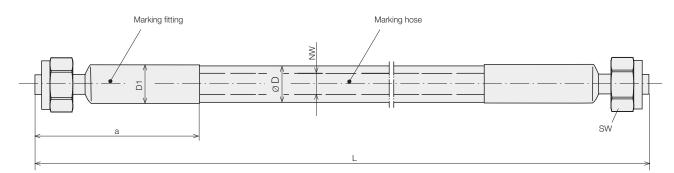




# **Torsional stress**



# **Dimensions / Technical data**



High-pressure hose		ND	4	4	6.3	6
Max. operating pressure		[bar]	250	500	250	500
Port size			8L	8S	8L	8S
Union nut			m8L	m8S	m8L	m8S
SW		[mm]	17	19	17	19
D hose Ø		[mm]	9.5*	9.5*	15	17.5
D1 holder Ø		[mm]	13	13	19	19
Min. bending radius		[mm]	50	50	100	100
Fitting length a		[mm]	42	42	50	52
Minimum length		[mm]	150	150	200	200
specific Increase in volume per bar and meter		$\left[\frac{\text{cm}^3}{\text{bar} \star \text{m}}\right]$	0.006	0.006	0.008	0.006
Part no.			93751 XXXXX	93752 XXXXX	93206 XXXXX	93706 XXXXX
Preferred lengths	L= 500	[mm]	93751 00500	9375200500	9320600500	93706 00500
	1000	[mm]	9375101000	9375201000	9320601000	9370601000
	1600	[mm]	9375101600	9375201600	9320601600	9370601600
	2500	[mm]	93751 02500	9375202500	9320602500	93706 02500

\* with wire braiding

#### Marking hose

on the hose there is the following marking:

- name or code of the manufacturer
- number of European standard
- type
- nominal diameter
- quarter and the last two figures of the year of manufacture
- Marking fitting
- On the fitting there is the following marking:
- name or code of the manufacturer
- month of manufacture
- the last two figures of the year of manufacture
- nominal pressure PN of the hose fitting
- part number of the complete hydraulic hose

#### Important notes!

We deliver only completely pressed high-pressure hoses with mounted union nut. Pipe sockets with removable cutting ring and union nut are no longer allowed.

# Code for part numbers

#### 93XXX XXXXX

Hose length L in mm

Gradation: 5 mm Example: L = 750 mm : **00750** (Pay attention to the minimum length as per chart)

# Nominal diameter, union nut and nominal pressure

**751**: ND 4
 - m8L - 250 bar

 **752**: ND 4
 - m8S - 500 bar

 **206**: ND 6.3
 - m8L - 250 bar

 **706**: ND 6
 - m8S - 500 bar

Further hose lengths and union nuts are available on request

# Code for part numbers

# 27001 XXXX

for variable lengths with hose connection on both sides

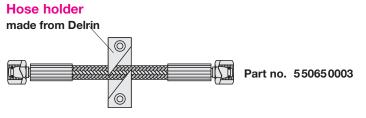
Union nut M14 x 1.5 or M12 x 1.5\*

\*When selecting hose connection M12 x 1.5 only max. operating pressure of 250 bar is admissible

# Length tolerances as per DIN 20066

•	•
Hose length L	Tolerance
≤ 630 mm	+7 / -3 mm
631–1250 mm	+12/-4 mm
1251–2500 mm	+20 / -6 mm
2501–8000 mm	+1.5/-0.5%
> 8001 mm	+3/-1%

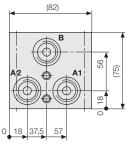
# Accessory

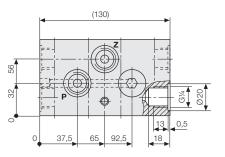


# **Connecting block**

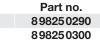
with pilot-operated check valves



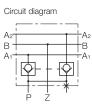




**Connecting threads** 2 x G 3/8 + 6 x G 1/4 8 x G 3/8

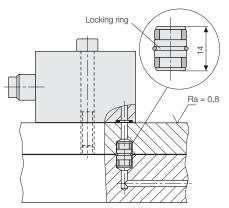


Control pressure = 0.38 x operating pressure + 12

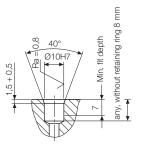


# Plug-in connectors for plates and piping boards

## Installation example



## Installation dimensions short version



Min. fit depth

40

Min. fit dept

Installation dimensions long version

Length [mm]	Nominal diameter [mm]	Max. operating pressure [bar]	Seal	Part no.
14	5	500	FKM	9210132
19	5	500	FKM	9210127

# **Quick-disconnect couplings**

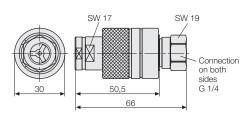


#### Description

The quick-disconnect couplings are couplings of sturdy design which lock automatically after uncoupling.

Connection and disconnection is made in the unpressurised condition.

The displacement of the sleeve to the corresponding coupling or uncoupling direction enables an easy one-hand operation.



Description	Part no.
Coupling complete	9384006
Coupler	9384106
Nipple	9384206
Dust cap for coupler	9384300
Dust cap for nipple	9384 400
Spare seal O-ring	3001 091
Spare seal back-up ring	3000228

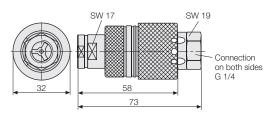
# **Coded couplings**



#### Description

In case of more than one coupling port there is the risk of confusion when coupling. Coded couplings are not only marked by colour but additionally by means of a pin inside of the coupling which only fits into the groove of the corresponding nipple. The risk of confusion is thereby eliminated.

The easy handling of the coded Push-Pull couplings allows for a quick and safe finding of the mechanical code.



	Part no.	Part no.	Part no.
Coding	Coupling complete	Coupler separate	Nipple separate
black	9384715	9384716	9384717
white*	9384725	9384726	9384727
red	9384735	9384736	9384737
yellow	9384745	9384746	9384747
green	9384755	9384756	9384757
blue	9384765	9384766	9384767

\* The white coded nipple is provided with a preloaded valve (VSV) which limits a possible pressure built-up through internal leakages in hydraulic clamping elements to approx. 5 bar. The pre-loaded valve is not effective in coupled mode.

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