

Certificate

Standard **ISO 9001:2015**

Certificate Registr. No. **01 100 5113**

Certificate Holder:



SPIR STAR AG
Auf der Rut 3-7
64668 Rimbach
Germany

Scope:

Development and production of high-pressure hoses and fittings. Sales of products and services in the high-pressure sector

Proof has been furnished by means of an audit that the requirements of ISO 9001:2015 are met.

Validity:

The certificate is valid from 2021-05-01 until 2024-04-30.
First certification 1995

2021-03-29

A handwritten signature in blue ink, appearing to read 'K. H. ...', positioned above a horizontal line.

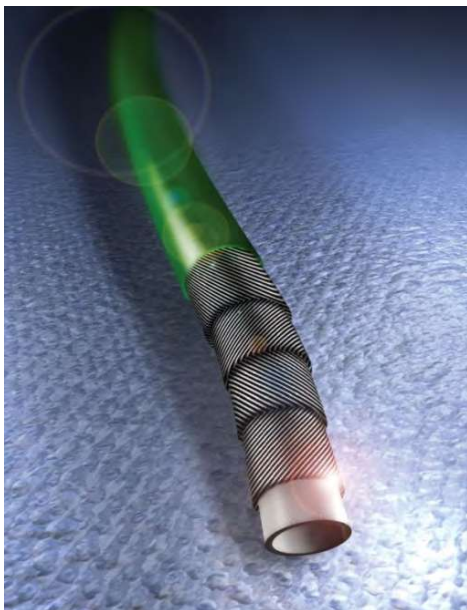
TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

Number of spiralized layers

Type **6/2WHT**

Series Description

Hose ID in mm



Hose Series	
DCI	Double Cover
H	Reinforced version
HT	For very high temperatures Very high chemical resistant PVDF inner core, PVDF outer cover
HW	Hot Water: for very high temperatures
K	Braided layer
L	Extremely flexible
M	For methanol service PA II inner core, PA outer cover
OK	Braided layer outer cover
PPA	For high temperatures Very high chemical resistant PVDF inner core, PA outer cover
R	Reinforced outer cover
W	2 wide layers of spiralized wire
KF	One braided layer

Hose Types



Type	Hose				Pressure Rating				Bend Radius		Weight		Insert ID		Sleeve OD		Application
	ID		OD		Working		Burst		[mm]	[in]	[kg/m]	[lbs/ft]	[mm]	[in]	[mm]	[in]	
	[mm]	[in]	[mm]	[in]	[bar]	[psi]	[bar]	[psi]	[mm]	[in]	[kg/m]	[lbs/ft]	[mm]	[in]	[mm]	[in]	
Hydrogen-Series	<i>Heat-resisting up to 85° C (185° F)</i>																
6mm Hydrogen	6,3	0,25	12,6	0,50	962.5	13.956	3.850	55.825	180	7,09	0,295	0,198	4,5	0,18	18,0	0,71	Oil & Gas, Hydrogen
16mm Hydrogen	15,8	0,62	25,7	1,01	600	8.700	3.000	43.500	300	11,81	1,150	0,773	10,5	0,41	31,8	1,25	Oil & Gas, Hydrogen

Applications

Oil and Gas: Connecting hose from dispenser to fuelling nozzle for gaseous compressed hydrogen

Technical Information

Inner Core: Polyoxymethylene (POM) with low permeation rate
Pressure Support: 4 layers of high-tensile steel wire
Outer Cover: Polyamide (PA)
Color: purple
Temperature: -40°C to +85°C [-40°F to 185°F]



Ø ID	Ø OD	Working Pressure	Burst Pressure	Bend Radius	Weight	Insert ID
6,3 mm	12,6 mm	-- (SF 4,0:1)	962,5 bar	180 mm	0,295 kg/m	4,5 mm
0,25 inch	0,50 inch	--	13.956 psi	7,09 inch	0,198 lbs/ft	0,18 inch

Part no.	Thread	Material	Nut	Dimensions (mm)				Sleeve
				A	B	C	⌀	
Sleeve								
10640125	-	AISI 316	-	16,4	49	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
HP fitting								
40640207W	3/8"x24UNF LH	Stainless steel	-	4,5	89	19,1	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
MP fitting								
40640307W	3/8"x24UNF LH	Stainless steel	-	4,5	87	11,1	-	
40640317W	9/16"x18UNF LH	Stainless steel	-	4,5	99	12,7	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Type M female swivel								
20640607W	9/16"x18UNF	Stainless steel	50540605	4,5	62	20	19	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
JIC female swivel								
20640617W	9/16"x18UNF	Stainless steel	50540605	4,5	57	-	19	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C		
STAR-Crimp								
60640609W	7/16"x20UNF	Stainless steel	incl.	4,5	61	-	17	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C		
Swivel nut								
50540605	9/16"x18UNF	AISI 316	1 radial	9,2	18	14	19	

Part no.	Material	Crimp ring	Dimensions (mm)		Bend restrictor
			Ø	Length	
PU bend restrictor					
I.9518306A	PU	I003035	34	250	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
9056400-ES	600,00	800,00	10,20	10-15	
Hose securing grip long version					
905640L-ES	600,00	990,00	10,20	10-15	

Important Information!

This hose must not be used in vehicles.

The outer cover is non conductive. The electrical resistance from end fitting to end fitting is < 0,3 Ohm/m.

The outer cover of the hose has to be pin pricked.

The hose assembly has to be exchanged every 2 years in service or after a pull out event.

Each hose assembly will be tested with water and helium according ISO 19880-5 before shipping.

Production related variations of the burst pressure of up to 5 % are possible. Other colors upon request.

The safety factors between the burst pressure and the working pressure as well as the test pressure depend on the operating conditions. For gaseous media the outer cover is to be pinpricked.

Regarding the safety factor for gaseous media please contact your local SPIR STAR® assembling center.

The indicated working pressure refers to the hose only. Depending on the used fitting the permitted working pressure of a hose assembly may be less.

**) Blast-Pro® fittings may only be used for tube cleaning operations inside the tube. They have not been designed for the use outside of tubes.*

We reserve our rights for technical changes without notice. Subject to printing errors.



Applications

Oil and Gas: Transferhose for Hydrogen

Technical Information

Inner Core: Polyoxymethylene (POM) with low permeation
Pressure Support: 4 layers of high-tensile steel wire
Outer Cover: Polyamide (PA)
Color: purple
Temperature: -40°C to +65°C [-40°F to 150°F]




Ø ID	Ø OD	Working Pressure	Burst Pressure	Bend Radius	Weight	Insert ID
		-- (SF 5,0:1)				
15,8 mm	25,7 mm	--	600 bar	300 mm	1,150 kg/m	10,5 mm
0,62 inch	1,01 inch	--	8.700 psi	11,81 inch	0,773 lbs/ft	0,41 inch



Part no.	Thread	Material	Dimensions (mm)			⚙️	Sleeve
			A	B	C		
Sleeve							
11640125	-	AISI 316	31,8	79	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)			⚙️	Insert
				A	B	C		
MP fitting								
41640307W	3/4"x16UNF LH	Stainless steel	-	10,5	124	15,9	-	

Part no.	Thread	Material	Nut	Dimensions (mm)	⚙️	Insert	
				A B C			
Female swivel with O-Ring							
21640207W	M30x2	Stainless steel	51640205	10,5 101,5	-	36	

Part no.	Thread	Material	Relief bores	Dimensions (mm)			⚙️	Swivel nut
				A	B	C		
Swivel nut								
51640205	M30x2	AISI 316	3 radial	20,5	28	18	36	

Part no.	Material	Crimp ring	Dimensions (mm)		Bend restrictor
			Ø	Length	
PU bend restrictor					
I.953545	PU	I005054	54	350	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
9136400-ES	600,00	800,00	24,30	25-30	
Hose securing grip long version					
913640L-ES	600,00	1.070,00	24,30	25-30	

Important Information!

This hose must not be used in vehicles.

The outer cover is non conductive. The electrical resistance from end fitting to end fitting is < 0,3 Ohm/m.

The outer cover of the hose has to be pin pricked.

The high-pressure hose assembly has to be secured at both ends by an appropriate retaining device (hose arrestor) against lashing or whipping around in case of a break or the hose fitting being pulled out.

The hose assembly has to be exchanged every 2 years in service or after a pull out event.

Production related variations of the burst pressure of up to 5 % are possible. Other colors upon request.

The safety factors between the burst pressure and the working pressure as well as the test pressure depend on the operating conditions. For gaseous media the outer cover is to be pinpricked.

Regarding the safety factor for gaseous media please contact your local SPIR STAR® assembling center.

The indicated working pressure refers to the hose only. Depending on the used fitting the permitted working pressure of a hose assembly may be less.

**1) Blast-Pro® fittings may only be used for tube cleaning operations inside the tube. They have not been designed for the use outside of tubes.*

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