

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.

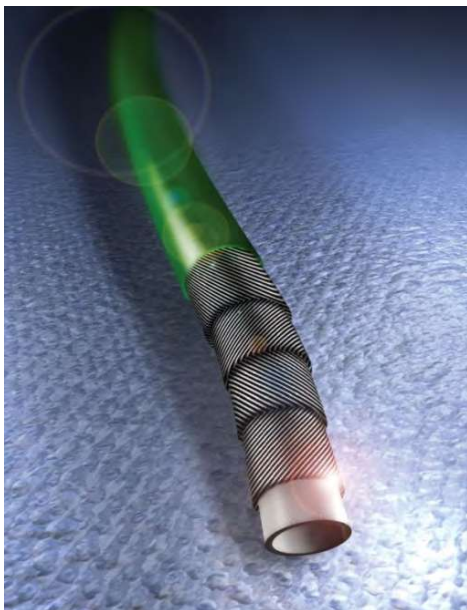
TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

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]									
ID10	Heat-resisting up to 70° C (158° F)																
10/2	10,1	0,4	15,5	0,61	690	10.005	1.725	25.010	160	6,30	0,280	0,188	6,5	0,26	20,8	0,81	Waterblast, Hydraulic
10/2W	10,0	0,39	17,2	0,68	1.100	15.950	2.760	40.020	125	4,92	0,430	0,288	6,5	0,26	21,5	0,84	Oil & Gas, Hydraulic
10/4	9,9	0,39	18,4	0,72	1.500	21.750	3.800	55.100	200	7,87	0,690	0,464	5,5	0,22	23,1	0,9	Oil & Gas, Waterblast, Hydraulic
10/6	9,8	0,39	20,4	0,8	1.920	27.840	4.800	69.600	250	9,84	1,000	0,672	5,5	0,22	26,6	1,04	Waterblast, Hydraulic
10mmUHP-X-3035	9,8	0,39	24,0	0,94	3.035	44.000	6.100	88.450	320	12,60	1,730	1,163	6,0	0,24	31,0	1,22	Waterblast, Hydraulic

Applications

- Waterblast:** Heat exchanger tube cleaning
- Hydraulics:** Pressure test equipment (valves, tooling and control panels)

Technical Information

- Inner Core:** Polyamide (PA)
- Pressure Support:** 2 layers of high-tensile steel wire
- Outer Cover:** Polyamide (PA)
- Color:** Green
- Temperature:** -30°C to +70°C [-22°F to 158°F]



Ø ID	Ø OD	Working Pressure -- (SF 2,5:1)	Burst Pressure	Bend Radius	Weight	Insert ID
10,1 mm	15,5 mm	--	690 bar	160 mm	0,280 kg/m	6,5 mm
0,40 inch	0,61 inch	--	10.005 psi	6,30 inch	0,188 lbs/ft	0,26 inch

Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
Sleeve							
11020101	-	Steel	20,8	57,5	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Male fitting								
31020401A	3/8"x18NPTF	Steel	-	6,5	82	14	19	
31020405A	3/8"x18NPTF	AISI 316	-	6,5	82	14	19	
31020425A	1/2"x14NPT	AISI 316	-	6,5	86	18	22	
Male fitting 60° internal cone								
31020311A	G3/8"	Steel	-	6,5	78,5	12	17	
Universal female swivel 24°/60°								
21020301A	G1/2"	Steel	51060311	6,5	73	-	27	
21020305A	G1/2"	AISI 316	51060315, 51060311	6,5	73	-	27	
Female swivel with O-Ring								
21020221A	M22x1,5	Steel	51060201, 51060205	6,5	83	-	30	
21040201A	M24x1,5	Steel	51321206	6,5	83,5	-	32	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C		
Type M female swivel								
21020645A	3/4"x16UNF	AISI 316	51320615	6,5	69	-	24	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C		
Swivel nut								
51320615	3/4"x16UNF	AISI 316	1 radial	14,2	22,5	17,5	24	
51060311	G1/2"	Steel	1 radial	16,7	23,5	13,5	27	
51060315	G1/2"	AISI 316	1 radial	16,7	23,5	13,5	27	
51060201	M22x1,5	Steel	2 axial	14,2	23	14	30	
51060205	M22x1,5	AISI 316	2 axial	14,2	25	14	30	
51321206	M24x1,5	Steel	2 axial	16,8	23	16	32	

Part no.	Thread	Material	Dimensions (mm)				Tube cleaning accessories	
			A	B	C			
Stop sleeve								
1.84110201A	-	Steel	-	20,8	58	-	-	

Part no.	Thread	Material	Dimensions (mm)				Marking ring	
			A	B	C			
Marking ring								
1.851720.5	-	AISI 316	-	18,5	10	-	-	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
9086400	600,00	780,00	20,40	15-20	

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.

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Applications

Hydraulics: Pressure test equipment (valves, tooling and control panels), hydraulic tools (instrumentation packages for gauges, control of service equipment, hydraulic jacks, hydraulic tools)

Oil and Gas: Control of subsea hydraulic components, nitrogen service, Gaseous media handling



Technical Information

Inner Core: Polyamide (PA)
Pressure Support: 2 open layers, 2 dense layers of high-tensile steel wire
Outer Cover: Polyurethane (TPU)
Color: Black
Temperature: -30°C to +60°C [-22°F to 140°F]

Ø ID	Ø OD	Working Pressure -- (SF 2,5:1)	Burst Pressure	Bend Radius	Weight	Insert ID
10,0 mm	17,2 mm	--	1.100 bar	125 mm	0,430 kg/m	6,5 mm
0,39 inch	0,68 inch	--	15.950 psi	4,92 inch	0,288 lbs/ft	0,26 inch

Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
Sleeve							
I1030191W	-	Steel	21,5	56,75	-	-	
I1030195W	-	AISI 316	21,5	58	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Male fitting								
31020401A	3/8"x18NPTF	Steel	-	6,5	82	14	19	
31020405A	3/8"x18NPTF	AISI 316	-	6,5	82	14	19	
31020425A	1/2"x14NPT	AISI 316	-	6,5	86	18	22	

Male fitting 60° internal cone								
31020311A	G3/8"	Steel	-	6,5	78,5	12	17	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Universal female swivel 24°/60°								
21020301A	G1/2"	Steel	51060311	6,5	73	-	27	
21020305A	G1/2"	AISI 316	51060315, 51060311	6,5	73	-	27	

Female swivel with O-Ring								
21020221A	M22x1,5	Steel	51060201, 51060205	6,5	83	-	30	
21040201A	M24x1,5	Steel	51321206	6,5	83,5	-	32	

Type M female swivel								
21020645A	3/4"x16UNF	AISI 316	51320615	6,5	69	-	24	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C	⌀	
Swivel nut								
51320615	3/4"x16UNF	AISI 316	1 radial	14,2	22,5	17,5	24	
51060311	G1/2"	Steel	1 radial	16,7	23,5	13,5	27	
51060315	G1/2"	AISI 316	1 radial	16,7	23,5	13,5	27	
51060201	M22x1,5	Steel	2 axial	14,2	23	14	30	
51060205	M22x1,5	AISI 316	2 axial	14,2	25	14	30	
51321206	M24x1,5	Steel	2 axial	16,8	23	16	32	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
Hose securing grip short version					
9086400	600,00	780,00	20,40	15-20	

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IDI0 - Series: B, C and Y

Applications

- Waterblast:** Heat exchanger tube cleaning, surface preparation (concrete removal, surface cleaning of buildings, paint removal), tank and vessel cleaning, ultra high-pressure waterjet cutting and hydro demolition (cutting and demolition of armoured concrete, pipelines, paper or steel)
- Hydraulics:** Pressure test equipment (valves, tooling and control panels), hydraulic tools (instrumentation packages for gauges, control of service equipment, hydraulic jacks, hydraulic tools)
- Oil and Gas:** Grease injection, chemical injection, control of subsea hydraulic components, nitrogen service, Gaseous media handling



Technical Information

- Inner Core:** Polyoxymethylene (POM)
- Pressure Support:** 4 layers of high-tensile steel wire
- Outer Cover:** Polyamide (PA)
- Color:** Grey
- Temperature:** -30°C to +70°C [-22°F to 158°F]

Ø ID	Ø OD	Working Pressure -- (SF 2,5:1)	Burst Pressure	Bend Radius	Weight	Insert ID
9,9 mm	18,4 mm	--	1.500 bar	200 mm	0,690 kg/m	5,5 mm
0,39 inch	0,72 inch	--	21.750 psi	7,87 inch	0,464 lbs/ft	0,22 inch

Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
Sleeve							
11040102	-	Steel	23	63,7	-	-	
11040105	-	AISI 316	23	64	-	-	
Blast-Pro® sleeve							
11040232	-	Steel	21	33	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
HP fitting								
41060204C	9/16"x18UNF LH	Stainless steel	-	5,5	114	24	-	

Part no.	Thread	Material	Sleeve	Dimensions (mm)				Blast-Pro® Insert*
				A	B	C	⌀	
Blast-Pro® MP male								
41040244Y	9/16"x18UNF LH	Stainless steel	I1040232	6	81	25	17	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Male fitting 60° internal cone								
31060311B	G3/8"	Steel	-	5,5	80	12	17	



Universal female swivel 24°/60°								
21060304C	G1/2"	Stainless steel	51060311, 51060315	5,5	78	-	27	


Female swivel with O-Ring								
21060204C	M22x1,5	Stainless steel	51060201, 51060205	5,5	90	-	30	
21060224C	M24x1,5	Stainless steel	51320205, 51321206, 51360206	5,5	93	-	32	
21060221B	M24x1,5	Steel	51321206	5,5	92,5	-	32	

Type M female swivel								
21040645B	3/4"x16UNF	AISI 316	51320615	5,5	78	-	24	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C	⌀	
Swivel nut								
51320615	3/4"x16UNF	AISI 316	1 radial	14,2	22,5	17,5	24	
51060311	G1/2"	Steel	1 radial	16,7	23,5	13,5	27	
51060315	G1/2"	AISI 316	1 radial	16,7	23,5	13,5	27	
51060201	M22x1,5	Steel	2 axial	14,2	23	14	30	
51060205	M22x1,5	AISI 316	2 axial	14,2	25	14	30	
51321206	M24x1,5	Steel	2 axial	16,8	23	16	32	
51320205	M24x1,5	AISI 316	1 radial	16,8	23	16	32	

Part no.	Thread	Material		Dimensions (mm)				Tube cleaning accessories
				A	B	C	⌀	
Marking ring								
I.852125.1	-	Steel	-	22,4	20	-	-	
I.852125.5	-	AISI 316	-	22,4	20	-	-	

Part no.	Size (mm)	Material	Crimp ring	Hose protection
Hose protection without spiral				
I.902531	ID Ø25, OD Ø31	PVC	I003335	
Hose protection with spiral				
I.912532	ID Ø25, OD Ø32	PVC	I003035	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
Hose securing grip short version					
9086400	600,00	780,00	20,40	15-20	

Accessories combinations				
Without hose protection				
Description		Bend restrictor	Crimp ring	Securing grips
Securing grip		-	-	9086400
Hose protection without spiral				
Description	Protection hose	Bend restrictor	Crimp ring	Securing grips
Protection hose	I.902531	-	I003335	-
with securing grip	I.902531	-	-	9086400
Hose protection with spiral				
Description	Protection hose	Bend restrictor	Crimp ring	Securing grips
Protection hose	I.912532	-	I003035	-
with securing grip	I.912532	-	-	9086400

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Applications

- Waterblast:** Surface preparation (concrete removal, surface cleaning of buildings, paint removal), tank and vessel cleaning, ultra high-pressure waterjet cutting and hydro demolition (cutting and demolition of armoured concrete, pipelines, paper or steel)
- Hydraulics:** Pressure test equipment (valves, tooling and control panels)



Technical Information

- Inner Core:** Polyoxymethylene (POM)
- Pressure Support:** 6 layers of high-tensile steel wire
- Outer Cover:** Polyamide (PA)
- Color:** Blue
- Temperature:** -30°C to +60°C [-22°F to 140°F]

Ø ID	Ø OD	Working Pressure -- (SF 2,5:1)	Burst Pressure	Bend Radius	Weight	Insert ID
9,8 mm	20,4 mm	--	1.920 bar	250 mm	1,000 kg/m	5,5 mm
0,39 inch	0,80 inch	--	27.840 psi	9,84 inch	0,672 lbs/ft	0,22 inch

Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
Sleeve							
11060102	-	Steel	26,6	64	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
HP fitting								
41060204C	9/16"x18UNF LH	Stainless steel	-	5,5	114	24	-	

Universal female swivel 24°/60°								
Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
A	B	C	⌀					
21060304C	G1/2"	Stainless steel	51060311	5,5	78	-	27	

Female swivel with O-Ring								
Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
A	B	C	⌀					
21060204C	M22x1,5	Stainless steel	51060201, 51060205	5,5	90	-	30	
21060224C	M24x1,5	Stainless steel	51320205, 51321206, 51360206	5,5	93	-	32	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C		
Swivel nut								
51060311	G1/2"	Steel	1 radial	16,7	23,5	13,5	27	
51060201	M22x1,5	Steel	2 axial	14,2	23	14	30	
51060205	M22x1,5	AISI 316	2 axial	14,2	25	14	30	
51321206	M24x1,5	Steel	2 axial	16,8	23	16	32	
51320205	M24x1,5	AISI 316	1 radial	16,8	23	16	32	

Part no.	Thread	Material	Dimensions (mm)				Tube cleaning accessories
			A	B	C		
Marking ring							
1.852630.5	-	AISI 316	-	24,4	20	-	-

Part no.	Size (mm)	Material	Crimp ring	Hose protection
1.903037	ID Ø30, OD Ø39	PVC	I003941	
Hose protection with spiral				
1.913038	ID Ø30, OD Ø38	PVC	I004145	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
9106400	600,00	800,00	20,40	20-25	



Accessories combinations				
Without hose protection				
Description		Bend restrictor	Crimp ring	Securing grips
Securing grip		-	-	9086400
Hose protection without spiral				
Description	Protection hose	Bend restrictor	Crimp ring	Securing grips
Protection hose	I.903037	-	I003941	-
with securing grip	I.903037	-	-	9086400
Hose protection with spiral				
Description	Protection hose	Bend restrictor	Crimp ring	Securing grips
Protection hose	I.913038	-	I004145	-
with securing grip	I.913038	-	-	9086400

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Hydraulics: Pressure test equipment (valves, tooling and control panels)



Technical Information

Inner Core: Polyoxymethylene (POM)
Pressure Support: 8 layers of high-tensile steel wire
Outer Cover: Polyamide (PA)
Color: Chrome yellow
Temperature: -30°C to +70°C [-22°F to 158°F]


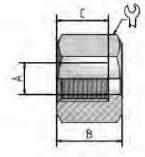
Ø ID	Ø OD	Working Pressure -- (SF 2.0:1)	Burst Pressure	Bend Radius	Weight	Insert ID
9,8 mm	24,0 mm	--	3.035 bar	320 mm	1,730 kg/m	6,0 mm
0,39 inch	0,94 inch	--	44.000 psi	12,60 inch	1,163 lbs/ft	0,24 inch

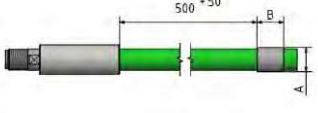
Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⚙	
Sleeve							
11080109		carbon steel	31	82,7	-	-	


Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⚙	
HP fitting								
41060204E	9/16"x18UNF LH	Stainless steel		6	128,6	23,8	-	
41060104E	M14x1,5 LH	Stainless steel		6	128,6	23,8	-	
41060114E	M18x1,5 LH	Stainless steel		6	145	28	-	



Female swivel with O-Ring								
21060204E	M24x1,5	Stainless steel	51321206, 51361206	6	99	-	32	

Type M female swivel								
21060604E	7/8"x14UNF	Stainless steel	51060605	6	93	-	30	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C		
Swivel nut								
51060605	7/8"x14UNF	AISI 316	1 radial	16,65	30	24	30	
51321206	M24x1,5	Steel	2 axial	16,8	23	16	32	
51361206	M24x1,5	Steel	2 axial	16,8	28	21	32	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Tube cleaning accessories
				A	B	C		
Marking ring								
1.852630.5	-	AISI 316	-	28	20	-	-	

Part no.	Material	Crimp ring	Dimensions (mm)		Bend restrictor
			Ø	Length	
PU bend restrictor					
1.953350E	PU	I005054	50	470	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
Hose securing grip short version					
9106400	600,00	800,00	20,40	20-25	
Hose securing grip long version					
910640L	600,00	1.010,00	20,40	20-25	

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