

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.

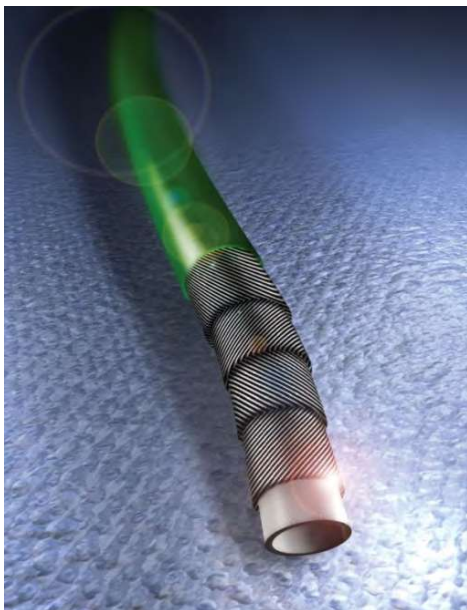
TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

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]									
HL-Series	Heat-resisting up to 60° C (140° F) - Hydraulic Line																
VIPER	6,1	0,24	12,5	0,49	700	10.150	1.800	26.100	80	3,15	0,206	0,138	4,0	0,16	14,4	0,56	Hydraulic
VIPER Twin	6,1	0,24	12,5	0,49	700	10.150	1.800	26.100	80	3,15	0,412	0,276	4,0	0,16	14,4	0,56	Hydraulic
MAMBA	5,9	0,23	12,0	0,47	1.200	17.400	3.000	43.500	80	3,15	0,237	0,159	4,0	0,16	15,5	0,61	Hydraulic
MAMBA Twin	5,9	0,23	12,0	0,47	1.200	17.400	3.000	43.500	80	3,15	0,474	0,318	4,0	0,16	15,5	0,61	Hydraulic
COBRA	5,0	0,20	11,2	0,44	1.800	26.100	4.500	65.250	150	5,91	0,260	0,174	2,5	0,10	15,0	0,59	Hydraulic

Applications

Hydraulics: Torque wrenching

Technical Information

Inner Core: Polyamide (PA)

Pressure Support: Multi layers of high-tensile steel wire and open synthetic fibers

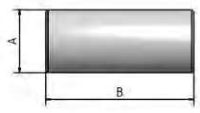
Outer Cover: Polyurethane (TPU)

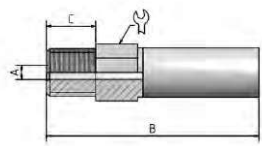
Color: Luminous yellow

Temperature: -30°C to +60°C [-22°F to 140°F]

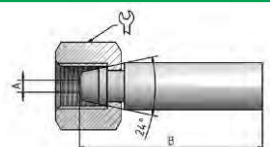


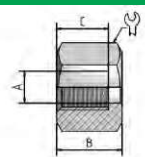
Ø ID	Ø OD	Working Pressure -- (SF 2.6:1)	Burst Pressure	Bend Radius	Weight	Insert ID
6,1 mm	12,5 mm	--	700 bar	80 mm	0,206 kg/m	4,0 mm
0,24 inch	0,49 inch	--	10.150 psi	3,15 inch	0,138 lbs/ft	0,16 inch


Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
VIPER-S	-	Steel	14,4	42	-	-	



Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Male fitting								
VIPER-M-1/4	1/4"x18NPTF	Steel	-	4	68	14	14	
VIPER-M-3/8	3/8"x18NPTF	Steel	-	4	64	14	17	

Female fitting NPT/NPTF								
Part no.	Thread	Material	Nut	Dimensions (mm)				
A	B	C	⌀					
VIPER-F-1/4	1/4"x18NPTF	Steel	-	4	67	20	19	

Universal female swivel 24°/60°								
Part no.	Thread	Material	Nut	Dimensions (mm)				
A	B	C	⌀					
VIPER-F-I-1/4	G1/4"	Steel	VIPER-F-N-1/4	4	55	-	19	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C	⌀	
Swivel nut								
VIPER-F-N-1/4	G1/4"	Steel	1 radial	9,2	16,5	8,5	19	

Part no.	Material	Crimp ring	Dimensions (mm)		Bend restrictor
			Ø	Length	
Rubber bend restrictor					
I.9518600	Rubber	QR-HL	34	126	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
9056400	600,00	740,00	10,20	10-15	
Hose securing grip long version					
905640L	600,00	990,00	10,20	10-15	

Accessories combinations				
Without hose protection				
Description	Bend restrictor	Crimp ring	Securing grips	
Bend restrictor	I.9518600	QR-HL	-	
Securing grip	-	-	9056400	
Bend restrictor and securing grip	I.9518600	QR-HL	905640L	

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.

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Hose Type VIPER Twin

6VIPERD

SPIR STAR®

ID6 - Series: -

Applications

Hydraulics: Torque wrenching

Technical Information

Inner Core: Polyamide (PA)

Pressure Support: Multi layers of high-tensile steel wire and open synthetic fibers

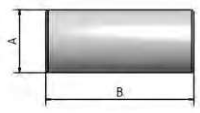
Outer Cover: Polyurethane (TPU)

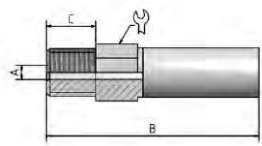
Color: Luminous yellow and purple red

Temperature: -30°C to +60°C [-22°F to 140°F]

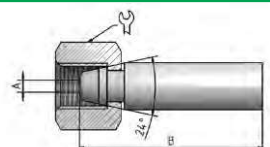


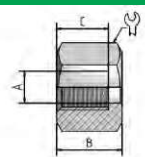
Ø ID	Ø OD	Working Pressure -- (SF 2.6:1)	Burst Pressure	Bend Radius	Weight	Insert ID
6,1 mm	12,5 mm	--	700 bar	80 mm	0,412 kg/m	4,0 mm
0,24 inch	0,49 inch	--	10.150 psi	3,15 inch	0,276 lbs/ft	0,16 inch


Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
VIPER-S	-	Steel	14,4	42	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Male fitting								
VIPER-M-1/4	1/4"x18NPTF	Steel	-	4	68	14	14	
VIPER-M-3/8	3/8"x18NPTF	Steel	-	4	64	14	17	

Female fitting NPT/NPTF								
Part no.	Thread	Material	Nut	Dimensions (mm)				
A	B	C	⌀					
VIPER-F-1/4	1/4"x18NPTF	Steel	-	4	67	20	19	

Universal female swivel 24°/60°								
Part no.	Thread	Material	Nut	Dimensions (mm)				
A	B	C	⌀					
VIPER-F-I-1/4	G1/4"	Steel	VIPER-F-N-1/4	4	55	-	19	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C	⌀	
Swivel nut								
VIPER-F-N-1/4	G1/4"	Steel	1 radial	9,2	16,5	8,5	19	

Part no.	Material	Crimp ring	Dimensions (mm)		Bend restrictor
			Ø	Length	
Rubber bend restrictor					
I.9518600	Rubber	QR-HL	34	126	

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.

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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)

Technical Information

Inner Core: Polyamide (PA)
Pressure Support: Multi-layers of high-tensile steel wire
Outer Cover: Polyurethane (TPU)
Color: Red
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
5,9 mm	12,0 mm	--	1.200 bar	80 mm	0,237 kg/m	4,0 mm
0,23 inch	0,47 inch	--	17.400 psi	3,15 inch	0,159 lbs/ft	0,16 inch

Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⚙	
Sleeve							
MAMBA-S	-	Steel	15,4	43	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⚙	
Male fitting								
MAMBA-M-1/4	1/4"x18NPTF	Steel	-	4	68	14	14	
MAMBA-M-3/8	3/8"x18NPTF	Steel	-	4	64	14	17	
Male fitting 100° external cone								
MAMBA-M-1/4-100	G 1/4"	Steel	-	4	67	18	17	
Male fitting for USIT® Ring								
MAMBA-M-1/4-U	G 1/4"	Steel	-	4	61	11	22	
Universal female swivel 24°/60°								
MAMBA-F-1-1/4	G 1/4"	Steel	MAMBA-F-N-1/4	4	55	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C		
Universal female swivel 24°/60° light								
MAMBA-F-I-M14	M14x1,5	Steel	MAMBA-F-N-M14	4	55	-	19	

Female fitting NPT/NPTF								
Part no.	Thread	Material	Nut	Dimensions (mm)				
A	B	C						
MAMBA-F-I/4	1/4"x18NPTF	Steel	-	4	67	20	19	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C		
Swivel nut								
MAMBA-F-N-1/4	G 1/4"	Steel	1 radial	9,2	16,5	8,5	19	
MAMBA-F-N-M14	M14x1,5	Steel	1 radial	9,2	16,5	8,5	19	

Part no.	Material	Crimp ring	Dimensions (mm)		Bend restrictor
			Ø	Length	
Rubber bend restrictor					
I.9518600	Rubber	QR-HL	34	126	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
9056400	600,00	740,00	10,20	10-15	

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

Accessories combinations

Without hose protection

Description	Bend restrictor	Crimp ring	Securing grips
Bend restrictor	I.95I8400	QR-HL	-
Securing grip	-	-	9056400
Bend restrictor and securing grip	I.95I8400	QR-HL	905640L

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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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Hose Type MAMBA Twin

6MAMBAD

SPIR STAR®

ID6 - Series: -

Applications

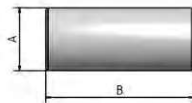
Hydraulics: Torque wrenching

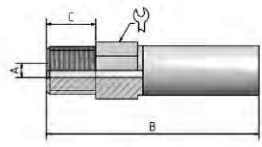
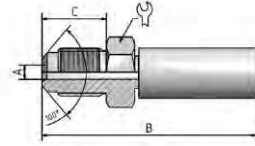
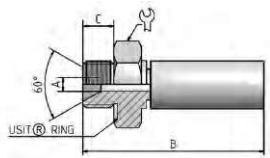
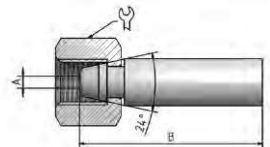
Technical Information

Inner Core: Polyamide (PA)
Pressure Support: Multi-layers of high-tensile steel wire
Outer Cover: Polyurethane (TPU)
Color: Red and dark grey
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
5,9 mm	12,0 mm	--	1.200 bar	80 mm	0,474 kg/m	4,0 mm
0,23 inch	0,47 inch	--	17.400 psi	3,15 inch	0,318 lbs/ft	0,16 inch

Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
MAMBA-S	-	Steel	15,4	43	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Male fitting								
MAMBA-M-1/4	1/4"x18NPTF	Steel	-	4	68	14	14	
MAMBA-M-3/8	3/8"x18NPTF	Steel	-	4	64	14	17	
Male fitting 100° external cone								
MAMBA-M-1/4-100	G 1/4"	Steel	-	4	67	18	17	
Male fitting for USIT® Ring								
MAMBA-M-1/4-U	G1/4"	Steel	-	4	61	11	22	
Universal female swivel 24°/60°								
MAMBA-F-I-1/4	G 1/4"	Steel	MAMBA-F-N-1/4	4	55	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	Ø	
Universal female swivel 24°/60° light								
MAMBA-F-I-M14	M14x1,5	Steel	MAMBA-F-N-M14	4	55	-	19	
Female fitting NPT/NPTF								
MAMBA-F-I/4	1/4"x18NPTF	Steel	-	4	67	20	19	
Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C	Ø	
Swivel nut								
MAMBA-F-N-1/4	G 1/4"	Steel	1 radial	9,2	16,5	8,5	19	
MAMBA-F-N-M14	M14x1,5	Steel	1 radial	9,2	16,5	8,5	19	
Part no.	Material	Crimp ring	Dimensions (mm)		Bend restrictor			
			Ø	Length				
Rubber bend restrictor								
I.9518600	Rubber	QR-HL	34	126				

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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Hose Type COBRA

5COBRA

SPIR STAR®

ID5 - Series: -

Applications

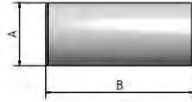
Hydraulics: Bolt tensioning, pressure test equipment (valves, tooling and control panels), hydraulic tools (instrumentation packages for gauges, control of service equipment, hydraulic jacks, hydraulic tools)

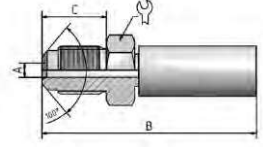
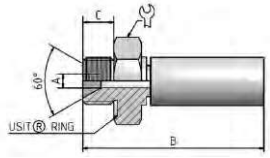
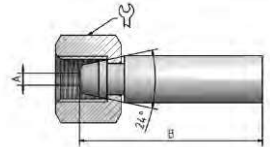
Technical Information


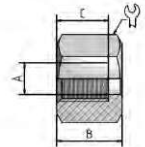
Inner Core: Polyoxymethylene (POM)
Pressure Support: multi-layers of high-tensile steel wire
Outer Cover: Polyamide (PA)
Color: Dark blue
Temperature: -30°C to +60°C [-22°F to 140°F]






Ø ID	Ø OD	Working Pressure -- (SF 2.5:1)	Burst Pressure	Bend Radius	Weight	Insert ID
5,0 mm	11,2 mm	--	1.800 bar	150 mm	0,260 kg/m	2,5 mm
0,20 inch	0,44 inch	--	26.100 psi	5,91 inch	0,174 lbs/ft	0,10 inch

Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⚙	
Sleeve							
COBRA-S	-	Steel	15	45	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⚙	
Male fitting 100° external cone								
COBRA-M-1/4-100	G 1/4"	Steel	-	2,5	69	11	17	
Male fitting for USIT® Ring								
COBRA-M-1/4-U	G1/4"	Steel	-	2,5	76	18	22	
Universal female swivel 24°/60°								
COBRA-F-1-1/4	G1/4"	Steel	COBRA-F-N-1/4	2,5	62	-	19	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C		
Swivel nut								
COBRA-F-N-1/4	G 1/4"	Steel	1 radial	9,2	16,5	8,5	19	

Part no.	Material	Crimp ring	Dimensions (mm)		Bend restrictor
			Ø	Length	
Rubber bend restrictor					
I.9518600	Rubber	QR-HL	34	126	

Part no.	Mesh length (mm)	Overall length (mm)	Breaking strength (kN)	Suitable for SPIR STAR® hose outer diameter (mm)	Hose securing grip
9056400	600,00	740,00	10,20	10-15	
Hose securing grip long version					
905640L	600,00	990,00	10,20	10-15	

Accessories combinations				
Without hose protection				
Description	Bend restrictor	Crimp ring	Securing grips	
Bend restrictor	I.9518600	QR-HL	-	
Securing grip	-	-	9056400	
Bend restrictor and securing grip	I.9518600	QR-HL	905640L	

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