

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. K. K.', positioned above a horizontal line.

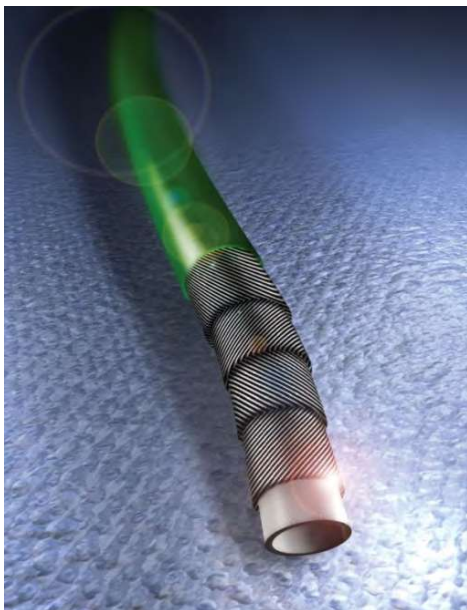
TÜV Rheinland Cert GmbH
Am Grauen Stein · 51105 Köln

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]									
M-Series	<i>Heat-resisting up to 60° C (140° F) - with methanol-washed inner core</i>																
6/2WM	6,0	0,24	12,2	0,48	690	10.000	2.760	40.000	95	3,74	0,24	0,161	4,0	0,16	16,8	0,66	Oil & Gas, Hydraulic
6/4M	6,0	0,24	13,0	0,51	1.035	15.000	4.140	60.000	180	7,09	0,338	0,226	3,0	0,12	19,9	0,78	Oil & Gas, Hydraulic
8/2WM	8,0	0,31	14,3	0,56	690	10.000	2.760	40.000	110	4,33	0,314	0,210	5,5	0,22	18,3	0,72	Oil & Gas, Hydraulic
10/2WM	10,0	0,39	17,2	0,68	690	10.000	2.760	40.000	125	4,92	0,466	0,312	5,0	0,20	21,5	0,84	Oil & Gas, Hydraulic
13/2WM	12,7	0,50	20,8	0,82	690	10.000	2.760	40.000	150	5,91	0,630	0,422	8,5	0,33	27,8	1,09	Oil & Gas, Hydraulic



Applications

Hydraulics: Hydraulic tools (instrumentation packages for gauges, control of service equipment, hydraulic jacks, hydraulic tools)

Oil and Gas: Methanol service (oil rigs, distribution panels, umbilicals), jumper/ subsea well control, control of subsea hydraulic components, nitrogen service



Technical Information

Inner Core: BESNO P40 TLO (PA I I)
Pressure Support: 2 open layers, 2 dense layers of high-tensile steel wire
Outer Cover: Polyamide (PA)
Color: Dark blue
Temperature: -30°C to +60°C [-22°F to 140°F]

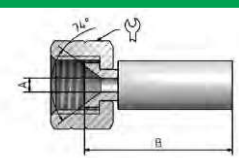
Ø ID	Ø OD	Working Pressure		Burst Pressure	Bend Radius	Weight	Insert ID
		(SF 2.5:1)	(SF 4.0:1)				
6,0 mm	12,2 mm	1.100 bar	690 bar	2.760 bar	95 mm	0,240 kg/m	4,0 mm
0,24 inch	0,48 inch	15.950 psi	10.000 psi	40.000 psi	3,74 inch	0,161 lbs/ft	0,16 inch

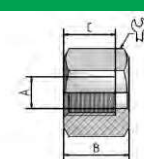
Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
Sleeve							
I063017IW	-	Steel	16,8	53	-	-	
I0630185W	-	AISI 316	16,8	53	-	-	


Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
MP fitting								
40620305M	3/8"x24UNF LH	AISI 316	-	4	94	20	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Male fitting								
30620401M	1/4"x18NPT	Steel	-	4	83	14	14	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Type M female swivel								
20620645M	9/16"x18UNF	AISI 316	50540605	4	68,5	-	19	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	Ø	
JIC female swivel								
20620605M	7/16"x20UNF	AISI 316	50620605, 50620601	4	64	-	19	
20620625M	9/16"x18UNF	AISI 316	50540605, 50540601	4	64	-	19	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C	Ø	
Swivel nut								
50620601	7/16"x20UNF	Steel	1 radial	8,2	16	12	19	
50620605	7/16"x20UNF	AISI 316	1 radial	8,2	16	12	19	
50540601	9/16"x18UNF	Steel	1 radial	9,2	18	14	19	
50540605	9/16"x18UNF	AISI 316	1 radial	9,2	18	14	19	

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					
9056400	600,00	740,00	10,20	10-15	

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

Hydraulics: Hydraulic tools (instrumentation packages for gauges, control of service equipment, hydraulic jacks, hydraulic tools)

Oil and Gas: Methanol service (oil rigs, distribution panels, umbilicals), jumper/ subsea well control, control of subsea hydraulic components, nitrogen service



Technical Information

Inner Core: BESNO P40 TLO (PA I I)
Pressure Support: 2 open layers, 2 dense layers of high-tensile steel wire
Outer Cover: Polyamide (PA)
Color: Dark blue
Temperature: -30°C to +60°C [-22°F to 140°F]


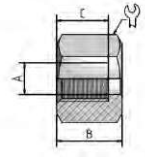
Ø ID	Ø OD	Working Pressure		Burst Pressure	Bend Radius	Weight	Insert ID
		(SF 2.5:1)	(SF 4.0:1)				
8,0 mm	14,3 mm	1.100 bar	690 bar	2.760 bar	110 mm	0,314 kg/m	5,5 mm
0,31 inch	0,56 inch	15.950 psi	10.000 psi	40.000 psi	4,33 inch	0,210 lbs/ft	0,22 inch


Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
Sleeve							
10830181W	-	Steel	19,7	52	-	-	
10830185W	-	AISI 316	19,7	52	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Male fitting								
30820401M	3/8"x18NPT	Steel	-	5,5	84	14	19	

Type M female swivel								
20820645M	3/4"x16UNF	AISI 316	50840605	5,5	70,5	-	24	

JIC female swivel								
20820655M	9/16"x18UNF	AISI 316	51040615	5,5	63	-	19	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C		
Swivel nut								
51040615	9/16"x18UNF	AISI 316	I radial	11,2	18	14	19	
50840605	3/4"x16UNF	AISI 316	I radial	12,2	22,5	17,5	24	

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	

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.

Hose Type I0/2WM

I02WM3012

SPIR STAR®

ID10 - Series: M

Applications

Hydraulics: Hydraulic tools (instrumentation packages for gauges, control of service equipment, hydraulic jacks, hydraulic tools)

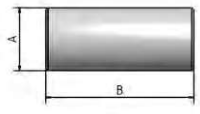
Oil and Gas: Methanol service (oil rigs, distribution panels, umbilicals), jumper/ subsea well control, control of subsea hydraulic components, nitrogen service

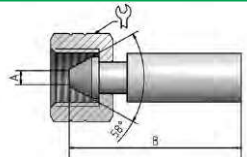


Technical Information

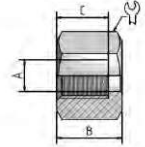
Inner Core: BESNO P40 TLO (PA I I)
Pressure Support: 2 open layers, 2 dense layers of high-tensile steel wire
Outer Cover: Polyamide (PA)
Color: Dark blue
Temperature: -30°C to +60°C [-22°F to 140°F]


Ø ID	Ø OD	Working Pressure		Burst Pressure	Bend Radius	Weight	Insert ID
		(SF 2.5:1)	(SF 4.0:1)				
10,0 mm	17,2 mm	1.100 bar	690 bar	2.760 bar	125 mm	0,466 kg/m	5,0 mm
0,39 inch	0,68 inch	16.000 psi	10.000 psi	40.000 psi	4,92 inch	0,312 lbs/ft	0,20 inch

Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
Sleeve							
I1030185W	-	AISI 316	21,5	64	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Type M female swivel								
21020645M	3/4"x16UNF	AISI 316	51320615	5	73,5	-	24	

JIC female swivel								
Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
21020605M	9/16"x18UNF	AISI 316	51040615	5	77	-	19	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C	⌀	
Swivel nut								
51040615	9/16"x18UNF	AISI 316	1 radial	11,2	18	14	19	
51320615	3/4"x16UNF	AISI 316	1 radial	14,2	22,5	17,5	24	

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	

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.

Hose Type I3/2WM

I32WM3012

SPIR STAR®

ID13 - Series: M

Applications

Hydraulics: Hydraulic tools (instrumentation packages for gauges, control of service equipment, hydraulic jacks, hydraulic tools)

Oil and Gas: Methanol service (oil rigs, distribution panels, umbilicals), jumper/ subsea well control, control of subsea hydraulic components, nitrogen service



Technical Information

Inner Core: BESNO P40 TLO (PA I I)
Pressure Support: 2 open layers, 2 dense layers of high-tensile steel wire
Outer Cover: Polyamide (PA)
Color: Dark blue
Temperature: -30°C to +60°C [-22°F to 140°F]


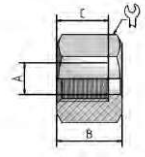
Ø ID	Ø OD	Working Pressure		Burst Pressure	Bend Radius	Weight	Insert ID
		(SF 2.5:1)	(SF 4.0:1)				
12,7 mm	20,8 mm	1.100 bar	690 bar	2.760 bar	150 mm	0,630 kg/m	8,5 mm
0,50 inch	0,82 inch	15.950 psi	10.000 psi	40.000 psi	5,91 inch	0,422 lbs/ft	0,33 inch


Part no.	Thread	Material	Dimensions (mm)				Sleeve
			A	B	C	⌀	
Sleeve							
I1330181W	-	Steel	27,8	64	-	-	
I1330185W	-	AISI 316	27,8	64	-	-	

Part no.	Thread	Material	Nut	Dimensions (mm)				Insert
				A	B	C	⌀	
Male fitting								
31320401M	1/2"x14NPT	Steel	-	8,5	104	18	22	

Type M female swivel								
21320645M	1"x12UNF	AISI 316	51360645	8,5	86	-	32	

JIC female swivel								
21320615M	3/4"x16UNF	AISI 316	51320615	8,5	79	-	24	

Part no.	Thread	Material	Relief bores	Dimensions (mm)				Swivel nut
				A	B	C		
Swivel nut								
51320615	3/4"x16UNF	AISI 316	I radial	14,2	22,5	17,5	24	
51360645	1"x12UNF	AISI 316	I radial	16,8	28	22	32	

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	

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.