



## **HIGH PRESSURE HYDRAULICS** (Hose, Coupling, Pressure Gauges, Adaptors)







# HIGH PRESSURE THERMOPLASTIC HOSES



As the specialist in the manufacturing of high pressure hoses, we are poised to achieve exceptional quality in terms of service life and reliability.

Other features include: Flexibility, durability, lightweight, small volumetric expansion

## HOSE TYPE - COBRA



### 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

Design .....Inner core of polyoxymethylene (POM), 4 multi-layers of high-tensile steelwire, outer cover of polyamide (PA)  
 ID x OD .....5.0 x 11.2 mm  
 Working Pressure .....1,8110 bar  
 Burst Pressure .....4,5110 bar  
 Bend Radius .....150 mm  
 Weight .....0.260 kg/m  
 Colour .....Dark blue  
 Temperature .....-30 °c to +60 °c [-22 °F to 140 °F]

### END CONNECTIONS

- 1/4" BSP male 100" external cone
- 1/4" BSP male for USIT ring
- 1/4" BSP female swivel (24"/60" sealing cone)

## HOSE TYPE - MAMBA



### 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

Design .....Inner core of polyamide (PA), multi-layers of high-tensile steelwire, outer cover of polyurethane (PUR)  
 ID x OD .....5.9 x 12 mm  
 Working Pressure .....1,200 bar  
 Burst Pressure .....3,000 bar  
 Bend Radius .....80 mm  
 Weight .....0.237 kg/m  
 Colour .....Red  
 Temperature .....-30 °c to +60 °c [-22 °F to 140 °F]

### END CONNECTIONS

- 1/4" NPT male
- 3/8" NPT male
- 1/4" NPT male 100" external cone
- 1/4" NPT male for USIT ring
- 1/4" NPT female swivel (24"/60" sealing cone)
- 1/4" NPT female fitting

## HIGH PRESSURE THERMOPLASTIC HOSES

### HOSE TYPE - ANACONDA



#### APPLICATIONS

Waterblast: Heat exchanger tube cleaning  
Hydraulics: Bolt tensioning

#### TECHNICAL INFORMATION

Design .....Inner core of polyoxymethylene (POM), Slayers of high- tensile steelwire,outer cover of polyurethane (PUR)  
1D X OD .....4.8 X 13.2 mm  
Working Pressure .....2,5110 bar  
Burst Pressure .....6,250 bar  
Band Radius .....200 mm  
Weight .....0.450 kg/m  
Colour .....Lumlnous red  
Temperature .....-30 •c to +60 •c [-22 "F to 140 "F]

#### END CONNECTIONS

- 1/4" BSP mala 100" external cone
- 1/4" BSP female swivel (24"/60" sealing cone)
- Type M female swivel 9/16" .x 18 UNF

### HOSE TYPE - VIPER



#### APPLICATIONS

Hydraulics: Torque wrenching

#### TECHNICAL INFORMATION

Design .....Inner core of polyamide (PA), multi-layers of high tensile steel wire and open synthetic fibers,outer cover of polyurethane (PUR)  
ID X OD .....6.1 X 12.5 mm  
Working Pressure .....700 bar  
Burst Pressure .....1,800 bar  
Band Radius .....80 mm  
Weight .....0.206 kg/m  
Colour .....luminous yellow  
Temperature .....-30 •c to +60 •c [-22 "F to 140 "F]

#### END CONNECTIONS

- 1/4" NPT male
- 3/8" NPT male
- 1/4" NPT female


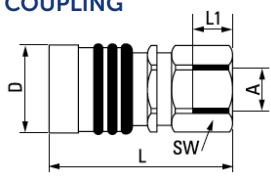
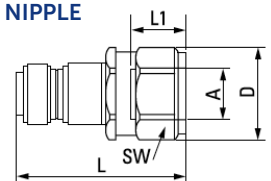
# HIGH PRESSURE QUICK CONNECT COUPLERS




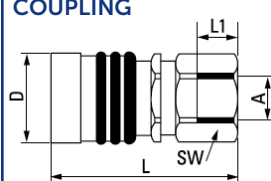
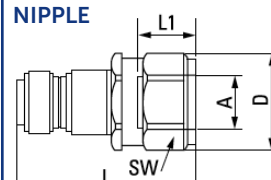
Reliable Quick Connect Couplings are a necessity in High Pressure Hydraulics applications. SPIR STAR offers a range of Quick Connect Couplings up to 2,500 bar, which are complemented by our Ultra High Pressure Thermoplastic hoses and a complete range of adaptors and pressure gauges.

Applications include the connection of pumps to hydraulic jacks, rams, bolt tensioners, torque tools, as well as for pressure test equipment (valves, tooling and controll, etc.

## C1000 SERIES


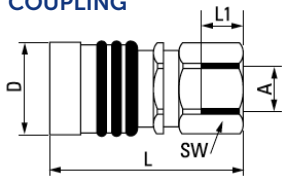

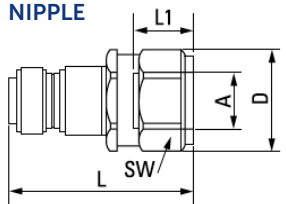
	CONNECTION	HEX SW	L	L1	D	PART NO.	
 <p><b>TECHNICAL DATA</b>            Material: Hardened Zinc Plated Steel            Max. Working Pressure: 1000 bar            Min. Burst Pressure: 2600 bar            Nominal Flow Diameter: 2.5mm            Temperature Range: -30°C - +100°C            Flow Capacity at Pressure Drop 4.5 bar: 5.9L/min</p>	<b>COUPLING</b> 	G1/4"	24	59	12	27	C1000-1202-15K
	<b>NIPPLE</b> 	G1/4"	22	38	12	24.5	C1000-6202-15K

## C1500 SERIES


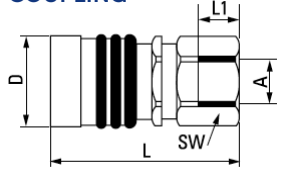

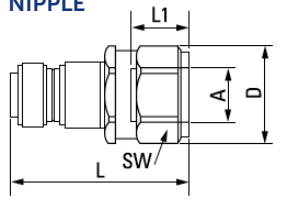
	CONNECTION	HEX SW	L	L1	D	PART NO.	
 <p><b>TECHNICAL DATA</b>            Material: Hardened Zinc Plated Steel            Max. Working Pressure: 1500 bar            Min. Burst Pressure: 3000 bar            Nominal Flow Diameter: 2.5mm            Temperature Range: -30°C - +100°C            Flow Capacity at Pressure Drop 4.5 bar: 5.2L/min</p>	<b>COUPLING</b> 	G1/4"	24	59	12	27	C1500-1202-20K
	<b>NIPPLE</b> 	G1/4"	22	38	12	24.5	C1500-6202-20K

# HIGH PRESSURE QUICK CONNECT COUPLERS

## C2000 SERIES


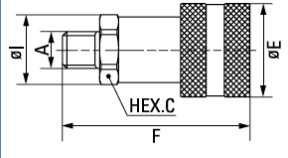
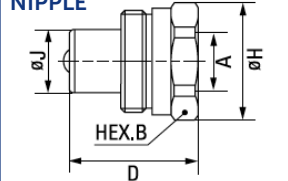
 <p><b>TECHNICAL DATA</b>  Material: Hardened Zinc Plated Steel Max.  Working Pressure: 2000 bar  Min. Burst Pressure: 4000 bar  Nominal Flow Diameter: 2.5mm  Temperature Range: -30°C - +100°C  Flow Capacity at Pressure Drop 4.5 bar: 5.7L/min</p>		CONNECTION	HEX SW	L	L1	D	PART NO.
	G1/4"	24	59	12	27	C2000-1202-30K	
 <p><b>TECHNICAL DATA</b>  Material: Hardened Zinc Plated Steel  Max. Working Pressure: 2500 bar  Min. Burst Pressure: 5000 bar  Nominal Flow Diameter: 2.5mm  Temperature Range: -30°C - +100°C  Flow Capacity at Pressure Drop 4.5 bar: 5.7l/min</p>		CONNECTION	RECOMMENDED TORQUE (nm)	PART NO.			
	G1/4"	22	38	12	24.5	C2000-6202-30K	

## C2500 SERIES


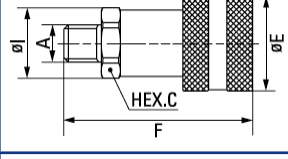
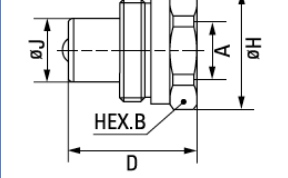
 <p><b>TECHNICAL DATA</b>  Material: Hardened Zinc Plated Steel  Max. Working Pressure: 2500 bar  Min. Burst Pressure: 5000 bar  Nominal Flow Diameter: 2.5mm  Temperature Range: -30°C - +100°C  Flow Capacity at Pressure Drop 4.5 bar: 5.7l/min</p>		CONNECTION	RECOMMENDED TORQUE (nm)	PART NO.
	G1/4"	50-60	C2500-1202-36K	
 <p><b>TECHNICAL DATA</b>  Material: Hardened Zinc Plated Steel  Max. Working Pressure: 2500 bar  Min. Burst Pressure: 5000 bar  Nominal Flow Diameter: 2.5mm  Temperature Range: -30°C - +100°C  Flow Capacity at Pressure Drop 4.5 bar: 5.7l/min</p>		CONNECTION	RECOMMENDED TORQUE (nm)	PART NO.
	G1/4"	50-60	C2500-6202-136K	

# HIGH PRESSURE QUICK CONNECT COUPLERS

## CPW SERIES (1/4")

 <p><b>Coupler</b>      <b>Nipple</b></p>				CONNECTION	Unit	A	HEX C	E	F	I	PART NO.
		<p><b>TECHNICAL DATA</b>            Material: Zinc Plated Steel            Max. Working Pressure: 700 bar            Max. Flow Suggested: 12 lpm            Temperature Range: -20°C- +100°C</p>		<p><b>COUPLING</b></p> 		1/4" NPT	mm	1/4	22	28	60.8
		<p><b>NIPPLE</b></p> 		1/4" NPT	mm	22	19	32.5	28	15.8	CPW-14-M-10K

## CPW SERIES (3/8")

 <p><b>Coupler</b>      <b>Nipple</b></p>				CONNECTION	Unit	A	HEX C	E	F	I	PART NO.
		<p><b>TECHNICAL DATA</b>            Material: Zinc Plated Steel            Max. Working Pressure: 700 bar            Max. Flow Suggested: 23 lpm            Temperature Range: -20°C- +100°C</p>		<p><b>COUPLING</b></p> 		1/4" NPT	mm	3/8	25	35	72.2
		<p><b>NIPPLE</b></p> 		3/8" NPT	mm	3/8	32	40	35	19	CPW-38-M-10K



# PRESSURE GAUGES



SPIR STAR is able to offer a complete range of pressure gauges for both bottom and panel mounted configurations. All gauges are glycerin filled, with an accuracy of +/- 1.5% of full scale.

SPIR STAR Pressure Gauges are available in 2.5", 4 and 6" dial faces, up to 6,000 bar.

## Ø 63mm



**BOTTOM CONNECTION**  
 Range of WP available: Up to 1000 bar  
 Connections available: 1/4" BSP,  
 1/4" NPT,  
 9/16"-18 UNF  
 Units: Bar/psi



**PANEL MOUNTED**  
 Range of WP available: Up to 1000 bar  
 Connections available: 1/4" BSP,  
 1/4" NPT,  
 9/16"-18 UNF  
 Units: Bar/psi

## Ø 100mm



**BOTTOM CONNECTION**  
 Range of WP available: Up to 4000 bar  
 Connections available: 1/2" BSP,  
 1/2" NPT,  
 9/16"-18 UNF  
 Units: Bar/psi



**PANEL MOUNTED**  
 Range of WP available: Up to 4000 bar  
 Connections available: 1/2" BSP,  
 1/2" NPT,  
 9/16"-18 UNF  
 Units: Bar/psi

## Ø 150mm



**BOTTOM CONNECTION**  
 Range of WP available: Up to 6000 bar  
 Connections available: 1/2" BSP,  
 1/2" NPT,  
 9/16"-18 UNF  
 Units: Bar/psi



**PANEL MOUNTED**  
 Range of WP available: Up to 6000 bar  
 Connections available: 1/2" BSP,  
 1/2" NPT,  
 9/16"-18 UNF  
 Units: Bar/psi



## ADAPTORS



SPIRSTAR has a complete range of connections to adapt to any port. Our adaptors are made of Stainless Steel AISI 316. The working pressure ranges from 1,000 bar to 3,000 bar.

### BSPP MALE X BSPP MALE 60° CONES



**Part No.:** MB4-MB4 30K  
**Description:** 1/4" BSPP Male X 1/4" BSPP Male  
**Max Working Pressure:** 30,000 psi

### BSPP MALE EXTERNAL 120° CONE X BSPP MALE EXTERNAL 120° CONE



**Part No.:** 12B4-12B4 30K  
**Description:** 1/4" BSPP Male External Cone X 1/4" BSPP Male External Cone  
**Max Working Pressure:** 30,000 psi

### BSPP MALE 60° CONE X NPT MALE NIPPLES



**Part No.:** MB4-NM4 15K  
**Description:** 1/4" BSPP Male X 1/4" NPT Male  
**Max Working Pressure:** 15,000 psi

**Part No.:** MB4-NM6 15K  
**Description:** 1/4" BSPP Male X 3/8" NPT Male  
**Max Working Pressure:** 15,000 psi

### METRIC MALE X MALE HEX ADAPTORS



**Part No.:** DKOS-M16M16 30K  
**Description:** Metric M16 Male X M16 Male  
**Max Working Pressure:** 30,000 psi

### HIGH PRESSURE MALE X BSPP MALE



**Part No.:** HM4-MB4 30K  
**Description:** 1/4" HP Male X 1/4" BSPP Male  
**Max Working Pressure:** 30,000 psi

**Part No.:** HM6-MB4 30K  
**Description:** 3/8" HP Male X 1/4" BSPP Male  
**Max Working Pressure:** 30,000 psi

### METRIC MALE X HIGH PRESSURE MALE ADAPTORS



**Part No.:** M16-HP4 30K  
**Description:** Metric M16 Male X 1/4" HP Male  
**Max Working Pressure:** 30,000 psi

## ADAPTORS

### BSPP MALE EXTERNAL 120° CONE X NPT MALE



**Part No.:** 12B4-NM4 15K  
**Description:** 1/4" BSPP Male  
 External Cone X 1/4"  
 NPT Male  
**Max Working Pressure:** 15,000 psi

### METRIC MALE X MALE BSPP HEX ADAPTORS



**Part No.:** DKOS-M16MB4 30K  
**Description:** Metric M16 Male X 1/4"  
 BSPP Male  
**Max Working Pressure:** 30,000 psi

**Part No.:** DKOS-M22MB4 30K  
**Description:** Metric M22 Male X 1/4"  
 BSPP Male  
**Max Working Pressure:** 30,000 psi

### BSPP MALE EXTERNAL 120° CONE X MALE TYPE M



**Part No.:** 12B4-M9 30K  
**Description:** 1/4" BSPP Male  
 External Cone X 9/16"  
 Type M Male  
**Max Working Pressure:** 30,000 psi

### METRIC MALE X MALE BSPP 120° EXTERNAL CONE ADAPTORS



**Part No.:** DKOS-M2212B4 30K  
**Description:** Metric M22 Male x 1/4"  
 BSPP Male 120° External  
 Cone  
**Max Working Pressure:** 30,000 psi

**Part No.:** DKOS-M1612B4 30K  
**Description:** Metric M16 Male X  
 1/4" BSPP Male 120°  
 External Cone

**Max Working Pressure:** 30,000 psi

### BSPP MALE EXTERNAL 120° CONE X HIGH PRESSURE MALE



**Part No.:** 12B4-HM6 30K  
**Description:** 1/4" BSPP Male  
 External Cone X 3/8"  
 HP Male  
**Max Working Pressure:** 30,000 psi