

# Schroeder Check Test Point System

## Introduction

Schroeder Check test points provide a fast easy and safe way to test pressures up to 10,000 psi (680 bar) in hydraulic systems under operation. They are available in both 1620 (M16x20) and 1215 (M12x1.5) reverse buttress connections threads with a variety of screw port threads. The standard poppet style features a primary and secondary seal, providing for absolute sealing of fluid. The design allows connection by hand at pressures up to 10,000 psi (680 bar) without any loss of fluid. Metal caps and Buna seals are standard and each hydraulic test point is individually checked for quality assurance.

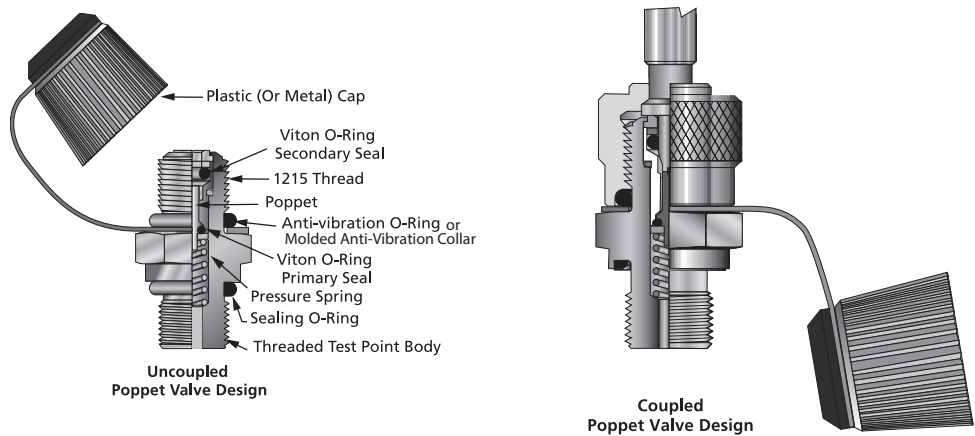
In addition to functioning as a secure access point for checking pressure, they can also be effectively used for collecting oil samples for subsequent testing or bleed air from a hydraulic system. Schroeder check test point can be used in conjunction with gauge adapters, pressure gauges, microflex hoses, and pressure gauge test kits.

Our hydraulic test point design allows easy, comfortable, and safe access to high pressure system enabling measuring, sampling, and filling without interfering with installation. Even connect and disconnect sensors at running installation for easy diagnosis and fluid condition monitoring.

### Benefits

- No mess, no-leak design means sealing is complete before connection is made to hydraulic system.
- No tools - simply hand tighten gauge, transducer or hose adapter onto Schroeder Check test points under full pressure to 10,000 psi (680 bar)
- No contamination - proper use of test points eliminates the introduction of contaminants into a hydraulic system

# Schroeder Check Test Point System



## Test Points

Test Points

Adapters

Hose Joiners

Microflex Hose

## Description

Pressure Limiters

Test Kits

Schroeder Check Test point provide an easy, efficient and Safe method for testing pressure up to 10,000 psi (680 bar) in a hydraulic system during operation. Available in 1620 threads as a standard and 1215 as an option, the test point are available in a variety threads for the circuit thread of the test point. Utilizing a dual seal poppet design, that incorporated a primary and secondary soft seal and a hard seal on the end of the piston Schroeder Check Test points are capable of sealing completely allowing no leakage in hydraulic applications. This design permits connection of Microflex hoses in tandem with the Schroeder Check test point during machine operation safely by hand up to 10,000 psi (680 bar) with no loss of fluid. All Schroeder Check Test Points are equipped with a standard Metal (or Plastic) cap.

In Addition to serving as a secure access point for checking pressure during trouble shooting, test points can also be used to obtain oil samples for testing or to bleed air from a hydraulic circuit. Schroeder Check test points can be used in conjunction with gauge adapters, pressure gauges, Microflex hoses and the pressure gauge kits.

- No Mess  
No-leak design means sealing is complete before connection is made to hydraulic system.
- No Tools  
Simply hand tighten gauge, transducer or hose adapter onto Schroeder Check test points under full pressure to 10,000 psi (680 bar).
- No Contamination  
Proper use of test points eliminates the introduction of contaminants into a hydraulic system.

## Features

Pressure Gauges

GS

- Fluid sampling
- Air bleeding
- Connection for diagnostic products

## Applications

Reservoir Breather Fluid Sampling Adapter

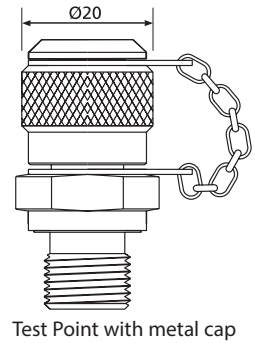
Maximum Working Pressure: 10,000 psi (680 bar)		
Materials:	Standard Body:	S12L14 AS 1442 (AISI-SAE composition)
	Metal Cap:	S12L14 AS 1442 (AISI-SAE composition)
	Poppet:	S12L14 AS 1442 (AISI-SAE composition)
	Secondary Seal:	Viton
	Ball:	Hard Chrome
	Seat:	Stainless Steel 316
Operating Temperature Range: -22°F to +275°F (-30°C to +135°C)		
Optional materials include stainless steel body and stainless steel poppet.		

## Specifications

Probalizer

# Schroeder Check Test Point System

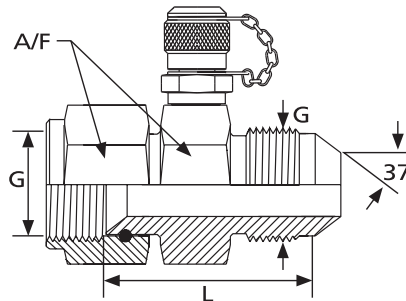
G Thread	Sealing System	Part Number
1/8" NPT	Thread	SP1620NPT18VM
1/4" NPT	Thread	SP1215NPT14VSSM SP1620NPT14VM
5/16"-24 UNF	Viton O-Ring	SP1215UN716VM
7/16"-20 UNF	Viton O-Ring	SP1620UN716VM SP1215UN716VSSM
9/16"-18 UNF	Viton O-Ring	SP1620UN916VM
1/8" BSPP	WD Seal NBR	SP1620G18WDM
1/4" BSPP	WD Seal NBR	SP1620G14WDM



SP = Test point with poppet valve; SS = Stainless Steel; M = Metal Cap;  
 FP = Female Poppet  
 P = Plastic Cap  
 All Test Points have Viton® seals.

Preferred order codes designate shorter lead times and faster delivery.

JIC  
 Male/  
 Female  
 In-Line  
 Test Points

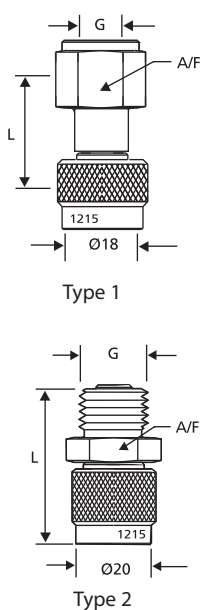


JIC according to SAE J514.  
 Male/female threads of the same size.

G Thread	Tube/Pipe dia	ΔP (max) psi (bar)	L in (mm)	A/F in (mm)	Part Number
7/16"-20 UNF	1/4"	4500 (315)	1.38 (35)	.51 (13)	SP1215L04JICP SP1620L04JICM
9/16"-18 UNF	3/8"	4500 (315)	1.38 (35)	.63 (16)	SP1215L06JICP SP1620L06JICM
3/4"-16 UNF	1/2"	4500 (315)	1.50 (38)	.83 (21)	SP1215L08JICVP SP1620L08JICM
1-1/16"-12 UNF	3/4"	4500 (315)	1.89 (48)	1.06 (27)	SP1215L12JICVP SP1620L12JICM
1-5/16"-12 UNF	1"	4500 (315)	1.97 (50)	1.38 (35)	SP1215L16JICP SP1620L16JICM

Preferred order codes designate shorter lead times and faster delivery.

# Schroeder Check Test Point System



There is no internal check valve in these parts. They are used to connect gauges and pressure transducers directly onto test points without use of Schroeder Microflex hose.

G Thread	Type	$\Delta P$ (max) psi (bar)	L in (mm)	A/F in (mm)	Part Number
1/4" NPT	1	10,000 (680)	0.83 (21)	0.75 (19)	S1215DCNPT14
					S1215DCNPT14SS
					S1620DCNPT14
1/4" BSPP	1	10,000 (680)	0.83 (21)	0.75 (19)	S1215DCG14CU S1620DCG14CU
7/16" UNF	1	10,000 (680)	0.83 (21)	0.75 (19)	S1215DCUN716 S1620DCUN716
1/4" NPT	2	10,000 (680)	0.83 (21)	0.75 (19)	S1215DCMNPT14

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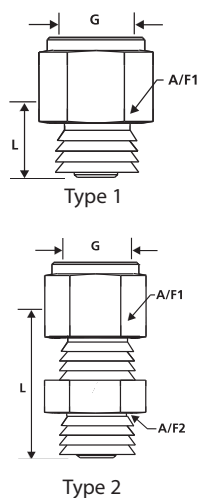
## Direct Gauge Adapters

Test Points

Adapters

Hose Joiners

Microflex Hose



There is no internal check valve in this arrangement. Type 1 is for direct connection of gauge to hose. Type 2 is for bulkhead connection of gauge to hose with bulkhead mounting.

G Thread	Type	Gauge Seal	L in (mm)	A/F1 in (mm)	A/F2 in (mm)	Part Number
1/4" NPT	1	Thread	1.34 (34)	0.75 (19)	—	S1215GANPT14
						S1620GANPT14

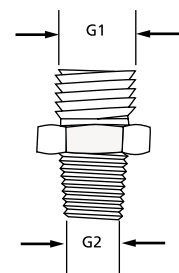
Preferred order codes designate shorter lead times and faster delivery.

## Gauge to Hose Adapters

Pressure Limiters

Test Kits

Pressure Gauges



There is no internal check valve in this arrangement.

G1 Thread	G2 Thread	Part Number
M12 x 1.5	1/8" NPT Male	S1215NPT18P
M12 x 1.5	1/4" NPT Male	S1215NPT14
M12 x 1.5	1/4" NPT Male	S1215NPT14P

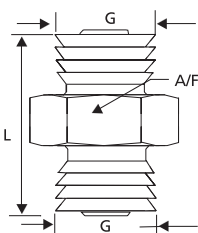
P = Plastic Cap

Preferred order codes designate shorter lead times and faster delivery.

## Change-Over Adapters

GS

Reservoir Breather Fluid Sampling Adapter



G Thread	$\Delta P$ (max) psi (bar)	L in (mm)	A/F in (mm)	Part Number
System 1215	10,000 (680)	1.54 (39)	0.55 (14)	SJ1215
System 1620	10,000 (680)	1.54 (39)	0.55 (14)	SJ1620

Preferred order codes designate shorter lead times and faster delivery.

## Hose Joiners

Probalizer

# Schroeder Check Test Point System

## Microflex Hoses

Perforated polyamide / kevlar hose, 2 mm ID, 5 mm OD, plastic dust cap.  
Rated Differential Pressure 10,000 psi/680 bar max

### How to Build a Valid Model Number for a Schroeder Check Test Point System:

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
SM2				

Example: NOTE: One option per box

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
SM2	NPT18		SS	12

= SM2-NPT18-SS-012

Example: NOTE: One option per box

BOX 1	BOX 2	BOX 3	BOX 4	BOX 5
SM2	NPT18	1215		12

= SM2-NPT18-1215-12

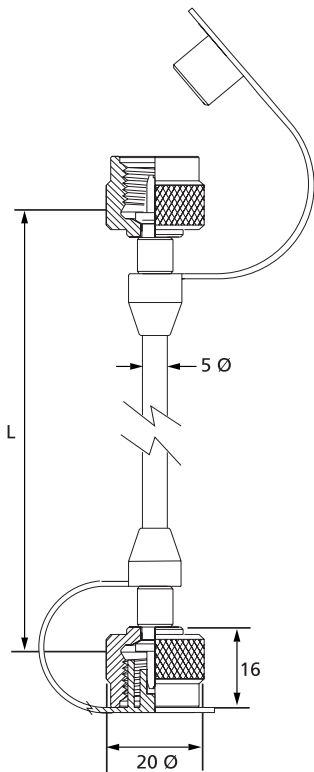
BOX 1	BOX 2	BOX 3
MicroHose Diameter	Hose End System (1st End)	Hose End System (2nd End)
SM2	1620	1620
SM4	1215	1215
	NPT18 = 1/8 NPT (Male) Hose End	NPT18 = 1/8 NPT (Male) Hose End
	NPT14 = 1/4 NPT (Male) Hose End	NPT14 = 1/4 NPT (Male) Hose End
	NPFS14 = 1/4 NPT (Female Swivel) Hose End	NPFS14 = 1/4 NPT (Female Swivel) Hose End
	J716 = 7/16 UNF (Male) Hose End	J716 = 7/16 UNF (Male) Hose End
	JFS716 = 7/16 UNF (Female Swivel) Hose End	JFS716 = 7/16 UNF (Female Swivel) Hose End
	J916 = 9/16 UNF (Male) Hose End	J916 = 9/16 UNF (Male) Hose End
		Omit = Same as 1st end

BOX 4	BOX 5
Hose End Material Option	Length (inches)
Omit = Carbon Steel	6
SS = Stainless Steel	12
	24
	36
	48
	72
	96

Preferred order codes designate shorter lead times and faster delivery.

4mm hoses are available for use with the TMU to allow adequate flow.

L in (mm)	ΔP (max) psi (bar)	Part Number
6 (200)	10,000 (680)	SM4-1620-06
12 (300)	10,000 (680)	SM4-1620-12
35 (890)	10,000 (680)	SM4-1620-35
71 (1800)	10,000 (680)	SM4-1620-71



# Schroeder Check Test Point System



- Schroeder Pressure Test Kits are available in four configurations as shown below. Highest quality components were selected for versatility and long service life. Contents of each kit are listed below.
- The optional gauge range should be specified using the order code shown above.  
For example: UB102-1-2 specifies one (1) 100 psi gauge and one (1) 200 psi

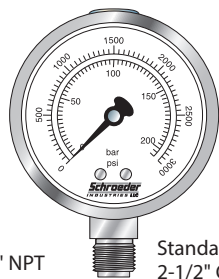
UB101-(* )	UB102-(* )-(* )	UB103-(* )-(* )-(* )	UB106-(* )-(* )-(* )-(* )-(* )-(* )
1 U401 Gauge (* )	2 U401 Gauges (* )-(* )	3 U401 Gauges (* )-(* )-(* )	6 U401 Gauges (* )-(* )-(* )-(* )-(* )-(* )
1 Microflex Hose 36"	2 Microflex Hoses 36"/72"	3 Microflex Hoses 12"/36"/72"	6 Microflex Hoses, 2x12"/2x36"/2x72"
1 Hose Joiner	1 Hose Joiner	1 Hose Joiner	3 Hose Joiners
1 (Hose) Gauge Adapter	1 (Hose) Gauge Adapter	1 (Hose) Gauge Adapter	3 (Hose) Gauge Adapters
1 Direct Gauge Adapter	1 Direct Gauge Adapter	1 Direct Gauge Adapter	3 Direct Gauge Adapters
3 Schroeder Check Test Points:	6 Schroeder Check Test Points:	6 Schroeder Check Test Points:	12 Schroeder Check Test Points:
1 ea. 1/4" NPT	2 ea. 1/4" NPT	2 ea. 1/4" NPT	4 ea. 1/4" NPT
1 ea. 7/16" UNF	2 ea. 7/16" UNF	2 ea. 7/16" UNF	4 ea. 7/16" UNF
1 ea. 9/16" UNF	2 ea. 9/16" UNF	2 ea. 9/16" UNF	4 ea. 9/16" UNF

Pressure test kits are also available with U400 all stainless steel gauges. Part numbers are U101-(\* ), U102-(\* )-(\* )...etc.



Custom Test Kits are designed for many special requirements. Utilizing components from Schroeder gauge and pressure test kits, these boxes are constructed for reliability and precision.

For additional information on custom test kits, please consult factory.



1/4" NPT Standard 2-1/2" Case

With the Schroeder Check System, one top quality gauge can do the work previously done by many. Compromising on low cost, short life gauges with questionable accuracy is no longer necessary. A series of precision instruments, Schroeder gauges are fluid filled with full scale accuracy of  $\pm 1.5\%$  (or better). Dual scale dial has a non-reflective white background and a high contrast matte black pointer. Cases and connections are stainless steel, internals are brass. Ideal for most liquids and gases under pressure or vacuum where contact with the liquid filling would not be hazardous. For additional applications, information, and pressure ranges, please consult the factory.

Part Number	Pressure	Order Code (needed for test kits)
U401-30/100-01*	30 in Hg VAC to 100 psi (6.9 bar)	0
U401-100-01	0 to 100 psi (6.9 bar)	1
U401-200-01	0 to 200 psi (13.8 bar)	2
U401-600-01	0 to 600 psi (41.2 bar)	6
U401-1000-01	0 to 1000 psi (70.0 bar)	10
U401-1500-01	0 to 1500 psi (103.0 bar)	15
U401-3000-01*	0 to 3000 psi (207.0 bar)	30
U401-5000-01	0 to 5000 psi (345.0 bar)	50
U401-6000-01*	0 to 6000 psi (414.0 bar)	60
U401-10000-01	0 to 10000 psi (689.0 bar)	100

\*Also available is U400-XXX-01 gauge, identical to U401 except with stainless steel internals.

Preferred order codes designate shorter lead times and faster delivery.

## Schroeder Pressure Test Kits

Test Points

Adapters

## Part Number

Hose Joiners

Microflex Hose

Pressure Limiters

## Schroeder Custom Test Kits

Test Kits

## Pressure Gauges

Pressure Gauges

GS

## Part Number

Reservoir Breather Fluid Sampling Adapter

Probalizer