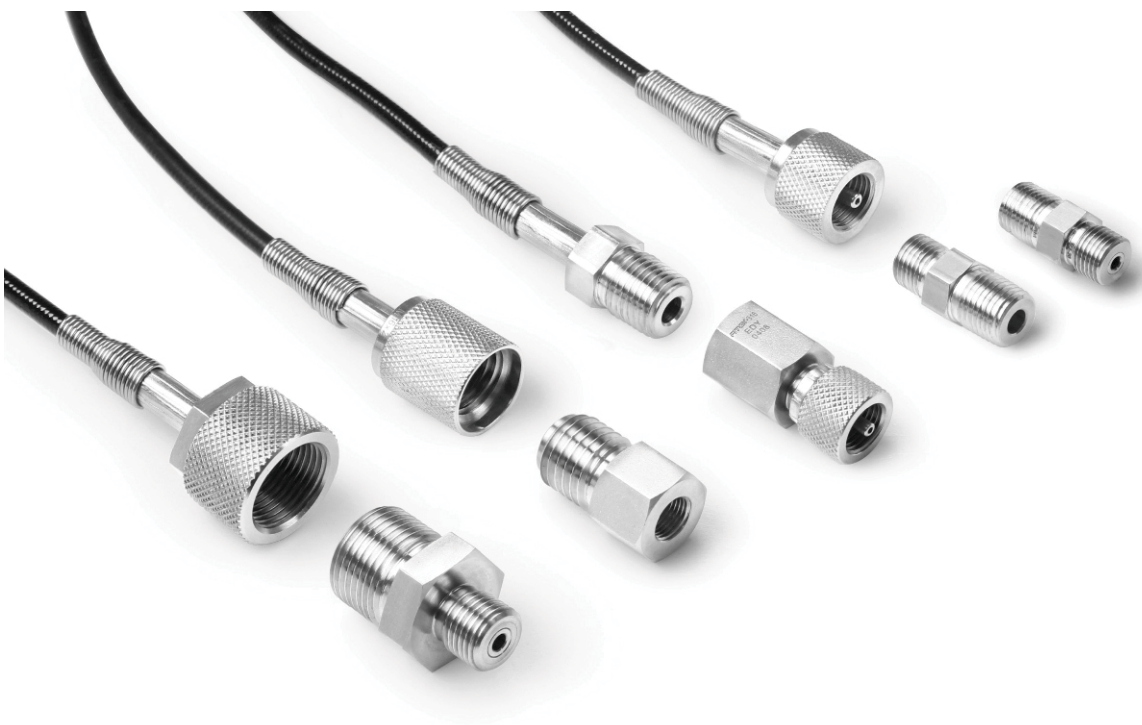




# Calibration Fittings and Hoses

QH, QT, HQH and HQT Series



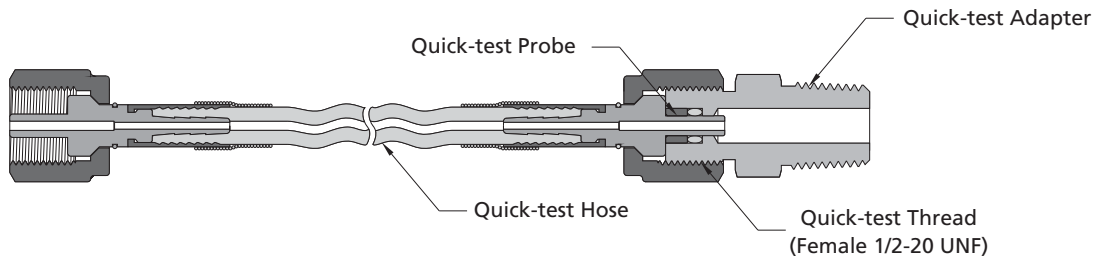
**FITOK**

[www.fitokgroup.com](http://www.fitokgroup.com)

# Calibration Fittings and Hoses

## Features

- ⦿ No wrench or thread sealant required for assembly and disassembly.
- ⦿ Flexible hoses with small inside diameter and low internal volume.
- ⦿ Variety of adapters to connect with wide range of calibration devices.
- ⦿ Interchangeable with those of other manufacturers.
- ⦿ Every assembly is factory tested with pure water at 1.5 times the maximum working pressure.



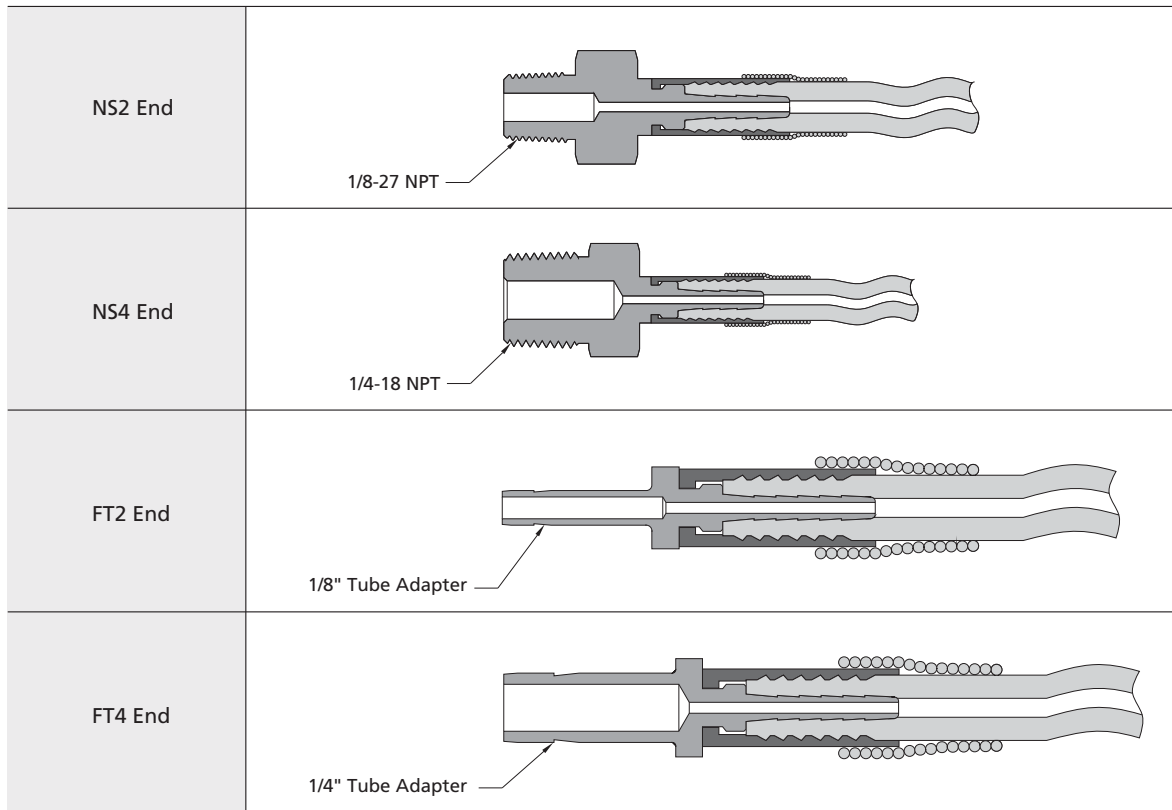
## Quick-test Hoses QH Series

### Features

- ⦿ Working pressure up to: 6900 psig (476 bar)
- ⦿ Working temperature: -10°F to 140°F (-23°C to 60°C)
- ⦿ Outer diameter of hose: 0.2" (5 mm)
- ⦿ Inner diameter of hose: 0.08" (2 mm)
- ⦿ Hose end materials: 316 SS, 304 SS
- ⦿ Fluid media: water, petroleum based oils, air, inert gas, compressed natural gas

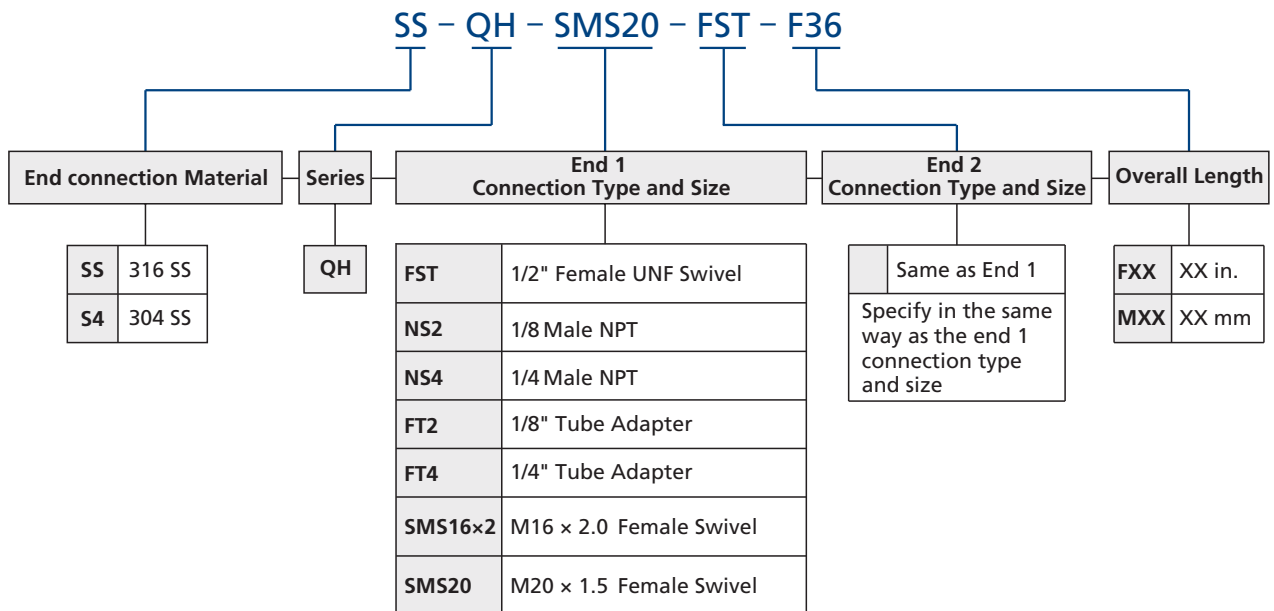
### Hose Ends

FST End	<p>1/2-20 UNF</p>
SMS16x2 End	<p>M16x2.0</p>
SMS20 End	<p>M20x1.5</p>



Types listed are standard. Other types are available upon request.

## Ordering Number Description



End 1 and end 2 follow the orders and regulations below:

1. Metric Double Ferrules - Fractional Double Ferrules - Metric Tube Adapters - Fractional Tube Adapter - NPT Threads - BSPT Threads - BSPP Threads - SAE/IMS Parallel Threads - 37° Flare - Others
2. Put the sizes from the biggest down to the smallest if they are of the same type.
3. Put the female before male if they are of the same type and size.

Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

# Quick-test Adapters and Fittings

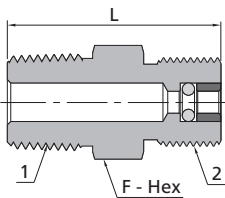
## QT Series

### Features

- ⦿ Working pressure up to:
  - Without valve: 5000 psig (345 bar)
  - With valve: 3000 psig (207 bar)
- ⦿ Materials: 316 SS, 304 SS
- ⦿ Working temperatures:
  - 10°F to 400°F (-23°C to 204°C)
  - 10°F to 250°F (-23°C to 121°C)
- ⦿ Optional check valve and protective cap available

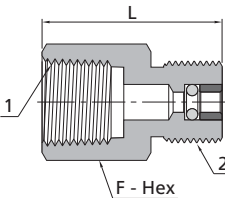
### Dimensions

#### Male NPT Adapters



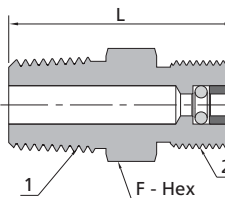
Connect to Female NPT to FST End					
End 1	End 2	Basic Ordering Number	Dimension		Option
Male NPT Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
1/8	ST	QT-NS2-ST	9/16	1.11 (28.3)	1.Check Valve 2.Protective Cap
1/4	ST	QT-NS4-ST	9/16	1.29 (32.8)	
3/8	ST	QT-NS6-ST	3/4	1.29 (32.8)	
1/2	ST	QT-NS8-ST	7/8	1.54 (39.1)	
3/4	ST	QT-NS12-ST	1 1/16	1.54 (39.1)	

#### Female NPT Adapters



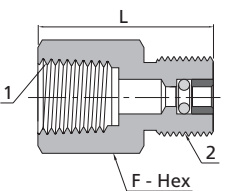
Connect to Male NPT to FST End					
End 1	End 2	Basic Ordering Number	Dimension		Option
Female NPT Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
1/8	ST	-QT-FNS2-ST	5/8	0.98 (24.9)	Protective Cap
1/4	ST	-QT-FNS4-ST	3/4	1.16 (29.5)	
3/8	ST	-QT-FNS6-ST	7/8	1.23 (31.2)	
1/2	ST	-QT-FNS8-ST	1 1/16	1.41 (35.8)	
3/4	ST	-QT-FNS12-ST	1 5/16	1.56 (39.6)	

#### Male BSPT Adapters



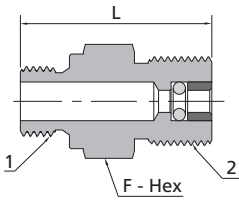
Connect to Female BSPT to FST End					
End 1	End 2	Basic Ordering Number	Dimension		Option
Male BSPT Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
1/8	ST	-QT-RT2-ST	9/16	1.11 (28.3)	1.Check Valve 2.Protective Cap
1/4	ST	-QT-RT4-ST	9/16	1.29 (32.8)	

#### Female BSPT Adapters



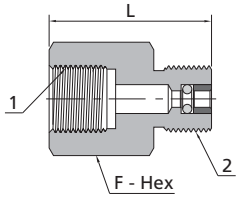
Connect to Male BSPT to FST End					
End 1	End 2	Basic Ordering Number	Dimension		Option
Female BSPT Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
1/8	ST	-QT-FRT2-ST	5/8	0.98 (24.9)	Protective Cap
1/4	ST	-QT-FRT4-ST	3/4	1.16 (29.5)	

### Male BSPP Adapters



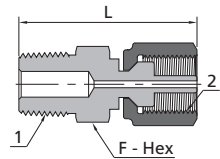
Connect to Female BSPP to FST Ends					
End 1	End 2	Basic Ordering Number	Dimension		Option
Male BSPP Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
1/8	ST	-QT-RS2-ST	9/16	1.09 (27.7)	1.Check Valve 2.Protective Cap
1/4	ST	-QT-RS4-ST	3/4	1.24 (31.5)	
3/8	ST	-QT-RS6-ST	7/8	1.29 (32.8)	

### Female BSPP Adapters



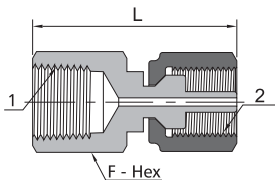
Connect to Male BSPP to FST Ends					
End 1	End 2	Basic Ordering Number	Dimension		Option
Female BSPP Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
1/8	ST	-QT-RG2-ST	9/16	0.97 (24.6)	Protective Cap
1/4	ST	-QT-RG4-ST	3/4	1.16 (29.5)	
3/8	ST	-QT-RG6-ST	7/8	1.23 (31.2)	
1/2	ST	-QT-RG8-ST	1 1/16	1.41 (35.8)	

### Male NPT Quick-test Gauge Adapters



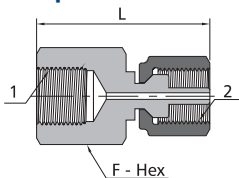
Connect to Female NPT to ST Adapter					
End 1	End 2	Basic Ordering Number	Dimension		Option
Male NPT Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
1/8	FST	-QT-NS2-FST	9/16	1.42 (36.1)	
1/4	FST	-QT-NS4-FST	9/16	1.60 (40.6)	

### Female NPT Quick-test Gauge Adapters



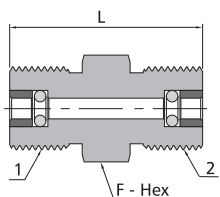
Connect to Male NPT to ST Adapter					
End 1	End 2	Basic Ordering Number	Dimension		Option
Female NPT Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
1/8	FST	-QT-FNS2-FST	5/8	1.32 (33.5)	
1/4	FST	-QT-FNS4-FST	3/4	1.50 (38.1)	

### Female BSPP Quick-test Gauge Adapters



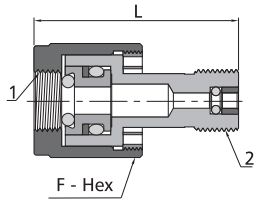
Connect to Male BSPP to ST Adapter					
End 1	End 2	Basic Ordering Number	Dimension		Option
Female BSPP Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
1/4	FST	-QT-RG4-FST	3/4	1.50 (38.1)	
3/8	FST	-QT-RG6-FST	7/8	1.57 (39.9)	
1/2	FST	-QT-RG8-FST	1 1/16	1.76 (44.7)	

### Quick-test Hose Unions



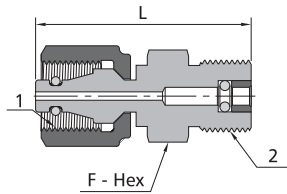
Connect to two FXT Ends					
End 1	End 2	Basic Ordering Number	Dimension		Option
SAE/MS Thread Size	SAE/MS Thread Size		F	L	
			in.	in. (mm)	
ST	ST	-QT-ST-ST	9/16	1.17 (29.7)	Protective Cap

**Hand Tight Female NPT Quick-test Gauge Adapters**



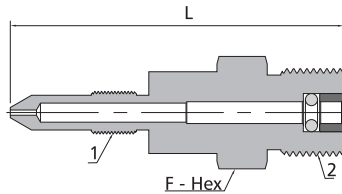
Connect to Male NPT to FST Ends					
End 1	End 2	Basic Ordering Number	Dimension		Option
Female NPT Size	SAE/MS Thread Size		F	L	
			in. (mm)	in. (mm)	
1/8	ST	-QT-QNS2-ST	0.78 (19.8)	1.52 (38.7)	Protective Cap
1/4	ST	-QT-QNS4-ST	0.94 (23.8)	1.65 (41.9)	
3/8	ST	-QT-QNS6-ST	1.06 (26.9)	1.69 (42.9)	

**Quick-test Tube Adapters**



Connect to Tube Fitting Thread to FST Ends					
End 1	End 2	Basic Ordering Number	Dimension		Option
SAE/MS Thread Size	SAE/MS Thread Size		F	L	
			in. (mm)	in. (mm)	
1/4 Tube Fitting	ST	-QT-QL4-ST	0.56 (14.2)	1.39 (35.3)	Protective Cap
3/8 Tube Fitting	ST	-QT-QL6-ST	0.56 (14.2)	1.45 (36.8)	
1/2 Tube Fitting	ST	-QT-QL8-ST	0.75 (19.1)	1.58 (40.1)	

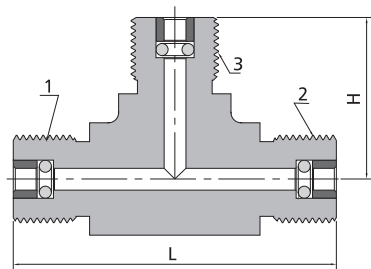
**DP Transmitter Calibration Adapters**



Connect to Foxboro, Rosemount, Yokogawa and Honewell Bleed Ports to FST Ends					
End 1	End 2	Basic Ordering Number	Dimension		Option
SAE/MS Thread Size	SAE/MS Thread Size		F	L	
			in. (mm)	in. (mm)	
1/4-28 UNF	ST	-QT-CH-ST	0.56 (14.2)	1.93 (49.0)	Protective Cap
5/16-24 UNF	ST	-QT-CR-ST	0.56 (14.2)	1.73 (43.9)	

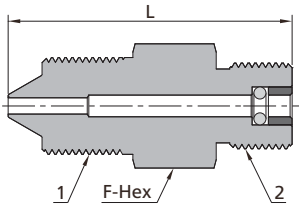
1/4-28 UNF end is applicable to Honeywell pressure transmitters; 5/16-24 UNF end is applicable to Foxboro, Rosemount and Yokogawa.

**Quick-test Tees**



Connect to three FXT Ends						
End 1	End 2	End 3	Basic Ordering Number	Dimension		Option
SAE/MS Thread Size	SAE/MS Thread Size	SAE/MS Thread Size		H	L	
				in. (mm)	in. (mm)	
ST	ST	ST	-QT-ST-ST-ST	0.93 (23.6)	1.88 (47.8)	Protective Cap

### Male High Pressure Adapters

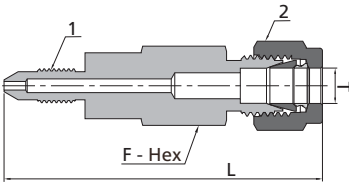


Connect to a Female High Pressure 60 degree coned and threaded fittings and ST/FST Ends

End 1 SAE/MS Thread Size	End 2 SAE/MS Thread Size	Basic Ordering Number	Dimension		Option
			F in.	L in. (mm)	
9/16-18 UNF	ST	-QT-60HP-ST	5/8	1.31 (33.3)	Protective Cap
9/16-18 UNF	FST	-QT-60HP-FST	5/8	1.29 (32.8)	

9/16-18 UNF end is used for connecting to Gigabar, Autoclave Engineers®, Butech®, HiP® (High Pressure Equipment), Parker® or equivalent high pressure coned and threaded connections, valves, tees and unions.

### DP Transmitter Calibration Adapters

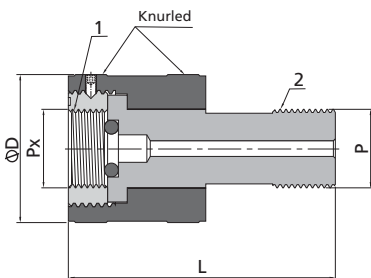


Connect to Foxboro, Rosemount, Yokogawa and Honewell outlet and 1/4" Tube Adapter Ends

End 1 SAE/MS Thread Size	End 2 T-Tube O.D. (in.)	Basic Ordering Number	Dimension		Option
			F in.	L in. (mm)	
1/4-28 UNF	1/4	-QT-CH-FL4	1/2	1.69 (42.9)	
5/16-24 UNF	1/4	-QT-CR-FL4	1/2	2.32 (58.9)	

- 1/4-18 UNF end is used for connecting to Honeywell's pressure transmitters. 5/16-24 UNF is used for connecting to Foxboro, Rosemount, Yokogawa's pressure transmitters.
- Please refer to FITOK detailed catalog "Tube Fittings, Tubes and Pipes "-" Calibration Fittings" for the parts drawings of this assembly.

### Hand Tight Adapters



Connect to M14X1.5, M20X1.5, M22X1.5 male thread Ends and SMS20 Ends

End 1 Px-MS Thread Size	End 2 P-MS Thread Size	Basic Ordering Number	Dimension		Option
			D in.	L in. (mm)	
M14X1.5	M20X1.5	-QT-MS20-MS14	32	2.68 (68)	
M20X1.5	M20X1.5	-QT-MS20	37.5	2.68 (68)	
M22X1.5	M20X1.5	-QT-MS20-MS22	37.5	2.68 (68)	

Connect to ISO pipe parallel thread and SMS20 Ends

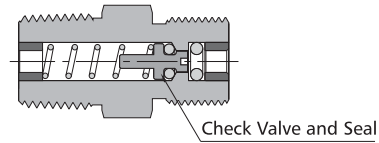
End 1 Px-ISO Pipe Parallel Thread Size	End 2 P-MS Thread Size	Basic Ordering Number	Dimension		Option
			D in.	L in. (mm)	
1/4	M20X1.5	-QT-MS20-RP4	32	2.68 (68)	
3/8	M20X1.5	-QT-MS20-RP6	32	2.68 (68)	
1/2	M20X1.5	-QT-MS20-RP8	37	2.68 (68)	

Please refer to FITOK detailed catalog "Pipe Fittings "-" Hand Tight Adapter Fittings" for the parts drawings of this assembly.

## Options

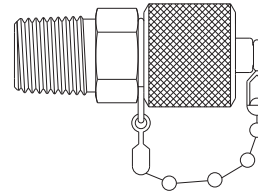
### 1. Check Valve

Adapter with check valve seals via the o-ring and probe. When the hose probe is pushed into the o-ring, the probe in the adapter opens the check valve and allows flow.



### 2. Protective Cap

Protective cap guards against damage and contaminants when adapters are uncoupled. Protective caps are not pressure containing devices.



## Ordering Information

Add the material designator as a prefix to the basic ordering number. To get a valve or/and protective cap, add -V or -PC/-V-PC as a suffix to the basic ordering number.

Example: 1/4 Male NPT as end 1, 1/2" Male UNF as end 2, 304 stainless steel, a valve and a protective cap added, the complete ordering number is: **S4-QT-NS4-ST-V-PC**.

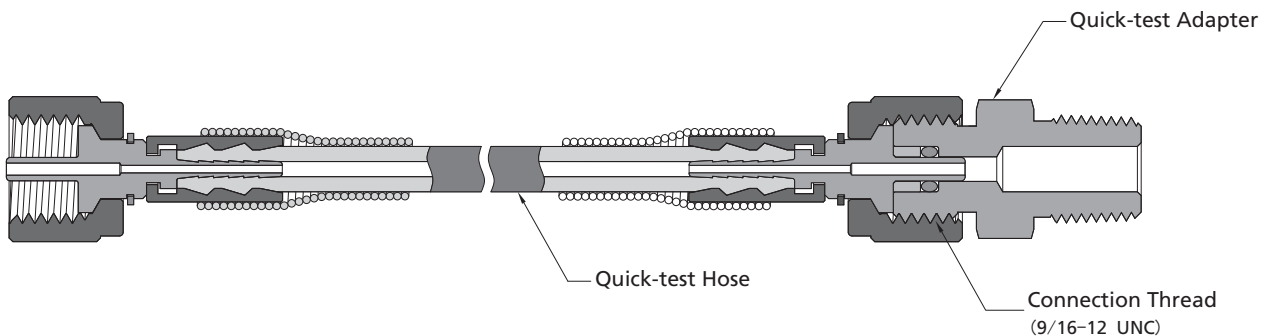
1. XT means 1/2-20 UNF Male thread, FXT means UNF Female thread UNC thread.
2. Sizes and types listed are standard, other sizes and types are available upon request.
3. Dimensions are for reference only and are subject to change.

# High Pressure Quick-test Hose Assemblies

## HQH Series

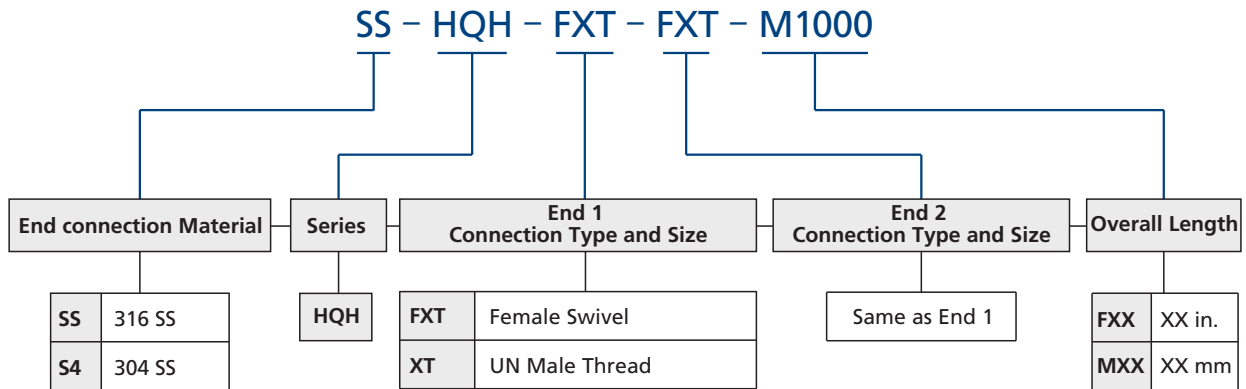
### Features

- ⦿ Working pressure up to: 690 bar (10000 psig)
- ⦿ Working temperature: -40°F to 140°F (-40°C to 60°C)
- ⦿ Outer diameter of hose: 0.24" (6 mm)
- ⦿ Inner diameter of hose: 0.08" (2 mm)
- ⦿ Hose end materials: 316 SS or 304 SS
- ⦿ Fluid media: water, petroleum based oils, air, inert gas





## Ordering Number Description



Note: "Ordering Number Description" is a reference to understand the combination rules of FITOK product part number. Not all combinations are available.

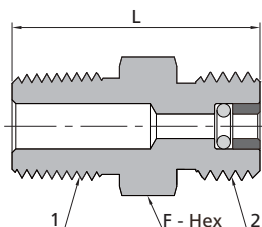
## High Pressure Quick-test Fittings

### HQT Series

#### Features

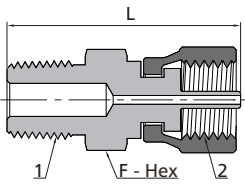
- ⦿ Working pressure up to: 690 bar (10000 psig)
- ⦿ Working temperature:
  - FKM Seal: -10°F to 400°F (-23°C to 204°C)
  - NBR Seal: -10°F to 250°F (-23°C to 121°C)
- ⦿ Hose end materials: 316 SS or 304 SS
- ⦿ Convenient connection: No wrench or thread sealant required for assembly or disassembly.
- ⦿ Not applicable to use with FITOK QH series Quick-test Hose, please use with FITOK HQH series Quick-test Hose.

#### Male NPT Adapter



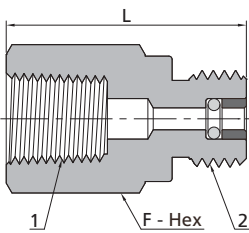
Connect to female NPT and FXT fittings							
End 1 Male NPT Size	End 2 SAE/MS Thread Size	Basic Ordering Number	Material	Working Pressure Range	Dimension		Option
					F in.	L in. (mm)	
1/8	XT	-HQT-NS2-XT	Stainless Steel	0~10000 psig (0~690 bar)	5/8	1.31 (33.3)	Protective Cap
1/4	XT	-HQT-NS4-XT	Stainless Steel	0~10000 psig (0~690 bar)	5/8	1.29 (32.8)	

### Male NPT Quick-test Gauge Adapters



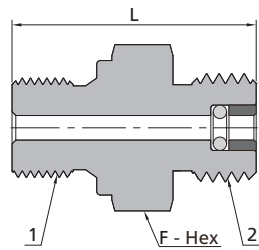
Connect to female NPT and XT fittings							
End 1	End 2	Basic Ordering Number	Material	Working Pressure Range	Dimension		Option
Male NPT Size	SAE/MS Thread Size				F	L	
					in.	in. (mm)	
1/8	FXT	-HQT-NS2-FXT	Stainless Steel	0~10000 psig (0~690 bar)	9/16	1.44(36.6)	
1/4	FXT	-HQT-NS4-FXT	Stainless Steel	0~10000 psig (0~690 bar)	9/16	1.67(42.4)	

### Female NPT Adapters



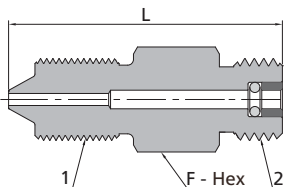
Connect to male NPT and FXT fittings							
End 1	End 2	Basic Ordering Number	Material	Working Pressure Range	Dimension		Option
Female NPT Size	SAE/MS Thread Size				F	L	
					in.	in. (mm)	
1/8	XT	-HQT-FNS2-XT	Stainless Steel	0~10000 psig (0~690 bar)	5/8	1.38(35.1)	Protective Cap
1/4	XT	-HQT-FNS4-XT	Stainless Steel	0~10000 psig (0~690 bar)	3/4	1.56(39.6)	

### Male BSPP Adapters



Connect to female BSPP and FXT fittings							
End 1	End 2	Basic Ordering Number	Material	Working Pressure Range	Dimension		Option
Male NPT Size	SAE/MS Thread Size				F	L	
					in.	in. (mm)	
1/4	XT	-HQT-RS4-XT	Stainless Steel	0~10000 psig (0~690 bar)	3/4	1.27 (32.3)	Protective Cap
3/8	XT	-HQT-RS6-XT	Stainless Steel	0~10000 psig (0~690 bar)	7/8	1.25 (31.8)	

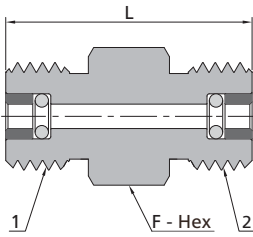
### High Pressure Male Adapters



Connect to Female High Pressure 60 degree coned and threaded fittings and FXT Ends							
End 1	End 2	Basic Ordering Number	Material	Working Pressure Range	Dimension		Option
SAE/MS Thread Size	SAE/MS Thread Size				F	L	
					in.	in. (mm)	
9/16-18 UNF	XT	-HQT-60HP-XT	Stainless Steel	0~10000 psig (0~690 bar)	5/8	1.88 (47.8)	Protective Cap

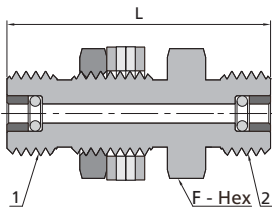
9/16-18 UNF end is used for connecting to Gigabar, Autoclave Engineers®, Butech®, HiP®, (High Pressure Equipment), Parker® or equivalent high pressure coned and threaded connections, valves, tees and unions.

## Quick-test Unions



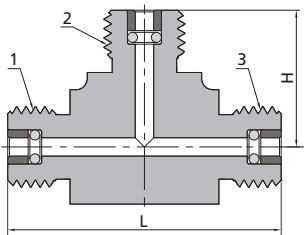
Connect to two FXT Ends							
End 1	End 2	Basic Ordering Number	Material	Working Pressure Range	Dimension		Option
SAE/MS Thread Size	SAE/MS Thread Size				F	L	
					in.	in. (mm)	
XT	XT	-HQT-XT-XT	Stainless Steel	0~10000 psig (0~690 bar)	5/8	1.29 (32.8)	Protective Cap

## Quick-test Bulkhead Unions



Connect to two FXT Ends							
End 1	End 2	Basic Ordering Number	Material	Working Pressure Range	Dimension		Option
SAE/MS Thread Size	SAE/MS Thread Size				F	L	
					in.	in. (mm)	
XT	TXT	-HQT-XT-TXT	Stainless Steel	0~10000 psig (0~690 bar)	3/4	1.76 (44.7)	Protective Cap

## Quick-test Tees



Connect to three FXT Ends								
End 1	End 2	End 3	Basic Ordering Number	Material	Working Pressure Range	Dimension		Option
SAE/MS Thread Size	SAE/MS Thread Size	SAE/MS Thread Size				H	L	
						in. (mm)	in. (mm)	
XT	XT	XT	-HQT-XT-XT-XT	Stainless Steel	0~10000 psig (0~690 bar)	0.95 (24.15)	1.9 (48.3)	Protective Cap

## Ordering Information

Add the material designator as a prefix to the basic ordering number. To get a protective cap, add -PC as a suffix to the basic ordering number. Example: 1/4 male NPT as end 1, XT as end 2, 316 stainlesssteel, a protective cap added, the complete ordering number is **SS-HQT-NS4-XT-PC**.

1. XT means 9/16-12 UNC Male thread, FXT means 9/16-12 UNC Female thread.
2. Sizes and types listed are standard, other sizes and types are available upon request.
3. Dimensions are for reference only and are subject to change.

## Options

### ☉ Protective Cap

Protective cap guards against damage and contaminants when adapters are uncoupled. Protective caps are not pressure containing devices.

## **FIRTECH**

Al. Piłsudskiego 34, 05-270 Marki, Polska

**Tel.:** +48 22 435-82-44, **Fax.:** +48 22 427-52-66

**e-mail:** FITOK@FITOKGROUP.PL

FK-IC-GF-05-EN-170303