

### Ashcroft<sup>®</sup> SMART Transmitter Assemblies

Ashcroft offers the assembly of SMART transmitters to our diaphragm seals and isolation rings, ensuring that your pressure assemblies are tested for accuracy and leak integrity prior to shipment. Our transmitter assembly service helps to take the guesswork out of specifying the correct pressure instrumentation and assembly orientation, while our Ashcroft instrumentation experts ensure that the instruments are compatible and properly calibrated to suit your application.

Selection is easy: choose the transmitter you want us to attach and configure the appropriate assembly code according to the instructions in this document. We'll build the assembly with our custom-made low volume fittings for minimal temperature error, fill the assembly with our state-of-the-art vacuum filling system, and ensure that every instrument in the assembly is checked for calibration prior to shipment.

#### Step 1: - Transmitter Selection

To ensure compatibility with the seal or isolation ring being attached, we recommend the following:

- Note the instrument connection: make sure all instruments being attached are the same size NPT
- Note the required output span – make sure it does not exceed the pressure rating of the isolator or the ranges of any attached instrument.
- Remove any option codes for block and bleed valves from the transmitter manufacturer part number– these cannot be installed above a diaphragm seal.

If in doubt, submit the form found at <https://bit.ly/transmitterform> and we'll respond within 24 hours with our recommendations.

#### Step 2: - Configure the Assembly Part Number

Refer to the coding table on pages 2 thru 3 to select the appropriate coding for the assembly orientation you need. When ordering, be sure to include the full transmitter part number somewhere on the purchase order. Refer to the respective data sheets to configure part numbers for isolation rings, seals, and any other instrument included on the assembly. (see coding example on page 4)

#### Step 3: - Send us your SMART Transmitter

Working through your Ashcroft sales representative or authorized distributor, submit your order. Once it has been entered into our system, we will issue a return authorization number for your transmitters.



## Ordering Guide

### Ashcroft® SMART Transmitter Assemblies

ORDERING CODE	Example:	TS	A	04	0	A001	T	0	0	CK	0/60#	-XC4NH7G
<b>Transmitter Seal Assembly</b>		TS										
<b>Transmitter Manufacturer</b>												
A - Emerson/Rosemont			A									
B - Endress & Hauser												
C - Siemens												
D - Foxboro/SE												
E - Yokogawa												
F - ABB												
G - Vega												
<b>Transmitter Process Connection</b>												
04 - ½ NPT Male				04								
02 - ¼ NPT Male												
50 - ½ NPT Female												
25 - ¼ NPT Female												
<b>Orientation Options</b>												
0 - Horizontal pipe					0							
E - Vertical pipe (includes elbow, ¼ NPT connections only)												
<b>Instrument Arrangement</b>												
A001 - Direct attachment						A001						
A002 - Single instrument with 1115 capillary line or 2198 MicroTube™ siphon												
A003 - Differential transmitter (attached with 1115 capillary)												
A004 - Single instrument with snubber/dampener												
B001 - 2 Instruments; right-facing tee (½ NPT connections)												
B002 - 2 Instruments; right-facing tee (¼ NPT connections)												
B003 - 2 Instruments; left-facing tee (½ NPT connections)												
B004 - 2 Instruments; left-facing tee (¼ NPT connections)												
C001 - 3 Instruments on cross fitting (½ NPT connections)												
C002 - 3 Instruments on cross fitting (¼ NPT connections)												
C003 - 3 Instruments on cross w/capillary (¼ NPT connections)												
Contact factory for additional/custom orientations												
<b>Instrument at 12:00</b>												
T - Customer-supplied instrument							T					
G - Analog gauge												
S - Switch												
D - Transducer/digital gauge												
<b>Instrument at 3:00 (select instrument for right-facing B and C arrangement)</b>												
0 - No instrument								0				
T - Customer -supplied instrument												
G - Analog gauge												
S - Switch												
D - Transducer/digital gauge												
<b>Instrument at 9:00 (select instrument for left-facing B and C arrangement)</b>												
0 - No instrument									0			
T - Customer -supplied instrument												
G - Analog gauge												
S - Switch												
D - Transducer/digital gauge												

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ORDERING CODE (continued)	Example:	TS	A	04	0	A001	T	0	0	CK	0/60#	-XC4NH7G
<b>Fill Fluids</b>												
DJ - 10 cSt Silicone												
CK - 50 cSt Silicone										CK		
CG - Glycerin												
CF - Halocarbon												
HA - Syltherm 800												
CC - Syltherm XLT												
NM - Neobee M20												
<b>Specify Desired Transmitter Output Range (use V for full vacuum, N for negative)</b>												
[Output @ 4mA]											e.g. 0/60#	
[Output @ 20mA]												
<b>Options (include "X" if selecting options)</b>												
C4 - Certified calibration chart												-X C4
6B - Cleaning for oxygen service (must select Halocarbon fill)												
6W - Cleaning for oxidizer service												
NH - Metal assembly tagging												NH
KH - Custom calibration requirements (e.g. mounting offset)												
1H - Hydrostatic testing												
7G - <b>Note: Include 7G in all instrument part numbers included in assembly</b>												7G

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#### Assembly Examples

##### A001 - Direct Attachment

###### TS C 04 0 A001 T00

04: ½ NPT male transmitter connection  
 0: No elbow  
 A001: Direct attachment  
 T00: Transmitter at 12:00



###### TS C 02 E A001 T00

02: ¼ NPT male transmitter connection  
 E: Elbow for vertical pipe install  
 A001: Direct attachment  
 T00: Transmitter at 12:00



##### A002 - Transmitter with Heat Dissipator and Isolater

###### TS C 04 0 A002 T00

04: ½ NPT male transmitter connection  
 0: No elbow  
 A002: Instrument with heat dissipater  
 T00: Transmitter at 12:00



##### B001 - Transmitter installed on right-facing tee (½ NPT)

###### TS C 50 0 B001 GT0

50: ½ NPT female transmitter connection  
 0: No elbow  
 B001: Right-facing tee  
 GT0: Gauge at 12:00, Transmitter at 3:00



##### Part Number Ordering Example

###### Gauge:

451279SS04LXCK7G100#

###### Isolation Ring:

8006ESB04TN000XCK7G

###### Assembly:

TSC500B001GT0CK0/100#-XCK7G