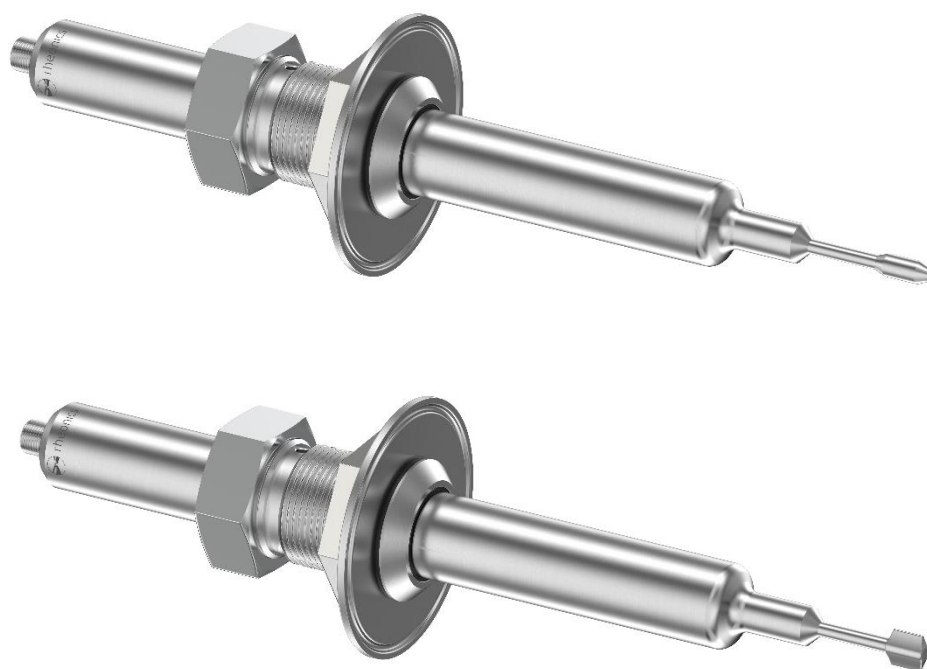




rheonics

inline process  
density and viscosity  
monitoring

# Rheonics Adjustable Process Connector Parts List and Assembly Guide



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## Rheonics APC - Adjustable Process Connector

The Rheonics APC is a flexible process connection system that can be used to clamp an industrial flange, connector, or adapter to the Rheonics SRV and SRD sensor probe's body without welding. The APC allows a flexible insertion length (if PTFE back ferrule is used), easy exchange of process connections, and easy assembly and disassembly of the sensor probe from the process.

This accessory is used for flanges and any other process connections that meet the APC use requirement. It can also be used as an accessory to clamp the probe to an external structure.

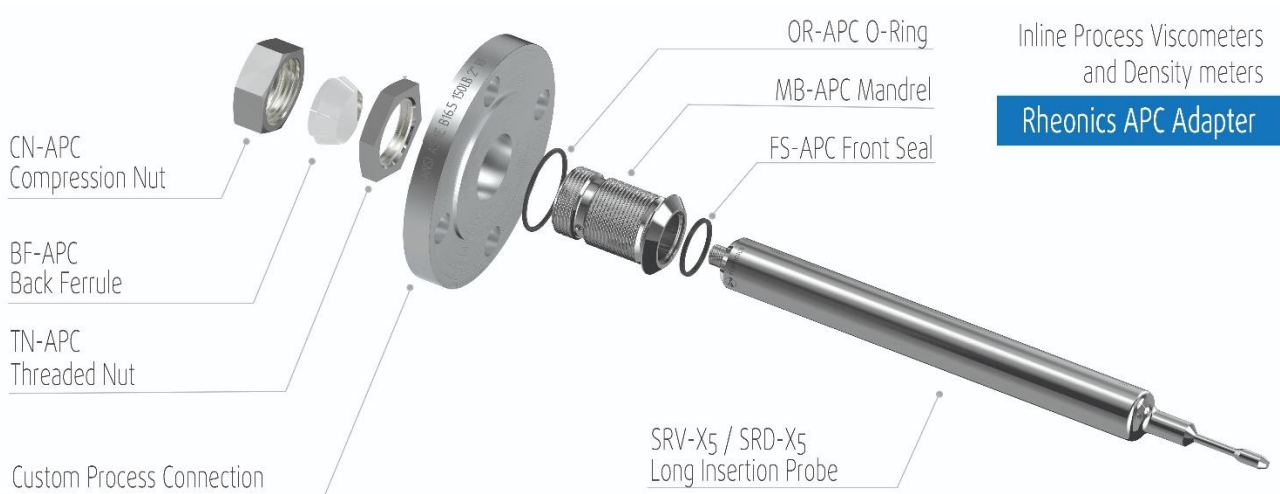
Review more on the [Rheonics APC web page](#).

### Notes for assembly

- The APC is designed for ambient pressure applications.
- The flange or adapter is either supplied by Rheonics or the final user.
- The back ferrule BF-APC should be ordered of PEEK (-PT) material when the process connection needs to be moved. Metal back ferrule (-SS) can be ordered when the location of the process connection is desired to be fixed.
- O-rings used in the assembly (OR-APC and FS-APC) are of FKM. Consider the compatibility of the fluid with this material.

**The APC accessory should NOT be used for sealing or connection of probe inline for pressurized applications**




### Rheonics APC – Exploded View



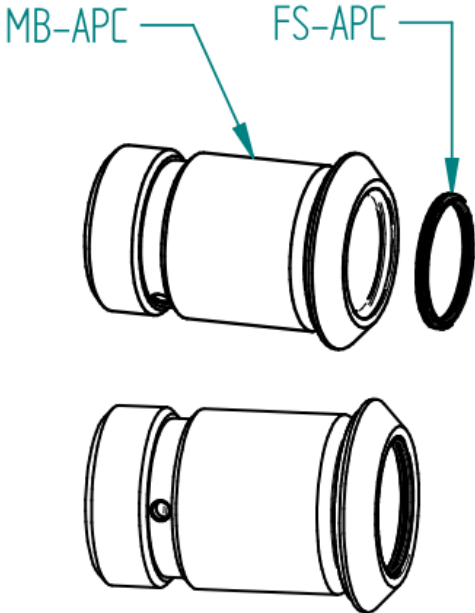
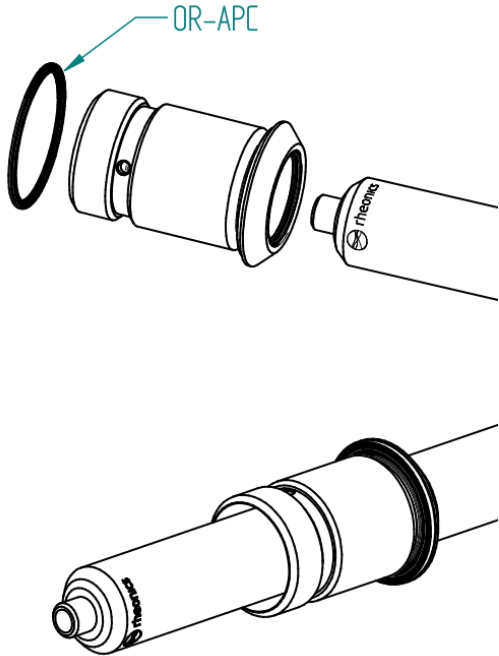
## APC Accessory - Parts list

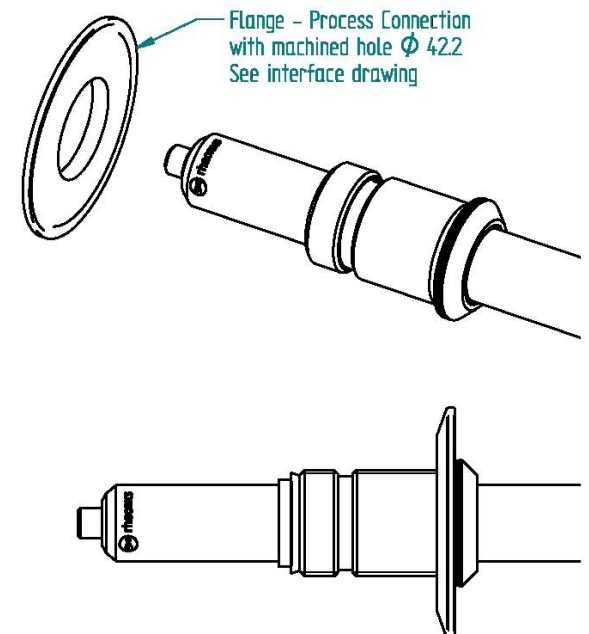
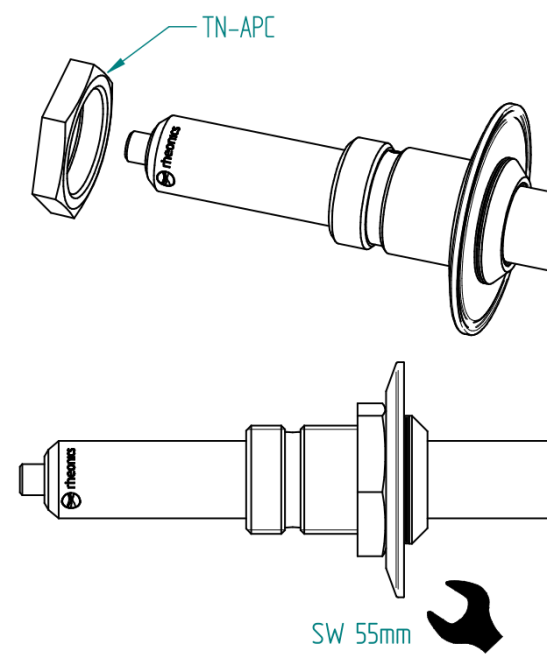
The next table details all parts used in the assembly and use of the APC - Adaptable Process Connection.

Part	Description	Image
CN-APC	Compression Nut Thread: Female BSPP G 1 1/4 Hex Size: SW 50 mm	 CN-APC
BF-APC-PT BF-APC-SS	Back Ferrule PTFE Back Ferrule Stainless Steel PTFE is used for variable insertion. SS is used to fix the position of APC on the probe.	 BF-APC-PT   BF-APC-SS
TN-APC	Wedge Lock Nut Thread: Female BSPP G 1 1/4 Hex Size: SW 55 mm	 TN-APC

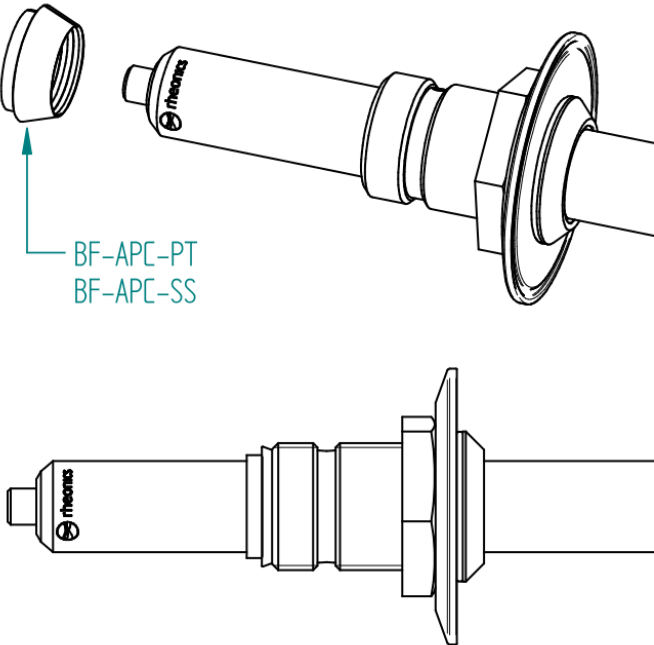
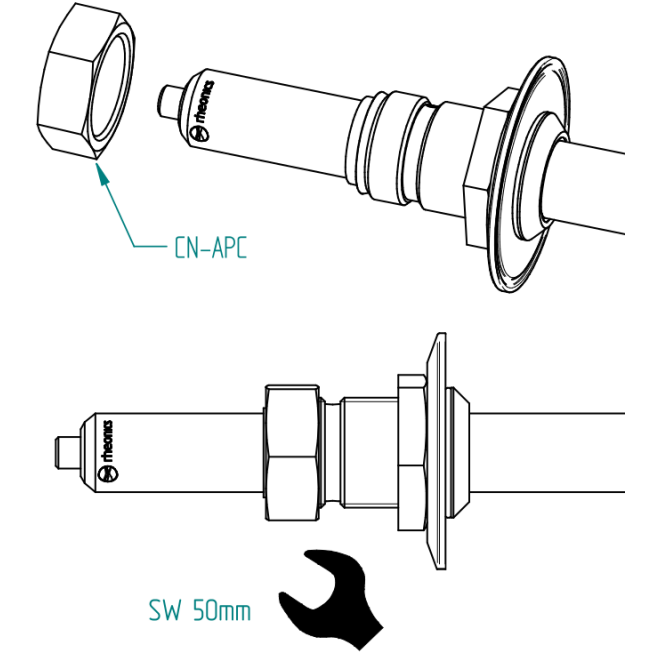
<p>OR-APC</p>	<p>O-Ring <math>\varnothing 42 \times 2.5</math> mm</p>	 <p>OR-APC</p>
<p>MB-APC</p>	<p>APC Mandrel Body</p>	 <p>MB-APC</p>
<p>FS-APC</p>	<p>Front Seal O-Ring <math>\varnothing 30 \times 2.5</math> mm</p>	 <p>FS-APC</p>
<p>Optional: Process Connection or Flange with machined hole.</p>		<p>Review webpage for interface drawing of flanges or adapters to be used with APC.</p>

## Assembly instructions

N°	Instruction	Picture
1	Place the APC seal (FS-APC) in the inner groove of the APC mandrel (MB-APC).	 <p>The diagram illustrates the first step of assembly. The top part shows a cylindrical APC mandrel (MB-APC) with a groove on its inner surface. An APC seal (FS-APC) is shown being placed into this groove. The bottom part shows the seal fully seated in the groove.</p>
2	Insert the APC mandrel (MB-APC) on the sensor probe body and place the O-ring (OR-APC) right behind the conical section of the mandrel.	 <p>The diagram illustrates the second step of assembly. The top part shows the APC mandrel (MB-APC) being inserted onto the sensor probe body. The O-ring (OR-APC) is shown being placed behind the conical section of the mandrel. The bottom part shows the mandrel fully inserted onto the sensor probe body with the O-ring in place.</p>

<p>3</p>	<p>Insert the Process Connection (flange) or any adapter required.</p>	
<p>4</p>	<p>Thread hand tight the threaded hex nut (TN-APC) to clamp the flange against the mandrel (MB-APC) and O-ring (OR-APC).</p>	



5	<p>Place the conical back ferrule (BF-APC-PT or -SS) behind the APC mandrel (MB-APC).</p>	 <p>BF-APC-PT BF-APC-SS</p>
6	<p>Thread hand tight the compression nut (CN-APC) to fix the APC mandrel (MB-APC) on the sensor probe body.</p> <p>To disassemble and change the position of the APC (for BF-APC-PT), unthread the compression nut (CN-APC).</p>	 <p>CN-APC</p> <p>SW 50mm</p>

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