Beamex Application note

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Proper set-up for a Beamex EXT module and PGXH Hand Pump



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The proper way to use these components is to let the pump act as a T-block so there is only one piece of tubing from the pump to the instrument under test. This also allows the 630 bar (9,140 psi) pressure rating of the Hydrotech tubing to be fully leveraged. The T-block used in the Hydrotech T-hose kit is rated to 400 bar (5,800 psi) which limits the overall pressure rating.

The EXT module mounts to the top port of the PGXH. The top port is 3/8" BSP female and the EXT is 1/4" BSP male so a 3/8" to 1/4" adaptor must be used. The seal is made by using a 3/8" bonded seal in the top port, then the 3/8" to 1/4" adaptor, then a copper crush washer, then the EXT module. Do not use thread tape. These are tightened firmly, overtightening may damage the bonded seal.

Copper Crush Washer

– p/n 7420040



3/8" to 1/4" Adaptor

- p/n 7117000 (included in PGXH Kit p/n 9010220)



3/8" Bonded Seal – p/n 7410950 (included in PGXH Kit p/n 9010220)



It is suggested to affix the adaptor/crush washer/EXT first so a wrench can be used to secure the port on the EXT while tightening the adaptor. Twisting the pressure sensor module inside the EXT will be a costly and avoidable mistake. Drop the copper crush washer onto the EXT port first and mount the



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adaptor down onto the module to ensure a proper seal. If the EXT is repeatedly removed the crush washer will deform and not work properly.

The side port of the PGXH is 1/4" BSP, remove the plug (*Note: Do not remove the plug on the other side port printed with "DO NOT REMOVE"*). The Hydrotech to 1/4" fitting will be used here. Again, no thread tape is needed, use the bonded seal that was installed with the plug.

Hydrotech to 1/4" BSP

- p/n 9999513 (included in PGXH Kit p/n 9010220)



The Hydrotech to 1/4" NPT fitting will be the connection for the instrument under test. Customer-side fittings must be used for process connections other than 1/4" NPT.

Hydrotech to 1/4" NPT

- p/n 9999515 (included in PGXH Kit p/n 9010220)



Hydrotech Tubing – p/n 7021390 (included in PGXH Kit p/n 9010220)



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