

TOTALFLOW

Technical Bulletin 156

NGC Analytical Module (Burkert Valve arrangement) Replacement Instructions

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Installation NOTICE!

You have received one of ABB's enhanced analytical modules incorporating the Dual Burkert pilot valve option (see part numbers below)

	Analytical Module P/N	Analytical (blackfin) Software P/N	Analytical Module Features	
Analytical module with GCM*	2102172-501	2102121-xxx	Metrology, SMC Pilot Valve, 12V	
	2102172-502	2102980-xxx	SMC Pilot Valve, 24V	
	2102172-503	2102980-xxx	SMC Pilot Valve, 12V	
	2102172-504	2103296-xxx	Dual Burkert Pilot Valve, 12V	
	2102172-505	2103296-xxx	Dual Burkert Pilot Valve, 24V	
Analytical module without GCM*	2102807-501	2102980-xxx	SMC Pilot Valve, 12V	
	2102807-502	2102980-xxx	SMC Pilot Valve, 24V	
	2102807-503	2103296-xxx	Dual Burkert Pilot Valve, 12V	
	2102807-504	2103296-xxx	Dual Burkert Pilot Valve, 24V	

*GCM – Gas chromatograph module (column spool)

Step #1 – Determine the part number of the original analytical module(AM). The part numbers should be a white sticker affixed to the AM.

Step #2 – Use the chart above to determine if the original AM is an SMC or Burkert valve design.

Step #3 – Place unit in "hold" mode and after unit has entered hold mode, save configuration data and collect historical data prior to powering down unit.

Step #4 – Power down unit

Step #5 – Replace existing AM with new AM. NOTE: follow all shut down and AM replacement procedures outlined in the NGC user manual.

Step #6 – Power-up NGC

Step #7 – If original unit was a Burkert design then skip steps 8-10 and proceed to step # 11 otherwise, original unit was SMC design, proceed to step #8.



Step #8 – Since the original AM incorporates the SMC valve, you will need to install software (shipped on CD with AM) and make one PCCUNGC parameter change after installing replacement AM.

Step #9 – Using PCCUNGC's TFLoader, install the application FLASH and blackfin FLASH. Follow PCCU help instructions on how to use the TFLoader to FLASH the NGC. The FLASH images can be found on a compact disk (CD) shipped with the AM. The blackfin FLASH will have a suffix of .ldr (i.e. 2103296.ldr) and the application FLASH will have a suffix of .exe (i.e. totalflow.exe)

Step #10 – Changing the pulse width value using PCCUNGC software:

- a. Go to "entry mode" and select tree view mode
- b. Select "view" from the tool bar and change security to "factory" mode



c. Select "GCM Interface" from the tree view

Communications	Chrom Setup APP Setup Scaling Constants Limits			
Remote COM1: Totalflow/TCP Totalflow/TCP Totalflow/TCP Totalflow/TCP Totalflow/TCP Totalflow/TCP Totalflow/TCP Totalflow/TCP Totalflow/TCP	30.249.9	Description Chrom Sync Delay	Value 200	Units Milliseconds
	30.249.10	Stream Purge Time	20000	Milliseconds
Analyzer Operation Cycle Control	30.249.11	Stream Bleed Time	5000	Milliseconds
GCM Interface Gram Presedure	30.249.12	Stream Inject Time	17500	Milliseconds
STREAM 1	30.249.13	Stream Backflush Time	260000	Milliseconds
STREAM 2 STREAM 3				
ter STREAM 4	38.2 49.8	Sample Frequency	40	HZ
⊞ 1ST CAL	30.249.35	Pilot Valve Pulse Width	2000	Milliseconds

- d. Select the "chrom setup" tab
- e. Change the "pilot valve pulse width" from 2000 to 200 (register 30.249.35)

Step #11 – Verify all setup parameters, perform peak find, calibrate and collect historical data prior to leaving the site.



If you have technical questions concerning this bulletin contact our service organization at (800) 442-3097 option #2.