


IPS Dock (VB-101-DOCK)

PC Data Integration Unit and Software for
IPS VB-105 Beacon, VB-105-TAM, VB-103-TAM

PCN = 26999975 03-25-13 (E)
Original Instructions

Installation
Operation
Maintenance



 ***These instructions must be read prior to installing, operating, using and maintaining this equipment.***

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1 INTRODUCTION AND SAFETY

1.1 General



These instructions must always be kept close to the product's operating location or directly with the product.

Flowserve products are designed, developed and manufactured with state-of-the-art technologies in modern facilities. The unit is produced with great care and commitment to continuous quality control, utilizing sophisticated quality techniques, and safety requirements.

Flowserve is committed to continuous quality improvement and being at your service for any further information about the product in its installation and operation or about its support products, repair and diagnostic services.

These instructions are intended to facilitate familiarization with the product and its permitted use. Operating the product in compliance with these instructions is important to help ensure reliability in service and avoid risks. The instructions may not take into account local regulations; ensure such regulations are observed by all, including those installing the product. Always coordinate repair activity with operations personnel, and follow all plant safety requirements and applicable safety and health laws/regulations.



These instructions must be read prior to installing, operating, using and maintaining the equipment in any region worldwide. The equipment must not be put into service until all the conditions relating to safety, noted in the instructions, have been met. Failure to follow and apply the present user instructions is considered to be misuse. Personal injury, product damage, delay or failures caused by misuse are not covered by the Flowserve warranty.

1.2 CE marking and approvals

It is a legal requirement that machinery and equipment put into service within certain regions of the world shall conform with the applicable CE Marking Directives covering Machinery and, where applicable, Low Voltage Equipment, Electromagnetic Compatibility (EMC), Pressure Equipment Directive (PED) and Equipment for Potentially Explosive Atmospheres (ATEX).

Where applicable, the Directives and any additional Approvals, cover important safety aspects relating to

machinery and equipment and the satisfactory provision of technical documents and safety instructions. Where applicable this document incorporates information relevant to these Directives and Approvals.

To confirm the Approvals applying and if the product is CE marked, check the serial number plate markings and the Certification.

1.3 Disclaimer

Information in these User Instructions is believed to be complete and reliable. However, in spite of all of the efforts of Flowserve Corporation to provide comprehensive instructions, good engineering and safety practice should always be used.

Flowserve manufactures products to exacting International Quality Management System Standards as certified and audited by external Quality Assurance organizations. Genuine parts and accessories have been designed, tested and incorporated into the products to help ensure their continued product quality and performance in use. As Flowserve cannot test parts and accessories sourced from other vendors the incorrect incorporation of such parts and accessories may adversely affect the performance and safety features of the products. The failure to properly select, install or use authorized Flowserve parts and accessories is considered to be misuse. Damage or failure caused by misuse is not covered by the Flowserve warranty. In addition, any modification of Flowserve products or removal of original components may impair the safety of these products in their use.

1.4 Copyright

All rights reserved. No part of these instructions may be reproduced, stored in a retrieval system or transmitted in any form or by any means without prior permission of Flowserve.

1.5 Duty conditions

This product has been selected to meet the specifications of your purchaser order. The acknowledgement of these conditions has been sent separately to the Purchaser. A copy should be kept with these instructions.



The product must not be operated beyond the parameters specified for the application. If there is any doubt as to the suitability of the product for the application intended, contact Flowserve for advice.

1.6 Safety

1.6.1 Summary of safety markings

These User Instructions contain specific safety markings where non-observance of an instruction would cause hazards. The specific safety markings are:



DANGER This symbol indicates electrical safety instructions where non-compliance will involve a high risk to personal safety or the loss of life.



This symbol indicates safety instructions where non-compliance would affect personal safety and could result in loss of life.



This symbol indicates “hazardous and toxic fluid” safety instructions where non-compliance would affect personal safety and could result in loss of life.



CAUTION This symbol indicates safety instructions where non-compliance will involve some risk to safe operation and personal safety and would damage the equipment or property.



This symbol indicates explosive atmosphere zone marking according to ATEX. It is used in safety instructions where non-compliance in the hazardous area would cause the risk of an explosion.



This symbol is used in safety instructions to remind not to rub non-metallic surfaces with a dry cloth; ensure the cloth is damp. It is used in safety instructions where non-compliance in the hazardous area would cause the risk of an explosion.



Note: This sign is not a safety symbol but indicates an important instruction in the assembly process.

1.6.2 Personnel qualification and training

All personnel involved in the operation, installation, inspection and maintenance of the unit must be qualified to carry out the work involved. If the personnel in question do not already possess the necessary knowledge and skill, appropriate training and instruction must be provided. If required the operator may commission the manufacturer/supplier to provide applicable training.

Always coordinate repair activity with operations and health and safety personnel, and follow all plant safety requirements and applicable safety and health laws and regulations.

1.6.3 Safety action

This is a summary of conditions and actions to help prevent injury to personnel and damage to

the environment and to equipment. For products used in potentially explosive atmospheres section 1.6.4 also applies.



DANGER NEVER DO MAINTENANCE WORK WHEN THE UNIT IS CONNECTED TO POWER (Lock out.)



HANDLING COMPONENTS

Many precision parts have sharp corners and the wearing of appropriate safety gloves and equipment is required when handling these components. To lift heavy pieces above 25 kg (55 lb.) use a crane appropriate for the mass and in accordance with current local regulations.

1.6.4 Products used in potentially explosive atmospheres



CAUTION The IPS Dock is not certified for potentially explosive atmospheres.



Measures are required to:

- Avoid excess temperature
- Prevent buildup of explosive mixtures
- Prevent the generation of sparks

1.7 Specific machine performance

For performance parameters see Section 1.5 Duty conditions. Where performance data has been supplied separately to the purchaser these should be obtained and retained with these User Instructions if required.

2 TRANSPORT AND STORAGE



Make sure that hazardous substances are disposed of safely and that the correct personal protective equipment is used. The safety specifications must be in accordance with the current local regulations at all times.

2.1 Consignment receipt and unpacking

Immediately after receipt of the equipment it must be checked against the delivery/shipping documents for its completeness and that there has been no damage in transportation. Any shortage and/or damage must be reported immediately to Flowserve and must be received in writing within ten days of receipt of the equipment. Later claims cannot be accepted. Check any crate, boxes or wrappings for any accessories or spare parts that may be packed separately with the equipment or attached to side walls of the box or equipment.

Each product has a unique serial number. Check that this number corresponds with that advised and always quote this number in correspondence as well as when ordering spare parts or further accessories.

2.2 Handling

Boxes, crates, pallets or cartons may be unloaded using fork lift vehicles or slings dependent on their size and construction.

2.3 Storage

Store the equipment in a clean, dry location away from vibration. Leave protective covers in place to keep dirt and other foreign material out of casing.

2.3.1 Storage and packaging

Normal packaging is designed to protect the unit and parts during shipment and for dry, indoor storage. After unpacking, protection will be the responsibility of the user.

2.4 Recycling and end of product life

At the end of the service life of the product or its parts, the relevant materials and parts should be recycled or disposed of using an environmentally acceptable method and in accordance with local regulations. If the product contains substances that are harmful to the environment, these should be removed and disposed of in accordance with current local regulations.

2.5 Disposal Instructions

At the end of the product's life, do not dispose of any electronic component or instrument in the domestic

waste. Disposal should be done in accordance with applicable regulations, which vary from state to state and country to country.

3 DESCRIPTION

The IPS Dock (VB-101-Dock) is an interface between the IPS Beacon (VB-105), VB-105-TAM and VB-103-TAM to a PC. The IPS Dock, along with the associated software utilities provides the ability to read data and configure settings on all three devices. The IPS Dock is connected to a PC by means of a USB-Serial cable (connected either to the DB9 port for the VB-103-TAM or the DB9 port for the IPS Beacon & VB-105-TAM). It is powered by the USB connection to the PC and requires no additional power connection. The IPS Dock has a separate port for connection to each of the three types of devices supported. Please refer to Figure 11 for the ports available on the IPS Dock.

Note: Two software utilities are available for use on the IPS Dock. The DockTalk software utility is exclusively for interfacing with the IPS Beacon and VB-105-TAM on the IPS Dock. The TAM103 software utility is exclusively for interfacing with the VB-103-TAM on the Dock.

4 CONNECTING IPS DOCK TO PC

4.1 Installing Drivers

Note: This procedure must be followed when connecting the IPS Dock to a PC for the first time.

To connect the IPS Dock to the PC, first copy the entire IPS Docking Station Utilities folder from the USB stick or CD included with the unit to a folder on the PC's hard drive.

Note: It is not recommended to start any of the IPS Dock software utilities directly from the USB stick or CD. If the DockTalk software is executed off of the USB Stick or CD and later the user wants to operate from the hard drive of the PC instead of the USB Stick or CD, the following procedure will need to be followed before you can accomplish this:

1. Open the following registry editor programs, depending on your operating system.
 - a. Windows XP: Click on the Start Menu, then click on "Run". Type in "regedit" and then click OK.
 - b. Windows Vista / 7: Click on the Start Menu, then type "regedit" in the

- search box. Click on the “regedit.exe” program.
- c. Windows 8: Point the cursor to the lower right corner of the screen. Select the ‘Search’ option from the menu. In the search box, type “regedit”. Click on the “regedit” on the left side of the “Apps” screen.
2. Locate HKEY_CURRENT_USER (double click to expand).
 3. Locate software (double click to expand).
 4. Locate Flowserve (double click to expand).
 5. Locate Docktalk (double click to expand).
 6. Locate Settings (double click to expand).
 7. Locate Folder (double click to expand).
 8. Locate Directory on right panel, right click on directory and delete.
 9. Close the Registry Editor program. You should now be able to run the software from the folder stored on the PC hard drive.

Next, ensure the USB-Serial cables are disconnected from the IPS Dock. Then connect the USB end of each cable to an open USB slot on the PC. The USB side of the cable will quickly flash LED lights to indicate a successful connection.

Windows XP

The new hardware found wizard will pop-up to begin installing drivers for the cables. Select the option to search for drivers from a specific folder.



Figure 1: Found New Hardware Wizard with option to install drivers from a specific folder

Point the wizard to the “IPS Dock to PC USB Cable Drivers” folder (may also be named “Cable_Drivers” inside of the “Docking Station Utilities” folder) previously copied onto the hard drive.

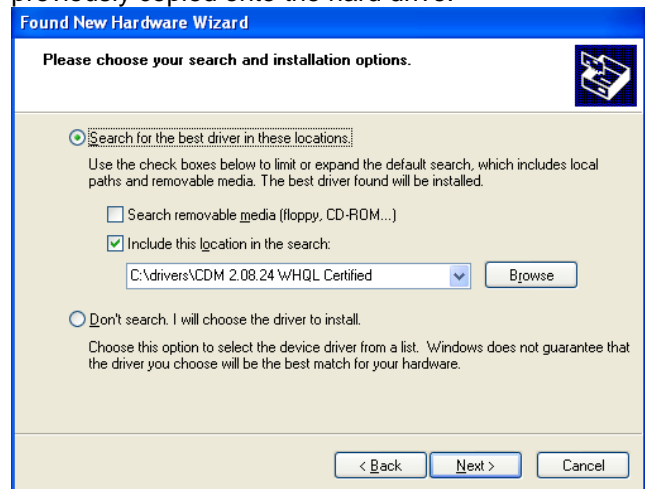


Figure 2: Select appropriate folder in Found New Hardware Wizard

After searching for the appropriate drivers, the wizard may ask you to select between two drivers. Select the driver located in the “IPS Dock to PC USB Cable Drivers” folder (may also be named “Cable_Drivers” inside of the “Docking Station Utilities” folder) on your PC hard drive.

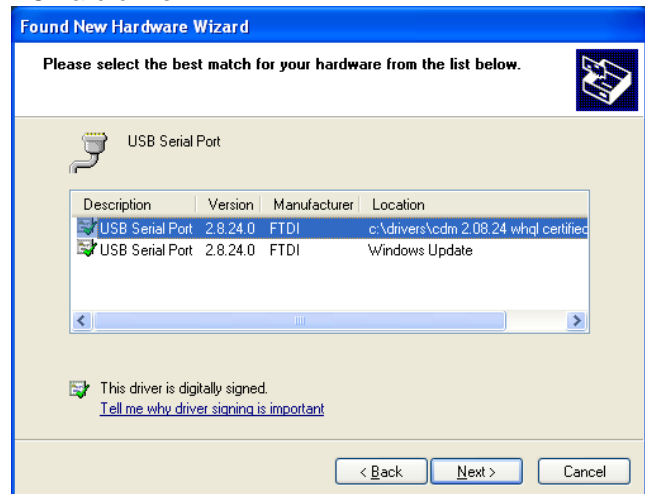


Figure 3: Select best driver screen

Lastly, you will see a screen noting that the driver software has been successfully installed.

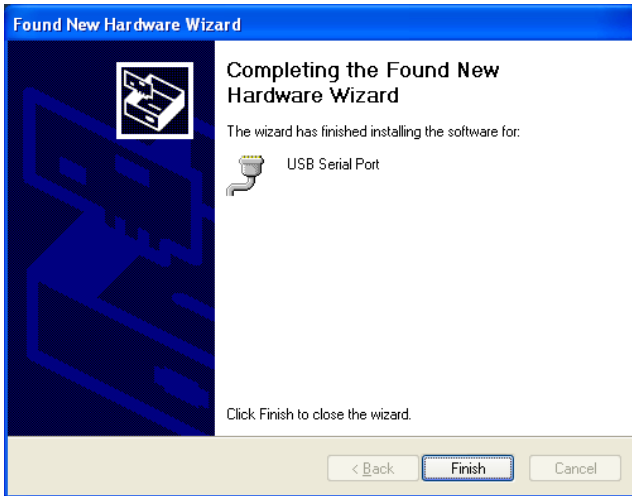


Figure 4: Driver installation successfully completed

Note: The new hardware wizard may ask to install drivers up to two times for each cable, direct it to search for drivers in the “IPS Dock to PC USB Cable Drivers” folder (may also be named “Cable_Drivers” inside of the “Docking Station Utilities” folder) both times.

Windows Vista / 7 / 8

The operating system should automatically discover the new hardware and pop-up a message the drivers are being installed for this hardware. If successful, after a few minutes a message will pop-up stating that the USB-Serial Port device driver software has been successfully installed.

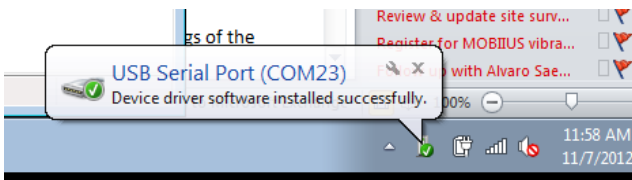


Figure 5: Device Driver Software Successfully Installed Pop-Up

If the drivers were not successfully installed, you will see a message that there was a problem with driver installation. To manually install the driver files go to the Start Menu and right-click on My Computer and select Manage. This will bring up the Computer Management window, now on the left sidebar select Device Manager.

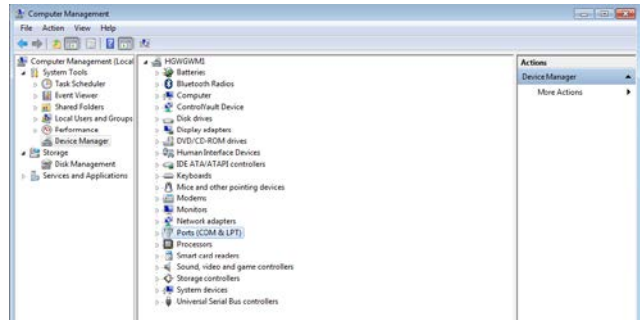


Figure 6: Device Manager Screen

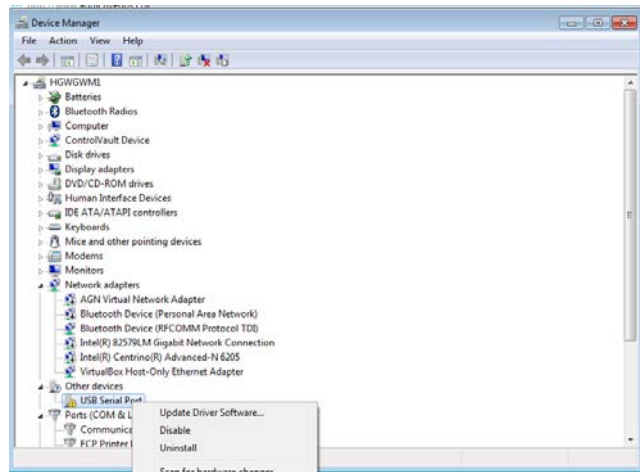


Figure 7: Device Right-Click Menu

Next, right click on the device (it may be listed as a USB-Serial Port or TTL device under “Ports” or “Other Devices”) and select “Update Driver Software”. Select the “Browse My Computer for Driver Software” selection from the window that pops up.

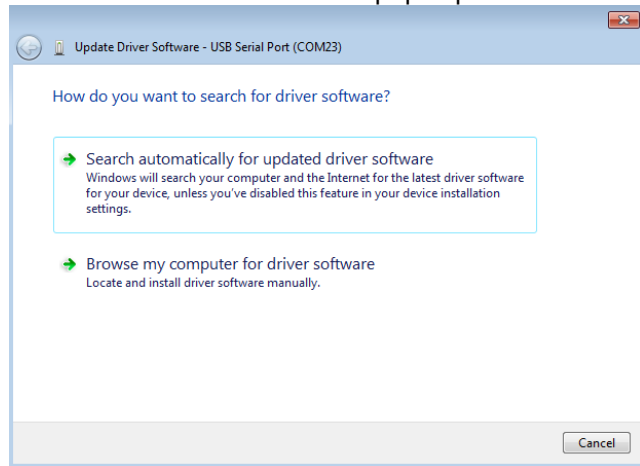


Figure 8: Search for driver software screen

In the next pop-up window choose the location of the “IPS Dock to PC USB Cable Drivers” folder (may also be named “Cable_Drivers” inside of the “Docking Station Utilities” folder) that you copied on to your hard

drive earlier, ensure the “Include subfolders” box is also checked. Click “Next” and Windows will install the driver.

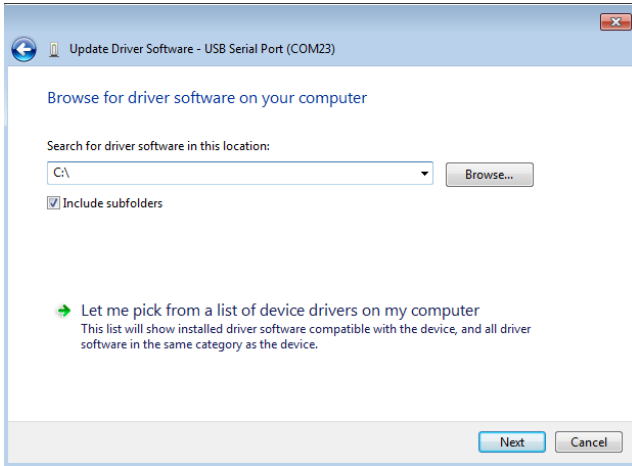


Figure 9: Select driver software location screen

The last screen will display that the driver has been successfully installed.

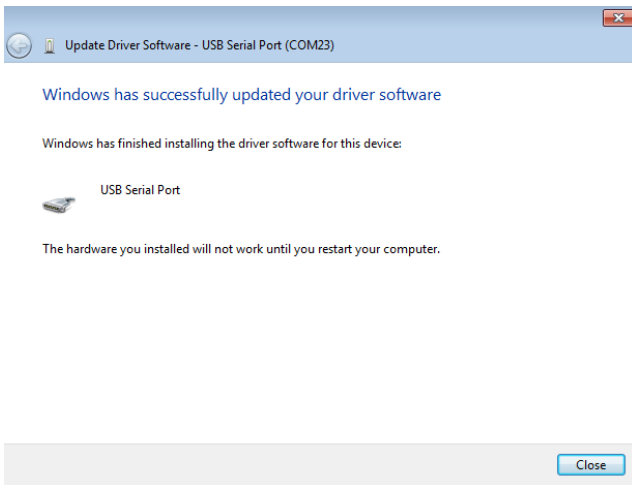


Figure 10: Driver successfully installed screen

4.2 Connecting Dock to PC

Note: This procedure must be followed when connecting the IPS Dock to a PC for the first time or if the IPS Dock was disconnected since the last IPS Dock connection.

After the appropriate driver files have been installed as detailed in the previous section, ensure the entire “IPS Dock to PC USB Cable Drivers” and “Software Utilities” folders (may also be combined under a “Docking Station Utilities” folder) have been copied to a folder on the PC’s hard drive. Next, ensure the USB-Serial cables are disconnected from the IPS Dock. Then connect the USB end of each cable to an open USB slot on the PC. The USB side of the cable

will quickly flash LED lights to indicate a successful connection.

Next, connect the DB-9 ports on the serial side of the cable to the DB-9 ports on the back of the IPS Dock. Note that the cable can be used on either DB9 port on the IPS Dock, unless you have two cables specifically labeled for the IPS Beacon or VB-103-TAM.

The DB-9 port on the left side of the Dock is for connection to the IPS Beacon and IPS VB-105-TAM. The DB-9 port on the right side of the Dock is for connection to the VB-103-TAM (reference Figure 11 below).

One or both cables can be connected to the PC & IPS Dock, depending on what device is being accessed on the IPS Dock.

Now, physically connect the unit (VB-103-TAM, IPS Beacon or VB-105-TAM) being read to the Dock. You may now start the appropriate software utility from the hard drive of the PC (DockTalk for IPS Beacon & VB-105-TAM or TAM103 for VB-103-TAM).

4.3 Determining IPS Dock Port Number

To determine what port number the IPS Dock is connected to on your PC, open Control Panel in Windows and navigate to the Device Manager section (often found in the System section). Next, scroll down to the section titled “Ports” and double-click it to expand it. In this section you will see one or two devices (depending on whether you have one or both cables connected to the IPS Dock) listed as “USB Serial Port” followed by “COMxx”. The xx number defines the COM port the IPS Dock is assigned on your PC.

Note: If you do not see the “USB Serial Port” followed by “COMxx” please repeat the steps in section 4.1 Installing Drivers.



Figure 11: IPS Beacon, VB-105-TAM, and VB-103-TAM connected to IPS Dock

5 INTERFACING WITH IPS BEACON

After connecting the IPS Dock to your PC as described in section 4 CONNECTING IPS Dock to PC, plug the IPS Beacon into the appropriate port on the IPS Dock.

Start up the DockTalk software utility on the PC by double-clicking on the “DockTalkvXX.exe” file (XX refers to the software version). Click on the “Beacon” tab and then Select the COM port (in the top right of the screen) that the IPS Dock is connected on. A green bar will appear above the COM port section of the screen when an active COM port is selected. Lastly, click on the “Read Beacon” button to read the current configuration of the Beacon unit connected to the IPS Dock.

5.1 Selecting US or Metric Units

On the right side of the screen, select the radio button for either US or Metric units.

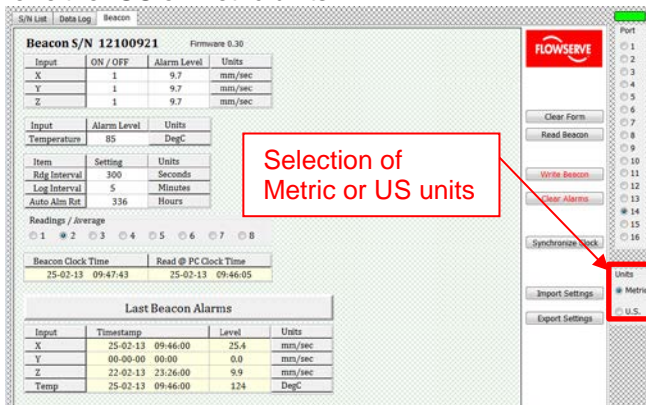


Figure 12: Metric & US units selection

This will change all units in the DockTalk program to US or Metric units. Additionally, date formatting is also adjusted (DD-MM-YY for Metric and MM-DD-YY for US).

5.2 Setting alarm setpoints

The IPS Beacon unit can have high alarm levels programmed for each data parameter. When the alarm level threshold is exceeded for any data parameter, the IPS Beacon unit will flash the red LED indicator light.

To program alarms, in the “Input” section of the screen, you can enter the alarm levels for each sensor data parameter (in the “Alarm Level” column). Each parameter is listed on a single row. Note that the alarm levels entered will be in the units listed in the “Units” column. See table below for a description of what each data type label means.

Table 1: Alarm level data type descriptions

Data type	Description
X	X-axis vibration value
Y	Y-axis vibration value
Z	Z-axis vibration value
Temperature	Temperature value

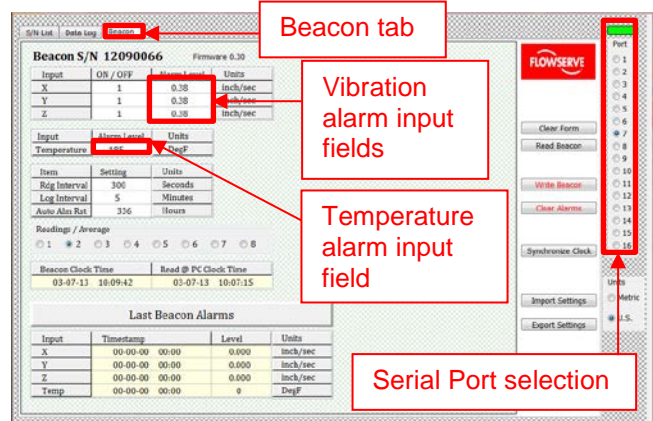


Figure 13: IPS Beacon screen showing alarms configuration

After the alarm levels have been entered, click on the “Write Beacon” button to write this new configuration to the Beacon unit. Once the writing of the configuration is complete, click on the “Read Beacon” button to read the configuration back from the IPS Beacon and ensure the updated values are correct.

Lastly, click on the “Export Settings” button to export the new IPS Beacon configuration to a CSV file. Proceed to save this CSV file on your PC for future reference.

5.3 General unit configuration

Additional general configuration options about the IPS Beacon unit are displayed in the middle left of the screen. Table 2 below describes each user editable parameter in this section.

Table 2: General IPS Beacon configuration options parameters

Parameter name	Description
Rdg Interval	How often (in seconds) the IPS Beacon unit will read sensor data. This should be set to match the same time period as the Log Interval.
Log interval	How often (in minutes) the VB-105-TAM unit will log sensor data (if connected to the IPS Beacon). This should be set to match the same time period as the Rdg Interval.
Auto Alm Rst	The time period (in hours) for which the IPS Beacon LED indicators will flash to indicate a past alarm event.
Readings/Average	Sets the length of the rolling average of readings to be compared to the alarm threshold. (Example: If you select "3", the IPS Beacon takes a reading, and then adds the last two readings to it, then divides by 3 – then this average is compared to the alarm threshold).

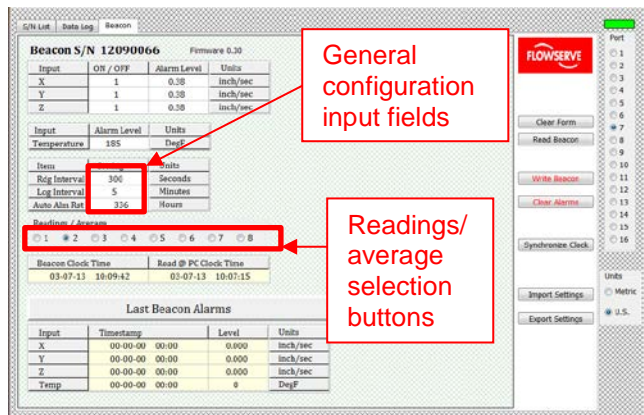


Figure 14: IPS Beacon screen showing general configuration

After the configuration options have been entered, click on the "Write Beacon" button to write this new configuration to the IPS Beacon unit. Once the writing of the configuration is complete, click on the "Read Beacon" button to read the configuration back from the IPS Beacon to ensure the updated values are correct.

Lastly, click on the "Export Settings" button to export the new IPS Beacon configuration to a CSV file. Proceed to save this CSV file on your PC for future reference.

5.4 Setting time and date on IPS Beacon unit

Note: Timestamps shown through the DockTalk software (from both the IPS Beacon and VB-105-TAM) are converted to the local time zone as set on the PC being used.

The date and time on the IPS Beacon unit can be set to ensure accurate timestamps when viewing data from the IPS Beacon or VB-105-TAM. The middle left of the screen shows the IPS Beacon time settings and the PC time settings when the IPS Beacon was last read.

To set the date and time, click on the "Synchronize Clock" button to set the IPS Beacon date and time to match the PC date and time.

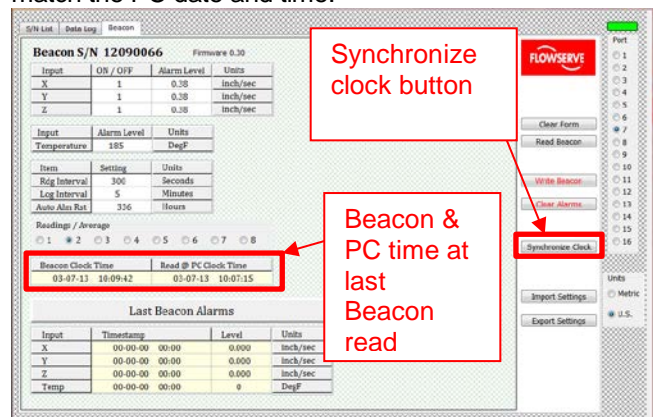


Figure 15: Beacon screen time settings

5.5 Reloading factory configuration

To reload the original factory configuration into the IPS Beacon unit you will need a copy of the original CSV configuration file for your particular unit. You may have a copy of this file from an earlier saved version that was exported from the DockTalk software utility or you may contact the Flowserve factory to obtain a copy of this file.

Once you have the file saved on your PC, click on the "Import Settings" button and then select the location of the CSV file.

After this, the settings will be loaded onto the utility screen. Click on the "Write Beacon" button to write this new configuration to the IPS Beacon unit. Once the writing of the configuration is complete, click on the "Read Beacon" button to read the configuration back from the unit to ensure the updated values are correct.

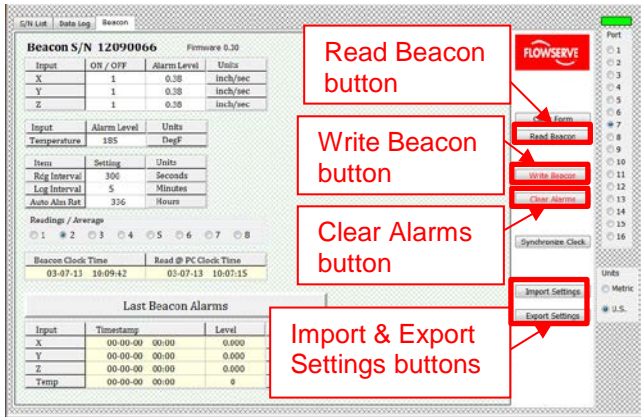


Figure 16: IPS Beacon screen showing general buttons

5.6 Viewing Alarms

The IPS Beacon unit stores the last set of alarm events for each sensor. The bottom left section of the screen displays the value and timestamp for the last alarm event for each sensor (X, Y, Z vibration and temperature independently).

Click on the “Clear Alarms” button to reset and clear out the alarms stored on the IPS Beacon unit.

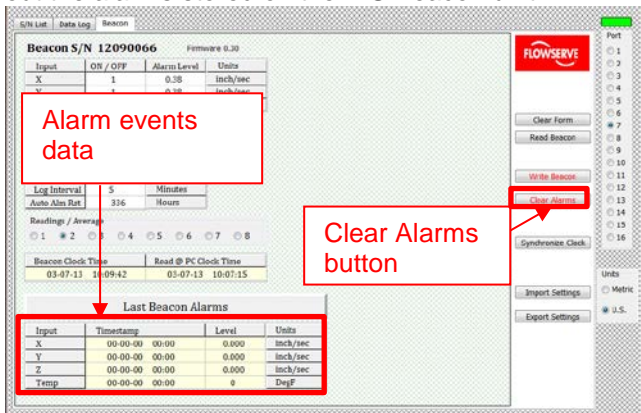


Figure 17: IPS Beacon screen showing alarms data

6 INTERFACING WITH IPS BEACON VB-105-TAM

Note: The sealing gasket around the DB9 port of the VB-105-TAM may need to be removed before connecting the VB-105-TAM to the IPS Dock. The gasket is fitted in place and can be removed by hand or hand tools. This gasket should be reinstalled once the VB-105-TAM is disconnected from the IPS Dock.

After connecting the IPS Dock to your PC as described in section 4 CONNECTING IPS Dock to PC,

plug the VB-105-TAM into the appropriate port on the IPS Dock.

Start up the DockTalk utility on the PC by double-clicking on the “DockTalkvXX.exe” file (XX refers to the software utility version). Select the COM port (in the top right of the screen) that the IPS Dock is connected on. A green bar will appear above the COM port section of the screen when an active COM port is selected.

6.1 Selecting US or Metric Units

On the right side of the screen, select the radio button for either US or Metric units.

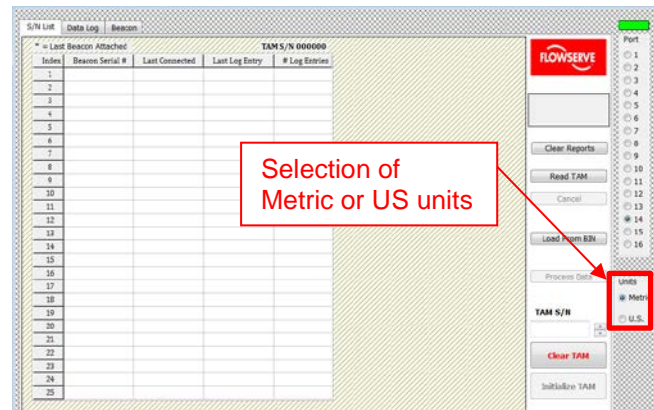


Figure 18: Metric & US units selection

This will change all units in the DockTalk program to US or Metric units. Additionally, date formatting is also adjusted (DD-MM-YY for Metric and MM-DD-YY for US).

6.2 Reading, Saving & Clearing Log Data

Note: The VB-105-TAM has enough capacity to store 28,000 sets of sensor readings (all vibration axes and temperature together make up a single set of data points). After the VB-105-TAM is full, data will be automatically overwritten (starting with the oldest set).

Note: Any data log files read or saved from the VB-105-TAM will be saved in the units selected on the DockTalk program (see section 6.1 Selecting US or Metric Units).

Note: Timestamps shown through the DockTalk software (from both the IPS Beacon and VB-105-TAM) are converted to the local time zone as set on the PC being used.



The VB-105-TAM can be removed from the IPS Beacon in the field. However, the DB9 port on the IPS Beacon must be engaged with the IPS

Beacon PUM (Power-Up Module) while the VB-105-TAM is disconnected.

In order to read data from the VB-105-TAM, perform the following steps after connecting the VB-105-TAM to the IPS Dock and launching the DockTalk software utility:

1. Click on the “Read TAM” button. Wait for the software utility to read the connected VB-105-TAM.
2. From the list of IPS Beacon Serial Numbers listed, double click on the one for whose log you would like to access.
3. Click on the “Data Log” tab to view the data on the VB-105-TAM.
4. [Optional] Click on “Process Data” from the “S/N List” tab to save the logged data to a CSV file in the folder specified in the right side of the screen. The CSV file, with the source IPS Beacon serial number as the name, can then be opened in Microsoft Excel.
5. [Optional] Click on “Clear TAM” to delete all log files from the VB-105-TAM.

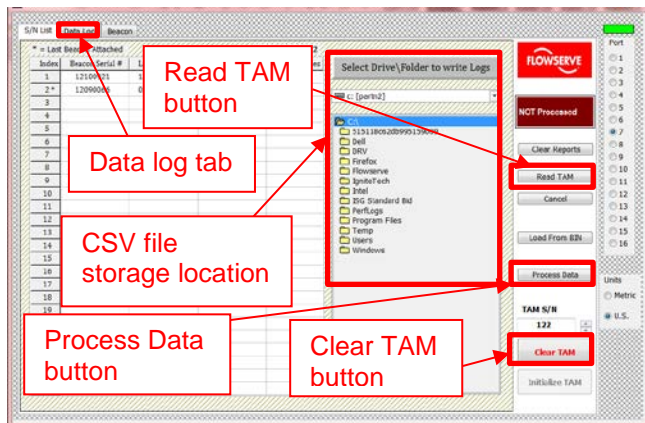


Figure 19: DockTalk software utility

7 INTERFACING WITH VB-103-TAM

Note: To preserve battery life, do not leave VB-103-TAM attached to IPS Dock when not in use.

After connecting the IPS Dock to your PC as described in section 4 CONNECTING IPS Dock to PC, plug the VB-103-TAM into the appropriate port on the IPS Dock. Ensure the VB-103-TAM is fully seated in the port for a good connection.

Start up the VB-103-TAM utility on the PC by double-clicking on the “TAM103vX.exe” file (X refers to

version of software). Select the COM port (in the top left of the screen) that the Dock is connected on. A green bar will appear above the COM port section of the screen when an active COM port is selected.

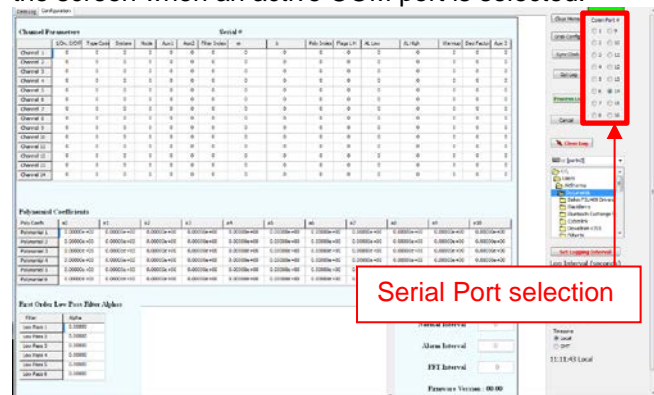


Figure 20: TAM103 utility serial port selection

You should now be connected to the VB-103-TAM unit and can proceed to perform any of the other functions described in this section.

7.1 Reading, Saving & Clearing Log Data

CAUTION The VB-103-TAM can be removed from the SELD-103 devices in the field. The SELD-103 device should have a Port Cover in place of the VB-103-TAM while it is disconnected.

Note: Timestamps shown through the TAM103 software are converted to the local time zone as set on the PC being used.

In order to read data from the VB-103-TAM, perform the following steps after connecting the VB-103-TAM into the designated port:

1. Click on the “Get Log” button.
2. Click on the “Data Log” tab to view the data on the VB-103-TAM. Information on what channel number corresponds to what sensor on the SELD-103-VB unit can be found by looking at the SELD-103-VB unit test sheet.
3. [Optional] Click on “Process Log” to save the logged data to a CSV file in the folder specified in the middle right section of the screen. The CSV file can then be opened in Microsoft Excel. Note that the left section of the CSV file shows the data log (with channels shown per column in the same order as the Data Log tab). The right section shows the configuration of the SELD-103-VB unit the VB-103-TAM was connected to. See Figure 4.
4. [Optional] Click on “Clear Log” to delete the log file from the VB-103-TAM.

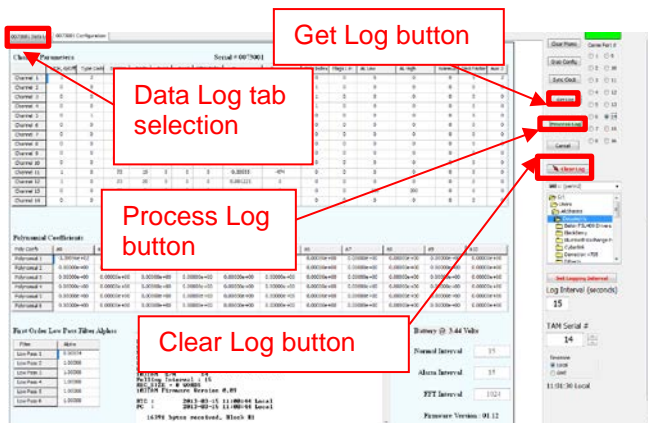


Figure 21: TAM103 utility log processing buttons



Figure 22: Sample TAM103 log in Microsoft Excel

7.2 Setting the Time on the VB-103-TAM

Note: The VB-103-TAM internal clock is set to GMT. Timestamps shown through the TAM103 software are converted to the local time zone as set on the PC being used.

The current time on the VB-103-TAM is shown in the bottom right section of the TAM103 software. The display of this time can be converted between the local PC timezone and the GMT timezone by selecting the appropriate radio button.

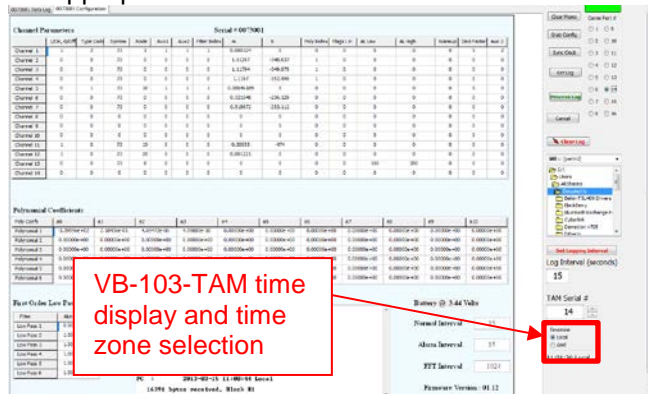


Figure 23: VB-103-TAM time display on TAM103 utility

After connecting to the VB-103-TAM, click on the “Sync Clock” button to set the VB-103-TAM time to match the time on your PC.

7.3 Changing the Data Logging Interval on the VB-103-TAM

In order to change the data logging interval on the VB-103-TAM, perform the following steps after connecting to the VB-103-TAM:

1. Click on the field below the “Log Interval” heading. Enter how often (in seconds) you would like the VB-103-TAM to record data. Note that if this interval is faster than the sensor read interval on the SELD-103-VB, the SELD-103-VB configuration will have to be updated as well.
2. Click on the “Set Logging Interval” to write the new configuration to the VB-103-TAM.

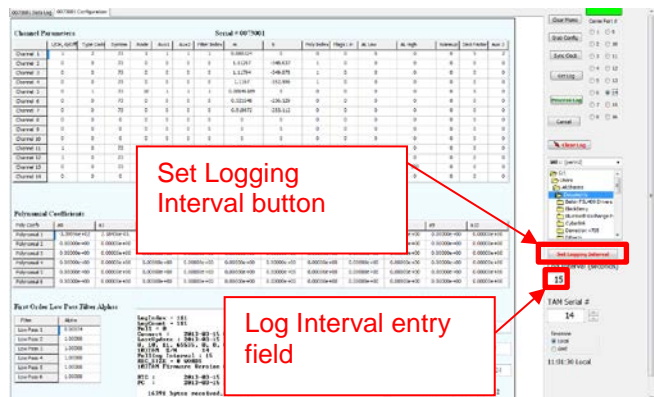


Figure 24: VB-103-TAM utility data measurement interval setting fields

7.4 Reading the VB-103-TAM Battery Level

CAUTION The VB-103-TAM battery is not replaceable.

The VB-103-TAM current battery level is displayed in the bottom section of the TAM103 software utility. Click on “Grab Config” to update the battery voltage value of the VB-103-TAM battery. Battery voltage should normally be between 2.8 and 3.6VDC. If it is lower than this, the entire VB-103-TAM unit will need to be replaced.

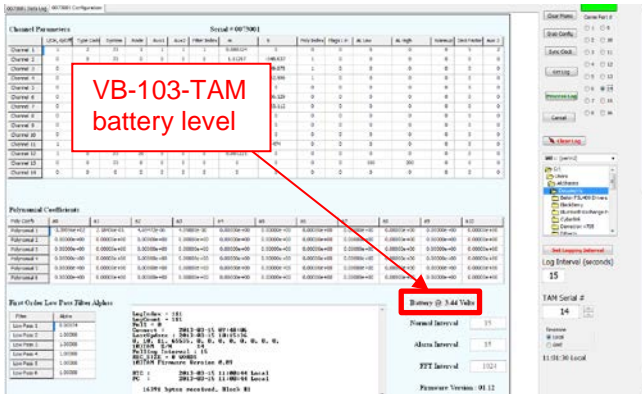


Figure 25: VB-103-TAM battery level display

8 TROUBLE SHOOTING GUIDE



NOTE: Changes to certain parameters will alter calibration.

In the event you encounter trouble with your unit:

8.1 No Response from IPS Beacon Units Connected to IPS Dock

There may be no response from the units connected to the IPS Dock for several reasons:

- Depleted battery on IPS Beacon
- Incorrect utility program selected
- Incorrect COM port selected
- Dock not properly connected to PC
- Loose connection of IPS Beacon units to IPS Dock

See solutions below to each of the possible causes:

Depleted Battery on IPS Beacon

If IPS Beacon has the red LED always on or flashing every 1 second, the battery is depleted and the entire unit will need to be replaced.

Incorrect Utility Program Selected

1. Close the current utility program open.
2. Ensure that the correct utility program is being used: DockTalk for the IPS Beacon & IPS Beacon VB-105-TAM.

Incorrect COM Port Selected

1. Close the current utility program open.
2. To determine what port number the IPS Dock is connected to on your PC, open the Control Panel in Windows and navigate to the Device Manager section (often found in the System section). Next, scroll down to the section titled

“Ports” and double-click it to expand it. In this section you will see one or two devices (depending on whether you have one or both cables connected to the IPS Dock) listed as “USB Serial Port” followed by “COMxx”. The xx number defines the COM port the IPS Dock is assigned to on your PC.

3. Restart the appropriate utility program and select the correct COM port.

IPS Dock Not Properly Connected to PC

Disconnect all USB-serial cables from the IPS Dock and the PC. Remove any hardware connected to the IPS Dock and close any software utilities open on the PC. Follow the procedure described in section 4.2 Connecting Dock to PC.

Loose Connection of IPS Beacon Units to IPS Dock

1. Disconnect all physical units from the IPS Dock.
2. Reconnect physical units to the IPS Dock while ensuring the connectors have a good link with the IPS Dock ports.
3. Restart the DockTalk software utility.

8.2 Cannot change PC hard drive for VB-103-TAM log output

1. To resolve this issue, follow the procedure to connect a VB-105-TAM unit to the IPS Dock (see section 4.2 Connecting Dock to PC) and then open the “DockTalk” utility from the folder where the software utilities are stored.
2. Select the appropriate COM Port, and then click on the “Read TAM” button.
3. Next, under the “Select Drive\Folder to write Logs” section choose the drive where you would like to write the VB-103-TAM logs.
4. Close the DockTalk utility.
5. Follow the connection procedure for the VB-103-TAM (see section 4.2 Connecting Dock to PC) and start the TAM103 utility, the drive should now be the one you selected through DockTalk.

8.3 “Cannot Open File for Output” Error on TAM103 Utility

This error message is displayed if the VB-103-TAM is not properly connected to the IPS Dock or the output location specified for the log file cannot be written to. First, ensure the VB-103-TAM is connected to the IPS

Dock as detailed in the section 4.2 Connecting Dock to PC. If the error message persists, this could be because the user does not have permissions to create new files in the selected output folder or the folder is non-writable (eg. a CD drive). Choose another folder, where the user has write access, to output the log file.

8.4 “File Not Found – rtl160.bpl” Error on TAM103 Utility

1. Open the following registry editor programs, depending on your operating system.
 - a. Windows XP: Click on the Start Menu, then click on “Run”. Type in “regedit” and then click OK.
 - b. Windows Vista / 7: Click on the Start Menu, then type “regedit” in the search box. Click on the “regedit.exe” program.
 - c. Windows 8: Point the cursor to the lower right corner of the screen. Select the ‘Search’ option from the menu. In the search box, type “regedit”. Click on the “regedit” on the left side of the “Apps” screen.
2. Locate HKEY_CURRENT_USER (double click to expand).
3. Locate software (double click to expand).
4. Locate Flowserve (double click to expand).
5. Locate Docktalk (double click to expand).
6. Locate Settings (double click to expand).
7. Locate Folder (double click to expand).
8. Locate Directory on right panel, double click on directory to expand and change value to “C:\” in the “Value data” field. If necessary, you may change the letter to reflect the drive on which you have the software utility saved.
9. Locate Dock 103 under the Flowserve folder (double click to expand).
10. Locate Settings (double click to expand).
11. Locate Folder (double click to expand).
12. Locate Directory on right panel, double click on directory to expand and change value to “C:\” in the “Value data” field. If necessary, you may change the letter to reflect the drive on which you have the software utility saved.
13. Close the Registry Editor program. You should now be able to run the software from the folder stored on the PC hard drive.

If none of the above solutions are successful in resolving the issue, contact the factory for additional support.

Unit manufactured by:
Flowserve Corporation
10920 W. Sam Houston Parkway N., Suite 950
Houston, TX 77064
Phone: 1-832-375-0807

9 CERTIFICATIONS



IPS Dock is only certified for operation in a safe area.





Notes:

Your Flowserve factory contacts:

Flowserve Corporation
10920 W Sam Houston Parkway N, Suite 950
Houston, TX 77064 USA
Phone: +1 832 375 0807

Your Flowserve sales contact:

Go To: www.flowserve.com

Equipment Monitoring and Control Products

FLOWSERVE REGIONAL SALES OFFICES:***USA and Canada***

Flowserve Corporation
Pump
5215 North O'Connor Blvd.,
Suite 2300
Irving, Texas 75039-5421 USA
Telephone 1 972 443 6500
Fax 1 972 443 6800

Europe, Middle East, Africa

Worthing S.P.A.
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Fax 39 0362 303396

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Fax 65 6779 4607