

Service catalog Flow products

Whatever your need our Service team will keep your measurement and plant performing

Measurement made easy



Introduction

When it comes to ensuring your flowmeters meet your expectations, we have a whole range of services designed to keep them delivering the performance you require.

We have developed a range of services tailored to meet different types of needs typically encountered in a plant. (Please check with your local service provider to find out if the service you are interested in is available in your area.)

To make it easy to select the right type and level of services you need, we have grouped them into three categories.

R Rapid response

The device is a critical plant component and needs to be operational 100% of the time

- You require close to 100% availability, anything less will cost you money

O Operational efficiency and performance improvement

The device needs to be a solid performer operating at its peak 100% of the time


- You require the maximum levels of stability, response and accuracy to keep your plant performing at optimum levels

L Lifecycle management


Extend, analyze and optimize the life of your device

- You trust this product and don't want to change it
- Extending the life of your product is important to you

Rapid response


 Service offering	Description of service	Benefits	Reference number
Service agreement	On-call Duty Agreement	When a problem occurs it is good to know help is at hand when you need it: <ul style="list-style-type: none"> – Guaranteed on-site support within agreed time frame – Telephone support 	2PAA112733
	Hot Spare parts	When a problem occurs it is good to know help is at hand when you need it: <ul style="list-style-type: none"> – Guaranteed delivery of spare parts within agreed time frame – Telephone support and assistance in getting your products and plant back up and running 	2PAA112734
	Call Center	When a problem occurs it is good to know help is at hand when you need it: <ul style="list-style-type: none"> – Telephone support 	2PAA112735
Training	On-site Training	Equip your maintenance team with the skills to optimize the availability and efficiency of your products improving the profitability of your production: <ul style="list-style-type: none"> – Detailed knowledge on how to use, maintain and troubleshoot problems with your products and processes – Recommendation on what spare parts and tools to purchase – The skills to perform on-site repairs safely and effectively 	2PAA112736
	ABB Site Training	We offer a range of standard training courses throughout the year. Contact your local service provider to find out what courses are available and when.	
Spares and Consumables	Spare parts	When things go wrong, holding a small stock of spare parts on-site can save you critical downtime <ul style="list-style-type: none"> – To identify which spare parts you should hold please contact your local ABB Service representative for support 	

Operational efficiency & performance improvement

	Service offering	Description of service	Benefits	Reference number			
Engineering & Consulting	Site Assessment	Understand your needs, process and flow conditions to get the maximum performance from your future product: <ul style="list-style-type: none"> – Advice on what type of flow meter to install, including size, flange type, material selection, comms type, accuracy class, flow range, pressure rating, others... – Identify the best location for your flow meter in your process line – Advice on installation accessories including: flow straighteners, earthing rings / lining protection flanges, others... – Any special earthing requirements – Requirement for Verification explained 	2PAA112737				
	Measure flow rate in your process	Flow measurements using Clamp-on Ultrasonic to ensure you install the right product in the right position	2PAA112738				
	Measure flow profile in your process	Flow profiling using AquaProbe measurements to understand process conditions: <ul style="list-style-type: none"> – Advice on best location for your flow meter and decision whether it is necessary to install flow straighteners – Flow meter fitted in a T-piece ball valve (suitable for pipe sizes >200 mm / 8 in. process temperatures up to 60 °C) 	2PAA112739				
Performance Improvement	Improve your DP flow meter performance	Survey DP / Multi-variable transmitter full scale differential pressure ranges in relation to maximum span: <ul style="list-style-type: none"> – Advice on modifications to optimize transmitter accuracy 	TBA				
Maintenance	Verification Services including use of Flow Simulators	Peace of mind that product health and performance has not changed: <ul style="list-style-type: none"> – Satisfies Regulatory requirements for independent Verification – Trending information provides data to show whether future scheduled maintenance is required and indication when it should be done – Option of Warranty extensions – Best possible method of checking product is performing without removing from the process line and checking calibration on a certified calibration rig 	2PAA112743				
	Enable Verification function and health check*	Enabling Verification function in products purchased without this option	2PAA112744				
	Verification by on-site flow measurement comparison	For products without verification function checking their performance is in agreement with a secondary flow measurement is a cost effective alternative to removing the product from the process line and sending it off for calibration: <table border="1" data-bbox="539 1287 1497 1413" style="width: 100%; border-collapse: collapse;"> <tr> <td data-bbox="539 1287 1369 1318">Clamp-on Ultrasonic flow Verification using meter fitted close to the flow meter</td> <td data-bbox="1380 1287 1497 1318">2PAA112745</td> </tr> <tr> <td data-bbox="539 1329 1369 1413">Electromagnetic AquaProbe flow verification using meter fitted in a T-piece ball valve close to electromagnetic flow meter. (Pipe sizes >200 mm / 8 in., process temperatures up to 60 °C)</td> <td data-bbox="1380 1329 1497 1360">2PAA112790</td> </tr> </table>	Clamp-on Ultrasonic flow Verification using meter fitted close to the flow meter	2PAA112745	Electromagnetic AquaProbe flow verification using meter fitted in a T-piece ball valve close to electromagnetic flow meter. (Pipe sizes >200 mm / 8 in., process temperatures up to 60 °C)	2PAA112790	
Clamp-on Ultrasonic flow Verification using meter fitted close to the flow meter	2PAA112745						
Electromagnetic AquaProbe flow verification using meter fitted in a T-piece ball valve close to electromagnetic flow meter. (Pipe sizes >200 mm / 8 in., process temperatures up to 60 °C)	2PAA112790						
Extensions, Upgrades and Retrofits	On-site upgrade ProcessMaster 300 series to 500 series	Your ProcessMaster 300 gives you great performance, but you want to know more about how your process and product are really performing. Upgrade your electronics to the 500 series and take advantage of some amazing diagnostics / measurement features: <ul style="list-style-type: none"> – Process flow conductivity – Detect gas bubbles in your process – Sensor temperature – Are your sensor electrodes becoming coated? – Advanced grounding checks 	2PAA113020				

*Please note: Verification function available only on model types; ProcessMaster, HygienicMaster, WaterMaster, AquaMaster, MagMaster

Service offering	Description of service	Benefits	Reference number
Extensions, Upgrades and Retrofits	On-site upgrade Vortex / SwirlMaster 430 to 450 series	Your VortexMaster or SwirlMaster 430 gives you great performance, but you want to know more about how your process and product are really performing. Upgrade your electronics to the 450 series and take advantage of diagnostics / measurement features: <ul style="list-style-type: none"> – Connectivity of remote pressure-, temperature-, gas analyser or density signal – Direct Energy metering for Steam, Gas or Liquids – Steam status supervision 	2PAA113379
	Add a digital output to your Vortex / SwirlMaster 430 series	Your VortexMaster or SwirlMaster 430 gives you great performance, but you want to add an additional digital output for: <ul style="list-style-type: none"> – Contact output – Pulse output – Frequency output 	
		Do-it-Yourself conversion kit (Non hazardous area only)	2PAA113380
		On-site service (including Hazardous area)	2PAA113381
	On-site upgrade of Vortex/SwirlMaster 430 to include process temperature measurement	Your VortexMaster or SwirlMaster gives you great performance, but you want to add an internal RTD for: <ul style="list-style-type: none"> – Temperature compensation – Direct saturated steam mass flow 	2PAA113382
Extensions, upgrades and retrofits	Remote product made into an integral (COPA) product	During plant upgrades it may be more efficient to position the electronics with the sensor <ul style="list-style-type: none"> – On-site conversion into an integral product 	
		ProcessMaster	2PAA112755
		WaterMaster	2PAA112756
		VortexMaster / SwirlMaster	2PAA113383
	Integral (COPA) product made into a remote product	During plant upgrades it may be more efficient to position the electronics remote from the sensor <ul style="list-style-type: none"> – On-site conversion into a remote product 	
		ProcessMaster	2PAA112753
		WaterMaster	2PAA112754
	VortexMaster / SwirlMaster	2PAA113384	
Maintenance	On-site calibration of Thermal Mass flow meters	If you have more than ten Thermal mass flow meters needing re-calibration each year why not arrange for ABB to bring the calibration equipment to you: <ul style="list-style-type: none"> – This service can save you up to half a days administration work per instrument. 	2PAA113415
	Thermal mass calibration agreement	If you regularly require your Thermal Mass flowmeters to be sent to ABB for re-calibration, why not set-up an annual maintenance agreement to reduce your administration time and costs.	2PAA113416
	Calibration at ABB Site	Peace of mind that product is performing within specification:	
		<ul style="list-style-type: none"> – Certified calibration certificate to show regulatory authorities – 3 points of calibration covering full flow range 	
		DN1-100 1/25" – 4"	2PAA112777
		DN150-250 6" – 10"	2PAA112778
		DN300-600 12"– 24"	2PAA112779
		DN700-1000 28"– 40"	2PAA112780
		>DN1000: Contact your local service provider for a quote	–
		For Non ABB product please specify make and model and also quote the following reference number:	2PAA112781
		Optional extras:	
		Fingerprint to check product health after calibration	2PAA112783
		Flow check only, no cal. certificate issued	2PAA112792
		Additional calibration points	2PAA112782
		Witnessed calibrations	2PAA112784
	Calibration of AquaProbe	2PAA112793	
	Express calibration service	2PAA113428	

	Service offering	Description of service	Benefits	Reference number
Maintenance	Thermal Mass calibration at ABB site	ABB offer a wide range of fast turnaround calibration options specific for Thermal Mass flow meters (all options include sensor cleaning as standard).		
			Recalibration	2PAA113417
			Recalibration with entry test	2PAA113418
			DAkKS / ILAC calibration or Recalibration according to DIN EN ISO/IEC 17025	2PAA113419
			EPA linearity sensor check for Sensyflow FMT700-P - Option (DAKKS)	2PAA113420
			Optional extras:	
			One week Express service	2PAA113421
			Transmitter or remote unit testing	2PAA113422
			Sensor replacement	2PAA113423
Extensions, upgrades and retrofits	On-site Upgrade Comms protocol	When performing a plant wide upgrade a change in control system often involves a change in communications protocol: <ul style="list-style-type: none"> – Rather than purchasing new flow meters it can be more cost effective to have an ABB Service engineer come to site and update your products' communications for you – We will even commission the device and ensure that it is fully integrated in your control system 		
		Electromagnetic flow		
		ProcessMaster upgrades to ProfiBUS PA	2PAA112794	
		ProcessMaster upgrades to Foundation FieldBUS	2PAA112795	
		WaterMaster upgrades to HART	2PAA112800	
		WaterMaster upgrades to ProfiBUS DP	2PAA112801	
		WaterMaster upgrades to MODBUS RTU	2PAA112802	
		Differential pressure		
		266DSH Transmitter upgrade to external pushbuttons	2PAA113401	
		266DSH Transmitter upgrades to Advanced HART and 4 to 20mA	2PAA113402	
		266DSH Transmitter upgrades to PROFIBUS PA	2PAA113403	
		266DSH Transmitter upgrades to Fieldbus	2PAA113404	
		Coriolis		
		FCM2000-MS2/MC2 upgrade to HART	2PAA113424	
		FCM2000-MS2/MC2 upgrade to ProfiBUS PA	2PAA113425	
		FCM2000-MS2/MC2 upgrade to Profibus PA with M12 plug	2PAA113426	
		FCM2000-MS2/MC2 upgrade to Foundation Fieldbus	2PAA113427	
Training	ABB Site Training	We offer a range of standard training courses throughout the year. <ul style="list-style-type: none"> – Contact your local service provider to find out what courses are available and when. 		
	E-learning	Check out our range of on-line training courses to improve your knowledge of flow products and their operation.		

Lifecycle management

Service offering	Description of service	Benefits	Reference number
Installation & Commissioning	Commissioning	A guarantee that your product is correctly installed and performing within spec.: <ul style="list-style-type: none"> – Electrical commissioning with all safety aspects taken care of – Verification measurements (if purchased with fingerprint) – Warranty extensions – Informal training and instruction how to use 	2PAA112741
Extensions, upgrades and retrofits	On-site retrofit of electronics to latest version	One of the many reasons ABB flow meters are so widely used is the long reliable life time you can expect. To ensure your product stays reliable it may be beneficial to upgrade your electronics to a newer model: <ul style="list-style-type: none"> – An electronics retrofit may be cheaper than replacing the entire flow system – Advances in technology mean that newer electronics platforms have additional features: <ul style="list-style-type: none"> – More detailed HMI – Additional diagnostic functions – More communication options 	
Electromagnetic flow			
Upgrade FXE4000-DE41/FXM2000-DM41 to ProcessMaster FEP321 Standard			2PAA112766
Upgrade FXE4000-DE41/FXM2000-DM41 to ProcessMaster FEP321 FieldBUS version			2PAA112767
Upgrade from FXE4000-DE21 / FXM2000-DM21 to HygienicMaster FEH321 standard version			2PAA112768
Upgrade from FXE4000-DE21 / FXM2000-DM21 to HygienicMaster FEH321 Fieldbus version			2PAA112769
Upgrade from FXE4000-DE43 / FXM2000-DM43 to ProcessMaster FEP311			2PAA112770
Upgrade from FXE4000-DE41 / FXM2000-DM41 to ProcessMaster FEP521 standard version			2PAA112771
Upgrade from FXE4000-DE41 / FXM2000-DM41 to ProcessMaster FEP521 Fieldbus version			2PAA112772
Upgrade from FXE4000-DE21 / FXM2000-DM21 to HygienicMaster FEH521 standard version			2PAA112773
Upgrade from FXE4000-DE21 / FXM2000-DM21 to HygienicMaster FEH521 Fieldbus version			2PAA112774
Upgrade from FXE4000-DE43 / FXM2000-DM43 to ProcessMaster FEP511 (up to DN100 in standard version)			2PAA112775
Upgrade MagMaster to WaterMaster			2PAA112803
Upgrade MagMaster to WaterMaster HART version			2PAA112804
Upgrade MagMaster to WaterMaster ProfiBUS DP			2PAA112805
Upgrade MagMaster to WaterMaster ModBUS RTU			2PAA112806
Vortex and Swirl flow meter			
Upgrade VT1000/ST1000 to VortexMaster / SwirlMaster FSV450 HART			2PAA113385
Upgrade VR1000/SR1000 to VortexMaster / SwirlMaster FSV450 remote HART			2PAA113386
Upgrade integral FV4000/FS4000 to VortexMaster / SwirlMaster FSV450 HART			2PAA113387
Upgrade FV4000/FS4000 to VortexMaster / SwirlMaster FSV450 remote HART			2PAA113388
Differential Pressure			
364DS DP transmitter			2PAA113411
266DSH DP transmitter			2PAA113412
266CSH Multivariable transmitter			2PAA113413
267CS Multivariable transmitter			2PAA113414

Service offering	Description of service	Benefits	Reference number
Replacement	MagMaster Transmitter exchange service	<p>For continuity purposes rather than upgrade your electronics to a newer version it may be more beneficial to exchange your old MagMaster Transmitter for a newly refurbished unit:</p> <ul style="list-style-type: none"> – A replacement MagMaster ensures your CalMaster verification unit continues to perform 	
		MagMaster, AC power	EXCMAG1-AB01
		MagMaster, DC Power	EXCMAG2-AB01
		MagMaster, Dual current output, AC power	EXCMAG3-AB01
		MagMaster, Dual current output, DC power	EXCMAG4-AB01
	On-site MagMaster transmitter replacement	Replacement transmitter fitted, commissioned and CalMaster verification performed by the professionals ensuring your system is working correctly:	
		MagMaster, AC power	2PAA112757
		MagMaster, DC Power	2PAA112822
		MagMaster, Dual current output, AC power	2PAA112823
		MagMaster, Dual current output, DC power	2PAA112824
	Differential pressure transmitter replacement	Replacement Transmitter fitted and commissioned:	
		264DS DP transmitter	2PAA113405
		265DS DP transmitter	2PAA113406
		364DS DP transmitter	2PAA113407
		266DSH DP transmitter	2PAA113408
		266CSH Multivariable transmitter	2PAA113409
		267CS Multivariable transmitter	2PAA113410
Maintenance	Electromagnetic flow meter refurbishment	<p>For abrasive applications such as mining or dredging, it can be cheaper to pay for your flow meter to be refurbished</p> <ul style="list-style-type: none"> – For products over ten years old, a refurbishment can be a good way to ensure your product will work for another ten years – One year Warranty extension – Avoids failure which can cause un-scheduled downtime in your process <p>Optional extra:</p> <ul style="list-style-type: none"> – Rental of Clamp-on Ultrasonic flow meter during refurbishment work 	<p>Price on application</p> <p>2PAA112750</p>
	AquaProbe refurbishment service	<p>Over time and regular use the sensing part of your AquaProbe may become more susceptible to damage and failure through accidental knocks and collisions during operation.</p> <p>ABB offers a refurbishment service whereby the metal works is cleaned and checked for damage, the sensor tip is removed and replaced with a new sensor and the device is recalibrated before shipping back to you.</p>	2PAA112828
	AquaProbe upgrade	Upgrade AquaProbe I to AquaProbe II to operate with the latest electronics.	2PAA112764
	Vortex / Swirl flow meter sensor check and exchange	<p>Over time and regular use the sensing part of your Vortex or Swirl meter may become more susceptible to damage and failure through accidental knocks by waterhammer or heating / cooling shocks during operation. ABB offers 2 refurbishment services:</p> <p>In house service including cleaning and checking for damage, the piezo sensor is removed and replaced with a new one and the device is recalibrated before shipping back to you.</p> <p>On-site service including checking for damage, the piezo sensor and sealing is removed and replaced with a new one and the device will be taken into operation after replacement.</p>	<p>2PAA113389</p> <p>2PAA113390</p>
Spares & Consumables	Spare parts	<p>When things go wrong, holding a small stock of spare parts to perform on-site repairs can save you downtime</p> <ul style="list-style-type: none"> – To identify which spare parts you should hold please contact your local ABB Service representative 	
	AquaMaster replacement battery	Why not carry a spare battery unit when you visit your AquaMaster flowmeter.	WABC2100
	Spare programmed EEPROM and FRAM service	<p>In case of failure as well as purchasing spare electronics parts it is also a good idea to purchase pre-programmed EEPROM and FRAM memories so that you can get your product up and running again immediately, without the need for timely configuration work.</p> <ul style="list-style-type: none"> – Provide us your product serial number and we will send you a duplicate EEPROM or FRAM ready for use 	<p>FXE4000 2PAA113030</p> <p>FXM2000 2PAA113031</p> <p>FSM4000 2PAA113032</p> <p>FXP4000 2PAA113033</p> <p>FCM200 2PAA113555</p> <p>FCB300 2PAA113556</p>

Contact us

To find your local ABB contact visit:

www.abb.com/contacts

For more information visit:

www.abb.com/measurement

Note

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