

# Instrumentation and monitoring

MJK PRODUCT CATALOG



CATALOG EN 1.00 PRODUCT CATALOGUE 1810



# A BETTER, CLEANER ENVIRONMENT

More than 40 years of experience, a professional approach and an attractive product range was what the global group Xylem Inc. acquired back in 2012 when welcoming MJK into the family.

Since then, more than 60 international distributors have been selling MJK's products. On markets where MJK has been known for years as well as on entirely new markets, MJK has experienced a growing collaboration within Xylem's family of companies.

Good collaboration is a two-way relation. MJK has extended the product range in Denmark with products from quality manufacturers such as Sontek and YSI; producers that are already popular within several lines of business, and known for their quality and precision.

Since being founded more than 40 years ago, MJK has focused on developing good products in collaboration with experts in fields aiming to improve everyday life. Therefore, it is only natural that we are working together with companies like Flygt, Sontek, and YSI on updating our products to provide brand new possibilities for our customers.

The ability to collaborate is the road to success - for MJK, our products, customers and of course - the environment.

#### WASTEWATER

The Danish wastewater industry is among the top wastewater industries, particularly distinguished by the ability to clean water prior to discharging, but also in respect of economic efficiency. Over the years, MJK's products have been developed and improved even further to meet the wastewater industry's increasing efficiency and quality requirements. MJK has over 40 years of experience and is among the leading suppliers of instruments and controllers to the wastewater industry.



#### DRINKING WATER

Drinking water is perhaps the most critical resource under severe pressure on earth today. Denmark is one of few countries that can enjoy fresh, clean drinking water flowing from the taps with no chemicals added to it. We take care of our drinking water, and maintain strict control over the water from the well till it reaches the consumer. MJK enables measuring of our groundwater level, in tanks, wells and pipes. Also, the quality of the water flowing in our distribution system is analysed and controlled using MJK products.



#### AQUACULTURE

Land-based fish farming is an industry in growth, and the technology is rapidly evolving. Fish farming is a contribution to secure the food resources of the world without harming the environment. MJK has developed products together with and for leading manufacturers of aquaculture plants for many years. Quality and precision are main keywords when securing oxygen content, salt level or when pumping water into or out of tanks with live fish.



## INDUSTRY

Increasing requirements on the industry's documentation of various processes and discharges mean that integration of analytical instruments and process control is more essential than ever. MJK supplies products that can withstand industrial operation for a long time. Reliable measurement results and a long life cycle provide the reliable operation and documentation that is required today and in the future.





#### PRODUCT RANGE

The MJK product range covers a comprehensive pallet within instrumentation and monitoring of processes for aquaculture and wastewater, drinking water and process water.

To create an overview of our product range, we have divided our products into categories. Each product category has its own color code and symbol.

The color codes are used throughout the catalog to indicate, which products can be combined.

[page 78-82]



# **ABOUT MJK**



#### PC SOFTWARE

Many of our products now have PC software for configuration, control and updating purposes. The software widens the scope and applications of our products. Many of our products can communicate with other instruments or SCADA systems to make it faster, simpler and safer for you to configure from a PC.

The PC programs allow you to save your configuration to a file, which you can reload or use in another unit. The PC software saves the files in a format, which can easily be exchanged via e-mail. In many cases, the MJK Support Team will be able to help resolve difficulties simply by checking or rectifying a configuration you send to us by e-mail.



#### Field Link

Use Field Link to upgrade converters and displays of the MagFlux, SuSix and Oxix series and to adapt the display user language. You can download, read and export the history from the built-in data logger in the display and export it to spreadsheet format.\*

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#### Chatter Link

Use our Chatter-Link software to set up and configure our MJK chatters.\*



#### **Connect Link**

Use our Connect Link software to set up and configure MJK pump controllers of the Connect series.\*



#### Expert Link

Use our Expert Link for verification and rescaling of measuring area output signals on the MJK Expert hydrostatic level transmitter series.\*

\* All software available at mjk.com for free.

#### LOGICAL OPERATION AND NETWORK

The products in the MJK instrument range communicate with each other and share a display via a network connection. For example, the display can be set up to show the individual measured values from up to four different instruments in the network or show all measurement simultaneously. The display has a built-in data logger with 360,000 logs, which can be shared between connected instruments. The measured values can be downloaded to a PC from the display's USB port as a CSV File (Excel).

If you link a communication module to the display, you can transmit measurements to a PLC or SCADA system with Profibus or Modbus communication. Using the built-in network, a Profibus or Modbus module can transmit signals for as many as four units/converters.







# RTU & CONTROLLERS

[Today, we store and log data from most processes. The quality and volume of discharged water, especially from inlets to waterworks, pump wells, aquaculture and water treatment plants are logged. We use the data to document and control processes with the aim of ensuring operating profitability yet at the same time preserving our nature for future generations.]



MJK supplies some of the market's most sophisticated and besttested RTU & controller units. We have a wealth of experience and have been a trendsetting supplier for more than 40 years. MJK's controllers are in operation all over the world.

## CONTROLLING PUMP STATIONS

In Scandinavia alone, more than 10,000 pump stations in operation use an MJK product to control and monitor the process. One of the major benefits of using MJK products is that the equipment always has backward compatibility.



# CONTROLLING WATER TREATMENT PLANTS

When you use MJK systems at treatment plants, RTU & control devices are simple and intuitive even though the processes involved are complex. Flexible inputs and outputs on the units and energy-optimizing functions for pumping operation, calculation, data logging and communication with SCADA systems make our products versatile and flexible in operation.



# CONTROLLING WATER-WORKS

MJK controllers can be used everywhere in modern waterworks, from the raw water intake, with the filters and in pump stations. Intelligent communication solutions make it possible to link the controllers and gather data from meters all over the plant.



#### CONTROLLERS WITH COMMUNICATION

The Connect series are integrated control and monitoring units used to control waterworks, pump stations, small treatment plants and to measure and record flow, e.g. in an emergency storm flow location.

Our controllers have technically advanced features to create energy-optimized pumping operations and control pumps with frequency converters + interlock controls including stopping pumps. Features also include intelligent data logging, SCADA systems communication and calculated saved energy.

Our controllers are modular and developed for DIN rail mounting with a bus system inside the DIN rail for simple mounting of additional I/O modules.

Our controllers come with an iNET Modbus port to allow for easy connection of MJK instruments, e.g. to measure flow, level, suspended solids, etc.

## WIRELESS ACCESS

MJK has developed a smartphone app to help you operate the most important parameters.

The Mµ Connect unit has built-in WiFi communication.

Using the MJK Connect app for iPhone and Android, you can restart, stop or block any pump. Change start, stop and alarm levels. Read operating data such as number of starts, runtime, level and the most recent alarms.

Download the app free of charge from App Store or Android Market.

#### **HMI DISPLAY**

The MJK HMI display for controllers provides the perfect overview of your pump station's operations. The display offers a large number of very practical functions, including pump status readings, a graphic view of level and an overview of active and historical alarms.



PUMP CONTROL VIEW





#### DOWNLOAD THE MJK CONNECT APP







WATERWORKS VIEW

#### ALL-ROUND COMMUNICATION

MJK controllers offer versatile communication options. You can read values on the installation site itself or via communication with a SCADA system.

Many MJK instruments are supplied with Modbus, Profibus, RS232 and RS485 communication modules.

Several of our control and data-logging units have PC communication, where the PC software simplifies instrument configuration. Any configuration can be saved as a file and sent by e-mail if you need a similar configuration at another installation.

The Connect series has built-in, or external, WiFi module for communication with smartphones.

Monitoring devices such as Connect, Mµ Connect, nConnect and Chatter have built-in modem to communicate with SCADA systems and a number of communication protocols including Modbus, COMLI, Aquacom and others.



# MONITOR LINK





# MANY FIELDS OF APPLICATION

Monitor Link ensures full monitoring, control, data gathering, and handling of alarms for waterworks, boreholes, decentralised pumping units or complete SCADA systems.

Monitor Link provides a professional and specialized overview of the water level in streams, lakes, and in the nature via the Chatter data logger.

Monitor Link is perfect for industrial waste water monitoring. Your company will receive a comprehensive monitoring and reporting tool without risking the loss of data.

GRAPHICAL OVERVIEW







#### PUMP STATION VIEW

#### GRAPHS



## CONTROLLERS WITH COMMUNICATION







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FEATURES					
	nCONNECT®	Mµ CONNECT®	I/O MODULE	CONNECT®	HMI DISPLAY
Fitting	DIN rail	DIN rail	DIN rail	Wall	Panel front
Housing	PC / ABS	PC / ABS	PC / ABS	Fibreglass-reinf. polycarbonate	Aluminium
Analogue AI / AO	3 AI	3 AI	Max. 16 Al Max. 16 AO	6 AI 1 AO	
Digital DI/ DO	4 DI 3 DO	6 DI 2 DO	Max. 32 DI Max. 32 DO	16 DI 8 DO	
Communication protocol	Modbus RTU / COMLI / AquaCom	Modbus RTU / COMLI / AquaCom	Internal	Modbus RTU / COMLI / Aqua Com	Modbus RTU
Interface	3G / RS485	3G / RS232 / RS485	Via DIN bus system	GSM / GPRS / 3G / RS232 / RS485	RS232 / RS485 / Ethernet Port / USB 2.0
IP protection class	IP20	IP20	IP20	IP67	IP66
Built-in data logger	360,000 logs	360,000 logs		360,000 logs and graph view	Graph view 3 hours, 1-7 days
HMI display	Remote at up to 1,000 m	Remote at up to 1,000 m		Remote at up to 1,000 m	7" TFT / Resolu- tion 800 x 480 pixels
Approvals	CE				CE

## CONTROLLERS WITHOUT COMMUNICATION

In practice, there is often a need for local controllers, which have no communication or remote control functions. MJK controllers are well-known for their reliability, flexible connection and simple, logical control system.

## 701 PUMP CONTROLLER - 1 OR 2 PUMPS

The most simple pump controller in the MJK range. The 701 pump controller is widely used to control pumps in buildings, small pump stations and anywhere where pumps or valves are controlled by the measured level.

CONNECT / Mµ CONNECT CAN BE USED WITH

Level [page 33]

Fittings [page 69]

Accessories [page 67-73]

701 PUMP CONTROLLER CAN BE USED WITH









#### FEATURES

PUMP CONTROLLER	701
Sensor	Hydrostatic
Measurement range	Min. 30 cm Max. 300 m
Analogue 4-20 mA	٠
Digital outputs	2
IP protection class	IP 22
Approvals	CE



# **DEVELOPMENT PARTNERSHIP**

The MJK data logger has been developed over the course of several years.

We felt it was important to develop this product to be compatible with products from YSI and SonTek and not least in collaboration with customers who use measurements and statistics on a daily basis.

#### SMS

Chatter can send data in a text message directly to a mobile phone combined with communication from the Chatter in 3 ways: to a database, using a standard RTU protocol directly to a SCADA system or by sending e-mail. The unit can also send a text message simply to notify of an alarm.



#### E-MAIL

The data is sent either by e-mail, as a plain text message or as a CSV attachment. This application is ideal for use with installations with only one or just a few Chatter devices.



# DATABASE

Chatter sends data to a database. From here, measurements and alarm signals can be uploaded for further processing or transmitted to a SCADA system. The database solution is ideal for systems, which have many Chatter units because an individual or several Chatter units can be reconfigured from the server.

# SCADA

Chatter functions as a battery-driven logger, which communicates directly with a SCADA system using RTU protocol. Chatter can be integrated into systems with e.g. MJK controllers with communication at pump stations.

# MONITORING GROUNDWATER LEVELS

In water supply systems, Chatter is used to measure and monitor the water level in monitoring wells.

On delivery, Chatter is built with an aluminium pipe with an impact-resistant plastic cover, into which the data logger, modem, antenna and battery are packed to form a compact unit. Chatter is connected to an MJK digital Expert level transmitter.



#### STORM FLOW REGISTRATION

Chatter can be used to register storm flow in a sewerage system. Chatter is triggered when the wastewater reaches storm flow level.

Chatter measures the level behind the weir and calculates the volume of water. Chatter's measurements intervals can be adjusted, e.g. to take measurements at two-minute intervals. Regular measurement and logging continue as long as the flow continues over the edge of the weir. At selected times, e.g. once a day, all the logged data is transmitted to log storm flow volume, times and the number of storm flow events.



# CONSTRUCTION SITE MONITORING

Chatter is used in major construction projects to monitor the groundwater level. The example shown here is from a tunnel construction project in Malmö, Sweden. MJK supplied monitoring equipment to measure groundwater lowering at 120 water wells during the construction phase.

## **RECORDING AND ALERTING IN THE** EVENT OF EXTREME WEATHER

Chatter is beneficial when used to monitor water levels in streams and watercourses in coastal areas or to report rainfall.

#### STORM FLOW RECORDING TO ENSURE HEALTHY BATHING CONDITIONS

Many Danish local authorities use Chatter to notify if the water at their beaches is polluted and bathing has to be prohibited. Heavy rain can cause drains to overflow so that wastewater flows directly into the storm flow basins, into the sea, streams and watercourses. When Chatter registers an emergency storm flow, it sends a message to the officer in charge of water quality at the beaches, who can warn visitors about the pollution, as described in the Danish Ministry of the Environment's bathing water regulations.

#### **ALARM NOTIFICATION**

To prevent unauthorized access to technical installations, Chatter can send an alarm to a SCADA system or as a text message.











#### PIPE- OR WALL-MOUNTED DATA LOGGER

The Chatter level data logger is available in two variants, either for fitting on a drilling pipe or for mounting e.g. on a wall.

New and existing meters are connected to the system using analogue, digital, and Modbus-controlled inputs.

FEATURES

To save energy, Chatter only supplies the power to connected transmitters while they are measuring, i.e. usually for less than 10 seconds per measurement.

Chatter is also available as an 11-16 V DC unit supplied for external power source like e.g. solar cells.





PIPE FITTING



WALL FITTING

**CHATTER®** FOR WALL FOR PIPE 3.6 VDC, 3.6 VDC from built-in Power supply 19 Ah li. battery battery or 11-16 VDC \* Battery lifetime > 2 years \* > 2 years \*\* Memory > 100,000 logs \*\*\* > 100,000 logs \*\*\* Smallest log intervals 1 min. 1 min. 1, 2, 5, 10 min., 1, 2, 4, 8, 12, 24 hours 1, 2, 5, 10 min., Event log intervals 1, 2, 4, 8, 12, 24 hours 1 hour 10, 25, 50 100, 250, 1 hour 10, 25, 50 100, 250, 500 or 1,000 logs Smallest call intervals 500 or 1,000 logs Fitting Wall On monitor pipe Cover PC / PC Housing Base Alu. (Polycarbonate) IP protection class IP67 IP67 CE CE Approval

\* from solar cell or external power supply

\*\* at 1 measurement/day and 1 call/day

\*\*\* date and time stamp

# EXPERT<sup>™</sup> DIGITAL LEVEL TRANSMITTER

MJK Expert digital pressure transmitters with Modbus communication are ideal to measure level. Since digital transmitters require no analogue/digital conversion, they achieve maximum precision.

Connect to the power supply and your digital transmitter is ready to measure. A digital transmitter can measure level and temperature, and consumes less power than a conventional analogue transmitter.

You can connect four transmitters to the Modbus input to measure, for example, four levels or two levels and two temperatures.

FEATURES				
EXPERT	700D	7070D	7060D	3400 D
Power supply	3.6 VDC from Chatter	3.6 VDC from Chatter	3.6 VDC from Chatter	10 VDC from Chatter
Application	Water well drilling	Water well, Process fluids	Water well, Process fluids	Water well, Process fluids
Measurement range	0-30/100 m	0-3/10/30 m	0-3/5/10/30 m	0-30 cm / 0-100 m
Accuracy (+10-30°C)	±0.5%	±0.25%	±0.25%	±0.1%
Housing	1.4404 / AISI 316L	1.4404 / AISI 316L	PP	PPS
Membrane	1.4404 / AISI 316L	1.4404 / AISI 316L	1.4404 / AISI 316L	Ceramic
External diameter	Ø 16 mm	Ø 22 mm	Ø 60 mm	Ø 50 mm
Output: Modbus RS485	٠	٠	٠	•
Output: 0.1-2.5 VDC	٠	٠	٠	
Approval	CE	CE	CE	CE

#### CHATTER CAN BE USED WITH



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## CHATTER OXYGEN 🚍



Via Expert level transmitter and YSI ProODO sensors, the MJK Chatter data logger provides data logging of water level, temperature and the amount of dissolved oxygen. This is an ideal solution for monitoring of e.g. forest lakes, which may often be impassable. The MJK Chatter logs the measured data and sends it either based on a time schedule or in case of a high alarm level. MJK solar panel connection is an advantage for monitoring in forests and marshes.



#### SOLAR PANEL MOUNTING



MJK Chatter data logger together with the SonTek IQ Doppler flow meter. Developed especially to monitor small streams, but is also an ideal solution for logging of partly filled pipes e.g. sewerage systems in the catchment area. The solution is also applied for logging of flow in channels e.g. in connection with overflow structures. The Chatter Flow is often placed in nature where power supplying by means of an MJK solar panel can come in handy.

## CHATTER RAIN

**CHATTER FLOW** 



The Chatter data logger with rainAhead offers logging of local data of rainfall. The data is logged and can be applied for estimating the capacity of the pipe network or the overflow structure. It can be combined with a digital pressure transmitter in the overflow structure, which can indicate whether the overflow is due to rainfall or other accidental discharges. If the Chatter Rain is placed decentralized, it is ideal to power supply it with an MJK solar panel. Data is transmitted according to time schedule or as alarm notification in case of acute severe overflow.

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FEATURES		
	ProODO	IQ DOPPLER
Measuring instru- ment	Optical oxygen meter (digital)	Doppler flow meter
Measurement range	0-500 % saturation / 0-50 mg/L	Min. depth 0.08 to 1.5/5 m
Water depth min max.		Water level 0.05-1.5-5.0 m
Power supply	Battery-driven	8 - 15 VDC
Communication	2 alkaline C-cells or via USB	RS232, SDI-12, Modbus
Speed measurement		± 5 m
Water column profiling		1-100 cells
Temperature working range	-10 to 60 ° C	-5 to 60° C
Memory	5.000 data set	4 GB or Chatter
Cable / sensor lengths	1, 4, 10, 20, 30, 40, 50, 60, and 100 m	Up to 100 m
IP protection class	IP 67	IP 68
Accuracy	± 1% of measure- ment	+/- 0.1%

#### CHATTER CAN BE USED WITH



Fittings [page 69]







rainAhead

Rain gauge

Max. 2.4 mm per minute water depth

Powered from the connected MJK unit

Chatter or the

Connect series

FEATURES	
CHATTER®	FOR WALL
Power supply	3.6 VDC, 19 Ah li. battery or 10-30 VDC
Battery lifetime	> 2 years *
Memory	> 100,000 logs **
Minimum log inter- val	1 min.
Event log intervals	1, 2, 5, 10 min., 1, 2, 4, 8, 12, 24 hours
Minimum call interval	1 hour 10, 25, 50 100, 250, 500 or 1,000 logs
Fitting	Wall
Housing	PC (Polycarbonate)
IP protection class	IP67
Approval	CE

by 1 measurement/day and 1 call/day
\*\* date and time stamp

Charlei					

-20 to 60° C

IP 68

0.2 mm / impulse max. 12 pulses / min





# LEVEL

[Level measurement and regulation are part of most processes where liquid is pumped in and out of tanks or containers. Instruments to measure the liquid level are invaluable tools when controlling and monitoring those processes.

MJK's comprehensive range of liquid level measuring instruments cover any task imaginable.]



# **COMPREHENSIVE LEVEL MEASUREMENT RANGE**

Water and wastewater treatment plants rely on precise measurements. To control the processes optimally, it is essential that the level transmitters are precise and accurate. The comprehensive range of MJK level transmitters is widely used in the water industry, and is installed worldwide where stability and precision are needed.

## **ON/OFF LEVEL CONTROL**

Levels in wells can be controlled by a relatively simple control unit using electrodes. This is a cost-effective solution, where liquid contact controls the tank emptying or filling process - or a simple alert tells you that the floor is wet.





#### ULTRASONIC MEASUREMENT

Ultrasound is widely used to measure levels in liquids and solids. Ultrasonic measuring is an excellent method as none of the parts is in contact with the liquid. This measuring method is therefore ideal for use with polluted water and aggressive liquids.



# HYDROSTATIC MEASUREMENT

Hydrostatic level transmitters are ideal for measuring the level in open tanks and containers, e.g. waste water pump stations. These instruments are often chosen for reasons of accuracy and reliability. The instruments are also used for measurements in rivers and lakes, or to measure groundwater levels in wells.

#### EXPERT<sup>™</sup> LEVEL TRANSMITTER

MJK Expert hydrostatic level transmitters are designed to measure level when submersed in pump wells, tanks, flumes and channels.

Expert level transmitters are strong and specially designed to withstand tough mechanical and chemical impacts in e.g. wastewater, slurry and sludge. Expert level transmitters are supplied with stainless steel or ceramic membranes. The housing is made of composite material or stainless steel.

Expert level transmitters are available in a number of variants adapted to measuring levels in wastewater, drinking water and process fluids. We can supply variants, which are suitable for use in corrosive chemicals and ATEX-approved (i.e. approved for use in explosive atmosphere).

Expert level transmitters cover measurement ranges from 0-30 cm up to 0-300 m.

Expert level transmitters are supplied with a 4-20 mA or Modbus output.









FEATURES					
EXPERT®	700	7070 (T)	7060	1400	3400
Application	Water well	Water well, Process fluids	Wastewater, Process fluids	Water well, Process fluids	Wastewater, Process fluids
Measurement range max.	0-30 m 0-100 m	0-3 m 0-300 m	0-3 m 0-300 m	0-30 cm 0-100 m	0-30 cm 0-100 m
Accuracy (+10-30°C)	±0.5%	±0.25%	±0.25%	±0.1%	±0.1%
Housing	1.4404/ AISI 316L	1.4404/ AISI 316L	PP	1.4404/ AISI 316L	PPS
Membrane	1.4404/ AISI 316L	1.4404/ AISI 316L	1.4404/ AISI 316L	Ceramic	Ceramic
External diameter	Ø 16 mm	Ø 22 mm	Ø 60 mm	Ø 22 mm	Ø 50 mm
Analogue 4-20 mA	٠	٠	٠	٠	٠
Modbus RS485	٠	٠	٠		
Temperature output	Modbus	Modbus / PT100	Modbus		
Approvals	CE	CE	CE		ATEX (U) CE

EXPERT CAN BE USED WITH

Dpen channel flow converter 713 [page 49]





RTU & Controllers [page 14] Chatter data logger [page 24]

Fittings [page 69]

# SHUTTLE® ULTRASONIC LEVEL TRANSMITTER

The Shuttle ultrasonic level transmitter measures the distance to a liquid and is used primarily to measure the level in tanks, pump wells, sludge tanks, storm flow weirs, channels, etc. The transmitter is not in physical contact with the liquid measured.

Shuttle sends a strong, narrow ultrasonic pulse to achieve stable and reliable measurements even from turbulent and polluted surfaces.

The transmitter is simple and logical to operate. The instrument is intelligent; it recognizes and eliminates signal impacts from its surroundings, e.g. piping and flanges inside a well.

Shuttle needs no operation after initial set-up. The instrument has an automatic start function. The sensors cover measurement ranges from 0-10 cm up to 0-25 m.







TRANSMITTER	200570	200640/41/42	200630/31/32	200660
	Fluids, Solid materials	Fluids, Solid materials	Fluids, Solid materials	Fluids, Solid materials
Depending on sensor	15 m in fluid 6 m in solid	12 m in fluid 5 m in solid	25 m in fluid 10 m in solid	10 m in fluid 5 m in solid
	30 KHz	40 KHz	30 KHz	50 KHz
	3 °	7 °	6 °	6 °
٠				
2				
<b>(!</b> ) ⊂ €	CE	APPROVED CE	1) FM CE	CE
	Depending on sensor	Fluids, Solid materials     Depending on sensor   15 m in fluid 6 m in solid     30 KHz     3°     2	Fluids, Solid materialsFluids, Solid materialsDepending on sensor15 m in fluid 6 m in solid12 m in fluid 5 m in solid30 KHz40 KHz3°7°211 m 2 m11 m 2 m	Fluids, Solid materialsFluids, Solid materialsFluids, Solid materialsDepending on sensor15 m in fluid 6 m in solid12 m in fluid 5 m in solid25 m in fluid 10 m in solid30 KHz40 KHz30 KHz3°7°6°211 c11 c11 c

1) Does not apply in 200632 and 200642

#### SHUTTLE CAN BE USED WITH

Dypen channel flow converter 713 [page 49] + Fittings [page 68-69]



#### Choose separate sensor and electronics modules to get the optimal sensor for the job.



# FLOAT SWITCH 7030

Float switches are often used in environmental engineering systems, such as pump stations and water treatment plants. It is therefore important that the float switches do not contain mercury.

Float switch 7030 has an electromechanical contact system. The float switch has a built-in hermetically sealed micro-switch, which is activated by a moving weight. The weight activates the micro-switch, when the position of the float switch in the water changes. Float switches are often used in overflow prevention systems.

We supply a counterweight (accessory), which ensures that the float switch remains submerged at all times. The differential is adjustable and the counterweight ensures that the cable bend is smooth.



## **CONDUCTIVITY LEVEL SWITCH 501**

ON/OFF level switches are often used as a simple method of controlling pumps and valves and to alert high or low levels and warn that there is water on the floor.

MJK's conductivity level switch comprises an electrode base for up to four electrodes. The stainless steel electrodes can be cut to the desired length and connected via the electrode base to the amplifier. The amplifier can be set to either pump in or out of the tank.

The electrode base can be fitted on a standard bracket - see page 68.







FEATURES				
LEVEL SWITCH	7030	501	ELEKTRODE BASE	ELECTRODE ROD
Application	Wastewater, Process fluids	Process fluids	Process fluids	Process fluids
Material	PP		POM 1.4404 / AISI 316L	Rubber cable 1.4404 / AISI 316L
Digital outputs	1	1		
Cable lengths	13 / 20 / 30 m			6 / 15 m
Switch	Max. 250 VAC / 16A	Max. 250 VAC / 4A		
Approval	CE	CE	CE	CE

#### LEVEL SWITCH AND 501 CAN BE USED WITH



Open channel flow meter 713 [page 49] + Fittings [page 68-69]











[ Flow measurement is a process used frequently in drinking water and wastewater treatment plants. MJK flow meters are used to accurately determine water volumes, control processes and perform various cal-culations e.g. water charges. MJK flow meters are also used to measure and control industrial applications. ]



# FLOW MEASURING IN CLOSED PIPE SYSTEMS AND OPEN CHANNELS

MJK produces both electromagnetic flow meters to measure conductive fluids in pipe systems and open channel flow converters to measure flow in weirs and measurement flumes. MJK flow meters are primarily supplied for use in drinking and wastewater processing plants, but we also have flow meters for industrial and aquaculture applications.

#### ELECTROMAGNETIC FLOW MEASUREMENT

MagFlux electromagnetic flow meters are used for pressurized closed pipe systems. Thanks to a versatile and modular design, MJK's sensors and converters cover a broad range of applications and can be combined to meet specific requirements.

MJK offers a wide range of sensors and converters with very competitive specifications. Our instruments are designed for flexibility and can be used in many different systems.



# **OPEN CHANNEL FLOW MEASUREMENT**

MJK has many years of experience of producing open channel flow meters for use in open channels and partly filled pipes. The present generation of open channel flow meters is adaptable to any weir or flume. Flow calculation follows ISO standard recommendations to the letter.

MJK open channel flow meters are supplied with ultrasonic or hydrostatic sensors.

## MAGFLUX® ELECTROMAGNETIC FLOW METER

MagFlux electromagnetic flow meters deliver very stable and accurate flow measurements in any conductive liquid in a pressurized closed pipe system.

MagFlux flow meters have no moving parts and have no hydraulic influence on the flow in the pipe system. The measurement method used is very accurate over a wide measurement area.

We have developed an outstanding sensor measuring method for MagFlux. An individual sensor calibration code adapts the converter automatically to communicate with the sensor. The calibration code includes calibration data, nominal diameter and sensor features. Once the calibration code is entered, the MagFlux flow meter is ready to operate. The calibration code means there is no need to make difficult adjustments in the field.





VERSATILE CONVERTER

MagFlux can be supplied with the converter mounted directly onto the sensor, or it can be mounted on a wall or panel. The display unit can be attached to the converter or mounted at a distance of up to 1,000 m from the measurement site. This means that you can mount both the converter and the display in the most practical spot.



COMPACT MOUNTING







PANEL MOUNTING



FEATURES					
MAGFLUX®		SENSOR 7100	SENSOR 7200	MAGFLUX®	CONVERTER
Application		Process fluids	Wastewater, Process fluids	Measurement range	Depends on sensor
Sizes	min. max.	DN15 DN1000	DN20 DN2000	Fitting	Compact / Wall
Accuracy (≥0.2m/s	5)	0.25 %	0.25 %	Housing	Fibreglass-reinfor- ced polycarbonate
Fluid flow speed	min. max.	0.2 m/s 10 m/s	0.2 m/s 10 m/s	Analogue output	4-20 mA
Flange	EN ANSI AWWA	EN-1092-1 B 16.5 C207-01	EN-1092-1 B 16.5 C207-01	Digital outputs	2
Liner		PTFE	Hard rubber	Built-in communication	Modbus RS485
Housing <sup>1)</sup>		Epoxy painted steel	Epoxy painted steel	Network compatibility <sup>4)</sup>	Modbus RS485 / Profibus DP
Electrodes <sup>2)</sup>		1.4571 / AISI 316 Ti	1.4571 / AISI 316 Ti	Built-in data logger	360,000 logs and graph view
IP protection class	5	IP 67 / 68	IP 67 / 68	IP protection class	IP 67
Reversible flow dir	rection	٠	۰	Remote display	Up to 1,000 m
Built-in liquid earth electr	ode <sup>3)</sup>	٠	۰		
Approval		CE	CE	Approvals	CUL US LISTED CE
1) Housing and flange can also l				4) Order separately	

2) Electrodes can be supplied as HASTELLOY C, platinum or titanium 3) From DN50

#### MAGFLUX CAN BE USED WITH





# DIMENSIONING YOUR FLOW SENSOR

MINIMUM / MAXIMUM FLOW AND STANDARD mA SETTINGS						
S	Size	Qmin = 0.2 m/s	Qmax = 10 m/s	20 mA		
DN	[inch]	[l/h]	[l/h]	[l/h]		
15	1/2"	127	6362	5000		
20	3/4"	226	11304	10000		
25	1"	353	17676	20000		
32	11⁄4"	579	28944	30000		
40	11⁄2"	905	45360	50000		
50	2"	1414	70560	75000		
DN	[inch]	[m³/h]	[m³/h]	[m <sup>3</sup> /h]		
65	21/2"	2.39	119	100		
80	3"	3.62	181	200		
100	4"	5.65	283	300		
125	5"	8.84	442	400		
150	6"	12.7	636	600		
200	8"	22.6	1131	1000		
250	10"	35.3	1767	2000		
300	12"	50.9	2545	2500		
350	14"	69.3	3464	3000		
400	16"	90.5	4524	4500		
450	18″	115	5726	6000		
500	20″	141	7069	7000		
600	24″	204	10179	10000		
700	28″	277	13854	15000		
800	32″	362	18095	20000		
900	36″	458	22902	25000		
1000	40″	565	28274	30000		
1200	48″	814	40715	40000		
1400	54″	1100	55400	55000		

# ACCURACY

MagFlux flow meters set the gold standard for precision. MagFlux meters offer full accuracy down to 0.25 % at a speed of 0.2 m/s. This ensures optimal accuracy to measure even low rates of flow, but it also expands the flow meter's dynamic measuring range whilst keeping the high accuracy.



# **BUILD-IN LENGTHS**

MJK flow sensors are easy to install. They have ISO-standard installation buildin lengths. You need a straight inflow pipe, which is only 3 x the diameter and a straight outflow pipe, which is only twice the diameter of the flow meter. For smaller dimensions, the sensor itself - to a great extent - meets all build-in lengths requirements.



MagFlux is supplied as standard with protection class IP67. However, if you use our gel potting kit, you can increase the protection class to IP68, which means that MagFlux can withstand constant submersion in water (max. 10 m water column pressure).







# MAGFLUX® Q

MagFlux Q is a corrosion-free electromagnetic flow meter developed for processes in saline fluids. This specific feature makes the sensor ideal for measuring at low speed, and it can be mounted with a build-in length down to 1:1 of the DN.



# DIMENSIONING YOUR FLOW SENSOR

MINIMUM / MAXIMUM FLOW AND STANDARD mA SETTINGS				
S	ize	Qmin = 0.2 m/s	Qmax = 10 m/s	20 mA
DN	[inch]	[m³/h]	[m³/h]	[m <sup>3</sup> /h]
50	2″	1.41	70,56	75
80	3″	3.62	181	200
100	4″	5.65	283	300
150	6″	12.7	636	600



FEATURES				
		MAGFLUX® Q	MAGFLUX®	CONVERTER
Application		Process fluids	Measurement range	Depending on sensor
Sizes	min. max.	DN50/80/100/150 PN16	Fitting	Compact / Wall
Accuracy (≥0.2m/s	.)	0.25 %	Housing	Fibreglass-reinf. polycarbonate
Fluid flow speed	min. max.	0.2 m/s 10 m/s	Analogue output	4-20 mA
Flange		EN-1092-1	Digital outputs	2
Liner		ABS	Built-in communication	Modbus RS485
Housing <sup>1)</sup>		ABS	Network compa- tibility 4)	Modbus RS485 / Profibus DP
Electrodes		Hasteloy	Built-in data logger	360,000 logs and graph view
IP protection class		IP 67 / 68	IP protection class	IP 67
Optional flow dire	ction	٠	Remote display	Up to 1,000 m
Built-in liquid earth electro	ode <sup>2)</sup>	٠		
Approval		CE	Approvals	CUL US LISTED CE
1) Housing and flange can also b	e supplied a	as steel 304/316	4) Order separately	

#### MAGFLUX Q CAN BE USED WITH

2) From DN50





## 713 OPEN CHANNEL FLOW CONVERTER

The MJK 713 flow converter measures the water level behind a weir or in a measurement flume. The converter measures the level and calculates flow values, displayed as actual flow and total flow. The 713 flow converter is supplied with an ultrasonic sensor or hydrostatic transmitter to measure the level.

The 713 flow converter has a 4-20 mA output signal and 5 digital outputs. The 713 flow converter's outputs can be connected to an external instrument or a data logger to record flow volumes. The digital outputs are used for e.g. an external alarm device to warn of excessively high or low flow, an external flow counter, or a liquid sampler controlled proportionate to flow.





#### FLUMES

We offer a range of prefabricated flumes as accessories for the 713 flow converter. MJK supplies 3 types of flumes: Parshall, Venturi, and Palmer & Bowlus. They are available in stainless steel, PVC or fibreglass-reinforced polyester, depending on the type.

MJK's flumes are often used in water treatment plants and in storm flow locations, or industrial wastewater outlets, where they can be used with the 713 flow converter to calculate wastewater duties.









FEATURES	
OPEN CHANNEL FLOW	713 FLOW CONVERTER
Measurement range	Depending on sensor
Analogue 4-20 mA	•
Digital outputs	5
Approvals	(l) C €

#### 713 OPEN CHANNEL FLOW CONVERTER CAN BE USED WITH









ULTRASONIC	HYDROSTATIC
min. 10 cm max. 3 m	min. 10 cm max. 3 m
CE	







# ANALYTICAL

[Analytical instruments provide water supplies and wastewater treatment plants data on dissolved oxygen, suspended solids, turbidity, pH and other important parameters. The aquaculture sector also shows a continuously increasing interest in these instruments, in particular for environmental monitoring purposes. ]



# ANALYTICAL MEASUREMENT

Our range of analytical transmitters includes instruments to measure dissolved oxygen, suspended solids, turbidity, pH and redox. We carry a range of converters, sensors, fittings and brackets to mount instruments in open containers and on pressurized pipe systems. Our range is consistently up-to-date and competitive. The instruments can be used as stand-alone units or connected with other MJK measuring instruments and controls to create network solutions.

## PH & REDOX

pH and redox measurement is an element in many water supply processes, in wastewater treatment plants and, above all, in industrial processes. pH measurement is used in neutralization, sedimentation and other chemical processes.



#### **TURBIDITY AND SOLIDS**

When measuring turbidity and suspended solids, you measure particles in water. At waterworks, turbidity is most commonly measured to ensure that the drinking water is pure.

# **DISSOLVED OXYGEN**

Dissolved oxygen is often measured in modern water treatment plants to control aeration so that sufficient oxygen is added to the water to allow a bacterial culture to grow. In order to avoid unnecessary expenses incurred in connection with aeration, precise measuring and control of the oxygen concentration are important aspects at the plants.

## **OXIX® DISSOLVED OXYGEN SYSTEM**

The Oxix dissolved oxygen transmitter is a unique system, which uses a technically advanced optical sensor to communicate with a specially developed converter.

Oxix is perfect for measuring dissolved oxygen in wastewater and process fluids. The optical sensor in Oxix has no replaceable membrane, contains no chemicals, electrolytes or similar substances and requires no calibration entailing that Oxix has unique functionalities and benefits compared to alternative products.

If the sensor is connected to a water or compressed air supply, the converter controls automatic cleaning of the sensor's optical window, making the system practically maintenance-free.



#### FEATURES OXIX<sup>®</sup> SENSOR **SUSIX**® 0-25 g/l 0.001-999 Measurement range 0.001-400 (dissolved oxygen) Submersion PVC / PP 1.4404 / Housing 1.4404 / AISI 316L Modbus R

25485	۰	
ion class	IP 68	
	CE	

#### SUSIX® SUSPENDED SOLIDS AND **TURBIDITY SYSTEM**

The SuSix sensor is produced in acid-resistant, polished steel with a chrome dioxide coating to ensure minimal particle adhesion to the surface. The optical windows are made of scratch-resistant sapphire glass. Thanks to these hi-tech materials, very little manual cleaning is required.

When applied in especially demanding environments where the sensor is likely to become soiled, we also supply a mechanical cleaning system.

The SuSix sensor has six optical windows and the patented measurement system measures turbidity in pure water and concentration in any thicker liquid, including sludge. Turbidity is measured in accordance with ISO 7027 standards.

MJK ANALYTICAL MEASUREMENT EQUIPMENT CAN BE USED WITH

Fittings [page 68-71]

Fitting

IP protecti

Approval





Flo

IP

Subm



	CONVERTER
Measurement range	Depends on sensor
Fitting	Compact / Wall
Housing	Fibreglass-reinfor- ced polycarbonate
Analogue output	4-20 mA
Digital outputs	2
Built-in communication	Modbus RS485
Network compa- tibility <sup>1)</sup>	Modbus RS485 / Profibus DP
Built-in data logger	360.000 logs and graph view
IP protection class	IP 67
Remote display	Up to 1,000 m
Approvals	CULUS LISTED CE
	range Fitting Housing Analogue output Digital outputs Built-in communication Network compa- tibility <sup>1)</sup> Built-in data logger IP protection class Remote display

1) Order separately

#### PHIX<sup>®</sup> COMPACT

pHix Compact is a ground-breaking and very practical alternative to customary pH and redox potential transmitters. It is simple to install and easy to use.

pHix Compact is an all-in-one electrode, fitting and transmitter unit.

The design eliminates the need for fittings and there are no fragile cable connections.

When installed in the simplest way, you just connect pHix Compact to a display and a 12 - 30 V DC power supply.

For measuring in open channels and containers, the pHix Compact transmitter is fitted on a pipe, which is immersed in the liquid.

For in-line measuring, pHix Compact is mounted into a 2" pipe connection.

The pHix Compact has IP68 class enclosure protection and can therefore withstand an external pressure of up to 1 bar, corresponding to submersion at a depth of 10 meters of water.

#### PHIX<sup>®</sup> COMPACT PPS

pHix Compact PPS has been developed to work permanently in aquaculture plants with saltwater, or offshore.

This version of the well-known pHix Compact is non-corrosive and created to ensure measurements of pH values in saltwater or heated saltwater, e.g. in offshore installations.

#### FEATURES

Measurement

Redox

Fitting

Housing

Analogue 4-20

Power supply

HART

IP protection

Approval

PHIX COMPACT / PPS CAN BE USED WITH

Fittings [page 71]



	PHIX <sup>®</sup> COMPACT	PHIX <sup>®</sup> PPS
area	0-14 pH 0-50 / 80 °C	0-14 pH 0-50 / 80 °C
	-1,000 +1,000 mV	-1,000 +1,000 mV
	Flow, Submersion	Flow, Submersion
	PPS 1.4404 / AISI 316L	PPS
0 mA	٠	٠
	12-30 V DC	12-30 V DC
	٠	٠
class	IP 68	IP 68
	CE	CE

# **ENVIRONMENT PROTECTION**

Many water treatment plants and industries are required to analyze the water from their wastewater outlets before discharging it into the natural environment. The MJK Sampler 780 is ideal for these purposes.

# STRONG SAMPLER

When you want to collect water samples from a wastewater plant or stream, the equipment you use has to meet a number of stringent requirements.

For many years, MJK has supplied samplers to treatment plants and industrial customers to collect samples at pre-determined intervals or in proportion to volume flows.



# RELIABLE RAIN GAUGE

rainAhead is a strong, reliable and up-to-date rain gauge, which measures rainfall intensity and volume.

The unique self-emptying bowl is a patented solution, which makes rainAhead one of the most accurate rain gauges on the market.







#### SAMPLER 780

The MJK Sampler 780 sets the gold standard for the design and function of a sampler.

The cabinet is welded in stainless steel. Parts that come into contact with fluids are made of either plastic or glass. The unit is operated from a waterproof touch panel.

We have done our utmost to create an instrument that is extremely reliable in operation. The sampler is waterproof (IP 67). The valves are fitted inside the cabinet, while parts in contact with fluids (the parts that need cleaning) are easily accessible on the outside.





FEATURES Sample volume Fitting Housing IP protection c Approval SAMPLER 780 CAN BE USED WITH Open channel flow converter 713 [page 49]





SAMPLER 780
20 - 500 ml
Wall
1.4404 / AISI 316L
IP 67
CE

# RAINFALL VOLUME

Climate change means that accurate measurements and reliable data are a must. Rainfall volume is interesting as the data can be used when planning new installations and to control e.g. pumping and wastewater storage.

# RAINAHEAD

rainAhead is a strong, reliable and up-to-date rain gauge, which measures rainfall intensity and volume.

The rain gauge can be fitted to a stand. It collects rain in a funnel, which leads the water into the rainAhead measuring system. rainAhead is calibrated from the factory at 0.2 mm rain per pulse. The unique self-emptying bowl is covered by a global patent. rainAhead is one of the most accurate rain gauges on the market.

A Mµ Connect or Chatter unit can measure and calculate rainfall intensity and volume and activate pumps to avert storm flow.

FEATURES

Capacity



# Solution Fitting

Housing

IP protection c

Approval

RAINAHEAD CAN BE USED WITH

RTU & Controllers [page 11-28]





	RAINAHEAD
	max. 2.4 mm per minute
	0.20 mm per pulse
	Fitting / Stand
	Styrosun
class	IP 68
	CE

+ Fittings [page 68]



# ACCESSORIES

[Precise and reliable measurement requires that sensors and transmitters are installed correctly whilst taking into account the need for regular cleaning and maintenance.]





## ACCESSORIES

MJK's comprehensive range of accessories and parts includes brackets for mounting sensors to walls or railings. Our brackets have a modular design and can be combined. The system also includes brackets and fittings for mounting converters.



#### **BRACKETS AND FITTINGS**

The brackets and fittings shown here are modular and can be combined to fit any MJK equipment or system.

#### Universal bracket

Universal pipe bracket. Developed with grip clamps for mounting on pipes. Our universal pipe bracket can be mounted on most brackets and fittings.



#### Extension bracket

Extension bracket for wall or channel wall mounting. Suitable for use with analysis sensor fittings. Two-part bracket - easy to detach for cleaning and maintenance. The fitting can be released using a foot.



#### Shielding

To protect converters from the worst impacts of the weather. Supplied with mounting hole for antenna.

#### Ultrasonic sensor bracket

Standard ultrasonic sensor fitting to mount on a wall or inside a well. The fitting is also suitable for electrode bases.

Fitting for ultrasonic sensor in open channels and gutters. Available in two widths - adapts to most channel widths.





#### Expert cable protector

For use with cable-hung pressure transmitters. Cable protector available in several different sizes.



Stainless steel protective cap and fittings set. Protects MagFlux, Oxix and Susix from falling objects, branches, etc.

#### Converter mounting plate

Makes it possible to fit converters to an uneven surface. The mounting plates are compatible with the universal bracket. Can also be used to mount converters on pipe or stand.

#### Converter panel bracket

Bracket specially designed for narrow or wide converter cabinet. For fitting cabinet in panel front.

#### Converter solar / rain protection

Protects MagFlux, SuSix and Oxix display from strong sunlight / rain / contact.

# Shuttle mounting bracket

Use to fit Shuttle converter to panel front.















#### Angled bracket

Angled bracket to mount Oxix fitting to railings. This bracket ensures that the sensor measures on the surface. Suitable for use with a universal bracket.



#### SuSix<sup>®</sup> in-line fitting

SuSix sensor flow in-line fittings are available with a valve (to remove sensor while it is in use) and as a simpler version, which requires that the pressure is released from the system before removing the sensor.

#### Submersion - Oxix<sup>®</sup> ball float

Floating device for Oxix sensor to measure at the surface. Use with angled bracket.



#### Submersion - SuSix®

Submersion fitting for SuSix turbidity and suspended solids sensor.



#### pHix<sup>®</sup> in-line fitting

pHix Compact can be fitted in pipes and tanks if y install 2" union nut fitting to allow pHix Compact transmitter to mount directly into a pipe or on a ta T-piece not included.



#### DISPLAYS

The displays shown here are used to display measured values and can be used for field and panel mounting.

#### 531

531 is a 4-20 mA loop powered indicator. The display is available as a stand-alone unit or mounted in a cabinet with pressure transmitters, when local indication of measured values is required.



#### 532

532 is a 4-20 mA loop supplied indicator for panel mounting. Available with optional back lighting (requires separate DC voltage connection to the instrument).



#### 533

533 has a 230 V AC power supply and supplies 24 V DC to power a dual-wire transmitter, e.g. pressure transmitter or pHix pH transmitter. The 533 display has 2 output circuits, which can be used either as simple controller or as alarm indication.



## SIGNAL PROCESSING

#### Signal converter

Diff-Calc calculates the difference between two 4-20 mA signals from transmitters. Diff-Calc is specially designed to measure level differences, where Diff-Calc is connected to two ultrasonic or hydrostatic level transmitters. Diff-Calc can be applied for all 4-20 mA signals to calculate temperature difference between pH values, etc.

#### A / mA converter

The Ampere / mA converter is used to measure and monitor motor current where the motor current from one of the phase conductors is converted to an mA signal, so the motor current can be applied for control, monitoring and recording. The converter is supplied with two separate channels and specially designed to monitor twin-pump pumping stations.







### NETWORK

Transmitters and controllers can be connected via a Modbus network, which is included in most MJK units. However, if you also need to communicate with an external system, you are advised to fit a communication module to separate the systems.

#### Modbus

To communicate with an external Modbus network, MJK offers a Modbus module suitable for mounting in the MagFlux, SuSix or Oxix display. MJK Modbus communication module separates the internal network from the external network, e.g. to a PLC. The MJK Modbus module can transmit data from four interconnected MJK transmitters.

#### Profibus

To communicate with an external Profibus network, we supply a Profibus module suitable for mounting in the MagFlux, SuSix and Oxix display. The MJK Profibus module can transmit data from four interconnected MJK transmitters.

#### mA-Bus Converter<sup>™</sup>

The MJK mA-Bus Converter is used to convert mA signals to Modbus so that the measured value can be displayed on an MJK display with e.g. flow. In terms of communication, the mA Modbus Converter operates like, e.g. a MagFlux and can transmit data to an external Modbus or Profibus network.











Secure your investment with MJK Service. Let MJK assist you on service and routine check-up, allowing more effective and efficient use of your resources and time. Our service department offers several solutions that can all be modified to suit your situation. Our experienced technicians can be available on demand, with regular intervals or for complete projects.

# PRIORITYSERVICE

Book our service technicians on short notice. We arrive, handle your assignment and you get invoiced by the hour.

A PriorityService agreement ensures that your service call gets top priority. It is fast and efficient, and your operating terms are secured.

#### **TECHSERVICE**

A TechService agreement ensures that your installed products are being manually checked once a year by an educated MJK technician. The extent of the control visit varies from product to product, but we ensure that operating controls, verification and measuring are up to date.

- Ask your MJK consultant how your products are serviced the best way.

#### PROJECTSERVICE

On larger projects, it can come in handy to have our technician working directly for you for a period of time. This ensures that our service technician knows what is needed on your project in coherence with our products. The MJK service technician becomes your project technician, he's your man.





TechService	



# **TECHNOLOGY AND DESIGN**

MJK products are continuously improved and we strive consistently to introduce new ideas and technologies into our products.



## PRODUCTION

Our production methods and consistent efforts to improve processes and testing ensure that products leaving the factory meet the highest standards of precision and operating reliability.



WAREHOUSE

MJK stocks all standard units with standard measuring ranges and can therefore deliver at short notice.

Intertek



# **SALES & HOTLINE**

Our Sales Team is more than willing to drop by for a chat about your current needs in relation to Xylem's broad range of products. We can supply a single product and comprehensive project solutions.

When you have received an MJK product, we are at your disposal, providing support and advice to ensure that you get the full benefit of your purchase.

## **TRAINING COURSES**

MJK also offers a full programme of training courses, the purpose of which is to teach end-users how to use our products and all the options available to them when they choose an MJK solution. Our training courses also equip the employee to maintain and service your MJK solution in the future.

#### **EXTENDED WARRANTY**

All MJK products are of course delivered with at least one year of warranty, but did you know that MJK Service can provide up to 5 years of warranty? You choose if you want 1, 2, 3, 4 or 5 full years of warranty, the extended warranty works exactly like the standard factory warranty.











# ENVIRONMENTAL GOAL

Through an improved and optimized process, we intend to lower the consumption of natural resources. MJK develops products that will ensure a cleaner, healthier and more efficient drinking water and wastewater environment whilst continuously reducing the energy consumption of the process. We have been doing this for more than 40 years, and we will strive to continue developing our knowledge, abilities and products, because we know that an effective process provides a cleaner environment.



# COMPLETE SOLUTIONS

At MJK travelling from idea to final product is not far. Our sales team is working closely with the developers' team creating new products, solving concrete assignments whilst keeping coherence to the networks and diversity known from the drinking water and wastewater businesses globally.

We prefer to deliver more than just a box, we mount, perform service and maintenance of all MJK products as well as we offer a wide range of specific courses, sharing our knowledge with you.













# Xylem |'zīləm|

1) The tissue in plants that brings water upward from the roots;

2) A leading global water technology company.

Xylem is a global team of more than 15,000 people unified in a common purpose: creating innovative solutions to meet our world's water needs. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work.

We move, treat, analyze and return water to the environment, and we help people use water efficiently, in their homes, buildings, factories and farms. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise, backed by a legacy of innovation.

For more information on how Xylem can help you, go to mjk.com or www. xylem.com



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