Optical D.O. Sensor reduces energy costs

# Increase efficienc 

- Precise measurement with innovative sensor cap
- Low operating costs and minimal maintenance


## - Reduced energy costs

Precise measurement with innovative sensor cap
The innovative geometry of the membrane cap with $45^{\circ}$ angle enables the precise oxygen measurement and avoids flase high readings. Due to the automatic recognition of the calibration free cap, a manual input of the serial number is not needed (potential source of error). The fast and easy cap change saves a lot work and time.

Low operating costs and low maintenance effort
The long lifetime of the cap (3-5 years) ensures sustainable operation and minimized maintenance costs. Further, the moveable sensor mounting enables a self cleaning effect at the measuring window. Additional cleaning with pressured air are possible for special applications, but not required for typical municipal wastewater treatment plants (see figure below).


Convince yourself with our HowTo videos!

Precise measurements, easy cap change and many more advantages.

## WTW at YouTube

Subscribe to our YouTube channel, and be updated about our new video uploads!
http://www.youtube.com/
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## Connectable to the IQ Sensor Net

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SENSOR NET

- For systems 2020 and 282/284
- Can be combined with all IQ Sensors for more parameters
(e.g. $\mathrm{NH}_{4^{\prime}} \mathrm{NO}_{3^{\prime}} \mathrm{NO}_{2}, \mathrm{COD}$, Turb, $\mathrm{TS}, \mathrm{PO}_{4}$ )


## Reduce energy costs by optimal aeration

Not too much, but always enough. Precise measurements allow the control of the oxygen concentration to the perfect value. A moveable mounting with swing mounting prevents too high readings and algae growth.

By means of the FDO® 700 IQ you can increase efficiency and keep costs under control

Dependency of $\mathrm{NH}_{4}-\mathrm{N}$ degradation from oxygen concentration


For more detailed information please visit our website: www.WTW.com/en/iq-sensors
(For convenience use our QR code)

## You want more?

Even more efficiency? Even lower costs? Even higher transparency?
If so, our VARiON® 700 IO for $\mathrm{NH}_{4}$ and $\mathrm{NO}_{3}$ is just the right sensor.


## Technical Data

|  | FDO ${ }^{\text {® }} 70010(S W)$ | FDO ${ }^{\text {® }} 701$ (SW) |
| :---: | :---: | :---: |
| Measuring range | $\begin{gathered} 0 \ldots 20.00 \mathrm{mg} / \mathrm{l}(0 \ldots 20.00 \mathrm{ppm}) \\ 0 \ldots 200.0 \% \end{gathered}$ |  |
| Resolution | $\begin{gathered} 0.01 \mathrm{mg} / \mathrm{l}(0.01 \mathrm{ppm}) \\ 0.1 \% \end{gathered}$ |  |
| $\mathrm{t}_{90}\left(\right.$ at $25^{\circ} \mathrm{C}$ ) | < 150 s | $<60$ s |
| Incident flow | Not required |  |
| Sensor monitoring | Monitoring of membrane function |  |
| Pressure resistency | Up to 10 bar |  |
| Operating temperature | $-5^{\circ} \mathrm{C} \ldots+50^{\circ} \mathrm{C}$ | $-5^{\circ} \mathrm{C} \ldots+40^{\circ} \mathrm{C}$ |

## Dimensions FDO® 700



## Order Information

| Model | Description | Order No. |
| :---: | :---: | :---: |
| FDO® 700 IQ | Digital calibration free optical oxygen sensor, with factory calibrated membrane cap SC-FDO ${ }^{\circledR} 700$, without connection cable. | 201650 |
| FDO® 701 IQ | Digital calibration free optical oxygen sensor with faster response time, with factory calibrated membrane cap SC-FDO ${ }^{\circledR} 701$, without connection cable. | 201660 |
| FDO ${ }^{\circledR} 700$ IQ SW | Like FDO ${ }^{\circledR} 700$ IQ, but higher resistency to corrosion | 201652 |
| FDO® 701 IQ SW | Like FDO® 701 IQ, but higher resistency to corrosion | 201653 |
| SC-FDO® 700 | Sensor cap for FDO® 700 IQ (SW) | 201654 |
| SC-FDO® 701 | Sensor cap with faster response time for $\mathrm{FDO}^{\circledR} 701 \mathrm{lQ}$ (SW) | 201655 |
| MSK FDO ${ }^{\circledR} \mathrm{CS}$ | Membrane protection cap, for protection against fishes and rock slide | 205253 |
| SACIQ-1,5 | Sensor adapter cable, with IP 68 waterproof connection, length 1.5 m | 480040 |
| SACIQ-7,0 | Sensor adapter cable, with IP 68 waterproof connection, length 7 m | 480042 |
| SACIQ-15,0 | Sensor adapter cable, with IP 68 waterproof connection, length 15 m | 480044 |

