

EK890 – with StreamTec heat management



Product features – Body

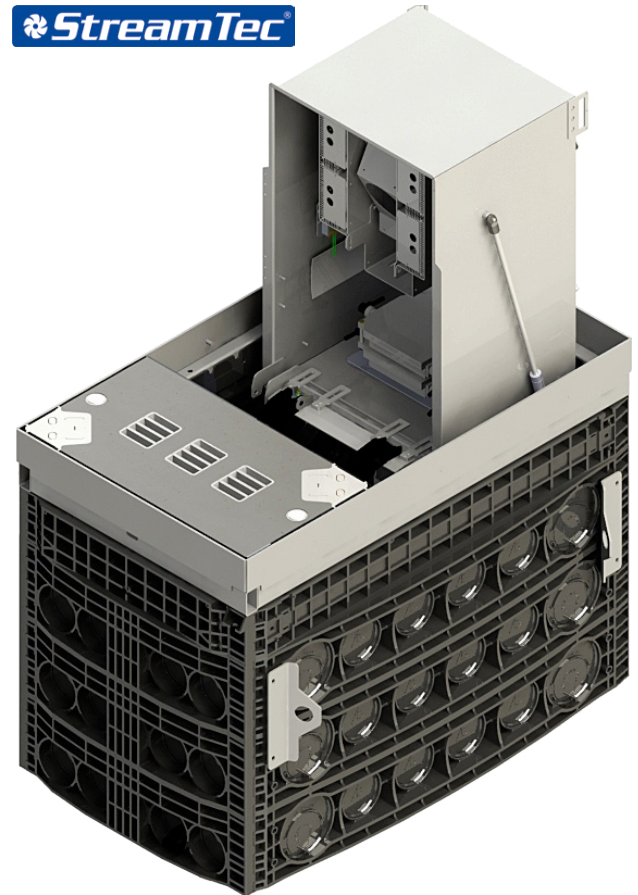
- ▲ **Innovative manhole structure with 3D ribFrame**
Modular, resistant, and durable system solution that can be adapted to the specific location
- ▲ **Modular manhole structure**
Flexible, adapts to the respective situation, and easy to handle
- ▲ **Modified polycarbonate (PC)**
Hard-wearing, certified groundwater compatibility, UV-resistant

Product features – Cover

- ▲ **Submersion hood (swivelling)**
Ideal for areas at risk of flooding
- ▲ **Cover/submersion hood safety catch**
Enhanced accident prevention and safe operation of the equipment compartment
- ▲ **Various manhole cover types**
Variable surface material, design and structure can be adapted; blends into the cityscape
- ▲ **Lock accessible only with a special construction key**
Protection against unauthorised access – Security
- ▲ **Solid cover**
Cover/lid can be safely removed by mechanical lifting equipment
- ▲ **Step protection/trip guard**
Prevents people from falling in when the cover is open
- ▲ **Opening support for submersion hood**
Ease of opening due to low weight of submersion hood, or using two stainless steel gas springs

Submersion hood extension variants

- ▲ Telecommunication equipment
- ▲ Support for 19-inch technology
- ▲ ETSI frame
- ▲ Mounting panel for individual configuration



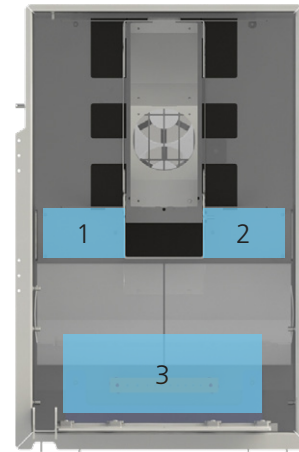
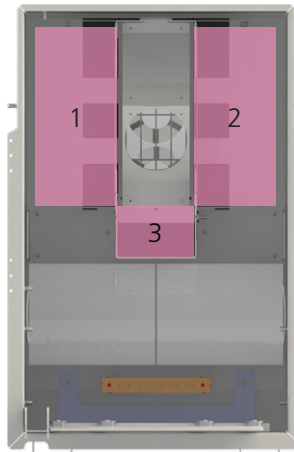
▲ EK890 underground distribution system with open cover and submersion hood

Functioning of StreamTec

When Langmatz polycarbonate manholes are used as underground distribution systems, the fixtures are generally protected against the ingress of water by a submersion hood concept. Under its product designation "EK 890-StreamTec - a system with active heat management", Langmatz now offers a cooling system for underground systems, to prevent active components from overheating.

With the help of pre-installed fans, this system dissipates high power losses and/or heat from the components through the exchange of air masses. The fans induct fresh air from outside through the system of pipes, and circulate it around the installed active modules. The heated air is subsequently discharged from the manhole via openings in the cover. A quick glance at the performance characteristics shows that systems with power losses of up to 500 watts at an ambient temperature of 38° C can be operated safely in the underground distribution system. The system is designed to be fully redundant and it can also emit an alarm signal to a control centre in the event of a fault.

Structure - Active and passive technology



EK890 installation space - active technology

Installation space 1+2

Height: 360 mm
Width: 160 mm
Depth: 350 mm

Installation space 3

Height: 70 mm
Width: 150 mm
Depth: 370 mm

EK890 installation space - passive technology

Installation space 1+2

Height: 100 mm
Width: 160 mm
Depth: 370 mm

Installation space 3

Height: 160 mm
Width: 400 mm
Depth: 260 mm

Technical data

Designation	EK890
Clear dimensions	650 x 1165 mm (WxD)
Overall external dimensions	841 x 1326 x 970 mm (WxLxH)
Total weight	Approx. 300 kg
Cover weight	Approx. 150 kg
Max. load class	D 400 (40 tonnes, 400 kN) as per DIN EN 124
Passive heat dissipation	75 W
Air circulation	180 W
Active heat dissipation	500 W
Protection rating	closed: IP 48/open: IP 44 (as per DIN EN 60529)
Cover material	Cover: 3-section; paveable, concrete-lined (tray depth 65 mm) Steel frame: steel (hot-dip galvanised)
Submersion hood material	Stainless steel (V2A)
Body material	polycarbonate (PC)