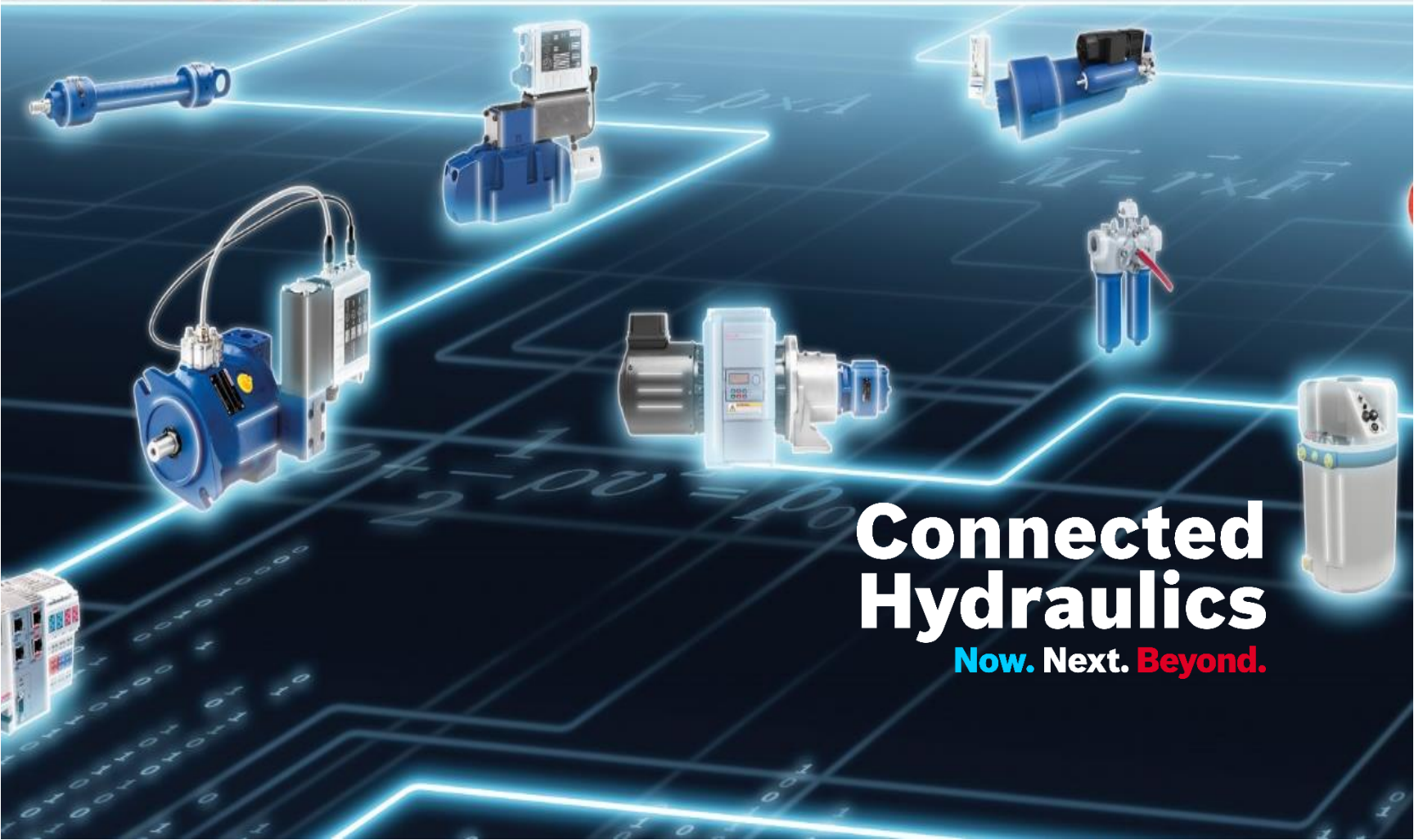


未來工廠

液壓智能動力站

CytroBox

CytroBox - The Hydraulic Power Unit of the Future



**Connected
Hydraulics**

Now. Next. Beyond.

Future starts now

CytroBox

The Hydraulic Power Unit of the Future



CytroBox - The HPU of the Future

Your requirements for the HPUs of the future

More space

by innovative design

更多的空間

Less noise

by encapsulation of noise sources

減少躁音

Less CO2 emissions

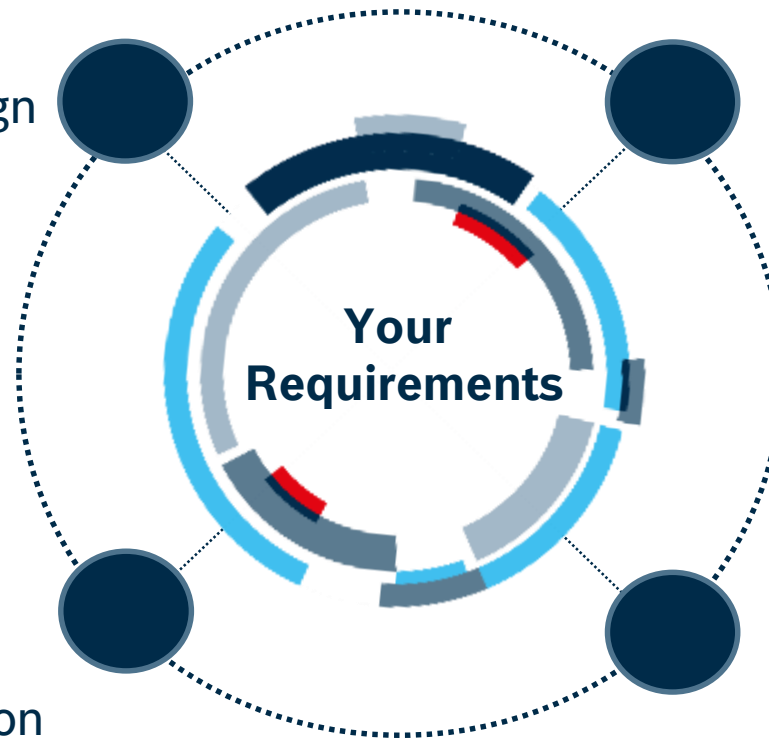
by efficient operation

減少碳排放

More availability

by intelligent IoT solutions

更多的可用性



CytroBox - The HPU of the Future

The solution for your requirements



The Future is uncompromisingly compact

未來是毫不妥協的緊湊

Less Space.

More Power.



The Future is really quiet

未來是真的安靜

Less Noise Emissions.

More Flexibility.



The Future is conserves on Energy

未來是節約能源

Less Consumption.

More Efficiency.



The Future is connected

未來是相連的

Less Surprises.

More Availability.

CytroBox - The HPU of the Future

The Future is uncompromisingly compact

Less Space. 更小的空間
More Power. 更大的動力

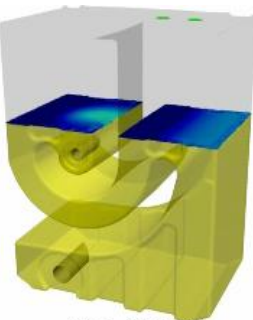
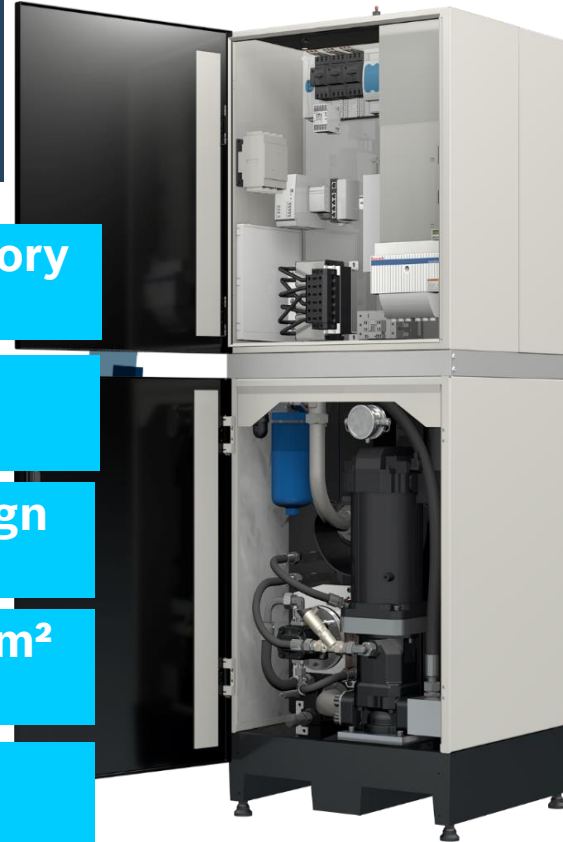
Decreased space usage in your factory
降低您工廠使用空間

Passive and active oil treatment
被動與主動式的油處置

Flow optimized tank design
流量優化的油箱設計150升

Foot print lower than 0,5 m²
足跡(底部)低於0.5平米

Lightweight Material
輕質材料



Time: 0.02 (s)

CytroBox - The HPU of the Future

The Future is uncompromisingly compact

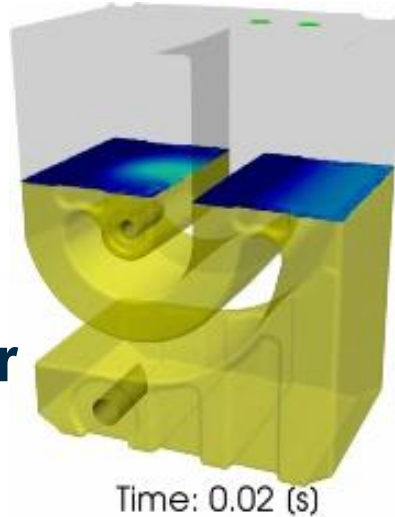


Conventional reservoir

CFD Simulation

CytroBox reservoir

600
Liter



150
Liter

General conditions

3-5x Pump flow

Customer benefits

80% Weight reduction

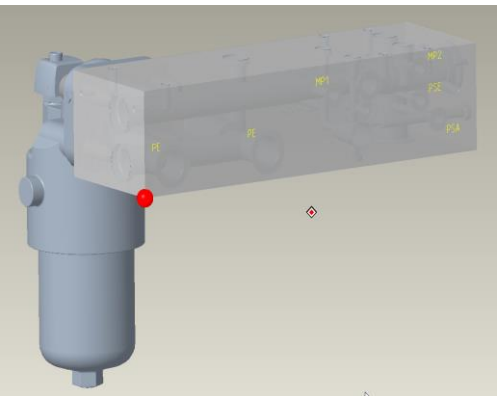
75% Reduced oil volume

CytroBox - The HPU of the Future

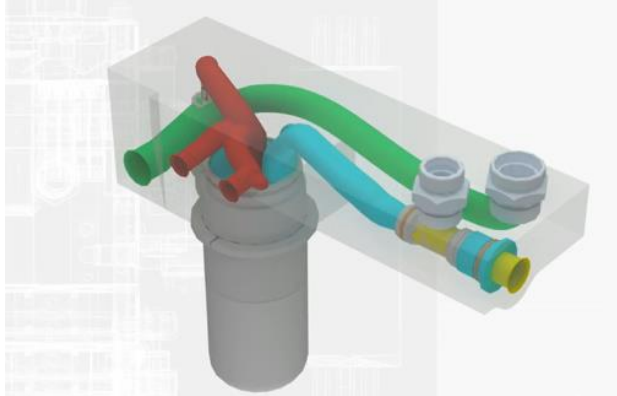
The Future is uncompromisingly compact



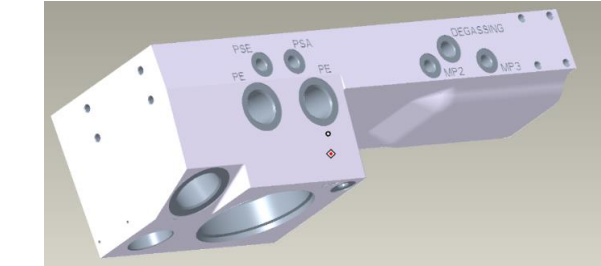
Conventional Manifold



CFD Simulation



CytroBox Manifold



Compact and weight reduction
緊湊性和輕量化

Integration of component functions (e.g. Pressure Filter)
部品功能性的集成 (例如: 壓力過濾器)

Optimization of cutting time and reduction of inside manual deburring process
優化切削時間和減少內部手動去毛邊過程

Customer benefits

Flow-optimized and compact
Less pressure loss and heat emission
Easy additional functional integration

CytroBox - The HPU of the Future

The Future conserves on Energy

Less Consumption. 減少耗能
More Efficiency. 更高效率

Energy on Demand
能量隨需求而變

Sytronix - Variable Speed Drive
Sytronix - 變速驅動

Up to 80% Energy Saving compared to the Asynchronous Technology
與非同步技術相比，節能可高達80%



CytroBox - The HPU of the Future

The Future conserves on Energy



Conventional solution:
Motor with constant speed

Variable Speed Servo-Drive

CytroBox solution

Size: -90%

Weight: -80%

Energy: up to -80%



CytroBox - The HPU of the Future

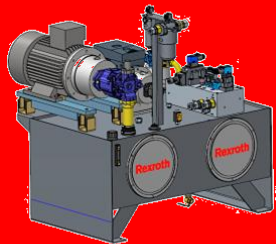
The Future conserves on Energy



Application example: Tire Press

Power [kW] 18

>85 dB(A)



Asynchronous

1500 rpm

Variable Displ.

100 ccm

150 l/min

Motor

Max. Speed

Pump

Pump Size

160 l/min

< 75 dB(A)



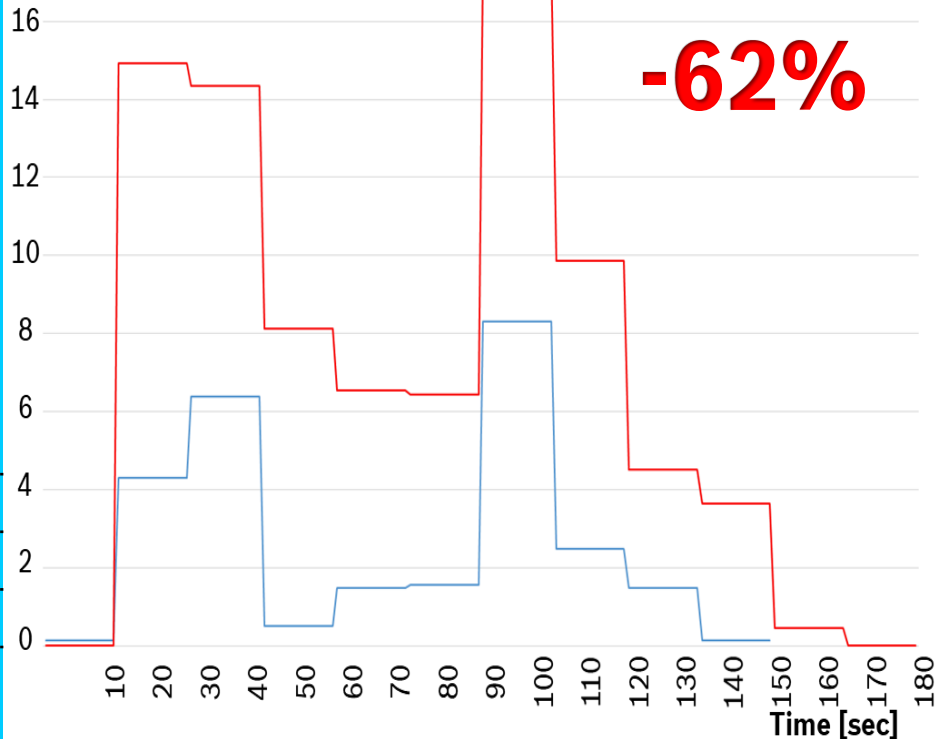
Servo

2600 rpm

Fixed Displ.

63ccm

160 l/min



CytroBox - The HPU of the Future

The Future is really quiet

Less Noise Emission. 噪音少
More Flexibility. 更靈活

Improve your work environment
改善您的工作環境

Damping trough polymer concrete foundation
聚合物基礎當阻尼

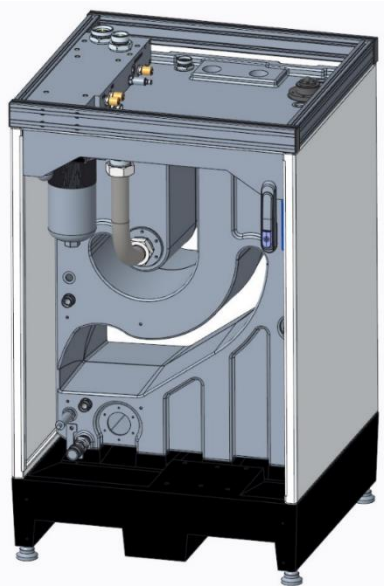
Closed acoustic housing
封閉式隔音罩

Less than 75 dB(A)
少於 75 dB(A)



CytroBox - The HPU of the Future

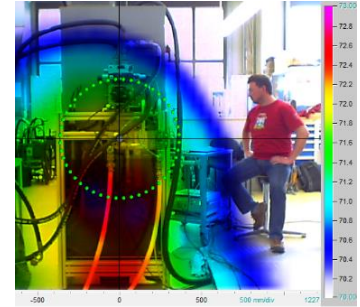
The Future is really quiet



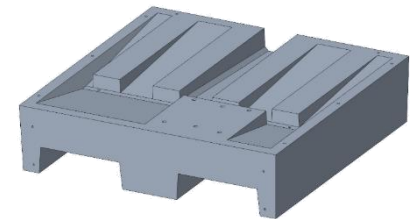
**Enclosed housing
with sound
absorbing material**



< 75 dB(A)



**Optimization by
acoustic camera**



**Vibration damping by
polymer concrete**

CytroBox - The HPU of the Future

The Easy-to-Use and Preventive IoT Service

Less Surprises. 不吃驚
More Availability. 更多可用性

Integrated IoT Service - CytroConnect
集成物聯網服務 - CytroConnect

All information accessible, anytime - Anywhere
隨時隨地掌握所有信息

IoT-ready = Multi Ethernet & Open Core Interface
物聯網就緒 = 以太網和開放核心接口

Intelligent automation features integrated
集成了智能自動化功能

Sensor package preinstalled
預裝傳感器組



CytroBox - The HPU of the Future

The Future is connected



CytroConnect service – Your Advantages

Easy & risk-free IoT Service

輕鬆無風險的物聯網服務

Plug & Play – No installation work

即插即用 - 無需安裝工作

Available everywhere – Web Browser access

隨處可用 - Web 瀏覽器存取

No minimum subscription period

沒有最低訂閱期

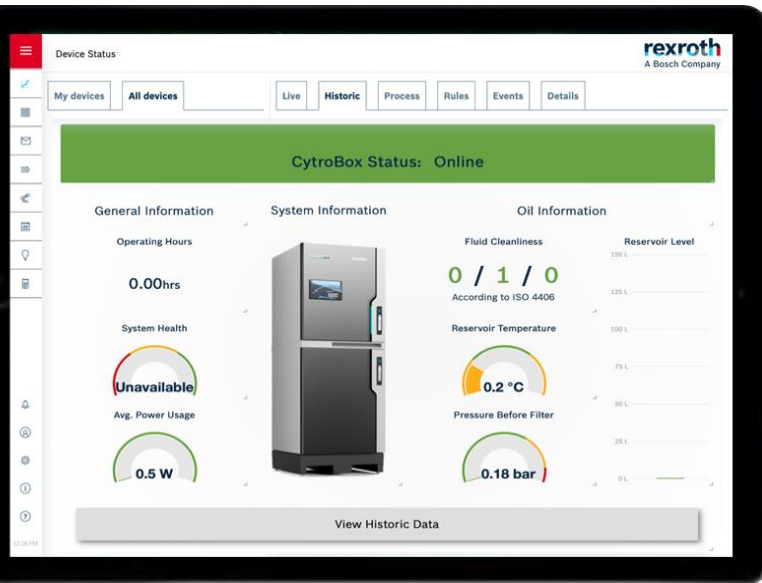
Freemium CytroConnect Monitor included

隨附免費增值CytroConnect監控器

Additional Add-Ons bookable

其他附加組件可預訂

More information: www.cytroconnect.com



CytroBox - The HPU of the Future

The Future is connected



Unlimited Data Add-On

Speed up with Detailed Diagnostics.

無限數據附加組件
加速詳細診斷

Maintain Add-On
Unlock Optimization potentials in your Maintenance Strategy.

維護附加組件
開啟你的維護策略的
優化潛力

Predict Add-On Motor & Pump
Reduce unplanned Downtime with Intelligent Analytics of the drive unit.

預防附加組件
馬達及泵浦
使用智能解析驅動單元減少計劃外停機時間

Predict Add-On Oil & Filter
Reduce unplanned Downtime with Intelligent Analytics of the oil in your System.

預測附加組件
油品及過濾器
用智能解析您的系統減少計劃外停機時間

CytroConnect Monitor

Overview of most relevant CytroBox Data – always and anywhere.

綜觀相關的CytroBox數據 – 總是也隨時隨地

CytroBox without CytroConnect

IoT-Ready – A State-of-the-Art Drive with open Interfaces

物聯網就緒 - 具有開放接口的最先進的驅動器

CytroBox - The HPU of the Future

The Future is connected



The Use Cases

Smart Maintenance



Predict Add-On`s

Reduce unplanned downtime with intelligent analytics.



Maintain Add-On

Unlock optimization potentials in your maintenance strategy.

Easy Diagnostics



Unlimited Data Add-On

Speed up with detailed diagnostics.

CytroConnect Monitor

Overview of the most relevant CytroBox Data – always and everywhere

Further Use Cases....

CytroBox without CytroConnect
IoT-Ready – A State-of-the-Art Drive
with open Interfaces

**Less Surprises.
More Availability.**

CytroConnect

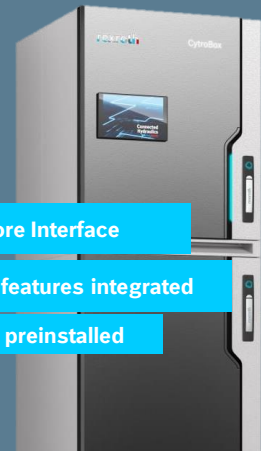
The easy & riskless IoT service for your CytroBox

Flexible Multi Ethernet & Open Core Interface

Intelligent automation features integrated

Sensor package preinstalled

IoT-Ready



CytroBox - The HPU of the Future

Innovation Business Model

Total Cost of Owner - Advantage

總體擁有成本優勢

Product Cost Commissioning Operation

Integrated Functionality,
Initial oil filling, Plug-and-Run

Saving of energy, cooling
and Maintenance

“Buy, rent or
pay per use”

Initial Costs (OEM)

TCO 2 Years

CytroBox - The HPU of the Future

Features before / after

Up to 315 bar

Up to 315 bar

Up to 150 l/min

Up to 160 l/min

600 Liter Oil Tank

150 Liter Oil Tank

2 m² Foot Print

0,5 m² Foot Print

>85 dB (A)

<75 dB (A)

Analog

Multi Ethernet Interface

Field data measurement

Field data acquisition

Application: Tire Press

IoT-ready



More technical information: www.boschrexroth.com/cytrbox

CytroBox - 未來的液壓智能動力站



**The Future of
Hydraulics has started.**

CytroBox

FUTURE STARTS NOW

www.boschrexroth.com/cytro