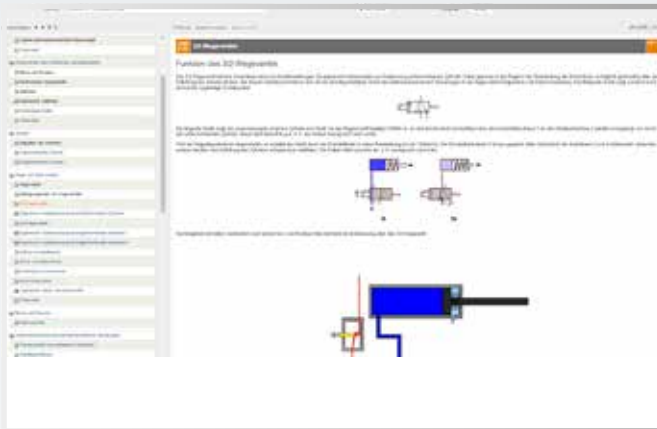


# HYDRAULICS / ELECTROHYDRAULICS TRAINING SYSTEMS



Work safety guaranteed  
thanks to a leak-free hose system



**UNITRAIN**  
SYSTEM

## Hydraulics compact trainer

Thanks to leak-free hose connections work can be done safely and cleanly in the classroom even up to a pressure level of 40 bar. The accompanying UniTrain self-study course guides the trainee through all the basics of hydraulics. Create logic operations in the software in the integrated circuit diagram or use cables to connect up the integrated control elements in the conventional way on the board to complete a required project.

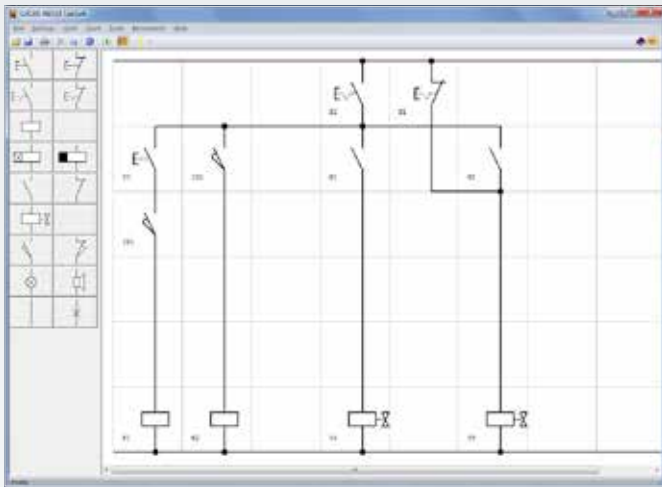
## Training content

- Fundamentals of hydraulics / electrohydraulics
- Hydraulic and electrical circuit diagrams
- Recording of distance-time diagrams
- Basic logic circuits with AND- / OR operations
- Path-dependent process controls

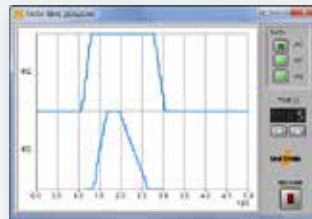
Art. no.

Hydraulics SO4205-8A

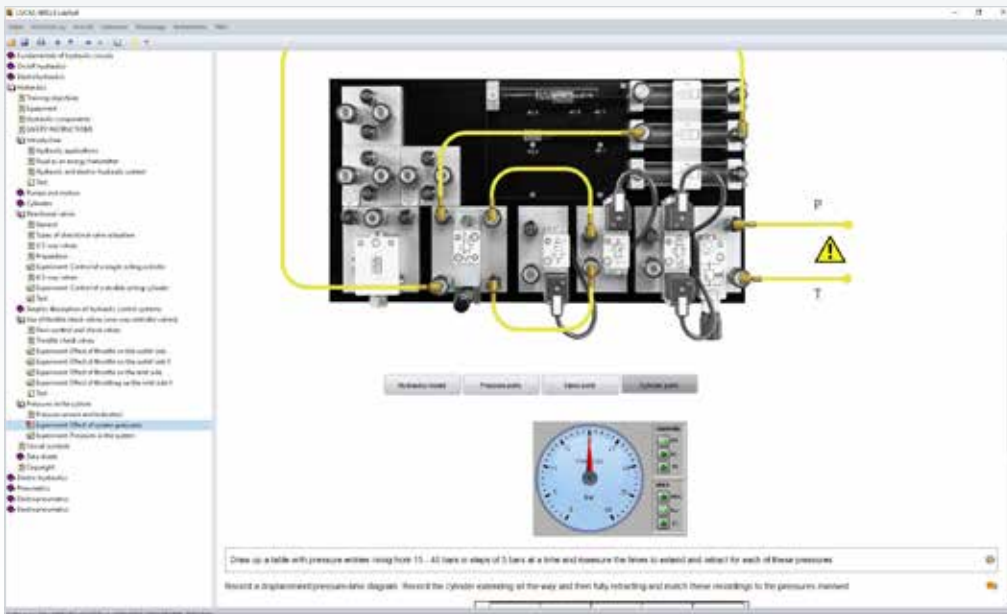
Electrohydraulics SO4205-8B (excl. accessories)



Interactive circuit diagram editor



Distance-pressure-time diagram for pressure-dependent process control



Hose connection animations in the UniTrain course

### Direct control of hardware from the ILA course

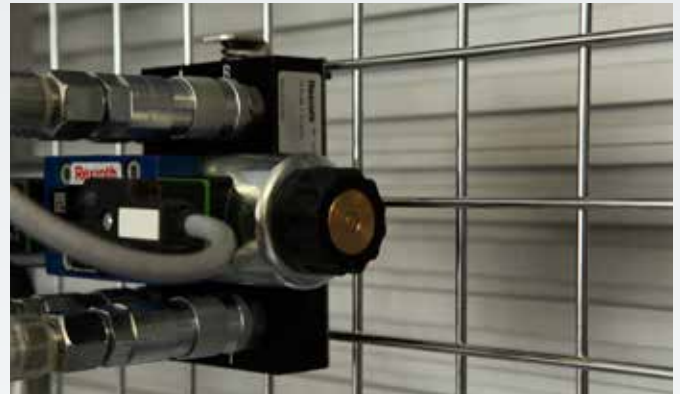
### Benefits

- Compact, portable hydraulic system with a constant pressure pump
- Self-sealing hydraulic hose connections with low oil leakage
- Interactive multimedia course
- Activate instruments directly from the multimedia course
- Control the hardware using the interactive circuit diagram editor

# HYDRAULICS TRAINING SYSTEM



Customized: 4/3-way valve for vocational training and developing skills



Standard industrial components



## Manually operated hydraulics

Real industrial components and our patented "snap-in" mounting mechanism make the hydraulics training system a cutting edge system for vocational and advanced training.

## Training content

- Direct/indirect control of single- and double-action cylinders
- Path-dependent process controls
- Control of double-action cylinders using pulse valves
- Logic controls with exchange and two-pressure valves
- Pressure- and time-dependent controls
- Sequential control with pneumatic proximity switch

Art. no.

Basic equipment set HBC 10

Supplementary equipment set HBC 11



Detailed visualisation of the hardware



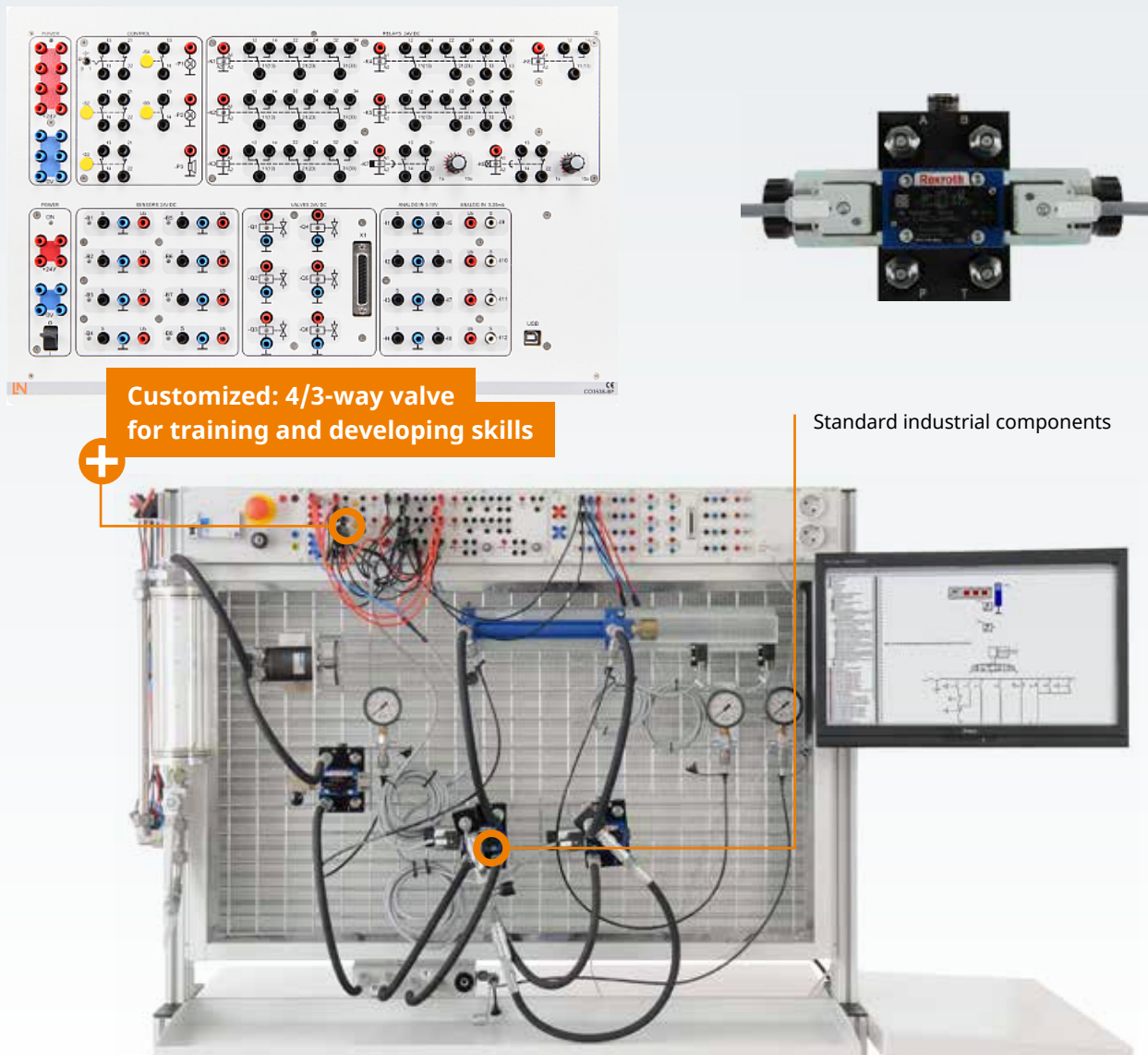
ILA supports the interactive set-up animator

## Carry out projects with the ILA course

### Benefits

- Use standard industrial components
- Set-up animations included in the interactive multimedia course
- Excellent monitoring of forces arising thanks to interactive measuring instruments
- Lots of freedom to arrange the component configurations
- High operating pressures are possible

# ELECTROHYDRAULICS TRAINING SYSTEM

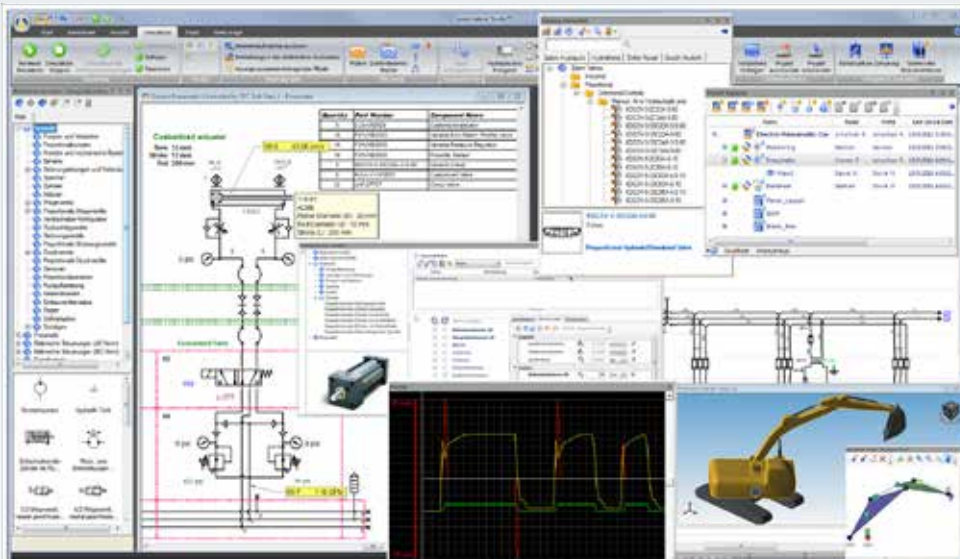


Customized: 4/3-way valve for training and developing skills

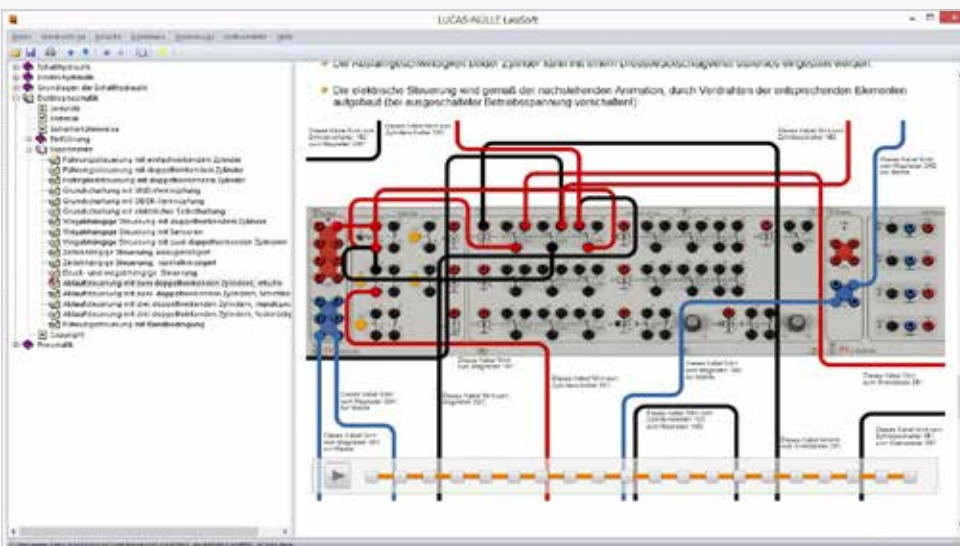
Standard industrial components

**Electrical supplement to industrial hydraulics**  
 Core skills and technical qualifications are imparted by including autonomous planning, implementation, and inspection in all practice-oriented project assignments. The system is rounded off with components from Bosch Rexroth.

- Training content**
- Exploring pressure-volume characteristics
  - Pressure transmission in differential cylinders
  - Open-loop control using directional valves
  - Relationship between opening cross-section/pressure differential / volumetric flow rate
  - Process control of the hydraulic drive



Direct hardware control via the interface



Electrical wiring as set-up animation in the ILA course

## Control the hardware with the ILA course and Automation Studio™

### Benefits

- Use of real industrial components
- Work with the simulation software Automation Studio™
- Direct evaluation of the interactive knowledge test
- Step-by-step animation as set-up instructions for wiring and hose connections
- Easy to operate simply by starting the controls from the course itself