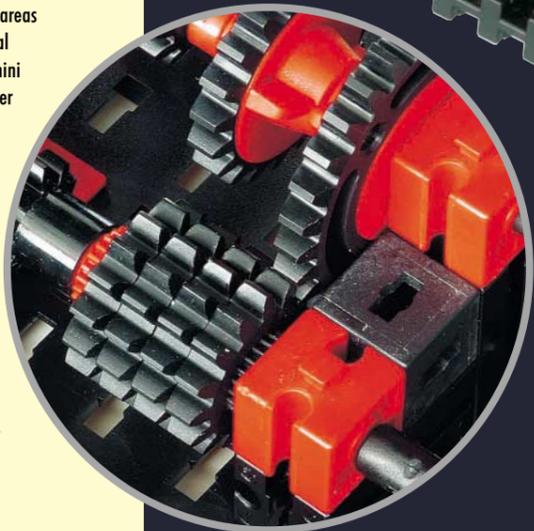


**PROFI  
Mechanic  
& Static**

**NEW**

Art. No. 93 291

The ultimate technology kit for all future mechanical engineers, technicians and engineers. How does a manual gearbox work? What is a planetary gear? How do you make a windscreen wiper work? How do you build a sturdy bridge? This kit with 20 different models answers these and many other elementary questions from the subject areas of mechanical and structural engineering. Kit contains mini motor, switch, battery holder for 9V block battery (not included), numerous gear wheels and other gearbox parts. With detailed assembly instructions. More than 550 components. From 9 years. With activity booklet on the subjects of "Mechanical and Structural Engineering".



**fischertechnik**  <sup>®</sup>  
B U I L D I N G B L O C K S F O R L I F E

**NEW 2003**

- Universal II
- PROFI Mechanic & Static
- ROBO Mobile Set

- ROBO Interface
- ROBO I/O-Extension
- ROBO RF Data Link
- ROBO Pro Software



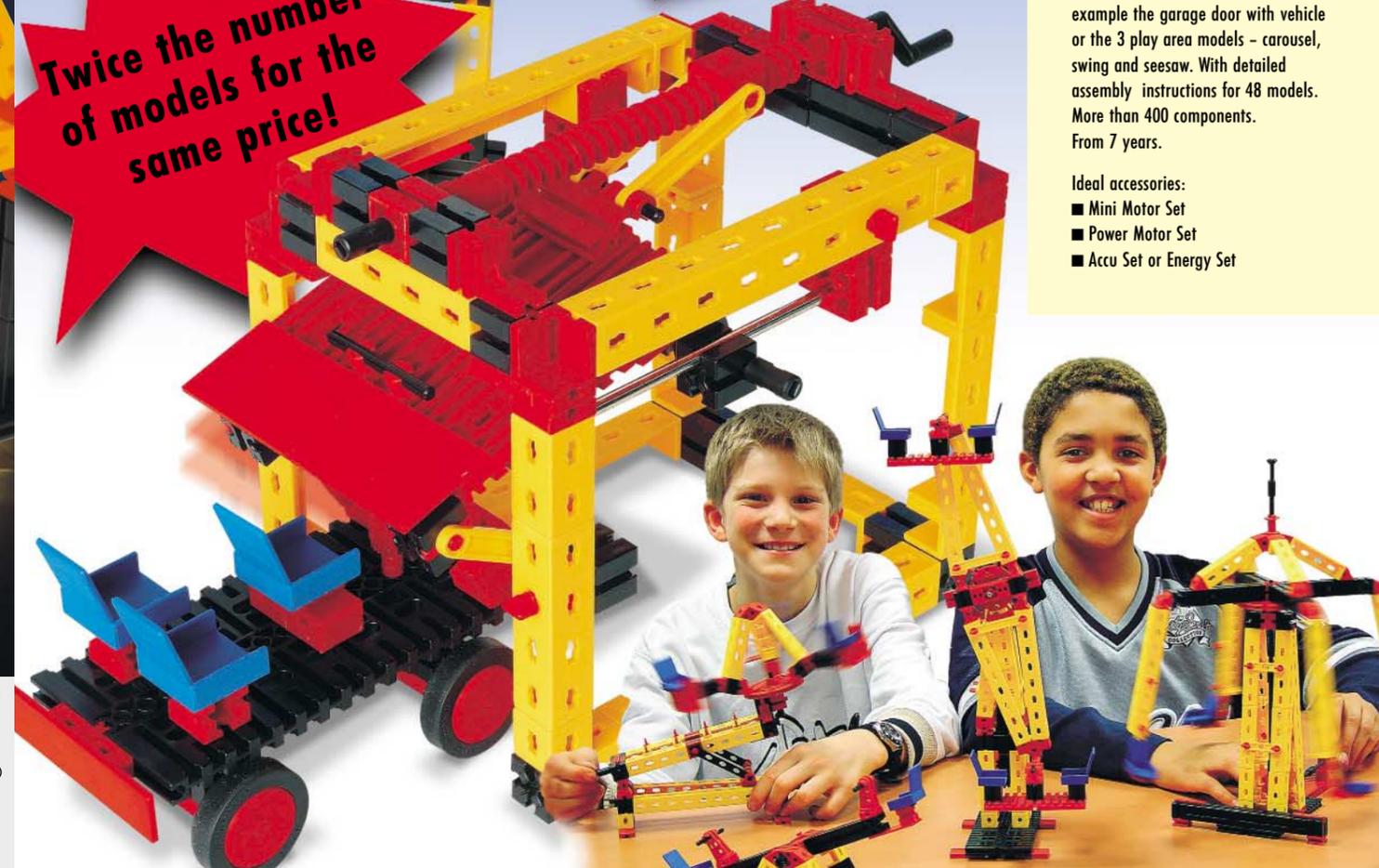
**NEW**

**Universal II**  
Art. No. 93 290

The 'universal genius' is now even more versatile, with 48 models instead of the previous 24, many new modelling ideas such as dock yard crane, windmill, tow truck, dump truck and mixer combined with proven universal models, e.g. oil pump, sewing machine, planing machine or crane. Several models can now be built simultaneously, for example the garage door with vehicle or the 3 play area models - carousel, swing and seesaw. With detailed assembly instructions for 48 models. More than 400 components. From 7 years.

- Ideal accessories:
- Mini Motor Set
  - Power Motor Set
  - Accu Set or Energy Set

**Twice the number of models for the same price!**



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# ROBO Mobile Set

**NEW**

Art. No. 93 292

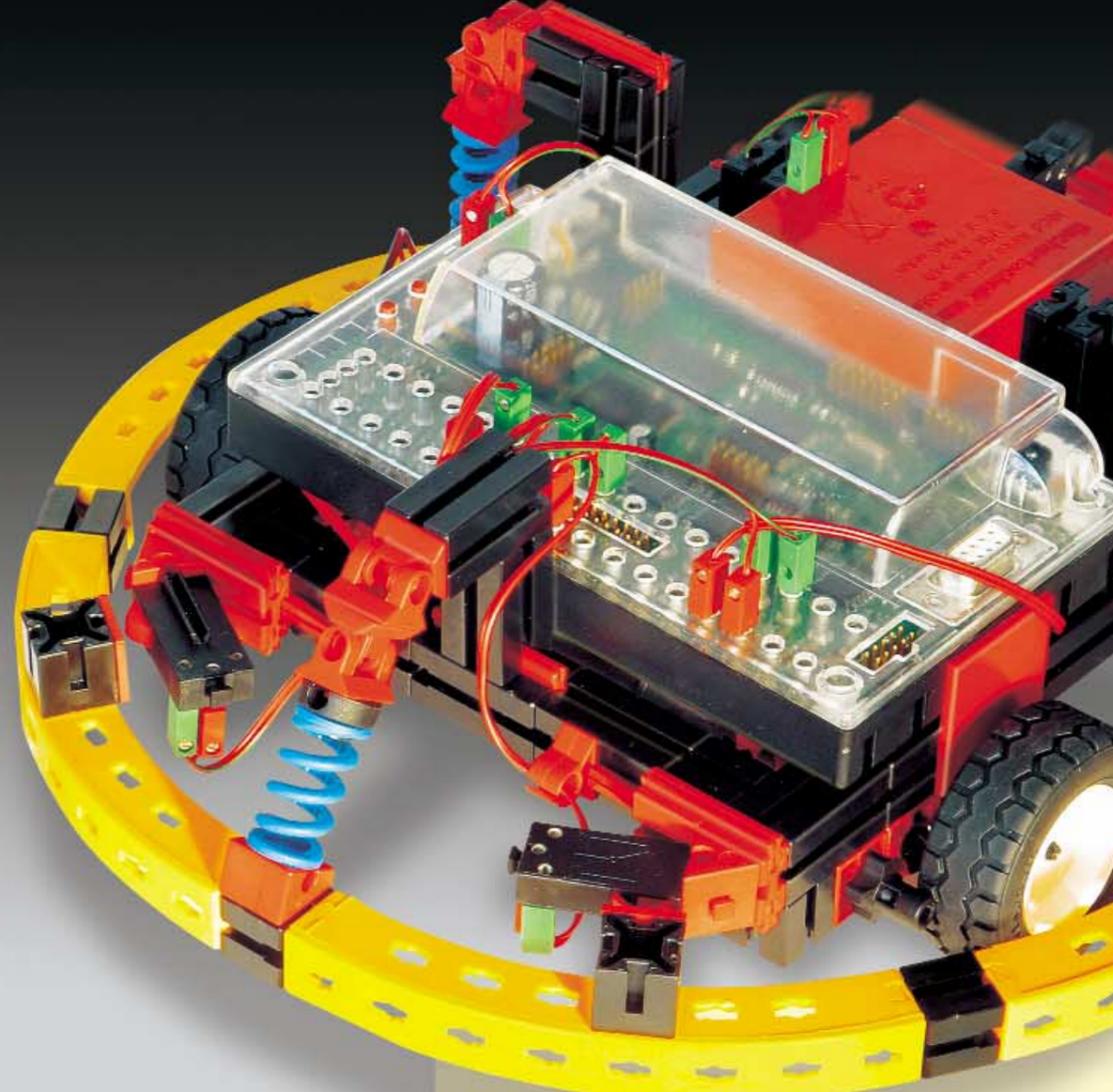
The new complete computing package! Consisting of a kit for building 8 mobile robot models, the new ROBO Interface and the new ROBO Pro software.

The instructions show how to build 7 mobile robots and one walking robot. Mobile robots now feature improved all-round edge detection or obstacle detection. A light finder constantly tracks a light source moving ahead of the robot. The tracker follows a black line.

The light finder can also be combined with the obstacle detection function. The walking robot has 6 legs like an insect and can move forwards, backwards, and to the left and right.

Kit includes 2 power motors (reduction ratio 50:1), 4 sensors, 2 phototransistors, a lens tip lamp. More than 350 components. From 12 years. Additional power supply required (e.g. Accu Set).

With activity booklet on the subject of "Programming and Control of fischertechnik roboters via computer".



# ROBO Interface

**NEW**

Art. No. 93 293

A quantum leap in the world of computer-controlled fischertechnik models. The kit includes a 16-bit microcontroller, USB and serial interfaces, as well as 128 kByte of flash memory for downloading 2 different programs which are retained even if the power supply is disconnected.

Four 9V/250mA (max. 1A) motor outputs now with variable speed control, 8 digital inputs, 2 analog inputs for resistances from 0-5kΩ, 2 analog inputs for voltages from 0-10V and 2 inputs for digital distance sensors. One connection each for ROBO I/O Extension expansion module and ROBO RF Data Link radio interface, as well as an interface to infrared transmitter from the IR Control Set. Additional 26-pole male connector strip - to which all inputs and outputs are brought out - for convenient connection of finished models through a single 26-pole connector. Programmable with ROBO Pro graphic software or with C-Compiler (not included in scope of supply). Additional 9VDC/1A power supply required (e.g. Energy Set).



# ROBO I/O-Extension

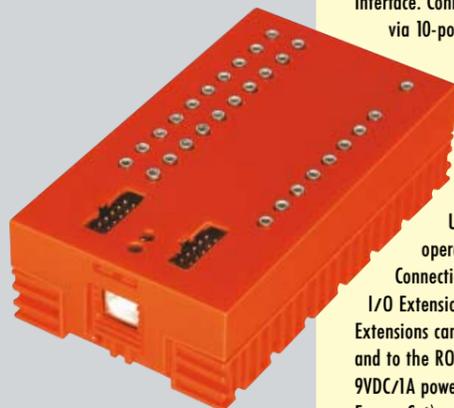
**NEW**

Art. No. 93 294

Expansion module for the ROBO Interface. Connects to ROBO interface via 10-pole flat ribbon cable.

Four 9V/250mA motor outputs (max. 1A). Variable speed control. 8 digital inputs, one analog input with 0-5kΩ.

USB interface for online operation directly on the PC. Connection for additional ROBO I/O Extension. Up to 3 ROBO I/O-Extensions can be connected in series and to the ROBO Interface. Additional 9VDC/1A power supply required (e.g. Energy Set).



# ROBO RF Data Link

**NEW**

Art. No. 93 295

Radio interface for the ROBO Interface. Connects to PC through an USB interface (A). The interface connection is an additional board (B) which plugs on to the ROBO Interface board. No additional power supply required. Range approx. 10m. Frequency: 2.4 GHz. 8 frequencies can be configured for simultaneous operation of 8 devices within a room. Allows direct communication between two ROBO Interfaces on the same frequency.



# ROBO Pro Software

**NEW**

Art. No. 93 296 (single license)

Art. No. 93 298 (school license)

New graphic programmer's application for Windows 98, ME, NT, 2000, XP (Linux in preparation, Art. No. 93 297) for activating ROBO Interface and ROBO I/O Extension. The previous Intelligent Interface (Art. No. 30 402) can be controlled in Online mode. Easy for beginners to use, thanks to proven flowchart programming utility consisting of various software modules.

Data can be interchanged between software modules and subroutines using not only variables (as before) but also graphical connections. Program operation is easier to understand. Subroutines are stored in a library and can now be used without having to understand the internal workings in the subroutine. Beginners will find it easy to grasp even complex programs.

The graphic programming language ROBO Pro provides all the key elements of a modern programming language, such as arrays, functions, recursions, objects, asynchronous events and quasiparallel processing, making it a useful tool even for professional programmers. Programs are translated directly into machine language for efficient execution of even the most complex programs. Even advanced

programmers will find that ROBO Pro knows no limits. With ROBO Pro, it's easy to write teach-in programs or exchange data with other Windows software.

In Online mode, it is possible to control multiple ROBO Pro interfaces in parallel - for large-scale models - and to make custom control panels which include switches, controllers and display elements.

