

Increase in Flow Rate and Decrease in Size: The TC Valve Series



Modular, expandable concept for a multitude of applications



The Low-Cost Alternative for Compact Design: TC Valve Series

The constant trend in the pneumatics sector is towards smaller valves with higher flow rates. In response to this demand, we have developed the new TC valve series: These valves are ideal for pneumatic applications in a limited space and with extremely demanding flow rate capacities. You can choose between single or block valves. The block valves can be combined into a modular valve manifold system.



Measuring up to size: TC08 block valve and TC15 single valve (here with a form C connector as per ISO 15217)

Available as a Single Valve or Modular Valve System: TC08 and TC15 Cover All Applications

The TC valve series is available in two different sizes making it the perfect choice for any requirement – whether in a block or a single valve design. The product name

gives a clear indication of the valve's flow rate: The TC08 block or single valves reach a flow rate of 800 liters (0.8 C_v) per minute and the larger TC15 range of block and

single valves even reaches 1500 liters (1.5 C_v) per minute. The valve width, however, measures less than 17 (TC08) and 21 millimeters (TC15) respectively.

TC08 as single and block valve/valve block

The benefits at a glance:

- Compact dimensions with high flow rate capacities
- Outstanding performance even under harsh conditions
- Air connection via commercially available standard fittings
- Tried-and-tested technology
- Low height, as there is no base plate
- Reduced weight
- Modular extension features
- Easy to mount/dismantle using tie-rod principle
- Service-friendly aspects



Alternative electrical connection with M8 plug

Connection benefits:

Looking for a fast connection? The TC valve series provides additional benefits: The pneumatic connections are implemented using commercially available standard fittings that can be obtained on short notice

and low cost. A form C connector (in compliance with ISO 15217) in a fixed or rotatable or a M8 standard plug provides the power voltage. The M8 plug is easy to mount with a screw-in connection and without an extra tool.

Block-to-Block Advantages: With All the Features You Need

The block valves in the TC valve series can be modularly combined to form a valve manifold block with up to 12 valves. The main benefit of this block assembly principle is its compact size. Three tie rods connect the chosen number of valves to a valve block over a pneumatic subplate and an end plate. Our conscious decision to omit conventional base plates has not only reduced the height but also the weight of the block as well.

Electrical connection via form C connector
as per ISO 15217 or M8 plug

Easy-to-mount block valves on tie rods

Secure block assembly using centering pins

Air connection via commercially available
standard fittings

Valve block assembly using tie rods

Can be mounted to a flat base
using screws

End plate

Can be mounted to
DIN EN 50022 mounting rails



Especially easy to assemble

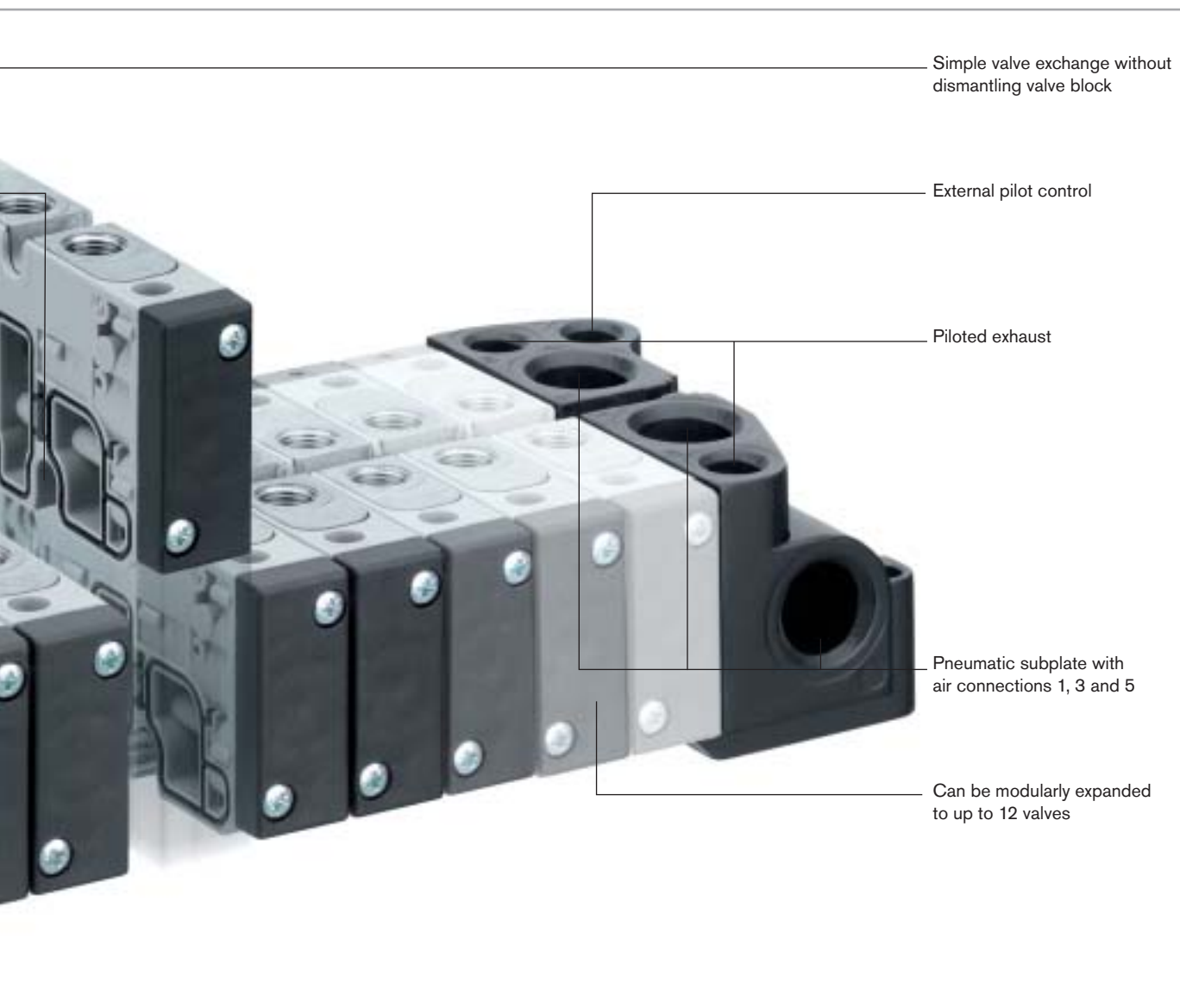
The TC valve series is extremely easy to assemble. There is no need to dismantle the entire valve block when exchanging the valves, a slight loosening of the tie rods is sufficient. Further details can be found in the illustration below.

Even the single TC valves are easy to mount

With the help of through-holes, the single valves can be flanged to any flat surface. Commercially available standard fittings can be used for connecting the air supply. The compact dimensions and light

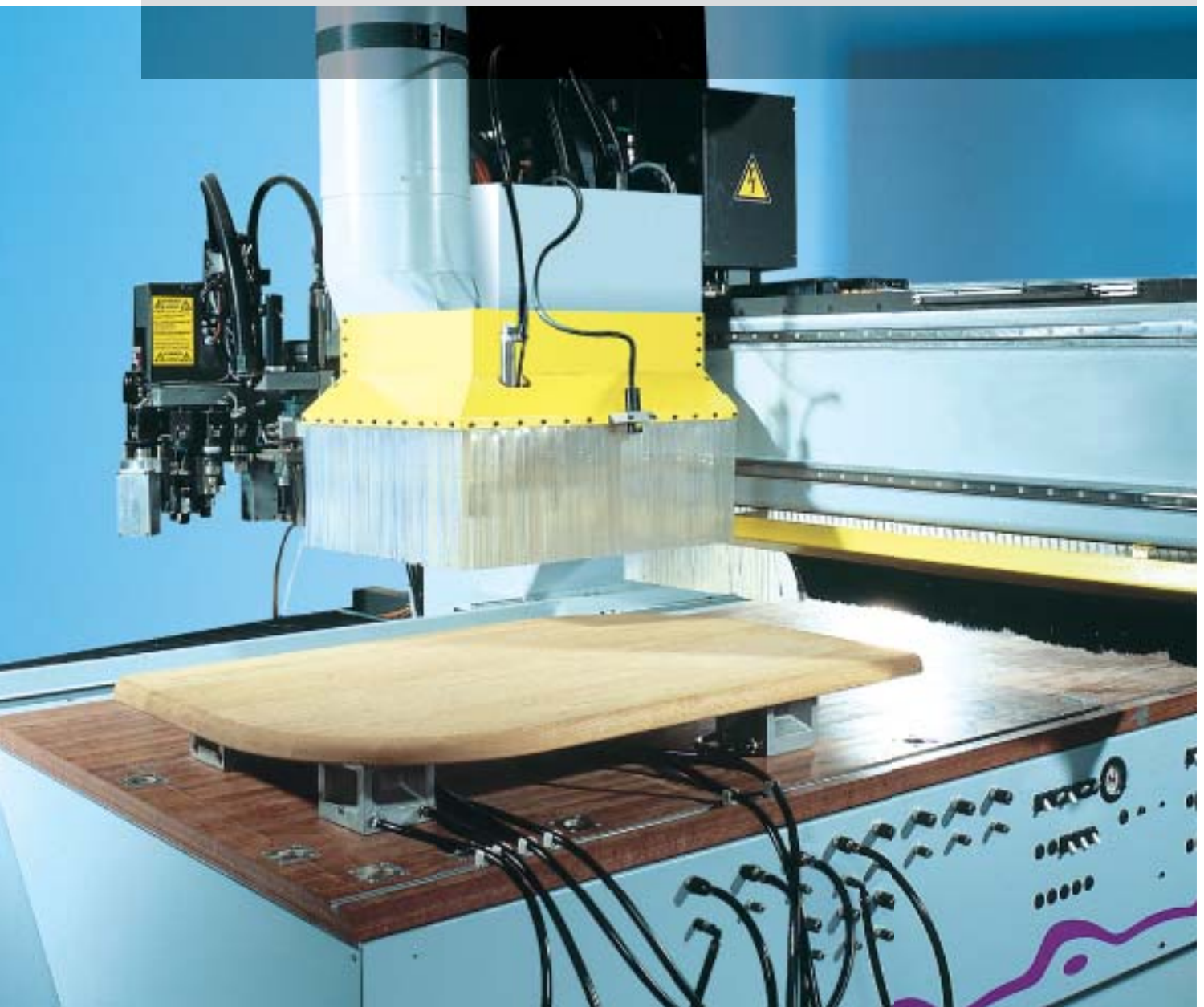


weight make this valve ideal for mounting on dynamic machine parts. The valves can also be positioned anywhere on frames or walls without difficulty.



Open to All Applications

The TC valve series is the perfect partner for any system that needs a pneumatic valve for control – the fields of application are practically inexhaustible. The valves are ideal for controlling linear or rotational motions. They are well suited for woodworking applications, plastics processing and in the machine tool industry. Thanks to its compact measurements, the valve series is particularly suitable for mounting on moving parts. If you are looking for a cost-effective, robust and reliable valve and only have a limited amount of space available, the TC valve series is the right choice.



Just 3 application examples from many:



Machine tool engineering

We have always concentrated our efforts toward the machine tool industry. The TC valve series is optimally equipped to handle tough working conditions involving metal cutting.



Processing plastics

Due to its optimized flow rate values, fast switching times as well as compact and lightweight design, the TC valve series is the ideal partner for the plastics processing industry.



Working with wood

In the wood processing industry, the need for robust components is vital when sawing, burring and edge jointing with adhesives, as they must withstand difficult working conditions. The TC valve series is ready to meet these demands.

Increase your benefits!

Have you thought of combining the diverse range of applications of the TC valve series with other pneumatic best-in-class components from Rexroth to give your profits an additional boost? Rexroth continually develops and manufactures products that meet the strictest quality standards. Go ahead and set your ideas in motion with valves from the TC series and the following Rexroth products:

ISO cylinders



Compact cylinders



GPC guide cylinders



RexMover rodless cylinders



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