



## ES05 - THE ESSENTIAL VALVE SYSTEM

SIMPLE, FLEXIBLE AND  
EFFICIENT

**Pneumatics**  
It's that easy



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# ES05 – The Essential Valve System

ES05 is a valve system that has been designed especially for standard pneumatics applications and industrial automation. Simple, flexible and efficient – without bells and whistles.

## Easy assembly

- Due to a modular concept, low number of parts and the one-tool-concept our customers save time.
- Thanks to the easy construction concept, mistakes at assembly are nearly impossible.

## High flexibility

- The ES05 allows individual configuration, the flexible electrical connectivity enables easy modification and extensions.
- Modifications are possible at any time down to the last minute or even after installation.

## Easy configuration

- Through the engineering tools you can easily configure, assemble or order your desired products,
- Including all documentation free-of-charge.

## High quality

- You can benefit from cost focussed contemporary products in technical excellence made from extensive wealth of experience.

## Lower inventory

- Small number of parts required to build a vast variations of valve systems reduces inventory investment.



Single wire



AES field bus



IO-Link



Individual valve

# ES05 – the simple solution for elementary pneumatics

From your idea to the finished product: The ES05 Essential valve system from AVENTICS is setting benchmarks for demand-based, custom-configurable valve systems. Buy AVENTICS assembled systems or build your own.

## Option 1 - Factory assembled valve systems

Users can individually configure their ES05 valve system in the online configurator in just a few steps. Our configuration tool will then provide all necessary documentation, spare parts lists, 3D models, operating instructions, and assembly instructions for system extensions. The configurator creates a material number which can be immediately used to order the complete ES05 valve system. And in just a few days, you will receive the ready-to-install and tested valve system.

## Option 2 - Build your own valve systems

ES05 is a modular system that enables users to create individual valve systems based on simple assembly steps and just a few components – with a single tool and uniform torque. All components are distinct which makes incorrect installation virtually impossible. Final inspection is easy thanks to the Essential Test Box which allows you to carry out all necessary

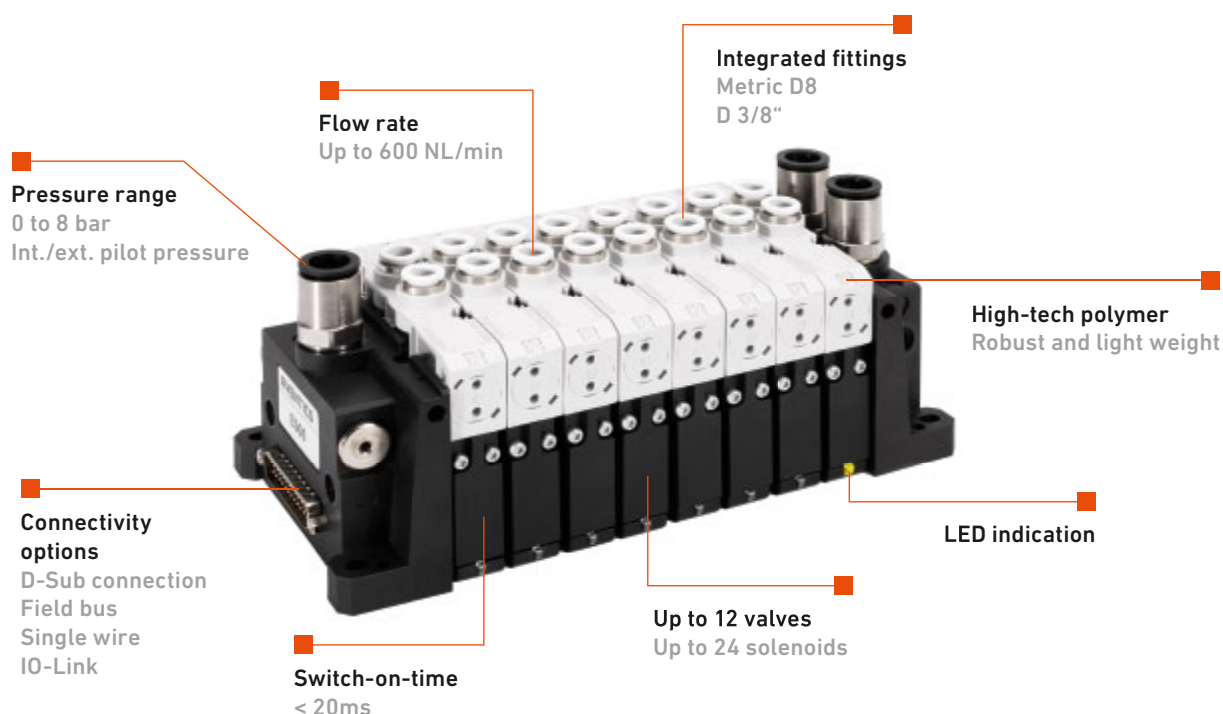
tests – including the right assembly tool and test instructions. AVENTICS ES05: It's that easy.

## The choice is yours

For valve systems with a field bus or multipole connection, electrical wirings are integrated into the base plate. Alternatively, conventional single wiring is also possible. If required, the valve coil can be turned at a later stage to enable variable connection configuration.

## Think different

Usually pilots are integrated in the valve, but the pilots of ES05 are integrated in the base plate. Thanks to this concept you can easily and cost-effectively adapt the valve function – even at a later stage. Choose your base plate according to your demands: As a flexible solution ready for all valve functions or more cost efficient optimized for single solenoid valves.

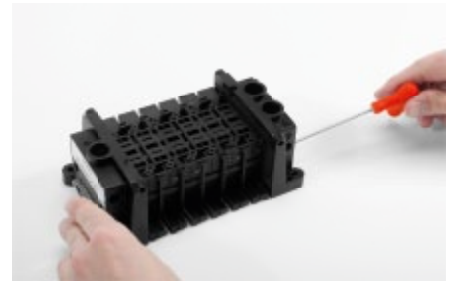


# One-tool concept for simple assembly

The entire assembly process is very simple, only requires a single tool and can be done in three easy steps.

## 1. Base plate assembly

Mount the tie rods on the left end plate e.g. with D-Sub connection and extend to the required expansion stage using tie rod extensions. After that, push the base plate onto the tie rods and mount finally the right end plate.



## 2. Valves

Place the corresponding valve functions on the base plate positions and tighten.



## 3. Test

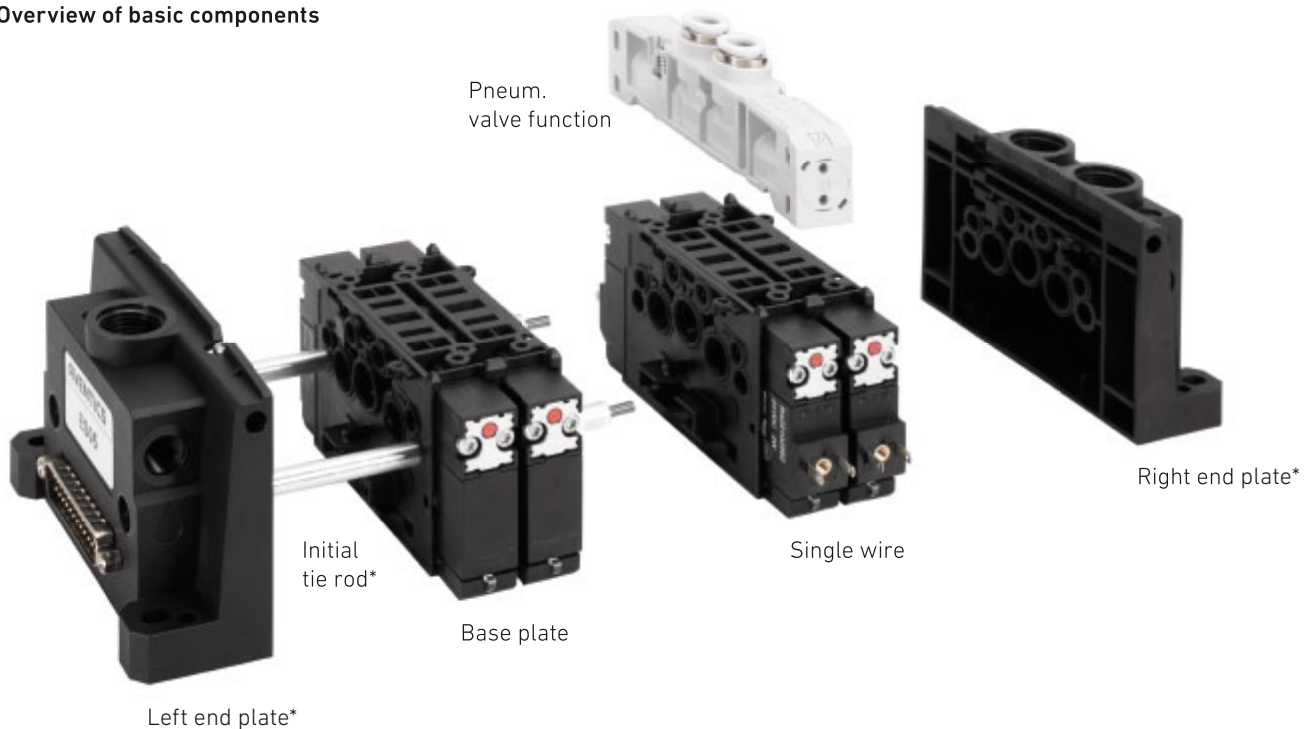
Connect the ES05 valve system electrically and pneumatically to the Essential Test Box and perform a short function and leakage test. Done!



# Facts and figures

	Valve system	Single valve
<b>Valve functions</b>	5/2 single and double solenoid; dual 3/2 nc and no; 5/3 closed center; blanking plate; intermediate supply plate	
<b>Number of valves</b>	Up to 12 valves in steps of 2	1 valve
<b>Electrical connection</b>	Single wire (form C, industry) D-Sub connection (25-pin) Field bus connection via AES IO-Link	Single wire (form C, industry)
<b>IP rating</b>	IP65 (single wire) IP50 (D-Sub, Field bus, IO-Link)	IP65
<b>Switch-on-time</b>	< 20ms	< 20ms
<b>Dimensions of D-Sub and single wire version (Depth/Height/Length - X = number of valves)</b>	100mm/86mm/X*18+69mm	105mm/80mm/18.8mm

## Overview of basic components



\* End plate kit

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