

# Smart Positioning Cylinders for the Process Industry

**FESTO**



Festo offers automation components which have been tried and tested in operation and are designed to withstand the extreme requirements in the processing industry.

**Our smart positioning cylinders are proof of this.**



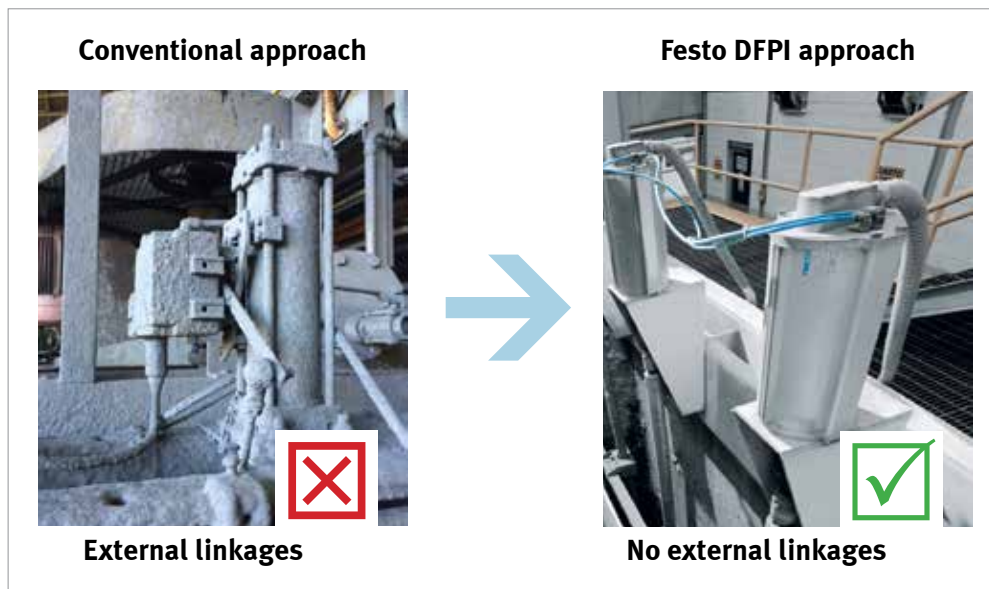
## Positioning cylinders for the process industry

In the processing industry, Festo has been a partner in providing solutions to increase efficiency and simplify maintenance. This has been achieved by using our reliable and clean design positioning cylinders.

Positioning drives with external feedback linkages are still being used in the process industry. However, the feedback linkages are extremely susceptible to damage

and malfunctions due to the harsh conditions they are subjected to. This leads to increased costs in maintenance and lost production time.

**Don't put up with the problems caused by external feedback linkages any longer! Switch to the Festo solution and put an end to downtime.**



## The new generation of smart positioning cylinders - the DFPI series

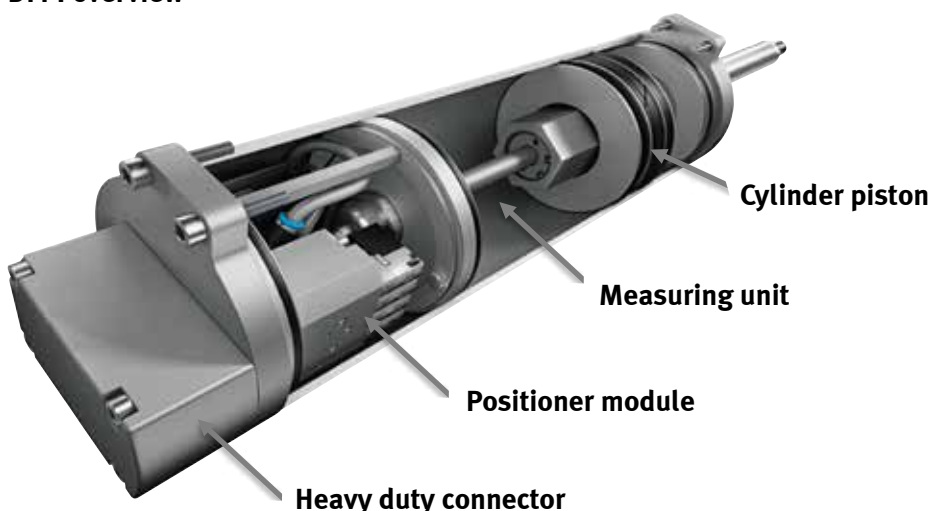
The advantages of the Festo solution are obvious, it combines the function of a linear actuator, position controller and displacement encoder all securely enclosed within the cylinder barrel.

This solution protects the critical system components from humidity, moisture, dust and aggressive atmospheres. The actuator only requires a self-teach initialisation sequence during commissioning, after that it's virtually **maintenance free!**

### DFPI highlights

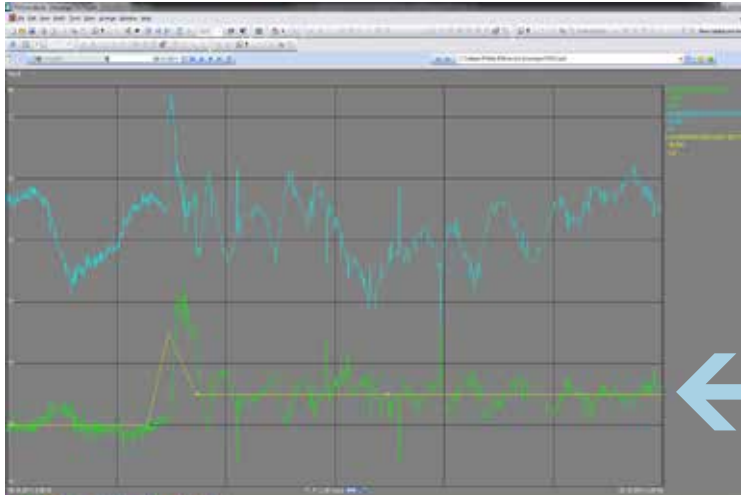
- Everything in one housing - robust, compact design
- High IP rating
- High level of corrosion resistance for use in aggressive environments
- Self-initialisation - easy commissioning
- Fail safe position selection
- Festo proximity sensors can be used with additional sensing of intermediate positions

### DFPI overview



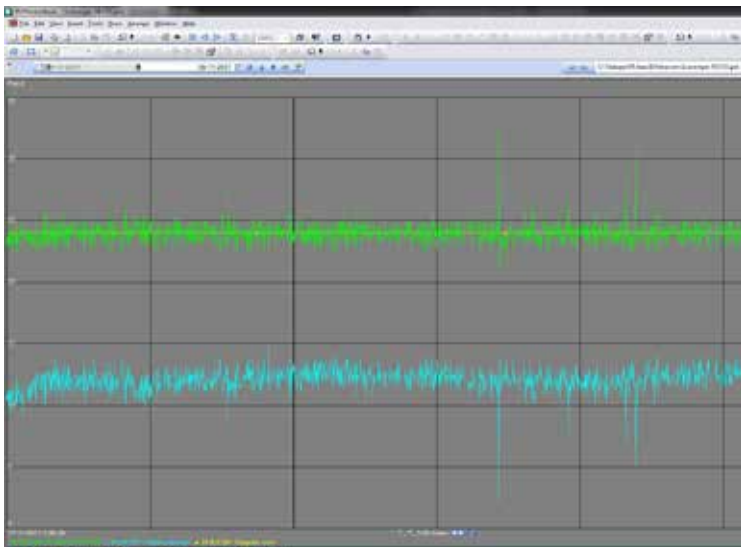
## Proven results in operation for level control: Conventional approach vs Festo DFPI solution

### Electro-pneumatic with mechanical position feedback



The result of the **conventional approach**, low accuracy in level control

### Festo DFPI smart cylinder installed in the same application



The result of the **Festo DFPI approach**, higher accuracy in level control = **INCREASED YIELD!**

## DFPI solutions - No external linkages

### Internal feedback and positioner

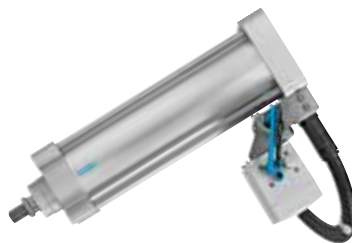


#### Applications:

- Damper control
- Louver control
- Clam shell doors
- TLO ploughs
- Knifegate valves

ISO 15552 with compatible accessories

### Internal feedback with external positioner



#### Applications:

- Damper control
- Louver control
- Clam shell doors
- TLO ploughs
- Knifegate valves

External positioner can be mounted directly to a cylinder or remotely if required

### Internal feedback and positioner



#### Applications:

- DART valves
- Hopper slide gate control
- Knife gate valves

ISO mounting pattern on face to suit process valves

**We understand industry needs.  
We understand customer challenges.  
We always offer the right solutions.**

**→ WE ARE THE ENGINEERS  
OF PRODUCTIVITY.**



### **50 years of experience in automation**

Festo can also provide system solutions to enhance the benefits of using the DFPI positioning cylinders, these include:

- Control panel building for local auto or manual control
- Valve terminals with input and output modules to suit many network protocols
- Process valve control



For more info visit [www.festo.com/dfpi](http://www.festo.com/dfpi)

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