

INDUSTRY SOLUTIONS
WITH
VALVE TECHNOLOGY



CHEMICAL/PETROCHEMICAL INDUSTRY

CNG

BLOW-MOULDING MACHINES

DIESEL AND GAS ENGINES

POWER PLANTS



SOLENOID VALVES FOR CONTROLLING PNEUMATIC ACTUATORS IN POTENTIALLY EXPLOSIVE ATMOSPHERES

Seitz solenoid valves are used universally and are designed to a high safety standard. They are used effectively as control valves in the production plants of leading chemical, petrochemical and pharmaceutical companies worldwide.

The product range includes direct-acting and pilot-operated solenoid valves. Typical applications are the control of single-acting or double-acting actuators. Due to their high functional reliability, Seitz solenoid valves are also used for fail-safe functions, such as the safety shut-off of actuators with positioners.

Certifications, expert approvals and references confirm that Seitz solenoid valves fulfil the highest requirements with respect to operational reliability, service life and flexibility of use. Seitz solenoid valves are therefore suitable for installation outdoors and under difficult environmental conditions. Compatible solenoids are available in protection types EEx em, EEx ia and EEx d.

HIGH AVAILABILITY

SOLENOID VALVES FOR INCREASED PROCESS SAFETY

The high component reliability of Seitz solenoid valves increases the process safety of the whole plant. By means of integrated risk reduction extending from their design and production down to the smallest detail, plant availability is substantially increased and breakdown and maintenance costs are consequently reduced.



Highest safety levels

Protection requirements up to SIL4 reduce risks to people and the environment.



Less outage time

Component reliability increases process safety, integrated risk reduction increases plant availability.

DIRECT-ACTING SOLENOID VALVES

VALVE GROUP L-32

Function:	3/2-way NC or universal
Port connections:	G 1/4 or NPT 1/4
Orifice size:	3.5 mm
Pressure range:	0 ... 8 bar
Type of protection:	EEx em, EEx d
Application:	spring-return actuators with threaded connection
Special features:	simple and robust



VALVE GROUP UV-05

Function:	3/2-way universal
Port connections:	G 1/4, NPT 1/4 or NAMUR
Orifice size:	5 mm
Pressure range:	0 ... 10 bar
Type of protection:	EEx em, EEx d
Application:	spring-return actuators of all kinds
Special features:	models with TÜV-approval up to SIL 4, "One fits all", universal model for all spring-return actuators



VALVE GROUP UV-07/10

Function:	3/2-way universal
Port connections:	G 1/4, NPT 1/4, G 1/2, NPT 1/2, flange or NAMUR
Orifice size:	7 mm or 10 mm
Pressure range:	0 ... 10 bar
Type of protection:	EEx em, EEx d
Application:	spring-return actuators with large volume
Special features:	large flow with NAMUR-interface



VALVE GROUP 446/449

Function:	3/2-way NC
Port connections:	G 1/4 and G 1/2, or NPT 1/4 and NPT 1/2
Orifice size:	12 mm for venting
Pressure range:	0.2 ... 8 bar
Type of protection:	EEx em, EEx d
Application:	spring-return actuators with large volume
Special features:	quick venting for "fail-safe" functions



PILOT-OPERATED SOLENOID VALVES

VALVE GROUP 1471

Function:	5/2-way
Port connections:	G 1/4 or NAMUR
Orifice size:	6 mm
Pressure range:	2 ... 10 bar
Type of protection:	EEx em, EEx d
Application:	double-acting drives
Special features:	simple and robust



PILOT-OPERATED SOLENOID VALVES

VALVE GROUP CP-11

Function:	3/2- and 5/2-way
Port connections:	G 1/4 or G 1/2 and NAMUR
Orifice size:	6 mm and 12 mm
Pressure range:	0 (2) ... 8 bar
Type of protection:	EEx em, EEx ia
Application:	single- and double-acting drives of all kinds
Special features:	models with TÜV-approval up to SIL 4, "One fits all", universal model for all spring-return actuators, low electrical performance, 1.8 W or 200 mW



VALVE GROUP CP-12

Function:	3/2- and 5/2-way
Port connections:	G 1/4 or G 1/2 and NAMUR
Orifice size:	6 mm and 12 mm
Pressure range:	0 (2) ... 8 bar
Type of protection:	EEx ia
Application:	single- and double-acting drives of all kinds
Special features:	"One fits all", universal model for all spring-return actuators, very low electrical performance, 30 mW or 7 mW



VALVE GROUP LC-11

Function:	3/2- and 5/2-way, single- or double solenoid
Port connections:	NAMUR and G 1/4
Orifice size:	7 mm
Pressure range:	2 ... 8 bar
Type of protection:	EEx me, EEx ia
Application:	single- and double-acting quarter-turn actuators
Special features:	favourably priced solenoid valves adhering to the Seitz-Standard



WITH TÜV-APPROVAL UP TO SIL 4

SOLENOID VALVES WITH TÜV-APPROVAL UP TO SIL 4

Direct-acting solenoid valves from valve group UV-05 and pilot-operated solenoid valves from valve group CP-11 are available with TÜV-approval up to SIL 4 in accordance with IEC 61508.

IEC 61508 describes protective process measuring and control equipment, protection requirements and protective measures required for safe function. Equipment which has been tested up to SIL 4 complies with the most stringent requirements.

The basis for TÜV-approval up to SIL 4 is the DIN type-testing for control solenoid valves in accordance with DIN EN 161, DIN 3394 Parts 1 and 2, an extensive practical test as the lengthy and positive experience of applications in outdoor plants.



«ONE FITS ALL»

UNIQUE. EVERY SOLENOID VALVE FITS ALL SPRING-RETURN ACTUATORS

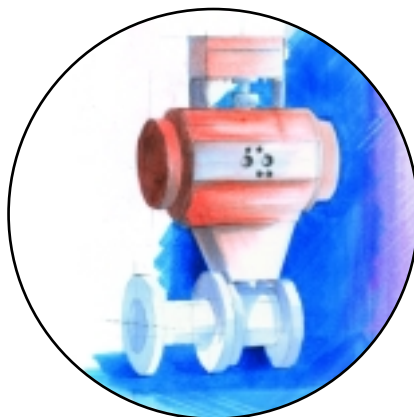
Simplified procurement, reduced stock keeping, training and installation costs. This is because the solenoid valves have supplementary threaded ports in addition to the new NAMUR-interface, and can be therefore used universally for all actuators with spring-return action.

With pilot-operated solenoid valves, the integrated automatic shuttle-valve ensures the correct supply of external air supply, so that they can also be used without modification as safety valves at positioner.

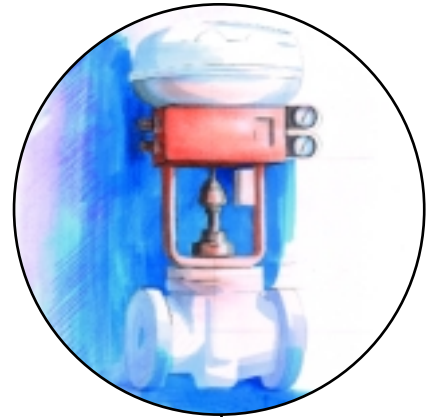
As an additional advantage, the solenoid valves can be installed on manifolds (series installation), mounting plates (individual installation) or the NAMUR ribs of the actuator, using the varied accessories available.



Piston actuator



Quarter-turn actuator



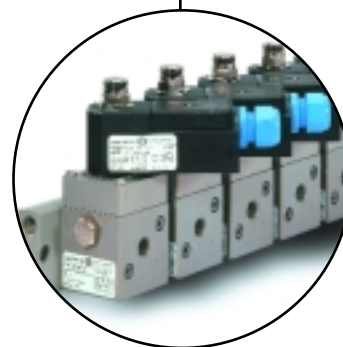
Actuator with positioner



Solenoid valves from groups UV-05, CP-11 and CP-12 can be mounted on spring-return actuators.



Individual installation



... or manifold installation

IN USE WORLDWIDE

COMPLIANCE WITH IMPORTANT DIRECTIVES

Seitz solenoid valves are used worldwide. The solenoids for hazardous areas comply with the following directives and regulations.

Europe	94/9/EC	Zones 1 and 2	EEx em, EEx d, EEx ia
China	NEPSI		EEx em, EEx d, EEx ia
Ukraine	GOST		EEx d



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