

# Plug-in proportional amplifier

RE 30259/07.12

1/4

**Type VT-SSPA1-525-1X/V0**

Component series 1X



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## Features

- Analog amplifier for controlling proportional valves (pressure and directional valves) without position control
- Differential input
  - Adjustable sensitivity and valve zero point
  - Connection via 4-pole connector
  - Operating voltage 12/24 V

### Notice:

The photo is an example configuration.  
The delivered product differs from the figure.

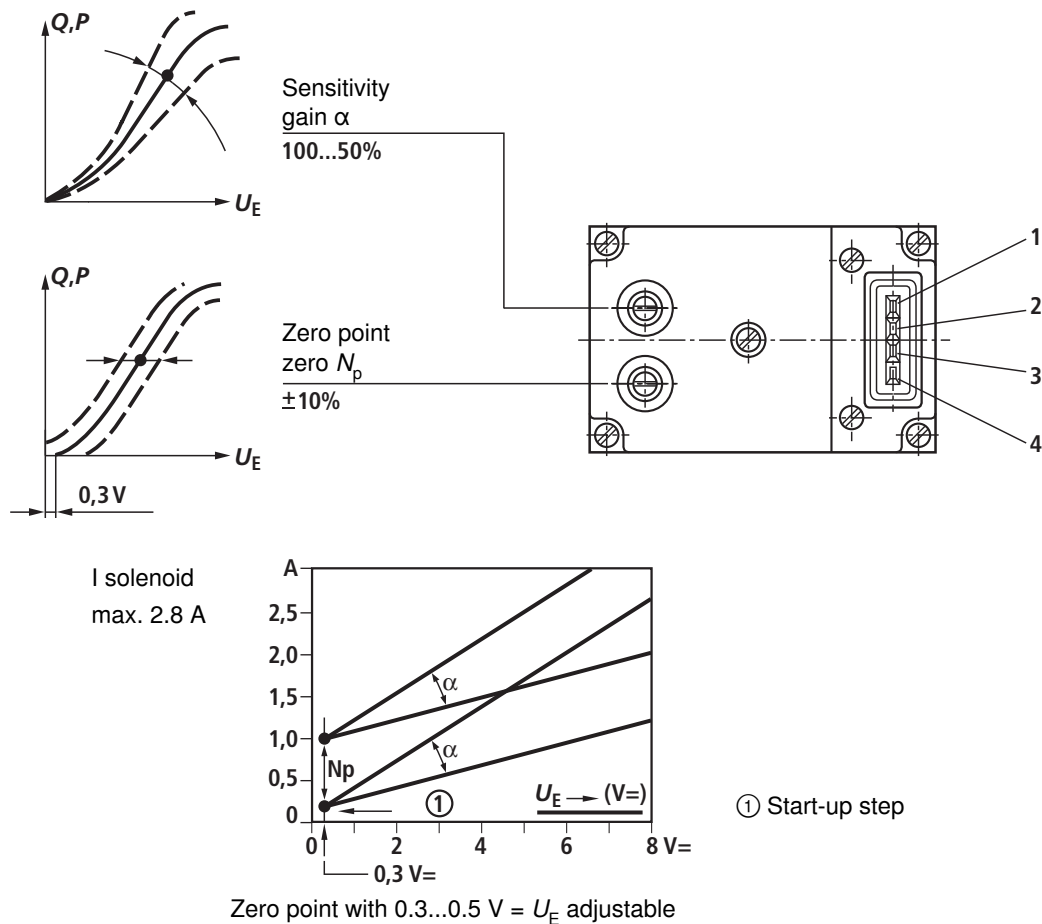
## Ordering code

| VT- S S P A 1 -525-1X/V0               |     |  |  |  |  |  |  |       |                                                                                      |
|----------------------------------------|-----|--|--|--|--|--|--|-------|--------------------------------------------------------------------------------------|
| Plug-in proportional amplifier         | = S |  |  |  |  |  |  | V0 =  | Customer version<br>Catalog version                                                  |
| Hydraulic component                    |     |  |  |  |  |  |  | 1X =  | Component series 10 to 19<br>(10 to 19: Unchanged technical data and pin assignment) |
| For valves without electrical feedback | = S |  |  |  |  |  |  | 525 = | Serial number for type<br>2.5 A solenoid                                             |
| Valve type                             |     |  |  |  |  |  |  |       |                                                                                      |
| Proportional valve                     | = P |  |  |  |  |  |  |       |                                                                                      |
| Control                                |     |  |  |  |  |  |  |       |                                                                                      |
| Analog                                 |     |  |  |  |  |  |  |       |                                                                                      |
| Output stages                          |     |  |  |  |  |  |  |       |                                                                                      |
| 1 output stage                         |     |  |  |  |  |  |  |       |                                                                                      |

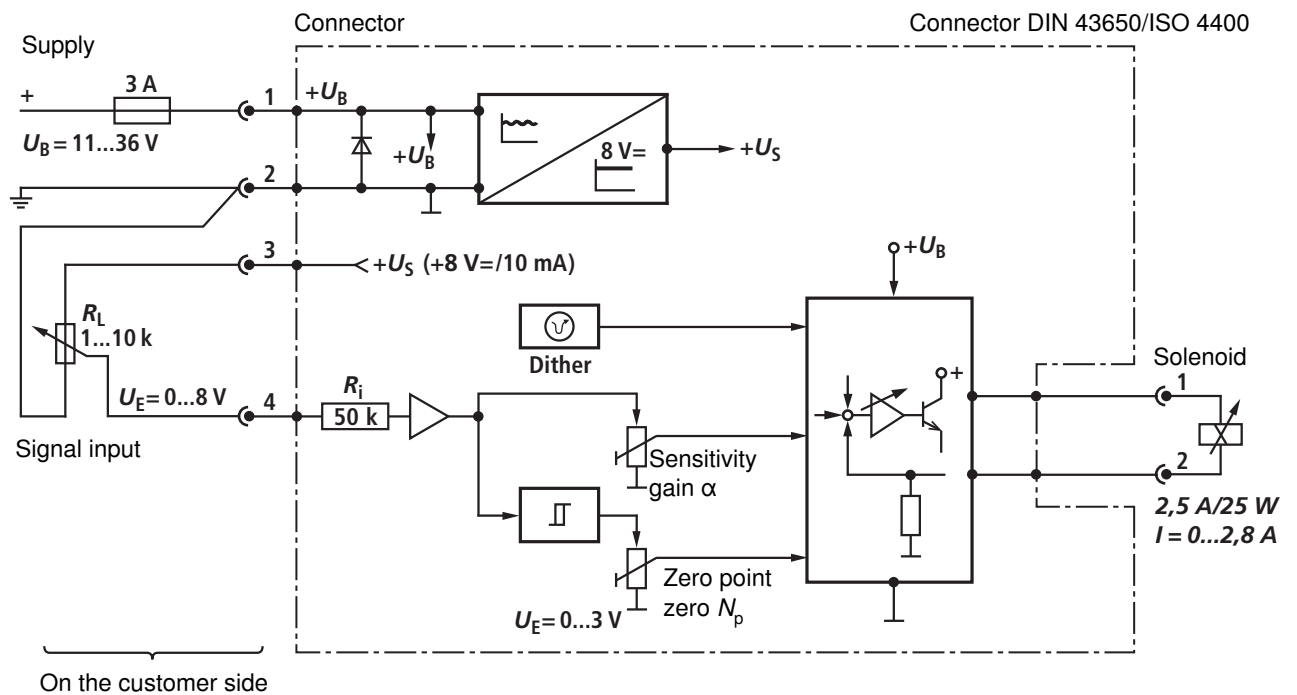
## Preferred types

| Type                    | Material number | For valves                                                                |
|-------------------------|-----------------|---------------------------------------------------------------------------|
| VT-SSPA1-525-10/V0      | 0811405041      | All proportional valves without position control with solenoid 2.5 A/25 W |
| Connector socket 4-pole | 1834484098      |                                                                           |

## Adjustment, pin assignment



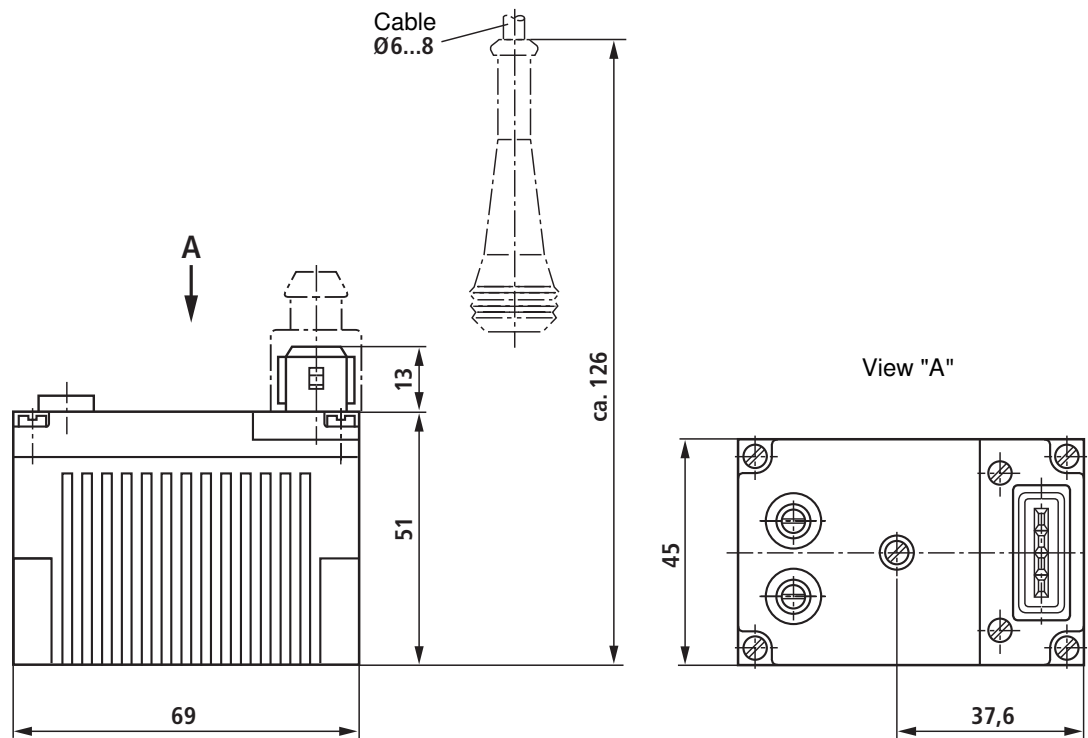
## Block diagram with pin assignment



## Technical data (For applications outside these parameters, please consult us!)

|                                          |                                                                                                                    |                                           |                     |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------|---------------------|
| Design:                                  | Connector housing                                                                                                  |                                           |                     |
| Plug-in connection                       | Solenoid: DIN 34 650<br>Cable: 4-pole                                                                              |                                           |                     |
| Ambient temperature                      | °C                                                                                                                 | −20...+70                                 |                     |
| Storage temperature min.                 | °C                                                                                                                 | −20                                       |                     |
| Protection class                         | IP 65 including connector socket, cable Ø 6...8 mm                                                                 |                                           |                     |
| Supply voltage                           | 12 V/24 V battery voltage<br>(11...36 V, < 10 % ripple)                                                            |                                           |                     |
| Max. power consumption                   | W                                                                                                                  | < 30                                      |                     |
| Input signal (command value)             | V                                                                                                                  | 0.3...8<br>< 0.3 V, solenoid de-energized |                     |
| Signal source                            | Potentiometer 1...10 kΩ<br>Supply +8 V from (3)                                                                    |                                           |                     |
| Output proportional solenoid             | Rectangular voltage, pulse-modulated<br>I <sub>max</sub> = 2.5 A                                                   |                                           |                     |
| Cable lengths and cross-sections         | Supply                                                                                                             | < 20 m                                    | 1.5 mm <sup>2</sup> |
|                                          |                                                                                                                    | 20...40 m                                 | 2.5 mm <sup>2</sup> |
| Special features                         | – Inputs and outputs short-circuit proof<br>– Clocked output stage<br>– Fast energization for short actuating time |                                           |                     |
| Adjustment<br>via trimming potentiometer | 1. Zero point<br>2. Sensitivity                                                                                    |                                           |                     |

## Device dimensions (dimensions in mm)



## Project planning / maintenance instructions / additional information

- The plug-in proportional amplifier may only be wired in de-energized condition.
- Do not lay lines close to power cables!
- The distance to aerial lines, radios, and radar systems has to be 1 m at least.
- To set the potentiometers and to check the current values, use the measuring adapter and measure the currents in a potential-free manner.
- The specified maximum solenoid currents must not be exceeded.
- Do not use solenoids with integrated free-wheeling diodes.
- The supply voltage is to be secured by means of a fuse – see "Technical data".