

Electric Drives
and Controls

Hydraulics

Linear Motion and
Assembly Technologies

Pneumatics

Service

Rexroth
Bosch Group

Plug-in proportional amplifier

RE 30259/07.12

1/4

Type VT-SSPA1-525-1X/V0

Component series 1X



Table of contents

Contents	Page
Features	1
Ordering code	2
Adjustment, pin assignment	2
Block diagram with pin assignment	3
Technical data	3
Device dimensions	4
Project planning / maintenance instructions / additional information	4

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.

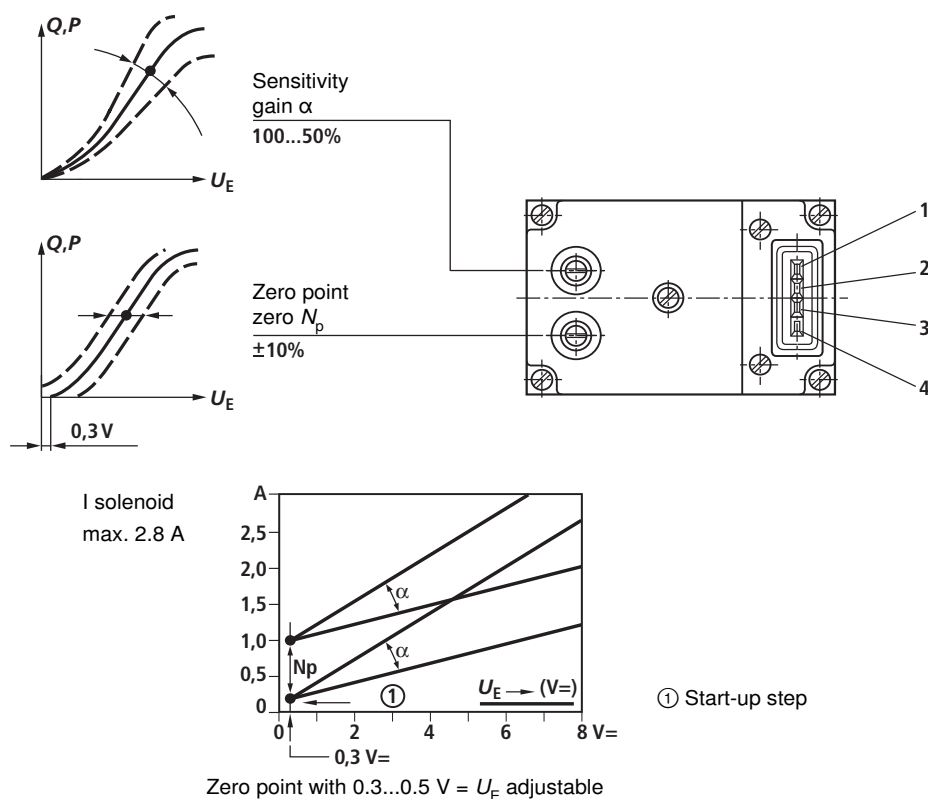
Ordering code

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

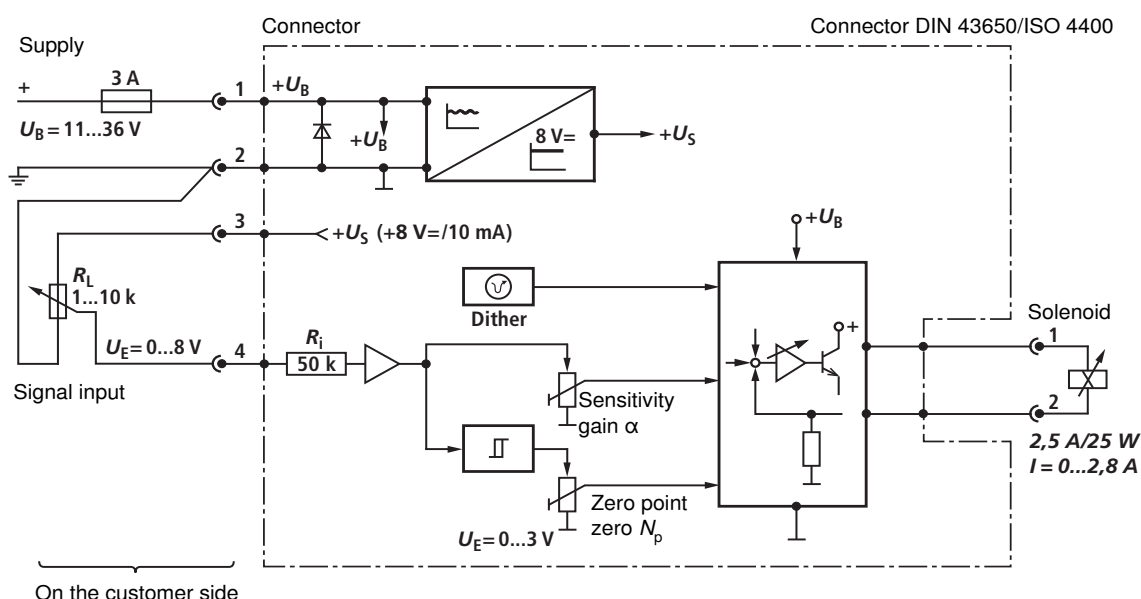
Preferred types

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

Adjustment, pin assignment



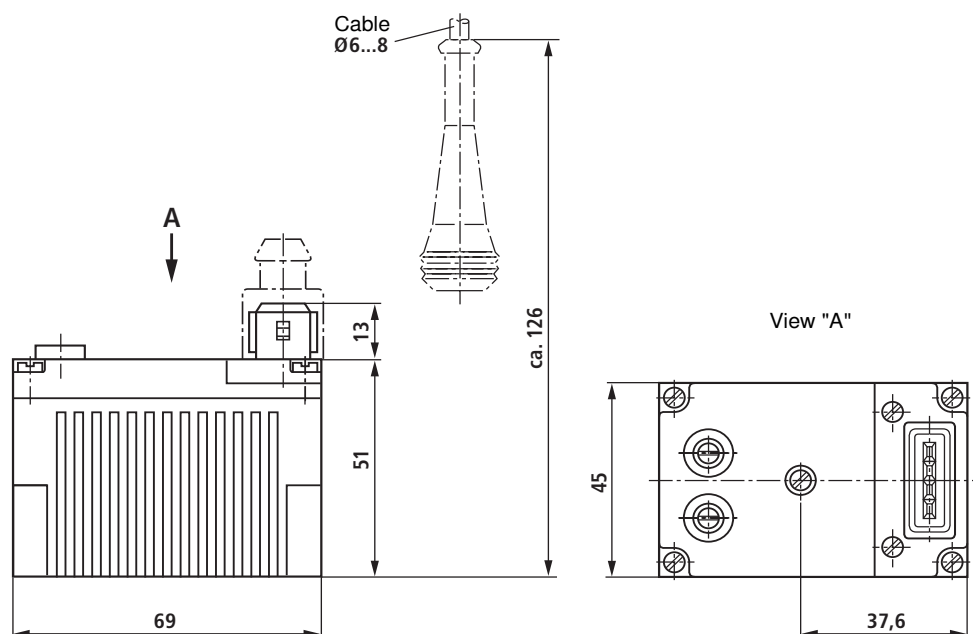
Block diagram with pin assignment



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

Design:	Connector housing
Plug-in connection	Solenoid: DIN 34650 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 (11...36 V, < 10 % ripple)
Max. power consumption	W < 30
Input signal (command value)	V 0.3...8 < 0.3 V, solenoid de-energized
Signal source	Potentiometer 1...10 kΩ Supply +8 V from (3)
Output proportional solenoid	Rectangular voltage, pulse-modulated $I_{\max} = 2.5\text{ A}$
Cable lengths and cross-sections	Supply < 20 m 1.5 mm ² 20...40 m 2.5 mm ²
Special features	– Inputs and outputs short-circuit proof – Clocked output stage – Fast energization for short actuating time
Adjustment via trimming potentiometer	1. Zero point 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".