

RT-(Z)DBEE-1X-40

Integrated proportional amplifier without electrical position feedback, single solenoid

Design number: 40 series

Power supply range: 8~32VDC

Command types: 0~10V,4~20mA
(confirmed before leaving the factory)

Maximum output current: 1.6A



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Features

- It is applicable to control the (Z)DBEE - 1X series of proportional relief valves.
- It has a built - in digital tube and buttons, with which the rising and falling ramp times can be set respectively.

(Z)DBEE

Ordering Model

RT-(Z)DBEE-1X	-	40	/	A1
01		02		03

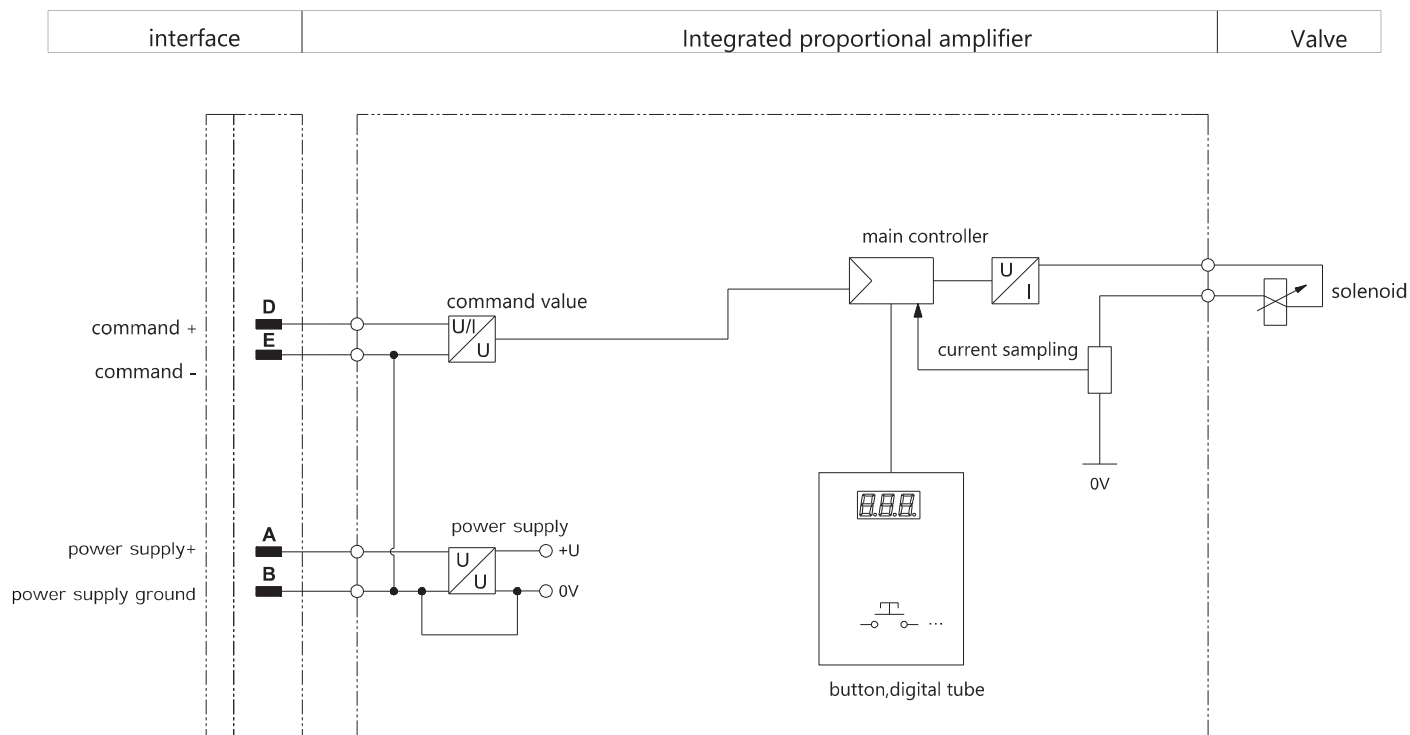
01	RT-(Z)DBEE-1X	Integrated proportional amplifier ,controlling the (Z)DBEE - 1X series of proportional relief valves
02	40	The design number is of 40 series .
03	A1	The command input of 0~10V
	F1	The command input of 4~20mA

Technical Data

Working Voltage	19~32 VDC
No-load Current	$\leq 40\text{mA}$
Signal Input	0~10 V, input impedance $\geq 100\text{K}\Omega$ 4~20 mA, input impedance $= 100\Omega$ (Specify before delivery, not switchable on site)
Resolution	$\leq 1\text{‰}$
Nonlinearity	$\leq 1\%$
Initial Current Value	0.2A (at the time of 5% command)
Maximum Current Value	1.6A (at the time of 100% command)
Chatter Frequency	300Hz
Ramp Time	0 - 99.9 S (settable), with the factory default setting being 0.
IP Rating	IP65
Operating Temperature	-20~70 °C
Storage Temperature	-20~85 °C
Operating and Storage Humidity	0%~90 %
Electrical Connection	Seven-core plug, compliant with DIN EN 175201-804.

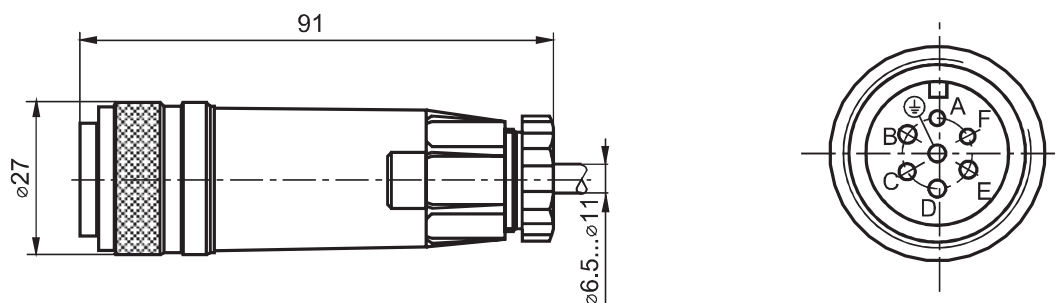
(Z)DBEE

Principle Block Diagram



Terminal Definition

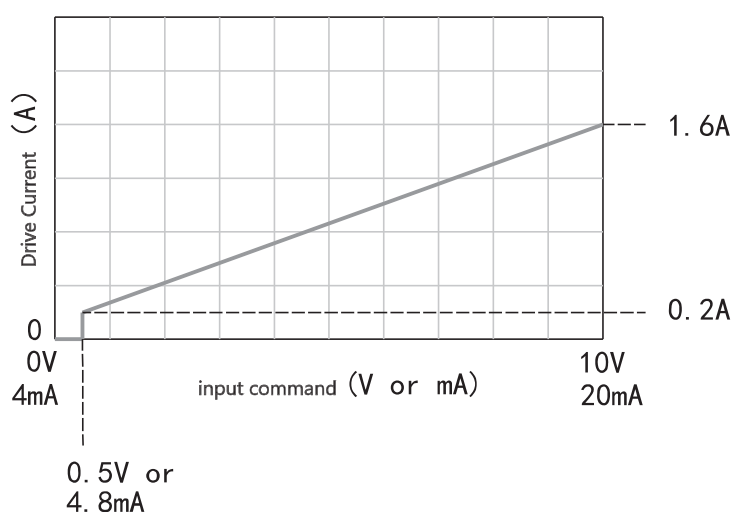
The plug complies with the standard DIN EN 175201 - 804 (see the picture below). It needs to be ordered separately, and the order model is: RT - QXCT.



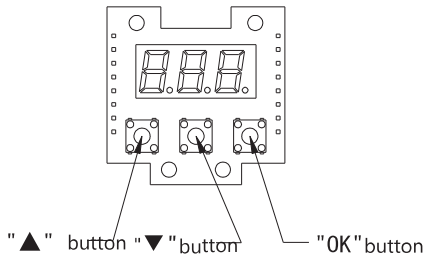
Plug Wiring Diagram

	Plug	Type A1	Type F1
Power Supply Voltage	A	24VDC (19~35VDC) ; I _{max} =2A	
	B	0V	
Command Input	C	Not connected	
	D	Set value 0~10V; R _e ≥100KΩ	Set value 4~20mA; R _e =100Ω
	E	Reference potential of the set - point value	
	F	Not connected	
	PE	Connect to the valve body and objects with a lower temperature.	

Input - Output Curve



Ramp Time Setting

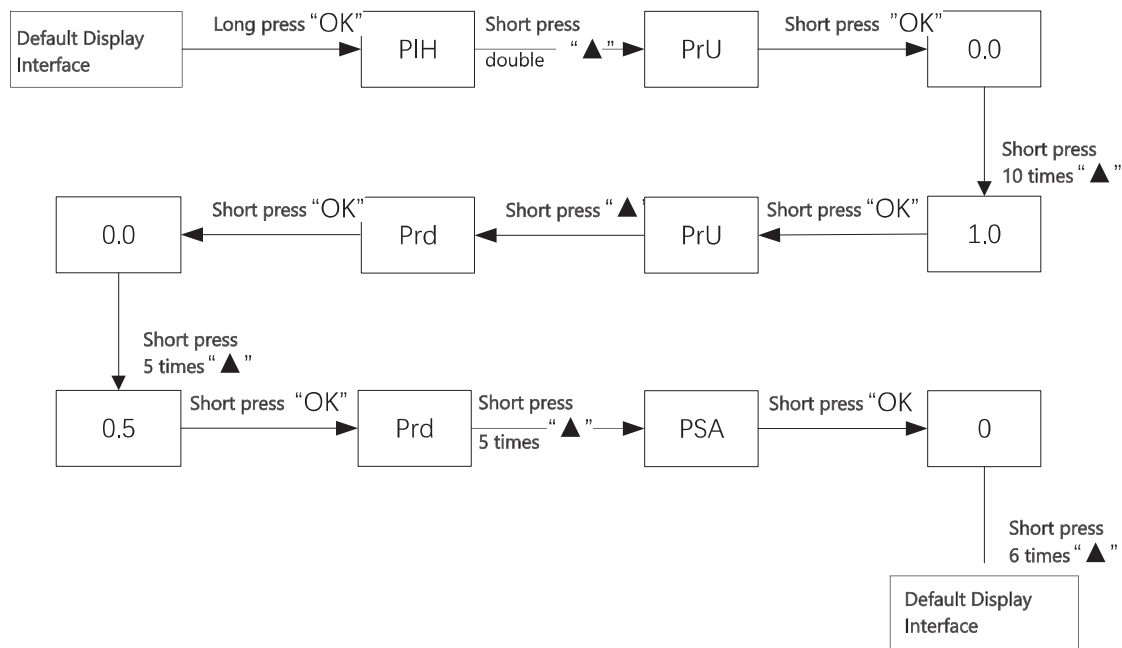


To set the ramp time, open the upper cover of the amplifier. You can see a 3 - digit digital tube and 3 buttons.

For example, to set a 1-second ramp-up time (PrU) and a 0.5-second ramp-down time (Prd), follow the steps below. The content in the box is the display of the digital tube, and the text on the arrow is the operation step.

After setting the parameters, the accumulated value of PSA needs to be greater than 5 to permanently save the parameters. Otherwise, the previous parameters will remain after power - off and restart.

Note: Do not change other parameters. Otherwise, the control performance described in the manual cannot be guaranteed.



Precautions

- The amplifier can only be plugged in or unplugged when the power is off!
- When measuring the amplifier, instruments with $R_i > 100k\Omega$ must be used!
- The distance from antennas, wireless power sources and radar equipment must be greater than 1m.
- Don't lay the solenoid and the command value cables near the power cables!