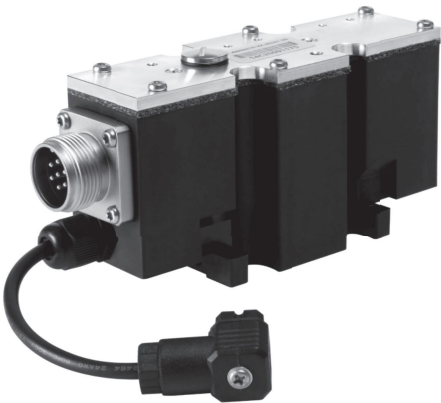


RT-4WREE.-2X-40

Integrated proportional amp lifier with electrical position feedback, double-electromagnet
Design number: 40 series
Power supply range: 19~35VDC
Command types: ±10V,4~20mA
(confirmed before leaving the factory)
Types of control valves: 4WREE6 or 4WREE10



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Features

- Application range Applicable to controlling 4WREE6 and 4WREE10 proportional valves.
- Zero position and gain are adjustable: The zero position and gain of the valve can be adjusted through a potentiometer.
- Adjustable ramp time: The ramp time can be adjusted via a potentiometer.
- Wide Voltage: Wide voltage input ranging from 19 to 35VDC

Ordering Model

RT-4WREE	6	_	-	2X	-	40	/	A1	-	00
01	02	03		04		05		06		07

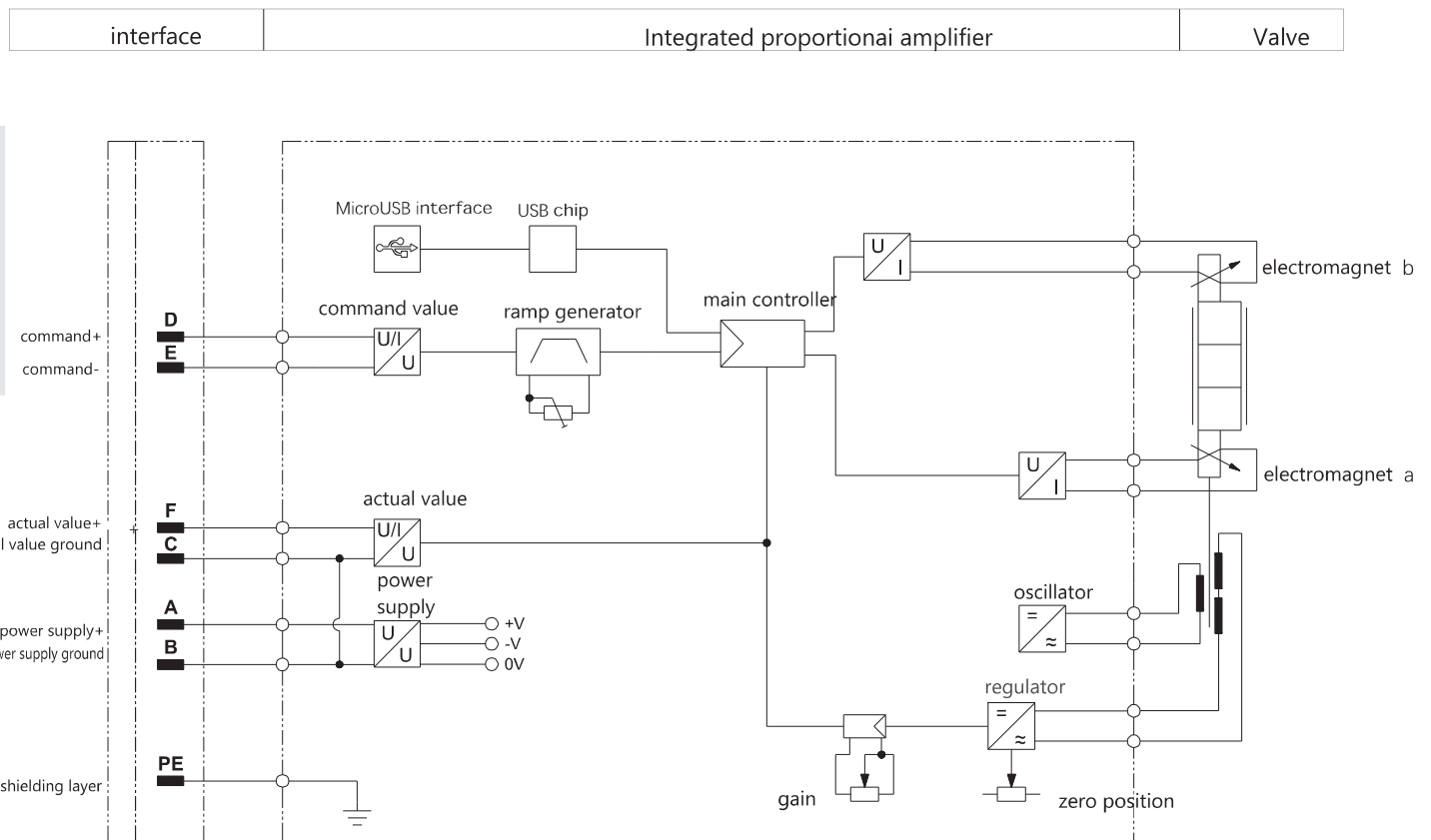
01	RT-4WREE	Integrated proportional amplifier,controlling 4WREE series of proportional valves.
02	6	Size 6
	10	Size10
03		Double-electromagnet standard type
	EA or WA	Single electromagnet, compatible with valves of EA or WA functions
04	2X	Proportional valve series number
05	40	The amplifier design number is of the 40 series.
06	A1	The commands are ±10V (for double- electromagnet) and 0 - 10V (for single - electromagnet).
	F1	The command is 4 - 20mA.
07	00	The housing type features 4 mounting holes and has no USB opening (default type).
	01	The housing type features 4 mounting holes and has a USB opening.
	02	The housing type features 2 mounting holes and has no USB opening.

4WREE

Technical Data

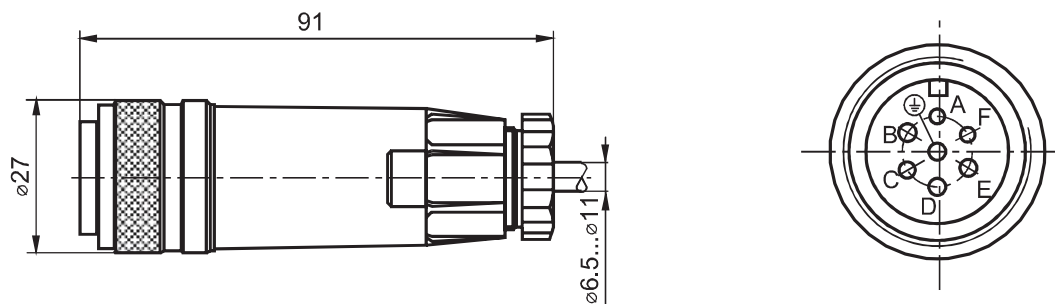
Working Voltage	19~35 VDC (commonly 24VDC)
Maximum Power Consumption	< 45VA
No-load Current	≤100mA (24V)
Differential Signal Input	±10 V (or 0~10V) , input impedance ≥1 00KΩ 4~20 mA, input impedance =100Ω (Specified before delivery, not switchable on site.)
Resolution	≤1 ‰
Nonlinearity	≤1 ‰
Maximum Output Current	Size 6 : 2.8A 10 - way nominal Size 10: 3A
Ramp Time	0.01~5S (adjustable by potentiometer)
Electrical Connection	Connector, 7-pole(6+PE) according to EN 175201-804 Sensor plug, compliant with DIN VDE0627 / IEC 61984
Operating Temperature	-20~80°C
Storage Temperature	-20~85°C
Operating and Storage Humidity	0 %~90 %
IP Rating	IP65

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	Type A1	Type F1
Power Supply Voltage	A	24VDC (19~35VDC) ; I _{max} =2A	
	B	0V	
Reference Potential (actual value)	C	Reference potential of the actual value	
Differential Input	D	Set value $\pm 10V$; $R_e \geq 100K\Omega$	Set value 4~20mA; $R_e = 100\Omega$
	E	Reference potential of the set - point value	
Measured Output (actual value)	F	Actual value $\pm 10V$; current - limiting at 1mA, $R_e \geq 100K\Omega$	Actual value 4~20mA; $R_e \leq 300\Omega$
	PE	Internally connect to the valve body	

Set Value:

- A positive given input value (0 to +10V or 12 to 20mA) applied to D and E will connect port P of the valve to port A and port B to port T.
- A negative given input value (0 to -10V or 12 to 4mA) applied to D and E will connect port P of the valve to port B and port A to port T.
- For valves with the structure of EA or WA, applying a positive set value of 0 to +10V (or 4 to 20mA) to D and E will connect port P of the valve to port B, and port A to port T.

Note:

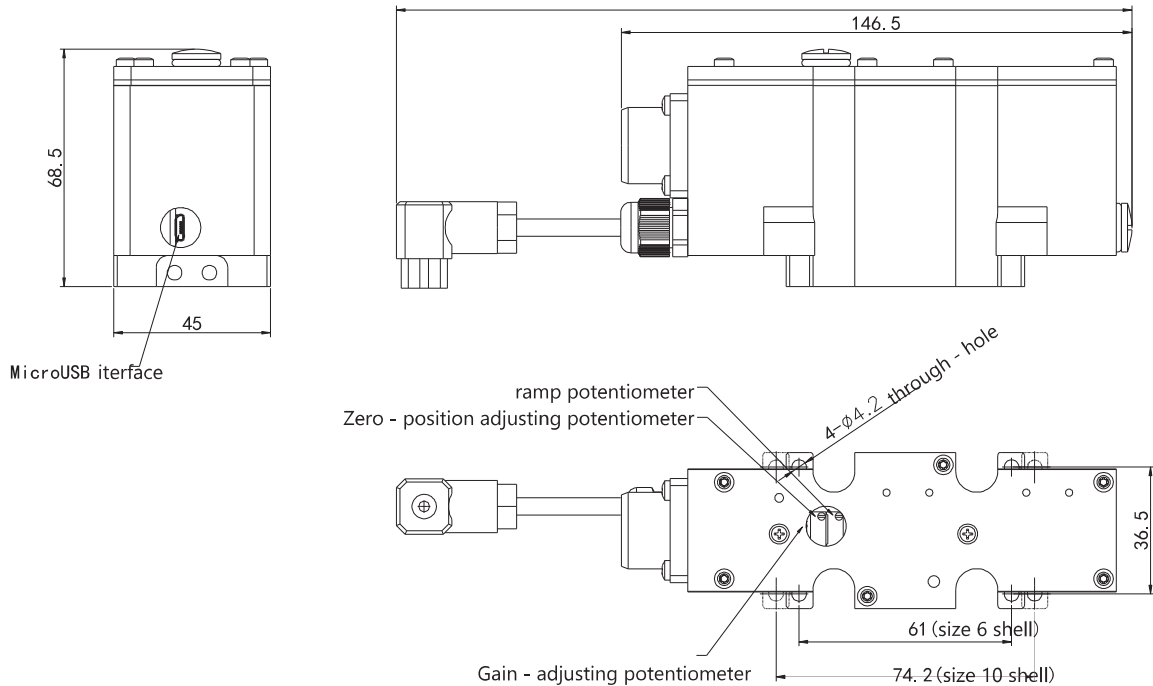
- For amplifiers with a 4 - 20mA command type, if the set value is less than 2mA, the amplifier will determine that the command line is broken. At this time, the output terminal of the amplifier will be powered off, and the valve spool will return to its original position through the spring.

Actual value:

- A positive actual value (0 to +10V or 12 to 20mA) on F and C indicates that port P of the valve is connected to port A, and port B is connected to port T.
- A negative actual value (0 to -10V or 12 to 4mA) on F and C indicates that port P of the valve is connected to port B, and port A is connected to port T.
- For valves with a spool structure of EA or WA, a positive actual value of 0 to +10V (or 4 to 20mA) on F and C indicates that port P of the valve is connected to port B and port A is connected to port T.

Overall Dimensions (Unit: mm)

Valve body lengths vary according to different port diameters. Refer to the physical product for the exact dimensions.



Name	Descriptions
MicroUSB	Connect the PC with a USB (Type A) to Micro - USB cable. No adjustable parameters are available for this amplifier model.
Zero point potentiometer	Rotate clockwise: P - to - B flow increases; counter - clockwise: P - to - A flow increases.
Gain Potentiometer	Rotate clockwise: overall flow decreases; counter - clockwise: overall flow increases.
Ramp Potentiometer	Rotate - clockwise: ramp time shortens; counter clockwise: ramp time increases up to 5 s. Factory setting: 0.01 s.

Precautions

- The MicroUsB interface is located inside the housing. For the amplifier with housing type 01 (which has a USB opening on the housing), you can unscrew the plug to make the connection, As for other amplifiers without a USB opening, you need to remove the six screws on the aluminum panel and take out the amplifier to access the MicroUSB interface for connection.
- The openings on the housing are sealed with pG7 threaded plugs. During use, unscrew the plugs counter - clockwise. After use, please screw the threaded plugs back in clockwise to ensure that the amplifier restores its IP65 protection rating.
- 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 electromagnet and the command value cables near the power cables!