

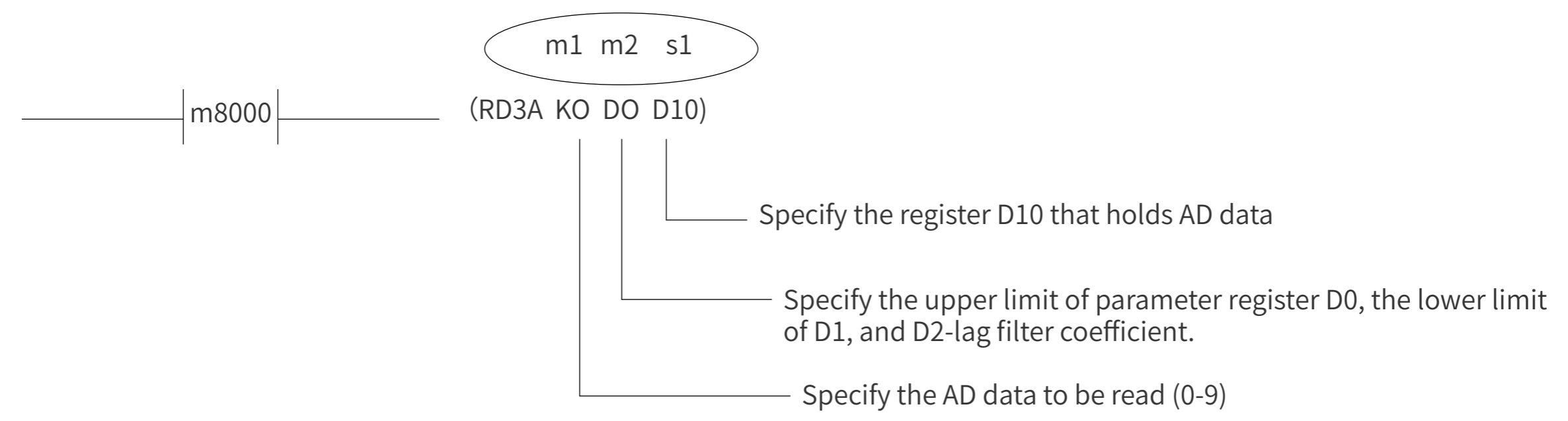
Instructions for using FX3U analog quantity of Easycon

Example of analog quantity AD 0-10V:

D600 is the upper limit register, then D601 is the lower limit register and D700 is the read value.



Description:



A) M1-specify the number of AD channels to be read (the maximum number is the number of channels opened by the setting software, which exceeds 6706)m2- specify the upper and lower limit range(-32767—32767) register, m2 is the upper range limit, m2+1 is the lower range limit, only the D register can be specified as the range address, m2+2 is the first-order lag filter coefficient (0-128), and other data are reported as 6706.

B) Principle of the above program: When the PLC is running, read the first AD data (the upper range is D600 and the lower range is D601) and save it at D700.

Example: Follow the above procedure.

- 1) If D600=1000, D601=0, the input of AD is 0~10V, and the current input is 5V, then D700=500.
- 2) If D600=4000, D601=0, the input of AD is 0~10V, and the current input is 5V, then D700=2000.
- 3) If D600=1000, D601= - 1000, the input of AD is 0~10V, and the current input is 5V, then D700=0.

Example of analog quantity AD 4-20mA:

D10 is the upper limit register, then D101 is the lower limit register, and D200 is the read value.



Analog input 4-20mA conversion instructions:

$$\text{Lower range} - \frac{\text{Upper range limit} - \text{Lower range}}{4} = \text{Lower limit of program}$$

The sensor range corresponding to 4 ~ 20ma in the program is 0 ~ 4000, so the upper limit of the program is set to 4000, and the lower limit algorithm of the program is as follows.

$$0 - \frac{4000 - 0}{4} = - 1000$$

Description:

A) M1-specify the number of AD channels to be read (the maximum number is the number of channels opened by the setup software, which exceeds the report of 6706)m2- specify the upper and lower limit registers (-32767-32767), m2 is the upper limit of the range, m2+1 is the lower limit of the range, only the D register can be specified as the range address, and m2+2 is the first-order lag filter coefficient (0-128).

B) Principle of the above program: when the PLC is running, read the first AD data (the upper range is D100 and the lower range is D101) and save it in D200.

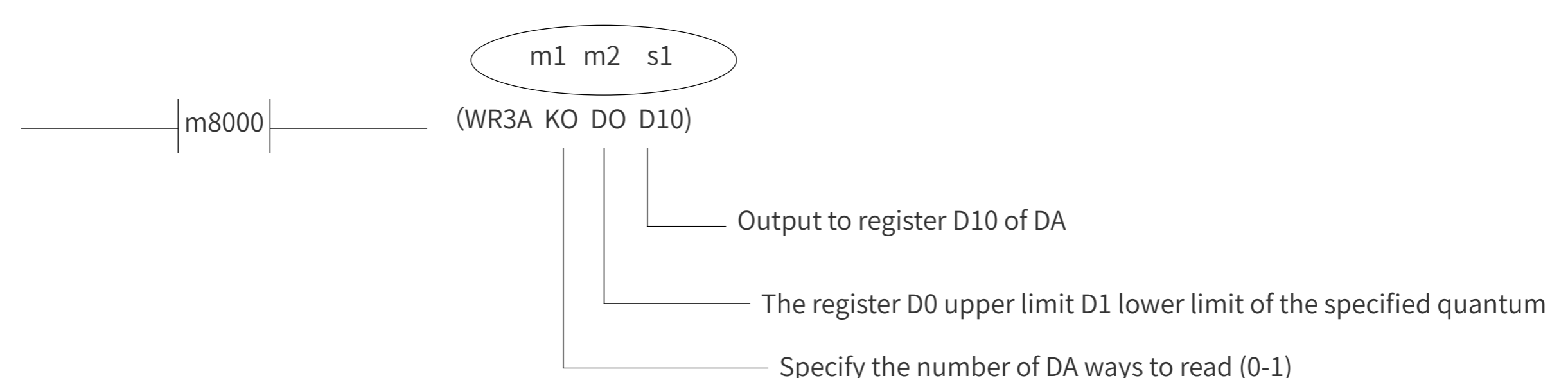
- 1) If D100=4000, D101=-1000, the input of AD is 4~20mA, and the current input is 10mA, then D200=1500.

Example of analog DA 0-10V shows:

D300 is the upper limit register, then D301 is the lower limit register, and D350 is the analog output value.



Description:



A) M1-Specify the number of DA (range 0-32767) channels that need to be output (the maximum number is the number of channels opened by the setting software, which exceeds 6712)

B) m2-the register that specifies the upper and lower range limits. M2 is the upper range limit, and m2+1 is the lower range limit. Only the D register can be specified as the range address. Other datagrams are 6712.

C) The above program principle: when the PLC is running, the data of D350 (the upper range is D300 and the lower range is D301) will be output to DA0.

Example:

According to the above procedure:

- 1) Suppose: D300=1000, D301=0, the output voltage of DA is 0~10V, the data of D350 is 500, and the output of DA is 5V.
- 2) Suppose: D300=4000, D301=0, the output voltage of DA is 0~10V, the data of D350 is 2000, and the output of DA is 5V.
- 3) Suppose: D300=1000, D301= -1000, the output voltage of DA is 0~10V, the data of D10 is 0, and DA outputs 5V.

Note:

The upper and lower ranges can be set to negative numbers, and the upper range must be greater than the lower range. If both the upper and lower ranges are 0, the data conversion of the corresponding ranges will not be performed.

1) When the upper and lower ranges are all 0, the input range of DA data is 0~4095, otherwise, the input range of DA data is > = lower range, < = upper range.

Measuring range; When the data is outside the above data, PLC reports 6706 failure.

2) Error detection is performed on the data converted from AD to DA, and AD reports 6706 and DA reports 6706 failure.

3) When using RD3A to read AD data, the first-order lag filtering is supported (range: 0-128, 0 means that the first-order lag filtering is not turned on, and the larger the coefficient, the greater the lag, so it is recommended to set a value of 50).