

**Product Information**

**Note**

The metering range end value can be programmed by the user via "teaching". Requirement for programmability must be stated when ordering, otherwise the device cannot be programmed. The ECI-1 device configurator with associated software is available as a convenient option for programming all parameters by PC, and for adjustment.  
 The teaching option is not available for the pulse output version.

**Operation and programming**

The teaching process can be carried out by the user as follows:

- The flow rate to be set is applied to the device.
- Apply an impulse of at least 0.5 seconds and max. 2 seconds duration to pin 2 (e.g. via a bridge to the supply voltage or a pulse from the PLC), in order to accept the measured value.
- When the teaching is complete, pin 2 should be connected to 0 V, so as to prevent unintended programming.

The devices have a yellow LED which flashes during the programming pulse. During operation, the LED serves as an indicator of operating voltage (for analog output) or of switching status (for frequency or pulse output).

In order to avoid the need to transit to an undesired operating status during the teach-in, the device can be provided ex-works with a teach-offset. The teach-offset point is added to the currently measured value before saving. The offset point can be positive or negative.

*Example: The end of the metering range should be set to 80 %. However, only 60 % can be achieved without problem. In this case, the device would be ordered with a "teach-offset" of +20%.. At a flow rate of 60 % in the process, teaching would then store a value of 80 %.*

If necessary, a far greater number of parameters can also be programmed using the ECI-1 device configurator.

**Ordering code**

The basic device is ordered e.g. RRI-010xxx with electronics e.g. LABO-RRI-010xxx

RRI-	1. 025	2. G	3. V	4. Q	5. 160	6. V	7. 10	8. K	9. E
LABO-RRI-	10. I	11. P	12. S	120L/MIN H2O					

○=Option

<b>1. Nominal width</b>		
010	DN 10	
025	DN 25	
<b>2. Mechanical connection</b>		
G	female thread	
A	male thread	
T	hose nozzle	
<b>3. Connection material</b>		
V	PVDF	
M	<input type="radio"/> CW614N nickelled	
K	<input type="radio"/> 1.4305	
<b>4. Housing material</b>		
Q	PPS	
V	PVDF	
A	<input type="radio"/> PPS with transparent cover PSU	
<b>5. Inwards flow drilling</b>		
020	Ø 2.0	•
050	Ø 5.0	•
070	Ø 7.0	•
080	Ø 8.0	•
120	Ø12.0	•
160	Ø16.0	•
<b>6. Seal material</b>		
V	FKM	
E	<input type="radio"/> EPDM	
N	<input type="radio"/> NBR	
<b>7. Rotor</b>		
10	with 10 clamps	
02	<input type="radio"/> with 2 clamps	
05	<input type="radio"/> with 5 clamps	
<b>8. Material for clamps</b>		
K	1.4310	
T	<input type="radio"/> titanium	
H	<input type="radio"/> Hastelloy®	
<b>9. Connection for</b>		
E	electronics	
<b>10. Signal output</b>		
I	current output 4..20 mA	
U	voltage output 0..10 V	
F	frequency output (see "Ordering information")	
C	pulse output (see "Ordering information")	
<b>11. Programming</b>		
N	cannot be programmed (no teaching)	
P	<input type="radio"/> programmable (teaching possible)	
<b>12. Electrical connection</b>		
S	for round plug connector M12x1, 4-pole	