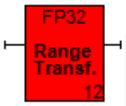
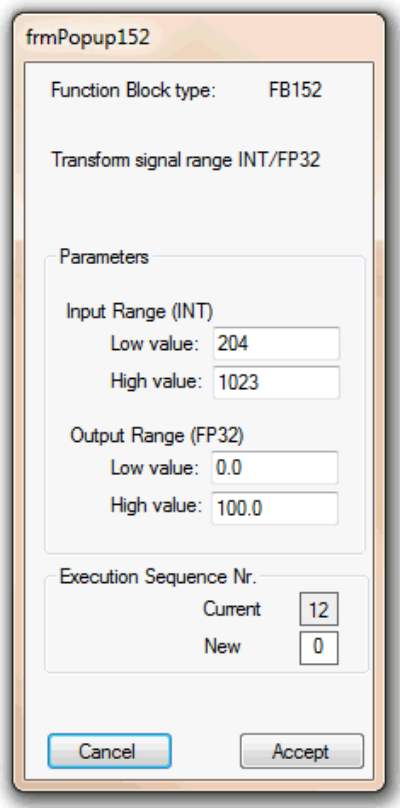
Function Block 152 Range Transform





Function Description
Transform the input signal from one range to another. Output is calculated as follows:

$$Output = (Input - B)\left(\frac{C-D}{A-B}\right) + D$$

Where: A = Input range max value.
B = Input range min value.
C = Output range max value.
D = Output range min value.

Popup Parameters

- Input Range
  High value: Range: -32678…+32767
  Low value: Range: -32678…+32767
- Output Range
  High value: Range: FP32 (Real)
  Low value: Range: FP32 (Real)
- Execution sequence number.

Input/Output Parameters

Type	Description	Data Type	Range
Input	Signal input	INT	-32678…+32767
Output	Signal Output	FP32	32Bit Real

Application
This function block is particularly helpful when transforming Analog inputs (range 0…1023) to a signal in engineering units (i.e. -10.0 ….120.0 DegC)

Notes:
Function block 152 can be executed in Cycle and Time tasks.
