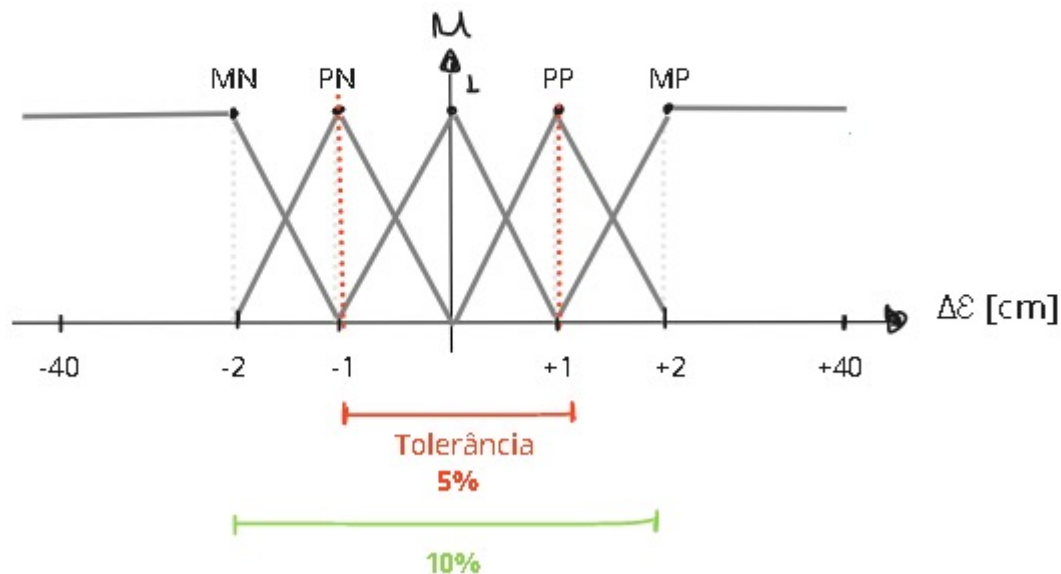


$$\text{Erro} = PV - SP \quad \begin{cases} \text{Erro}^+ = PV > SP \\ \text{Erro}^- = SP > PV \end{cases}$$

O nível da água está:

$\varepsilon^+ \rightarrow$ Alta
 $\varepsilon^- \rightarrow$ Baixa



$$\Delta \varepsilon = \mathbf{PV_{atual}} - \mathbf{PV_{ant}} \quad \left\{ \begin{array}{l} \text{DeltaErro} = 20 - (-20) \\ \text{DeltaErro} = -20 - (+20) \end{array} \right.$$

O nível da água está:

$\Delta \varepsilon \oplus \rightarrow$ Subindo
 $\Delta \varepsilon \ominus \rightarrow$ Descendo

		ϵ				
		-			+	
$\Delta\epsilon$	-	MN	PN	ZE	PP	MP
	MN	MA	A	M	M	B
	PN	A	M	B	B	MB
	ZE	M	B	MB	MB	MB
	PP	M	B	MB	MB	MB
	MP	M	B	MB	MB	MB
		+				

$$\Delta\epsilon = PV_{\text{atual}} - PV_{\text{ant}}$$

MN - Muito negativo

PN - Pouco negativo

ZE - Zero

PP - Pouco positivo

MP - Muito positivo

$\epsilon+$ - Nível Alto
 $\epsilon-$ - Nível Baixo

$\Delta\epsilon+$ - Nível aumentando
 $\Delta\epsilon-$ - Nível diminuindo

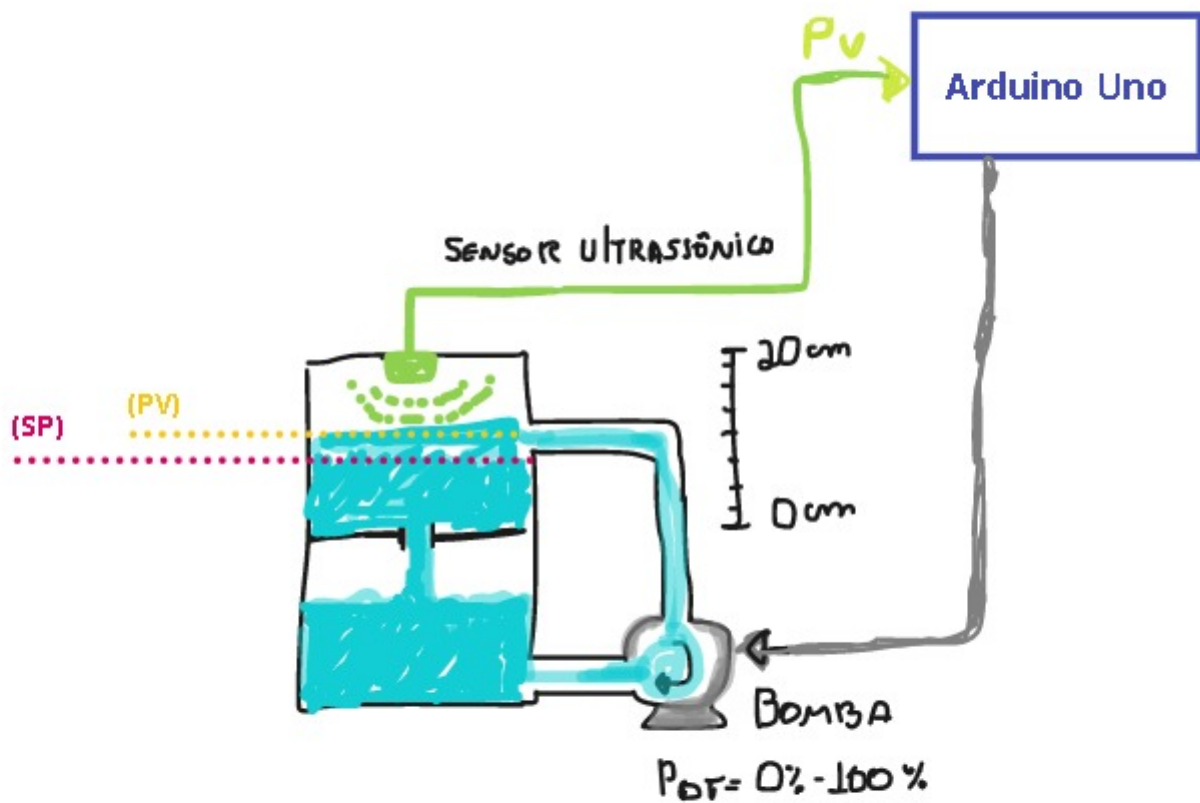
Região 1 $\left\{ \begin{array}{l} \epsilon- = \text{Baixo} \\ \Delta\epsilon- = \text{Diminuindo} \end{array} \right.$

Região 1 $\left\{ \begin{array}{l} \epsilon+ = \text{Alto} \\ \Delta\epsilon- = \text{Diminuindo} \end{array} \right.$

Região 2 $\left\{ \begin{array}{l} \epsilon- = \text{Baixo} \\ \Delta\epsilon+ = \text{Aumentando} \end{array} \right.$

Região 1 $\left\{ \begin{array}{l} \epsilon+ = \text{Alto} \\ \Delta\epsilon+ = \text{Aumentando} \end{array} \right.$

Nível ideal (PV)
Nível ideal (SP)



SimulIDE

untitled* - fuzzyTECH B.77e Professional Demo

File Edit View Debug Analyzer Tools Window Help

Fuzzy System

- Variable Groups
 - Inputs
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- Rule Blocks
- Test
- Debug: Interactive
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- Online Connections

Project Editor

Diagram showing a rule block (RD1) with inputs D_ERRO and ERRO, and output POT_BOMBA. The rule block is connected to a variable group (POT_BOMBA).

Watch: Interactive ...

Inputs	Outputs
D_ERRO: 2	POT_BOMBA: 0.336
ERRO: 10	

Messages

Information: Saving of projects and code generation are disabled.

----- fuzzyTECH: Enable Debug Mode

Warning: Variable 'POT_BOMBA' is not used in any rule block - 77 Bytes, 57 Points

Warning: Rule block 'RD1': Variable 'POT_BOMBA' is not used in any rule

===== Summary: 0 error(s), 2 warning(s)

Variables: 1 of 3 are not used in any rule

Terms: 5 of 15 are not used in any rule

Rule blocks: 1 of 1 have at least one variable that is not used in any rule

Loading Knowledge Base...

Debug: Interactive

00:30 22/12/2020

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Project Editor

Diagram showing a rule block (RD1) with inputs D_ERRO and ERRO, and output POT_BOMBA. The rule block is connected to a variable group (POT_BOMBA).

Watch: Interactive ...

Inputs	Outputs
D_ERRO: -3	POT_BOMBA: 91.662
ERRO: 10	

Messages

Information: Saving of projects and code generation are disabled.

----- fuzzyTECH: Enable Debug Mode

Warning: Variable 'POT_BOMBA' is not used in any rule block - 77 Bytes, 57 Points

Warning: Rule block 'RD1': Variable 'POT_BOMBA' is not used in any rule

===== Summary: 0 error(s), 2 warning(s)

Variables: 1 of 3 are not used in any rule

Terms: 5 of 15 are not used in any rule

Rule blocks: 1 of 1 have at least one variable that is not used in any rule

Performance Optimization: Conclusions (Memory): Inex - 77 Rules

Loading Knowledge Base...

Debug: Interactive

00:33 22/12/2020