

# Bpr

## Funkcia %Bpr

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---------------------|----|------------------|------------|--|------------|--|----|------------------|----|-------------------|
| Starý názov funkcie | %BprB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
| Funkcia             | Funkcia implementuje dvojpolohový regulátor. Vracia hodnotu typu <i>Boolean</i> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
| Deklarácia          | <pre>BOOL %Bpr(<br/>    REAL in RV,<br/>    REAL in IV,<br/>    REAL in DeadBand,<br/>    REAL in Hysteresis,<br/>    BOOL in OV/CO<br/>)</pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
| Parametre           | <table><tr><td>ZH</td><td>Požadovaná hodnota.</td></tr><tr><td>VH</td><td>Vstupná hodnota.</td></tr><tr><td>Necitlivos</td><td></td></tr><tr><td>Hysterézia</td><td></td></tr><tr><td>OV</td><td>Otvárací výstup.</td></tr><tr><td>ZV</td><td>Zatvárací výstup.</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ZH | Požadovaná hodnota. | VH | Vstupná hodnota. | Necitlivos |  | Hysterézia |  | OV | Otvárací výstup. | ZV | Zatvárací výstup. |
| ZH                  | Požadovaná hodnota.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
| VH                  | Vstupná hodnota.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
| Necitlivos          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
| Hysterézia          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
| OV                  | Otvárací výstup.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
| ZV                  | Zatvárací výstup.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |                     |    |                  |            |  |            |  |    |                  |    |                   |
| Poznámka            | <p>Regulácia prebieha podľa ľavej čiary obrázku (<math>OV/ZV = @OV</math>) alebo podľa pravej čiary obrázku (<math>OV/ZV = @ZV</math>).</p> <p>The diagram illustrates the control logic for the Bpr function. It shows a horizontal axis representing the input value (VH) and a vertical axis representing the setpoint (ZH). The input value (VH) is shown as a step function. The setpoint (ZH) is shown as a constant value. The output signals (OV and ZV) are shown as step functions. The diagram is divided into two parts: the left part shows the logic for <math>OV/ZV = @OV</math> and the right part shows the logic for <math>OV/ZV = @ZV</math>. The states are labeled as stav 1, stav 2, stav 3, stav 4, and stav 5. The transitions between states are labeled A, B, C, and D.</p> <p><b>Parametre:</b></p> <ul style="list-style-type: none"><li>Necitlivos = AC (&gt; 0) - reálna hodnota</li><li>Hysterézia = BC (&gt; 0) - reálna hodnota</li></ul> <p><b>Vstupné premenné:</b></p> <ul style="list-style-type: none"><li>VH - reálna hodnota</li><li>ZH - reálna hodnota (konštanta alebo spojitý signál)</li></ul> <p><b>Výstupné premenné:</b></p> <ul style="list-style-type: none"><li>OV - hodnota typu <i>Boolean</i></li><li>ZV - hodnota typu <i>Boolean</i></li></ul> <p><b>Funkcia:</b></p> <ul style="list-style-type: none"><li>Stav 1: <math>VH \leq ZH - AD</math>, potom <math>OV=1</math> a <math>ZV=0</math></li><li>Stav 2: <math>ZH - AD &lt; VH &lt; ZH - AB</math>, potom OV sa nemení a <math>ZV=0</math></li><li>Stav 3: <math>ZH - AB \leq VH \leq ZH + AB</math>, potom <math>OV=ZV=0</math></li><li>Stav 4: <math>ZH + AB &lt; VH &lt; ZH + AD</math>, potom <math>OV=0</math> a ZV sa nemení</li><li>Stav 5: <math>ZH + AD \leq VH</math>, potom <math>OV=0</math> a <math>ZV=1</math></li></ul> |    |                     |    |                  |            |  |            |  |    |                  |    |                   |



**Súvisiace stránky:**

[Implementované funkcie](#)  
[Argumenty funkcie - typy](#)