PGF Gas Using TikZ circuits to draw gas networks.

Robert Schwarz

April 14, 2011

This package defines four new symbols for common elements in natural gas networks:

- pi Pipes
- ${\rm cs\ Compressors}$
- va Valves
- cv Control valves
- re Resistors

Requires pgf with circuits library, e.g., version 2.10.

```
\begin{tikzpicture} \circuit \ \draw (0,4) to [pi] (2,4); \draw (0,3) to [cs] (2,3); \draw (0,2) to [va] (2,2); \draw (0,1) to [cv] (2,1); \draw (0,0) to [re] (2,0); \end{tikzpicture}
```

Figure 1: All the standard elements are available.

```
\begin{tikzpicture} [circuit, scale=1.5, circuit symbol unit=10pt]
                       to [cv=\{fill=yellow\}] (5,0);
  \langle draw (0,0) \rangle
  \langle draw (0,0) \rangle
                       to
                           [cs=\{red\}] (0,2);
  \backslash draw (0,2)
                           [va={fill=green}] (3,2);
                       to
  \backslash draw (5,0)
                           [re] (3,2);
                       to
                           [cs = \{fill = red\}] (3,2);
  \langle draw (0,0) \rangle
                       to
\end{tikzpicture}
```

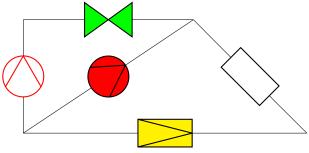


Figure 2: They can also be colored, filled, scaled and are automatically placed and rotated.