Proportional throttle valves series F5C allow to adjust the flow in proportion to the input signal. The combination of the F5C with pressure compensators R5A or R5P serves as a flow control valve - providing load compensated flow.

The F5C is offered with two types of response time:
- standard 350 ms at 1 l/min pilot flow
- code A 250 ms at 2 l/min pilot flow

Features
- Spool type proportional throttle valve
- SAE61 flange
- Maximum flow 380 l/min
- 3 sizes, SAE 3/4", 1", 1 1/4"
- Load compensated flow in combination with R5A/R5P
### Ordering Code / Pilot Connection

#### Series F5C

**Proportional Throttle Valve**

- **Code**: F5C
- **Nominal size**:
  - 06: SAE ¾”
  - 08: SAE 1”
  - 10: SAE 1¼”
- **Pilot flow and response**:
  - —: 1 l/min 350 ms
  - A: 2 l/min 250 ms
- **Spool type**:
  - Code: Size | Max. flow
  - B: 06/08 | 45 l/min
  - 1: 06/08/10 | 95 l/min
  - 2: 08/10 | 190 l/min
  - 3: 10 | 380 l/min

#### Pilot connection explanation

**F5C mit R5A**

- **Diagram**
- *optional

**F5C mit R5P**

- **Diagram**
- *optional

---

1) At nominal pressure drop \(\Delta p = 8.4 \text{ bar}\).
## Technical data

### General

<table>
<thead>
<tr>
<th>Size</th>
<th>06 (¾&quot;)</th>
<th>08 (1&quot;)</th>
<th>10 (1¼&quot;)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting</td>
<td>Flanged according to SAE61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mounting position</td>
<td>unrestricted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>[°C]</td>
<td>-20...+60</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>[kg]</td>
<td>3.9</td>
<td>4.1</td>
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</table>

### Hydraulic

<table>
<thead>
<tr>
<th>Max. operating pressure</th>
<th>Ports A, B, X1, X2, X3</th>
<th>Ports Y1, Y2</th>
<th>Max. pressure drop (from A to B)</th>
<th>Nominal flow</th>
<th>Fluid</th>
<th>Fluid temperature</th>
<th>Viscosity permitted</th>
<th>Viscosity recommended</th>
<th>Filtration</th>
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<tbody>
<tr>
<td>[bar]</td>
<td>350</td>
<td>70</td>
<td>21</td>
<td>[l/min]</td>
<td></td>
<td>[°C]</td>
<td>[cSt] / [mm²/s]</td>
<td>[cSt] / [mm²/s]</td>
<td>ISO 4406 (1999); 18/16/13</td>
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### Electrical characteristics

<table>
<thead>
<tr>
<th>Duty ratio</th>
<th>100 % ED; CAUTION: coil temperature up to 150 °C possible</th>
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<tbody>
<tr>
<td>Solenoid connection</td>
<td>Connector as per EN175301-803, solenoid identification as per ISO 9461</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP65 in accordance with EN 60529 (with correctly mounted plug-in connector)</td>
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<tr>
<td>Supply voltage</td>
<td>[V] 16</td>
</tr>
<tr>
<td>Current consumption</td>
<td>[A] 1.05</td>
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<tr>
<td>Resistance</td>
<td>[Ohm] 11.3</td>
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<tr>
<td>Response time</td>
<td>[ms] see ordering code</td>
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</table>

## Characteristic curves

All characteristic curves measured with HLP46 at 50 °C.
Proportional Throttle Valve
Series F5C

Dimensions

Internal pilot pressure connection (X1) (for use with R5A - 2-port compensator)

Optional external pilot pressure connection (X3)

External pilot drain (Y2)

Seal kits

<table>
<thead>
<tr>
<th>Seal kits</th>
<th>NG</th>
<th>NBR</th>
<th>FPM</th>
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<tbody>
<tr>
<td>06 / 08 / 10</td>
<td>S26-58484-0</td>
<td>S26-58484-5</td>
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<table>
<thead>
<tr>
<th>l1</th>
<th>b1</th>
<th>h1</th>
<th>h2</th>
<th>h3</th>
<th>h4</th>
<th>h5</th>
<th>h6</th>
<th>d1</th>
<th>d2</th>
<th>d3</th>
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<tbody>
<tr>
<td>F5C06</td>
<td>47.6</td>
<td>60</td>
<td>68.2</td>
<td>26</td>
<td>22.2</td>
<td>103.2</td>
<td>183</td>
<td>20.8</td>
<td>19</td>
<td>10.5</td>
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<tr>
<td>F5C08</td>
<td>52.4</td>
<td>60</td>
<td>73.6</td>
<td>29</td>
<td>26.2</td>
<td>108.6</td>
<td>187</td>
<td>24.3</td>
<td>25</td>
<td>10.5</td>
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<td>F5C10</td>
<td>58.7</td>
<td>75</td>
<td>83.5</td>
<td>36.5</td>
<td>30.2</td>
<td>118.5</td>
<td>198</td>
<td>29.3</td>
<td>32</td>
<td>12.5</td>
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