

```

monitor FIFOsemaphore {
  int s = 0;  ## s >= 0
  cond pos;  # signaled when s > 0

  procedure Psem() {
    if (s == 0)
      wait(pos);
    else
      s = s-1;
  }

  procedure Vsem() {
    if (empty(pos))
      s = s+1;
    else
      signal(pos);
  }
}

```

**Figure 5.3** FIFO semaphore using passing the condition.