

```

--algorithm FGBBuf {
  variables  $buf \in [0..(N-1) \rightarrow Msg]$ ,  $p = 0$ ,  $c = 0$ ;
  process (Producer = "P")
    { p1: while (TRUE)
      {
        await  $p \ominus c \neq N$  ;
        p2: with ( $v \in Msg$ ) { $buf[p \% N] := v$ };
        p3:  $p := p \oplus 1$ 
      }
    }
  fair process (Consumer = "C")
    { c1: while (TRUE)
      {
        await  $p \neq c$ ;
        c3:  $c := c \oplus 1$ 
      }
    }
}

```