

[Help](#)

```
#include "cir1d.h"
#include "chk.h"
#include "error_msg.h"
#include "model.h"

extern char *path_sep;

static int MOD(Init)(Model *model)
{
    TYPEMOD *pt = (TYPEMOD *) (model->TypeModel);

    if (model->init == 0)
    {
        model->init = 1;
        model->nvar = 0;
        pt->T.Vname = "Current Date";
        pt->T.Vtype = DATE;
        pt->T.Val.V_DATE = 0.0;
        pt->T.Viter = ALLOW;
        model->nvar++;

        pt->r0.Vname = "Current Rate";
        pt->r0.Vtype = PDOUBLE;
        pt->r0.Val.V_PDOUBLE = 0.05;
        pt->r0.Viter = ALLOW;
        model->nvar++;

        pt->k.Vname = "Speed of Mean Reversion";
        pt->k.Vtype = PDOUBLE;
        pt->k.Val.V_PDOUBLE = 0.15;
        pt->k.Viter = ALLOW;
        model->nvar++;

        pt->theta.Vname = "Long Term Mean";
        pt->theta.Vtype = PDOUBLE;
        pt->theta.Val.V_PDOUBLE = 0.05;
        pt->theta.Viter = ALLOW;
```

```
        model->nvar++;

        pt->Sigma.Vname = "Volatility";
        pt->Sigma.Vtype = PDOUBLE;
        pt->Sigma.Val.V_PDOUBLE = 0.1;
        pt->Sigma.Viter = ALLOW;
        model->nvar++;
    }
    return OK;
}
TYPEMOD Cir1d;
MAKEMOD(Cir1d);
```