FUNCTION\_BLOCK TRANSFER

VAR\_INPUT

AUTO : BOOL ; (\* 1 - track X0, 0 - ramp or hold \*)

XIN : REAL ; (\* Typically from PID Function Block \*)

FAST\_RATE, SLOW\_RATE : REAL ; (\* Up/down ramp slopes \*)

FAST\_UP, SLOW\_UP, (\* Typically pushbuttons \*)

FAST\_DOWN, SLOW\_DOWN : BOOL;

CYCLE : TIME ; (\* Sampling period \*)

END\_VAR

VAR\_OUTPUT XOUT : REAL ; END\_VAR

VAR XFER\_RAMP : INTEGRAL ;

RAMP\_RATE : REAL ;

END\_VAR

RAMP\_RATE := 0.0 ;

IF NOT AUTO THEN

IF FAST\_UP THEN RAMP\_RATE := FAST\_RATE; END\_IF;

IF SLOW\_UP THEN RAMP\_RATE := RAMP\_RATE + SLOW\_RATE; END\_IF;

IF FAST\_DOWN THEN RAMP\_RATE := RAMP\_RATE - FAST\_RATE; END\_IF;

IF SLOW\_DOWN THEN RAMP\_RATE := RAMP\_RATE - SLOW\_RATE; END\_IF;

END\_IF ;

XFER\_RAMP (RUN := 1, CYCLE := CYCLE, R1 := AUTO,

XIN := RAMP\_RATE, X0 := XIN) ;

XOUT := XFER\_RAMP.XOUT;

END\_FUNCTION\_BLOCK