4.1. Serial interfaces

Serial interfaces X01 and X02 are located on the front panel at the 25-pin sub-D plug connector X01. The X01 can either be operated as 20 mA (TTY) or as V24 (RS232) interface.
An interface circuit (hybrid module) must be inserted at slot X51, if the X01 interface is to be used. Presently, the following hybrid modules are available:

SS1 : 20 mA (TTY) MLFB: 6DD1688-1AA0

SS2 : V.24 (RS 232) 6DD1688-1AB0

Caution: Observe the mounting position! (observe the printed information on the board)

The X02 serial interface provides the RS485 signal level. A hybrid module is not inserted to use interface X02. The signal level must be converted externally if a 20 mA (TTY) or a V.24 (RS 232) interface is to be established via interface X02.

4.2. Interface modules

The system signals are fed to the PT20 processor module via interface modules. Modules SU10 and SE51 are provided (Fig. 1) for the analog inputs/outputs and the pulse encoder connection at connector X5. The binary inputs/outputs can be connected via module SU10, or via the other binary input/output modules available in the SIMADYN D program.
The modules are connected to a ribbon cable. Screened cables should be used to enhance the noise immunity. If other modules besides the SE51 or SU10 are used, the ribbon cable of the modules used must be split-up corresponding to the particular module, in steps of 10 (Fig. 2).

Type:	SU10	25-pin terminal block	MLFB: 6DD1681-0FG0
	SU12	10-pin terminal block	6DD1681-0AJ1
	SB10	8 binary inputs/outputs, LED	6DD1681-0AE2
	SB60	8, 220V/24V binary inputs	6DD1681-0AF4
	SB70	8, 24V/220V binary outputs	6DD1681-0AG2
	SB71	8, 24V binary outputs, LED	6DD1681-0DH1
	SE51	Pulse encode connection	6DD1681-0FB0
	SC42	50-core ribbon cable, 2 m	6DD1684-0EC0
	SC44	50-core to 5x10 core ribbon cable, 2m	6DD1684-0EE0
	SC45	50-core, screen ribbon cable, 2m	6DD1684-0EF0
	SC53	50-core to 2x26 core ribbon cable, 2m	6DD1684-0EE0

4.3. Speed sensing

The NAV and NAV04 blocks may only be configured at speed input 1. The NAV00x blocks can be configured at both inputs.
The speed encoder connections, according to the push-pull or common mode principle via SE51 at PT20 are illustrated in Figs. 3 and 4.
The speed inputs can also be connected via sub-D connectors, using terminal block SE51.