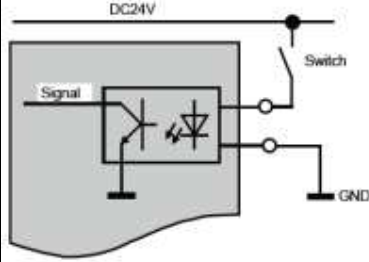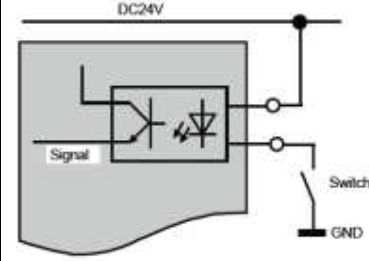**Description:**

There is a variety of terminologies for characterizing digital inputs and outputs,
e.g. "P-schaltend", "M-schaltend" (German) and "sinking", "sourcing" (English).
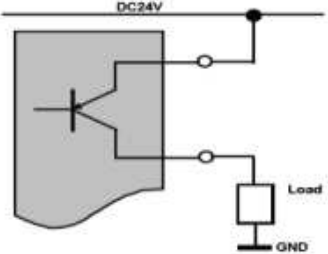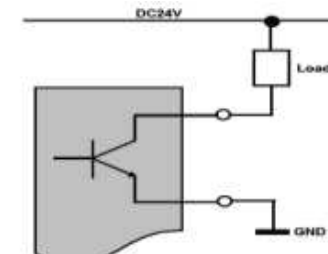There are also assignment problems with

- the logical status
- the electrical signal
- the wiring and switching

The two tables below show the relationship between terminology and assignment:

Digital inputs (24V)

Terminology	Logical status	Electrical signal	Switching
"P-lesend" Sinking input Switch is located between DC24V and the module	1 (true)	24V	Fig. 01
	0 (false)	0V (or open)	
"M-lesend" Sourcing input Switch is located between the module and ground	1 (true)	0V	Fig. 02
	0 (false)	24V (or open)	

Digital outputs (24V)

Terminology	Logical status	Electrical signal	Switching
"P-schaltend" Sourcing output PNP Transistor Load located between the module and ground	1 (true)	24V	 Fig. 03
	0 (false)	0V (or open)	
"M-schaltend" Sinking output NPN Transistor Load located between DC24V and the module	1 (true)	0V	 Fig. 04
	0 (false)	24V (or open)	

All S7-300, S7-400 and ET200S input modules and output modules are "P-lesend" or "P-schaltend", **except** the modules listed in the table below.

SIMATIC S7-300 modules	
6ES7 321-1BH50-0AB00	"M-lesend" inputs
6ES7 321-1BP00-0AB0	"P-lesend" or "M-lesend" inputs
6ES7 350-1AH03-0AB0	"P-lesend" or "M-lesend" encoder inputs
6ES7351-1AH02-0AE0	"P-lesend" or "M-lesend" encoder inputs
6ES7 322-1BP50-0AA0	"M-schaltend" outputs

6ES7 326-2BF40-0AB0	"P-schaltend" or "M-schaltend" inputs
6ES7 352-5AH00-0AE0	"M-schaltend" outputs
SIMATIC S7-400 modules	
6ES7 421-7DH00-0AB0	"P-lesend" or "M-lesend" inputs
6ES7 450-1AP00-0AE0	"P-lesend" or "M-lesend" encoder inputs
SIMATIC ET200S modules	
6ES7 131-4BD51-0AA0	"M-lesend" inputs
6ES7 131-4BF50-0AA0	"M-lesend" inputs
6ES7 138-4DA04-0AB0	"P-lesend" or "M-lesend" encoder inputs
6ES7 132-4BD50-0AA0	"M-schaltend" outputs
6ES7 132-4BF50-0AA0	"M-schaltend" outputs
6ES7 138-4FB02-0AB0	"P-schaltend" or "M-schaltend" inputs