

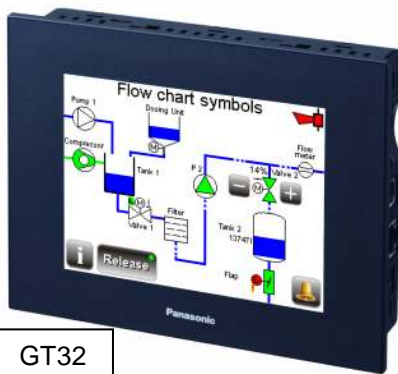
TB-SYMKEYS 2

User library with flow diagram symbols and switch elements for GT and GN touch terminals

The library TB-SYMKEYS 2.2 helps you create HMI applications with flow charts efficiently, e.g. for water management applications. The new library supports both GT and GN terminals.

For GT panels, this product contains a floating icon library and four key libraries which can be integrated into GTWIN.

For the GN series, this product contains sample projects for Movicon with all symbols. Each symbol functions as a button that can open a new page, switch equipment directly, or just as call up info. The functionality is supported by a comprehensive PLC program that animates the flow chart objects. These libraries can be used by the monochrome or color touch panels GT02, GT05, GT12, GT21 and GT32 and by all GN series panels.

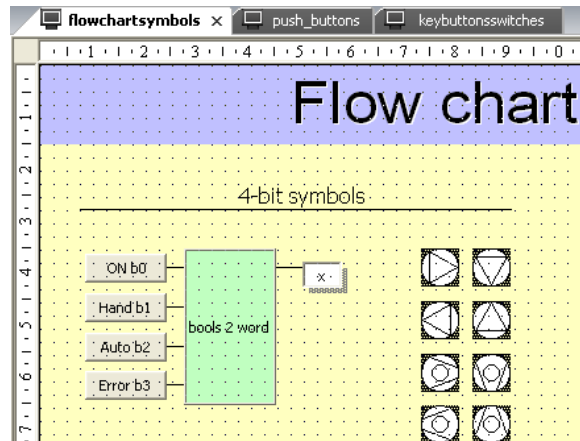


GT32



GN10

GTWIN screen shots of GTWIN and MOVICON:



Flow diagram symbols of TB-SYMKEYS for the **GT series**:

Name	passive	off	on			Auto off	Auto on	Error
Index	0	1	2	3	4	5	6	7
Pump								
Pump								
Pump								
Pump								
Flow meter								
Flow meter								
Compressor								
Compressor								
Compressor								
Compressor								
Closed tank								
Open tank								
Mixer								
Filter								
Dosing tank								
Alarm								
Pipe animated								
Pipe animated								
Pipe animated								
Pipe animated								

Complex symbols for the **GT series**:

Valve default/ errors	default 0	error - end pos. closed - 1	error - valve open - 2	error - end pos. open - 3	4
Valve	passive - end pos. closed - 5	closing - valve open - 6	passive - valve open - 7	opening - valve open - 8	passive - end pos. open - 9
Valve automatic	passive - end pos. closed - 10	closing - valve open - 11	passive - valve open - 12	opening - valve open - 13	passive - end pos. open - 14
Valve default/ errors	default 0	error - end pos. closed - 1	error - valve open - 2	error - end pos. open - 3	4
Valve	passive - end pos. closed - 5	closing - valve open - 6	passive - valve open - 7	opening - valve open - 8	passive - end pos. open - 9
Valve automatic	passive - end pos. closed - 10	closing - valve open - 11	passive - valve open - 12	opening - valve open - 13	passive - end pos. open - 14
Damper default/ errors	default 0	error - end pos. closed - 1	error - flap open - 2	error - end pos. open - 3	4
Damper	passive - end pos. closed - 5	closing - flap open - 6	passive - flap open - 7	opening - flap open - 8	passive - end pos. open - 9
Damper automatic	passive - end pos. closed - 10	closing - flap open - 11	passive - flap open - 12	opening - flap open - 13	passive - end pos. open - 14
Damper default/ errors	default 0	error - end pos. closed - 1	error - damper open - 2	error - end pos. open - 3	4
Damper	passive - end pos. closed - 5	closing - damper open - 6	passive - damper open - 7	opening - damper open - 8	passive - end pos. open - 9
Damper automatic	passive - end pos. closed - 10	closing - damper open - 11	passive - damper open - 12	opening - damper open - 13	passive - end pos. open - 14

Key (switch) library overview for the GT series

Name	Description	Touch terminal	Color	Background	Size(pixel)	default	active
BW24PIX2.1	Black white 24 pixels	GT02	black / white	white	24x24		
8GRAYKEY34P2.1	8 levels of gray keys 34 pixels	GT12	eight gray scale	white	34x34		
MONOR40P2.1	Monochrome round function keys	GT05 / 32 mono	black / white	white	40x40		
BFCOL_WBG40P2.1	Fade keys white background	GT05 / 21 / 32-color	color	white	40x40		
BFCOL_BBG40P2.1	Fade keys black background	GT05 / 21 / 32-color	color	black	40x40		

Key library "Blackfade".



Flow diagram symbols of TB-SYMKEYS for the **GN series**:

Name/status	Off	On	Manual off	Manual on	Auto off	Auto on	Error
Index	2#0	2#1	2#10	2#11	2#100	2#101	2#1000
Pump							
Pump							
Pump							
Pump							
Flow meter							
Flow meter							
Compressor							
Compressor							
Compressor							
Compressor							
Closed tank							
Open tank							
Mixer							
Filter							
Filter							
Dosing tank							
Pipe animated							
Pipe animated							
Pipe animated							
Pipe animated							

Symbols with more than one element are animated. The animation is controlled by Movicon.

Complex symbols with 7-bit control for the **GN-Series**:

Valve	no limit switch	limit switch - closed	limit switch - open	closing	opening
normal					
Index	2#0	2#1 / 1d	2#10 / 2d	2#100 / 4d	2#1000 / 8d
Manual					
Index	2#10000 / 16d	2#10001 / 17d	2#10010 / 18d	2#100100 / 20d	2#11000 / 24d
Automatic					
Index	2#100000 / 32d	2#100001 / 33d	2#100010 / 34d	2#100100 / 36d	2#101000 / 40d
Error					
Index	2#1000000 / 64d	2#1000001 / 65d	2#1000010 / 66d		
Valve	no limit switch	limit switch - closed	limit switch - open	closing	opening
normal					
Index	2#0	2#1 / 1d	2#10 / 2d	2#100 / 4d	2#1000 / 8d
Manual					
Index	2#10000 / 16d	2#10001 / 17d	2#10010 / 18d	2#100100 / 20d	2#11000 / 24d
Automatic					
Index	2#100000 / 32d	2#100001 / 33d	2#100010 / 34d	2#100100 / 36d	2#101000 / 40d
Error					
Index	2#1000000 / 64d	2#1000001 / 65d	2#1000010 / 66d		
Damper	no limit switch	limit switch - closed	limit switch - open	closing	opening
normal					
Index	2#0	2#1 / 1d	2#10 / 2d	2#100 / 4d	2#1000 / 8d
Manual					
Index	2#10000 / 16d	2#10001 / 17d	2#10010 / 18d	2#100100 / 20d	2#11000 / 24d
Automatic					
Index	2#100000 / 32d	2#100001 / 33d	2#100010 / 34d	2#100100 / 36d	2#101000 / 40d
Error					
Index	2#1000000 / 64d	2#1000001 / 65d	2#1000010 / 66d		
Damper	no limit switch	limit switch - closed	limit switch - open	closing	opening
normal					
Index	2#0	2#1 / 1d	2#10 / 2d	2#100 / 4d	2#1000 / 8d
Manual					
Index	2#10000 / 16d	2#10001 / 17d	2#10010 / 18d	2#100100 / 20d	2#11000 / 24d
Automatic					
Index	2#100000 / 32d	2#100001 / 33d	2#100010 / 34d	2#100100 / 36d	2#101000 / 40d
Error					
Index	2#1000000 / 64d	2#1000001 / 65d	2#1000010 / 66d		

Sample application for Movicon

In the application example for Movicon, all symbols from TB-SYMKEYS are shown. You can copy parts of the sample application to use in a new project.

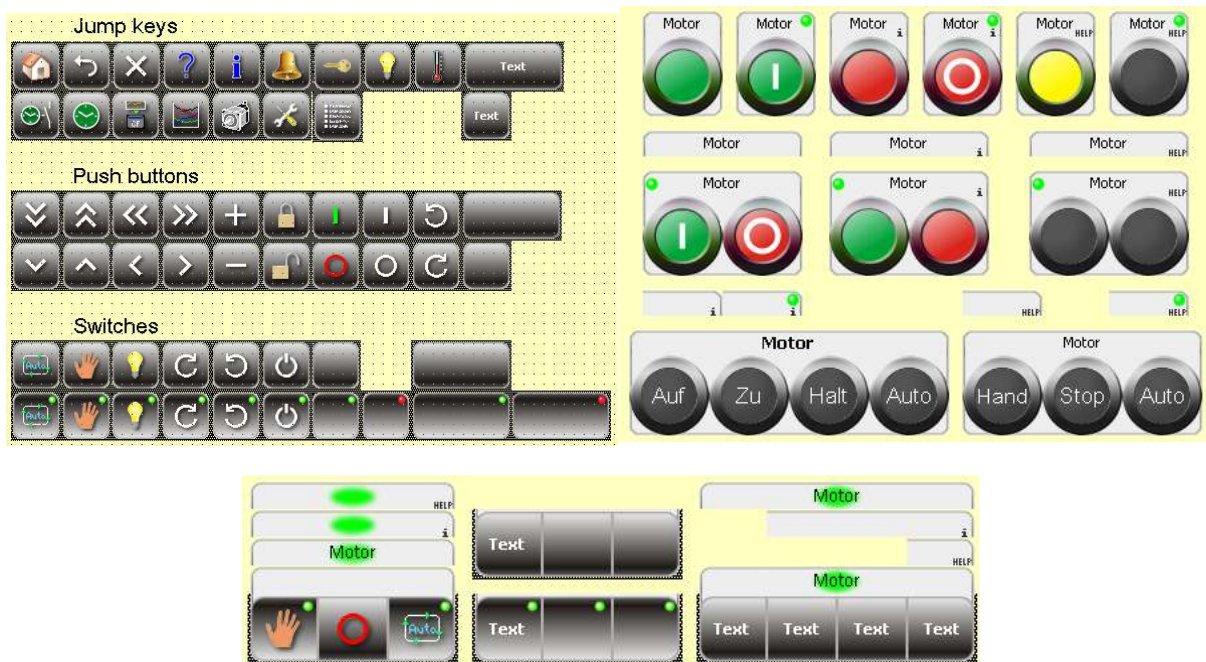
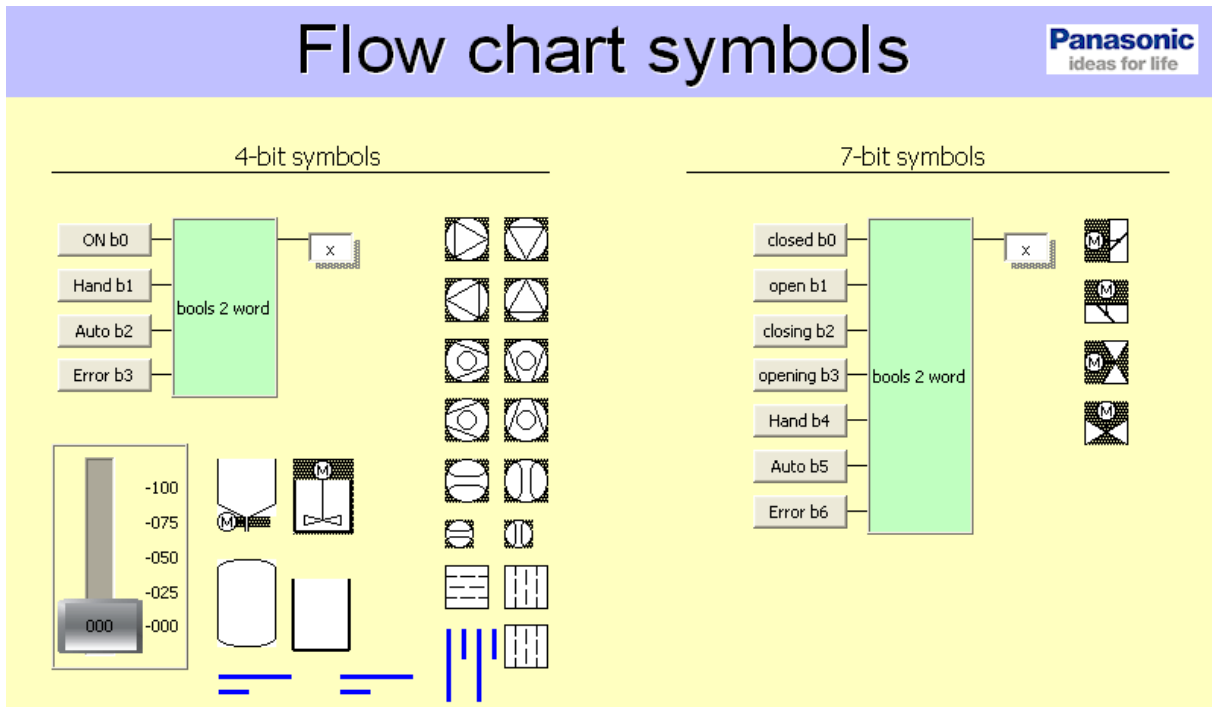


Figure: Movicon screenshots from the example application.

Installation for the GT series library:

The installation file for the GT support is "Setup-TB-SYMKEYS-GT-V2.1.exe"

The default installation uses the following destination folders.

- the colored flow diagram library
C:\ Pro... \Panasonic-EW Terminal\GTWIN\stp\FBSYMWASC2.1.UPL
- the monochrome flow diagram library
C:\ Pro... \Panasonic-EW Terminal\GTWIN\stp\FBSYMWASM2.1.UPL
- the key library "Blackfade" with white background
C:\ Pro... \Panasonic-EW Terminal\GTWIN\stp\BFCOL_WBG40P2.1.UPL
- the key library "Blackfade" with black background
C:\ Pro... \Panasonic-EW Terminal\GTWIN\stp\BFCOL_BBG40P2.1.UPL
- the key library "MonoRound" for monochrome GTs
C:\ Pro... \Panasonic-EW Terminal\GTWIN\stp\MONOR40P2.1.UPL
- the key library "8Gray" for GT12 (8 grayscale)
C:\ Pro... \Panasonic-EW Terminal\GTWIN\stp\8GRAYKEY34P2.1.UPL
- sample applications for GT32, monochrome GT05, GT02 und GT12
C:\ Pro... \Panasonic-EW Terminal\GTWIN\TB-SYMKEYS\GT02 Appl mono Demo SYMKEYS V2.1
C:\ Pro... \Panasonic-EW Terminal\GTWIN\TB-SYMKEYS\GT05 Appl mono Demo SYMKEYS V2.1
C:\ Pro... \Panasonic-EW Terminal\GTWIN\TB-SYMKEYS\GT12 Appl mono Demo SYMKEYS V2.1
C:\ Pro... \Panasonic-EW Terminal\GTWIN\TB-SYMKEYS\GT32 Appl color Demo SYMKEYS V2.1
- PLC programs with FBs for animation of the GT symbols
C:\ Pro... \Panasonic-EW Terminal\GTWIN\TB-SYMKEYS\PLC Prg. for GT05_32 Demo SYMKEYS 2.1.pro
C:\ Pro... \Panasonic-EW Terminal\GTWIN\TB-SYMKEYS\PLC Prg. for GT02_12 Demo SYMKEYS 2.1.pro
- this documentation
C:\ Pro... \Panasonic-EW Terminal\GTWIN\TB-SYMKEYS\TB-SYMKEYS 2 GT GN.pdf

Installation for the GN series library:

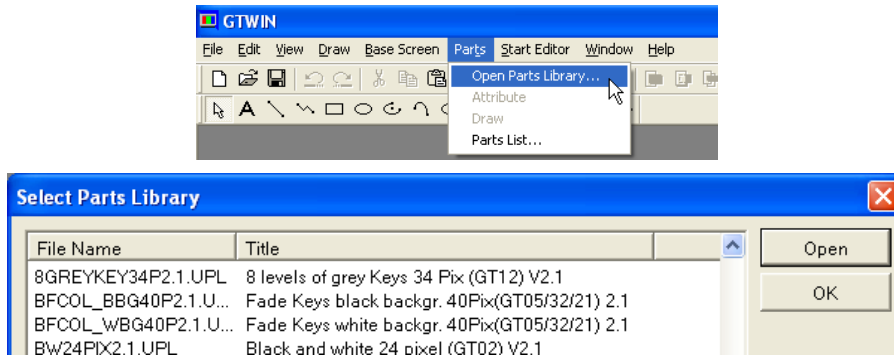
The installation file for the GN support is "Setup-TB-SYMKEYS-GN-V2.2.exe"

The default installation will create directories for all samples in the public folder (... \Documents and Settings\All Users\Documents\...)

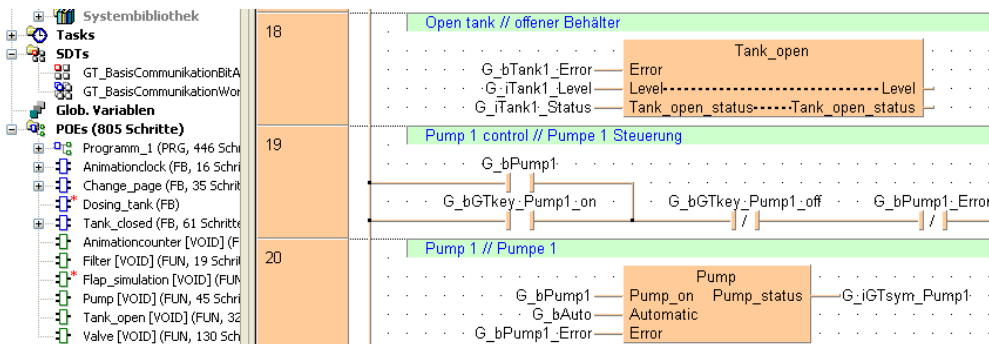
- example application
... \Documents\Progea\Movicon\TB-SYMKEYS 2\GN10 TB-Symkeys with PLC MC11.2
... \Documents\Progea\Movicon\TB-SYMKEYS 2\GN10 TB-Symkeys without PLC MC11.2
- PLC program with all functions for the GN example application
... \Documents\Progea\Movicon\TB-SYMKEYS 2\PLC Program\PLC Prg. for GN10_12 Demo SYMKEYS 2.2.pro
- this documentation
... \Documents\Progea\Movicon\TB-SYMKEYS 2\TB-SYMKEYS 2 GT GN.pdf

Usage in GTWIN

Open GT libraries in GTWIN as follows:



Screen shot of FPWIN Pro showing two FBs.



Usage in Movicon

To use the TB-SYMKEYS with Movicon open the sample project and an application project. Then copy all required elements from the demo application and insert it into your user application.

This has the advantage that the function of an element is better recognized and the work is accelerated.

A PLC sample program is also installed which contains functions to control the symbols in the HMI application.

Order information

Description	Item no.:
User library SYMKEYS – flow chart symbols and keys library for GT and GN touch panels (incl. PLC programs documented and samples for GT02/05/12/21/32 and all GNs).	TB-SYMKEYS