



## MATCH Vision² Libraries

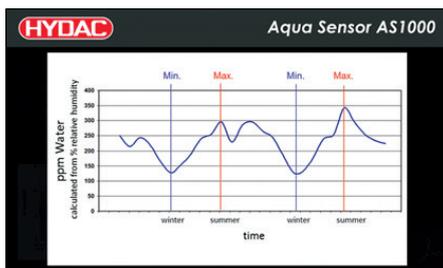
**HYDAC Aqua Sensor AS1000**

The AquaSensor AS 1000 is the culmination of the continued development of the successful AS 2000 series for online detection of water in oils, particularly as an OEM sensor for condition monitoring. It measures the water content relative to the saturation concentration (saturation point) and transmits the saturation level as a 4 ... 20 mA signal.

**Input Data**

- Saturation level 0 ... 100 %
- Temperature -25 ... 100 °C
- Operating pressure -0.5 ... 50 bar
- Pressure resistance max. 630 bar
- Flow velocity max. 5 m/s
- Parts in contact with fluid: Mechanical connection: Stainless steel / Vacuum-melted ceramic
- Seal: Viton or EPDM for each type

Touch-to-zoom information output



Touch-to-zoom enlarged graphic

Superimposed message

### Description

HYDAC provides two Vision² Libraries for CODESYS 3.5 programming for the purpose of controlling the HY-eVision² displays:

- The Vision² Basic Library for general display control, and
- The Vision² MATCH Library for display control supported by the MATCH development environment. This library is based on the Vision² Basic Library as is an integral part of the Auto Code Builder.

### Features of the Vision² Basic Library

- Provides generic and special classes for graphic display elements – such as buttons, texts, lists, check boxes, progress bars, input fields, windows, and much more besides.
- Simplifies access to low-level system functionalities due to the introduction of consistent high-level APIs
- Simplifies access to hardware components of Vision² displays (such as buzzers, keys, ambient light sensors, LEDs, GSM, GPS, USB and externally connected cameras)
- Provides initialisation, access and management functionalities for the CAN bus and CAN bus messages
- Offers generic tool classes such as timer, byte management counter, stack, checksum, file system and logging classes
- Enables the initialisation of applications via language management classes (including UTF-8 support)

### Technical data

Software system requirements		
Software	PDT CODESYS 3.5	
Displays	Touchscreen	Without touchscreen
	HY-eVision2 7.0 and HY-eVision2 10.4	HY-eVision2 7.0 and HY-eVision2 10.4
CAN USB interface		
PCAN-USB (additional dongles on request)		

### Vision² Library model code

Vision Library **V2L – XX – YYY – G10 – 000**

#### Display family

V2L = Vision² displays 7" and 10.4"

#### Programming language

00 = CODESYS 3.x

#### Library variant

BAS = Vision² Basic Library

#### Software version

G10 = current version

#### Modification number

000 = standard



## Features of the Vision<sup>2</sup> MATCH Library – PDT add-on DCD3

- Expands the concepts of the Vision<sup>2</sup> Application Library to include function modules and configurable function templates, is available as PDT add-on DCD3.
- Eliminates repetitive tasks due to internal library observer classes and allows for rapid development progress.
- Provides a PDT configuration for the display. This includes:
  - Automatic generation of CAN communication, parameter management, error detection and I/O diagnosis
  - Flexible language support from the PDT with as many language versions for the application as desired
- Errors shown on the display:
  - Error messages and responses
  - Error properties regarding display, signal message, and user confirmations are taken into account
  - J1939 compliant, DM1-based error display
  - Decoding of proprietary error messages
- Service Tool functionality on the display:
  - User management
  - Access restrictions with eight possible levels
  - Parameter access is subject to user group restrictions
  - Error access and list management
  - I/O diagnosis



Service Tool homepage



Language selection on the display

Number	Value	Default	Unit	Description
471	0	0	[custom]	GetCompressor Mode Front
470	0	0	[custom]	Get DeDust State Front
604	0	0	[custom]	GetWater System Mode Front
490	0	0	[custom]	Get ZSA Count of Pulses
400	0	False	[custom]	Get ZSA Lubrication System Status 0-OFF, 1
482	0	False	[custom]	Set Activate Debug Output Driving System

Parameterisation using the Service Tool functionality on the display

### Scope of delivery

Libraries and quickstart guide

### Accessories

(Not included in the scope of delivery; please order separately)

- PCAN dongle ZBS PCAN USB connector  
Part number: 6163719

### Note

The information in this brochure relates to the operating conditions and applications described.

For applications or operating conditions not described, please contact the relevant technical department.

Subject to technical modifications and corrections.

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