



Automation & Robotics

## FOCOVISION™ SPV-3

WITH POSITIONING ASSISTANCE (visualization of the micro-engravings)

### TECHNICAL DESCRIPTION

**FOCOVISION™ SPV-3: Prescription Version with visualization of the technical marks.**

The Focovision™ by Transmission SPV-3 is used in prescription laboratories. It is connected to your computer network, from which it receives the nominal values of the prescription lens. Its main advantages are repeatability, accuracy, easy calibration, and especially its visualization system of the semi-visible marks or the upper segment line corner of the addition. This system permits an accurate positioning on the different control points without any lens marking. It performs a lens optical power measurement compliant with ISO/ANSI standards by using a light beam perpendicular to the concave lens surface ('FOA' - Focus On Axis configuration) at a certain wavelength (546 nm or 587 nm) and by measuring in all directions (360 degrees - «ring method»). In addition, it has a user friendly interface permitting an operator to learn how to perform the complete lens control (far view, prism reference point, near view, thickness, shape, etc.) with little training required.



# Main Features

# Technical Specifications

# Benefits

# Options



COMPLETE CONTROL STATION FOR PRESCRIPTION LENSES WITH POSITIONING ASSISTANCE

The FOCOVISION™ SPV-3 is a Focometer dedicated to the semi-automatic inspection of prescription lenses and equipped with a lighting and visualization system evidencing on a screen the video image of the semi visible reference marks of progressive lenses or the segment of multifocal lenses.

Powerful interface capabilities-

When interfaced to the host computer, data specific to the job as well as the instructions to the operator for the product type being processed can be transmitted from the host computer through the FOCOVISION™ server via barcode scan.

Information for the job and the specific customer requirements can be accessed. A "go or no-go" message can be provided to the operator on the instrument's screen avoiding errors due to subjective interpretation.

Messages specific to the job can also be transmitted to the operator via the instrument's screen providing the operator with important instructions.

**Type : SPV-3**

For information purpose only.

Specifications subject to change without prior notice.

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The FOCOVISION™ SPV-3, equipped with a prism compensator as standard, measures the lens optical power according to the 'FOA' - Focus On Axis) configuration. The FOCOVISION™ uses the "ring method". It measures the optical lens power by transmitting a light beam, in all directions (360 degrees), through the lens with the appropriate wavelength in accordance with the ANSI/ISO Standards.

It accurately measures optical power to 0.02D and prism power to 0.02 cm/m, +1%.

Range:

The operating range of the instrument exceeds the normal requirements of the lab.

Optical power in the main axis: -20D to +20D

Prism power: 0 to 6 cm/m (S=-14D increasing with S)

- Complete measurement + control procedures in the instrument (optical power, thickness, diameter, cosmetic control assistance)

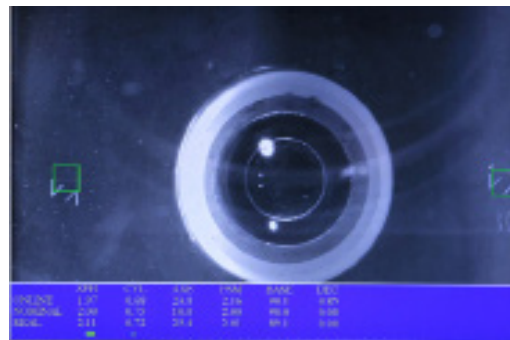
- Positioning assistance (automatic management of positioning lines on the visualization screen)

- Drawing showing the difference between current decentration + optical axes (psm, cyl.), and nominal value

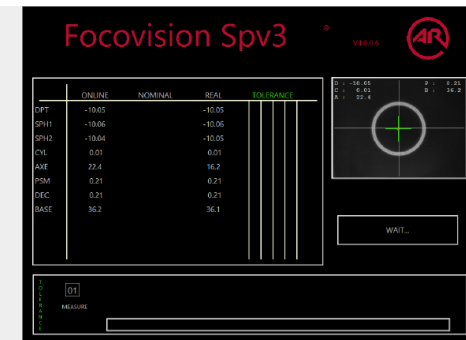
- Interfacing with server very simple, flexible and efficient

- Records (statistics) and printed reports (ticket)

- Supplied with centering device for single vision lenses & ticket printer



- Minimal training required
- Very high measurement speed
- Flexibility (configurable procedures, easy to adapt, any tolerance values)
- Ergonomic display and powerful dialog with the operator (messages, clear positioning display, real time measurement results)
- Non subjective decision go/no go, no mistakes
- Very good accuracy (positioning, optical power, axes), linearity, sensitivity, reliability
  - better than 0.02D on the optical power
  - 0.02 cm / m on the prismatic power
- Maintenance free (except dust, air filter and lamp)
- Measurement time : in practice, instantaneous for the operator (including tolerance checks)
- Light wavelength : bandwidth of 50 nm centered on 546 nm (USA, ... 587nm, on request)
- Powerful Data analysis : the actual parameters of the measured lens can be transmitted back to the host computer via the FOCOVISION™ server. This information can be stored as part of the record for the job for reference at a later date. The data can also be used in a production control analysis to assist the lab management in improving the production process. The FOCOVISION™ server can also provide a data download of the records of measured work to a secondary software analysis system if the customer prefers that method of production process control.



- 3 dots marking system
- Thickness measurement device
- Vacuum holder
- Retractable additional prism
- Working table

LATEST DEVELOPMENT:

- The NEW FOCOVISION SPV-3 software is based on Windows 10 Embedded OS.
- A new light source provides an improved ring image. Effect of local defects (dusts,...) are detected and corrected using a proprietary technology. The new light source, based on the long-life LED technology can easily be exchanged (plug and play), leading to better accuracy in lab conditions.

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