

ISO 9001:2015 – Quality Guaranteed

In 2016 Bowers achieved the latest **ISO 9001:2015** Quality Management Systems Standard at its Bradford manufacturing facility. This prestigious certification is a true testament to Bowers' dedication to the highest levels of quality management and customer satisfaction. ISO 9001:2015 is the newest update to the quality management system standard, which provides an integrated approach to quality management and continual improvement. This, in conjunction with Bowers' existing UKAS accreditation to ISO/IEC 17025:2005, ensures its customers can have complete confidence that the Bowers range of products is designed and manufactured to the highest standard.





BOWERS GROUP

Bowers Group

As a leading supplier of quality metrology instruments to organisations throughout the world, Bowers Group has developed into a respected global leader in the field of measurement. Our first-class reputation has been built on the continuing Group ethos of striving for excellence in both the comprehensive range of products that we supply and the many quality services that we provide to our customers. The Group's aim is to build on its hard-won reputation and continue to exceed customers' expectations.

Reflecting the all-inclusive nature of our products and services, Bowers UK provides British industry with the widest choice of cost effective, quality measuring instruments currently available. Supplementing Bowers' own famous range of gauges, our enviable 'sole UK agent' status means that we can offer superior products from many pre-eminent metrology companies, such as Trimos, Sylvac, Gagemaker, Innovatest, ACCRETECH and Wyler. Bowers' diverse range of quality measuring instruments allows us to offer cost effective solutions to UK industries' measuring challenges. Helping in the decision making process, our network of skilled Sales Engineers is happy to give on-site demonstrations of our full product range.



Baty International

Baty International is one of the world's leading manufacturers of Optical Profile Projectors, Co-ordinate Measuring Systems and Gauging Products. Baty's product range includes two dimensional (profile measuring) equipment and full 3 dimensional (coordinate measuring) systems. Baty also services and calibrates contact and non contact dimensional measuring equipment. Baty products are for industrial, manufacturing and professional use, on the shop-floor, in tool rooms, and in other areas where precision measurement is critical.



Moore & Wright

Founded in 1906 by innovative young engineer Frank Moore, Moore & Wright has been designing, manufacturing and supplying precision measuring equipment to global industry for over 100 years. With roots fixed firmly in Sheffield, the company began by manufacturing a range of calipers, screwdrivers, punches and other engineer's tools.

Now part of Bowers Group, Moore & Wright continues its commitment to supplying industry with high quality, affordable products. Its ongoing pledge to research and development ensures that Moore & Wright remains at the forefront of global innovation.



CV Instruments

With the largest selection of portable and bench hardness testers currently available within the UK, the CV arm of Bowers Group has evolved into an all-inclusive material testing quality instrument supplier, with cost effective solutions to coating thickness, surface finish and many other disciplines now available.

Bowers is also exclusive UK reseller for the following leading metrology brands:



EUROPE





Magnetic Bases and Fitments

Magnetic Bases

- All units are suitable for use with dial indicators and test dial indicators
- 900 and 901 versions both have push button 'ON/OFF' control
- 905 model has a toggle lever for 'ON/OFF' function
- The base incorporates a vee slot for location on curved surfaces (with the exception of 909)
- 909 Non-switchable (M6 coarse thread)

Magnetic Base Fitments

- All fitments accept stem or back lug mounting
- All fitments have M8 x 1.25mm screw thread for fixing
- Compatible with any of the Eclipse range of magnetic bases



E909-MW



E905-WFMW + RP991BLMW



E901-WFMW + RP995BLMW



E905-WFMW + RP999MW

MAGNETIC BASES

Code No	Force	Length (mm)	Width (mm)	Height (mm)	No. of Magnetic Faces	Note	Weight
E900-WFMW	30kg	48	40	50	4	Vee for Curved Surfaces	0.5kg
E901-WFMW	80kg	64	64	76	4	Vee for Curved Surfaces	1.7kg
E905-WFMW	80kg	65	50	55	2	Vee for Curved Surfaces	1.05kg
E909-MW	14kg	n/a	35	30	1	-	0.35kg

MAGNETIC BASES FITMENTS

Code No	Type	Description	Clamp Size	Note
RP991BLMW	Fine Adjust	Column dia - 12mm, length - 175mm. Arm dia - 10mm, length - 165mm	10mm Universal	Accepts 1/4" I.D Lug Stem / Spigot Dia: 1/8", 1/4", 5/16" and 3/8"
RP995BLMW	Plain	Column dia - 12mm, length - 175mm. Arm dia - 10mm, length - 165mm	10mm Universal	Accepts 1/4" I.D Lug Stem / Spigot Dia: 1/8", 1/4", 5/16" and 3/8"
RP72CPMW	Plain	Column dia - 12.5mm, length - 185mm. Arm dia - 6.3mm, length - 150mm	6.35 Standard Clamp	Accepts 1/4" I.D Lug Stem/Spigot Dia: 5/16"
RP999MW	3 Point Adjustable	Column dia - 15mm, length - 295mm.	3 Point Special Clamp	Accepts 1/4" I.D Lug and Dovetails Stem / Spigot Dia: 5/16"

Magnetic Indicator Stand 475 Series

Features

- Features fine adjustment
- With powerful on / off magnetic base
- Magnetic force 80Kg / 175lbs
- Universal model which can be used for indicators with or without lug on back plate
- Accepts dial test indicators, digital indicators and normal indicators
- Extra rigid



MAGNETIC INDICATOR STAND

Code No	Description	Type
MW475-01	ON/OFF Magnetic	Fine Adjustment

Magnetic Hydraulic Stand 485 Series

Features

- Features a unique hydraulic central lock for all arms and swivel positions
- Super solid model
- With fine adjustment
- With powerful on/off magnetic base
- Magnetic force 80Kg / 175lbs
- Universal model which can be used for indicators with or without lug on back plate
- Accepts dial test indicators, digital indicators and normal indicators
- Dovetail groove for clamping a dial test indicator
- Super rigid



MAGNETIC HYDRAULIC STAND

Code No	Description	Type
MW485-01	ON/OFF Magnetic	Hydraulic lock, dovetail groove

Magnetic Snake Stand 496 Series

Features

- Corrosion resistant chrome plated flex arm
- Magnetic force 40kg / 85 lbs
- Holds rigidly in almost any position
- V -base for mounting on rounded surfaces



MAGNETIC SNAKE STAND

Code No	Description	Type
MW496-01	Snake Stand	Mechanical Lock

Magnetic Articulating Stand 477 Series

Features

- Versatile magnetic base that can be adjusted in almost unlimited ways
- With fine adjustment
- 30kg clamp force
- V-base for mounting on rounded surfaces



MAGNETIC ARTICULATING STAND

Code No	Description	Type
MW477-01	Articulating arm magnetic base	Fine Adjustment



Comparator Stands

The rigid construction and quality materials used in manufacturing these quality Bowers comparator stands gives the user both a solid component support and a strong fixing for most types of indicator, transducer probe etc.

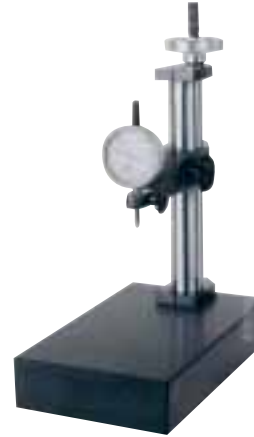


Features

- Hard chrome column
- Table surface is lapped
- One piece bracket for high rigidity and constant parallelism
- Adapter Hole for dial gauge 8mm H7



13-03306

13-03304 /
13-03305

13-03309



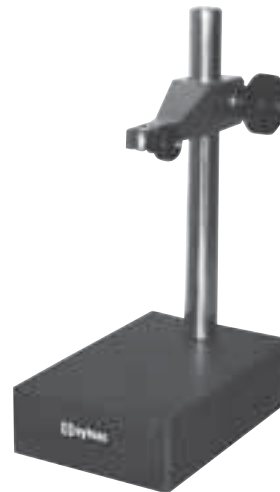
MW498-05



30-908-1204



30-908-1203



30-908-1206



30-908-1209

COMPARATOR STANDS

Code No	Height (mm)	Range (mm)	Overhang (mm)	Weight	Measuring Table Area	Type
13-03304	284	150	76	7kg	98 x 115mm	Plain Column
13-03305	320	160	104	12kg	98 x 180mm	Plain Column
13-03306	320	160	104	12kg	98 x 180mm	Threaded Column
13-03308	320	160	104	12kg	98 x 180mm	Handwheel Column
13-03309	320	180	104	9.5kg	150 x 200mm	Handwheel Column
MW498-05	280	110	70	12kg	98 x 98mm	Threaded Column

Other models available. Not supplied with dial gauge.

SYLVAC COMPARATOR STANDS

Code No	Height (mm)	Load Range (mm)	Overhang (mm)	Weight	Type	Size of Base
30-908-1203	280	0-150	67	8kg	Fine adjustment. Granite grade 00	240 x 140 x 50mm
30-908-1204	360	0-210	100	16kg	Fine adjustment. Granite grade 00	300 x 210 x 60mm
30-908-1206	240	0-170	60	2.6kg	Granite grade 00	100 x 150 x 40mm
30-908-1209	215	0-115	78	4.3kg	Cast iron, ceramic table	85 x 85 x 25mm

Not supplied with dial gauge.

DEMM Concentricity Gauge

Features

- Instrument for measuring concentricity and roundness
- Lightweight
- Rotor on hardened stainless steel
- Three different supports for dial gauge
- Dial gauge not included
- Movable supports
- Transmission through toothed belt drive system
- Delivery: ABS case



DEMM CONCENTRICITY GAUGE

Code No	Range (mm)	Repeatability (mm)	Weight
50-00879	1.5-50	0.002	8.5kg
50-00880	10-100	0.002	12.0kg



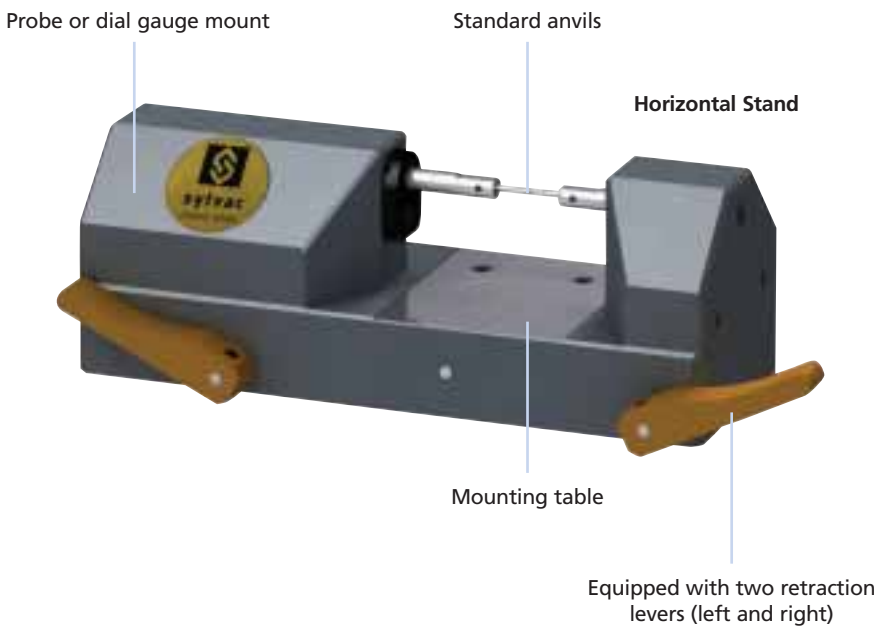
Sylvac Measuring Stand: PS15

The Sylvac Mini-Measuring Stand is the perfect solution to the rapid and accurate inspection of small parts. This extremely robust device exerts a low measuring force and is activated by one of the two convenient operating levers. The flexible Mini-Measuring Stand can be fitted with most analogue or digital indicators, or transducer probes.



Features

- Small horizontal or vertical bench table designed to easily and quickly check small parts up to 20mm
- Measuring spindle guided by linear ball bearing
- The measured value will be displayed either by a Sylvac digital gauge range 12.5mm, up to 0.0001mm resolution or by a Sylvac measuring probe P10 (P10L) linked to a digital display unit. Using a pair display unit / measuring probe an overall accuracy of 0.6µ and repeatability of 0.2µ can be reached
- This bench table can be equipped with different kind of tables as well as with several types of anvils of any shapes
- Wide choice of special applications can be found on our specific flyer Measuring Benches PS15-16-17



TECHNICAL SPECIFICATION

	30-808-1215	30-808-1216	30-908-1218
Description	PS15BH	PS15BV	PS15BV+
Max. capacity (mm)	20	20	20
Measuring Range (mm)	10	10	10
Adjustable measuring force (N)	0.3-1.0	0.3-1.0	0.3-1.0
Measuring direction	Horizontal	Vertical	Vertical
Anvils fixation	Ø 1.5mm	M2.5	Ø 1.5mm
Cary compatibility	Yes	Yes	Yes

SYLVAC MEASURING STAND PS15

Code No	Description	Weight
30-808-1215	Horizontal stand with anvils Ø 1.5mm without support table	1.8kg
30-808-1216	Vertical stand with 5mm / M2.5 flat anvils without support table	1.8kg
30-808-1218	Vertical stand with anvils Ø 1.5mm without support table	1.8kg

Note: For indicators, probes and accessories please ask for separate specification sheet.

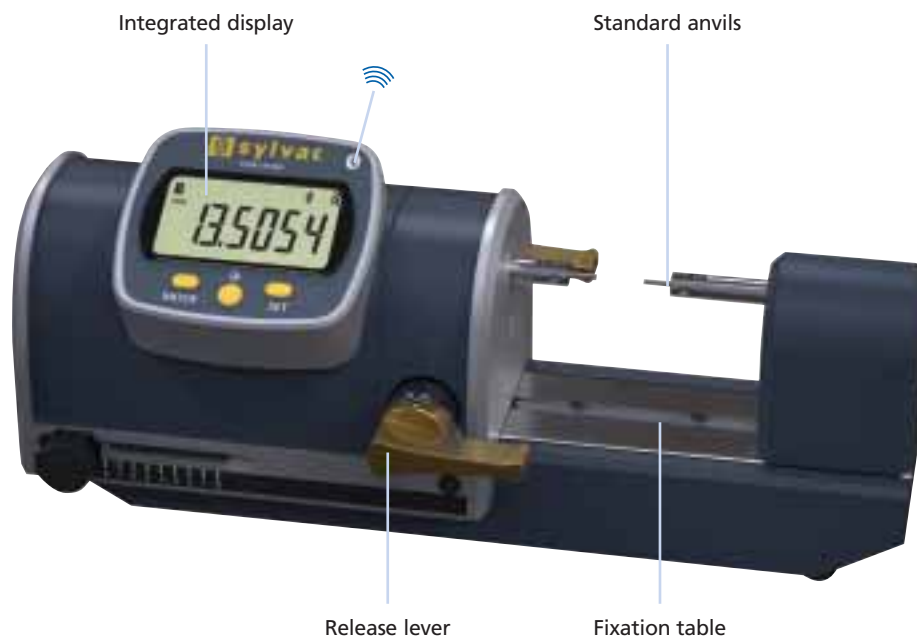
Sylvac Horizontal Measuring Bench Table: PS16 V2

The easy to use Sylvac Horizontal Measuring Table is capable of very accurate external and internal (with attachment) measurement. Ideal for repeatable small part batch measurements, the ingenious gauge has adjustable measuring force and can be supplied with a built-in digital display or connected to a multi-function Sylvac readout unit.



Features

- Integrated Bluetooth
- Brand new design
- Designed to check dimensions up to 50mm
- Equipped with various tables / anvils to fit the user's needs
- Adjustable measuring force
- Data output via USB or Bluetooth
- Standard measuring anvils Ø 1.5mm



TECHNICAL SPECIFICATION

External and internal measurement

	30-808-1231	30-808-1232
Measuring range (mm)	25	50
Max. Error (µm)	1.5	2.0
Repeatability (µm)	0.2	0.2
Resolution (µm)	0.1	0.1
Measuring force (Adjustable) N	0.1-0.6	0.1-0.6
Weight (kg)	3.6	4.2
Anvils clamping dimension (mm)	Ø 1.5	Ø 1.5
Dimensions - A (mm)	232	287
Dimensions - B (mm)	66	97

MEASURING BENCH TABLE PS16 V2

Code No	Description
30-808-1231	Horizontal stand, integral display, 25mm
30-808-1232	Horizontal stand, integral display, 50mm

See additional literature for alternative anvils and accessories
See following pages for remote display units.



Sylvac S_View D50S and D50S PRO

Ease of use and compatibility with the Sylvac range of long travel transducers have made the D50S a universal instrument for either the workshop or laboratory.



Features

- Easy to use
- 1 button = 1 function
- 2 Sylvac probe inputs
- Modes Absolute / Relative
- 1 configurable foot switch
- Resolution upto 0.0001mm
- RS-232 output
- Bright LED display
- Direct display:
 - channel 1
 - channel 2
 - channel 1 + channel 2
 - channel 1 - channel 2
- Mains power only
- Correction of linearity on both channels (D50S PRO only)

SYLVAC D50S DIGITAL INDICATOR UNITS

Code No	Description
30-804-1050	D50S digital readout 0.001 / 0.0001mm Res.
30-804-1060	D50S Pro digital readout 0.001 / 0.00001mm Res. (with correction factors on both channels)
30-904-4101	Foot pedal
30-925-5608	RS232 connecting cable

Sylvac S_View D70S/H/I

The Sylvac D70S/H/I have 2 probe inputs that provide multiple probe combinations, high resolution touch screen operation and the option of a simple user display or double display with an additional analogue bar-graph.

Features

- 4.3" touch screen display
- Available in 3 versions:
 - D70S for Sylvac capacitive probes
 - D70I for Sylvac inductive probes
 - D70H for Heidenhain Spectro/Metro probes
- All versions with 2 probe inputs
- Display resolution selectable up to 0.00001 mm
- Simple or double display with bargraph or needle
- Different possibilities of probe's combination : (C1, C2, C1-C2 ...)
- Direct measurement or Min, Max, Average, Max-Min...
- User friendly interface
- Very robust construction
- USB connection 'Keyboard', the easiest way to transfer data to PC
- No driver, no software to be installed. Works everywhere (Excel, etc.)
- Powered by the computer when connected by USB cable



SYLVAC S_VIEW D70S/H/I DIGITAL DISPLAY UNIT

Code No	Description
30-804-2070	D70S digital display 0.0001mm resolution
30-804-2071	D70I digital display 0.0001mm resolution
30-804-2072	D70H digital display 0.0001mm resolution
30-904-4101	Foot pedal

Sylvac S_View D80S

The advanced D80S is capable of undertaking numerous common and advanced measuring procedures with ease. Its user-friendly characteristics and clear digital display make it useful for processing and displaying readings from a Sylvac transducer probe.

Features

- Display unit with 8 analogue channels
- CCFL graphic display with backlight
- Resolution upto 0.0001mm
- Tolerance indicator
- Input for Sylvac probe P5 to P50
- RS-232 input/output
- Analogue and Opto-coupled output (command signal)
- Mains power only



SYLVAC S_VIEW D80S DIGITAL INDICATOR UNIT

Code No	Description
30-804-1080	D80S digital readout unit
30-904-4101	Foot pedal
30-925-5608	RS232 connecting cable

Sylvac S_View D300S V2 Digital Display

The D300s V2 digital display from Swiss Metrology manufacturer, Sylvac is able to display the absolute displacement position of Sylvac's extremely accurate capacitive and Inductive transducer probes, to a resolution of 0.1µm, as well as now being capable of connecting probes and instruments from other manufacturers due to the introduction of the new M-Bus input. The D300S has a highly visible 8.5" LCD touch screen digital display and is capable of accepting readings from up to 64 instruments via USB, RS232 and various other types of transducer probes from multiple manufacturers at the same time. The D300S can memorise previously input configurations and values and can recall both individual or group preset values. Each of the D300s' 64 channels has a separate maths function, whilst all of the channels have switchable numeric / analogue and statistical displays.



Features

- Digital display with 8.5" touch screen IP65 Rated
- 6 USB inputs for Sylvac instruments
- Optional embedded inputs for Sylvac probe, 2, 4 or None
- Capability to connect transducers and instruments from other manufacturers using M-Bus
- Automatic detection of connected instruments
- Maths functions for each channel
- Switchable and configurable interface / display
- Compatible with Bluetooth instruments (USB Dongle required)



TECHNICAL SPECIFICATIONS

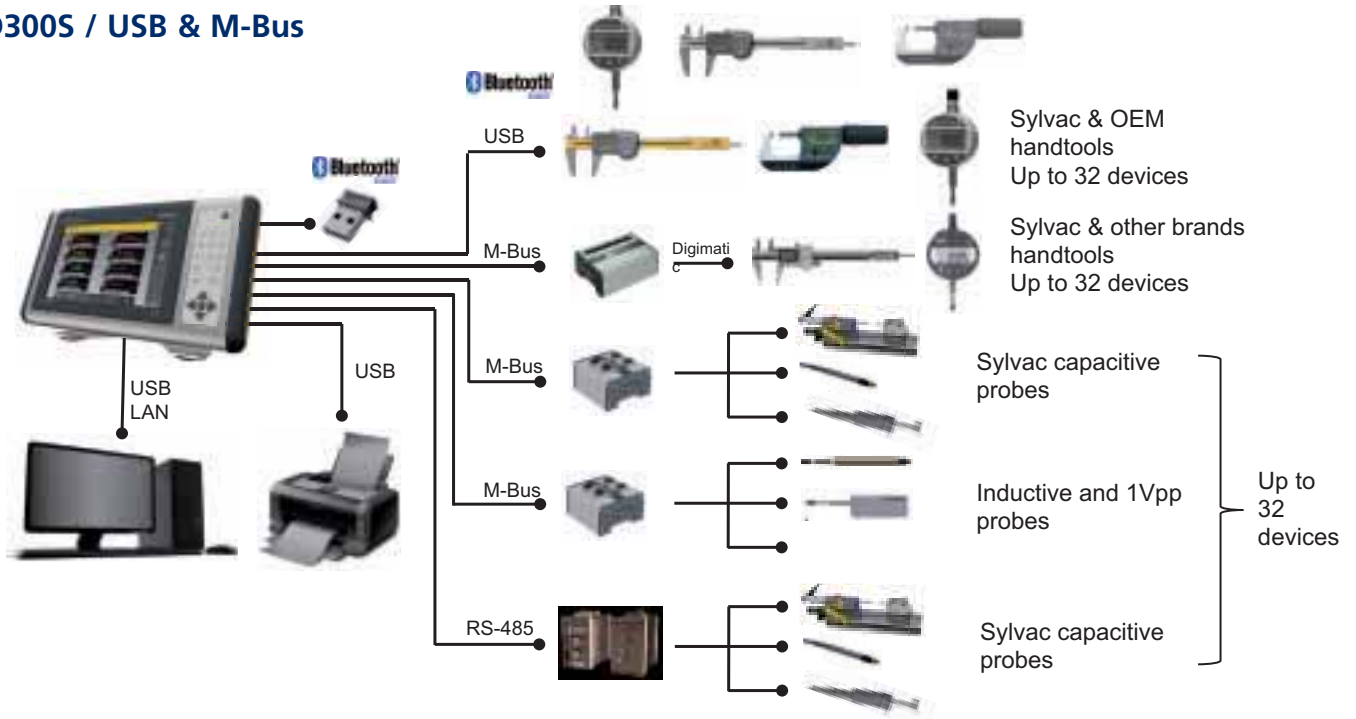
	30-804-1310	30-804-1300	30-804-1320
Embedded probe inputs	0	2	4
Probes types	Capa / ind / inc	Capa	Capa
Max probe inputs*	32	32	32
RS232 in / out	1	1	1
RS485 in	1	1	1
M-BUS	1	-	-
USB out	1	1	1
USB in	6 (up to 32*)	6 (up to 32*)	6 (up to 32*)
RJ45 / LAN	Yes	Yes	Yes
Footpedal plug	Binder (2x)	Binder (2x)	Binder (2x)
RS232 cable*	1:1	1:1	1:1
I/O optocoupled	Yes	Yes	Yes
Display mode	Digital & Analogue	Digital & Analogue	Digital & Analogue
Meas. / sec / input at 0.1µm	up to 500	20	20
Data via USB	Yes**	Yes**	Yes**

*With ext. modules **Virtual COM port

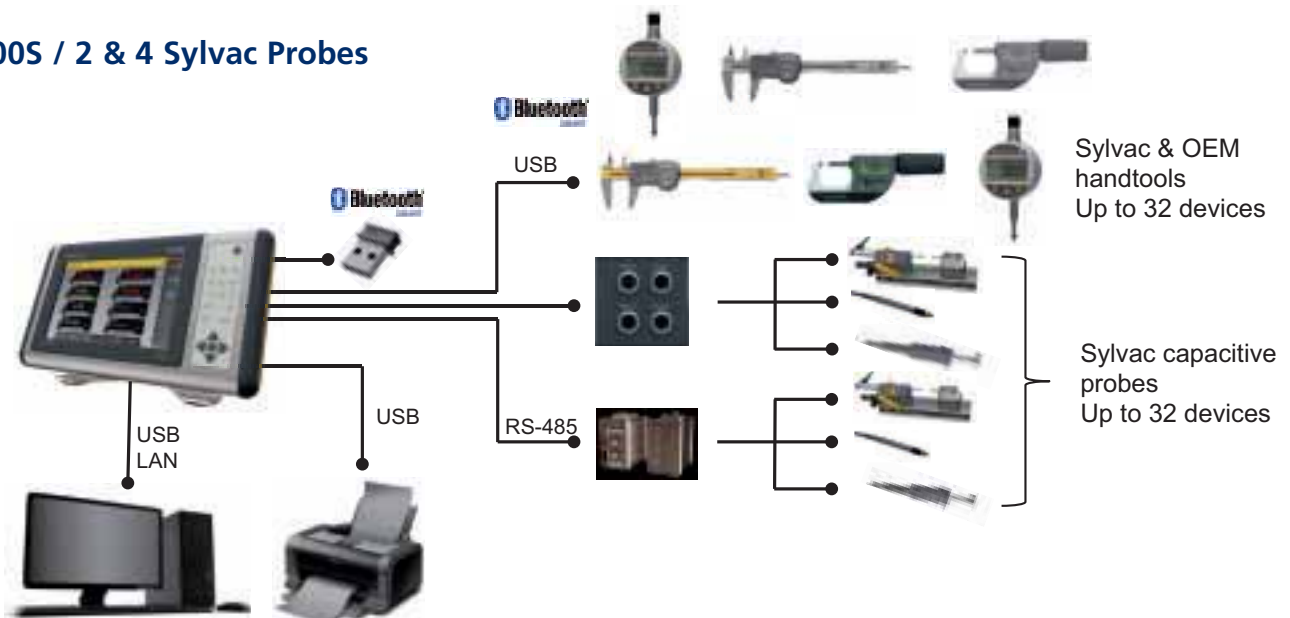


Sylvac S_View D300S V2 Digital Display

D300S / USB & M-Bus



D300S / 2 & 4 Sylvac Probes



SYLVAC D300S

Code No	Description	Output
30-804-1300	D300S Display Unit 2 Probes 6USB	USB / RS232 Output / LAN
30-804-1310	D300S Display Unit MBUS 6USB	USB / RS232 Output / LAN
30-804-1320	D300S Display Unit 4 Probes 6USB	USB / RS232 Output / LAN

Sylvac S_View D200S Digital Indicator Unit

The Sylvac S_View D200S is a computer based unit with extra speed for dynamic measurement and versatility.



Features

- Multiplexer with 8 inputs for Sylvac probes P2 to P50
- Dynamic measurement (200 measurements/sec)
- Ideal for the layout conception of multi-gauging
- Possibility of pneumatic lifting of the probes
- Software allowing the reading of up to 24 channels simultaneously (bar graph)
- Sending of the measured values in Excel, notepad or specific file
- Create sequences of sending data
- Grouped or individual PRESET
- Mathematic combinations between channels
- Unit usable in an autonomous way



TECHNICAL SPECIFICATION

Frequency of measurement	200 values/second
Case	Aluminium profile, Terlend plastic, ABS and aluminium varnished
Protection rating according to IEC 60529	IP50
Programmable by PC	Yes

SYLVAC D200S

Code No	Description	Size	Weight	Output
30-804-2101	D200S Multiplexer with Software	304 x 171 x 61mm	1.2kg	USB / RS232 Output
30-904-4101	Foot pedal			

Sylvac S_View D400S Digital Display

Features

- Digital multifunctional unit with 7" touch screen display
- Multi-brands compatible through M-BUS multiplexers (possibility to mix the transducer brands)
- Designed for multigauging applications
- Up to 99 input (probes, instruments, I/O) through M-BUS multiplexers
- Automatic detection of connected instruments
- Storage of up to 128 different parts configurations
- Up to 30,000 measurements can be saved by configuration
- Display of up to 32 channels simultaneously (on the same screen)
- Single or multi-gauging display mode
- SPC functions (run chart, pareto, histogram with Gaussian curve, etc.)
- PLC functions and PLC communication protocols
- Formula editor, free combination between all instruments connected to the M-BUS
- Configurable by PC
- Ethernet connection
- Footpedal input
- User friendly interface
- Very robust construction



SYLVAC D400S

Code No	Description
30-804-2400	D400S Display Unit



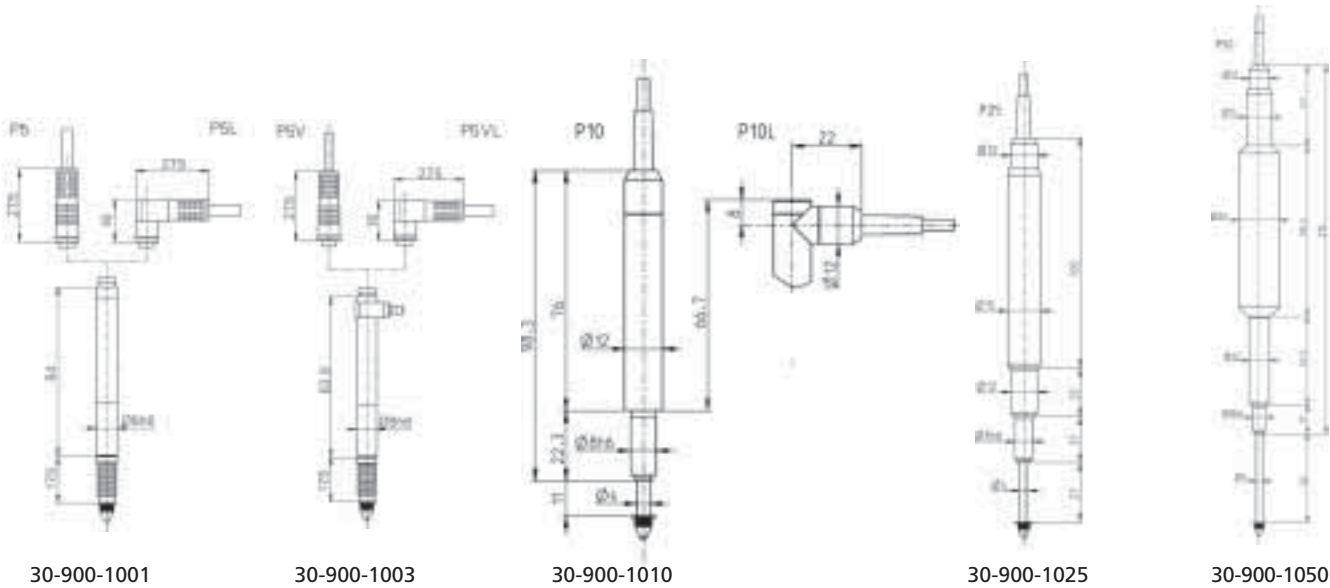
Transducer Probes

Sylvac long travel probes have built-in capacitive transducers which allow them to function for both absolute and comparative measurements. The Sylvac capacitive probes can be used with all Sylvac digital display units.

The Sylvac inductive (PXi) probes can be used with the Sylvac D300s V2 MBUS.



Swiss Precision



TRANSDUCER PROBES

Code No	Description
30-900-1050	Sylvac P50 Transducer Probe
30-900-1025	Sylvac P25 Transducer Probe
30-900-1010	Sylvac P10 Transducer Probe
30-900-1014	Sylvac P10L Transducer Probe
30-900-1001	Sylvac P5 Transducer Probe
30-900-1006	Sylvac P5L Transducer Probe
30-900-1001B	Sylvac P5BL Transducer Probe
30-900-1003	Sylvac P5V Transducer Probe
30-900-1008	Sylvac P5VL Transducer Probe
30-900-1003B	Sylvac P5BVL Transducer Probe

PXI INDUCTIVE PROBES

Code No	Description
30-900-1101	Sylvac P2i Inductive Probe - Spring Force
30-900-1102P	Sylvac P2i Inductive Probe - Pneumatic Force
30-900-1111	Sylvac P5i Inductive Probe - Spring Force
30-900-1112P	Sylvac P5i Inductive Probe - Pneumatic Force

CAPACITIVE TRANSDUCER PROBE SPECIFICATIONS

	P5, P5L & P5V Probes	P10 & P10L Probes	P25 Probe	P50 Probe	P2i & P2iP Probes	P5i & P5iP Probes
Linear measuring range	5mm / 0.2"	10mm / 0.4"	25mm / 1"	50mm / 2"	+/-2mm / 0.08"	+/-5mm / 0.2"
Maximum error	2µm / 0.00008"	1µm / 0.00004"	1.5µm / 0.00006"	4µm / 0.00016"	2µm / 0.00008"	5µm / 0.0002"
Measuring force	0.45-0.65 N	0.6-0.9 N	0.6-1.2 N	0.6-1.4 N		
Increase of measuring force	0.04N/mm	0.03 N/mm	0.024 N/mm	0.016N/mm		
Repeatability	0.2µm / 0.000008"	0.1µm / 0.000004"	0.01µm / 0.000004"	0.2µm / 0.000008"	0.15µm / 0.000006"	0.15µm / 0.000006"
Zero drift	0.0001mm/°C	0.0001mm/°C	0.0001mm/°C	0.0001mm/°C		
Temperature range	0-50°C	0-70°C	0-70°C	0-70°C		

'V' denotes vacuum retraction probe, 'B' denotes ball bearing, 'L' denotes side entry cable, 'P' denotes pneumatic.

Multiplexers

A wide range of flexible Sylvac Multiplexers are available to enable the connection of multiple transfer probes (up to 64) or instruments containing an Opto RS232 output to the Sylvac range of digital display units. Plus other types of digital instruments.

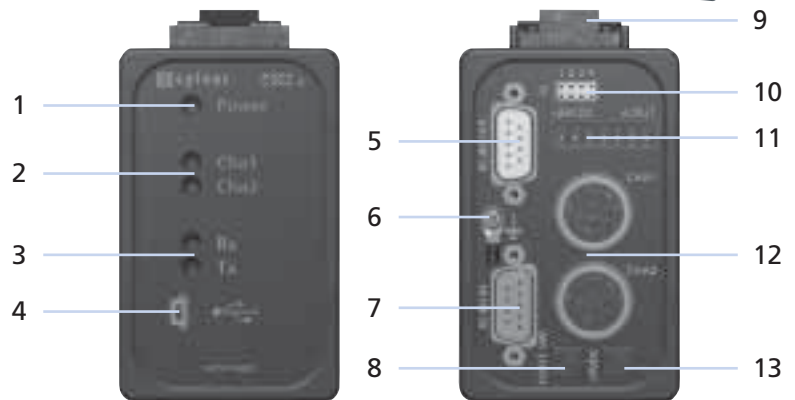


Features

- Multiplexing unit with 2 or 4 inputs for Sylvac probes P2 to P50
- Dynamic measurement (10 - 20 meas./Sec. according to resolution)
- Perfect solution for multi-gauging system
- Analogue output for PC connection
- Standalone use possible
- Programmable by PC
- Protection rating: IP40

MULTIPLEXERS - KEY

- | | |
|----|---|
| 1 | LED Power |
| 2 | LEDS channel |
| 3 | LED RS 485 activity |
| 4 | USB port for PC connection |
| 5 | RS 485 output |
| 6 | Ground connector |
| 7 | RS 485 input |
| 8 | External connector |
| 9 | Standard clamping (DIN 35mm) |
| 10 | Jumpers |
| 11 | Analogic output/24 VDC (only version a) |
| 12 | Probes input |
| 13 | 9V power supply input |



MULTIPLEXERS

Code No	Description
30-804-1302	D302 Multiplexer Unit
30-804-1303	D302 Multiplexer Unit with Analogue Output
30-804-1304	D304 Multiplexer Unit
30-804-1305	D304 Multiplexer Unit with Analogue Output

M-Bus Multiplexers

Features

- Multiplexer units allowing to connect different kind and brands of instruments to the D300S V2 and D400S display units
- Possibility to connect and mix different brands together
- RS485 based protocol
- The different units can be mounted on a DIN rail
- Robust construction



M-BUS MULTIPLEXERS

Code No	Description	Code No	Description
30-804-2102	M-Bus 2C Multiplexer Unit	30-804-2130	M-Bus IO PLC I/O
30-804-2104	M-Bus 4C Multiplexer Unit	30-804-2140	M-Bus PS Measuring Bench
30-804-2108	M-Bus 8i Inductive Multiplexer Unit	30-804-2160	M-Bus RS Computer
30-804-2114	M-Bus 4D Digimatic Multiplexer Unit	30-804-2170	M-Bus TP Temperature Sensor
30-804-2118	M-Bus 8D Digimatic Multiplexer Unit	30-804-2180	M-Bus BT Bluetooth Instrument
30-804-2122	M-Bus 2S Heidenhain Multiplexer Unit	30-804-2190	M-Bus AG Air Gauges



BOWERS GROUP



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Machine DRO

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