

ODAC[®] 2J / 16J

The casting design and insensitivity to industrial pollution guarantee that ODAC[®] 2J / 16J operate trouble free even under the most hostile industrial conditions, which brings it ahead of its competitors. It is permanently calibrated for highest accuracy and stability.

ODAC[®] 2J / 16J are able to measure all materials and products and does not mind whether they are opaque or transparent. It is the best low-cost and technical solution for measuring on-line and off-line processes such as drawing, extruding, grinding, polishing, measuring samples (quality control) and many more.

Main Advantages

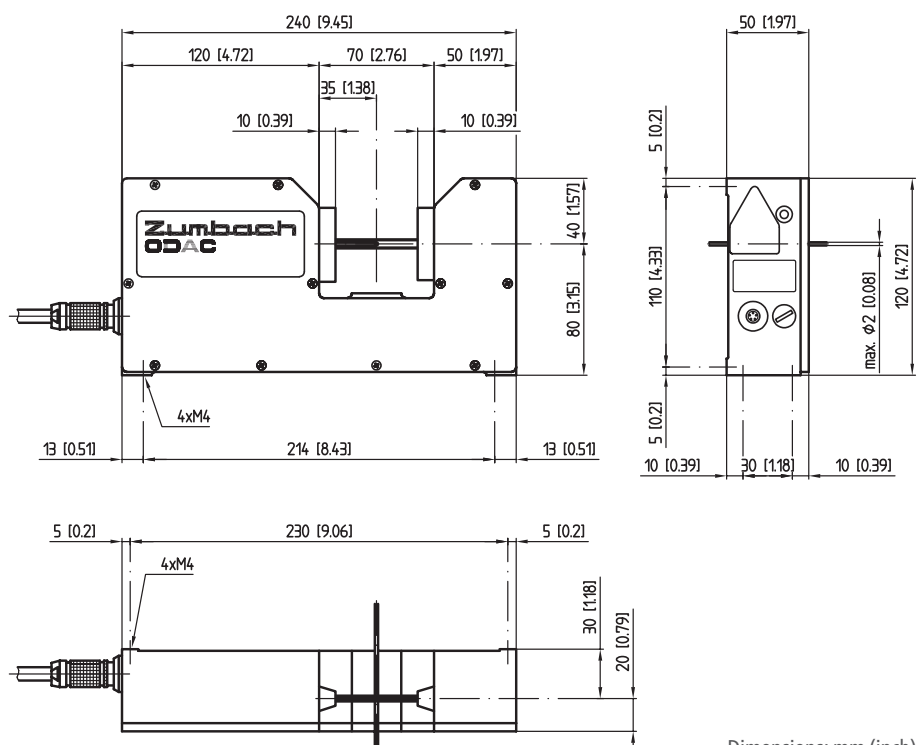
- Astonishingly low-priced, achieved through High Volume Production
- Very high tolerance to hostile conditions
- All products and materials
- For fine wire and fibres from 0.012 mm (.005 in.) up
- Extremely long-lived
- Can be installed anywhere, in any position

Practically all USYS processors and CI computer interfaces can work with ODAC[®] 2J / 16J to fulfil numerous functions such as:

- Product parameter library
- Storage of min./max. value
- Closed loop process control
- Statistical reel report
- Real-time SPC charts
- Measurement and control of:
 - Outer diameter
 - Inner diameter
 - Wall thickness
- Ready for computer networking

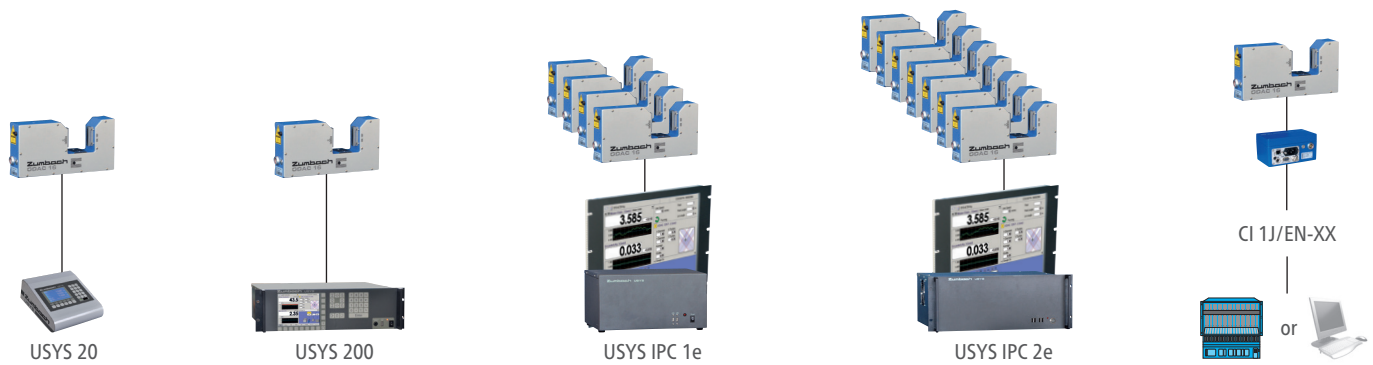


Dimensions



Dimensions: mm (inch)

Measuring heads ODAC 2J / 16J with corresponding processors



Technical Data

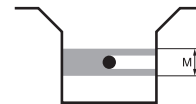
Model	ODAC 2J	ODAC 16J
Measuring field M ¹⁾	2 mm (.079 in.)	16 mm (.64 in.)
Min. object diameter	0.012 mm (.0005 in.)	0.050 mm (.002 in.)
Scanning frequency ³⁾	240 scans/s	240 / 480 scans/s ⁴⁾
Scanning speed	18.8 m/s (61.68 ft./s)	24 m/s (78.74 ft./s) at 240 scans/s 48 m/s (157.48 ft./s) at 480 scans/s
Measurement error	± 0.3 µm; range 0.012...1.0 mm (± .000012 in.; range .000504 in.)	± 0.5 µm, ± 0.1 ‰; from 8 mm ± 0.3 ‰ (± .000019 in., ± 0.1 ‰; from .3 in. ± 0.3 ‰)
Repeatability (3 σ)	0.45 µm (± .000018 in.), averaging time 0.1 s 0.15 µm (± .000006 in.), averaging time 1 s	
Resolution ²⁾	0.1 µm (± .000004 in.)	
Light source ⁴⁾	VLD (Visible Laser Diode) 630-680 nm, laser class 2 (device)	
Ambient temperature	Operating: 0...45 °C (0...113 °F); Transport / Storage: -20...50 °C (-4...122 °F)	
Max. atmospheric humidity	95 % (non condensing)	
Altitude	0...3000 m (0...9843 ft.) over sea level	
Type of protection	IP 65, connection plate IP 40	
Power supply	Supplied by the processor unit (24 VDC / 5 W)	
Power consumption	Max. 5 W	
Weight	1.7 kg (3.7 lbs.)	
Dimensions	See page 1	
Data acquisition system (Processors)	USYS 20, USYS 200, USYS IPC 1e, USYS IPC 2e, CI 1J/EN-RS, CI 1J/EN-DP, CI 1J/EN-EN, CI 1J/EN-PN, CI 1J/EN-EI	

¹⁾ M stands for measuring field height. In practice, the largest object diameter corresponds to measuring field height minus instability of position.

²⁾ System resolution is the smallest practical value on the last digit of the display.

³⁾ Scanning frequency 480 scans/s only with measured object diameter larger than 0.1 mm (.004 in.).

⁴⁾ Maximum power of the laser can be read on the warning label.



Accessories

Description

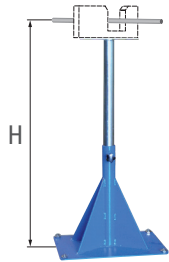
Order number

Floor stand ST2-ODAC16

Vertically adjustable.

Line height (H): 880...1220 mm
(34.7...48 in.)

ODAC 2J ODAC 16J



ST02.060.65000

Description

Order number

Set of calibration standards ODAC 2

For VR1M guide.

Delivered in a protection box, comprising:
– Calibration standard \varnothing 0.05 mm
– Calibration standard \varnothing 0.5 mm
– Certificate
Other calibration standards on request.

ODAC 2J ODAC 16J



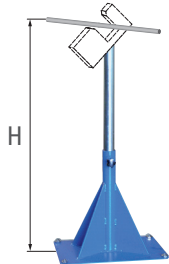
ODAC.9500.10000

Floor stand ST2-ODAC16

Vertically adjustable with 45° tilt.

Line height (H): 880...1220 mm
(34.7...48 in.)

ODAC 2J ODAC 16J



ST02.060.65020

Set of calibration standards ODAC 16

Delivered in a protection box, comprising:

– Calibration standard holder
– Calibration standard \varnothing 0.5 mm
– Calibration standard \varnothing 6 mm
– Certificate
Other calibration standards on request.

ODAC 2J ODAC 16J



ODAC.9500.35000

Mountable support for ST2

Lateral support, including rotary holder (USY.0002.910) for table top version of the USYS 20 processor.

ODAC 2J ODAC 16J

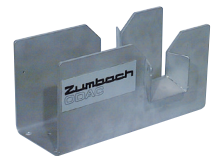


ST02.060.190

Protective shield ODAC 2/16J

To protect additionally the measuring head against severe pollution and damage.

ODAC 2J ODAC 16J



ODAC.161.920

Rotary holder USYS 20

USY.0002.910

Fixation set for wall mounting (with pivot arm) USY.0002.920

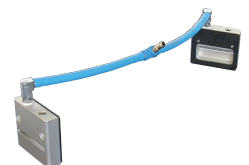
Fixation set for table top USYS 20

USY.0002.930

Air curtain LV16-ODAC16

Keeps the measuring area free of dust, water, talk etc. Composed of 2 compressed-air jet units.

ODAC 2J ODAC 16J



ODAC.161.900

Maintenance kit

Cleans and keeps the compressed air free of dirt.

Features: Filter regulators, submicrofilter, manometer, pressure difference display, automatic condensate emptying and wall fixture.

ODAC 2J ODAC 16J

A34 200 0050



Description

Guide VF16-ODAC16

With ceramic rollers (V shape) for measured object diameter up to 16 mm (.64 in.).

ODAC 2J ODAC 16J

Order number

ODAC.161.400



Description

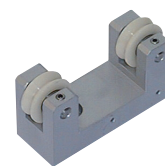
Guide VR1M-ODAC16

With ceramic rollers (V shape) for measured object diameters up to 1 mm (.04 in.).

ODAC 2J ODAC 16J

Order number

ODAC.161.460



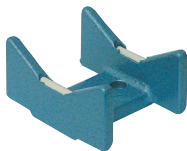
Limiting socket FF16-ODAC16

Used as a device to delimit the measuring field. It has no guiding function.

ODAC 2J ODAC 16J

Order number

ODAC.161.420



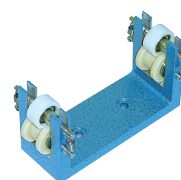
Guide FRG6B-ODAC16

With flat ceramic rollers and counter rollers. Used for the precise guiding of flat profiles, having a border length of up to max. 6 mm (.24 in.).

ODAC 2J ODAC 16J

Order number

ODAC.161.480



Guide FR4B-ODAC16 4 mm

Guide FR6B-ODAC16 6 mm

With flat ceramic rollers. Used for the precise guiding of flat profiles, having an edge width of up to 4 or 6 mm (.16 or .24 in.).

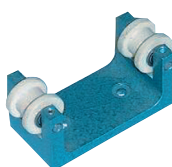
ODAC 2J ODAC 16J

Order number

ODAC.161.440-04

Order number

ODAC.161.440-06



Ordering information

When ordering, specify the following (A, B, C):

- A Measuring head model **ODAC 2J / ODAC 16J**.
- B Length of the connection cable between ODAC measuring head and the processor; available lengths: 1, 2, 5, 10, 15, 20, 25 and 30 m (3.3, 6.6, 16.4, 32.8, 49.2, 65.6, 82 and 98.5 ft.). Longer cables on request.
- C Processor model (data acquisition system): USYS 20, USYS 200, USYS IPC 1e, USYS IPC 2e, CI 1J/EN-RS, CI 1J/EN-DP, CI 1J/EN-EN, CI 1J/EN-PN, CI 1J/EN-EI. ► Ask for corresponding data sheets.

• Specifications are subject to change without notice

WORLDWIDE CUSTOMER SERVICE AND SALES OFFICES



Headquarter:
Zumbach Electronic AG
P.O. Box
CH-2552 Orpund
SWITZERLAND
Tel.: +41 (0)32 356 04 00
sales@zumbach.ch

BENELUX, sales@zumbach.be
CHINA P.R., sales@zumbach.com.cn
CZECH REPUBLIC, jvorlicek@zumbach.cz
FRANCE, ventes@zumbach.com.fr
GERMANY, verkauf@zumbach.de

INDIA, sales@zumbachindia.com
ITALY, zumit@zumbach.it
SPAIN, gestion@zumbach.es
TAIWAN, info@zumbach.tw
UK, sales@zumbach.co.uk

North American Headquarter:
Zumbach Electronics Corp.
140 Kisco Avenue
Mount Kisco, NY 10549-1407
Phone +1 914 241 7080
USA
sales@zumbach.com

