

INVITATION TO BID

Bid Invitation Number: 53-2014

Date of Issue: 3/11/14

Sealed bids will be received in the office of the Division of Central Purchasing, 200 East Main Street, Lexington, Kentucky, until **2:00 PM**, prevailing local time on 3/25/2014. Bids must be received by the above-mentioned date and time. Mailed bids should be sent to:

Division of Central Purchasing
200 East Main Street, Room 338
Lexington, KY 40507, (859) 258-3320

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

All bids must have the company name and address, bid invitation number, and the commodity/service on the outside of the envelope.

Bids are to include all shipping costs to the point of delivery located at: See Specifications

Bid Security Required: Yes No Performance Bond Required: Yes No
Cashier Check, Certified Check, Bid Bond (Personal checks and company checks will not be acceptable).

Commodity/Service
Compact Phosphate Analyzer
See specifications

<p style="text-align: center;"><u>Check One:</u></p> <p><input type="checkbox"/> Bid Specifications Met</p> <p><input checked="" type="checkbox"/> Exceptions to Bid Specifications. <i>Exceptions shall be itemized and attached to bid proposal submitted.</i></p>	<p style="text-align: center;"><u>Proposed Delivery:</u></p> <p><u>30</u> days after acceptance of bid.</p>
<p style="text-align: center;"><u>Procurement Card Usage</u></p> <p><input checked="" type="checkbox"/> Yes The Lexington-Fayette Urban County Government will be using Procurement Cards to purchase goods and services and also to make payments. Will you accept Procurement Cards?</p> <p><input type="checkbox"/> No</p>	

Submitted by:

Hach Company

Firm

5600 Lindbergh Dr

Address

Loveland CO 80538

City, State & Zip

***Bid must be signed:
(original signature)***

Roxanna Nittmann, Project Specialist II
Signature of Authorized Company Representative – Title
Roxanna Nittmann, Project Specialist II
Representative's Name (Typed or printed)

800-227-4224

970-461-3911

Area Code - Phone - Extension

Fax #

bids@hach.com

E-Mail Address

The Affidavit in this bid must be completed before your firm can be considered for award of this contract.

AFFIDAVIT

Comes the Affiant, Roxanna Nittmann, and after being first duly sworn under penalty of perjury as follows:

1. His/her name is Roxanna Nittmann and he/she is the individual submitting the bid or is the authorized representative of Hach Company

the entity submitting the bid (hereinafter referred to as "Bidder").

2. Bidder will pay all taxes and fees, which are owed to the Lexington-Fayette Urban County Government at the time the bid is submitted, prior to award of the contract and will maintain a "current" status in regard to those taxes and fees during the life of the contract.

3. Bidder will obtain a Lexington-Fayette Urban County Government business license, if applicable, prior to award of the contract.

4. Bidder has authorized the Division of Central Purchasing to verify the above-mentioned information with the Division of Revenue and to disclose to the Urban County Council that taxes and/or fees are delinquent or that a business license has not been obtained.

5. Bidder has not knowingly violated any provision of the campaign finance laws of the Commonwealth of Kentucky within the past five (5) years and the award of a contract to the Bidder will not violate any provision of the campaign finance laws of the Commonwealth.

6. Bidder has not knowingly violated any provision of Chapter 25 of the Lexington-Fayette Urban County Government Code of Ordinances, known as "Ethics Act."

7. Bidder acknowledges that "knowingly" for purposes of this Affidavit means, with respect to conduct or to circumstances described by a statute or ordinance defining an offense, that a person is aware or should have been aware that his conduct is of that nature or that the circumstance exists.

Further, Affiant sayeth naught.

Roxanna Nittmann

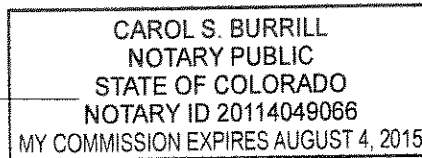
STATE OF Colorado

COUNTY OF Larimer

The foregoing instrument was subscribed, sworn to and acknowledged before me

by Carol Burrill on this the 21 day of March, 2014.

My Commission expires: 8/4/15



NOTARY PUBLIC, STATE AT LARGE

Please refer to Section II. Bid Conditions, Item "U" prior to completing this form.

I. GREEN PROCUREMENT

A. ENERGY

The Lexington-Fayette Urban County Government is committed to protecting our environment and being fiscally responsible to our citizens.

The Lexington-Fayette Urban County Government mandates the use of Energy Star compliant products if they are available in the marketplace (go to www.Energystar.gov). If these products are available, but not submitted in your pricing, your bid will be rejected as non-compliant.

ENERGY STAR is a government program that offers businesses and consumers energy-efficient solutions, making it easy to save money while protecting the environment for future generations.

Key Benefits

- These products use 25 to 50% less energy
- Reduced energy costs without compromising quality or performance
- Reduced air pollution because fewer fossil fuels are burned
- Significant return on investment
- Extended product life and decreased maintenance

B. GREEN SEAL CERTIFIED PRODUCTS

The Lexington-Fayette Urban County Government is also committed to using other environmentally friendly products that do not negatively impact our environment. Green Seal is a non-profit organization devoted to environmental standard setting, product certification, and public education.

Go to www.Greenseal.org to find available certified products. These products will have a reduced impact on the environment and on human health. The products to be used must be pre-approved by the LFUCG prior to commencement of any work in any LFUCG facility. If a Green Seal product is not available, the LFUCG must provide a signed waiver to use an alternate product. Please provide information on the Green Seal products being used with your bid response.

C. GREEN COMMUNITY

The Lexington-Fayette Urban County Government (LFUCG) serves as a principal, along with the University of Kentucky and Fayette County Public Schools, in the Bluegrass Partnership for a Green Community. The Purchasing Team component of the Partnership collaborates on economy of scale purchasing that promotes and enhances environmental initiatives. Specifically, when applicable, each principal is interested in obtaining best value products and/or services which promote environment initiatives via solicitations and awards from the other principals.

If your company is the successful bidder on this Invitation For Bid, do you agree to extend the same product/service pricing to the other principals of the Bluegrass Partnership for a Green Community (i.e. University of Kentucky and Fayette County Schools) if requested?

Yes X* No

*** Please note that Hach is not able to submit or provide certified green product on this invitation to bid. Hach has checked yes above to note that Hach will extend the same product quoted to other principals of the Bluegrass Partnership but the product does not meet the green community requirements**

II. Bid Conditions

- A. No bid may be withdrawn for a period of sixty (60) days after the date and time set for opening.
- B. No bid may be altered after the date and time set for opening. In the case of obvious errors, the Division of Central Purchasing may permit the withdrawal of a bid. The decision as to whether a bid may be withdrawn shall be that of the Division of Central Purchasing.
- C. Acceptance of this proposal shall be enactment of an Ordinance by the Urban County Council.
- D. The bidder agrees that the Urban County Government reserves the right to reject any and all bids for either fiscal or technical reasons, and to award each part of the bid separately or all parts to one vendor.
- E. Minor exceptions may not eliminate the bidder. The decision as to whether any exception is minor shall be entirely that of the head of the requisitioning Department or Division and the Director of the Division of Central Purchasing. The Urban County Government may waive technicalities and informalities where such waiver would best serve the interests of the Urban County Government.
- F. Manufacturer's catalogue numbers, trade names, etc., where shown herein are for descriptive purposes and are to guide the bidder in interpreting the standard of quality, design, and performance desired, and shall not be construed to exclude proposals based on furnishing other types of materials and/or services. However, any substitution or departure proposed by the bidder must be clearly noted and described; otherwise, it will be assumed that the bidder intends to supply items specifically mentioned in this Invitation for Bids.
- G. The Urban County Government may require demonstrations of the materials proposed herein prior to acceptance of this proposal.
- H. Bids must be submitted on this form and must be signed by the bidder or his authorized representative. Unsigned bids will not be considered.
- I. Bids must be submitted prior to the date and time indicated for opening. Bids submitted after this time will not be considered.
- J. All bids mailed must be marked on the face of the envelope:

“Bid on #53-2014 Compact Phosphate Analyzer”

and addressed to: Division of Central Purchasing
 200 East Main Street, Room 338
 Lexington, Kentucky 40507

The Lexington-Fayette Urban County Government assumes no responsibility for bids that are not addressed and delivered as indicated above. Bids that are not delivered to the Division of Central Purchasing by the stated time and date will be rejected.

- K. Bidder is requested to show both unit prices and lot prices. In the event of error, the unit price shall prevail.
- L. A Certified / Cashier's Check or Bid Bond in the amount of XX percent of the bid price must be attached hereto. This check must be made payable to the Lexington-Fayette Urban County Government, and will be returned when the material and/or services specified herein have been delivered in accordance with specifications. In the event of failure to perform within the time period set forth in this bid, it is agreed the certified / cashier's check may be cashed and the funds retained by the Lexington-Fayette Urban County Government as liquidated damages. Checks of unsuccessful

bidders will be returned when the bid has been awarded.

- M. The delivery dates specified by bidder may be a factor in the determination of the successful bidder.
- N. Tabulations of bids received may be mailed to bidders. Bidders requesting tabulations must enclose a stamped, self-addressed envelope with the bid.
- O. The Lexington-Fayette Urban County Government is exempt from Kentucky Sales Tax and Federal Excise Tax on materials purchased from this bid invitation. Materials purchased by the bidder for construction projects are not tax exempt and are the sole responsibility of the bidder.
- P. All material furnished hereunder must be in full compliance with OSHA regulations.
- Q. If more than one bid is offered by one party, or by any person or persons representing a party, all such bids shall be rejected.
- R. Signature on the face of this bid by the Bidder or his authorized representative shall be construed as acceptance of and compliance with all terms and conditions contained herein.
- S. The Entity (regardless of whether construction contractor, non-construction contractor or supplier) agrees to provide equal opportunity in employment for all qualified persons, to prohibit discrimination in employment because of race, color, creed, national origin, sex or age, and to promote equal employment through a positive, continuing program from itself and each of its sub-contracting agents. This program of equal employment opportunity shall apply to every aspect of its employment policies and practices.
- T. The Kentucky Equal Employment Opportunity Act of 1978 (KRS 45.560-45.640) requires that any county, city, town, school district, water district, hospital district, or other political subdivision of the state shall include in directly or indirectly publicly funded contracts for supplies, materials, services, or equipment hereinafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age or national origin;*
- (2) The contractor will state in all solicitations or advertisements for employees placed by or on behalf of the contractors that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, age or national origin;*
- (3) The contractor will post notices in conspicuous places, available to employees and applicants for employment, setting forth the provisions of the non-discrimination clauses required by this section; and*
- (4) The contractor will send a notice to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding advising the labor union or workers' representative of the contractor's commitments under the nondiscrimination clauses.*

The Act further provides:

KRS 45.610. Hiring minorities - Information required

- (1) For the length of the contract, each contractor shall hire minorities from other sources within the drawing area, should the union with which he has collective bargaining agreements be unwilling to supply sufficient minorities to satisfy the agreed upon goals and timetable.*

(2) *Each contractor shall, for the length of the contract, furnish such information as required by KRS 45.560 to KRS 45.640 and by such rules, regulations and orders issued pursuant thereto and will permit access to all books and records pertaining to his employment practices and work sites by the contracting agency and the department for purposes of investigation to ascertain compliance with KRS 45.560 to 45.640 and such rules, regulations and orders issued pursuant thereto.*

KRS 45.620. Action against contractor - Hiring of minority contractor or subcontractor

- (1) *If any contractor is found by the department to have engaged in an unlawful practice under this chapter during the course of performing under a contract or subcontract covered under KRS 45.560 to 45.640, the department shall so certify to the contracting agency and such certification shall be binding upon the contracting agency unless it is reversed in the course of judicial review.*
- (2) *If the contractor is found to have committed an unlawful practice under KRS 45.560 to 45.640, the contracting agency may cancel or terminate the contract, conditioned upon a program for future compliance approved by the contracting agency and the department. The contracting agency may declare such a contractor ineligible to bid on further contracts with that agency until such time as the contractor complies in full with the requirements of KRS 45.560 to 45.640.*
- (3) *The equal employment provisions of KRS 45.560 to 45.640 may be met in part by a contractor by subcontracting to a minority contractor or subcontractor. For the provisions of KRS 45.560 to 45.640, a minority contractor or subcontractor shall mean a business that is owned and controlled by one or more persons disadvantaged by racial or ethnic circumstances.*

KRS 45.630 Termination of existing employee not required, when

Any provision of KRS 45.560 to 45.640 notwithstanding, no contractor shall be required to terminate an existing employee upon proof that that employee was employed prior to the date of the contract.

KRS 45.640 Minimum skills

Nothing in KRS 45.560 to 45.640 shall require a contractor to hire anyone who fails to demonstrate the minimum skills required to perform a particular job.

It is recommended that all of the provisions above quoted to be included as special conditions in each contract. In the case of a contract exceeding \$250,000, the contractor is required to furnish evidence that his work-force in Kentucky is representative of the available work-force in the area from which he draws employees, or to supply an Affirmative Action plan which will achieve such representation during the life of the contract.

- U. Any party, firm or individual submitting a proposal pursuant to this invitation must be in compliance with the requirements of the Lexington-Fayette Urban County Government regarding taxes and fees before they can be considered for award of this invitation and must maintain a "current" status with regard to those taxes and fees throughout the term of the contract. The contractor must be in compliance with Chapter 13 from the Code of Ordinances of the Lexington-Fayette Urban County Government. The contractor must be in compliance with Ordinance 35-2000 pursuant to contractor registration with the Division of Building Inspection. If applicable, said business must have a Fayette County business license.

Pursuant to KRS 45A.343 and KRS 45A.345, the contractor shall

- (1) Reveal any final determination of a violation by the contractor within the previous five year period pursuant to KRS Chapters 136 (corporation and utility taxes), 139 (sales and use taxes), 141 (income taxes), 337 (wages and hours), 338 (occupational safety and health of employees), 341 (unemployment and compensation) and 342 (labor and human rights) that apply to the contractor; and*
- (2) Be in continuous compliance with the above-mentioned KRS provisions that apply to the contractor for the duration of the contract.*

A contractor's failure to reveal the above or to comply with such provisions for the duration of the contract shall be grounds for cancellation of the contract and disqualification of the contractor from eligibility for future contracts for a period of two (2) years.

- V. Vendors who respond to this invitation have the right to file a notice of contention associated with the bid process or to file a notice of appeal of the recommendation made by the Director of Central Purchasing resulting from this invitation.

Notice of contention with the bid process must be filed within 3 business days of the bid/proposal opening by (1) sending a written notice, including sufficient documentation to support contention, to the Director of the Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his/her contention with the bid process. After consulting with the Commissioner of Finance the Chief Administrative Officer and reviewing the documentation and/or hearing the vendor, the Director of Central Purchasing shall promptly respond in writing findings as to the compliance with bid processes. If, based on this review, a bid process irregularity is deemed to have occurred the Director of Central Purchasing will consult with the Commissioner of Finance, the Chief Administrative Officer and the Department of Law as to the appropriate remedy.

Notice of appeal of a bid recommendation must be filed within 3 business days of the bid recommendation by (1) sending a written notice, including sufficient documentation to support appeal, to the Director, Division of Central Purchasing or (2) submitting a written request for a meeting with the Director of Central Purchasing to explain his appeal. After reviewing the documentation and/or hearing the vendor and consulting with the Commissioner of Finance and the Chief Administrative Officer, the Director of Central Purchasing shall in writing, affirm or withdraw the recommendation.

LFUCG Non-Appropriation Clause

Contractor acknowledges that the LFUCG is a governmental entity, and the contract validity is based upon the availability of public funding under the authority of its statutory mandate.

In the event that public funds are unavailable and not appropriated for the performance of the LFUCG's obligations under this contract, then this contract shall automatically expire without penalty to the LFUCG thirty (30) days after written notice to Contractor of the unavailability and non-appropriation of public funds. It is expressly agreed that the LFUCG shall not activate this non-appropriation provision for its convenience or to circumvent the requirements of this contract, but only as an emergency fiscal measure during a substantial fiscal crisis, which affects generally its governmental operations.

In the event of a change in the LFUCG's statutory authority, mandate and mandated functions, by state and federal legislative or regulatory action, which adversely affects the LFUCG's authority to continue its obligations under this contract, then this contract shall automatically terminate without penalty to the LFUCG upon written notice to Contractor of such limitation or change in the LFUCG's legal authority.

EQUAL OPPORTUNITY AGREEMENT

The Law

- Title VII of the Civil Rights Act of 1964 (amended 1972) states that it is unlawful for an employer to discriminate in employment because of race, color, religion, sex, age (40-70 years) or national origin.
- Executive Order No. 11246 on Nondiscrimination under Federal contract prohibits employment discrimination by contractor and sub-contractor doing business with the Federal Government or recipients of Federal funds. This order was later amended by Executive Order No. 11375 to prohibit discrimination on the basis of sex.
- Section 503 of the Rehabilitation Act of 1973 states:

The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap.

- Section 2012 of the Vietnam Era Veterans Readjustment Act of 1973 requires Affirmative Action on behalf of disabled veterans and veterans of the Vietnam Era by contractors having Federal contracts.
- Section 206(A) of Executive Order 12086, Consolidation of Contract Compliance Functions for Equal Employment Opportunity, states:

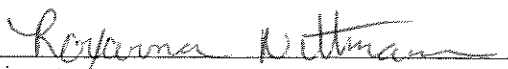
The Secretary of Labor may investigate the employment practices of any Government contractor or sub-contractor to determine whether or not the contractual provisions specified in Section 202 of this order have been violated.

The Lexington-Fayette Urban County Government practices Equal Opportunity in recruiting, hiring and promoting. It is the Government's intent to affirmatively provide employment opportunities for those individuals who have previously not been allowed to enter into the mainstream of society. Because of its importance to the local Government, this policy carries the full endorsement of the Mayor, Commissioners, Directors and all supervisory personnel. In following this commitment to Equal Employment Opportunity and because the Government is the benefactor of the Federal funds, it is both against the Urban County Government policy and illegal for the Government to let contracts to companies which knowingly or unknowingly practice discrimination in their employment practices. Violation of the above mentioned ordinances may cause a contract to be canceled and the contractors may be declared ineligible for future consideration.

Please sign this statement in the appropriate space acknowledging that you have read and understand the provisions contained herein. Return this document as part of your application packet.

Bidders

I/We agree to comply with the Civil Rights Laws listed above that govern employment rights of minorities, women, Vietnam veterans, handicapped and aged persons.


Signature

Hach Company
Name of Business

GENERAL PROVISIONS OF BID CONTRACT

By signing the below, bidder acknowledges that it understands and agrees with the following provisions related to its bid response and the provision of any goods or services to LFUCG upon selection by LFUCG pursuant to the bid request:

1. Bidder shall comply with all Federal, State & Local regulations concerning this type of service or good.
2. Failure to submit ALL forms and information required by LFUCG may be grounds for disqualification.
3. Addenda: All addenda, if any, must be considered by the bidder in making its response, and such addenda shall be made a part of the requirements of the bid contract. Before submitting a bid response, it is incumbent upon bidder to be informed as to whether any addenda have been issued, and the failure of the bidder to cover any such addenda may result in disqualification of that response.
4. Bid Reservations: LFUCG reserves the right to reject any or all bid responses, to award in whole or part, and to waive minor immaterial defects in proposals. LFUCG may consider any alternative proposal that meets its basic needs.
5. Liability: LFUCG is not responsible for any cost incurred by bidder in the preparation of its response.
6. Changes/Alterations: Bidder may change or withdraw a proposal at any time prior to the opening; however, no oral modifications will be allowed. Only letters, or other formal written requests for modifications or corrections of a previously submitted proposal which is addressed in the same manner as the bid response, and received by LFUCG prior to the scheduled closing time for receipt of bids, will be accepted. The bid response when opened, will then be corrected in accordance with such written request(s), provided that the written request is contained in a sealed envelope which is plainly marked "modifications of bid response".
7. Clarification of Submittal: LFUCG reserves the right to obtain clarification of any point in a bid or to obtain additional information from any bidder.
8. Bribery Clause: By his/her signature on its response, bidder certifies that no employee of his/hers, any affiliate or subcontractor, has bribed or attempted to bribe an officer or employee of the LFUCG.
9. Additional Information: While not necessary, the bidder may include any product brochures, software documentation, sample reports, or other documentation that may assist LFUCG in better understanding and evaluating the bid response. Additional documentation shall not serve as a substitute for other documentation which is required by the LFUCG to be submitted with the bid response.
10. Ambiguity, Conflict or other Errors: If a bidder discovers any ambiguity, conflict, discrepancy, omission or other error in the bid request of LFUCG, it shall immediately notify LFUCG of such error in writing and request modification or clarification of the document if allowable by the LFUCG.
11. Agreement to Bid Terms: In submitting its bid response, the bidder agrees that it has carefully examined the specifications and all provisions relating to LFUCG's bid request, including but not limited to the bid contract. By submission of its bid response, bidder states that it

understands the meaning, intent and requirements of LFUCG's bid request and agrees to the same. The successful bidder shall warrant that it is familiar with and understands all provisions herein and shall warrant that it can comply with them. No additional compensation to bidder shall be authorized for services, expenses, or goods reasonably covered under these provisions that the bidder omits from its bid response.

12. Cancellation: LFUCG may unilaterally terminate the bid contract with the selected bidder(s) at any time, with or without cause, by providing at least thirty (30) days advance written notice unless a different advance written notice period is negotiated prior to contract approval. Payment for services or goods received prior to termination shall be made by the LFUCG provided these goods or services were provided in a manner acceptable to the LFUCG. Payment for those goods and services shall not be unreasonably withheld.
13. Assignment of Contract: The selected bidder(s) shall not assign or subcontract any portion of the bid contract with LFUCG without the express written consent of LFUCG. Any purported assignment or subcontract in violation hereof shall be void. It is expressly acknowledged that LFUCG shall never be required or obligated to consent to any request for assignment or subcontract; and further that such refusal to consent can be for any or no reason, fully within the sole discretion of LFUCG.
14. No Waiver: No failure or delay by LFUCG in exercising any right, remedy, power or privilege hereunder, nor any single or partial exercise thereof, nor the exercise of any other right, remedy, power or privilege shall operate as a waiver hereof or thereof. No failure or delay by LFUCG in exercising any right, remedy, power or privilege under or in respect of this bid proposal or bid contract shall affect the rights, remedies, powers or privileges of LFUCG hereunder or shall operate as a waiver thereof.
15. Authority to do Business: Each bidder must be authorized to do business under the laws of the Commonwealth of Kentucky and must be in good standing and have full legal capacity to provide the goods or services specified in the bid proposal. Each bidder must have all necessary right and lawful authority to submit the bid response and enter into the bid contract for the full term hereof including any necessary corporate or other action authorizing the bidder to submit the bid response and enter into this bid contract. If requested, the bidder will provide LFUCG with a copy of a corporate resolution authorizing this action and/or a letter from an attorney confirming that the proposer is authorized to do business in the Commonwealth of Kentucky. All bid responses must be signed by a duly authorized officer, agent or employee of the bidder.
16. Governing Law: This bid request and bid contract shall be governed by and construed in accordance with the laws of the Commonwealth of Kentucky. In the event of any proceedings regarding this matter, the bidder agrees that the venue shall be the Fayette County Circuit Court or the U.S. District Court for the Eastern District of Kentucky, Lexington Division and that the bidder expressly consents to personal jurisdiction and venue in such Court for the limited and sole purpose of proceedings relating to these matters or any rights or obligations arising thereunder.
17. Ability to Meet Obligations: Bidder affirmatively states that there are no actions, suits or proceedings of any kind pending against bidder or, to the knowledge of the bidder, threatened against the bidder before or by any court, governmental body or agency or other tribunal or authority which would, if adversely determined, have a materially adverse effect on the authority or ability of bidder to perform its obligations under this bid response or bid contract, or which question the legality, validity or enforceability hereof or thereof.
18. Bidder understands and agrees that its employees, agents, or subcontractors are not

employees of LFUCG for any purpose whatsoever. Bidder is an independent contractor at all times related to the bid response or bid contract.

19. If any term or provision of this bid contract shall be found to be illegal or unenforceable, the remainder of the contract shall remain in full force and such term or provision shall be deemed stricken.

Rebecca Nittman
Signature

3/21/2014
Date

**RISK MANAGEMENT PROVISIONS
INSURANCE AND INDEMNIFICATION**

Bid # 53-2014 – Compact Phosphate Analyzer

INDEMNIFICATION AND HOLD HARMLESS PROVISION

- (1) It is understood and agreed by the parties that Contractor hereby assumes the entire responsibility and liability for any and all damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Contractor or its employees, agents, servants, owners, principals, licensees, assigns or subcontractors of any tier (hereinafter "CONTRACTOR") under or in connection with this agreement and/or the provision of goods or services and the performance or failure to perform any work required thereby.
- (2) CONTRACTOR shall indemnify, save, hold harmless and defend the Lexington-Fayette Urban County Government and its elected and appointed officials, employees, agents, volunteers, and successors in interest (hereinafter "LFUCG") from and against all liability, damages, and losses, including but not limited to, demands, claims, obligations, causes of action, judgments, penalties, fines, liens, costs, expenses, interest, defense costs and reasonable attorney's fees that are in any way incidental to or connected with, or that arise or are alleged to have arisen, directly or indirectly, from or by CONTRACTOR's performance or breach of the agreement and/or the provision of goods or services provided that: (a) it is attributable to personal injury, bodily injury, sickness, or death, or to injury to or destruction of property (including the loss of use resulting therefrom), or to or from the negligent acts, errors or omissions or willful misconduct of the CONTRACTOR; and (b) not caused solely by the active negligence or willful misconduct of LFUCG.
- (3) In the event LFUCG is alleged to be liable based upon the above, CONTRACTOR shall defend such allegations and shall bear all costs, fees and expenses of such defense, including but not limited to, all reasonable attorneys' fees and expenses, court costs, and expert witness fees and expenses, using attorneys approved in writing by LFUCG, which approval shall not be unreasonably withheld.
- (4) These provisions shall in no way be limited by any financial responsibility or insurance requirements, and shall survive the termination of this agreement.

FINANCIAL RESPONSIBILITY

BIDDER/CONTRACTOR understands and agrees that it shall, prior to final acceptance of its bid and the commencement of any work, demonstrate the ability to assure compliance with the above Indemnity provisions and these other risk management provisions.

INSURANCE REQUIREMENTS

YOUR ATTENTION IS DIRECTED TO THE INSURANCE REQUIREMENTS BELOW, AAND YOU MAY NEED TO CONFER WITH YOUR INSURANCE AGENTS, BROKERS, OR CARRIERS TO DETERMINE IN ADVANCE OF SUBMISSION OF A RESPONSE THE AVAILABILITY OF THE INSURANCE COVERAGES AND ENDORSEMENTS REQUIRED HEREIN. IF YOU FAIL TO COMPLY WITH THE INSURANCE REQUIREMENTS BELOW, YOU MAY BE DISQUALIFIED FROM AWARD OF THE CONTRACT.

Required Insurance Coverage

BIDDER/CONTRACTOR shall procure and maintain for the duration of this contract the following or equivalent insurance policies at no less than the limits shown below and cause its subcontractors to maintain similar insurance with limits acceptable to LFUCG in order to protect LFUCG against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by CONTRACTOR. The cost of such insurance shall be included in any bid:

<u>Coverage</u>	<u>Limits</u>
General Liability (Insurance Services Office Form CG 00 01)	\$1 million per occurrence, \$2 million aggregate or \$ 2 million combined single limit
Commercial Automobile Liability (Insurance Services Office Form CA 0001)	combined single, \$1 million per occurrence
Worker's Compensation	Statutory
Employer's Liability	\$500,000.00

The policies above shall contain the following conditions:

- a. All Certificates of Insurance forms used by the insurance carrier shall be properly filed and approved by the Department of Insurance for the Commonwealth of Kentucky (DOI). LFUCG shall be named as an additional insured in the General Liability Policy and Commercial Automobile Liability Policy using the Kentucky DOI approved forms.
- b. The General Liability Policy shall be primary to any insurance or self-insurance retained by LFUCG.
- c. The General Liability Policy shall include Products and Completed Operations coverage and will include Products Liability Coverage or endorsement to the CGL policy.
- d. The General Liability Policy shall include a Pollution liability and/or Environmental Casualty endorsement unless it is deemed not to apply by LFUCG.
- e. LFUCG shall be provided at least 30 days advance written notice via certified mail, return receipt requested, in the event any of the required policies are canceled or non-renewed.
- f. Said coverage shall be written by insurers acceptable to LFUCG and shall be in a form acceptable to LFUCG. Insurance placed with insurers with a rating classification of no less than Excellent (A or A-) and a financial size category of no less than VIII, as defined by the most current Best's Key Rating Guide shall be deemed automatically acceptable.

Renewals

After insurance has been approved by LFUCG, evidence of renewal of an expiring policy must be submitted to LFUCG, and may be submitted on a manually signed renewal endorsement form. If the policy or carrier has changed, however, new evidence of coverage must be submitted in accordance with these Insurance Requirements.

Deductibles and Self-Insured Programs

IF YOU INTEND TO SUBMIT A SELF-INSURANCE PLAN IT MUST BE FORWARDED TO LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT, DIVISION OF RISK MANAGEMENT, 200 EAST MAIN STREET, LEXINGTON, KENTUCKY 40507 NO LATER THAN A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO THE RESPONSE DATE. Self-insurance programs, deductibles, and self-insured retentions in insurance policies are subject to separate approval by Lexington-Fayette Urban County Government's Division of Risk Management, upon review of evidence of BIDDER/CONTRACTOR's financial capacity to respond to claims. Any such programs or retentions must provide LFUCG with at least the same protection from liability and defense of suits as would be afforded by first-dollar insurance coverage. If BIDDER/CONTRACTOR satisfies any portion of the insurance requirements through deductibles, self-insurance programs, or self-insured retentions, BIDDER/CONTRACTOR agrees to provide Lexington-Fayette Urban County Government, Division of Risk Management, the following data prior to the final acceptance of bid and the commencement of any work:

- a. Latest audited financial statement, including auditor's notes.
- b. Any records of any self-insured trust fund plan or policy and related accounting statements.
- c. Actuarial funding reports or retained losses.
- d. Risk Management Manual or a description of the self-insurance and risk management program.
- e. A claim loss run summary for the previous five (5) years.
- f. Self-Insured Associations will be considered.

Safety and Loss Control

CONTRACTOR shall comply with all applicable federal, state, and local safety standards related to the performance of its works or services under this Agreement and take necessary action to protect the life, health and safety and property of all of its personnel on the job site, the public, and LFUCG.

Verification of Coverage

BIDDER/CONTRACTOR agrees to furnish LFUCG with all applicable Certificates of Insurance signed by a person authorized by the insurer to bind coverage on its behalf prior to final award, and if requested, shall provide LFUCG copies of all insurance policies, including all endorsements.

Right to Review, Audit and Inspect

CONTRACTOR understands and agrees that LFUCG may review, audit and inspect any and all of its records and operations to insure compliance with these Insurance Requirements.

DEFAULT

BIDDER/CONTRACTOR understands and agrees that the failure to comply with any of these insurance, safety, or loss control provisions shall constitute default and that LFUCG may elect at its option any single remedy or penalty or any combination of remedies and penalties, as available, including but not limited to purchasing insurance and charging BIDDER/CONTRACTOR for any such insurance premiums purchased, or suspending or terminating the work.

Bid Specifications
For
Compact Phosphate Analyzer
For
West Hickman Creek WWTP

GENERAL

1. The successful Bidder will furnish all equipment, training, materials and related services required to install specified **Compact Phosphate Analyzer** for determining/testing phosphate concentration(s) in wastewater samples of the West Hickman Creek Waste Water Treatment Plant which is owned and operated by the Lexington Fayette Urban County Government Division of Water Quality.
2. It is the intent of the Division of Water Quality to purchase one (1), as specified herein, **Compact Phosphate Analyzer** during the current Fiscal Year (FY 2014)
3. Installation of **Compact Phosphate Analyzer** will be performed by West Hickman Creek WWTP staff.
4. A copy of this specification with each paragraph check marked to show specification compliance or marked to show deviations. All exceptions must be clearly noted and detailed. The LFUCG reserves the right to disallow any bid due to exception.

SCOPE OF SUPPLY

1. Furnish new Compact Phosphate Analyzer, Sample Preparation System, and "Plug and Play" Digital Controller with all necessary reagents, sample vessels, data cables, tubing and/or other accessories necessary for a complete operational unit as specified.
2. Equipment manufacturer technician and/or authorized agent to assist with installation, testing and/or calibration of "system" at West Hickman Creek WWTP.
3. Equipment manufacturer technician and/or authorized agent to provide training for West Hickman Creek WWTP personnel as specified herein
4. Provide minimum one (1) year full coverage warranty as specified

GENERAL REQUIREMENTS:

Compact Phosphate Analyzer

1. The Compact Phosphate Analyzer, Sample Preparation System, and "Plug and Play" Digital Controller specified shall be the **PHOSPHAX™** **sc Phosphate Analyzer manufactured by HACH®** or Owner approved equal

Specification Compliant	
Yes	No
X	

2. At the beginning of each measurement cycle the analyzer measures a sample for purposes of compensating for background color of the sample.

Specification Compliant	
Yes	No
X	

3. The method of measuring ammonia will be by vanadomolybdophosphoric acid colorimetric method as found in *Standard Methods*.
- a. Other instruments that do not use the vanadomolybdophosphoric acid colorimetric method are not acceptable
 - b. And other instruments that do not compensate for background sample color are not acceptable

Specification Compliant	
Yes	No
X	

4. Performance Requirements:
- a. Measurement Range: 0.05 to 15 mg/L
 - b. Lower Detection Limit: 0.05 mg/L
 - c. Accuracy: 2% ± 0.05 mg/L
 - d. Reproducibility: 2% ± 0.05 mg/L
 - e. Response Time: Less than 5 minutes (T90), including sample preparation
 - f. Measurement Interval: 5 to 120 minutes, adjustable

Specification Compliant	
Yes	No
X	

5. Operational Criteria:
- a. Phosphate Analyzer:
 - i. Sample Temperature: 39 to 104°F (4 to 40°C)
 - ii. Sample pH: 5 to 9 pH
 - iii. Operating Temperature: -4 to 114°F (-20 to 45°C)
 - iv. Relative Humidity: 95% relative humidity, non-condensing
 - b. Filtration System:
 - i. Immersion Depth: 9.8 feet (3 m), maximum
 - ii. Sample Flow Rate: 3 m/s, maximum
 - iii. Filtrate Flow Rate: 5 mL/minute, minimum

Specification Compliant	
Yes	No
X	

6. The analyzer shall be housed in an ASA UV-resistant, IP55-rated, lockable housing to be installed at the measurement point.

- a. Unit must easily mount to wall
- b. Mounting options: rail and/or stand

Specification Compliant	
Yes	No
x	

7. Power Requirements:

- a. 115Vac, 50-60Hz, via the controller

Specification Compliant	
Yes	No
x	

8. The Analyzer shall zero-calibrate and clean automatically

Specification Compliant	
Yes	No
x	

9. The analyzer shall be equipped with self-diagnostics

Specification Compliant	
Yes	No
x	

10. There shall be an optional filtration system that conditions the sample for the analyzer

Specification Compliant	
Yes	No
x	

11. The analyzer shall be HACH® Company, PHOSPHAX™ sc Phosphate Analyzer or Owner approved equal

Specification Compliant	
Yes	No
x	

12. Warranty:

- a. Minimum one (1) year full coverage warranty from date of shipment

Specification Compliant	
Yes	No
x	

GENERAL REQUIREMENTS:

Filterprobe sc

1. Operation:
 - a. In-situ membrane filtration
 - b. Filter modules are exchangeable
 - c. Continuous self-cleaning with air bubbles
 - d. Particles larger than 0.15 µm are separated from sample stream

Specification Compliant	
Yes	No
X	

2. Power Supply:
 - a. Via analysis instrument 100 VA (brief peak power consumption: 1000 VA), with 5 or 10 m heated filter probe hose.
 - b. Electrical fuse protection.

Specification Compliant	
Yes	No
X	

GENERAL REQUIREMENTS:

Multi-Parameter Universal Controller

1. The controller shall consist of a portable display module connected to one or more probe modules.

Specification Compliant	
Yes	No
X	

2. The portable display module shall have a color graphical touch-screen display.

Specification Compliant	
Yes	No
X	

3. Connections between the sensors and the controller shall be "plug and play." ***Please reference attached clarification document.**

Specification Compliant	
Yes	No
X	

4. The controller shall have the option for MODBUS or PROFIBUS DP communication

Specification Compliant	
Yes	No
X	

5. The interface unit shall allow operators to control sensor and interface functions with menu-driven software.

Specification Compliant	
Yes	No
X	

6. The controller shall have up to four potential free relays, twelve analog outputs and twelve analog inputs per probe module (all expandable via the controller's internal network). * **Please reference attached clarification document.**

Specification Compliant	
Yes	No
	X

7. The controller shall have an Ethernet service port for direct connection to a personal computer for transfer of data and software updates.

Specification Compliant	
Yes	No
X	

8. The controller shall be housed in an IP65 enclosure. An optional sun shield shall be available

Specification Compliant	
Yes	No
X	

9. The controller shall be mounted horizontally or vertically on surface or pipe. An optional sun shield shall be available.

Specification Compliant	
Yes	No
X	

10. The AC power supply shall be housed in the interface unit and automatically accept input in the range of 100 to 230 Vac, 50/60 Hz. A 24 Vdc probe module shall be available as an option.

Specification Compliant	
Yes	No
X	

11. All system components shall be certified as follows: North American Certifications; cTUVus to UL 61010A-1 and CSA C22.2 No. 1010.1; FCC ID QIPMC56 / IC IC 267W-MC56.

Specification Compliant	
Yes	No
x	

12. The controller shall be warranted for 12 months against defects in material and workmanship.

Specification Compliant	
Yes	No
x	

13. The controller shall be **HACH® Company Model sc1000 Multiparameter Universal Controller** or Owner approved equal.

Specification Compliant	
Yes	No
x	

GENERAL REQUIREMENTS:

Installation, Startup, and Training

1. Installation:

a. Installation of specified equipment will be performed by West Hickman Creek WWTP staff in strict accordance with the manufacturer's instructions and recommendations.

Specification Compliant	
Yes	No
x	

2. Startup and Training:

a. Manufacturer's representative shall include a ½ day of startup service(s) by a factory trained technician to perform startup on instrument and include basic operational training and certification of performance of the instrument.

Specification Compliant	
Yes	No
x	

SUBMITTALS

- 1. Copy of the manufacturer's equipment warranty detailing the duration of the warranty and all limitations of the warranty.

Specification Compliant	
Yes	No
X	

- 2. A copy of this specification with each paragraph check marked to show specification compliance or marked to show deviations. All exceptions must be clearly noted and detailed. The LFUCG reserves the right to disallow any bid due to exception

Specification Compliant	
Yes	No
X	

- 3. All equipment and materials shall be new and shall be specially designed or selected for the function and service specified.

Specification Compliant	
Yes	No
X	

- 4. Operation and Maintenance Manuals: Prior to delivery of equipment and up-dated as required during the installation of the equipment, the Manufacturer shall furnish complete and detailed installation, operation, and maintenance manuals, minimum of one (1) hard copy per unit, which shall include the following information as a minimum requirement:

Specification Compliant	
Yes	No
X	

- a. Name, address, and phone number of nearest competent service organization who can supply parts and service. If this is not the Manufacturer's own service department, then furnish the letters confirming that the named organization has been factory authorized to represent the manufacturer of the equipment furnished.
- b. Installation, operation, and maintenance brochures.
- c. All required operating instructions.
- d. All required maintenance instructions including schedules of routine maintenance.

- 5. Submit documentation for optional future preventive maintenance plans

Specification Compliant	
Yes	No
X	

Please write in the unit price per item below.

Compact Phosphate Analyzer	Description	Unit Price
PHOSPHAX™ sc Phosphate Analyzer manufactured by HACH®	<ul style="list-style-type: none"> ▪ Compact Phosphate Analyzer System as specified; including Filterprobe sc, Multi-Parameter Universal Controller, software, data cables, reagents and/or other accessories as required ▪ Minimum one (1) year full coverage warranty as specified 	\$25,499.84
<p style="text-align: center;"><u>Optional</u></p> Preventive Maintenance Plan and/or Extended Warranty Plan	Include plan specific(s) if applicable	Warranty Plus for the Phosphax and sc1000 \$2132.00 Standard 1 year Extended Warranty for Phosphax and sc1000 \$2155.00
<p style="text-align: center;"><u>Optional</u></p> Rail and Stand Mounting Optional Equipment	Rail Mount kit for Phosphax with sc1000 Controller Rail Mount kit for Phosphax only Stand Mount kit for Phosphax with sc1000 Controller Stand Mount kit for Phosphax only Rim Mounting Kit for Filterprobe Rail Mounting kit for Filterprobe	\$727.21 \$695.32 \$760.09 \$695.32 \$476.25 \$723.90

***Please reference attached Hach quotation # 100005830 for further information.**

SPECIAL INSTRUCTIONS TO BIDDER:

- For bidding questions contact Betty Landrum, Division of Central Purchasing, @ 859.258.3329.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
03/14/2014

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER MARSH USA INC. SUITE 400 1255 23RD STREET, N.W. WASHINGTON, DC 20037 Attn: Danaher.certrequest@marsh.com Fax (212) 948-0503 040108-ALL-7/1-13-14 HACH NO	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS: INSURER(S) AFFORDING COVERAGE NAIC # INSURER A : ACE American Insurance Company 22667 INSURER B : Indemnity Ins Co Of North America 43575 INSURER C : INSURER D : INSURER E : INSURER F :
---	--

COVERAGES CERTIFICATE NUMBER: CLE-004057183-01 REVISION NUMBER: 5

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR	WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liability <input checked="" type="checkbox"/> Broad Form PD GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC			HDOG27021062	07/01/2013	07/01/2014	EACH OCCURRENCE \$ 2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 2,000,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 2,000,000 GENERAL AGGREGATE \$ 5,000,000 PRODUCTS - COMP/OP AGG \$ 5,000,000
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			ISAH08720162	07/01/2013	07/01/2014	COMBINED SINGLE LIMIT (Ea accident) \$ 3,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$
B A A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	WLRC47320173 (AOS) WLRC47320197 (AZ, CA, MA) SCFC47320185 (WI)	07/01/2013 07/01/2013 07/01/2013	07/01/2014 07/01/2014 07/01/2014	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 2,000,000 E.L. DISEASE - EA EMPLOYEE \$ 2,000,000 E.L. DISEASE - POLICY LIMIT \$ 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)
 LEXINGTON FAYETTE URBAN COUNTY GOVERNMENT, COMMISSIONERS, OFFICERS, AGENTS AND EMPLOYEES ARE ADDITIONAL INSURED (EXCEPT FOR WORKERS COMPENSATION) ONLY AS REQUIRED BY WRITTEN CONTRACT WITH RESPECT TO THE OPERATIONS OF THE NAMED INSURED. GENERAL LIABILITY COVERAGE EVIDENCED HEREIN IS CONSIDERED PRIMARY AND NON-CONTRIBUTORY WHERE REQUIRED BY WRITTEN CONTRACT.

CERTIFICATE HOLDER LEXINGTON FAYETTE URBAN COUNTY GOVERNMENT ATTN: CENTRAL PURCHASING 200 EAST MAIN STREET LEXINGTON, KY 40507	CANCELLATION SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE of Marsh USA Inc. Manashi Mukherjee
---	---

© 1988-2010 ACORD CORPORATION. All rights reserved.



Bid

Hach Company
 PO Box 608
 Loveland, CO 80539-0608
 Phone: (800) 227-4224
 Email: quotes@hach.com
 Website: www.hach.com

Quote Date: 04-Feb-2014

Quote Expiration: 05-Apr-2014

Quote Number: 100005830v1
 Use quote number at time of order to ensure that you receive prices quoted

Lexington Fayette

Name: Betty Landrum
 Phone: 8592583329
 Fax: 8592583329

Customer Quote Reference: Bid # 53-2014

Sales Contact: Ted Simmons Email: tsimmons@hach.com Phone: 800-227-4224

PRICING QUOTATION

Line	Part Number	Description	Qty	Net Unit Price	Extended Price
PHOSPHAXsc PHOSPHATE ANALYZER					
1	6159100	KTO:PHOSPHAX sc ANZR 115V .05-15MG/L0.05-15MG/L PO4-P, INCLUDES FILTERPROBE sc WITH 10M HEATED HOSE CE/cTUVus and TUV-GS APPROVED	1	18,509.93	18,509.93
2	LXV402.99.10002	db aa sc1000 DISPLAY MODULE, TCP, NO GSM	1	3,333.75	3,333.75
3	LXV400.99.1R572	db PROBE MODULE, SC1000	1	2,016.44	2,016.44
4	5448800	KIT, POWER CORD W/STRAIN RELIEF	1	38.72	38.72
5	27	Simplified freight charge	1	479.00	479.00
6	57P	** Field Svc HALF DAY StartUp-PROCESS (P)	1	935.00	935.00
7	STARTUP TRAVEL	** Field Svc HACH START UP TRAVEL CHG	1	187.00	187.00
				Subtotal	\$ 25,499.84
PREVENTATIVE MAINTENANCE WARRANTY PLUS					
8	WRTUPGPHOSPHAXSC	Comprehensive warranty upgrade includes: Instrument start-up, all parts, labor, and travel for on-site repairs, 2 on-site calibrations per year, factory recommended maintenance (including required parts), unlimited technical support calls, and free firmware updates. On-site response for "down" instrument repairs is typically 3 business days. Standard business hours are 8am-5pm M-F local time, excluding holidays. Please see service terms and conditions for additional details on our service plans, and to ensure you have an opportunity to review our environmental and safety requirements.	1	1,907.00	1,907.00
9	WRTUPGSC1000	Comprehensive warranty upgrade includes: Instrument start-up, all parts, labor, and travel for on-site repairs, 1 on-site factory recommended maintenance (including required parts), unlimited technical support calls, and free firmware updates. On-site response for "down" instrument repairs is typically 3 business days. Standard business hours are 8am-5pm M-F local time, excluding holidays. Please see service terms and conditions for additional details on our service plans, and to ensure you have an opportunity to review our environmental and safety requirements.	1	225.00	225.00
				Subtotal	\$ 2,132.00
STANDARD EXTENDED WARRANTY					
10	3464	STANDARD EXTENDED WARRANTY 1 YEAR PHOSPHAX	1	1,943.30	1,943.30

Line	Part Number	Description	Qty	Net/Unit Price	Extended Price
11	3464	STANDARD EXTENDED WARRANTY 1 YEAR SC1000	1	211.70	211.70
				Subtotal	\$ 2,155.00
RAIL AND STAND MOUNTING OPTIONS					
12	LZY285	KIT, MTG HRDWARE,RAIL MT,PHOSPAX sc W/FOR PHOSPAX sc ANALYZER WITH sc1000 CONTROLLER	1	727.71	727.71
13	LZY316	KIT, MTG HRDWARE,RAIL MT,PHOSPAX sc	1	695.32	695.32
14	LZY286	KIT, MTG HRDWARE,STAND MT,PHOSPAX sc FOR PHOSPAX SC WITH sc1000 CONTROLLER	1	760.09	760.09
15	LZY287	KIT, MTG HRDWARE,STAND MT, PHOSPAX sc	1	695.32	695.32
16	LZX414.00.50000	KIT, MTG HRDWARE,RIM MT,FILTERPROBE RIM MOUNT FOR FILTERPROBE sc	1	476.25	476.25
17	LZX414.00.60000	KIT, MTG HRDWARE,RAILMT,FILTERPROBE RAIL MOUNTING KIT FOR FILTERPROBE sc	1	723.90	723.90
				Subtotal	\$ 4,078.59
				Grand Total	\$ 33,865.43

NOTES

Hach is providing a quotation for the instrumentation above.
For further clarification, see attached document clarifications.

TERMS OF SALE

Freight: Ground Prepay and Add

FOB: Origin

All purchases of Hach Company products and/or services are expressly and without limitation subject to Hach Company's Terms & Conditions of Sale ("Hach TCS"), incorporated herein by reference and published on Hach Company's website at www.hach.com/terms. Hach TCS are incorporated by reference into each of Hach's offers or quotations, order acknowledgments, and invoice and shipping documents. The first of the following acts shall constitute an acceptance of Hach's offer and not a counter offer and shall create a contract of sale ("Contract") in accordance with the Hach TCS, subject to Hach's final credit approval: (i) Buyer's issuance of a purchase order document against Hach's offer or quotation; (ii) Hach's acknowledgement of Buyer's order; or (iii) commencement of any performance by Hach in response to Buyer's order. Provisions contained in Buyer's purchase documents that materially alter, add to or subtract from the provisions of these Terms and Conditions of Sale shall be null and void and not considered part of the Contract.

Due to international regulations, a U.S. Department of Commerce Export License may be required. Hach reserves the right to approve specific shipping agents. Wooden boxes suitable for ocean shipment are extra. Specify final destination to ensure proper documentation and packing suitable for international transport. In addition, Hach may require: 1) A statement of intended end-use; 2) Certification that the intended end-use does not relate to proliferation of weapons of mass destruction (prohibited nuclear end use, chemical / biological weapons, missile technology); and 3) Certification that the goods will not be diverted contrary to U.S. law.

ORDER TERMS:

Terms are Subject to Credit Review

Please reference the quotation number on your purchase order.

Sales tax is not included. Applicable sales tax will be added to the invoice based on the U.S. destination, if applicable provide a resale/exemption certificate.

Shipments will be prepaid and added to invoices unless otherwise specified.

Equipment quoted operates with standard U.S. supply voltage.

Hach standard terms and conditions apply to all sales.

Additional terms and conditions apply to orders for service partnerships.

Freight Charge Schedule and Collect Handling Fees attached.

Refrigerated and all weather Samplers do not qualify for simplified freight charges, and are considered heavy freight.

Dissolved Oxygen Sensors can be damaged if exposed to temps below freezing, causing sensor failure. Must be shipped over night or 2nd day air during the cold weather months.

Standard lead time is 30 days

Sales Contact:

Name: Ted Simmons
Title: Regional Sales Manager
Phone: 800-227-4224
Email: tsimmons@hach.com

Prepared By:

Name: Roxanna Nittmann
Title: Project Specialist II
Phone: 800-227-4224
Email: rnittman@hach.com

November 7, 2013

Dear Prospective Customer:

By signature below the following Hach representatives are hereby authorized (during the period of November 7, 2013 through December 31, 2014) to sign all bid documents, representations and certifications, and sales/service contracts submitted by Hach to prospective customers in accordance with Hach's internal contract procedures, and which do not require a Corporate Officer's signature:

Greg DiNoia
Mike Strycker
Lance Reisman
Gary Dreher
Kurt Tyler
Kevin Klau
Shawn Collins
Robbin Crane
Chris Westlake
Mike Rembelski
Lori Pegelow

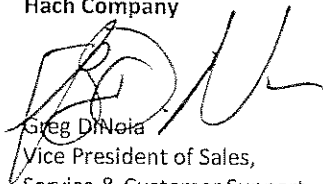
Pam Keller
Adrian Revuelta
Bruce Zimbelman
Marty Jost
Ronald Khoshabeh
Paul Farrell
Brian Staff
Rachel Schneider
Collins King
Brett Hellier
Chris Serafin

Lino Oddi
Robert Bollea
Roxanna Nittmann
Staci Lamfers
Debbie Casale
Heather Looney
Stephanie Smith
Delcie Robeson
Miguel Molina
Heather Johnston

We appreciate the opportunity to do business with your organization.

Sincerely,

Hach Company



Greg DiNoia
Vice President of Sales,
Service & Customer Support
800-227-4224 p
970-669-2932 f
www.hach.com



HACH sc1000 Controller Standard Warranty

Warranty

Hach Company warrants the sc1000 Controller to the original purchaser against any defects that are due to faulty material or workmanship for a period of one year from date of shipment unless otherwise noted in the product manual.

In the event that a defect is discovered during the warranty period, Hach Company agrees that, at its option, it will repair or replace the defective product or refund the purchase price excluding original shipping and handling charges. Any product repaired or replaced under this warranty will be warranted only for the remainder of the original product warranty period.

This warranty does not apply to consumable products such as chemical reagents; or consumable components of a product, such as, but not limited to, lamps and tubing. Contact Hach Company or your distributor to initiate warranty support. Products may not be returned without authorization from Hach Company.

Limitations

This warranty does not cover:

- Damage caused by acts of God, natural disaster, labor unrest, acts of war (declared or undeclared), terrorism, civil strife or acts of any governmental jurisdiction
- Damage caused by misuse, neglect, accident or improper application or installation
- Damage caused by any repair or attempted repair not authorized by Hach Company
- Any product not used in accordance with the instructions furnished by Hach Company
- Freight charges to return merchandise to Hach Company
- Freight charges on expedited or express shipment of warranted parts or product
- Travel fees associated with on-site warranty repair

This warranty contains the sole express warranty made by Hach Company in connection with its products. All implied warranties, including without limitation, the warranties of merchantability and fitness for a particular purpose, are expressly disclaimed.

Some states within the United States do not allow the disclaimer of implied warranties and if this is true in your state the above limitation may not apply to you. This warranty gives you specific rights, and you may also have other rights that vary from state to state.

This warranty constitutes the final, complete, and exclusive statement of warranty terms and no person is authorized to make any other warranties or representations on behalf of Hach Company.

Limitation of Remedies

The remedies of repair, replacement or refund of purchase price as stated above are the exclusive remedies for the breach of this warranty. On the basis of strict liability or under any other legal theory, in no event shall Hach Company be liable for any incidental or consequential damages of any kind for breach of warranty or negligence.

HACH Phosphax with Filter Probe Standard Warranty

Warranty

Hach Company warrants the Phosphax with Filterprobe to the original purchaser against any defects that are due to faulty material or workmanship for a period of one year from date of shipment unless otherwise noted in the product manual.

In the event that a defect is discovered during the warranty period, Hach Company agrees that, at its option, it will repair or replace the defective product or refund the purchase price excluding original shipping and handling charges. Any product repaired or replaced under this warranty will be warranted only for the remainder of the original product warranty period.

This warranty does not apply to consumable products such as chemical reagents; or consumable components of a product, such as, but not limited to, lamps and tubing. Contact Hach Company or your distributor to initiate warranty support. Products may not be returned without authorization from Hach Company.

Limitations

This warranty does not cover:

- Damage caused by acts of God, natural disaster, labor unrest, acts of war (declared or undeclared), terrorism, civil strife or acts of any governmental jurisdiction
- Damage caused by misuse, neglect, accident or improper application or installation
- Damage caused by any repair or attempted repair not authorized by Hach Company
- Any product not used in accordance with the instructions furnished by Hach Company
- Freight charges to return merchandise to Hach Company
- Freight charges on expedited or express shipment of warranted parts or product
- Travel fees associated with on-site warranty repair

This warranty contains the sole express warranty made by Hach Company in connection with its products. All implied warranties, including without limitation, the warranties of merchantability and fitness for a particular purpose, are expressly disclaimed.

Some states within the United States do not allow the disclaimer of implied warranties and if this is true in your state the above limitation may not apply to you. This warranty gives you specific rights, and you may also have other rights that vary from state to state.

This warranty constitutes the final, complete, and exclusive statement of warranty terms and no person is authorized to make any other warranties or representations on behalf of Hach Company.

Limitation of Remedies

The remedies of repair, replacement or refund of purchase price as stated above are the exclusive remedies for the breach of this warranty. On the basis of strict liability or under any other legal theory, in no event shall Hach Company be liable for any incidental or consequential damages of any kind for breach of warranty or negligence.



Rail Mounting

Introduction

These instructions describe the installation of the rail mounting LZY316 or LZY285.

One analyzer can be mounted to the short version (LZY316), one analyzer and one sc1000 controller with sun shield can be mounted to the long version (LZY285).

Note: For sizes and dimensions, see Figure 2 on page 3 and Figure 3 on page 4.

Items supplied with LZY316 and LZY285

Items supplied with rail mounting LZY316 (see Figure 1 on page 2):

- 1 short mounting rail
- 5 U profiles (LZY3565)
- 1 angle bracket (LZY357)
- 1 angle plate (LZY358)
- 1 set of screws (LZY220)

Items supplied with rail mounting LZY285 (see Figure 1 on page 2):

- 1 long mounting rail
- 5 U profiles (LZY3565)
- 1 angle bracket (LZY357)
- 1 angle plate (LZY358)
- 1 set of screws (LZY220)

Items supplied with LZY220 (see Figure 1 on page 2):

- 6 screws M8 x 120
- 3 screws M8 x 12
- 7 nuts M8
- 11 spring washers for M8
- 18 hex socket head screws M5 x 8
- 18 spring washers for M5

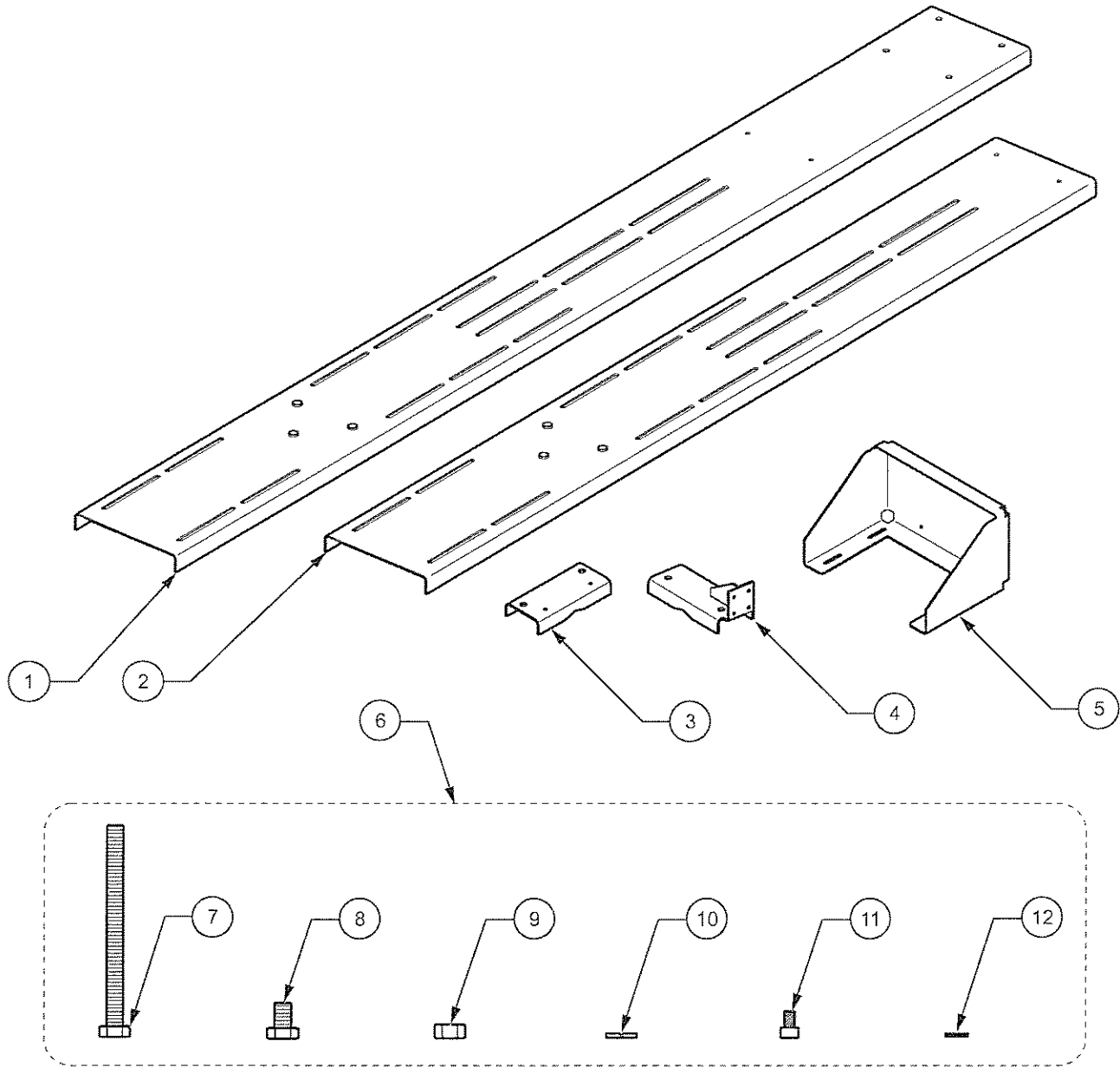


Figure 1 Items supplied with the rail mounting¹

1	Mounting rail for LZY285 (1x) (for mounting one analyzer and one sc1000)	7	Screw M8 x 120 (6x), from LZY220 M8 X 120
2	Mounting rail for LZY316 (1x) (for mounting one analyzer)	8	Screw M8 x 12 (3x), from LZY220
3	U profile LZY356 (5x)	9	Nuts M8 (7x), from LZY220
4	Angle bracket LZY357 (1x)	10	Spring washer for M8 (11x), from LZY220
5	Angle plate LZY358 (1x)	11	Hex socket head screw M5 x 8 (18x), from LZY220
6	Set of screws for rail mounting LZY220 (1x)	12	Spring washer for M5 (18x), from LZY220

¹ We reserve the right to make changes without notice

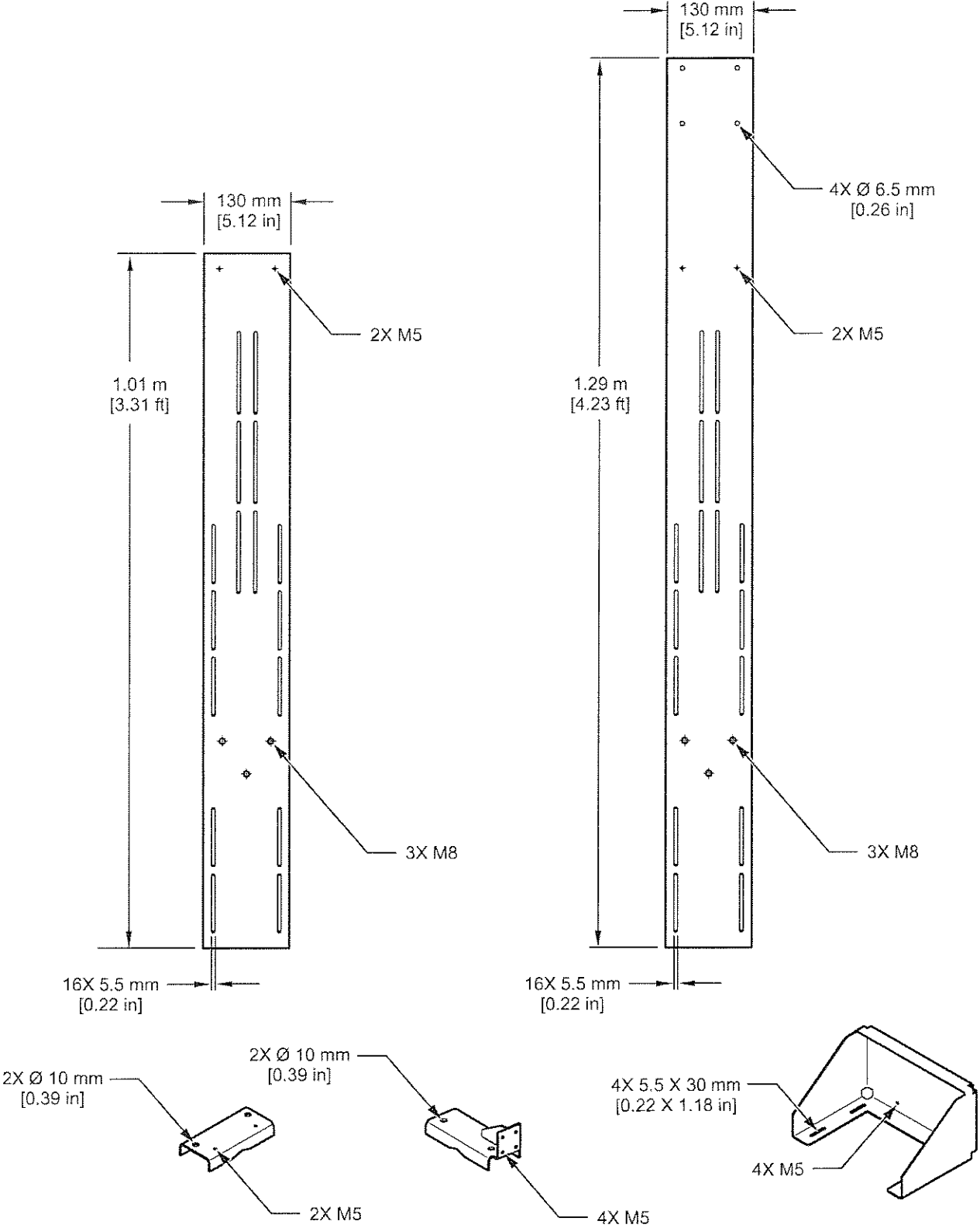


Figure 2 LZY316 and LZY285 Sizes and Dimensions

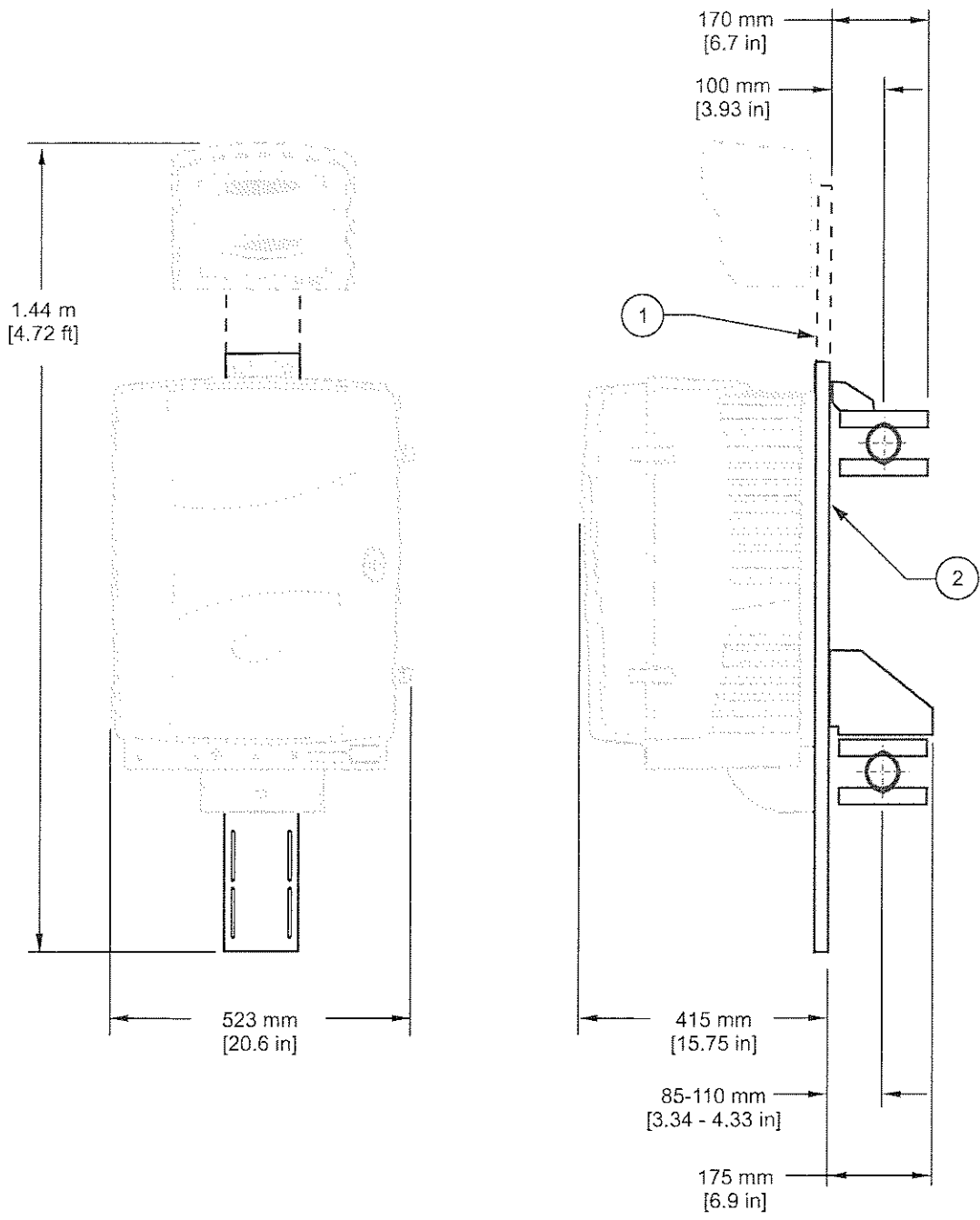


Figure 3 LZY285 and LZY316 Mounting dimensions

<p>1 Mounting rail for LZY285 (1x) (for mounting one analyzer and one sc1000)</p>	<p>2 Mounting rail for LZY316 (1x) (for mounting one analyzer)</p>
--	---

Selecting the installation location

Important Note: When installing the analyzer, pay attention to all safety instructions in the analyzer User Manual.

Note: During site selection, make sure the analyzer is mounted vertically.

When selecting an installation location, pay attention to:

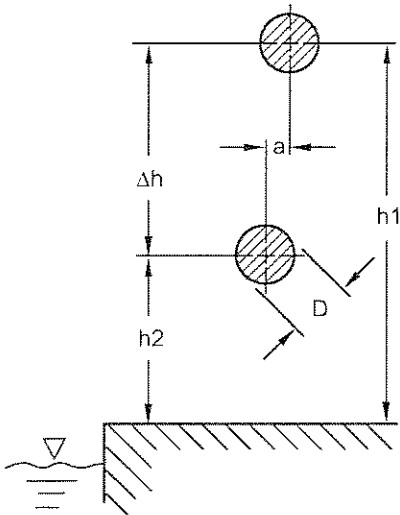
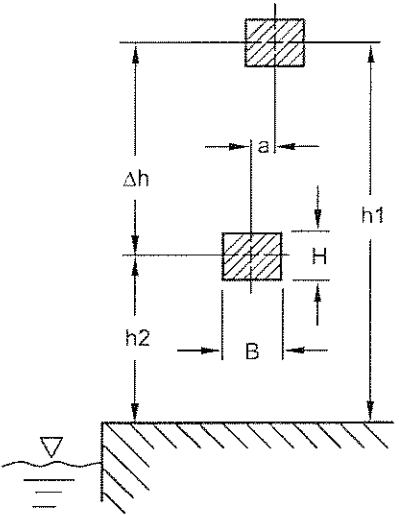
- The weight of the analyzer (approximately 40 kg)
- The accessibility of the enclosure door and ease of access for loading the analyzer with chemicals
- The maximum cable and tubing lengths
- The wind forces that may cause damage (wind load and vibration)
- The display module, make sure there is a clear view (when mounting the sc1000 to the long rail mounting (LZY285)).

Checking the railing specifications

The rail mounting is designed for installation on round (Figure 4) or rectangular (Figure 5) railings. See Table 1 for specifications that must be met in order to rail mount the analyzer.

Note: Check other railing profiles for suitability to ensure adequate load bearing capacity.

Table 1 Railing characteristics

Round railing profiles	Rectangular railing profiles
 <p>Figure 4 Section drawing of round railing profile</p>	 <p>Figure 5 Section drawing of rectangular railing profile</p>
<p>D: 25–75 mm [1.00–2.95 in.]</p>	<p>B: 40–90 mm [1.57–3.54 in.]; H: 5–68 mm [0.20–2.67 in.]</p>
<p>a: ≤ 25 mm [1.00 in.]</p>	
<p>h1: 850–1200 mm [33.50–47.25 in.]</p>	
<p>h2: 580–800 mm [22.80–31.50 in.]</p>	
<p>Δh: 300–620 mm [11.80–24.40 in.]</p>	

Installing the rail mounting (LZY316 and LZY285)

1. Loosely mount two U profiles to the angle plate with two M5 hex socket head screws and spring washers (see Figure 6 on page 7).

Note: Only tighten the screws when the entire rail mounting is aligned and adjusted for height.

2. Loosely mount the angle bracket to the mounting rail with four M5 hex socket head screws and spring washers (see Figure 7 on page 7).

Note: Change the installation height by sliding the angle bracket along the slots.

3. Find a suitable installation location and place the angle bracket on the top rail.

4. Loosely screw a U profile to the angle bracket with the M8 x 120 screws, spring washers and M8 nuts (see Figure 8 on page 8).

5. Loosely mount the angle plate to the mounting rail with the M5 hex socket head screws. Loosely screw the angle plate to the bottom rail with two U profiles (see Figure 9 on page 9).

Note: Adjust the installation height by sliding the angle plate in the slots or by rotating the angle plate by 180° (see Figure 10 on page 10)

Note: To fit the angle plate to a vertical rail, rotate the angle plate 90° on the mounting rail.

Note: To vertically align the mounting rail, slide the M5 hex socket head screws in the slots on the angle plate.

6. Screw the top angle bracket (supplied with the analyzer) to the analyzer (see Figure 11 on page 11 and the Installation section of the analyzer manual).
7. Attach the fastening bracket (supplied with the analyzer) to the mounting rail using the three M8 x 12 screws and spring washers (see Figure 11 on page 11 and the Installation section of the analyzer manual).
8. Align all parts until the mounting rail is vertical and then tighten all screws.
9. Slide the analyzer to the fastening bracket and screw the enclosure to the fastening bracket (refer to the Installation section of the analyzer manual).
10. Screw the top angle bracket (supplied with the analyzer) on the analyzer to the mounting rail (see Figure 11 on page 11).
11. Feed the cables and tubing through the mounting rail.
12. Continue as described in the analyzer manual.

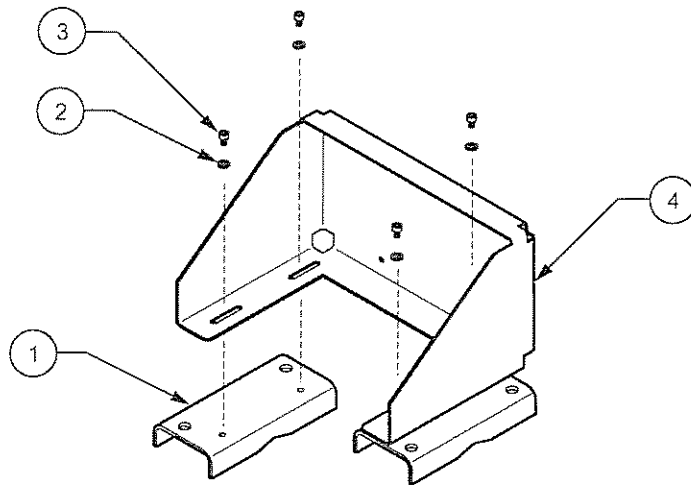


Figure 6 Installing the U profile on the angle plate

1	U profile LZY356 (2x)	3	Hex socket head screw M5 x 8 (4x), from LZY220
2	Spring washer for M5 (4x), from LZY220	4	Angle plate LZY358 (1x)

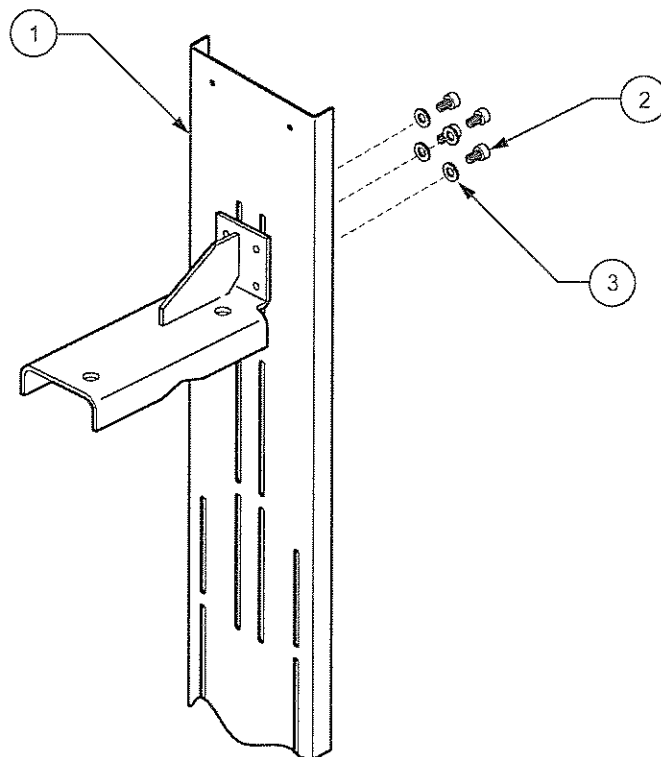


Figure 7 Installing the angle bracket on the mounting rail

1	Mounting rail for LZY285 or LZY316 (LZY316 shown)	3	Spring washer for M5 (4x), from LZY220
2	Hex socket head screw M5 x 8 (4x), from LZY220		

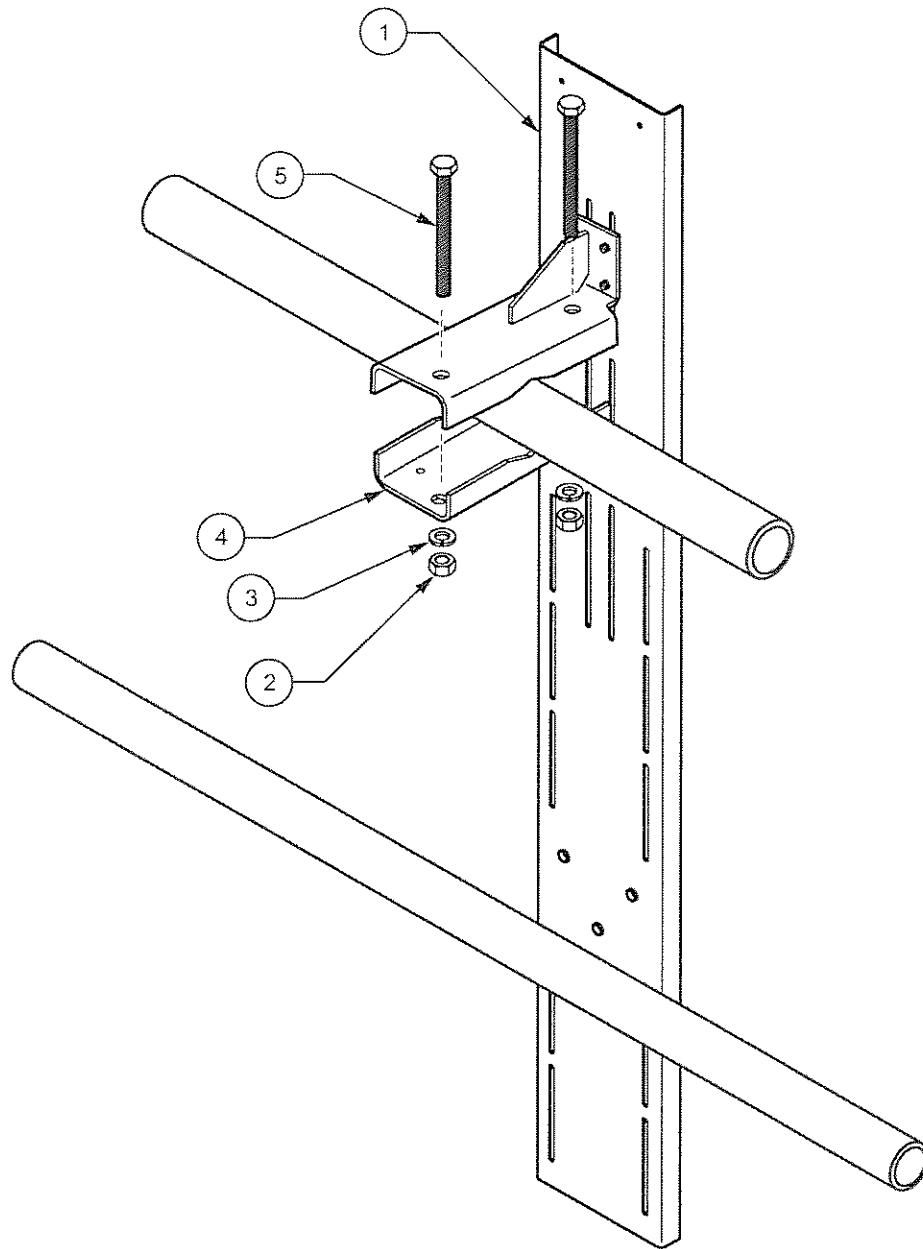


Figure 8 Installing the angle bracket on the top rail

1	Mounting rail for LZY285 or LZY316 (LZY316 shown)	4	U profile LZY356
2	Nuts M8 (2x), from LZY220	5	Screw M8 x 120 (2x), from LZY220
3	Spring washer for M8 (2x), from LZY220		

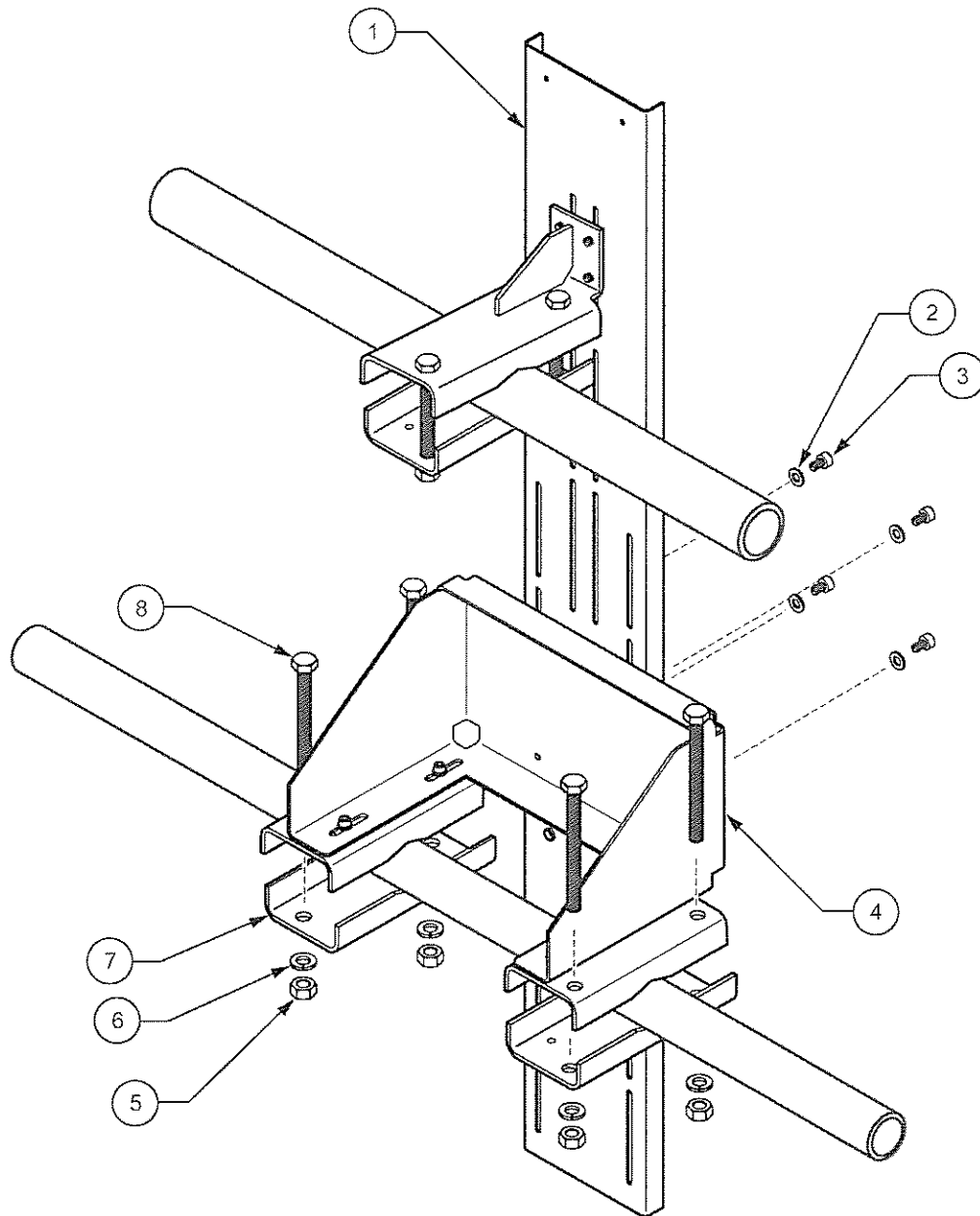


Figure 9 Installing the angle bracket on the mounting rail

1	Mounting rail for LZY285 or LZY316 (LZY316 shown)	5	Nuts M8 (4x), from LZY220
2	Spring washer for M5 (4x), from LZY220	6	Spring washer for M8 (4x), from LZY220
3	Hex socket head screw M5 x 8 (4x), from LZY220	7	U profile LZY356 (2x)
4	Angle plate LZY358, pre-installed	8	Screw M8 x 120 (4x), from LZY220

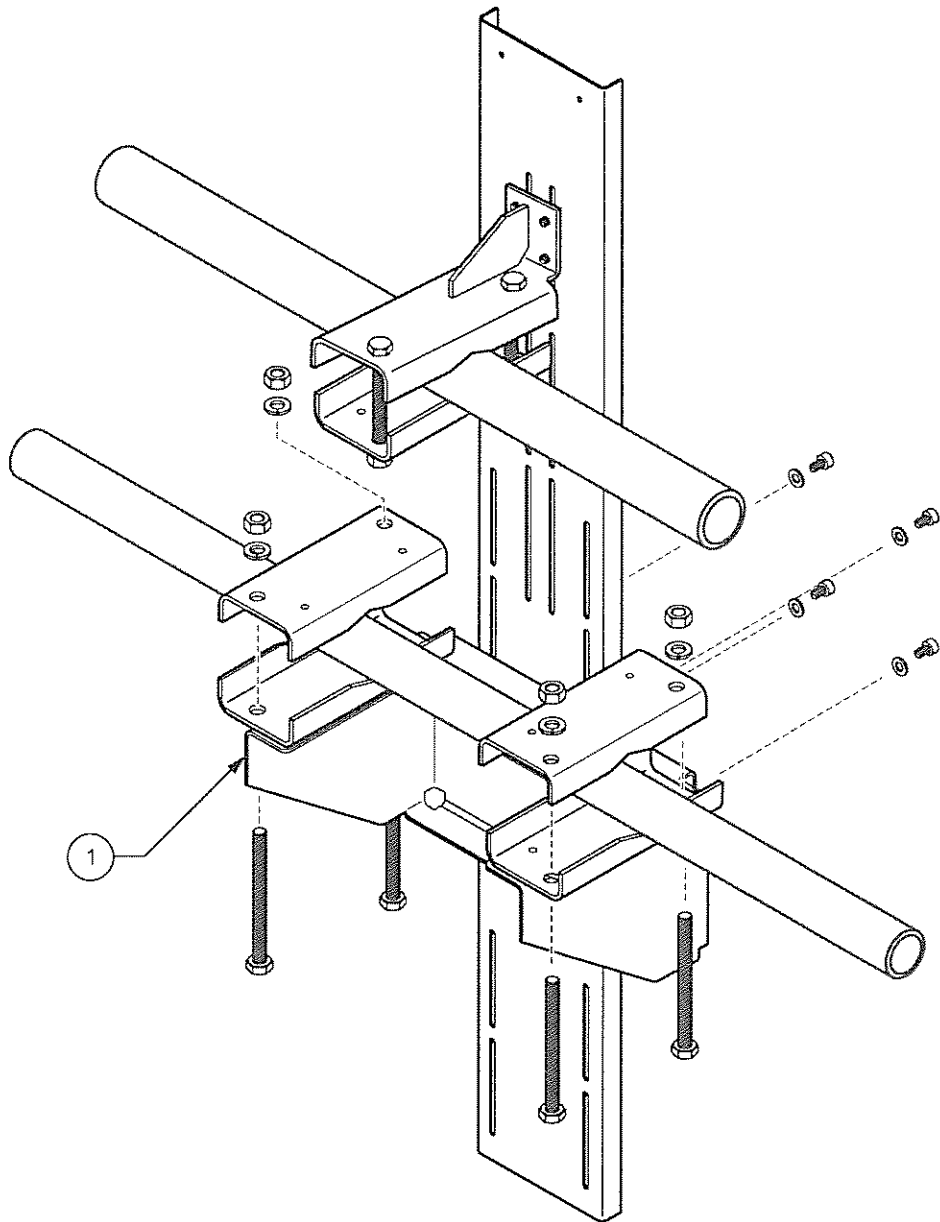


Figure 10 Installing the mounting rail rotated by 180°

1 Angle plate LZY358, pre-installed

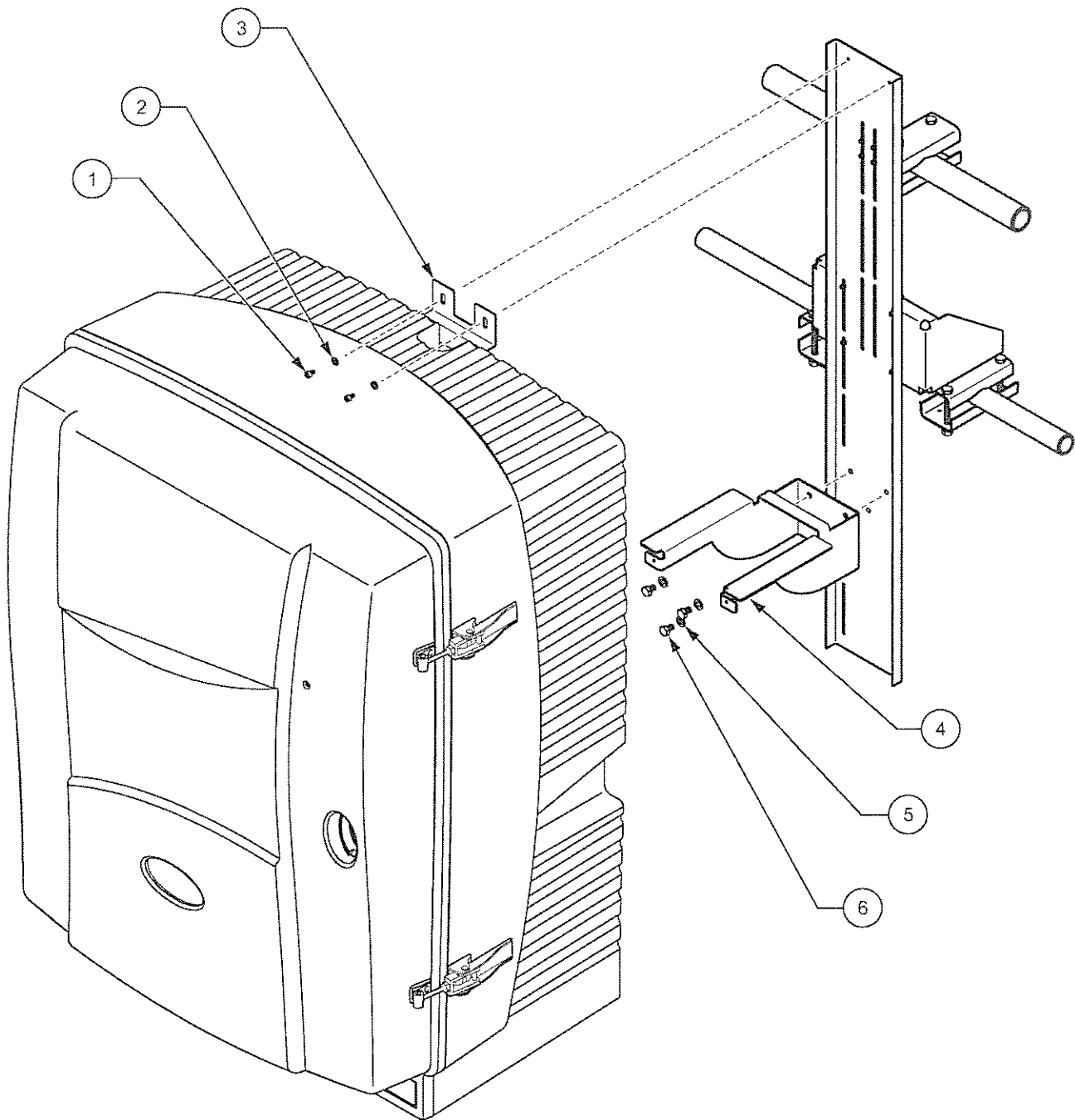


Figure 11 Installing the analyzer on the mounting rail

1	Hex socket head screw M5 x 8 (2x), from LZY220	4	Fastening bracket (supplied with the analyzer)
2	Spring washer for M5 (2x), from LZY220	5	Spring washer for M8 (3x), from LZY220
3	Angle bracket (supplied with the analyzer)	6	Screw M8 x 12 (3x), from LZY220

Installing the sc1000 (LZY285 only)

The sun shield must be used with the controller in order to install a sc1000 on the long mounting rail (LZY285). Refer to the instructions supplied with the sun shield for more information.

1. Insert the M6 x 110 screws (supplied with the sun shield) through the sun shield and the mounting rail.
2. Tighten the nuts supplied with the sun shield with the washers.
3. Install the sc1000 into the sun shield.

Replacement parts and accessories

Description	Quantity	Catalog Number
Angle bracket	1	LZY357
Angle plate	1	LZY358
U profile	1	LZY356
Set of screws rail mounting	1	LZY220



FOR TECHNICAL ASSISTANCE, PRICE INFORMATION AND ORDERING:
In the U.S.A. – Call toll-free 800-227-4224
Outside the U.S.A. – Contact the HACH office or distributor serving you.
On the Worldwide Web – www.hach.com; E-mail – techhelp@hach.com

HACH COMPANY
WORLD HEADQUARTERS
Telephone: (970) 669-3050
FAX: (970) 669-2932



Stand mounting

Introduction

These instructions describe the installation of the stand mounting LZY286 or LZY287.

One analyzer can be mounted to the short version (LZY287), one analyzer and one sc1000 controller with sun shield can be fitted to the long version (LZY286).

Note: For sizes and dimensions, see Figure 2 on page 3 to Figure 5 on page 6.

Items supplied LZY286 and LZY287

Items supplied with stand mounting LZY286 (see Figure 1 on page 2):

- 1 long stand mounting
- 1 set of screws (LZY360)

Items supplied with stand mounting LZY287 (see Figure 1 on page 2):

- 1 short stand mounting
- 1 set of screws (LZY360)

Items supplied with LZY360 (see Figure 1 on page 2):

- 3 screws M8 x 12
- 3 spring washers for M8
- 2 hex socket head screws M5 x 8
- 2 spring washers for M5
- 4 quick-fit anchors with washers and nuts

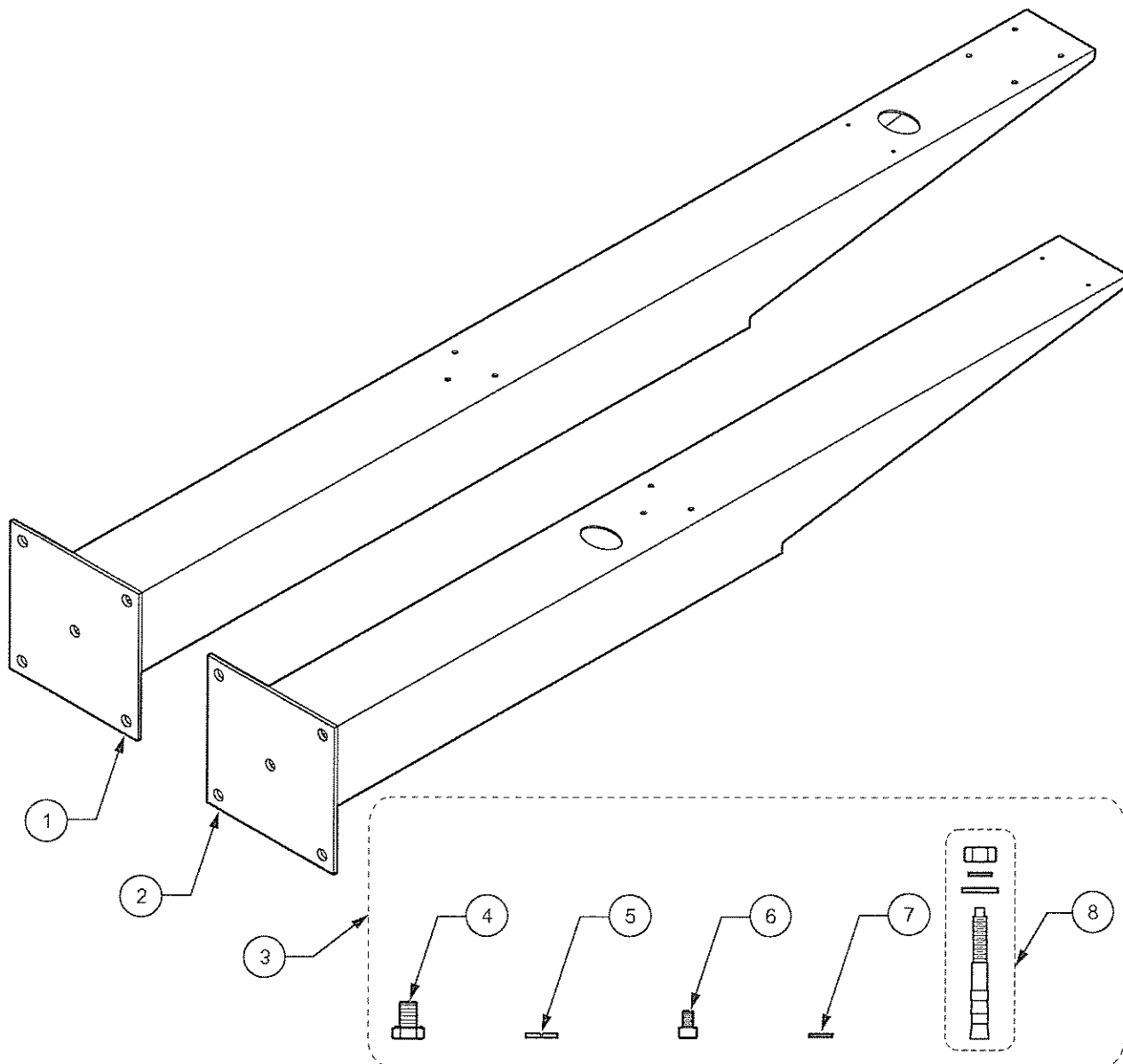


Figure 1 Items supplied with the stand mountings¹

1	Stand mounting LZY286 (1x) (for mounting one analyzer and one sc1000)	5	Spring washer for M8 (3x), from LZY360
2	Stand mounting LZY287 (1x) (for mounting one analyzer)	6	Hex socket head screw M5 x 8 (2x), from LZY360
3	Set of screws for ground mounting LZY360 (1x)	7	Spring washer for M5 (2x), from LZY360
4	Screw M8 x 12 (3x), from LZY360	8	Quick-fit anchors with washers and nuts (4x), from LZY360

¹ We reserve the right to make changes without notice

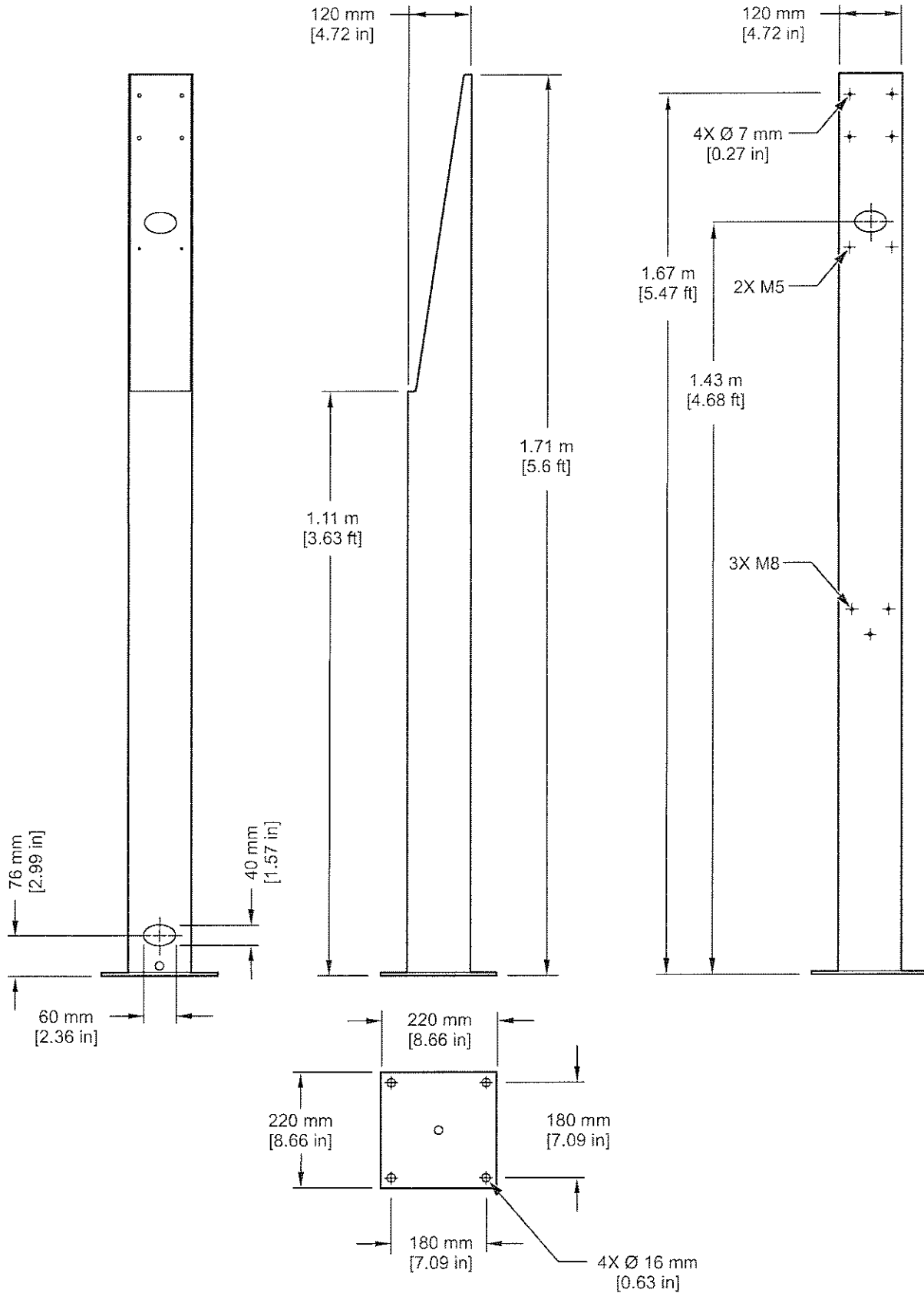


Figure 2 Sizes and dimensions for LZY286

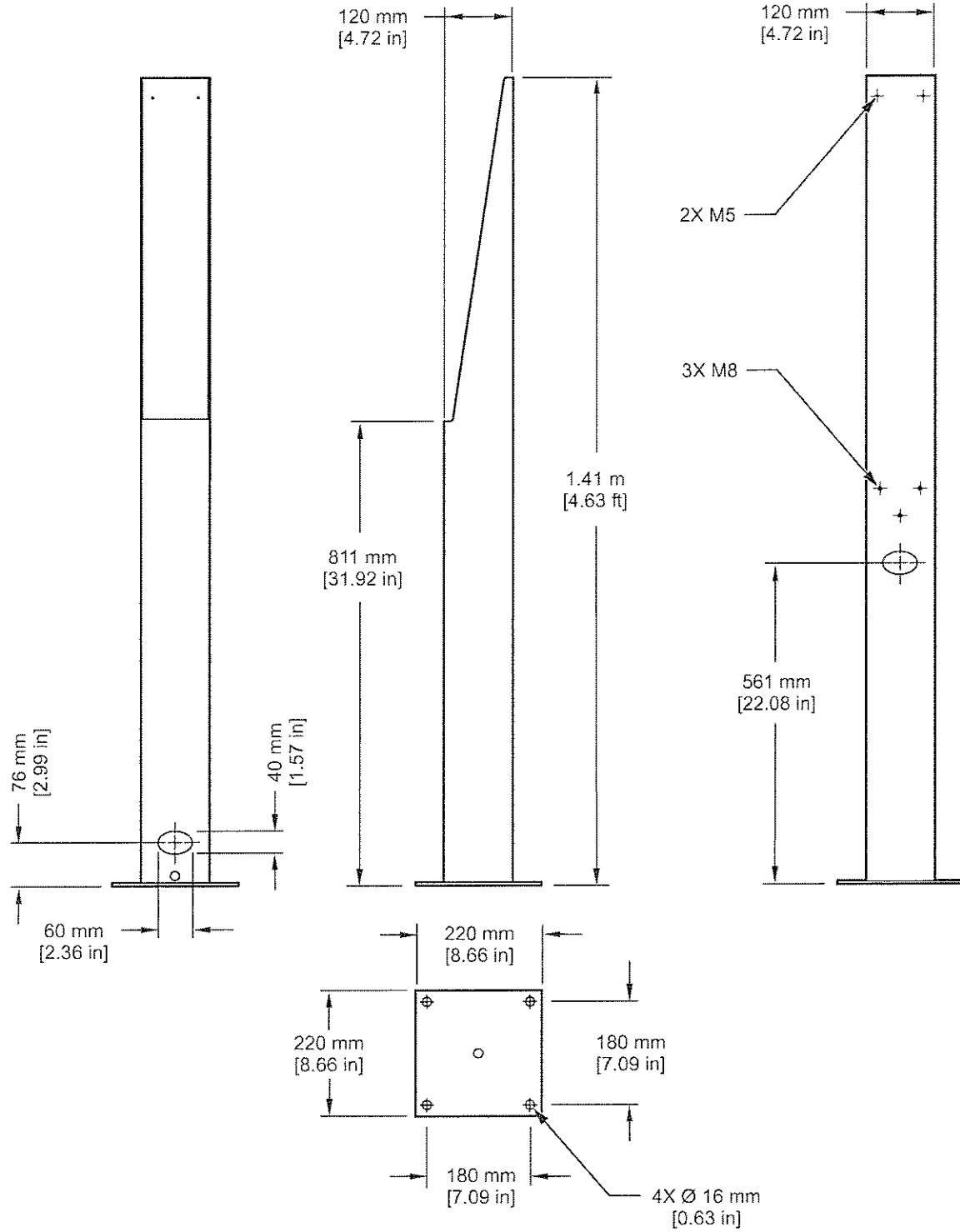


Figure 3 Sizes and dimensions for LZY287

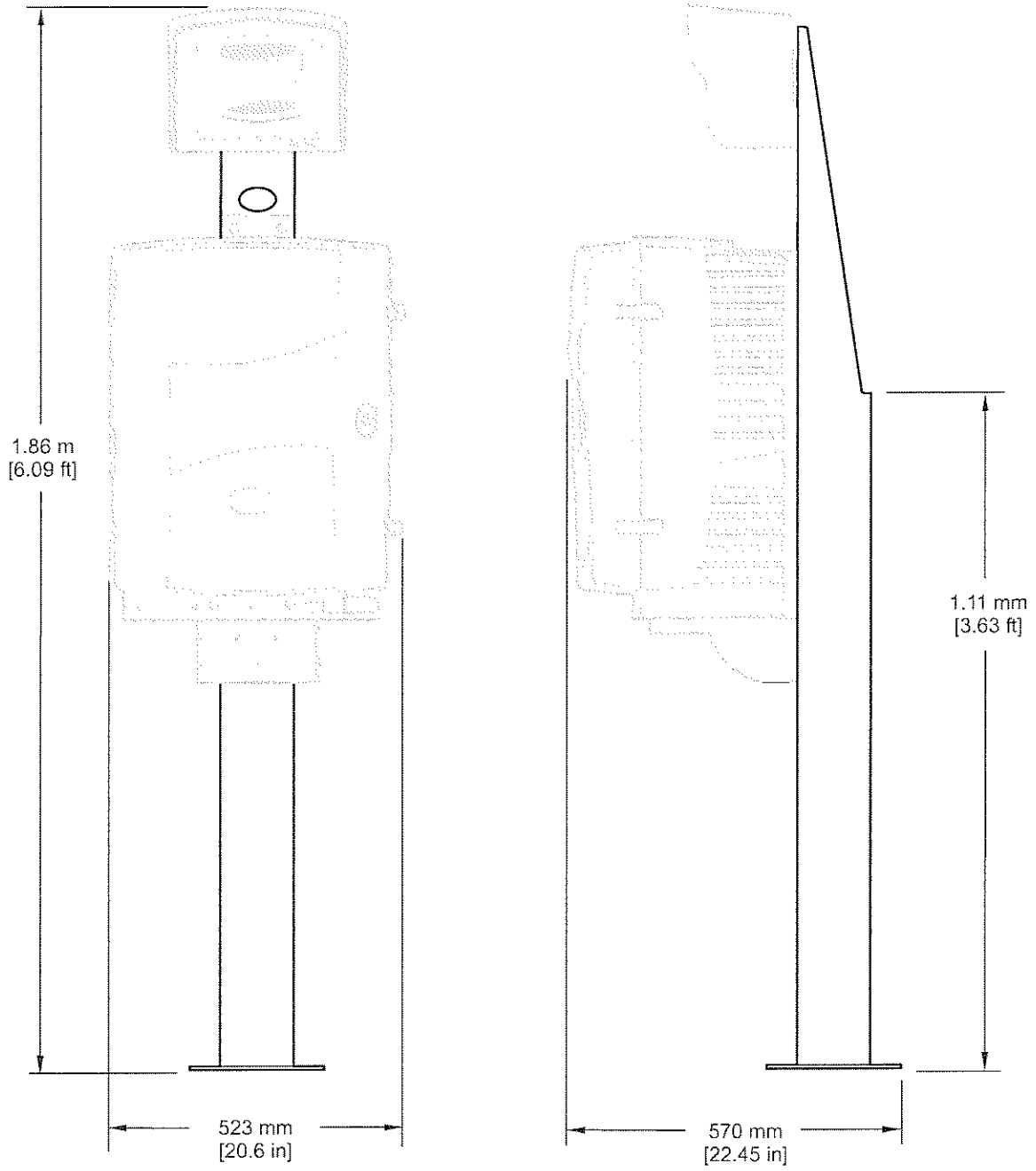


Figure 4 Mounting dimensions for LZY286

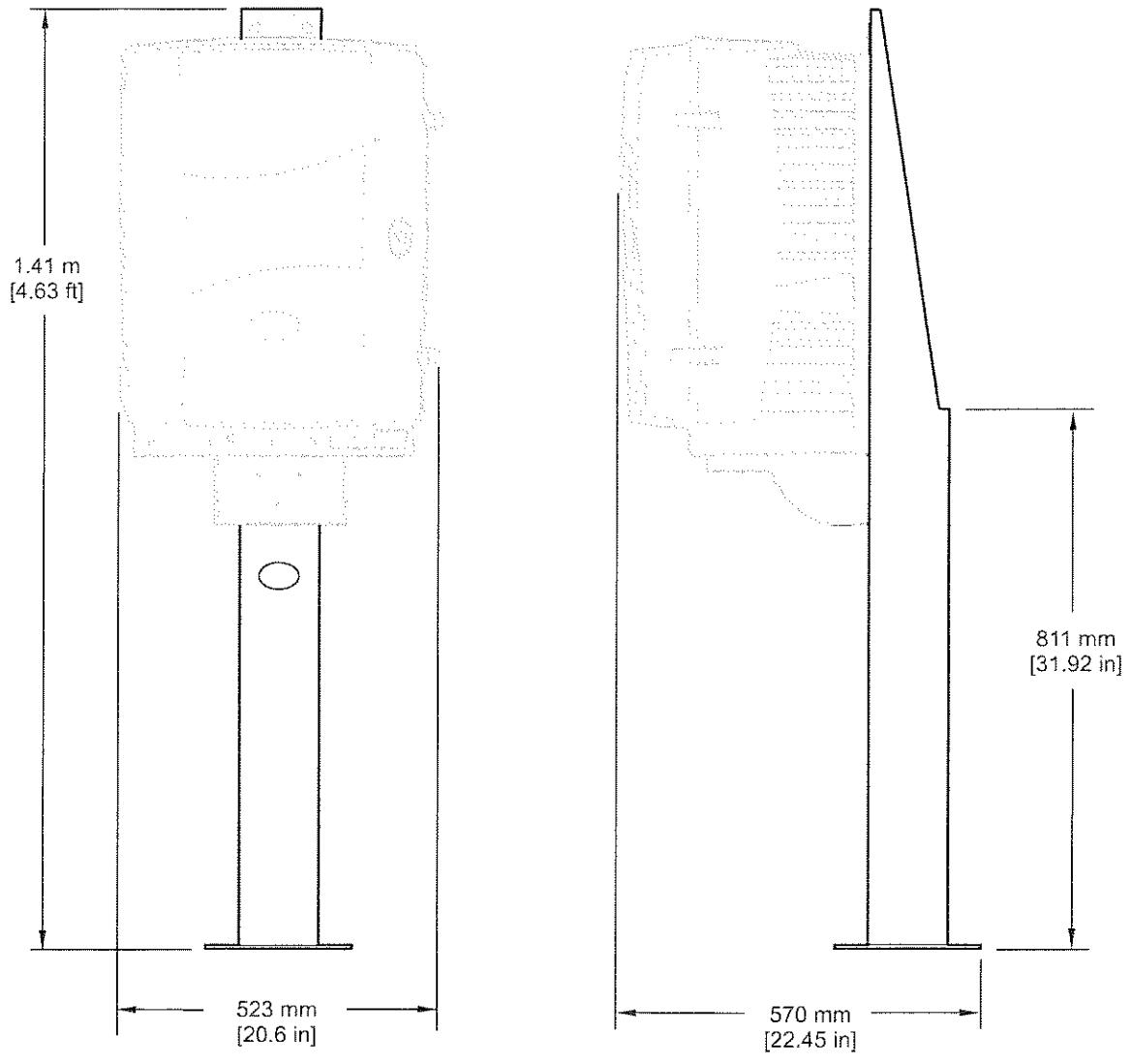


Figure 5 Mounting dimensions for LZY287

Selecting the installation location

Important note: When installing the analyzer, pay attention to all safety instructions in the analyzer manual.

Note: During site selection, make sure the analyzer is mounted vertically.

During site selection, pay attention to

- The weight of the analyzer (approximately 40 kg),
- The accessibility of the enclosure door and ease of access for loading the analyzer with chemicals,
- The maximum cable and tubing lengths,
- The wind forces that may cause damage (wind load and vibration) and
- The display module, make sure there is a clear view of the display module (when mounting the sc1000 to the long stand mounting (LZY286)).

Note: Refer to the analyzer manual for more information.

Installing the stand mounting (LZY286 and LZY287)

1. Find a suitable installation location and install the quick-fit anchors.
 - a. Drill the holes (see Figure 6 on page 8) and insert the quick-fit anchors.
 - b. Hit the head of the quick-fit anchor with a hammer to spread the quick-fit anchor in the hole.
2. Place the mounting on the quick-fit anchors. Install the large and small washers and tighten the nuts (see Figure 7 on page 8).
3. Screw the top angle bracket (supplied with the analyzer) to the analyzer (refer to the installation section in the analyzer manual).
4. Attach the fastening bracket (supplied with the analyzer) to the stand mounting using the three M8 x 12 screws and spring washers (see Figure 8 on page 9 and the installation section in the analyzer manual).
5. Slide the analyzer to the fastening bracket and screw the enclosure to the fastening bracket (refer to the installation section in the analyzer manual).
6. Screw the top angle bracket on the analyzer to the stand mounting (see Figure 8 on page 9 and the installation section of the analyzer manual).
7. Feed the cables and tubing through the stand mounting.
8. Continue as described in the analyzer manual.

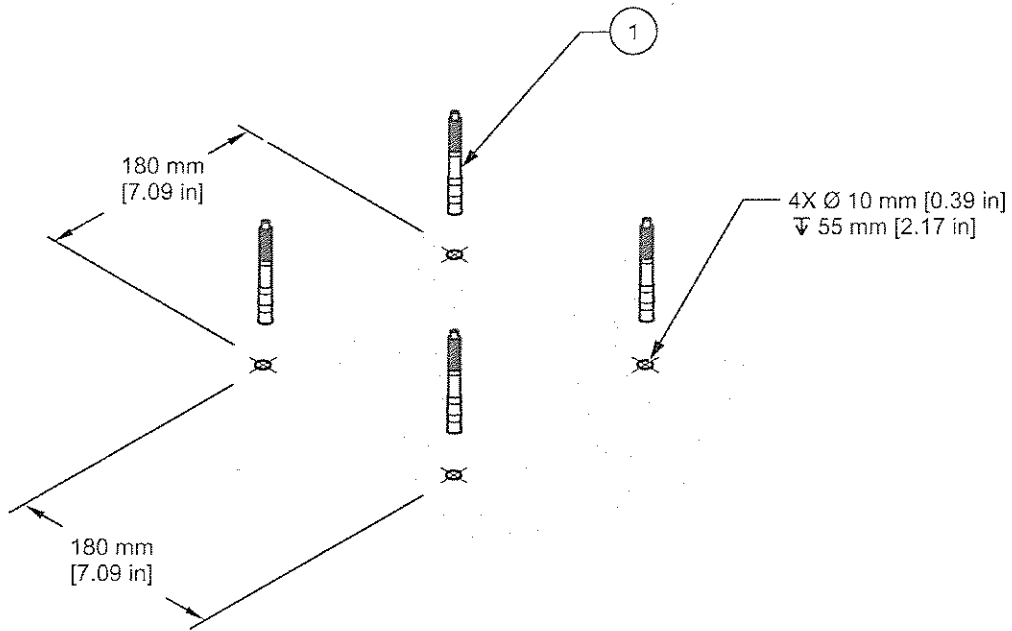


Figure 6 Installing the quick-fit anchors

1	Quick-fit anchors (4x), from LZY360
---	-------------------------------------

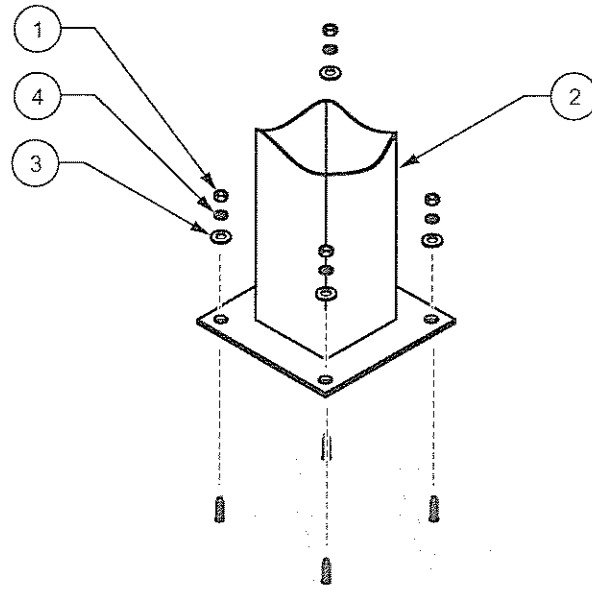


Figure 7 Installing the stand mounting

1	Nuts M8 (4x), from LZY360	3	Large washers (4x), from LZY360
2	Stand mounting LZY286 or LZY287	4	Small washers (4x), from LZY360

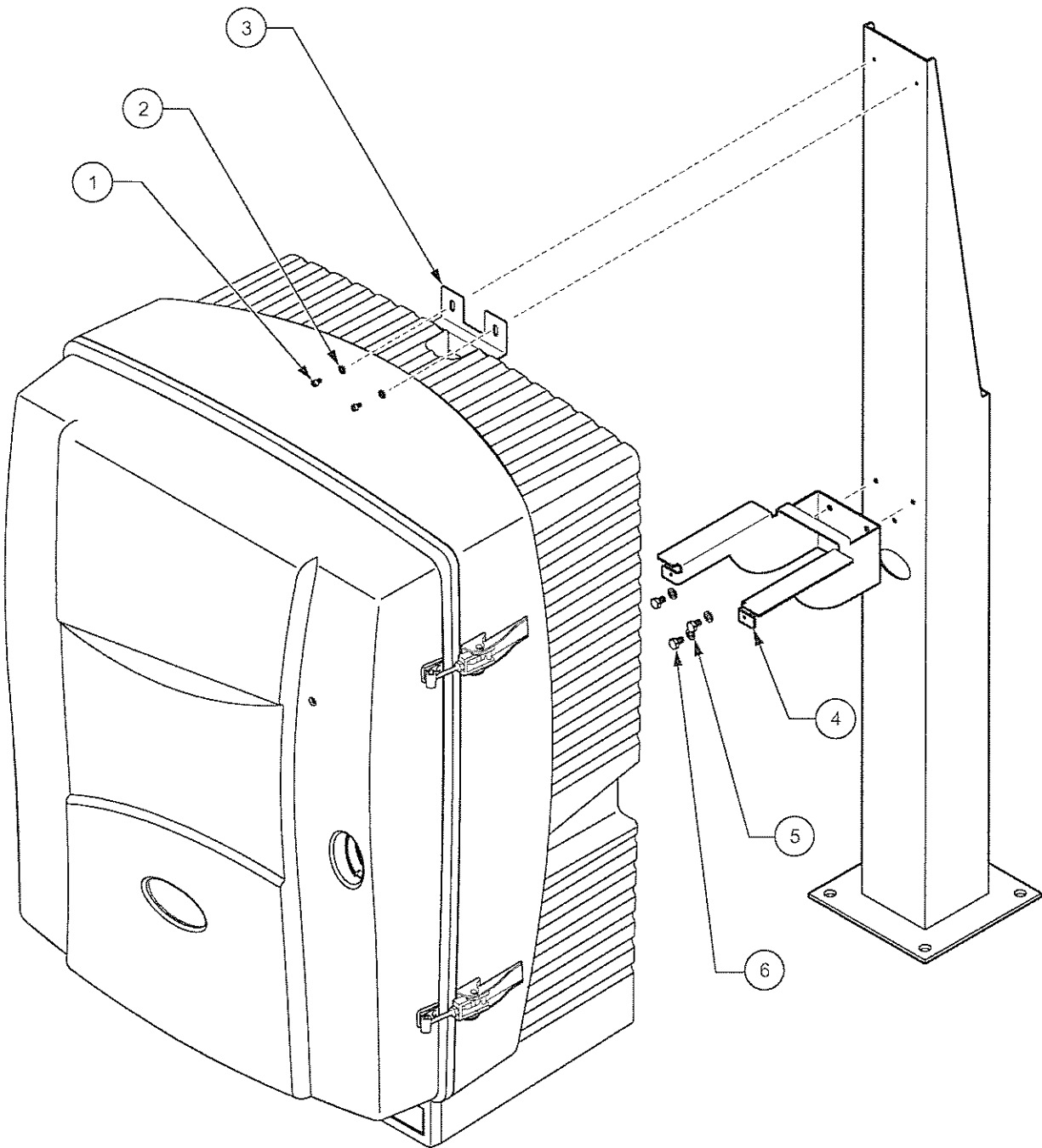


Figure 8 Installing the analyzer on the stand mounting

1	Hex socket head screw M5 x 8 (2x), from LZY360	4	Fastening bracket (supplied with the analyzer)
2	Spring washer for M5 (2x), from LZY360	5	Spring washer for M8 (3x), from LZY360
3	Angle bracket (supplied with the analyzer)	6	Screw M8 x 12 (3x), from LZY360

Stand mounting

Installing the sc1000 (LZY286 only)

The sun shield must be used with the controller in order to install a sc1000 on the long stand mounting (LZY286). Refer to the instructions supplied with the sun shield for more information.

1. Insert the M6 x 110 screws (supplied with the sun shield) through the sun shield and the mounting.
2. Tighten the nuts supplied with the sun shield with the washers.
3. Install the sc1000 into the sun shield.

Replacement parts and accessories

Description	Quantity	Catalog Number
Set of screws ground mounting	1	LZY360



FOR TECHNICAL ASSISTANCE, PRICE INFORMATION AND ORDERING:
In the U.S.A. – Call toll-free 800-227-4224
Outside the U.S.A. – Contact the HACH office or distributor serving you.
On the Worldwide Web – www.hach.com; E-mail – techhelp@hach.com

HACH COMPANY
WORLD HEADQUARTERS
Telephone: (970) 669-3050
FAX: (970) 669-2932

Instruction Sheet

DOC306.53.00087

Rail mounting hardware

Introduction

These installation instructions describe the installation of rail mounting hardware kit LZX414.00.60000. Items supplied with the rail mounting hardware are shown in Figure 1 on page 1. Figure 2 on page 2 shows the dimensions for the mounting hardware components.

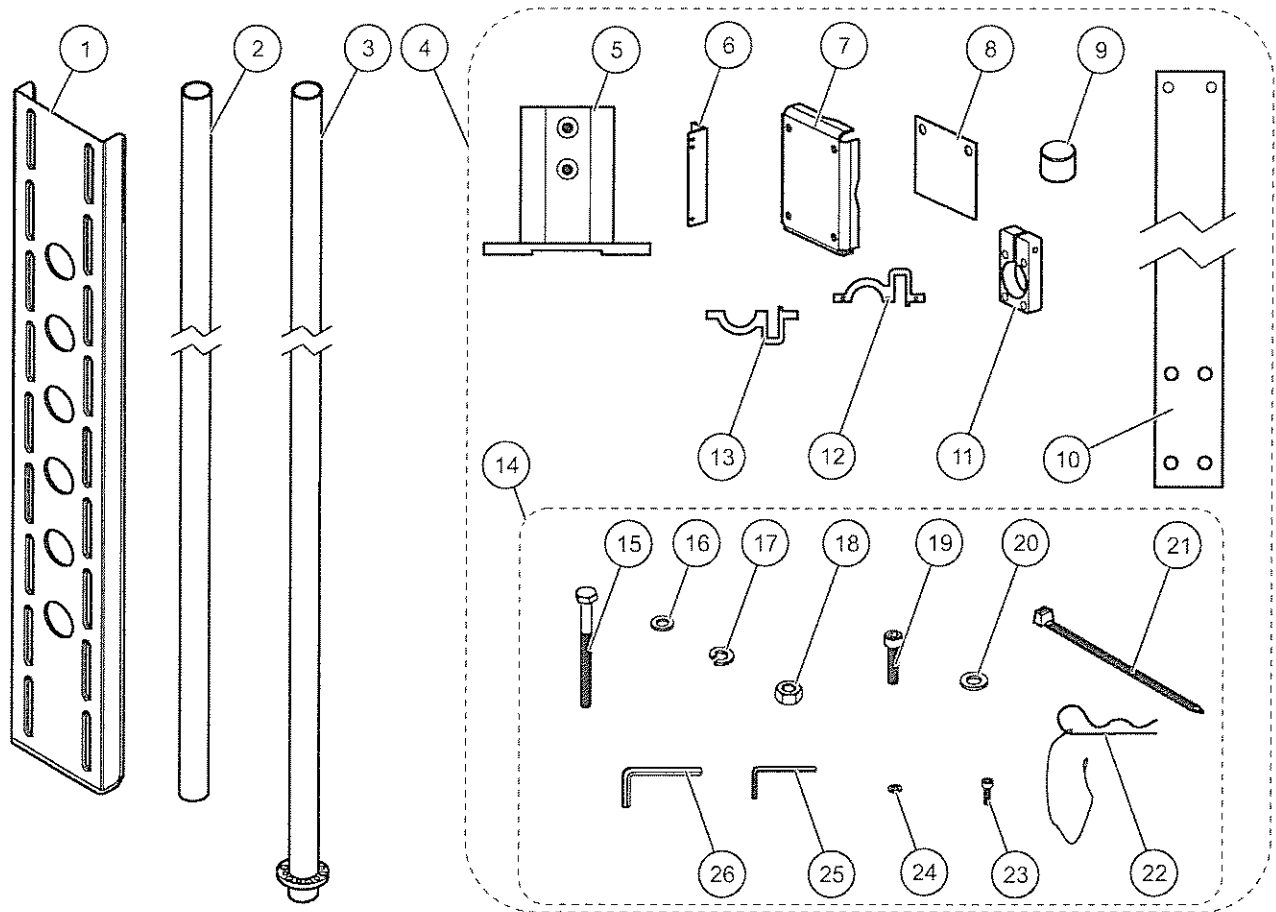


Figure 1 Items supplied with the rail mounting

1	Mounting rail HPS063	10	Fastening lug	19	Cap screw M8 x 40 mm (11x)
2	Supporting pipe (1 m) HRO307	11	Clamp (3x)	20	Washer for M10 (4x)
3	Mounting pipe (2 m) BRO075	12	Bracket, threaded AHH032 (3x)	21	Cable tie (3x)
4	Hardware set, LZY363	13	Bracket, unthreaded AHH033 (3x)	22	Spring locking pin (2x)
5	Base ATS010	14	Set of small parts LZY434	23	Cap screw M5 x 20 mm (10x)
6	Angle (2x)	15	Hex screw M8 x 120 mm (8x)	24	Spring washer for M5 (9x)
7	Clamping plate (2x)	16	Washer for M8 (12x)	25	Hex wrench 4 mm
8	Shim (3x)	17	Spring washer for M8 (19x)	26	Hex wrench 6 mm
9	Pipe cap (2x)	18	Nut M8 (16x), from LZY220		

Rail mounting hardware

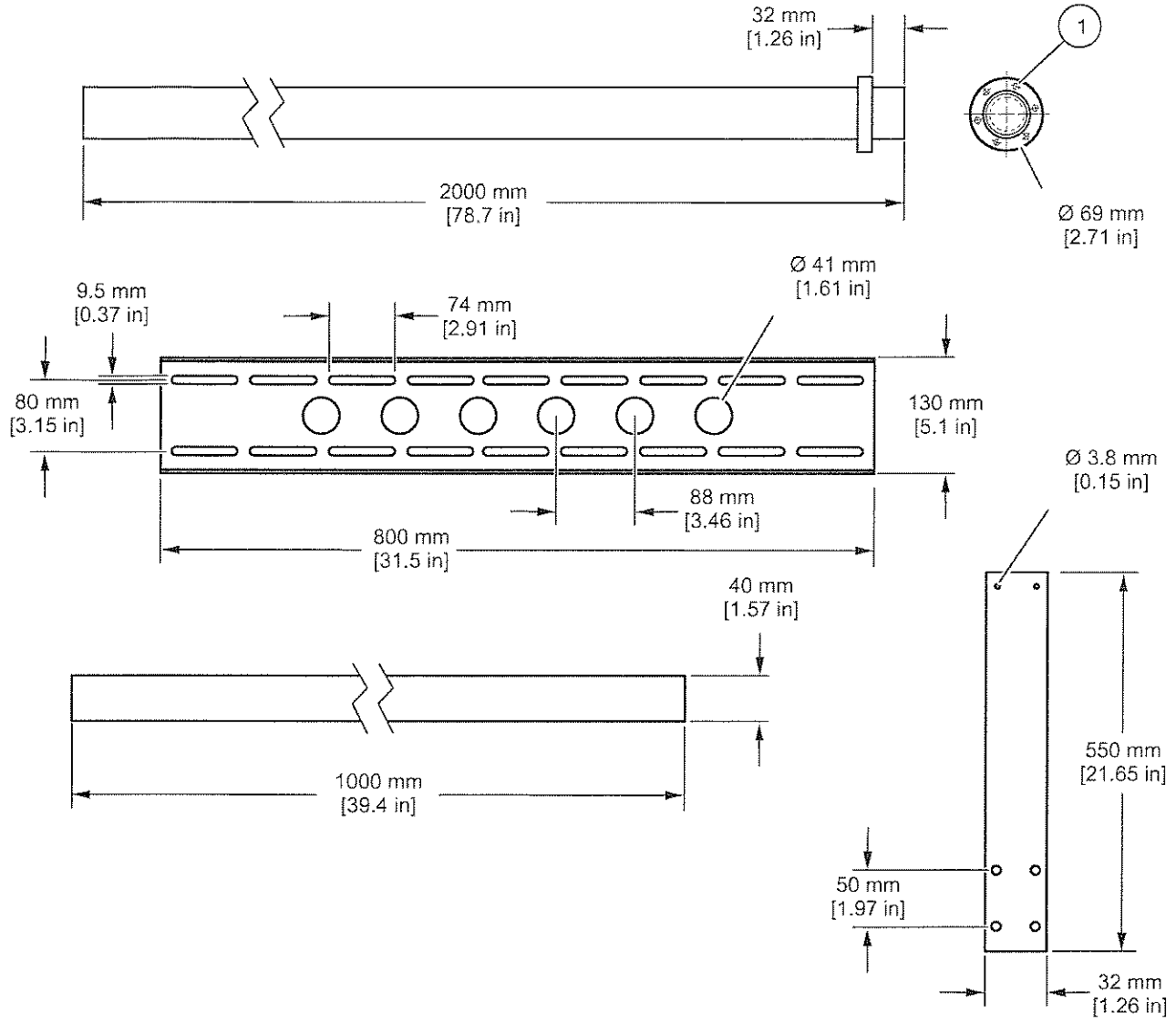


Figure 2 Mounting hardware dimensions

- | | |
|---|---|
| 1 | Countersunk hole, clearance for M5 (6x) |
|---|---|

Installation dimensions

Figure 3 defines the position of the probe when the mounting pipe is in the service position (see Placing the probe in the service position on page 12).

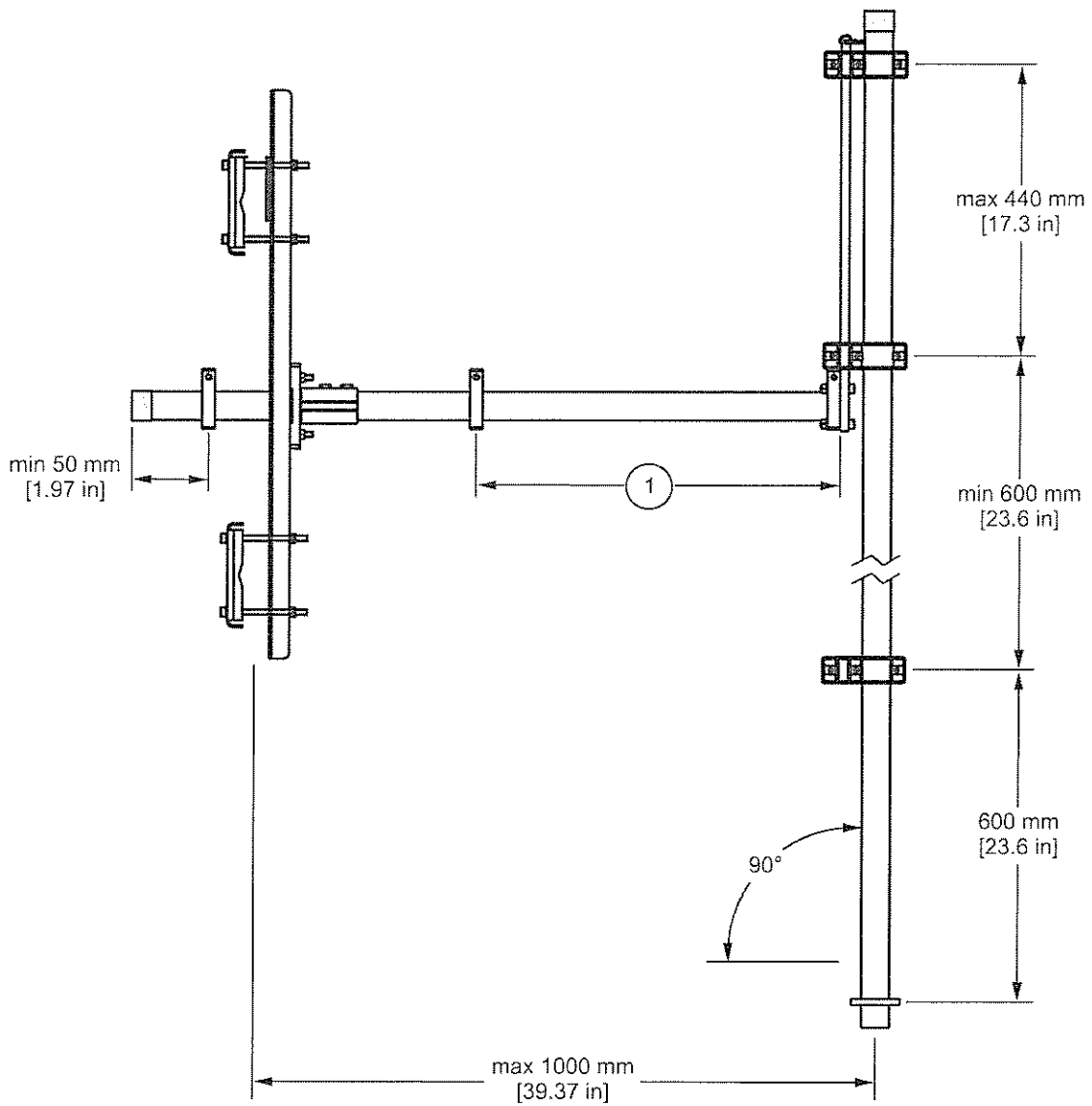


Figure 3 Installation dimensions

1 Position of the probe when mounting pipe is in the service position (dependent on the local situation).

Selecting the installation location

Important note: Refer to the probe user manual for specific installation instructions. Note all safety instructions and hazards.

Note: When selecting the installation location, always ensure there is safe access to all parts of the system and that the probe can never hit the tank wall.

During the selection of the installation location, pay attention to:

- The load bearing capacity and strength of the railings (lever forces due to flow and installation)
- The maximum cable and tubing lengths

Note: Refer to the probe user manual for operating instructions.

Railing specifications for mounting hardware

The rail mounting is designed for installation on round (Figure 4) or rectangular (Figure 5) railing profiles. Table 1 contains information on the railing specifications for installation.

Note: Check other railing profiles for suitability to ensure adequate load bearing capacity.

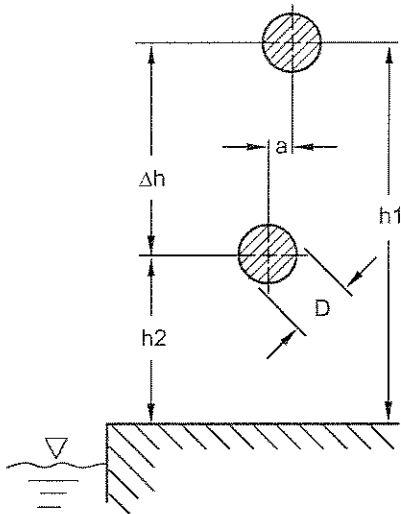


Figure 4 Section drawing of round railing profile

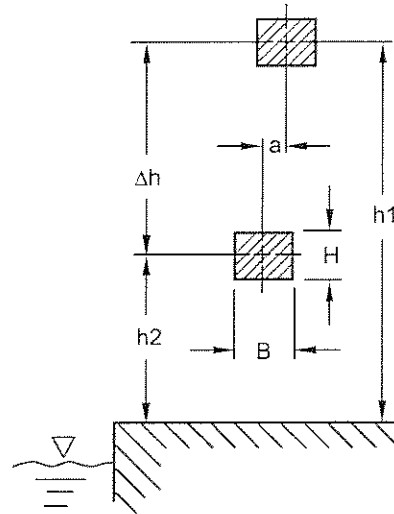


Figure 5 Section drawing of rectangular railing profile

Table 1 Rail mounting specifications

Round rail profile	Rectangular rail profile
D: 25–75 mm (1.00–2.95 in.)	B: 40–90 mm (1.57–3.54 in.); H: 40–68 mm (0.20–2.67 in.)
a: ≤ 25 mm (1.00 in.)	a: ≤ 25 mm (1.00 in.)
h1: 850–1200 mm (33.50–47.25 in.)	h1: 850–1200 mm (33.50–47.25 in.)
h2: 580–800 mm (22.80–31.50 in.)	h2: 580–800 mm (22.80–31.50 in.)
Δh: 300–620 mm (11.80–24.40 in.)	Δh: 300–620 mm (11.80–24.40 in.)

Installing the rail mounting

1. Assemble the base and the two angles using four socket head cap screws (M8 x 40 mm), washers for M10, spring washers for M8 and M8 nuts (Figure 6 on page 6).

Fit the four socket head cap screws (M8 x 40 mm) and washers for M10 to the side of the angle so that the holes in the angles are covered.
 2. Loosely bolt the mounting rail and a clamping plate to the top railing using four screws (M8 x 120 mm) with washers for M8, spring washers for M8 and M8 nuts (Figure 7 on page 7). Do not tighten the screws until the entire rail mounting is aligned and adjusted for height.
 3. Loosely bolt the mounting rail and the second clamping plate to the bottom railing using four screws (M8 x 120 mm) with washers for M8, spring washers for M8 and M8 nuts (Figure 7 on page 7).
 - To change the installation height of the mounting rail, slide the screws along the slots or use other slots.
 - To change the mounting height of the base, fit the base higher or lower.
 - For railings that are not vertically positioned or have different diameters, align the mounting rail vertically by fitting shims between the railings and the mounting rail.
 4. Fit a clamp to the middle and end of the supporting pipe using one M8 x 40 mm screw and spring washer for each clamp (Figure 8 on page 7).
 5. Bolt the fastening lug to the clamp on the end of the supporting pipe using four M8 x 40 mm socket head cap screws, washers, spring washers and nuts (Figure 9 on page 8).
 6. Insert the supporting pipe through the base and fit the third clamp between the angles using one M8 x 40 mm socket head cap screw and spring washer (Figure 10 on page 8).
 - Set the supporting pipe axial offset using the distance from the clamp between the angles and the clamp in front of the base (see Figure 3 on page 3 and section Placing the probe in the service position on page 12).
 - Lock the supporting pipe to avoid twisting using the clamp between the angles. Secure the probe on the vertical axis.
- Important note:** Fit the pipe cap on the end of the supporting pipe facing the user to prevent leg injuries due the sharp pipe edges. The pipe can be shortened as needed before fitting the pipe cap.
7. Bolt the retaining strap for the spring locking pin to one of the angles using an M5 socket head cap screw. Secure the supporting pipe against axial movement by inserting the spring locking pin into a hole (Figure 11 on page 9).
 8. Loosely bolt one of the three threaded brackets to one of the unthreaded brackets using one M5 x 20 mm socket head cap screw and a spring washer. Push the bracket onto the mounting pipe; pay attention to the bottom installation dimension (Figure 12 on page 10). Tighten the screws.

Rail mounting hardware

9. Refer to the Filter Probe sc operating instructions to determine the installation position for the two top brackets and loosely fit the brackets to the mounting pipe. Refer to Figure 3 on page 3 for installation dimensions.
10. Slide the two top brackets over the mounting lug. Align the brackets and tighten the screws.
11. Undo one of the screws on the top bracket and fit a strap for a spring locking pin (Figure 13 on page 11). Tighten the screw.
12. Adjust the tank bracket and tighten all screws. Refer to Figure 3 on page 3 for installation dimensions.

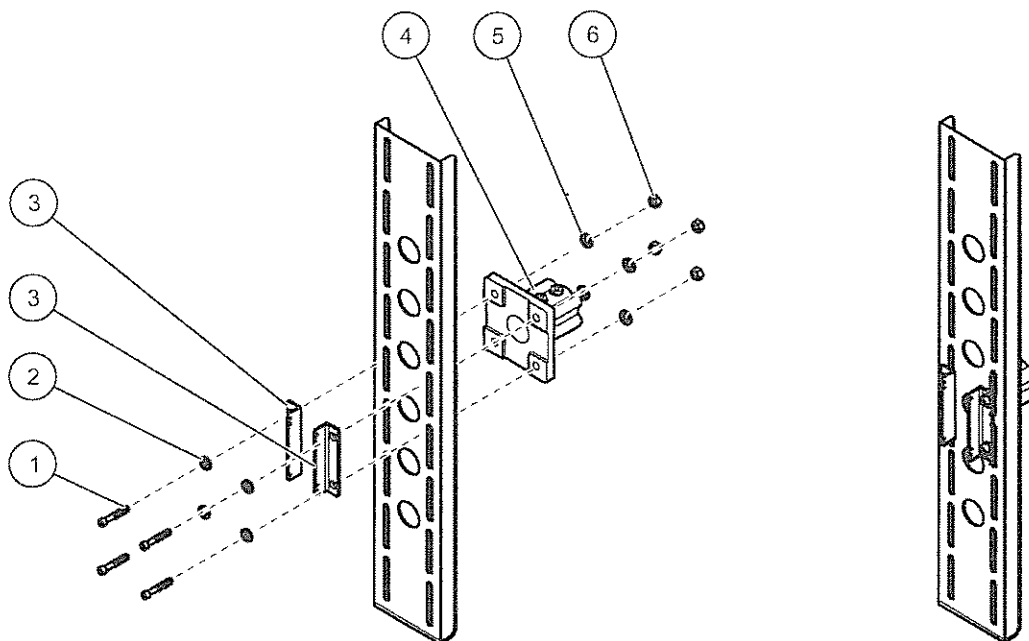


Figure 6 Fitting the base and angles

1	Socket head cap screw M8 x 40 mm	4	Base ATS010
2	Washer for M10	5	Spring washer for M8
3	Angle	6	Nut, M8

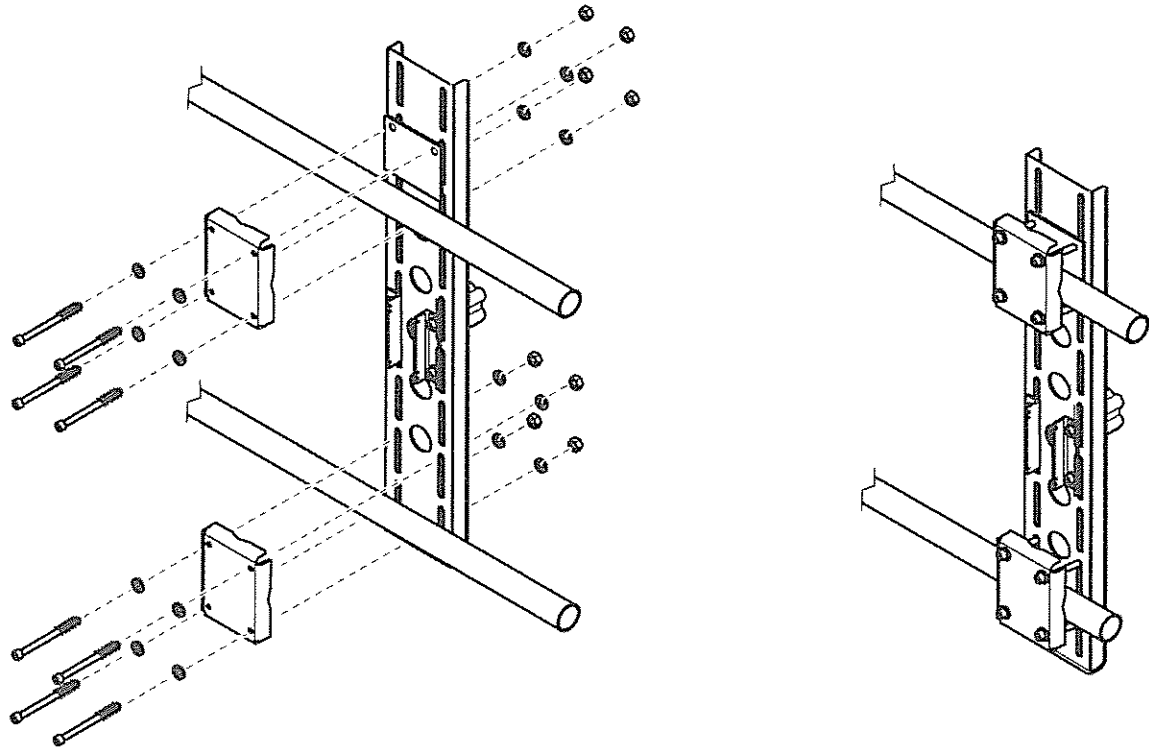


Figure 7 Installing the mounting rail

1 Shim	3 Clamping plate
2 Mounting rail	

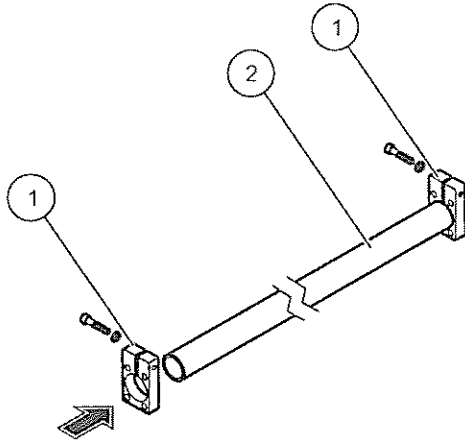


Figure 8 Fitting the clamps

1 Clamp	2 Supporting pipe
---------	-------------------

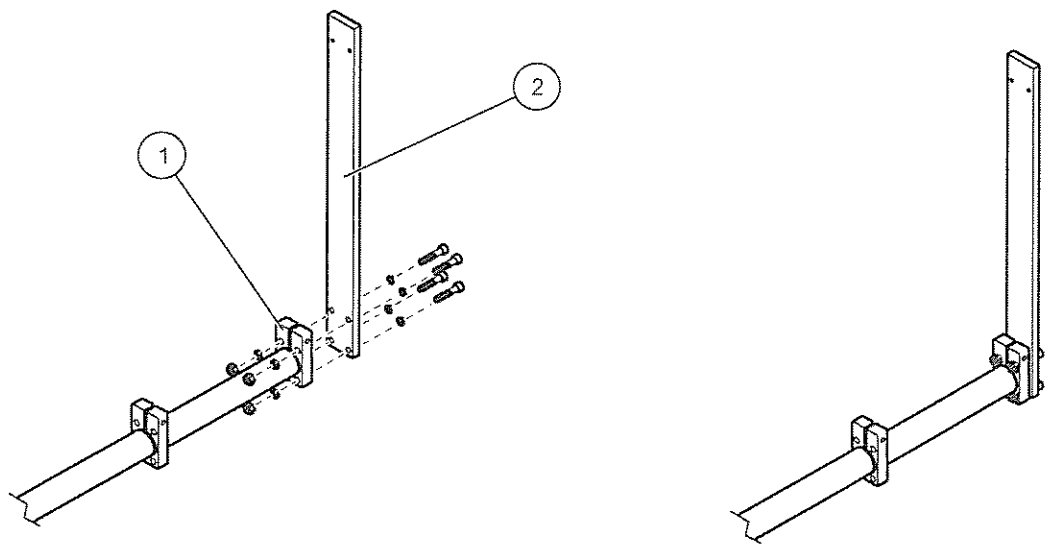


Figure 9 Fitting the mounting lug

1 Clamp	2 Fastening lug
---------	-----------------

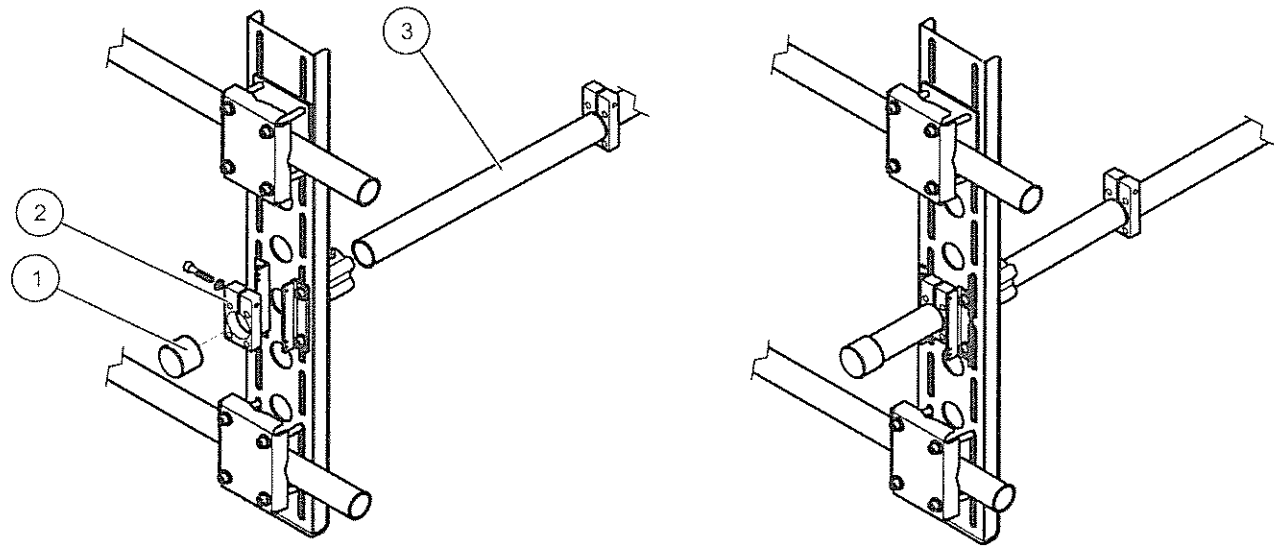


Figure 10 Fitting the supporting pipe, clamp and pipe cap

1 Pipe cap	3 Supporting pipe
2 Clamp	

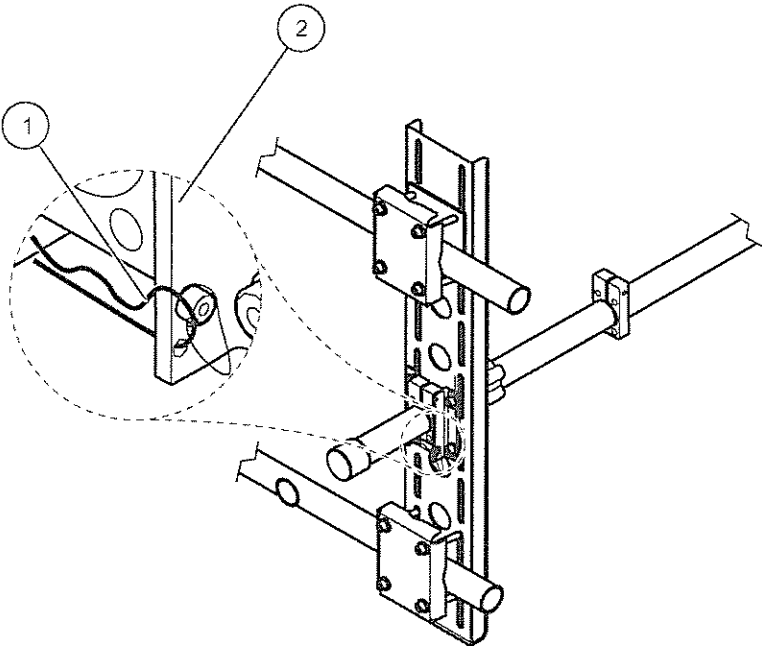


Figure 11 Securing the supporting pipe

1 Spring locking pin	2 Angle
----------------------	---------

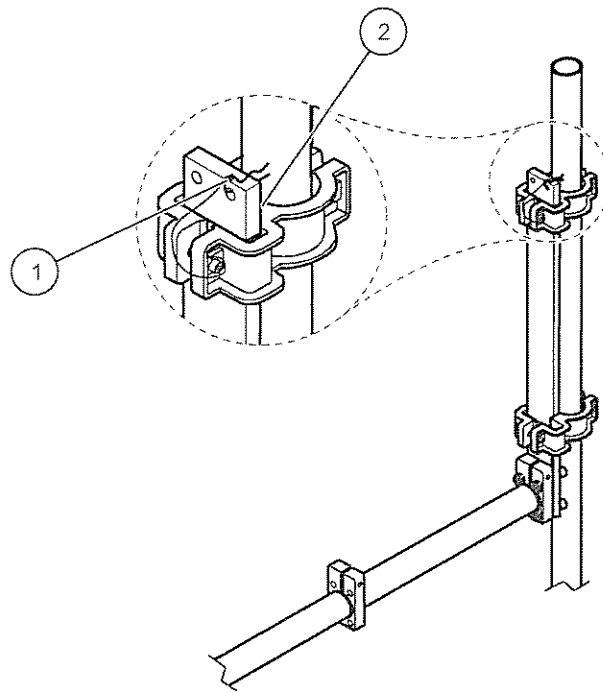


Figure 13 Securing the mounting pipe

1 Spring locking pin

2 Fastening lug

Mounting the probe

1. Pull out the spring locking pin on the fastening lug. Remove the mounting pipe with the brackets from the fastening lug.
2. Fit the probe to the mounting pipe and push the mounting pipe with the brackets back onto the fastening lug.
3. Secure the tubing for the probe to the mounting pipe using cable ties.
4. Secure the mounting pipe on the fastening lug against floating upwards using the spring locking pin.
5. Continue as described in the operating instructions for the Filter Probe and the analyzer.

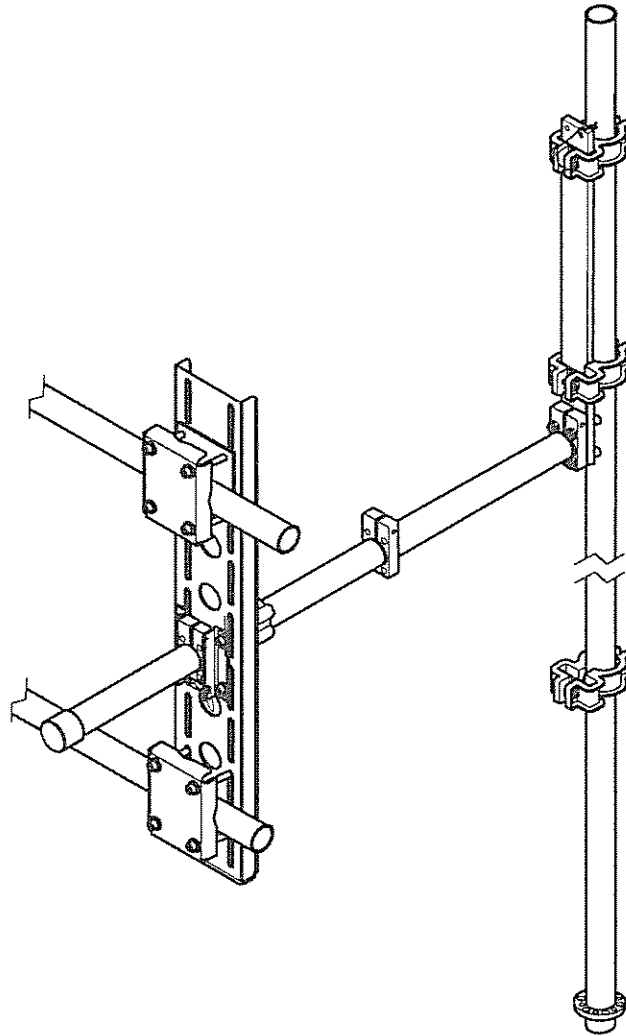


Figure 14 Installed rail mounting

Placing the probe in the service position

1. Remove the spring locking pin from the fastening lug and pull the brackets with the mounting pipe from the fastening lug.
2. Slide the mounting pipe onto the fastening lug using the bottom bracket (Figure 15 on page 13).
3. Pull the spring locking pin out of the angle and pull the supporting pipe back to the base until the clamp is in contact with the base.

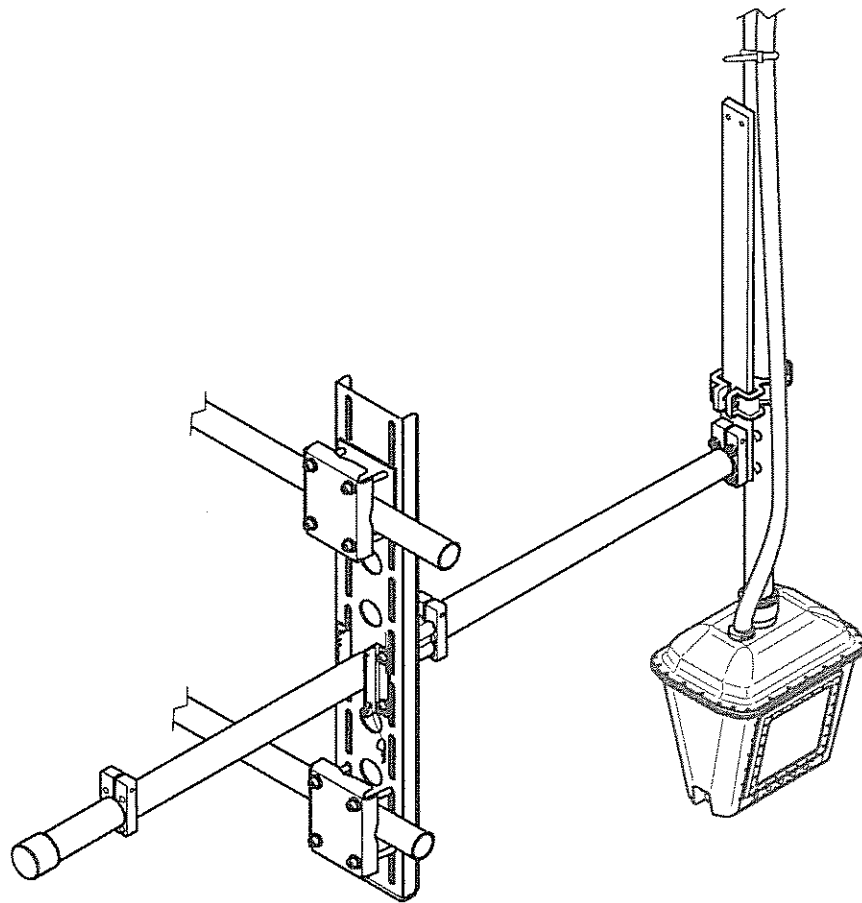


Figure 15 Filter Probe sc in the service position

Spare parts and accessories

Description	Quantity	Cat. No.
Rail Bracket Hardware Set	1	LZY363
Mounting Pipe (2 m)	1	BRO075
Supporting Pipe	1	HRO307
Hardware Set	1	LZY434
Base	1	ATS010
Bracket, complete	2 each	LZX200



FOR TECHNICAL ASSISTANCE, PRICE INFORMATION AND ORDERING:
In the U.S.A. – Call toll-free 800-227-4224
Outside the U.S.A. – Contact the HACH office or distributor serving you.
On the Worldwide Web – www.hach.com; E-mail – techhelp@hach.com

HACH COMPANY
WORLD HEADQUARTERS
Telephone: (970) 669-3050
FAX: (970) 669-2932

Rim Mounting Kit Part # LZX414.00.50000

Installation

3.3.1 Mounting the Filter Probe into the Process Stream

Figure 4 illustrates the installation overview for the Filter Probe sc. Use the fixed-point optional mounting hardware to install the Filter Probe sc into the sample stream. Refer to Figure 5 through Figure 7 for detailed mounting information.

3.3.1.1 Installation Guidelines

- Only install the Filter Probe sc using an appropriate mounting system (e.g. fixed-point mounting).
- Only install the Filter Probe sc in flowing water with protection against flow.
- Install the Filter Probe sc so that it is held a minimum of 0.1 m and maximum of 3 m below the surface of the water.
- In case of frost, insulate the first 10 cm of the tubing if the top edge of the Filter Probe sc is not at least 20 cm below the surface of the water.
- Ensure the Filter Probe sc is not in contact with the base of the tank and does not hit the side walls.

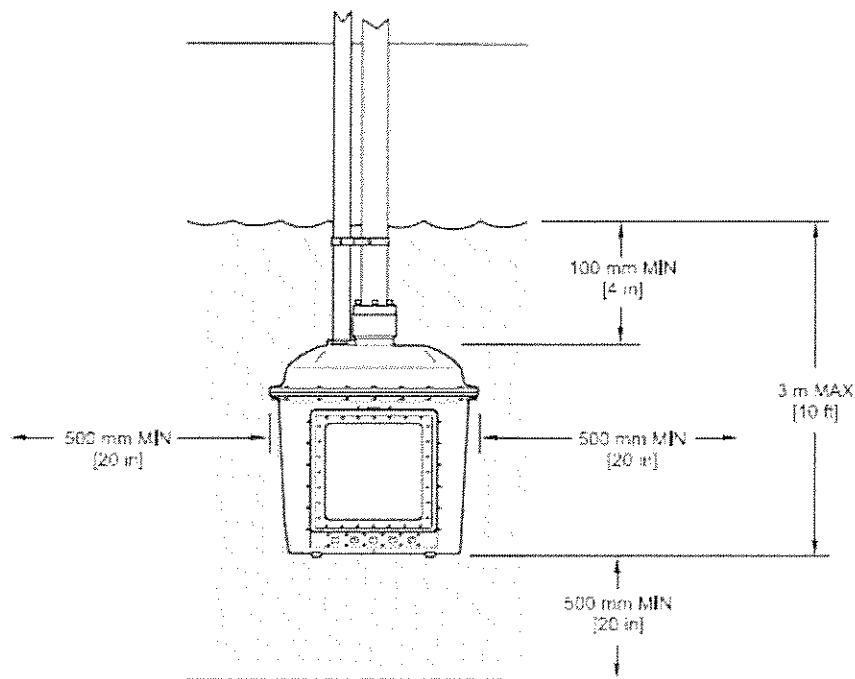


Figure 4 Installation Position for the Filter Probe sc

Installation

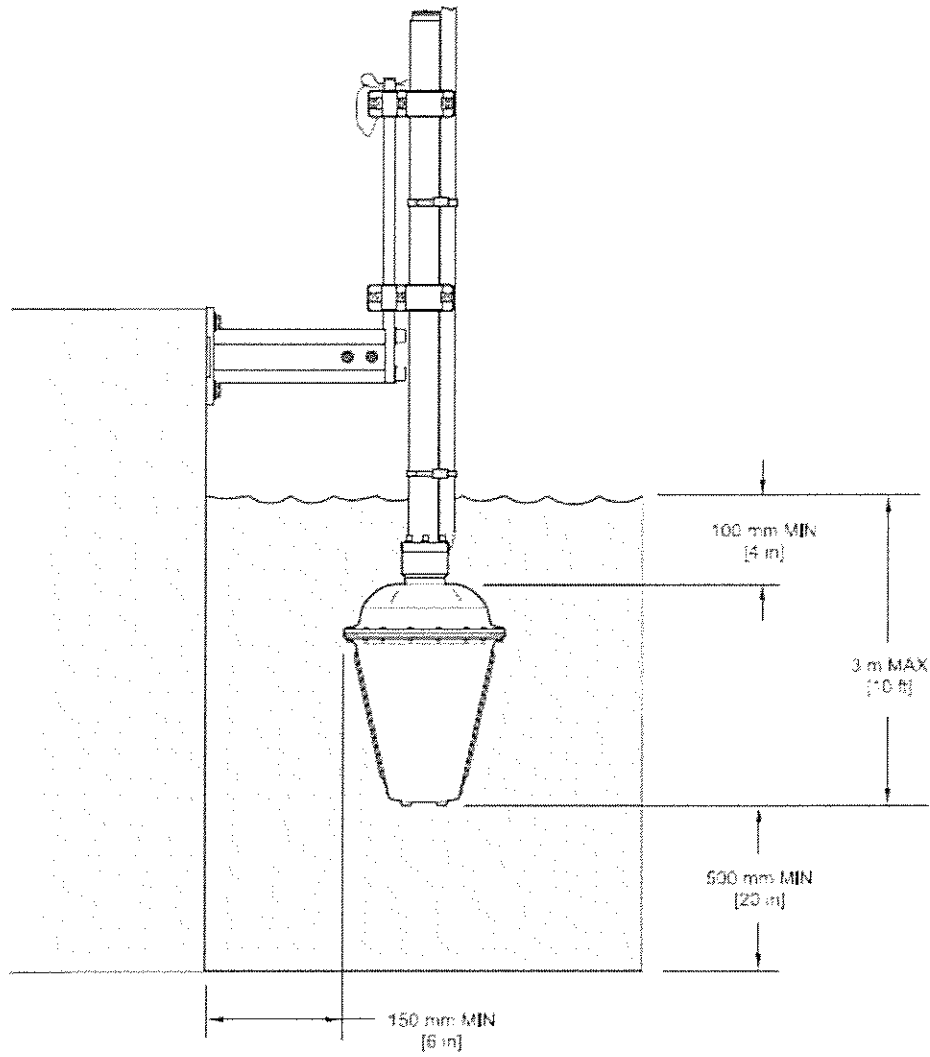


Figure 5 Fixed-point Final Assembly

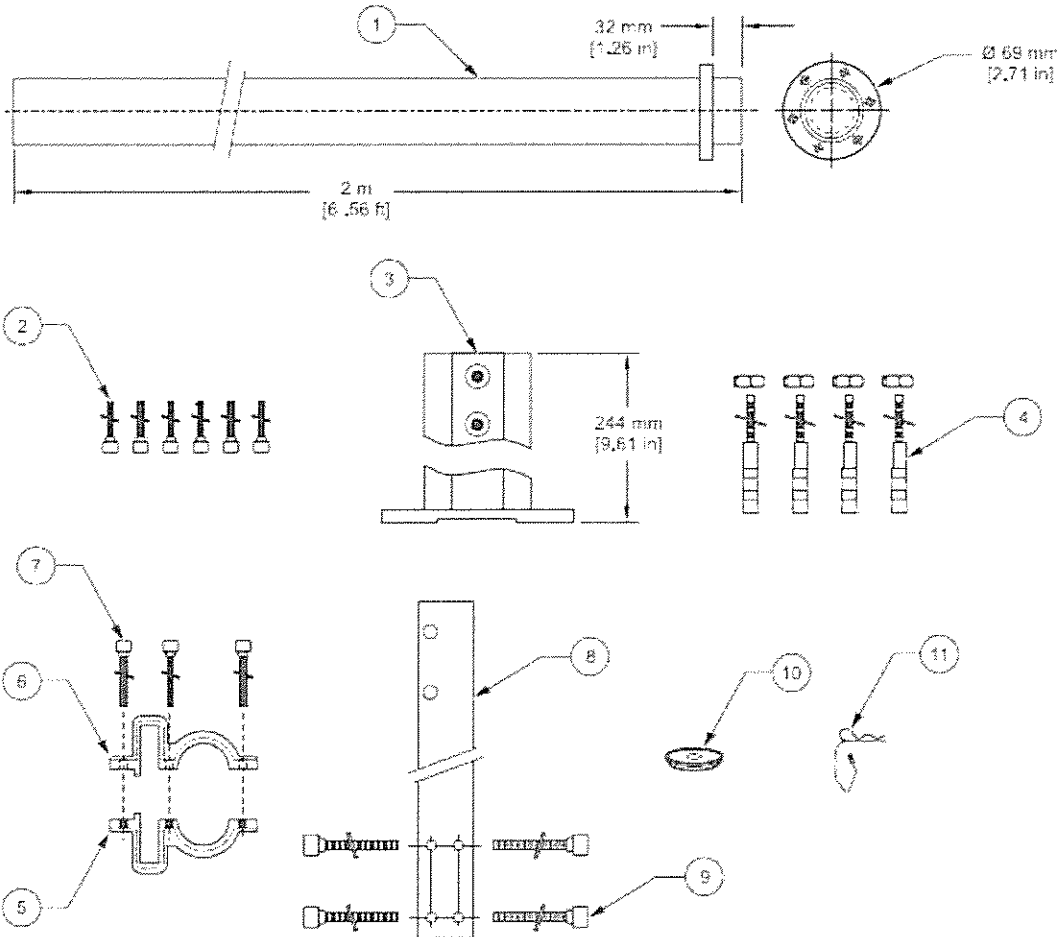


Figure 6 Fixed-point Mounting Parts (Cat.No. LZx414.00.50000)

1	Mounting Pipe	7	Socket Head Cap Screws M5 X 20 mm (6X)
2	Socket Head Cap Screws M5 X 10 mm (6X)	8	Flat Bar
3	Base	9	Socket Head Cap Screws M9 X 40 mm (4X)
4	Anchors (4X)	10	Plug
5	Clamp Half with Thread (2X)	11	Spring Cotter
6	Clamp Half (2X)		

Installation

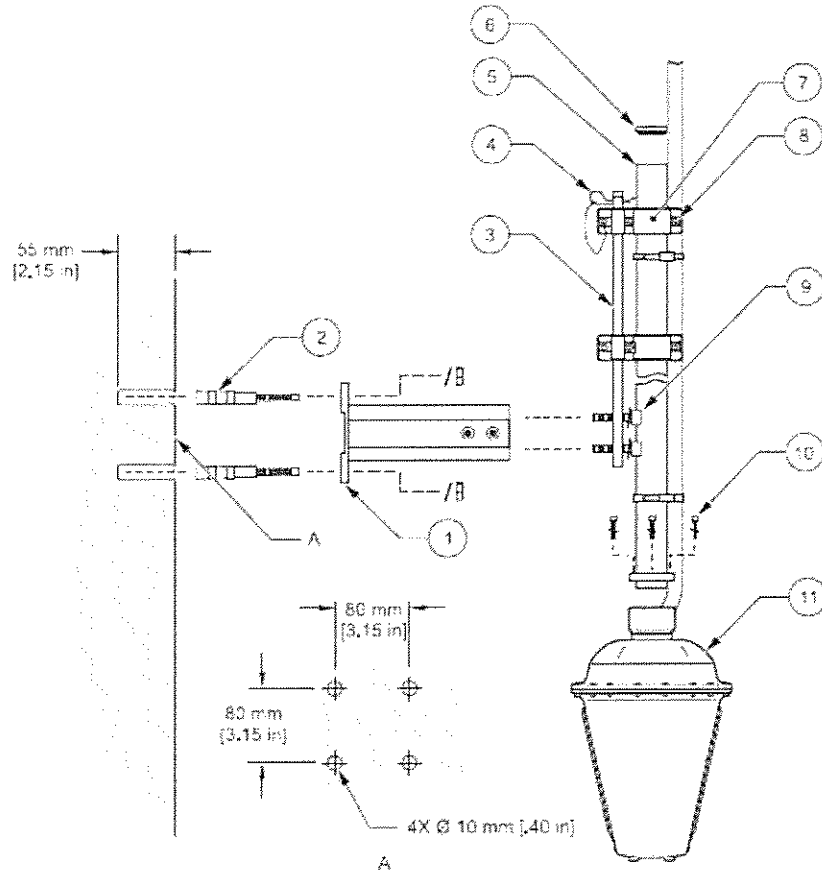


Figure 7 Fixed-point Mounting

1	Base	7	Clamp Assembly (2X)
2	Anchors (4X)	8	Socket Head Cap Screws M5 X 20 mm (8X)
3	Flat Bar	9	Socket Head Cap Screws M8 X 40 mm (4X)
4	Spring Cotter	10	Socket Head Cap Screws M5 X 16 mm (8X)
5	Mounting Pipe	11	Filter Probe sc
6	Plug		