

Pièces détachées pour ADI 2016, 2018 et 2019

2.14 SPECIAL TOOLS FOR BASIC MAINTENANCE

In order to be able to perform adequate basic maintenance the following tools are required:

- special ADI tools, delivered with the ADI 2016 / 2018 / 2019 series Process analyzer (see also Spare parts and mounting materials):



Wrench for M6 and M8 tubing connectors
 ADI Article number : V0R9900406



Special grease for piston/sleeve 30g
 ADI article number : V0M5000010



TUBE EXPANDER/PUMP ASSEMBLE TOOL
 ADI article number : V2MD004021



Torx Key TX10 for Sol.valve.PEEK.
 ADI article number : V0R9900200



Valve adjustment tool.
 ADI article number : V2KD000551

- commercially available tools (not delivered with the ADI 2016 / 2018 / 2019 series Process Analyzer, but available as spare part (see Spare parts and mounting materials)):



PTFE-tape for (not flared) tubing connectors
 ADI article number : V0R9901001



Tube cutter
 ADI article number : V0R9901200



Grooving tool for 1/4" tubing
 ADI article number : V0M5218500

CHAPTER 3

RECOMMENDED SPARE PARTS

3.1. GENERAL

This chapter describes the various spare parts for the ADI 2016 / 2018 / 2019 series Process analyzer, with a reference to the related Z-modules. Besides the spare parts for basic maintenance, also the service parts for corrective and preventive maintenance are listed, along with the most commonly used mounting materials. The starting point for making up this list of spare parts, is that the user doesn't need any special electro-mechanical skills to perform a concerning corrective measure as (partly) described in chapter 2.

For convenience an descriptive list of used abbreviations for synthetic materials is here included:

SYNTHETIC MATERIALS

ETFE	Ethylenetrafluorethylene
FEP	Perfluorethylenpropylene
FPM	Fluor rubber
PA	Polyamide
PCTFE	Polychlorotrifluorethylene
PE	Polyethylene
PEEK	Polyetheretherketone
PETP	Polyethyleneterephthalate
PFA	Perfluoralkoxy
PMP	Polymethylpentene
POM	Polyoxymethylene
PP	Polypropylene
PS	Polystyrene
PTFE	Polytetrafluor ethylene
PVC	Polyvinylchloride
PVDF	Polyvinylidenfluoride

RECOMMENDED SPARE PARTS

3.2 ELECTRODES:

- ZB62311000 ELECTROLYTE SOL. K₂SO₄ C= SAT.
- ZB62308020 ELECTROLYTE SOL. KCL C= 3 MOL/L
- ZB62308030 GELLED KCL SOL. (ADILYTE) 250 ML
- ZB62310000 ELECTROLYTE SOL. KNO₃ C= SAT.
- ZB62311010 ELECTROLYTE SOL. KNO₃ GELLED
- ZB62312000 ELECTROLYTE SOL. LICL C= SAT.
- ZB62309000 ELECTROLYTE SOL. LICLO₄ C= SAT.



- ZCADI04000 ADI BUFFER PH4 1 LTR
- ZCADI07000 ADI BUFFER PH7 1 LTR
- ZCADI10000 ADI BUFFER PH10 1 LTR



- ZBNH3IF010 AMMONIA ELECTR.FILLING SOLUTION

Used for ZBNH315010



- ZBNH3MK050 AMMONIA MEMBRANE KIT 20PCS+O-RING

used for ZBNH315010



- ZB628020000 POLISHING SET FOR ISE

used for :

ZBAGS15010, ZBCL015010, ZBCN015010, ZBCU015010, ZBFO015010



3.3 STIRRER / VESSEL HOLDER MODULE (ZB20401800)

- VOM5217205 NORPRENE TUBING ID 1/4" OD 3/8"
(Tube for overflow vessel)

material: Norprene



- V2MD000131 TOP PLATE STIRRER MODULE

material: PTFE



- V2MD000151 STOPPER FOR ELECTRODE

material: PTFE



- V2MD000161 FASTENER FOR ELECTRODE

material: PP



- V2MD000171 CENTER FASTENER FOR ELECTRODE

material: PP



- ZB20401850 BLIND STOPPER VESSEL ENTRY 1/4"

material: PTFE



- ZB20401860 BLIND STOPPER VESSEL ENTRY 3/8"

material: PTFE



- ZB20401870 BLIND STOPPER VESSEL ENTRY 12MM

material: PTFE



RECOMMENDED SPARE PARTS

- V2LD001781 ASSEMBLY KNURLED BOLT



- V2LD001791 SEAL PACKAGE FOR STIRRER MODULE

material: FEP / EPDM



- V0M5026070 STIRRER BAR D=4MM X L=12MM

- V0M5026075 STIRRER BAR D=4MM X L=16MM

- V0M5026080 STIRRER BAR D=5MM X L=25MM

material: PTFE



- V2KD001911 REACTION VESSEL TRANSP. 5-70 ML

material: GLASS



- V2KD001931 REACTION VESSEL TRANSP. 20-90 ML

material: GLASS



- V2KD001951 REACTION VESSEL TRANSP. 40-150 ML

material: GLASS



- V0M5004051 CONNECTOR CYLINDER-TUBING M8

material: PCTFE



- V0W8002011 TITRATION VESSEL 10-90 ML TRANSP.

material: GLASS



- V0W8002013 TITRATION VESSEL 20-90 ML TRANSP.

material: GLASS



- V0W8002015 TITRATION VESSEL 50-150 ML TRANSP.

material: GLASS



3.4 MACRO PIPETTE MODULE (ZB20402201/11/31/51)

- V0M5219010 TEFLON TUBING 1/4 "FEP MTR

material: FEP



- V2MD002721 MACRO SAMPLING PIPETTE 6ML
- V2MD002731 MACRO SAMPLING PIPETTE 10ML
- V2MD002741 MACRO SAMPLING PIPETTE 20ML
- V2MD002751 MACRO SAMPLING PIPETTE 50ML

material: Glass



- V2MC120451 ANTI-DROP GLASS ROD ADI201X

material: Glass



- V2MD002711 MOUNTING PLATE MACRO PIPETTE

material: SS



- V0M5004051 CONNECTOR CYLINDER-TUBING M8

material: PCTFE



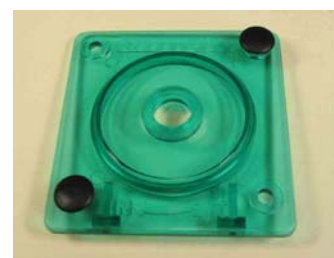
- V0M5217205 NORPRENE TUBING ID 1/4" OD 3/8"

material: Norprene



RECOMMENDED SPARE PARTS**3.5 TUBING PUMP MODULE (ZB20401501 /1521 / 1561)**

- V2KD003161 PUMP TUBING ID 1.6MM
material: norprene ®
(Used in ZB20401521 pump 5 ml/min)
- V2KD003171 PUMP TUBING ID 4.8MM
material: norprene ®
(Used in ZB20401501 pump 320 ml/min and ZB20401561 pump
120 ml/min)
- V2MD002801 PUMP ADAPT. M6(F)-HOSE ID1.6MM PP
material: PP
(Used in ZB20401521 pump 5 ml/min)
- V2MD002871 PUMP ADAPT. M8(F)-HOSE ID4.8MM PP
material: PP
(Used in ZB20401501 pump 320 ml/min and ZB20401561 pump 120
ml/min)
- V0M5224222 2-ROLLER CARRIER POM/SS/NYLON GF
material: POM (rollers)
- V0N0415010 M4X10 NYLON KNURLED SCREW
material: NYLON
- V0M5224221 COVER TUBING PUMP, GREEN PA
material: PA



3.6 BURETTE MODULE (ZB20401210/1220/1230/1240)

- V0W8002036 CYLINDER HEAD NUT 2ML BURETTE
 - V0W8002037 CYLINDER HEAD NUT 10ML BURETTE
 - V0W8002038 CYLINDER HEAD NUT 50ML BURETTE
- Head nut for 20 ml burette is equal to 10 ml burette.

Material: PP

- V0W8002039 PISTON FOR 2 ML BURETTE
- V0W8002040 PISTON FOR 10 ML BURETTE
- V0W8002041 PISTON FOR 50 ML BURETTE
- V0W8002082 PISTON FOR 20 ML BURETTE

material: PTFE

- V0W8002045 GLASS CYLINDER 2 ML BURETTE
- V0W8002046 GLASS CYLINDER 10 ML BURETTE
- V0W8002047 GLASS CYLINDER 50 ML BURETTE
- V0W8002060 GLASS CYLINDER 20 ML BURETTE

material: Glass

- V2KD001211 CYLINDER HEAD 2 ML BURETTE
- V2KD001221 CYLINDER HEAD 10 ML BURETTE
- V2KD001231 CYLINDER HEAD 50 ML BURETTE
- V2KD001241 CYLINDER HEAD 20 ML BURETTE

material: Carbon filled PTFE



TOP SIDE



BOTTOM SIDE

- V0W8002081 ANTIDIFFUSION VALVE FOR BURET.TIP

material: ETFE/KALREZ



- V0M5008021 BURETTE TIP L=145

material: FEP/ETFE/KALREZ



- V0M5000010 SPEC.GREASE FOR PISTON/SLEEVE 30G



3.7 MULTIWAY VALVES (ZB20401610 / ZB20401710 / ZB20402010+2030 /ZB20401730)

- V2LD001611 BURETTE VALVE UNIT

material: PCTFE (head), PTFE (slider)



- V2MD000331 RETURN TUBE FOR BUR./CONT.CONN

material: FEP



- V2MD000341 REDUCER BURETTE/CONTAINER CONN.

material: PP



- V2LD001731 BURETTE SELECTOR VALVE UNIT

material: PCTFE (head), PTFE (slider)



- V2LD001711 6-WAY SELECTOR VALVE UNIT

material: PCTFE (head), PTFE (slider)



- V2LD002011 SAMPLING SYSTEM LOOP UNIT
- V2LD122031 SAMPLING SYSTEM LOOP MODULE 2-WAY

material: PCTFE (head), PTFE (slider)



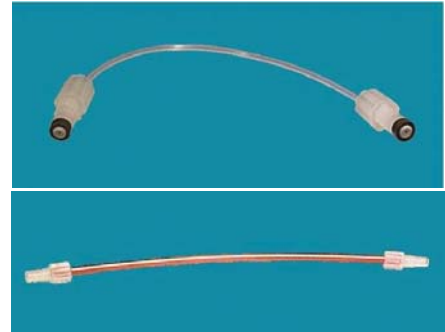
- V1S5ARP028 O-RING ID- 28.30X1.78

material: EPDM



- ZB20402110 0.2 ML LOOP FOR SAMPLING SYSTEM

material: PTFE



- ZB20402120 0.5 ML LOOP FOR SAMPLING SYSTEM
- ZB20402123 1 ML LOOP FOR SAMPLING SYSTEM
- ZB20402124 2 ML LOOP FOR SAMPLING SYSTEM
- ZB20402125 5 ML LOOP FOR SAMPLING SYSTEM

material: FEP

3.8 SAMPLE FLOW DETECTOR (ZB20402100)

- V0W0030001 BULKHEAD MALE D 1/4 "- 1/8" NPT PP

material: PP



- V2MD121161 ADAPTER G1/8 " MALE- M6

material: Carbon filled PTFE



- V2MD000281 MOUNTING PLATE FLOW SWITCH



3.9 SAMPLE FLOW CELL (ZB20402500)

- V0W0130001 ELBOW 1/4 "G MALE 1/4 " TUBE PP

material: PP



- V0W0130002 ELBOW 1/4 "G MALE 3/8 " TUBE PP

material: PP



- V1S5500X15 O-RING ID- 50.00X1.50 EPDM

material: EPDM



3.10 CUVETTE MODULE (ZB20407200-80)

- V2MD000891 CUVETTE 20 ML

Material: borosilicate glass



- V0W704000 STIRRER BAR D=3mm X L=13 mm

Material: PTFE



- V2MD000881 CUVETTE LID 6X M6, 1X 1/4" TUBE

Material: PTFE



- V2LD090181 EXCHANGE TUBING PACKAGE CUV. LID

Material: tubes: PTFE, O-ring: EPDM



- V2MD000901 PLUG FOR SIGHT HOLE CUVETTE

Material: PETP



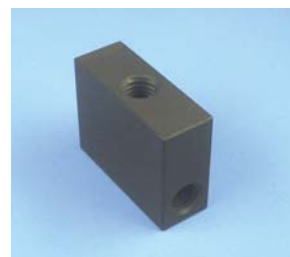
- V0N0415020 KNURLED SCREW



3.11 MOUNTING MATERIALS

- V2MD000991 TEE UNION M6 TUBING

material: Carbon filled PTFE



- V0M5008029 SCREW NIPPLE FOR M6

material: PVDF

(Can be used together with V2MD000961 as blind stopper)



- V2MD000961 PLUG FOR SCREW NIPPLE M6

material: PTFE



- V2MD000981 TEE UNION M8 TUBING

material: Carbon filled PTFE



- V0W0040000 SCREW NIPPLE FOR M8

material: PVDF

(Can be together with V2MD000951 as blind stopper)



- V2MD000951 PLUG FOR SCREW NIPPLE M8

material: PTFE



- V2MD001001 UNION M8 MALE PTFE-C

material: Carbon filled PTFE



RECOMMENDED SPARE PARTS

- V2LA123322 ADAPTER M6- 6MM TUBE PP
material: PP
- V2LD090201 ADAPTER M6- 6MM TUBE PCTFE
material: PCTFE
(incl.nut)
(Can be used in ZB20402010 / 2030 , ZB20401521)
- V2LD090191 ADAPTER M8- 6MM TUBE PP
material: PP
- V2LD090051 ADAPTER M8- 6MM TUBE PCTFE
material: PCTFE
(incl.nut)
(Can be used in ZB20401151, ZB20401501 / 1561)

- V0M5210010 NUT FOR 6MM TUBING CONNECTOR PVDF
material: PDVF
- V0M5221200 NUT FOR 1/4" TUBING CONNECTOR PP
material: PP

- V0M5209010 CONN. 1/4 " NPT- 1/4 " TUBE

material: PFA

(Can be used in ZB20401120)

- V0M5222010 MALE ELBOW 1/4 " NPT- 1/4 " TUBE

material: PFA

(Can be used in ZB20401180 / 1190)

- V0M5214010 TEE UNION 1/4 " TUBE

material: PFA

- V0M5221070 DISTRIBUTER 1/4 " TUBE PP
- V0M5221071 DISTRIBUTER 6 MM TUBE PP

material: PP

- V0M5228000 UNION M6-M6

material: ETFE



- V2MD001921 MALE RUN TEE FOR DRAIN CONN.R 1/4 "

material: PTFE

(Present in ZB20401910 / 1930 / 1950)



- V2MD000971 ADAPTER M8 MALE M6 FEM

material: Carbon filled PTFE

(Can be used in ZB20401151)



- V0M5042240 ADAPTER M6 MALE M8 FEMALE PCTFE

material: PCTFE



- V0M5207073 BLINDSTOPPER PE DIA.7.3

material: PE

(Present in ZB20401151)



- V2MD000361 ADAPTER O.D. 6MM-M6 PP

material: PP

(Present in ZB20403010-3040)



- V0W0530014 ADAPTER DN4/6MM-OD 6MM PP

(Incl.nut)

material: PP

(Present in ZB20403010-3040)



- ZA55226000 FEMALE M6/OD 6-OD6.35MM ADAPTER

(Incl.nut)

material: PVDF



RECOMMENDED SPARE PARTS

- V0M5219010 TUBING 1/4 " FEP MTR
- V0M5219000 TUBING ID4/OD 6 MM FEP MTR
material: FEP



- V0P5217000 TUBING FOR AIR 6.2MM CL
- V0W7203004 TUBING ID4/OD 6 MM PE
material: PE



- V0W8004010-4250 FEP TUB.2X M6 ID 2MM

V0W8004010 L= 130MM
 V0W8004020 L= 520MM
 V0W8004030 L=1500MM
 V0W8004040 L= 90MM
 V0W8004050 L= 180MM
 V0W8004060 L= 600MM
 V0W8004070 L= 105MM
 V0W8004080 L= 250MM
 V0W8004090 L= 310MM
 V0W8004100 L= 400MM
 V0W8004110 L= 800MM
 V0W8004120 L=1000MM
 V0W8004130 L=1200MM
 V0W8004180 L= 160MM
 V0W8004190 L= 110MM
 V0W8004250 L=2500MM



material: FEP

- V0W8004001 PTFE-TUB 2X M8 L=250MM ID=3.0MM
- V0W8004002 PTFE-TUB 2X M8 L=170MM ID=3.0MM
- V0W8004005 PTFE-TUB 2X M8 L=330MM ID=3.0MM
- V0M5042160 PTFE-TUB 2X M8 L=500MM ID=3.0MM
material: PTFE



- V2KD001891 RINSE TUBING FOR DRAIN VALVE CONN
material: PTFE

(Present in ZB20401910 / 1930 / 1950)



- V2KD001901 DRAIN TUBING FOR REACTION VESSEL
material: PTFE

(Present in ZB20401910 / 1930 / 1950)



- V0W7226001 NORPRENE TUBING ID 5/16" OD 7/16"

- V0M5217205 NORPRENE TUBING ID 1/4" OD 3/8"
(Present in ZB20401800; overflow analysis vessel)
(Present in ZB2040222201/11/31/51; overflow pipette)
material: Norprene



- V0N0232008 M2X 8-SS-A4 CR.REC.RAIS.HD.SCREW
(Present in ZB20400620 /0640 / 0650 / 0660 / 1030)



- V0N0432035 M4X 35-SS-A4 CR.REC.RAIS.HD.SCREW



- V0R1317308 SHIELD TERMINAL SH.OD 0- 8 MM



- V0R1317314 SHIELD TERMINAL SH.OD 8- 14 MM

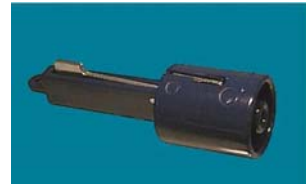


- V0R9901001 PTFE-TAPE (ROLL)



3.12 TOOLS

- V0M5218500 GROOVING TOOL FOR 1/4 " TUBING



- V0R9901200 TUBE CUTTER



- V0W4070005 KEY FOR DOOR LOCK DOUBLE BIT 5MM



- V2MD004022 TUBE EXPANDER/PUMP ASSEMBLY



- V0R9900406 WRENCH FOR M6 TUBING CONNECTOR



- V0R9900200 TORX KEY TX10



- V2KD000551 VALVE ADJUSTMENT TOOL

