

ÄKTA ready XL Flow Kit, product code 29482435 and 29482436

Product Documentation



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1 General information

Purpose of this document

This document provides an overview of the ÄKTA™ ready XL Flow Kit, general specifications and material conformity. For more information about ÄKTA ready XL, refer to the user documentation.

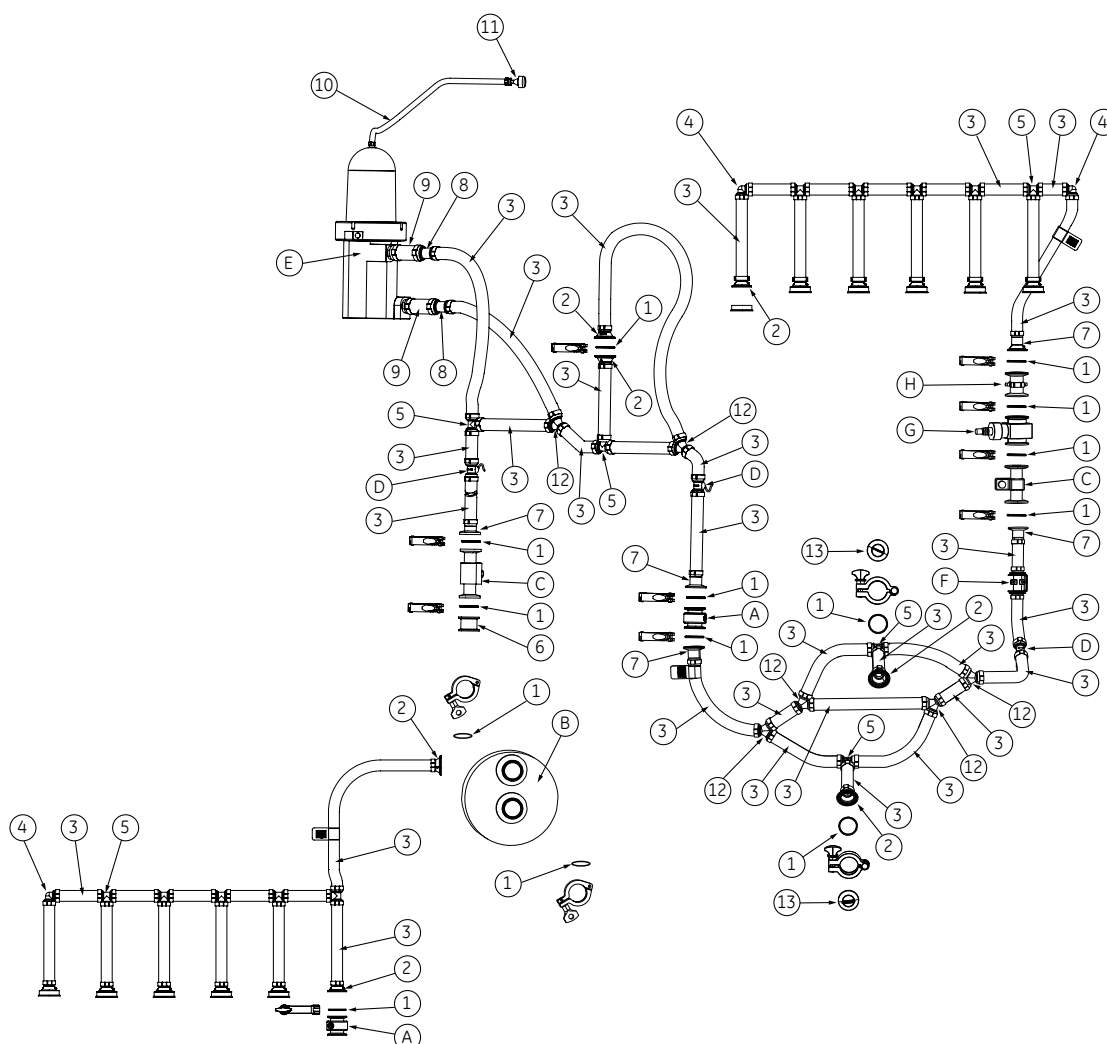
Note: *This document is only valid for the original condition of the ÄKTA ready XL Flow Kit, product code 29482435 and 29482436 as delivered from the manufacturer.*

2 Illustrations of flow kits

The ÄKTA ready XL Flow Kit is shown in the illustrations below. The numbered components are explained in the [Parts list, on page 9](#).

Main View

The following illustration shows the main view of the flow kit.



See the following sections for detailed illustrations of components labeled E, G, and H.

Illustration of E - Air Trap

The following illustration shows the flow kit air trap:

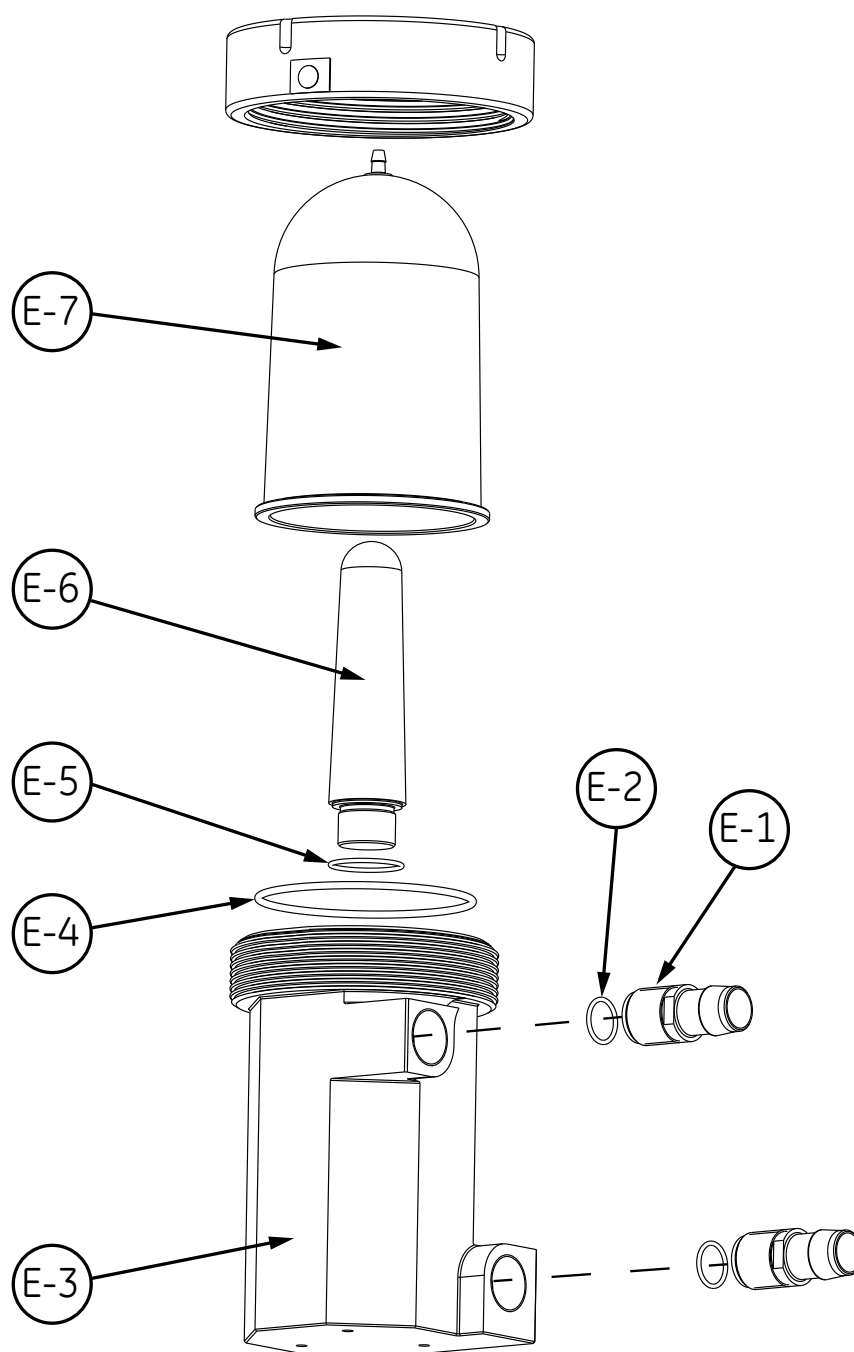


Illustration of G - pH Sensor

The following illustration shows the flow kit pH sensor:

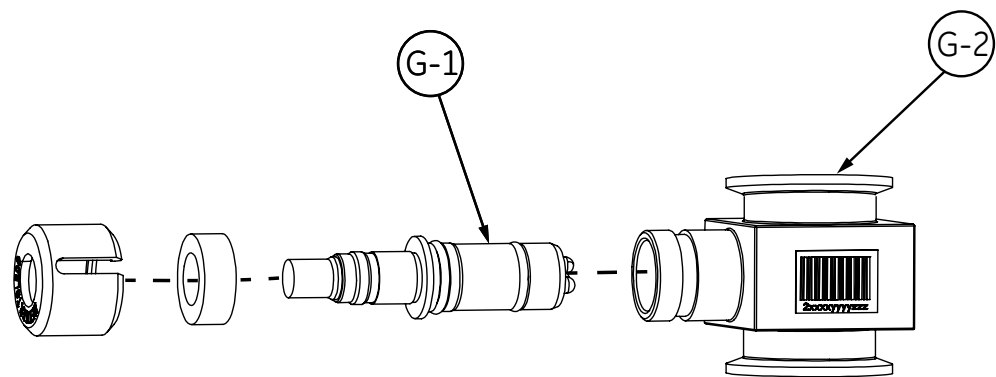
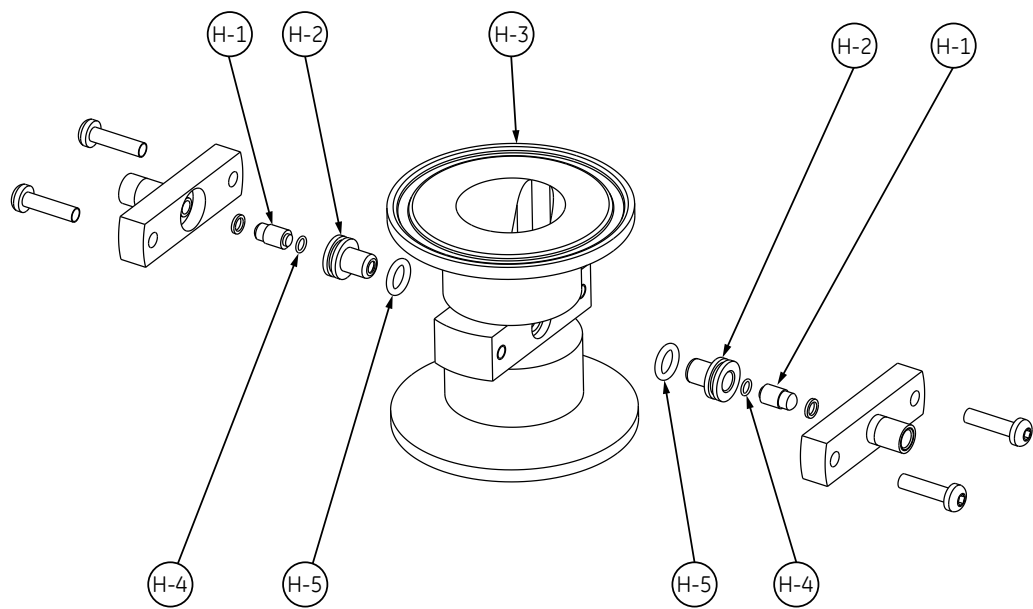


Illustration of H - UV Sensor

The following illustration shows the flow kit UV sensor:



3 Module specifications

Introduction

The tables below list specifications for the ÄKTA ready XL Flow Kit.

Code numbers

Number	Name
29482435	¾-inch Flow Kit
29482436	1-inch Flow Kit

Flow kit specifications

Parameter	¾" Flow Kit	1" Flow Kit
Tubing diameter (i.d.)	19.1 mm (¾")	25.4 mm (1")
Flow rate range	45 to 1900 L/h	90 to 3500 L/h
Total volume	8.02 L	10.56 L
Air Trap volume	3.45 L	3.45 L
Inlet/outlet connector (i.d.)	TC 50: 15 mm	TC 50: 22 mm
No. of inlets/outlets	6/6	6/6
Ambient temperature	10°C to 30°C	10°C to 30°C
Liquid temperature	10°C to 30°C	10°C to 30°C
Estimated shelf life	18 months	18 months
Maximum operating pressure	For details, refer to the documentation provided for each system.	
Chemical resistance	For details, refer to the <i>ÄKTA ready XL Operating Instructions</i> manual.	

Note: For full details of specifications, refer to the *ÄKTA ready XL Operating Instructions* manual delivered with the *ÄKTA ready XL* system.

Post assembly treatment

Gamma irradiation (kGy)

25 to 40

Applicable codes and standards

Code or Standard	Data
Design code	Designed and stress calculated according to Good Engineering Practice
Quality Management System	Certified according to ISO 9001

4 Material conformity

Wetted parts

The materials below are used in parts that are in contact with the process fluids.

Material	Abbreviation
Ethylene-propylene-diene monomer	EPDM
High-density polyethylene	HDPE
Polyamide	PA
Polyether-ether-ketone	PEEK
Polypropylene	PP
Polysulfone	PS
Thermoplastic elastomer	TPE
Stainless steel	SS 316L
Glass	LBF360
Loctite	M121HP
Gold	
Grade 2 quartz	
Porous Zirconia	
Silicone	
Soluble polyvinylpyrrolidone	
Titanium	

Parts list

The numbers in the part number column correspond to the components in the images previously presented in this document.

The parts listed below are in contact with the process fluids. Values are shown in mm (millimeters), unless otherwise stated.

Part No.	Flow kit size	Product code	Component Description	Material
1		28952744	Gasket, TC 50	Silicone

4 Material conformity

Part No.	Flow kit size	Component		Material
		Product code	Description	
2	3/4"	28953933	TC 50 connector, i.d. 15 mm	PP
2	1"	28989673	TC 50 connector, i.d. 22 mm	PP
3	3/4"	28956671	Tubing, i.d. 3/4"	Silicone
3	1"	28956672	Tubing, i.d. 1"	Silicone
4	3/4"	29259368	Connection, elbow, i.d. 15 mm	PP
4	1"	29259984	Connection, T, i.d. 22 mm	PP
5	3/4"	28952994	Connection, T, i.d. 15 mm	PP
5	1"	28952996	Connection, T, i.d. 22 mm	PP
6	1"	23900705	Reducer, i.d. 22 mm to 34 mm, TC50	PP
7	3/4"	29300707	TC 50 connector, i.d. 15 mm	PP
7	1"	29300706	TC 50 connector, i.d. 22 mm	PP
8	3/4"	29259983	Connection, reducer, straight, 1" to 3/4"	PP
9	3/4"	28956672	Tubing, i.d. 1"	Silicone
10		28920041	Tubing, i.d. 6.4 mm	Silicone
11		28906900	TC25 connector, 1/4"	PP
12	3/4"	28952999	Connection, Y, i.d. 15 mm	PP
12	1"	28953000	Connection, Y, i.d. 22 mm	PP
13		28997599	Cap, TC 50	PP

Part letter	Flow kit size	Component		Material
		Product code	Description	
A		29274862	Air sensor, TC 50	PP
B		29259459	Single use pump chamber, TC 50	EPDM, TPE, PP, SS 316L
C		29408950	Conductivity and temperature sensor, TC 50	PS, Gold, Silicone
D	3/4"	29259460	Pressure sensor	PS
D	1"	29297563	Pressure sensor	PS
E-1		29264711	Air trap tubing connection, 1"	PP
E-2		29265292	O-ring 21.8 × 2.4	EPDM
E-3		29264582	Air trap bottom	PP
E-4		28920134	O-ring 116 × 4	EPDM
E-5		29265293	O-ring 37.6 × 2.4	EPDM

Part letter	Flow kit size	Component		Material
		Product code	Description	
E-6		29264712	Air trap centre cone	PP
E-7		28920209	Air trap housing	PA
F	3/4"	29259403	Flow meter, 3/4"	PS, SS 316L
F	1"	29297561	Flow meter, 1"	PS, SS 316L
G-1		29448306	pH sensor	HDPE, EPDM, Porous zirconia, LBF360 Glass, Loctite M121HP, Soluble polyvinylpyrrolidone
G-2		29259906	pH sensor flow cell housing	PP
H-1		56308199	Lens	Grade 2 quartz
H-2		56323578	Lens housing	Titanium
H-3		29267385	UV flow cell	PEEK
H-4		56308204	O-ring 2.5 x 0.5	EPDM
H-5		56308200	O-ring 5 x 1.35	EPDM

The quality system of Cytiva is certified according to ISO 9001 and thereby guarantees full control of the product realization process. Cytiva has a controlled process for quality assurance in selection, assessment and evaluation of suppliers based on strict adherence to specifications for all materials.



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