

ABB MEASUREMENT & ANALYTICS | PARTS LIST | PL/FEP630/FEW630/FEH630-EN REV. C

# ProcessMaster FEP630, FEW630

## HygienicMaster FEH630

### Electromagnetic flowmeter



Measurement made easy

FEP630  
FEW630  
FEH630  
FET630

### Additional Information

Additional documentation on ProcessMaster FEP630, FEW630 HygienicMaster FEH630 is available for download free of charge at [www.abb.com/flow](http://www.abb.com/flow). Alternatively simply scan this code:



### My Measurement Assistant

The app that puts ABB measurement device support at your fingertips:



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# 1 Safety instructions for repair work

ABB flowmeters are designed to be easy to repair thanks to uniform replacement parts and simple replacement of predefined parts.

However, if repair work is not carried out in accordance with the guidelines, this may result in malfunctioning of the device, causing serious injury to persons, and harm to the environment. This is especially true for safety-critical devices and those certified for use in explosion hazard environments.

Certifications will also lapse if the repairs were not carried out with the proper tool or by persons without adequate training. We therefore recommend all repair work on flowmeters be carried out by ABB service technicians.

As the manufacturer of the device, ABB cannot guarantee the necessary quality of the repair procedures if the work and/or parts exchange was not carried out by ABB.

The plant operator is responsible for all repairs carried out by the customer, plant operator, or third party. In this case, ABB will reject all responsibility for any improper device functionality, in particular all safety-related functions.

ABB does not assume any liability for the deterioration or loss of device performance, malfunctions, or damage arising from the above repair work or replacement. All liability for defects shall lapse when the replacement or repair work is not carried out by ABB.

If you are unsure about the repair process even if some or all replacement parts are available, please get in touch with ABB Service before beginning work.

Respect national and internal laws when carrying out repairs. In particular laws relating to certified flowmeters used in explosion hazard environments. Repair work which is carried out without following the legal requirements can result in the revocation of your operating permit.

For more information, go to [www.abb.com/flow](http://www.abb.com/flow) or contact your local ABB Customer Service Center.



### 3 Spare parts list

#### Electromagnetic flowmeter FEP632, FEW632, FEH632 in remote mount design

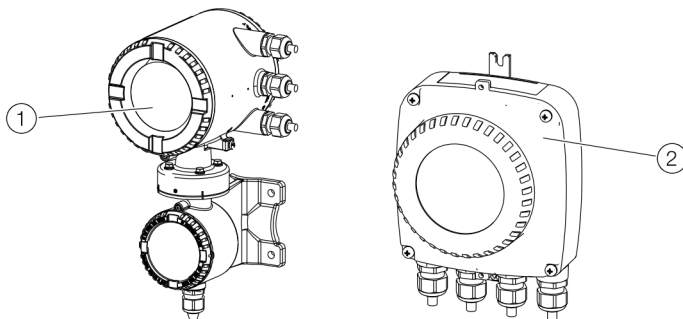


Figure 2: Overview of transmitter in dual-compartment housing ① and single-compartment housing ②

#### FET632 transmitter in dual-compartment housing

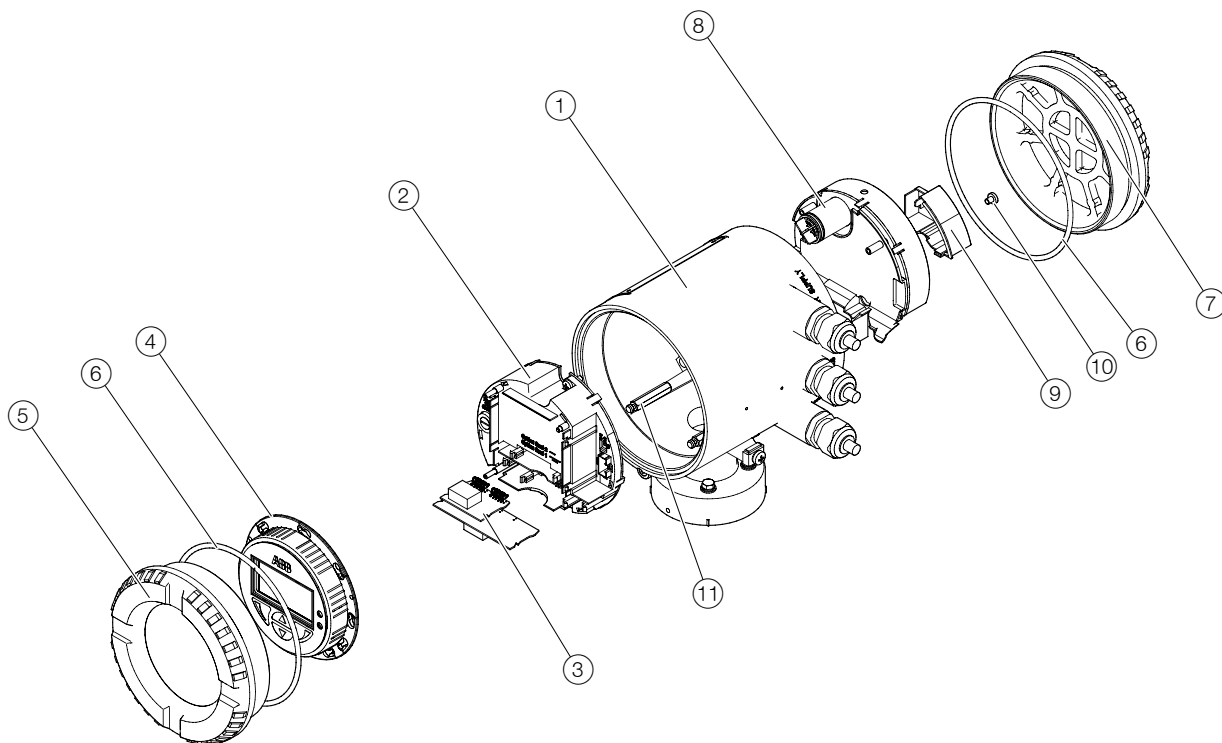


Figure 3: Top section with electronics

## ... 3 Spare parts list

### ... Electromagnetic flowmeter FEP632, FEW632, FEH632 in remote mount design

Position	Designation	Variant	Ordering number	Recommended spare part		
①+②+ ⑧+⑪	Dual-chamber housing incl. motherboard and EMC board	100...230 V AC / M20 GP, Zone 2, Division 2	3KQZ407133U1100			
		100...230 V AC / M20 Zone 1	3KQZ407133U1200			
		11...30 V DC / M20 GP, Zone 2, Division 2	3KQZ407133U1300			
		11...30 V DC / M20 Zone 1	3KQZ407133U1400			
		100...230 V AC / NPT GP, Zone 2, Division 2	3KQZ407133U1500			
		100...230 V AC / NPT Zone 1	3KQZ407133U1600			
		11...30 V DC / NPT GP, Zone 2, Division 2	3KQZ407133U1700			
		11...30 V DC / NPT Zone 1	3KQZ407133U1800			
		100...230 V AC / NPT Division 1	3KQZ407133U1900			
		11...30 V DC / NPT Division 1	3KQZ407133U2000			
		①+②+ ⑧+⑪	Dual-chamber housing incl. motherboard and EMC board, APL version	100...230 V AC / M20 GP, Zone 2, Division 2	3KQZ407133U2100	
				100...230 V AC / M20 Zone 1	3KQZ407133U2200	
				11...30 V DC / M20 GP, Zone 2, Division 2	3KQZ407133U2300	
				11...30 V DC / M20 Zone 1	3KQZ407133U2400	
100...230 V AC / NPT GP, Zone 2, Division 2	3KQZ407133U2500					
100...230 V AC / NPT Zone 1	3KQZ407133U2600					
11...30 V DC / NPT GP, Zone 2, Division 2	3KQZ407133U2700					
11...30 V DC / NPT Zone 1	3KQZ407133U2800					
100...230 V AC / NPT Division 1	3KQZ407133U2900					
11...30 V DC / NPT Division 1	3KQZ407133U3000					
①	Dual-chamber housing	M20	3KQZ407020U0100			
	Dual-chamber housing	NPT	3KQZ407020U0300			
②	Motherboard T3	100 ... 230V AC includes 3KQZ402013U0200	D800D520U19	X		
	Motherboard T3	11 ... 30 V DC includes 3KQZ402013U0200	D800D520U20	X		
③	Option cards		—			

See page 18

Position	Designation	Variant	Ordering number	Recommended spare part
④	LCD indicator (HMI)	—	3KQZ407125U0100	X
⑤	Cover with glass pre-assembled	GP, Division 2	D612A197U01	
	Cover with glass pre-assembled (EX)	Zone 2	D612A197U02	
⑥	O-ring cover 118 x 3.70 NBR	—	D101A034U05	
⑦	Cover without glass pre-assembled	GP, Zone 2, Division 2	D612A226U01	
	Cover without glass pre-assembled (EX)	Zone 1, Division 1	D612A226U02	
⑧	Connection board (EMC) / Old variant	For EX 1:1 exchange only GP, Zone 2, Division 2, Division 1 Ersetzt 3KQZ402003U0100	D800D520U21	
	Connection board (EMC) (EX) / Old variant	For EX 1:1 exchange only Zone 1 Replaces 3KQZ402003U0200	D800D520U22	
	Connection board (EMC) Rev. 2	GP, Zone 2, Division 2, Division 1 Replaces 3KQZ402003U0300	D800D520U23	X
	Connection board (EMC) (EX) Rev. 2	Zone 1 Replaces 3KQZ402003U0400	D800D520U24	X
	Connection board (EMC) Rev. 3	APL-Version GP, Zone 2, Division 2, Division 1 Replaces 3KQZ402003U0500	D800D520U26	
	Connection board (EMC) (EX) Rev. 3	APL-Version Zone 1 Replaces 3KQZ402003U0600	D800D520U27	
⑨	T3 power supply plastic cover	—	3KQZ407005U0100	
⑩	Screw for mains connection cap M 4 x 6 DIN7985	For Pos. ⑨	D004G106AU20	
⑪	Spacer bolt HMI T3	—	3KQZ407017U0100	
⑫	Fuse 5 x 20 mm 1.25 A 1500 A @ 250 V AC	11...30 V DC	3KQR000757U0100	X
	Fuse 5 x 20 mm 0.8 A 500 A @ 250 V AC	100...230 V AC	3KQR000757U0200	X
⑬	Cable gland M20x1.5	—	3KQP000046U0100	
⑭	Hexagon head screw THRD.B.HEAD M5 X 22 DIN933 A2-70	—	D022H115AU20	

## ... 3 Spare parts list

### ... Electromagnetic flowmeter FEP632, FEW632, FEH632 in remote mount design

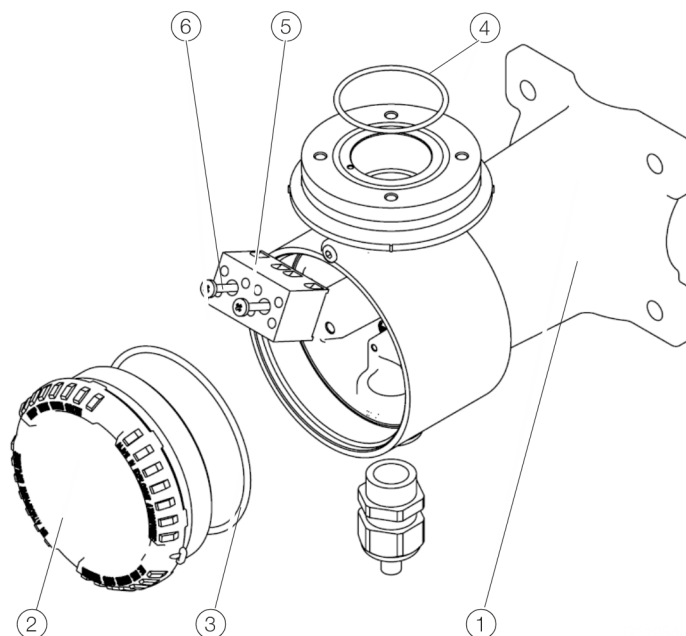


Figure 4: Wallmount

Position	Designation	Variant	Ordering number	Recommended spare part
①	T3 wall bracket, pre-assembled	M20	3KQZ407114U0100	
	T3 wall bracket, pre-assembled	NPT	3KQZ407114U0300	
②	T3 wall bracket cover	—	3KQZ207035U0100	
③	O-ring cover wall bracket 118 x 3.70 NBR	—	D101A034U05	
④	O-ring 41 x 1.78 NBR	—	D101A040U01	
⑤	Terminal block 4-pole	—	3KQR002621U0100	
⑥	Pan-head screw for terminal block M3 x 20 A2-70	—	3KQP000063U0100	
—	Accessory bag Cable clamps	—	3KXF002015U0100	
—	T3 connection cable Wall bracket for housing	—	3KQZ407087U0100	
—	Signal cable	See page 19	—	



## ... 3 Spare parts list

### ... Electromagnetic flowmeter FEP632, FEW632, FEH632 in remote mount design

Position	Designation	Variant	Ordering number	Recommended spare part
⑥	Single chamber housing	M20	3KXF002614U0300	
	Single chamber housing	NPT	3KXF002614U0400	
⑦	Cable gland M20x1.5	—	3KQP000046U0100	
⑧	Spacer bolt HMI T4	—	3KQZ407047U0100	
—	Gasket Type4 Silicone IRM950-8 sw	—	MJAG9902	
⑨	Fuse 5 x 20 mm 1.25 A 1500 A @ 250 V AC	11...30 V DC	3KQR000757U0100	X
	Fuse 5 x 20 mm 0.8 A 500 A @ 250 V AC	100...230 V AC	3KQR000757U0200	X

## Terminal box flowmeter sensor FEP632, FEW632, FEH632 – remote mount design

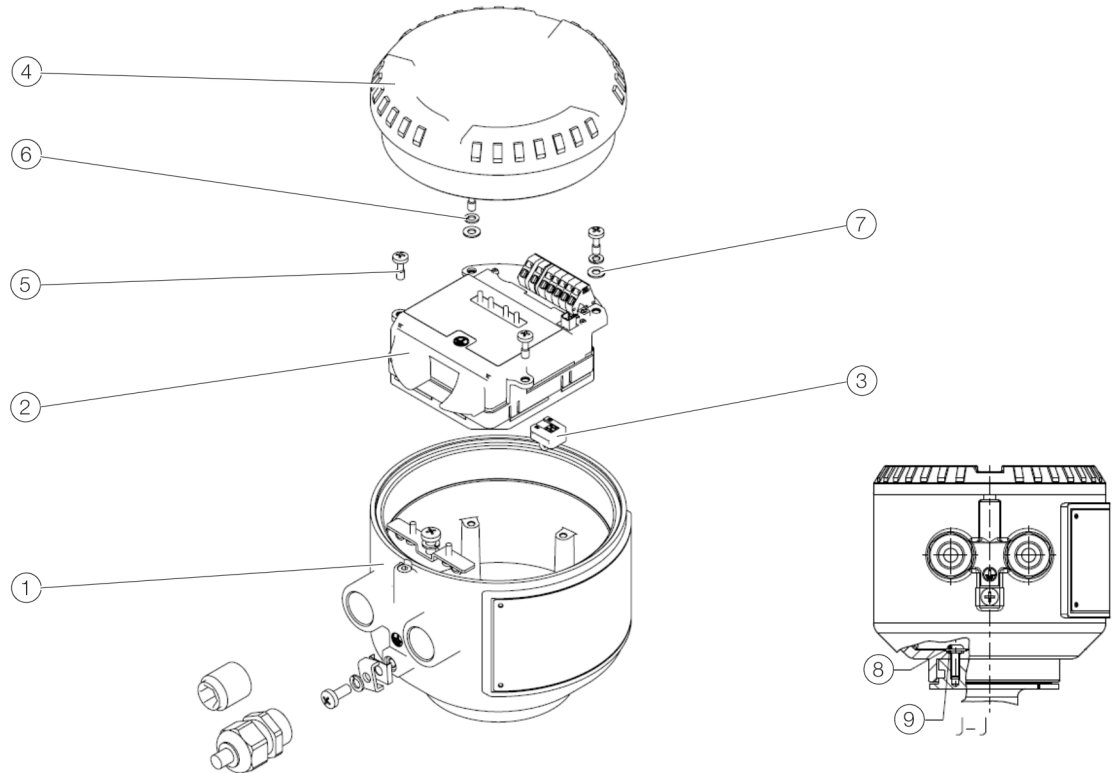


Figure 6: Terminal box

Position	Designation	Variant	Ordering number	Recommended spare part
①	Terminal box aluminum M20	—	3KXF002568U0100	
	Terminal box aluminum NPT	—	3KXF002568U0200	
	Terminal box stainless steel M20	—	3KXF002567U0100	
	Terminal box stainless steel NPT	—	3KXF002567U0200	
②	Slide In Remote	GP	3KXF003071U0100	x
	Slide In Remote	Zone 1, HygenicMaster	3KXF003071U0200	x
	Slide In Remote	Zone 1, ProcessMaster	3KXF003071U0300	x
	Slide In Remote	Division 1, HygenicMaster	3KXF003071U0400	x
	Slide In Remote	Division 1, ProcessMaster	3KXF003071U0500	x
	Slide In Remote	Zone 2, Division 2	3KXF003071U0600	x
③	Sensor memory	—	3KXF002906U0100	
	Sensor memory, pre-programmed	Serial number is required	3KXF002906U0100A	
	Sensormemory Retain clip		3KQZ400047U0100	
④	Cover without glass pre-assembled	GP, Zone 2, Division 2, Division 1	D612A226U01	
	Cover without glass pre-assembled (EX)	Zone 1	D612A226U02	
	Cover without glass pre-assembled	Stainless steel	3KQZ407109U0100	
⑤	Pan-head screw with cross recess M4 x 12	—	D396A014U02	
	Spacer bolt for Ex M4 x 8 SW7	Accessories for pos. ⑤ for zone 1	3KXF002616U0100	
⑥	Spring washer B 4.0 DIN 127 stainless	—	D085C020BU20	
⑦	Washer A 4.3 DIN 125 without chamfer stainless	—	D085A021AU20	
⑧	Pan head screw ISO7380 M5 x 16 A2	—	3KQP000043U0100	
⑨	O-ring 4.76 x 1.78 NBR	—	D101A034U07	

## ... 3 Spare parts list

### Electromagnetic flowmeter FEP631, FEW631, FEH631 in integral mount design

#### Transmitter in dual-compartment housing

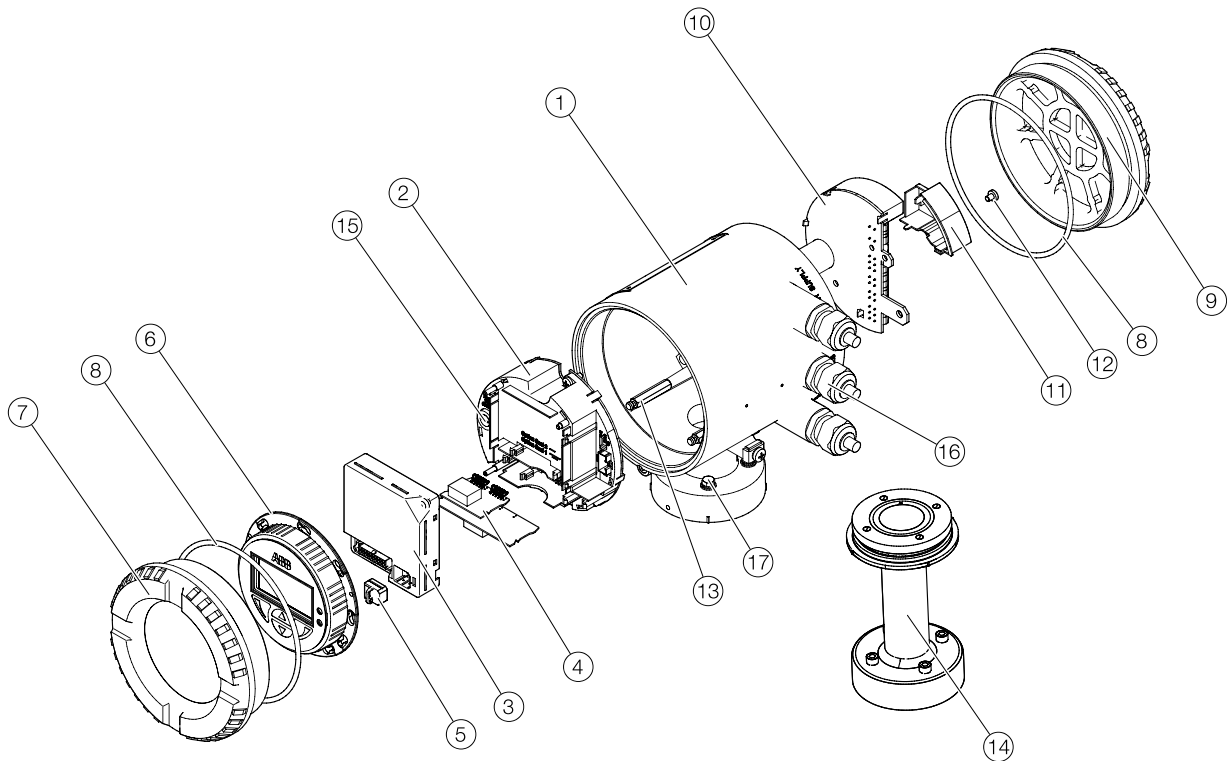


Figure 7: Transmitter in dual-compartment housing – integral mount design

Position	Designation	Variant	Ordering number	Recommended spare part
①+②+ ⑧+⑪	Dual-chamber housing incl. motherboard and EMC board	100...230 V AC / M20 GP, Zone 2, Division 2	3KQZ407133U1100	
		100...230 V AC / M20 Zone 1	3KQZ407133U1200	
		11...30 V DC / M20 GP, Zone 2, Division 2	3KQZ407133U1300	
		11...30 V DC / M20 Zone 1	3KQZ407133U1400	
		100...230 V AC / NPT GP, Zone 2, Division 2	3KQZ407133U1500	
		100...230 V AC / NPT Zone 1	3KQZ407133U1600	
		11...30 V DC / NPT GP, Zone 2, Division 2	3KQZ407133U1700	
		11...30 V DC / NPT Zone 1	3KQZ407133U1800	
		100...230 V AC / NPT Division 1	3KQZ407133U1900	
		11...30 V DC / NPT Division 1	3KQZ407133U2000	

Position	Designation	Variant	Ordering number	Recommended spare part
①+②+ ⑧+⑪	Dual-chamber housing incl. motherboard and EMC board APL Version	100...230 V AC / M20 GP, Zone 2, Division 2	3KQZ407133U2100	
		100...230 V AC / M20 Zone 1	3KQZ407133U2200	
		11...30 V DC / M20 GP, Zone 2, Division 2	3KQZ407133U2300	
		11...30 V DC / M20 Zone 1	3KQZ407133U2400	
		100...230 V AC / NPT GP, Zone 2, Division 2	3KQZ407133U2500	
		100...230 V AC / NPT Zone 1	3KQZ407133U2600	
		11...30 V DC / NPT GP, Zone 2, Division 2	3KQZ407133U2700	
		11...30 V DC / NPT Zone 1	3KQZ407133U2800	
		100...230 V AC / NPT Division 1	3KQZ407133U2900	
		11...30 V DC / NPT Division 1	3KQZ407133U3000	
①	Dual chamber housing	M20	3KQZ407020U0100	
	Dual chamber housing	NPT	3KQZ407020U0300	
②	Motherboard T3	100...230V AC includes 3KQZ402013U0200	D800D520U19	X
	Motherboard T3	11...30 V DC includes 3KQZ402013U0100	D800D520U20	X
③	Front End Board	GP	3KXF004212U0100	x
		Zone 1, Division 1 HygenicMaster	3KXF004212U0200	x
		Zone 1, Division 1 ProcessMaster	3KXF004212U0300	x
		Zone 2, Division 2	3KXF004212U0600	x
④	Option cards	See page 18	—	
⑤	Sensor memory	—	3KXF002906U0100	
	Sensor memory, pre-programmed	Serial number is required	3KXF002906U0100A	
	Sensormemory Retain clip	—	3KQZ400047U0100	

## ... 3 Spare parts list

### ... Electromagnetic flowmeter FEP631, FEW631, FEH631 in integral mount design

Position	Designation	Variant	Ordering number	Recommended spare part
⑥	Cover with glass pre-assembled	—	3KQZ407125U0100	X
⑦	Cover with glass pre-assembled (EX)	GP, Zone 2, Division 2	D612A197U01	
	O-ring cover 118 x 3.70 NBR	Zone 1, Division 1	D612A197U02	
⑧	Cover without glass pre-assembled	—	D101A034U05	
⑨	Cover without glass pre-assembled (EX)	GP, Zone 2, Division 2	D612A226U01	
	Connection board (EMC) / Old variant	Zone 1, Division 1	D612A226U02	
⑩	Connection board (EMC) (EX) / Old variant	For EX 1:1 exchange only	D800D520U21	
		GP, Zone 2, Division 2, Division 1		
	Cover with glass pre-assembled	For EX 1:1 exchange only	D800D520U22	
		Zone 1		
	Connection board (EMC) Rev. 2	GP, Zone 2, Division 2, Division 1	D800D520U23	X
	Connection board (EMC) (EX) Rev. 2	Zone 1	D800D520U24	X
	Connection board (EMC) Rev. 3	APL Version	D800D520U26	
		GP, Zone 2, Division 2, Division 1		
		Replaces 3KQZ402003U0500		
	Connection board (EMC) (EX) Rev. 3	APL Version	D800D520U27	
		Zone 1		
		Replaces 3KQZ402003U0600		
⑪	T3 power supply plastic cover	—	3KQZ407005U0100	
⑫	Screw for mains connection cap M 4 x 6 DIN7985	For Pos. ⑪	D004G106AU20	
⑬	Spacer bolt HMI T3	—	3KQZ407017U0100	
⑭	Tower extension	For high-temperature design	D323B457U02	
	Tower extension	For explosion-proof design	D323B456U02	
⑮	Fuse 5 x 20 mm 1.25 A 1500 A @ 250 V AC	11...30 V DC	3KQR000757U0100	X
	Fuse 5 x 20 mm 0.8 A 500 A @ 250 V AC	100...230 V AC	3KQR000757U0200	X
⑯	Cable gland M20x1.5	—	3KQP000046U0100	
⑰	Hexagon head screw THRD.B.HEAD M5 X 22 DIN933 A2-70	—	D022H115AU20	
—	Flat gasket EPDM 70-KTW ShoreA 80/70x2	FEHx only	D333F030U01	

### Transmitter in single-compartment housing

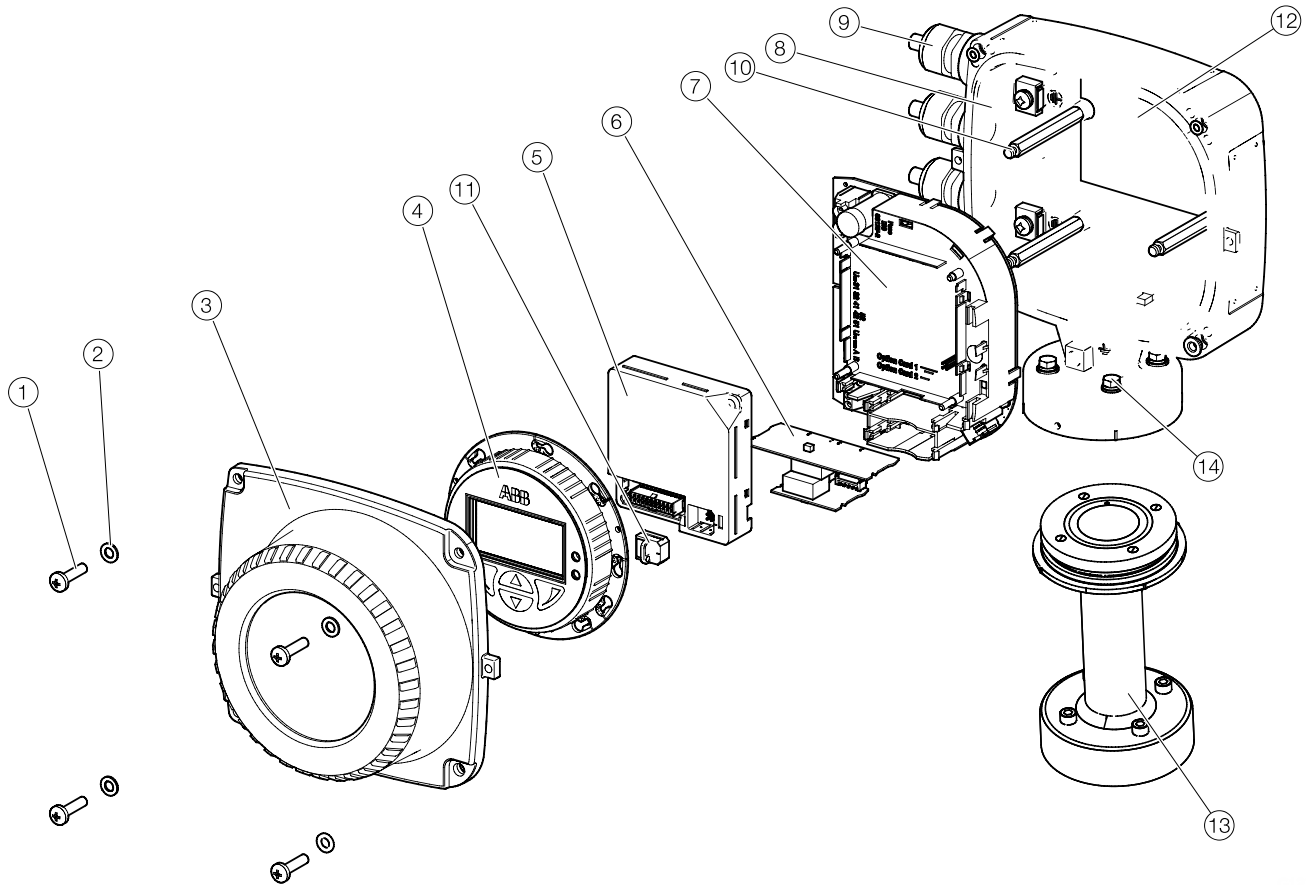


Figure 8: Transmitter in single-compartment housing – integral mount design

Position	Designation	Variant	Ordering number	Recommended spare part
⑤+⑥+⑦	Single-chamber housing incl. motherboard (integral)	100...230 V AC / M20 GP, Zone 2	3KQZ407116U0500	
	Screw 6KT M5 x 20	11...30 V DC / M20 GP, Zone 2	3KQZ407116U0600	
	Washer A 5.3 DIN 125 CrNi-Stahl	100...230 V AC / NPT GP, Division 2	3KQZ407116U0700	
	T4 cover with glass pre-assembled	11...30 V DC / NPT GP, Division 2	3KQZ407116U0800	
①	T4 cover with glass pre-assembled	—	3KQP000087U0300	
②	Single-chamber housing incl. motherboard (integral)	—	D085A024AU20	
③	Screw 6KT M5 x 20	GP, Division 2	3KXF004000U2400	
	Washer A 5.3 DIN 125 CrNi-Stahl	Zone 2	3KXF004000U1400	
④	LCD indicator (HMI)	—	3KQZ407125U0100	X
⑤	Front End Board	GP	3KXF004212U0100	X
	Front End Board	Zone 2, Division 2	3KXF004212U0600	X
⑥	Option cards	See page 18	—	

## ... 3 Spare parts list

### ... Electromagnetic flowmeter FEP631, FEW631, FEH631 in integral mount design

Position	Designation	Variant	Ordering number	Recommended spare part
⑦	Motherboard T4 / Old variant	100...230 V AC	3KQZ402011U0100	
		For EX 1:1 exchange only		
	Motherboard T4 / Old variant	11...30 V DC	3KQZ402011U0200	
		For EX 1:1 exchange only		
	Motherboard T4	100...230 V AC	3KQZ402011U0300	X
	Motherboard T4	11...30 V DC	3KQZ402011U0400	X
⑧	Single-chamber housing (integral)	M20	3KXF002615U0300	
	Single-chamber housing (integral)	NPT	3KXF002615U0400	
⑨	Cable gland M20x1.5	—	3KQP000046U0100	
⑩	Spacer bolt HMI T4	—	3KQZ407047U0100	
⑪	Sensor memory	—	3KXF002906U0100	
	Sensor memory, pre-programmed	Serial number is required	3KXF002906U0100A	
	Sensormemory Retain clip	—	3KQZ400047U0100	
⑫	Insulation plate FRA 0.3 mm	—	3KXF002320U0100	
⑬	Tower extension	For high-temperature design	D323B457U02	
	Tower extension	For explosion-proof design	D323B456U02	
⑭	Hexagon head screw THRD.B.HEAD M5 X 22 DIN933 A2-70	—	D022H115AU20	
—	Gasket Type4 Silicone IRM950-8 sw	For Pos. ⑧	MJAG9902	
—	Flat gasket EPDM 70-KTW ShoreA 80/70x2	FEHxxx only	D333F030U01	

## 4 Upgrade Kits

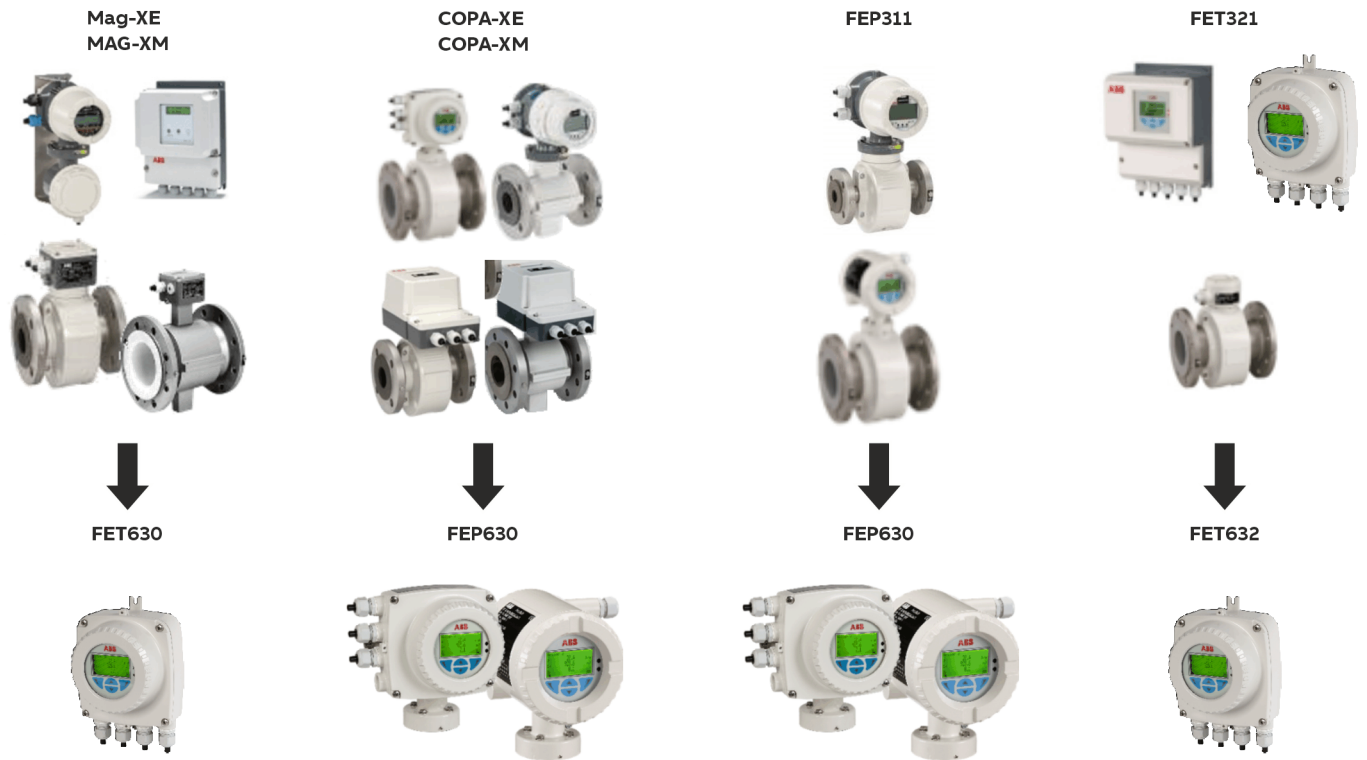


Figure 9: Upgrade kits

Designation	Variant	Ordering number	Recommended spare part
FEX630 T3 Uhigh Retrofit Kit integral for FXM2000/FXE4000	100 to 230 V AC / M20, Dual-compartment housing	D800D631U08	
FEX630 T3 Ulow Retrofit Kit integral for FXM2000/FXE4000	11 to 30 V DC / M20, Dual-compartment housing	D800D631U09	
FEX630 T4 Uhigh Retrofit Kit integral for FXM2000/FXE4000	100 to 230 V AC / M20, Single-compartment housing	D800D631U10	
FEX630 T4 Ulow Retrofit Kit integral for FXM2000/FXE4000	11 to 30 V DC / M20, Single-compartment housing	D800D631U11	
FEX630 T3 Uhigh Retrofit Kit integral for FEx300/FEx500	100 to 230 V AC / M20, Dual-compartment housing	D800D631U12	
FEX630 T3 Ulow Retrofit Kit integral for FEx300/FEx500	11 to 30 V DC / M20, Dual-compartment housing	D800D631U13	
FEX630 T4 Uhigh Retrofit Kit integral for FEx300/FEx500	100 to 230 V AC / M20, Single-compartment housing	D800D631U14	
FEX630 T4 Ulow Retrofit Kit integral for FEx300/FEx500	11 to 30 V DC / M20, Single-compartment housing	D800D631U15	
FEX630 T4 Uhigh Retrofit Kit remote for FXM2000 / FXE4000 / FEx300 / FEx500	100 to 230 V AC / M20, Single-compartment housing	D800D632U08	
FEX630 T4 Ulow Retrofit Kit remote for FXM2000 / FXE4000 / FEx300 / FEx500	11 to 30 V DC / M20, Single-compartment housing	D800D632U09	
Front-End for Retrofit FEP632		3KXS360004L0047	
Front-End for Retrofit FEP631		3KXF004212U0100	

### Note

Upgrades shall be at the user's own risk!

The upgrade can be performed by request on site or by the Göttingen service center.

## 5 Activation codes

Position	Designation	Variant	Ordering number	Recommended spare part
	Release code enhanced diagnostics		3KXS360004L0001	
	Release code FillMAG		3KXS360004L0002	

## 6 Plug-in cards for transmitter

The transmitter has two slots (OC1, OC2) into which plug-in cards can be inserted to provide additional inputs and outputs.

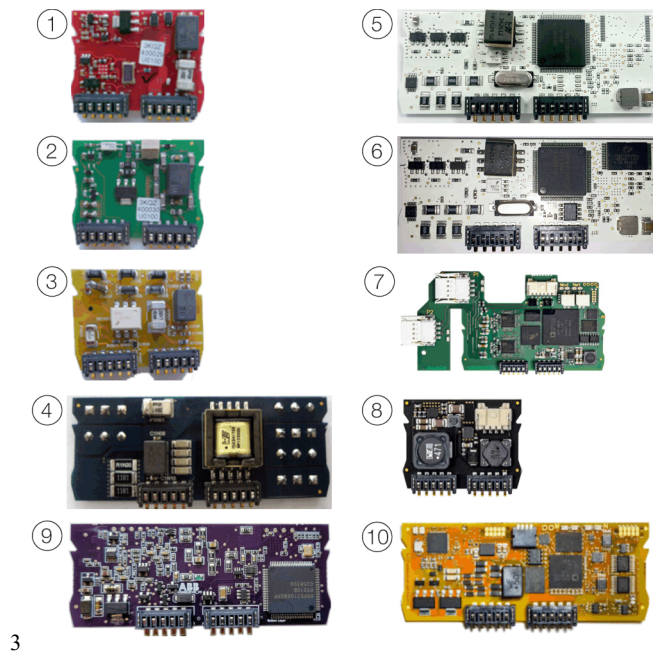


Figure 10: Plug-in cards for Transmittet

Position	Designation	Variant	Ordering number	Recommended spare part
①	Current output, 4 to 20 mA passive (red)	Max. 2	3KQZ400035U0100	
②	Passive digital output (green)	Max. 1 <sup>1)</sup>	3KQZ400030U0100	
③	Passive digital input (yellow)	Max. 2	3KQZ400032U0100	
④	Loop power supply 24 V DC (blue)	Max. 1	3KQZ400031U0100	
⑤	Modbus RTU RS485 (white)	Max. 1 <sup>2)</sup>	3KQZ400028U0100	
⑥	PROFIBUS DP (white)	Max. 1 <sup>2)</sup>	3KQZ400027U0100	
⑦	Standard Ethernet (green) (Modbus TCP, ProfiNet, EtherNet IP, web server)	Max. 1 <sup>2)</sup> , <sup>3)</sup>	3KQZ400037U0100	
⑧	Power-over-Ethernet (POE)	Max. 1 <sup>2)</sup> , <sup>3)</sup>	3KQZ400039U0100	
⑨	PROFIBUS PA (blue)	Max. 1 <sup>2)</sup>	3KQZ400061U0100	
⑩	Ethernet-APL™	Max. 1 <sup>2)</sup> , <sup>4)</sup>	3KQZ400067U0100	

1) Only one plug-in card of passive or active digital output type can be inserted

2) A compatibility check is required for retrofitting

3) The Ethernet plug-in cards can only be used with transmitters with single-compartment housing, for other spare parts see **Ethernet** on page 19.

4) The Ethernet APL plug-in card can only be used with transmitters in dual-compartment housing. Compatible with passive/active digital output and passive digital input plug-in cards.

## 7 Ethernet

Position	Designation	Note	Ordering number	Recommended spare part
	Ethernet (green) (Modbus TCP, ProfiNet, EtherNet IP, web server)	1), 2)	3KQZ400037U0100	
	Power Over Ethernet expansion card	1), 2)	3KQZ400039U0100	
	M12 connector 8 wires complete, Ethernet		3KQZ400051U0100	
	M12 connector 4wires complete, Ethernet		3KQZ400052U0100	
	Netw. cable RJ45 4wires, 5m compl. Eth.		3KQZ400053U0100	
	Netw. cable RJ45 4wires, 10m compl. Eth.		3KQZ400053U0200	
	Netw. cable RJ45 4wires, 15m compl. Eth.		3KQZ400053U0300	
	Netw. cable RJ45 4wires, 20m compl. Eth.		3KQZ400053U0400	
	Netw. cable RJ45 8wires, 5m compl. Eth.		3KQZ400054U0100	
	Netw. cable RJ45 8wires, 10m compl. Eth.		3KQZ400054U0200	
	Netw. cable RJ45 8wires, 15m compl. Eth.		3KQZ400054U0300	
	Netw. cable RJ45 8wires, 20m compl. Eth.		3KQZ400054U0400	
	Locking clip for Ethernet M12 con. 4WCTW		3KQP000163U0100	
	Connector Ethernet expansion card		3KQR001156U0100	

1) A compatibility check is required for retrofitting

2) The Ethernet plug-in cards can only be used with transmitters in a single-compartment housing.

## 8 Signal cables

Number	Designation	Note	Ordering number	Recommended spare part
	Signalkabel 4WCTW 4 x 0,75mm 5 m (16ft)		3KQZ407123U0500	
	Signalkabel 4WCTW 4 x 0,75mm 10 m (33ft)		3KQZ407123U1000	
	Signalkabel 4WCTW 4 x 0,75mm 15 m (49ft)		3KQZ407123U1500	
	Signalkabel 4WCTW 4 x 0,75mm 20 m (65ft)		3KQZ407123U2000	
	Signalkabel 4WCTW 4 x 0,75mm 25 m (82ft)		3KQZ407123U2500	
	Signalkabel 4WCTW 4 x 0,75mm 30 m (98ft)		3KQZ407123U3000	
	Signalkabel 4WCTW 4 x 0,75mm 35 m (114ft)		3KQZ407123U3500	
	Signalkabel 4WCTW 4 x 0,75mm 40 m (131ft)		3KQZ407123U4000	
	Signalkabel 4WCTW 4 x 0,75mm 50 m (164ft)		3KQZ407123U5000	
	Signalkabel 4WCTW 4 x 0,75mm 80 m (262ft)		3KQZ407123U8000	

### Note

The signal cable is supplied unassembled (wires not stripped, without wire end ferrules).

## 9 Accessories


Figure	Designation	Variant	Ordering number	Recommended spare part
	Set for 2" pipe mounting FCB/FCT/ FEP/FET	—	D614L875U01	
	Pipe fitting Type4 Remote	—	3KQZ407135U1100	
—	FronEndBoard disassembly tool	—	3KXS360004L0004	
	Infrared Adapter FZA100	—	FZA100	
	Local Operating Interface for 4-WCT	—	3KXS360040L0003	
	NHA121-NO HART/USB Modem	—	3KDE636710L0002	
	NHA121-NX HART-Ex/USB Modem	—	3KDE636710L0001	

Figure	Designation	Variant	Ordering number	Recommended spare part
—	Flat gasket EPDM FDA 70 Shore-A	DN 3 bis 11 (inside) for FEH6xx	D333B007U11	
—	Flat gasket EPDM FDA 70 Shore-A	DN 15 (inside) for FEH6xx	D333B008U11	
—	Flat gasket EPDM FDA 70 Shore-A	DN 20 (inside) for FEH6xx	D333B009U11	
—	Flat gasket EPDM FDA 70 Shore-A	DN 25 (inside) for FEH6xx	D333B010U11	
—	Flat gasket EPDM FDA 70 Shore-A	DN 32 (inside) for FEH6xx	D333B011U11	
—	Flat gasket EPDM FDA 70 Shore-A	DN 40 (inside) for FEH6xx	D333B012U11	
—	Flat gasket EPDM FDA 70 Shore-A	DN 50 (inside) for FEH6xx	D333B013U11	
—	Flat gasket EPDM FDA 70 Shore-A	DN 65 (inside) for FEH6xx	D333B014U11	
—	Flat gasket EPDM FDA 70 Shore-A	DN 80 (inside) for FEH6xx	D333B015U11	
—	Flat gasket EPDM FDA 70 Shore-A	DN 100 (inside) for FEH6xx	D333B016U11	
—	O-Ring	DN 50 (outside) for FEH6xx	D101A035U01	
—	O-Ring	DN 65 (outside) for FEH6xx	D101A035U02	
—	O-Ring	DN 80 (outside) for FEH6xx	D101A035U03	
—	O-Ring	DN 100 (outside) for FEH6xx	D101A035U04	

## ... 9 Accessories

### Grounding plates

Material – 1.4571 / 316Ti



Figure 11: Grounding Ring

Designation	Note	Ordering number	Recommended spare part
Grounding Ring, 1/10 to 5/16 in, PN 10 to 40	1.4571 / 316Ti	D374A165U21	
Grounding Ring, 3/8 in, PN 10 to 40	1.4571 / 316Ti	D374A165U22	
Grounding Ring, 1/2 in, PN 10 to 40	1.4571 / 316Ti	D374A165U23	
Grounding Ring, 3/4 in, PN 10 to 40	1.4571 / 316Ti	D374A165U24	
Grounding Ring, 1 in, PN 10 to 40	1.4571 / 316Ti	D374A165U25	
Grounding Ring, 1 1/4 in, PN 10 to 40	1.4571 / 316Ti	D374A165U26	
Grounding Ring, 1 1/2 in, PN 10 to 40	1.4571 / 316Ti	D374A165U27	
Grounding Ring, 2 in, PN 10 to 40	1.4571 / 316Ti	D374A165U28	
Grounding Ring, 2 1/2 in, PN 10 to 40	1.4571 / 316Ti	D374A165U29	
Grounding Ring, 3 in, PN 10 to 40	1.4571 / 316Ti	D374A165U30	
Grounding Ring, 4 in, PN 10 to 16	1.4571 / 316Ti	D374A165U31	
Grounding Ring, 5 in, PN 10 to 16	1.4571 / 316Ti	D374A165U32	
Grounding Ring, 6 in, PN 10 to 16	1.4571 / 316Ti	D374A165U33	
Grounding Ring, 8 in, PN 10 to 16	1.4571 / 316Ti	D374A165U34	
Grounding Ring, 10 in, PN 10 to 16	1.4571 / 316Ti	D374A165U35	
Grounding Ring, 4 in, PN25 to 40	1.4571 / 316Ti	D374A165U36	
Grounding Ring, 5 in, PN25 to 40	1.4571 / 316Ti	D374A165U37	
Grounding Ring, 12 in, PN 10	1.4571 / 316Ti	D374A165U39	
Grounding Ring, 14 in, PN 10	1.4571 / 316Ti	D374A165U40	
Grounding Ring, 16 in, PN 10	1.4571 / 316Ti	D374A165U41	
Grounding Ring, 20 in, PN 10	1.4571 / 316Ti	D374A165U42	
Grounding Ring, 24 in, PN 10	1.4571 / 316Ti	D374A165U43	
Grounding Ring, 12 in, PN 16	1.4571 / 316Ti	D374A165U44	
Grounding Ring, 14 in, PN 16	1.4571 / 316Ti	D374A165U45	
Grounding Ring, 16 in, PN 16	1.4571 / 316Ti	D374A165U46	
Grounding Ring, 20 in, PN 16	1.4571 / 316Ti	D374A165U47	
Grounding Ring, 24 in, PN 16	1.4571 / 316Ti	D374A165U48	
Grounding Ring, 8 in, PN 25	1.4571 / 316Ti	D374A165U49	
Grounding Ring, 16 in, PN 25	1.4571 / 316Ti	D374A165U53	
Grounding Ring, 10 in, PN 40	1.4571 / 316Ti	D374A165U57	

Designation	Note	Ordering number	Recommended spare part
Grounding Ring, 1/10 to 5/16 in, CL150	1.4571 / 316Ti	D374A165U58	
Grounding Ring, 3/8 in, CL150	1.4571 / 316Ti	D374A165U59	
Grounding Ring, 1/2 in, CL150	1.4571 / 316Ti	D374A165U60	
Grounding Ring, 3/4 in, CL150	1.4571 / 316Ti	D374A165U61	
Grounding Ring, 1 in, CL150	1.4571 / 316Ti	D374A165U62	
Grounding Ring, 1 1/2 in, CL150	1.4571 / 316Ti	D374A165U64	
Grounding Ring, 1 in, CL150	1.4571 / 316Ti	D374A165U65	
Grounding Ring, 1 1/2 in, CL150	1.4571 / 316Ti	D374A165U66	
Grounding Ring, 3 in, CL150	1.4571 / 316Ti	D374A165U67	
Grounding Ring, 4 in, CL150	1.4571 / 316Ti	D374A165U68	
Grounding Ring, 5 in, CL150	1.4571 / 316Ti	D374A165U69	
Grounding Ring, 6 in, CL150	1.4571 / 316Ti	D374A165U70	
Grounding Ring, 8 in, CL150	1.4571 / 316Ti	D374A165U71	
Grounding Ring, 10 in, CL150	1.4571 / 316Ti	D374A165U72	
Grounding Ring, 12 in, CL150	1.4571 / 316Ti	D374A165U73	
Grounding Ring, 14 in, CL150	1.4571 / 316Ti	D374A165U74	
Grounding Ring, 16 in, CL150	1.4571 / 316Ti	D374A165U75	
Grounding Ring, 20 in, CL150	1.4571 / 316Ti	D374A165U76	
Grounding Ring, 24 in, CL150	1.4571 / 316Ti	D374A165U77	

## ... 9 Accessories

### ... Grounding plates

Material – 2.4610 / Hastelloy® C-4



Figure 12: Grounding Ring

Designation	Note	Ordering number	Recommended spare part
Grounding Ring, 1/10 to 5/16 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U21	
Grounding Ring, 3/8 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U22	
Grounding Ring, 1/2 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U23	
Grounding Ring, 3/4 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U24	
Grounding Ring, 1 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U25	
Grounding Ring, 1 1/4 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U26	
Grounding Ring, 1 1/2 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U27	
Grounding Ring, 2 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U28	
Grounding Ring, 2 1/2 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U29	
Grounding Ring, 3 in, PN 10 to 40	2.4610 / Hastelloy C-4	D374A166U30	
Grounding Ring, 4 in, PN 10 to 16	2.4610 / Hastelloy C-4	D374A166U31	
Grounding Ring, 5 in, PN 10 to 16	2.4610 / Hastelloy C-4	D374A166U32	
Grounding Ring, 6 in, PN 10 to 16	2.4610 / Hastelloy C-4	D374A166U33	
Grounding Ring, 8 in, PN 10 to 16	2.4610 / Hastelloy C-4	D374A166U34	
Grounding Ring, 10 in, PN 10 to 16	2.4610 / Hastelloy C-4	D374A166U35	
Grounding Ring, 4 in, PN 25 to 40	2.4610 / Hastelloy C-4	D374A166U36	
Grounding Ring, 5 in, PN 25 to 40	2.4610 / Hastelloy C-4	D374A166U37	
Grounding Ring, 12 in, PN 10	2.4610 / Hastelloy C-4	D374A166U39	
Grounding Ring, 14 in, PN 10	2.4610 / Hastelloy C-4	D374A166U40	
Grounding Ring, 16 in, PN 10	2.4610 / Hastelloy C-4	D374A166U41	
Grounding Ring, 12 in, PN 16	2.4610 / Hastelloy C-4	D374A166U44	
Grounding Ring, 8 in, PN 25	2.4610 / Hastelloy C-4	D374A166U49	
Grounding Ring, 1/10 to 5/16 in, CL 150	2.4610 / Hastelloy C-4	D374A166U58	
Grounding Ring, 3/8 in, CL 150	2.4610 / Hastelloy C-4	D374A166U59	
Grounding Ring, 1/2 in, CL 150	2.4610 / Hastelloy C-4	D374A166U60	
Grounding Ring, 3/4 in, CL 150	2.4610 / Hastelloy C-4	D374A166U61	
Grounding Ring, 1 in, CL 150	2.4610 / Hastelloy C-4	D374A166U62	
Grounding Ring, 1 1/2 in, CL 150	2.4610 / Hastelloy C-4	D374A166U63	
Grounding Ring, 1 in, CL 150	2.4610 / Hastelloy C-4	D374A166U64	
Grounding Ring, 1 1/2 in, CL 150	2.4610 / Hastelloy C-4	D374A166U65	
Grounding Ring, 3 in, CL 150	2.4610 / Hastelloy C-4	D374A166U66	
Grounding Ring, 4 in, CL 150	2.4610 / Hastelloy C-4	D374A166U67	
Grounding Ring, 5 in, CL 150	2.4610 / Hastelloy C-4	D374A166U68	
Grounding Ring, 6 in, CL 150	2.4610 / Hastelloy C-4	D374A166U69	
Grounding Ring, 8 in, CL 150	2.4610 / Hastelloy C-4	D374A166U70	
Grounding Ring, 10 in, CL 150	2.4610 / Hastelloy C-4	D374A166U71	
Grounding Ring, 12 in, CL 150	2.4610 / Hastelloy C-4	D374A166U72	
Grounding Ring, 14 in, CL 150	2.4610 / Hastelloy C-4	D374A166U74	

## Material – Titanium



Figure 13: Grounding Ring

Designation	Note	Ordering number	Recommended spare part
Grounding Ring, 1/10 to 5/16 in, PN 10 to 40	Titanium	D374A167U21	
Grounding Ring, 3/8 in, PN 10 to 40	Titanium	D374A167U22	
Grounding Ring, 1/2 in, PN 10 to 40	Titanium	D374A167U23	
Grounding Ring, 3/4 in, PN 10 to 40	Titanium	D374A167U24	
Grounding Ring, 1 in, PN 10 to 40	Titanium	D374A167U25	
Grounding Ring, 1 1/4 in, PN 10 to 40	Titanium	D374A167U26	
Grounding Ring, 1 1/2 in, PN 10 to 40	Titanium	D374A167U27	
Grounding Ring, 2 in, PN 10 to 40	Titanium	D374A167U28	
Grounding Ring, 2 1/2 in, PN 10 to 40	Titanium	D374A167U29	
Grounding Ring, 3 in, PN 10 to 40	Titanium	D374A167U30	
Grounding Ring, 4 in, PN 10 to 16	Titanium	D374A167U31	
Grounding Ring, 5 in, PN 10 to 16	Titanium	D374A167U32	
Grounding Ring, 6 in, PN 10 to 16	Titanium	D374A167U33	
Grounding Ring, 8 in, PN 10 to 16	Titanium	D374A167U34	
Grounding Ring, 10 in, PN 10 to 16	Titanium	D374A167U35	
Grounding Ring, 12 in, PN 10	Titanium	D374A167U39	
Grounding Ring, 14 in, PN 10	Titanium	D374A167U40	
Grounding Ring, 20 in, PN 10	Titanium	D374A167U42	
Grounding Ring, 1/10 to 5/16 in, CL 150	Titanium	D374A167U58	
Grounding Ring, 3/8 in, CL 150	Titanium	D374A167U59	
Grounding Ring, 1/2 in, CL 150	Titanium	D374A167U60	
Grounding Ring, 3/4 in, CL 150	Titanium	D374A167U61	
Grounding Ring, 1 in, CL 150	Titanium	D374A167U62	
Grounding Ring, 1 1/2 in, CL 150	Titanium	D374A167U64	
Grounding Ring, 2 in, CL 150	Titanium	D374A167U65	
Grounding Ring, 4 in, CL 150	Titanium	D374A167U67	
Grounding Ring, 5 in, CL 150	Titanium	D374A167U68	
Grounding Ring, 6 in, CL 150	Titanium	D374A167U70	
Grounding Ring, 8 in, CL 150	Titanium	D374A167U71	

## ... 9 Accessories

### ... Grounding plates

Material – PTFE (conductive)

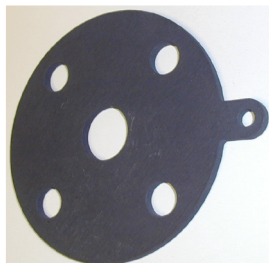


Figure 14: PTFE-Grounding Ring

Designation	Note	Ordering number	Recommended spare part
Grounding Ring, 3/8 in, PN 40	PTFE (conductive)	D377B106U01	
Grounding Ring, 1/2 in, PN 40	PTFE (conductive)	D377B106U02	
Grounding Ring, 3/4 in, PN 40	PTFE (conductive)	D377B106U03	
Grounding Ring, 1 in, PN 40	PTFE (conductive)	D377B106U04	
Grounding Ring, 1 1/4 in, PN 40	PTFE (conductive)	D377B106U05	
Grounding Ring, 1 1/2 in, PN 40	PTFE (conductive)	D377B106U06	
Grounding Ring, 2 in, PN 40	PTFE (conductive)	D377B106U07	
Grounding Ring, 2 1/2 in, PN 40	PTFE (conductive)	D377B106U08	
Grounding Ring, 2 1/2 in, PN 16	PTFE (conductive)	D377B106U09	
Grounding Ring, 3 in, PN 40	PTFE (conductive)	D377B106U10	
Grounding Ring, 4 in, PN 16	PTFE (conductive)	D377B106U11	
Grounding Ring, 4 in, PN 40	PTFE (conductive)	D377B106U12	
Grounding Ring, 3/8 in, CL 150	PTFE (conductive)	D377B106U13	
Grounding Ring, 1/2 in, CL 150	PTFE (conductive)	D377B106U14	
Grounding Ring, 3/4 in, CL 150	PTFE (conductive)	D377B106U15	
Grounding Ring, 1 in, CL 150	PTFE (conductive)	D377B106U16	
Grounding Ring, 1 1/4 in, CL 150	PTFE (conductive)	D377B106U17	
Grounding Ring, 1 1/2 in, CL 150	PTFE (conductive)	D377B106U18	
Grounding Ring, 2 in, CL 150	PTFE (conductive)	D377B106U19	
Grounding Ring, 2 1/2 in, CL 150	PTFE (conductive)	D377B106U20	
Grounding Ring, 3 in, CL 150	PTFE (conductive)	D377B106U21	
Grounding Ring, 4 in, CL 150	PTFE (conductive)	D377B106U22	
Grounding Ring, 5 in, CL 150	PTFE (conductive)	D377B106U24	
Grounding Ring, 2 in, CL 300	PTFE (conductive)	D377B106U25	
Grounding Ring, 2 1/2 in, CL 300	PTFE (conductive)	D377B106U26	

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