

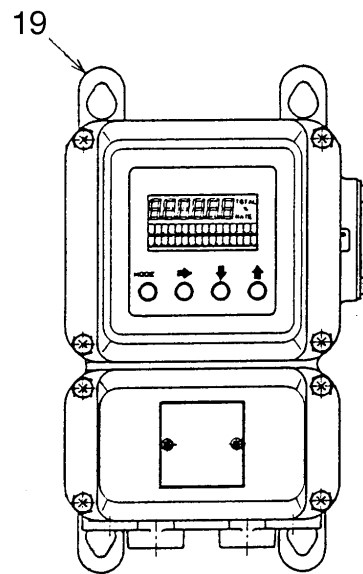
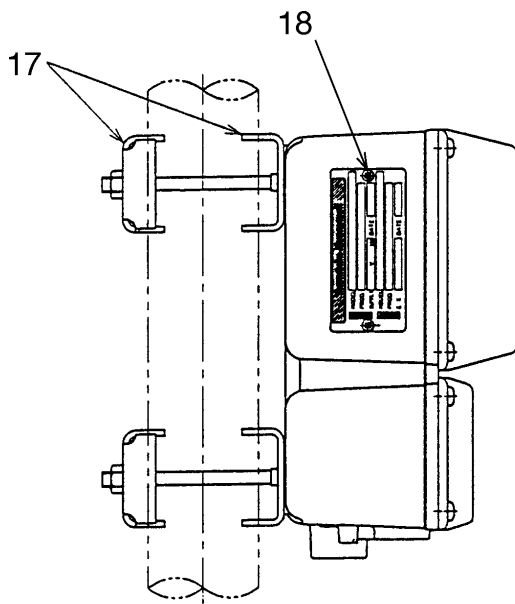
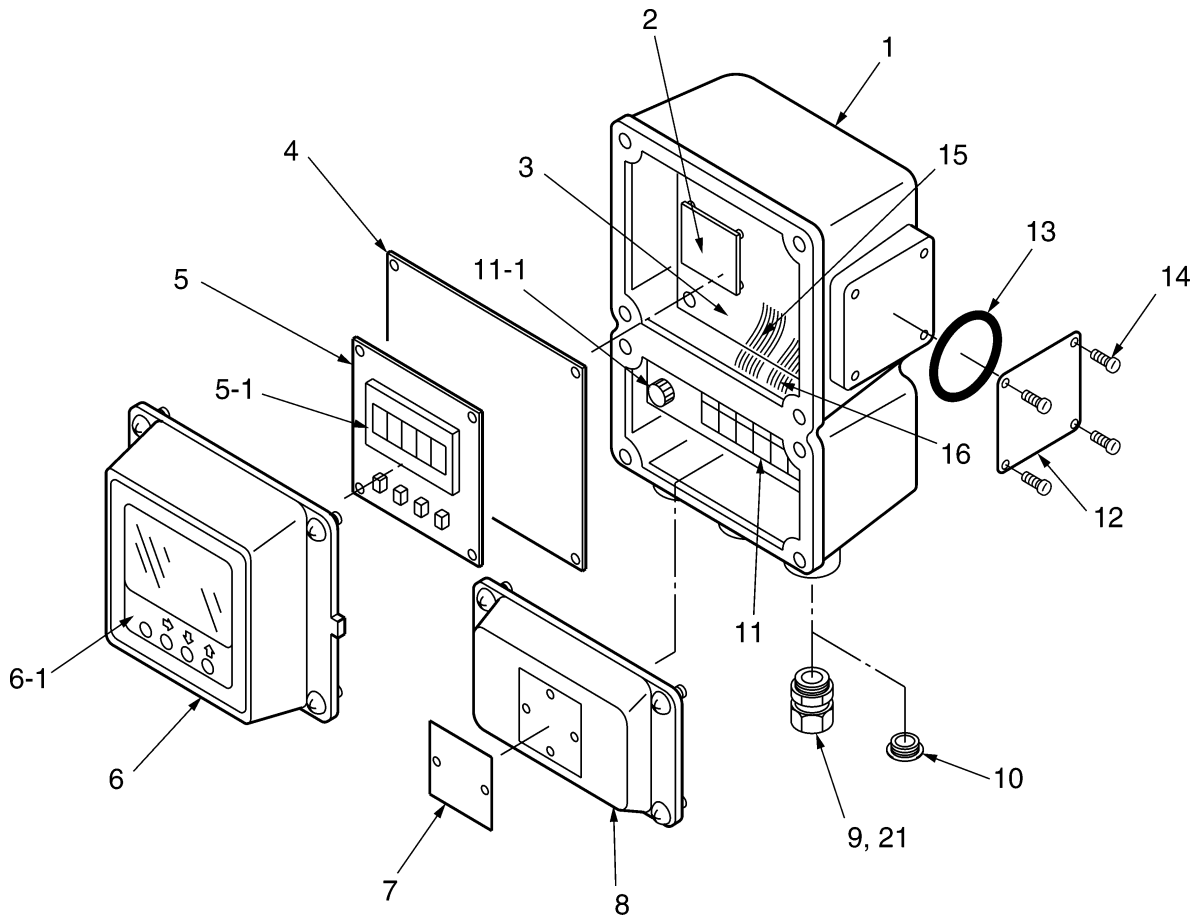
# **MagneW 3000 FLEX / PLUS Electromagnetic Flowmeter**

**Model MGG10C /14C  
MGG11U /12U /18U /19U  
MGG11D /12D /18D /19D  
MGG11F /12F /18F /19F  
MGF11D / 11F  
MGS11U / MGS28U**

## **Parts List**

MagneW3000	Electromagnetic Flowmeter	MGG	1st Edit : 97. 2. 1 Rev.(5) : 04. 2. 1	PL2 – MGG100 – 0100 1 of 26
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**MGG10C**  
**MGG14C**



MagneW3000	Electromagnetic Flowmeter	MGG	1st Edit : 97. 2. 1	PL2 – MGG100 – 0100
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## MGG10C / 14C

Key No.	Description	Quantity	Part No.	
1	Converter main body			
	(Standard finish)	1	80381001-001	
	(Corrosion-resistant finish)	1	80381001-101	
	(Corrosion-proof finish)	1	80381001-201	
2	Contact input/output card			
	(2 inputs)	1	80381221-001	
	(1 input / 1 output)	1	80381221-002	
	(2 outputs)	1	80381221-003	
3	Main card		80381035-001	
4	Displaycontrol card / pulse card			
	(W / pulse)	1	80381219-001	
	(WO / pulse)	1	80381219-002	
5	Data setting device		80381043-001	
	Screw	4	HS311530-062	
5-1	LCD assembly	1	80381224-001	
6	Display cover assembly (W / LCD)		MGG10C	MGG14C
	Horizontal and integral model			
	(Standard finish)	1	80381004-001	80381164-061
	(Corrosion-resistant finish)	1	80381004-101	80381164-161
	(Corrosion-proof finish)	1	80381004-201	80381164-261
	Display cover assembly (WO / LCD)			
	Horizontal and integral model			
	(Standard finish)	1	80381004-011	80381164-071
	(Corrosion-resistant finish)	1	80381004-111	80381164-171
	(Corrosion-proof finish)	1	80381004-211	80381164-271
	Display cover assembly (W / LCD)			
	Vertical and integral, or remote model			
	(Standard finish)	1	80381004-002	80381164-062
	(Corrosion-resistant finish)	1	80381004-102	80381164-162
	(Corrosion-proof finish)	1	80381004-202	80381164-262
Display cover assembly (WO / LCD)				
Vertical and integral, or remote model				
(Standard finish)	1	80381004-012	80381164-072	
(Corrosion-resistant finish)	1	80381004-112	80381164-172	
(Corrosion-proof finish) 1	1	80381004-212	80381164-272	
6-1	Glass (W / LCD)	1	80381009-001	80381163-061
	(WO / LCD)	1	80381009-011	80381163-071

## MGG10C / 14C

Key No.	Description	Quantity	Part No.
7	Tag No. plate (W / Tag No.)	1	80381014-001
	Screw	2	HS311230-050
8	Terminal box cover (Standard finish)	1	80381010-001
	(Corrosion-resistant finish)	1	80381010-101
	(Corrosion-proof finish)	1	80381010-201
9	Watertight gland (Ni plated brass)	1	80356020-101
	(Plastic)	1	80352997-001
	(SUS304)	1	80356020-001
10	Plug (W / Air-purge hole)	1	80381089-001
	(WO / Air-purge hole)	1	80381052-001
11	Terminal assembly (AC100 to 120V / AC200 to 240V)	1	80381015-001
	(DC24V)	1	80381015-002
11-1	Fuse	1	80381226-001
12	Cover	1	80381073-001
13	O-ring	1	80020935-807
14	Screw	4	HS311250-100
15	ABC cable (Signal cable)	1	80381050-001
16	XY cable (Excitation current cable)	1	80381046-001
17	2inch pipe mounting kit (SPCC)	1	80279935-002
	(SUS304)	1	80381130-002
18	Name plate (for MGG10C)	1	80381003-001
	(for MGG14C General)	1	80381162-001
	(for MGG14C NI/Integral)	1	80381169-001
	(for MGG14C NI/Remote)	1	80381169-001
	Screw	2	HS311230-050
19	Wall mounting kit (SPCC)	1	80279935-001
	(SUS304)	1	80381130-001

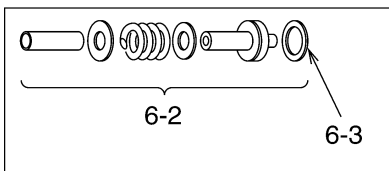
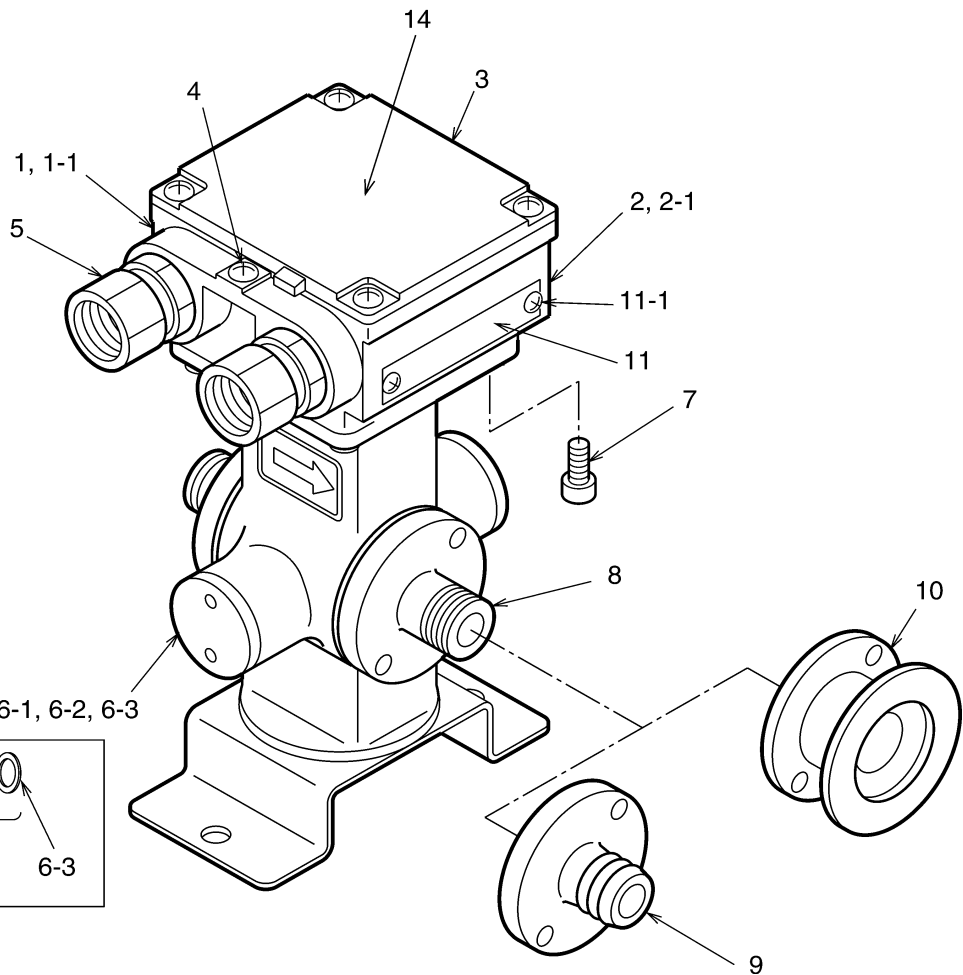
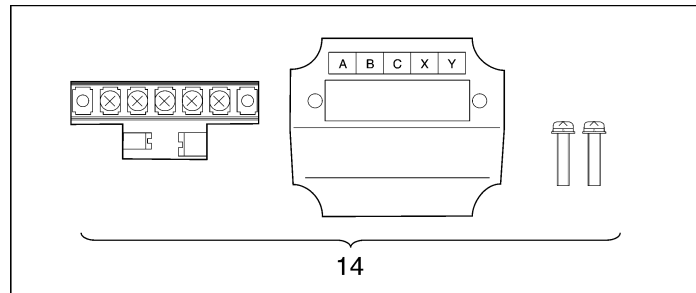
MagneW3000	Electromagnetic Flowmeter	MGG	1st Edit : 97. 2. 1 Rev.(5) : 04. 2. 1	PL2 – MGG100 – 0100 4 of 26
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## MGG10C / 14C

Key No.	Description	Quantity	Part No.
20	Power unit		
	(AC100V)	1	80381220-101
	(AC110V)	1	80381220-102
	(AC120V)	1	80381220-103
	(AC200V)	1	80381220-201
	(AC220V)	1	80381220-202
	(AC240V)	1	80381220-203
	(DC24V / 50Hz)	1	80381220-301
	(DC24V / 60Hz)	1	80381220-302
21	Adaptor assembly		
	(1/2NPT)	1	80381077-001
	(CM20)	1	80381077-002
	(Pg13.5)	1	80381077-003

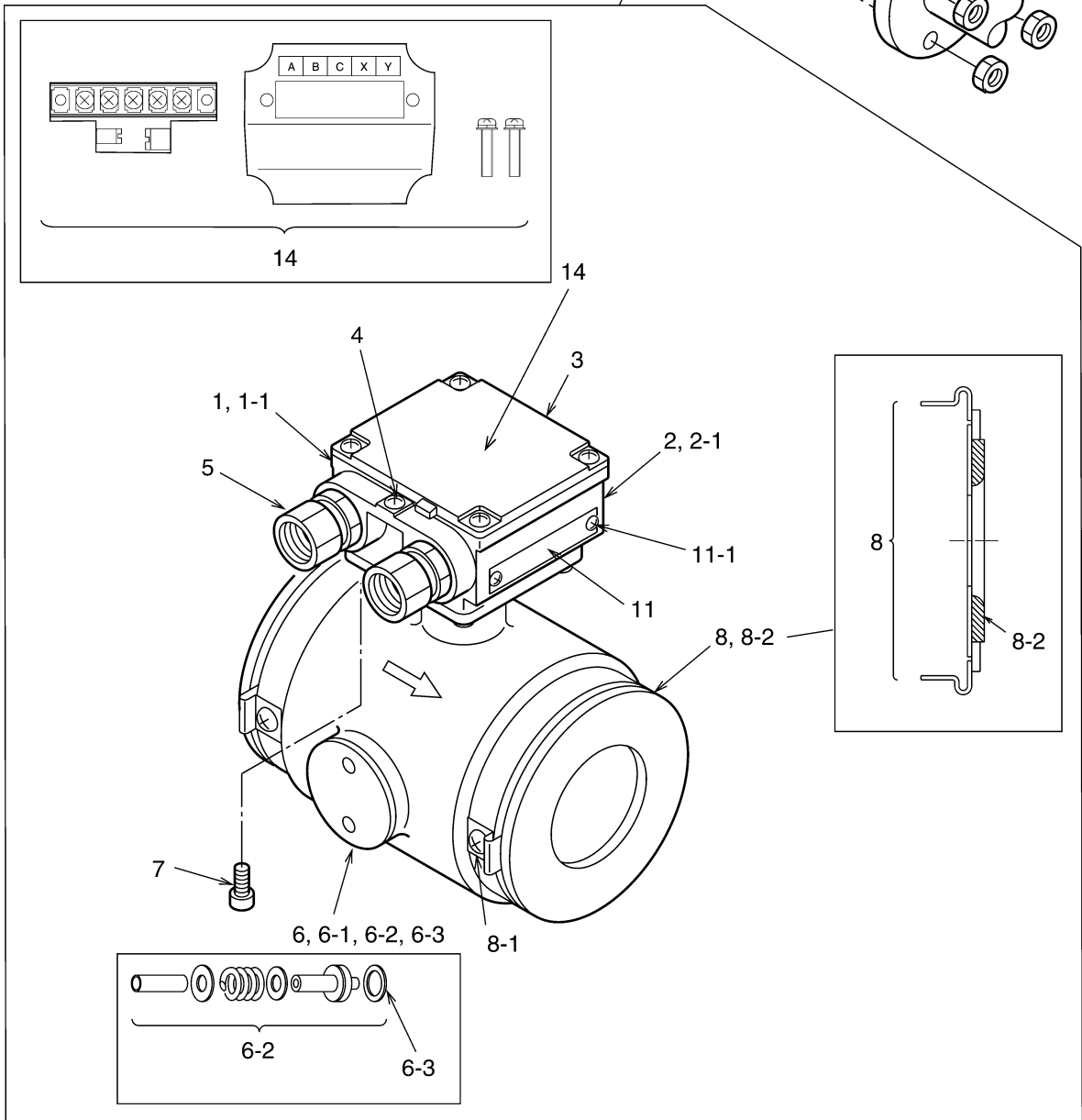
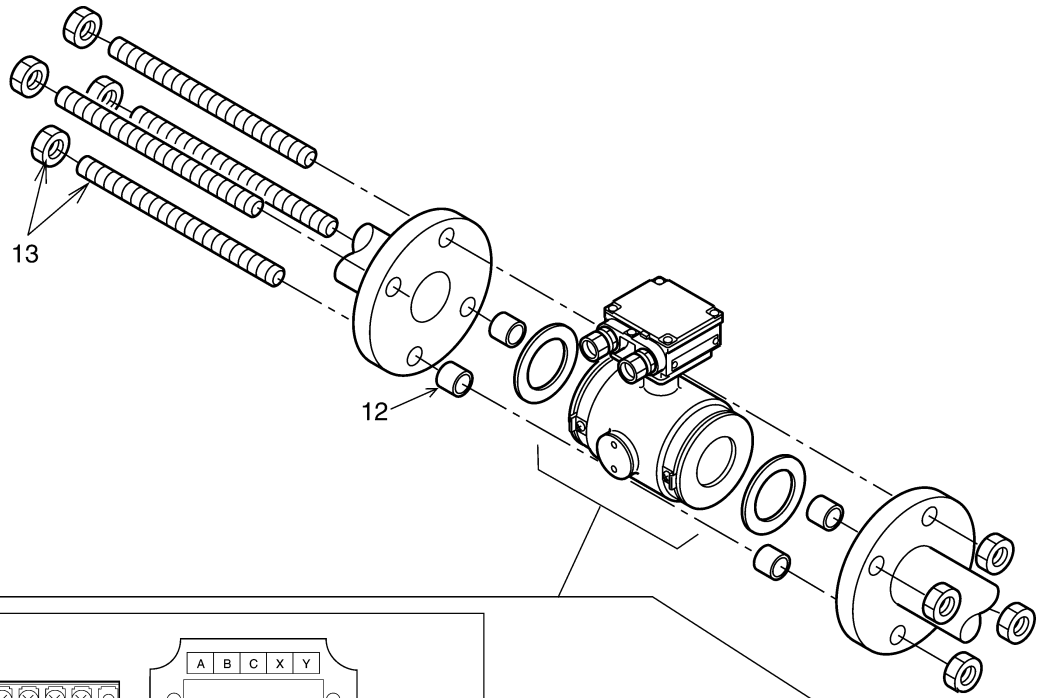
MagneW3000	Electromagnetic Flowmeter	MGG	1st Edit : 97. 2. 1 Rev.(5) : 04. 2. 1	PL2 – MGG100 – 0100 5 of 26
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**MGG11U**  
**MGG12U**  
**MGG18U**  
**MGG19U**

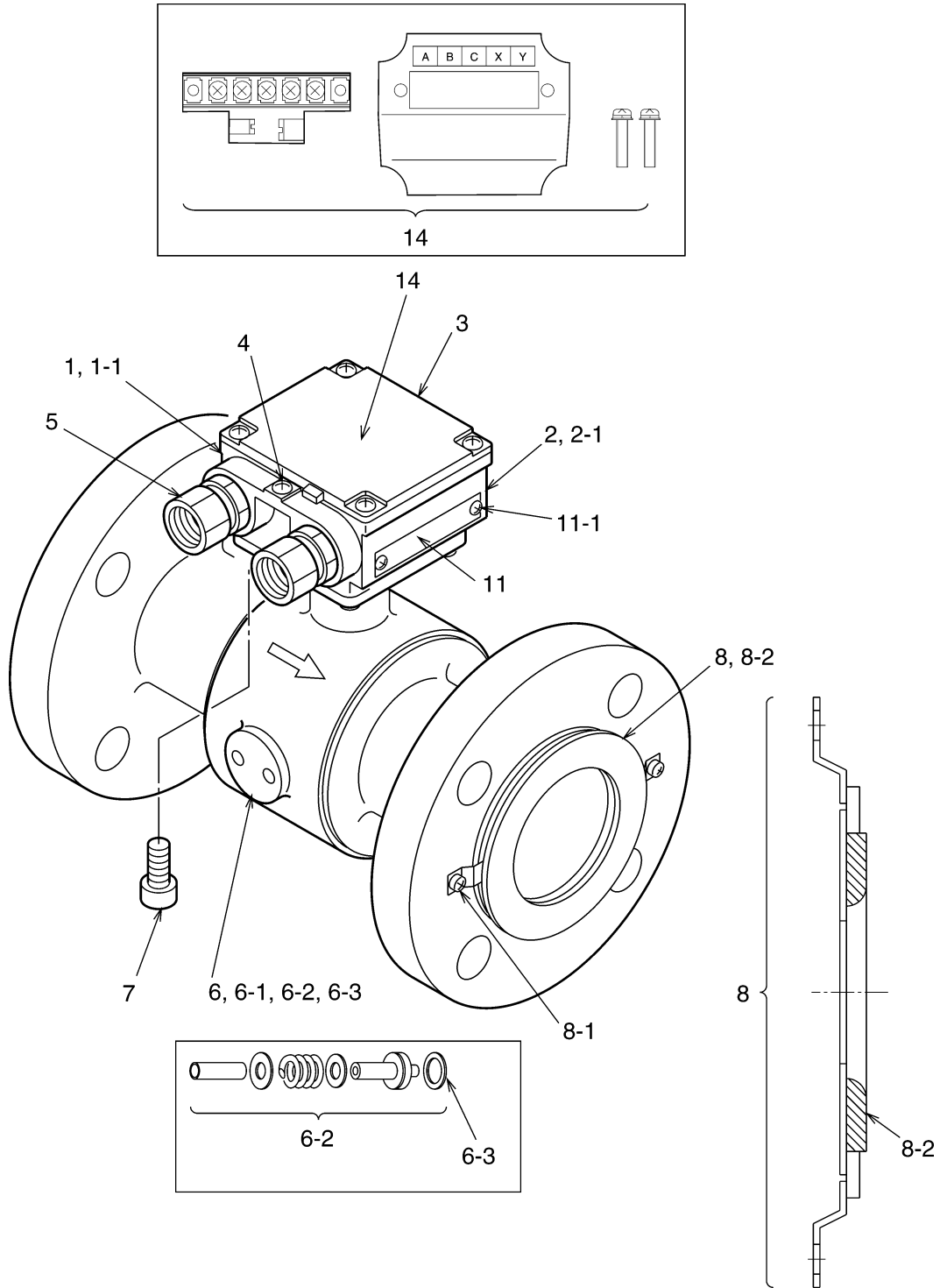


MagneW3000	Electromagnetic Flowmeter	MGG	1st Edit : 97. 2. 1 Rev.(5) : 04. 2. 1	PL2 – MGG100 – 0100 6 of 26
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**MGG11D**  
**MGG12D**  
**MGG18D**  
**MGG19D**  
**MGF11D**

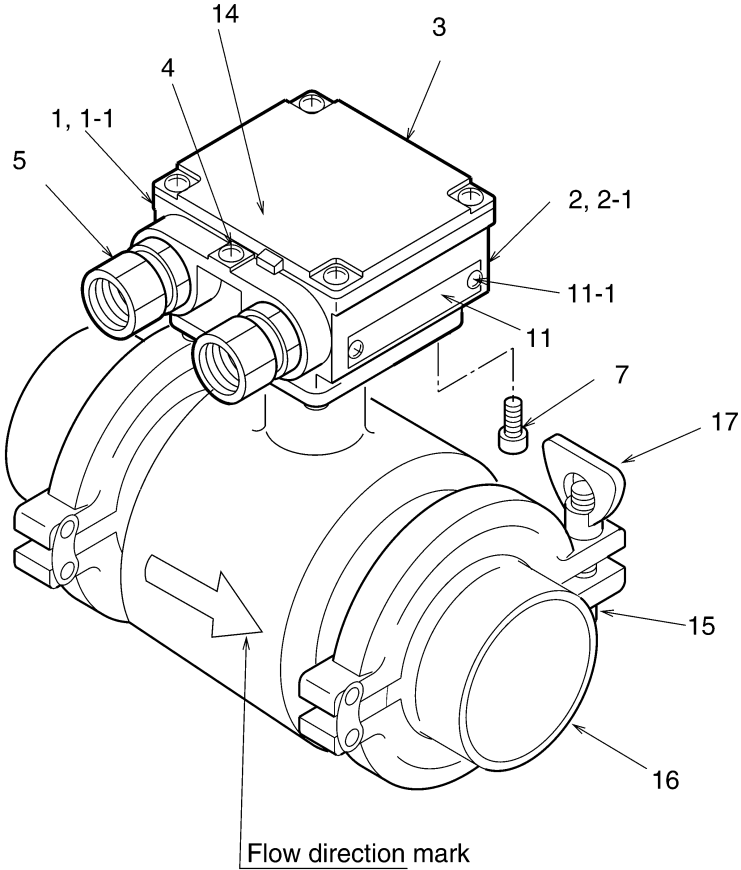
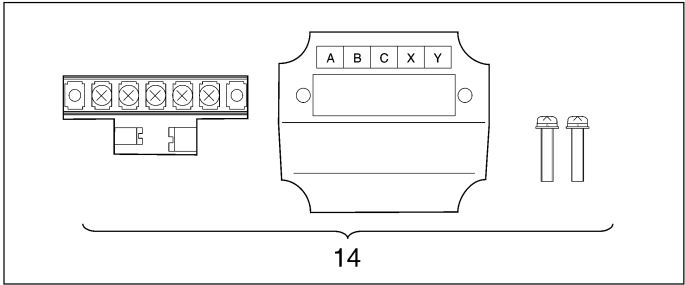


**MGG11F**  
**MGG12F**  
**MGG18F**  
**MGG19F**  
**MGF11F**



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**MGS11U**  
**MGS28U**



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**MGG11U/12U/18U/19U/11D/12D/18D/19D/11F/12F18F/19F,  
MGF11D/11F, MGS11U/28U**

Key No.	Description	Quantity	Part No.
1	Name plate (for MGG11/ 12, MGS11U)	1	80380570-001
	(for MGG18/ 19, MGS28U)	1	80380570-002
1-1	Screw	2	HS311230-050
2	Terminal box		
	(Standard finish G1/2)		80380571-001
	(Standard finish 1/2NPT)		80380571-002
	(Standard finish CM20)		80380571-003
	(Standard finish Pg13.5)		80380571-004
	(Corrosion-resistant finish G1/2)		80380571-005
	(Corrosion-resistant finish 1/2NPT)		80380571-006
	(Corrosion-resistant finish CM20)		80380571-007
	(Corrosion-resistant finish Pg13.5)		80380571-008
	(Corrosion-proof finish G1/2)		80380571-009
	(Corrosion-proof finish 1/2NPT)		80380571-010
	(Corrosion-proof finish CM20)		80380571-011
	(Corrosion-proof finish Pg13.5)		80380571-012
2-1	O-ring	1	80020935-807
3	Terminal box cover		
	(Standard finish)	1	80380573-001
	(Corrosion-resistant finish)	1	80380573-002
	(Corrosion-proof finish)	1	80380573-003
4	Grounding screw	1	HS311240-060
5	Waterproof gland		
	(SUS)	1	80356020-001
	(Ni plated brass)	1	80356020-101
	(Plastic)	1	80352997-001
6	Electrode cover	1	80380744-001
			(See page 12)
6-1	O-ring	1	80020935-192
6-2	Electrode assembly	1	(See page 12 to 15)
6-3	Gasket	1	(See page 12 to 15)
7	Mounting screw	1	80356995-001
8	Grounding ring assembly	1	See page 16 to 19
8-1	Screw	1	See page 16 to 19
8-2	Gasket (PTFE) for exotic material grounding ring	1	See page 20
8	Union	1	See page 21
8-1	Screw	1	See page 21
9	Hose	1	See page 21
9-1	Screw	1	See page 21
10	Clamp	1	See page 21
10-1	Screw	1	See page 21

MagneW3000	Electromagnetic Flowmeter	MGG	1st Edit : 97. 2. 1	PL2 – MGG100 – 0100
			Rev.(5) : 04. 2. 1	10 of 26

**MGG11U/12U/18U/19U/11D/12D/18D/19D/11F/12F/18F/19F,  
MGF11D/11F, MGS11U/28U**

Key No.	Description	Quantity	Part No.
11	Tag No. plate (W / Tag No.) (for MGG General, MGS28U General)	1	80380584-001
	(for MGG18,MGS28U FM/CSA NI and MGG19)	1	80380384-001
11-1	Screw	2	HS311230-050
12	Centering nuts	4	80380811-ITEM (see page 22 to 23)
13	Bolts and Nuts	1 set	80380810-ITEM (see page 24 to 25)
14	Terminal assembly	1	80380997-001
15	Gasket (for MGS11U/28U)	2	see page 26
16	Ferrule for welding (for MGS11U/28U)	2	see page 26
17	Clamp (for MGS11U/28U)	2	see page 26

MagneW3000	Electromagnetic Flowmeter	MGG	1st Edit : 97. 2. 1 Rev.(5) : 04. 2. 1	PL2 – MGG100 – 0100 11 of 26
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Key No.	Discription	Quantity	Part No.
6	Electrode cover	1	80380744-001
6-1	O-ring	1	80020935-192
6-2	Electrode assembly	1	Table 1-1
6-3	Gasket	1	Table 1-1

Table 1-1

Electrode	Flowmeter size (mm)	PFA		Rubber	
		Key No.6-2	Key No.6-3	Key No.6-2	Key No.6-3
SUS316L	2.5	80356405-001	80356250-001		
	5	80356405-007	80356250-002		
	10	80356405-013	80356051-001		
	15	80356405-013	80356051-001		
	25	80356405-013	80356051-001	80356405-013	80356051-001
	40	80356405-121	80356051-002	80356405-121	80356051-002
	50	80356405-121	80356051-002	80356405-121	80356051-002
	65	80356405-121	80356051-002	80356405-121	80356051-002
	80	80356405-019	80356051-002	80356405-019	80356051-002
	100	80356405-019	80356051-002	80356405-019	80356051-002
	125	80356405-019	80356051-002	80356405-019	80356051-002
	150	80356405-019	80356051-002	80356405-019	80356051-002
	200	80356405-019	80356051-002	80356405-019	80356051-002
	250	80356405-032	80356051-002	80356405-036	
	300	80356405-032	80356051-002	80356405-036	
	350	80356405-032	80356051-002	80356405-036	
	400	80356405-032	80356051-002	80356405-036	
	500	80356405-032	80356051-002	80356405-036	
600	80356405-032	80356051-002	80356405-036		
Hastelloy C	2.5	80356405-003	80356250-001		
	5	80356405-009	80356250-002		
	10	80356405-015	80356051-001		
	15	80356405-015	80356051-001		
	25	80356405-015	80356051-001		
	40	80356405-123	80356051-002		
	50	80356405-123	80356051-002		
	65	80356405-123	80356051-002		
	80	80356405-021	80356051-002		
	100	80356405-021	80356051-002		
	125	80356405-021	80356051-002		
	150	80356405-021	80356051-002		
	200	80356405-021	80356051-002		
	250	80356405-033	80356051-002		
	300	80356405-033	80356051-002		
	350	80356405-033	80356051-002		
	400	80356405-033	80356051-002		
	500	80356405-033	80356051-002		
600	80356405-033	80356051-002			

Table 1-1

Electrode	Flowmeter size (mm)	PFA		Rubber	
		Key No.6-2	Key No.6-3	Key No.6-2	Key No.6-3
Titanium	2.5	80356405-004	80356250-001		
	5	80356405-010	80356250-002		
	10	80356405-016	80356051-001		
	15	80356405-016	80356051-001		
	25	80356405-016	80356051-001	80356405-016	80356051-001
	40	80356405-124	80356051-002	80356405-124	80356051-002
	50	80356405-124	80356051-002	80356405-124	80356051-002
	65	80356405-124	80356051-002	80356405-124	80356051-002
	80	80356405-022	80356051-002	80356405-022	80356051-002
	100	80356405-022	80356051-002	80356405-022	80356051-002
	125	80356405-022	80356051-002	80356405-022	80356051-002
	150	80356405-022	80356051-002	80356405-022	80356051-002
	200	80356405-022	80356051-002	80356405-022	80356051-002
	250	80356405-034	80356051-002		
	300	80356405-034	80356051-002		
	350	80356405-034	80356051-002		
	400	80356405-034	80356051-002		
	500	80356405-034	80356051-002		
600	80356405-034	80356051-002			
Zirconium	2.5	80356405-101	80356250-001		
	5	80356405-103	80356250-002		
	10	80356405-105	80356051-001		
	15	80356405-105	80356051-001		
	25	80356405-105	80356051-001		
	40	80356405-127	80356051-002		
	50	80356405-127	80356051-002		
	65	80356405-127	80356051-002		
	80	80356405-107	80356051-002		
	100	80356405-107	80356051-002		
	125	80356405-107	80356051-002		
	150	80356405-107	80356051-002		
	200	80356405-107	80356051-002		
	250	80356405-110	80356051-002		
	300	80356405-110	80356051-002		
	350	80356405-110	80356051-002		
	400	80356405-110	80356051-002		
	500	80356405-110	80356051-002		
600	80356405-110	80356051-002			

Table 1-1

Electrode	Flowmeter size (mm)	PFA		Rubber	
		Key No.6-2	Key No.6-3	Key No.6-2	Key No.6-3
Tantalum	2.5	80356405-005	80356250-001		
	5	80356405-011	80356250-002		
	10	80356405-017	80356051-001		
	15	80356405-017	80356051-001		
	25	80356405-017	80356051-001		
	40	80356405-125	80356051-002		
	50	80356405-125	80356051-002		
	65	80356405-125	80356051-002		
	80	80356405-023	80356051-002		
	100	80356405-023	80356051-002		
	125	80356405-023	80356051-002		
	150	80356405-023	80356051-002		
	200	80356405-023	80356051-002		
	250	80356405-109	80356051-002		
	300	80356405-109	80356051-002		
	350	80356405-109	80356051-002		
	400	80356405-109	80356051-002		
	Tangsten-carbide	10	80356405-106	80356051-001	
15		80356405-106	80356051-001		
25		80356405-106	80356051-001	80356405-106	80356051-001
40		80356405-128	80356051-002	80356405-128	80356051-002
50		80356405-128	80356051-002	80356405-128	80356051-002
65		80356405-128	80356051-002	80356405-128	80356051-002
80		80356405-108	80356051-002	80356405-108	80356051-002
100		80356405-108	80356051-002	80356405-108	80356051-002
125		80356405-108	80356051-002	80356405-108	80356051-002
150		80356405-108	80356051-002	80356405-108	80356051-002
200		80356405-108	80356051-002	80356405-108	80356051-002
250		80356405-111	80356051-002		
300		80356405-111	80356051-002		
350		80356405-111	80356051-002		
400		80356405-111	80356051-002		
500		80356405-111	80356051-002		
600	80356405-111	80356051-002			

Table 1-1

Electrode	Flowmeter size (mm)	PFA		Rubber	
		Key No.6-2	Key No.6-3	Key No.6-2	Key No.6-3
Platinum/iridium	2.5	80356405-006	80356250-001		
	5	80356405-012	80356250-002		
	10	80356405-018	80356051-001		
	15	80356405-018	80356051-001		
	25	80356405-018	80356051-001		
	40	80356405-126	80356051-002		
	50	80356405-126	80356051-002		
	65	80356405-126	80356051-002		
	80	80356405-024	80356051-002		
	100	80356405-024	80356051-002		
	125	80356405-024	80356051-002		
	150	80356405-024	80356051-002		
	200	80356405-024	80356051-002		
	250	80356405-035	80356051-002		
	300	80356405-035	80356051-002		
	350	80356405-035	80356051-002		
	400	80356405-035	80356051-002		
	500	80356405-035	80356051-002		
600	80356405-035	80356051-002			

**MGG11F/12F/18F/19F, MGF11F**

Grounding ring	Flowmeter size (mm)	Key No.8 Grounding ring assembly	Quantity	Key No.8-1 Screw	Quantity
SUS316	2.5 / 5	80380151-001	1	HS311240-060	2
	10	80380151-002	1	HS311240-060	2
	15	80380151-003	1	HS311240-060	2
	25	80380648-009	1	HS311240-060	2
	40	80380648-001	1	HS311240-060	2
	50	80380648-002	1	HS311240-060	2
	65	80380648-003	1	HS311240-060	2
	80	80380648-004	1	HS311240-060	2
	100	80380648-005	1	HS311240-060	2
	125	80380648-006	1	HS311240-060	4
	150	80380648-007	1	HS311240-060	4
	200	80380648-008	1	HS311240-060	4
Hastelloy C	2.5 / 5	80380152-001	1	HS311240-060	2
	10	80380152-002	1	HS311240-060	2
	15	80380152-003	1	HS311240-060	2
	25	80380630-001	1	HS311240-060	2
	40	80380631-001	1	HS311240-060	2
	50	80380632-001	1	HS311240-060	2
	65	80380633-001	1	HS311240-060	2
	80	80380634-001	1	HS311240-060	2
	100	80380635-001	1	HS311240-060	2
	125	80380636-001	1	HS311240-060	4
	150	80380637-001	1	HS311240-060	4
	200	80380638-001	1	HS311240-060	4
	250	80356519-002	1	HS311240-060	4
	300	80356520-002	1	HS311240-060	4
	350	80356521-002	1	HS311240-060	4
	400	80356522-002	1	HS311240-060	4
	450	80381430-002	1	HS311240-060	4
	500	80356523-002	1	HS311240-060	4
600	80356524-002	1	HS311240-060	4	
Titanium	2.5 / 5	80380152-301	1	HS311240-060	2
	10	80380152-302	1	HS311240-060	2
	15	80380152-303	1	HS311240-060	2
	25	80380630-002	1	HS311240-060	2
	40	80380631-002	1	HS311240-060	2
	50	80380632-002	1	HS311240-060	2
	65	80380633-002	1	HS311240-060	2
	80	80380634-002	1	HS311240-060	2
	100	80380635-002	1	HS311240-060	2
	125	80380636-002	1	HS311240-060	4
	150	80380637-002	1	HS311240-060	4
	200	80380638-002	1	HS311240-060	4
	250	80356639-001	1	HS311240-060	4
	300	80356639-002	1	HS311240-060	4
	350	80356639-003	1	HS311240-060	4
	400	80356639-004	1	HS311240-060	4
	450	80356639-007	1	HS311240-060	4
	500	80356639-005	1	HS311240-060	4
600	80356639-006	1	HS311240-060	4	

MagneW3000	Electromagnetic Flowmeter	MGG	1st Edit : 97. 2. 1	PL2 – MGG100 – 0100
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## MGG11F/12F/18F/19F, MGF11F

Grounding ring	Flowmeter size (mm)	Key No.8 Grounding ring assembly	Quantity	Key No.8-1 Screw	Quantity
Zirconium	2.5 / 5	80380751-101	1	HS311240-060	2
	10	80380751-102	1	HS311240-060	2
	15	80380751-103	1	HS311240-060	2
	25	80380630-007	1	HS311240-060	2
	40	80380631-007	1	HS311240-060	2
	50	80380632-007	1	HS311240-060	2
	65	80380633-007	1	HS311240-060	2
	80	80380634-007	1	HS311240-060	2
	100	80380635-007	1	HS311240-060	2
	125	80380636-007	1	HS311240-060	4
	150	80380637-007	1	HS311240-060	4
	200	80380638-007	1	HS311240-060	4
Tantalum	2.5 / 5	80380152-101	1	HS311240-060	2
	10	80380152-102	1	HS311240-060	2
	15	80380152-103	1	HS311240-060	2
	25	80380630-003	1	HS311240-060	2
	40	80380631-003	1	HS311240-060	2
	50	80380632-003	1	HS311240-060	2
	65	80380633-003	1	HS311240-060	2
	80	80380634-003	1	HS311240-060	2
	100	80380635-003	1	HS311240-060	2
	125	80380636-003	1	HS311240-060	4
	150	80380637-003	1	HS311240-060	4
	200	80380638-003	1	HS311240-060	4
Platinum/iridium	2.5 / 5	80380152-201	1	HS311240-060	2
	10	80380152-202	1	HS311240-060	2
	15	80380152-203	1	HS311240-060	2
	25	80380630-004	1	HS311240-060	2
	40	80380631-004	1	HS311240-060	2
	50	80380632-004	1	HS311240-060	2
	65	80380633-004	1	HS311240-060	2
	80	80380634-004	1	HS311240-060	2
	100	80380635-004	1	HS311240-060	2
	125	80380636-004	1	HS311240-060	4
	150	80380637-004	1	HS311240-060	4
	200	80380638-004	1	HS311240-060	4

**MGG11F/12F/18F/19F, MGF11F**

Gasket	Flowmeter size (mm)	Key No.8-2	Quantity	
PTFE	2.5 / 5	82728099-001	1	
	10	82728099-002	1	
	15	82728099-003	1	
	25	80380613-004	1	
	40	80380613-005	1	
	50	80380613-006	1	
	65	80380613-007	1	
	80	80380613-008	1	
	100	80380613-009	1	
	125	80380613-010	1	
	150	80380613-011	1	
	200	80380613-012	1	

## MGG11U/12U/18U/19U

Union	Flowmeter size (mm)	Key No.8	Quantity	Key No.8-1	Quantity	
SUS316	2.5 / 5	R1/4 external thread	80380567-101	1	HS314203-080	2
		R1/2 external thread	80380567-102	1	HS314203-080	2
	10	1/4NPT external thread	80380567-103	1	HS314203-080	2
		1/2NPT external thread	80380567-104	1	HS314203-080	2
		Rc1/4 internal thread	80380567-105	1	HS314203-080	2
		Rc1/2 internal thread	80380567-106	1	HS314203-080	2
	15	1/4NPT internal thread	80380567-107	1	HS314203-080	2
		1/2NPT internal thread	80380567-108	1	HS314203-080	2
		R1/2 external thread	80380567-117	1	HS314203-080	2
		1/2NPT external thread	80380567-118	1	HS314203-080	2
	10	Rc1/2 internal thread	80380567-119	1	HS314203-080	2
		1/2NPT internal thread	80380567-120	1	HS314203-080	2
		R1/2 external thread	80380567-125	1	HS314203-080	2
		1/2NPT external thread	80380567-126	1	HS314203-080	2
	15	Rc1/2 internal thread	80380567-127	1	HS314203-080	2
		1/2NPT internal thread	80380567-128	1	HS314203-080	2

Hose	Flowmeter size (mm)	Key No.9	Quantity	Key No.9-1	Quantity
SUS316	2.5 / 5	80380567-201	1	HS314203-080	2
	10	80380567-202	1	HS314203-080	2
	15	80380567-203	1	HS314203-080	2

Clamp	Flowmeter size (mm)	Key No.10	Quantity	Key No.10-1	Quantity
SUS316	2.5 / 5	80380567-301	1	HS314203-080	2
	10	80380567-302	1	HS314203-080	2
	15	80380567-303	1	HS314203-080	2

**MGG11D/12D/18D/19D, MGF11D**

Grounding ring	Flowmeter size (mm)	Key No.8	Quantity	Key No.8-1	Quantity
SUS316	2.5 / 5	80380639-001	1	HS314203-050	2
	10	80380639-002	1	HS314203-050	2
	15	80380639-003	1	HS314203-050	2
	25	80380640-001	1	HS314203-050	2
	40	80380641-001	1	HS311230-060	2
	50	80380641-002	1	HS311230-060	2
	65	80380641-003	1	HS311230-060	2
	80	80380641-004	1	HS311240-060	2
	100	80380641-005	1	HS311240-060	2
	125	80380641-006	1	HS311240-060	4
	150	80380641-007	1	HS311240-060	4
	200	80380641-008	1	HS311240-060	4
Hastelloy C	2.5 / 5	80380614-001	1	HS314203-050	2
	10	80380615-001	1	HS314203-050	2
	15	80380616-001	1	HS314203-050	2
	25	80380617-001	1	HS314203-050	2
	40	80380618-001	1	HS311230-060	2
	50	80380619-001	1	HS311230-060	2
	65	80380620-001	1	HS311230-060	2
	80	80380621-001	1	HS311240-060	2
	100	80380622-001	1	HS311240-060	2
	125	80380623-001	1	HS311240-060	4
	150	80380624-001	1	HS311240-060	4
	200	80380625-001	1	HS311240-060	4
Titanium	2.5 / 5	80380614-002	1	HS314203-050	2
	10	80380615-002	1	HS314203-050	2
	15	80380616-002	1	HS314203-050	2
	25	80380617-002	1	HS314203-050	2
	40	80380618-002	1	HS311230-060	2
	50	80380619-002	1	HS311230-060	2
	65	80380620-002	1	HS311230-060	2
	80	80380621-002	1	HS311240-060	2
	100	80380622-002	1	HS311240-060	2
	125	80380623-002	1	HS311240-060	4
	150	80380624-002	1	HS311240-060	4
	200	80380625-002	1	HS311240-060	4
Zirconium	2.5 / 5	80380614-007	1	HS314203-050	2
	10	80380615-007	1	HS314203-050	2
	15	80380616-007	1	HS314203-050	2
	25	80380617-007	1	HS314203-050	2
	40	80380618-007	1	HS311230-060	2
	50	80380619-007	1	HS311230-060	2
	65	80380620-007	1	HS311230-060	2
	80	80380621-007	1	HS311240-060	2
	100	80380622-007	1	HS311240-060	2
	125	80380623-007	1	HS311240-060	4
	150	80380624-007	1	HS311240-060	4
	200	80380625-007	1	HS311240-060	4

## MGG11D/12D/18D/19D, MGF11D

Grounding ring	Flowmeter size (mm)	Key No.8 Grounding ring assembly	Quantity	Key No.8-1 Screw	Quantity
Tantalum	2.5 / 5	80380614-003	1	HS314203-050	2
	10	80380615-003	1	HS314203-050	2
	15	80380616-003	1	HS314203-050	2
	25	80380617-003	1	HS314203-050	2
	40	80380618-003	1	HS311230-060	2
	50	80380619-003	1	HS311230-060	2
	65	80380620-003	1	HS311230-060	2
	80	80380621-003	1	HS311240-060	2
	100	80380622-003	1	HS311240-060	2
	125	80380623-003	1	HS311240-060	4
	150	80380624-003	1	HS311240-060	4
	200	80380625-003	1	HS311240-060	4
Platinum/iridium	2.5 / 5	80380614-004	1	HS314203-050	2
	10	80380615-004	1	HS314203-050	2
	15	80380616-004	1	HS314203-050	2
	25	80380617-004	1	HS314203-050	2
	40	80380618-004	1	HS311230-060	2
	50	80380619-004	1	HS311230-060	2
	65	80380620-004	1	HS311230-060	2
	80	80380621-004	1	HS311240-060	2
	100	80380622-004	1	HS311240-060	2
	125	80380623-004	1	HS311240-060	4
	150	80380624-004	1	HS311240-060	4
	200	80380625-004	1	HS311240-060	4

Gasket	Flowmeter size (mm)	Key No.8-2	Quantity	
PTFE	2.5 / 5	80380613-001	1	
	10	80380613-002	1	
	15	80380613-003	1	
	25	80380613-004	1	
	40	80380613-005	1	
	50	80380613-006	1	
	65	80380613-007	1	
	80	80380613-008	1	
	100	80380613-009	1	
	125	80380613-010	1	
	150	80380613-011	1	
	200	80380613-012	1	

**Parts No. : 80380811-ITEM Centering nuts set (four pieces per one set)**

ITEM	Description	
	Size	Flange type
002	2.5 mm	JIS10/20K 10mm flange
		DIN PN10
		DIN PN16
		DIN PN25
		DIN PN40
	5 mm	JIS10/20K 10mm flange
		DIN PN10
		DIN PN16
		DIN PN25
		DIN PN40
	10 mm	JIS10/20K 10mm flange
		DIN PN10
		DIN PN16
		DIN PN25
		DIN PN40
	15 mm	DIN PN10
DIN PN16		
DIN PN25		
DIN PN40		
003	2.5 mm	JIS10K
		JIS20K
	5 mm	JIS10K
		JIS20K
	10 mm	JIS10K
		JIS20K
15 mm	JIS10K	
	JIS20K	
005	2.5 mm	ANSI150
		JPI150
	5 mm	ANSI150
		JPI150
	10 mm	ANSI150
		JPI150
	15 mm	ANSI150
		JPI150
	25 mm	ANSI150
		JPI150
40 mm	ANSI150	
	JPI150	
007	2.5 mm	ANSI300
		JPI300
	5 mm	ANSI300
		JPI300
	10 mm	ANSI300
		JPI300
15 mm	ANSI300	
	JPI300	
008	50 mm	JIS10K
		JIS20K
		ANSI150
		JPI150
	65 mm	JIS10K
		JIS20K
	80 mm	JIS10K
	100 mm	JIS10K
009	40 mm	JIS10K
		JIS20K
	80 mm	ANSI150
		JPI150
	125 mm	DIN PN10
DIN PN16		

ITEM	Description	
	Size	Flange type
010	2.5 mm	JIS30K 10mm flange
	5 mm	JIS30K 10mm flange
	10 mm	JIS30K 10mm flange
	25 mm	JIS10K
		JIS20K
		ANSI300
	40 mm	JPI300
		DIN PN10
		DIN PN16
		DIN PN25
	50 mm	DIN PN40
		DIN PN10
		DIN PN16
DIN PN25		
65 mm	DIN PN40	
	DIN PN10	
	DIN PN16	
	DIN PN25	
100 mm	DIN PN40	
	DIN PN10	
	DIN PN16	
011	50 mm	ANSI300
		JPI300
	80 mm	DIN PN10
DIN PN16		
DIN PN25		
DIN PN40		
012	2.5 mm	JIS30K
	5 mm	
	10 mm	
	15 mm	
	25 mm	
	50 mm	
150 mm	JIS G3451 F12	
013	125 mm	JIS G3451 F12
	200 mm	
015	80 mm	JIS G3451 F12
	100 mm	
017	150 mm	ANSI150
		JPI150
018	65 mm	ANSI300
		JPI300
	80 mm	JIS20K
	100 mm	JIS20K
019	40 mm	ANSI300
		JPI300
	80 mm	JIS30K
020	100 mm	DIN PN25
		DIN PN40
021	40 mm	JIS30K
022	65 mm	JIS30K
025	100 mm	JIS30K
033	25 mm	DIN PN10
		DIN PN16
		DIN PN25
		DIN PN40
035	65 mm	ANSI150
		JPI150
037	125 mm	ANSI150
		JPI150

**Parts No. : 80380811-ITEM Centering nuts set (four pieces per one set)**

ITEM	Description	
	Size	Flange type
038	100 mm	ANSI150
		JPI150
041	80 mm	ANSI300
		JPI300
042	100 mm	ANSI300
		JPI300
045	2.5 mm	DIN PN10/16/40 10mm flange
	5 mm	
	10 mm	
046	125 mm	ANSI300
		JPI300
048	125 mm	JIS10K
	150 mm	JIS10K
		DIN PN10
	200 mm	JIS10K
049	200 mm	DIN PN10
		DIN PN16
050	200 mm	ANSI150
		JPI150
051	150 mm	ANSI300
		JPI300
052	125 mm	JIS20K
	200 mm	
053	125 mm	JIS30K
	150 mm	JIS20K
054	200 mm	ANSI300
		JPI300
055	125 mm	DIN PN25
		DIN PN40
	150 mm	DIN PN25
		DIN PN40
056	200 mm	JIS30K
057	150 mm	JIS30K
058	200 mm	DIN PN40
059	200 mm	DIN PN25

**Parts No. : 80380810-ITEM Bolts and Nuts (one set for one detector)**

ITEM	Description		
	Size	Flange type	Material
001	2.5 mm	JIS10K	Carbon steel
		JIS20K	
		JIS10/20K 10mm flange	
		DIN PN10	
		DIN PN16	
		DIN PN25	
		DIN PN40	
		DIN PN10/16/40 10mm flange	
	5 mm	JIS10K	
		JIS20K	
		JIS10/20K 10mm flange	
		DIN PN10	
		DIN PN16	
		DIN PN25	
		DIN PN40	
		DIN PN10/16/40 10mm flange	
	10 mm	JIS10K	
		JIS20K	
		JIS10/20K 10mm flange	
		DIN PN10	
		DIN PN16	
		DIN PN25	
		DIN PN40	
		DIN PN10/16/40 10mm flange	
	15 mm	JIS10K	
		JIS20K	
		DIN PN10	
		DIN PN16	
		DIN PN25	
		DIN PN40	
		DIN PN10/16/40 10mm flange	
		DIN PN10/16/40 10mm flange	
	25 mm	DIN PN10	
		DIN PN16	
		DIN PN25	
		DIN PN40	
002	40 mm	JIS10K	Carbon steel
		JIS20K	
		DIN PN10	
		DIN PN16	
		DIN PN25	
		DIN PN40	
		DIN PN10/16/40 10mm flange	
		DIN PN10/16/40 10mm flange	
	50 mm	JIS10K	
		DIN PN10	
		DIN PN16	
		DIN PN25	
	65 mm	JIS10K	
		DIN PN10	
		DIN PN16	
		JIS G3451 F12	
003	50 mm	JIS20K	Carbon steel
		JIS30K	
		JIS20K	
		DIN PN25	
	65 mm	DIN PN40	
		JIS10K	
		DIN PN10	
		DIN PN16	
80 mm	JIS10K		
	DIN PN10		
004	150 mm	JIS G3451 F12	Carbon steel
005	2.5 mm	ANSI150	Carbon steel
		ANSI300	
		JPI150	
		JPI300	
	5 mm	ANSI150	
		ANSI300	
		JPI150	
		JPI300	
	10 mm	ANSI150	
		ANSI300	
		JPI150	
		JPI300	
	15 mm	ANSI150	
		ANSI300	
		JPI150	
		JPI300	
	25 mm	ANSI150	
		JPI150	
	40 mm	ANSI150	
		JPI150	

ITEM	Description		
	Size	Flange type	Material
006	50 mm	ANSI150	Carbon steel
		JPI150	
		ANSI150	
	65 mm	JPI150	
		ANSI150	
		JPI150	
007	50 mm	ANSI300	Carbon steel
		JPI300	
008	65 mm	ANSI300	Carbon steel
		JPI300	
	80 mm	ANSI300	
009	100 mm	ANSI300	Carbon steel
		JPI300	
		ANSI150	
	125 mm	ANSI300	
		JPI150	
		JPI300	
150 mm	ANSI150		
	JPI150		
	JPI300		
010	150 mm	ANSI300	Carbon steel
		JPI300	
011	2.5 mm	JIS30K	Carbon steel
		JIS30K 10mm flange	
	5 mm	JIS30K	
		JIS30K 10mm flange	
	10 mm	JIS30K	
		JIS30K 10mm flange	
		JIS30K	
15 mm	JIS30K		
	JIS10K		
25 mm	JIS20K		
	JIS30K		
012	100 mm	JIS G3451 F12	Carbon steel
013	125 mm	JIS G3451 F12	Carbon steel
014	80 mm	DIN PN25	Carbon steel
		DIN PN40	
		JIS10K	
	100 mm	DIN PN10	
		DIN PN16	
		DIN PN10	
125 mm	DIN PN16		
	DIN PN16		
015	200 mm	JIS G3451 F12	Carbon steel
016	40 mm	JIS30K	Carbon steel
017	65 mm	JIS30K	Carbon steel
018	80 mm	JIS20K	Carbon steel
		JIS30K	
		JIS20K	
	100 mm	DIN PN25	
		DIN PN40	
		JIS10K	
125 mm	JIS10K		
	JIS10K		
	DIN PN10		
019	150 mm	DIN PN10	Carbon steel
		DIN PN16	
		DIN PN10	
200 mm	DIN PN10		
	DIN PN10		
020	200 mm	JIS10K	Carbon steel
		DIN PN16	
021	100 mm	JIS30K	Carbon steel
		JIS20K	
	125 mm	JIS30K	
022	150 mm	JIS20K	Carbon steel
		JIS20K	
023	200 mm	JIS20K	Carbon steel
024	125 mm	DIN PN25	Carbon steel
		DIN PN40	
		DIN PN25	
150 mm	DIN PN40		
	DIN PN40		
025	150 mm	JIS30K	Carbon steel
026	200 mm	JIS30K	Carbon steel
		DIN PN25	
027	200 mm	DIN PN40	Carbon steel
028	25 mm	ANSI300	Carbon steel
		JPI300	
029	100 mm	ANSI150	Carbon steel
		JPI150	
030	40 mm	ANSI300	Carbon steel
		JPI300	
031	200 mm	ANSI150	Carbon steel
		JPI150	
032	200 mm	ANSI300	Carbon steel
		JPI300	

**Parts No. : 80380810-ITEM Bolts and Nuts (one set for one detector)**

ITEM	Description			
	Size	Flange type	Material	
101	2.5 mm	JIS10K	SUS 304	
		JIS20K		
		JIS10/20K 10mm flange		
		DIN PN10		
		DIN PN16		
		DIN PN25		
		DIN PN40		
		DIN PN10/16/40 10mm flange		
	5 mm	JIS10K		
		JIS20K		
		JIS10/20K 10mm flange		
		DIN PN10		
		DIN PN16		
		DIN PN25		
		DIN PN40		
		DIN PN10/16/40 10mm flange		
	10 mm	JIS10K		
		JIS20K		
		JIS10/20K 10mm flange		
		DIN PN10		
		DIN PN16		
		DIN PN25		
		DIN PN40		
		DIN PN10/16/40 10mm flange		
	15 mm	JIS10K		
		JIS20K		
		DIN PN10		
		DIN PN16		
		DIN PN25		
		DIN PN40		
		DIN PN10/16/40 10mm flange		
		DIN PN16/40 10mm flange		
	25 mm	JIS10K		
		DIN PN10		
		DIN PN16		
		DIN PN25		
	102	40 mm		JIS10K
				JIS20K
				DIN PN10
				DIN PN16
				DIN PN25
				DIN PN40
50 mm		JIS10K		
		DIN PN10		
		DIN PN16		
		DIN PN25		
65 mm		JIS10K		
		DIN PN10		
80 mm		JIS G3451 F12		
		JIS20K		
		JIS30K		
		DIN PN10		
103	50 mm	JIS20K		
		JIS30K		
	65 mm	JIS20K		
		DIN PN25		
	80 mm	JIS10K		
		DIN PN10		
104	150 mm	JIS G3451 F12		
		SUS 304		
105	2.5 mm	ANSI150		
		ANSI300		
		JPI150		
		JPI300		
	5 mm	ANSI150		
		ANSI300		
		JPI150		
		JPI300		
	10 mm	ANSI150		
		ANSI300		
		JPI150		
		JPI300		
	15 mm	ANSI150		
		ANSI300		
		JPI150		
		JPI300		
	25 mm	ANSI150		
		JPI150		
		ANSI150		
		JPI150		
	40 mm	ANSI150		
		JPI150		
		ANSI150		
		JPI150		

ITEM	Description		
	Size	Flange type	Material
106	50 mm	ANSI150	SUS 304
		JPI150	
	65 mm	ANSI150	
		JPI150	
	80 mm	ANSI150	
		JPI150	
107	50 mm	ANSI300	SUS 304
108	65 mm	ANSI300	SUS 304
		JPI300	
109	100 mm	ANSI300	SUS 304
		JPI300	
110	150 mm	ANSI150	SUS 304
		ANSI300	
		JPI150	
		JPI300	
111	2.5 mm	JIS30K	SUS 304
		JIS30K 10mm flange	
	5 mm	JIS30K	
		JIS30K 10mm flange	
	10 mm	JIS30K	
		JIS30K 10mm flange	
	15 mm	JIS30K	
		JIS10K	
25 mm	JIS20K		
	JIS30K		
112	100 mm	JIS G3451 F12	SUS 304
113	125 mm	JIS G3451 F12	SUS 304
114	80 mm	DIN PN25	SUS 304
		DIN PN40	
	100 mm	JIS10K	
		DIN PN10	
125 mm	DIN PN10		
	DIN PN16		
115	200 mm	JIS G3451 F12	SUS 304
116	40 mm	JIS30K	SUS 304
117	65 mm	JIS30K	SUS 304
118	80 mm	JIS20K	SUS 304
		JIS30K	
	100 mm	JIS20K	
		DIN PN25	
125 mm	DIN PN40		
	JIS10K		
119	150 mm	JIS10K	SUS 304
		DIN PN10	
		DIN PN16	
120	200 mm	DIN PN10	SUS 304
121	100 mm	JIS10K	SUS 304
		JIS20K	
122	150 mm	JIS30K	SUS 304
		JIS20K	
123	200 mm	JIS20K	SUS 304
		DIN PN25	
		DIN PN40	
		DIN PN25	
124	125 mm	DIN PN40	SUS 304
		DIN PN25	
125	150 mm	DIN PN40	SUS 304
		JIS30K	
126	200 mm	JIS30K	SUS 304
127	200 mm	DIN PN25	SUS 304
		DIN PN40	
128	25 mm	ANSI300	SUS 304
129	100 mm	JPI300	SUS 304
		ANSI150	
130	100 mm	JPI150	SUS 304
		ANSI150	
131	200 mm	ANSI300	SUS 304
		JPI300	
132	200 mm	ANSI150	SUS 304
		JPI150	
133	200 mm	ANSI300	SUS 304
		JPI300	

## MGS11U/MGS28U

### Gasket Silicone

Parts No.	Nominal Size
80356325-001	0.5S (0.5 in.)
80356325-002	1S (1 in.)
80356325-003	1.5S (1.5 in.)
80356325-004	2S (2 in.)
80356325-005	3S (3 in.)
80356325-006	4S (4 in.)
82720684-001	5S (5 in.)

### Ferrule for weld SUS304

Parts No.	Nominal Size
80356323-001	0.5S (0.5 in.) (for 1S/1 in. piping)
80356324-001	0.5S (0.5 in.)
80356324-002	1S (1 in.)
80356324-003	1.5S (1.5 in.)
80356324-004	2S (2 in.)
80356324-005	3S (3 in.)
80356324-006	4S (4 in.)
82720685-001	5S (5 in.)

### Ferrule for weld SUS316L

Parts No.	Nominal Size
82721423-001	0.5S (0.5 in.)
82721423-002	1S (1 in.)
82721423-003	1.5S (1.5 in.)
82721423-004	2S (2 in.)
82721423-005	3S (3 in.)
82721423-006	4S (4 in.)
82720685-002	5S (5 in.)

### Clamp IDF (MGS11U/MGS28U)

Parts No.	Nominal Size
80356326-001	0.5S (0.5 in.)
80356326-002	1S, 1.5S (1 in., 1.5 in.)
80356326-003	2S (2 in.)
80356326-004	3S (3 in.)
80356326-005	4S (4 in.)
82720683-001	5S (5 in.)

### Clamp Tri clamp (MGS28U)

Parts No.	Nominal Size
80380987-001	0.5S (0.5 in.)
80380987-002	1S, 1.5S (1 in., 1.5 in.)
80380987-003	2S (2 in.)
80380987-004	3S (3 in.)