

3. Components

3-1 Bolt Specifications

	Bolt combination specifications		
	Hot dipped galvanizing specifications	SUS304 specification	SUS316 specification
Outer fastening bolt	Hot dipped galvanized	SUS304	SUS316
Fastening bolts of water tank inside gas phase portion	Resin coated	Resin coated	Resin coated
	Hot dipped galvanized	SUS304	SUS304
Fastening bolts of water tank inside submerged part	SUS304	SUS304	SUS316

Other combinations are considered special order specifications.

Hot dip galvanized bolt specifications: Hot dipped galvanizing (JIS H 8641 HDZ35) on a steel hexagon bolt

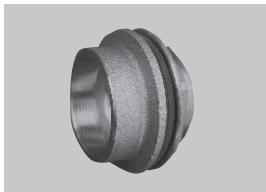
SUS304 bolt specifications: SUS304 (A2) hexagon bolt

SUS316 bolt specifications: SUS316 (A4) hexagon bolt

3-2 Gasket Specifications (Gasket Type, Features, Compatible Standards)

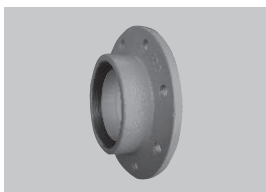
WRAS compatible type	PVC foam	BS6920 compatible WRAS part certified product
	Silicon foam	BS6920 compatible WRAS part certified product
Water Supply Act compatible type	EPDM foam	Compatible with leaching standards of Water Supply Act

3-3 Flange Specifications



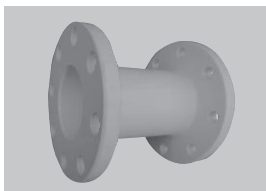
Name : CAC socket
 Bore sizes : 15 to 65 A
 Material : Copper alloy casting (JIS H 5120)
 Connecting method : Parallel pipe thread (JIS B 0202)

Nominal diameter	φD
15	40
20	50
25	60
32	70
40	80
50	90
65	120



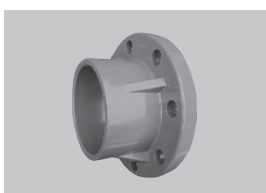
Name : Piping flanges with core
 Bore sizes : 20 to 150 A
 Material : Cast iron epoxy powder coating
 Connecting method : Pipe taper screw (JIS B 0203)

Nominal diameter	φD	L
20	100	25.5
25	125	29
32	135	31
40	140	32
50	155	35
65	175	39
80	185	41
100	210	48
125	250	53
150	280	53



Name : Double-sided Piping flanges
 Bore sizes : 20 to 200 A
 Material : Cast iron nylon powder coating
 Connecting method : JIS 10K flange

Nominal diameter	φD	L	Nominal diameter	φD	L
20	100	150	80	185	180
25	125		100	210	
32	135		125	250	
40	140		150	280	
50	155		200	330	
65	175				



Name : TS Piping flanges
 Bore sizes : 20 to 200 A
 Material : Polyvinyl chloride (JIS B 2212)
 Connecting method : Adhesion

Nominal diameter	φD	L	Nominal diameter	φD	L
15	95	35	80	185	73
20	100	40	100	210	93
25	125	46	125	250	114
32	135	50.5	150	280	142
40	140	61.5	200	330	161
50	155	71	250	400	167
65	175	70	300	445	167

3-4 Special parts specifications

Panel Type

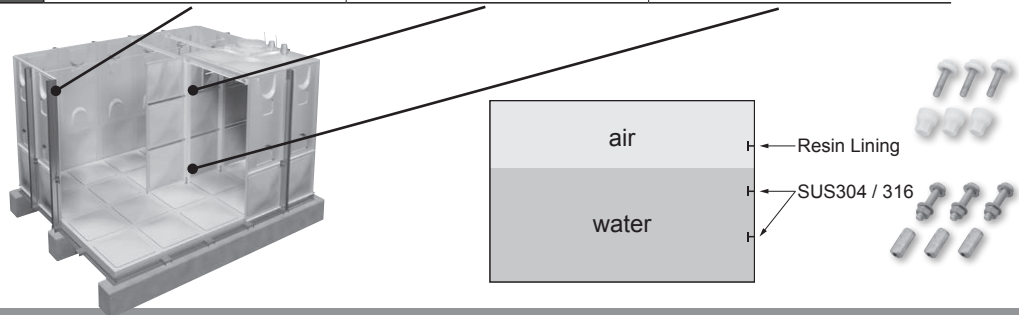
Product Name	horizontal seismic coefficient	Non insulation Insulation
GE	Non-Seismic	GRP
GSE		GRP with insulation
GA	Kh=2/3	GRP
GSA		GRP with insulation
GF	Kh=1.0	GRP
GSF		GRP with insulation
GH	Kh=1.5	GRP
GSH		GRP with insulation
GJ	Kh=2.0	GRP
GSJ		GRP with insulation

For NSF type, "-N" is added at the end. Applicable only to GF/GSF, GH/GSH, GJ/GSJ

Bolt Specifications

Note : SPECIAL SPEC takes longer time to make a quotation.

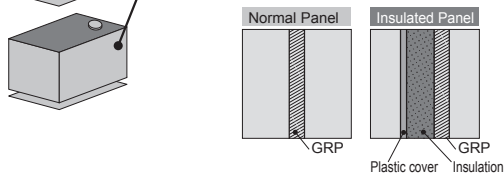
	Ourer fastening bolt	Inside Bolts (Air)	Inside Bolts (Water)
HDG SPEC	HDG	Resin coated HDG	SUS304
SUS304 SPEC	SUS304	Resin coated SUS304	SUS304
SUS316 SPEC	SUS316	Resin coated SUS304	SUS316
SPECIAL SPEC	()	()	()



Option Specifications

◆ Panel

Spec Code	Spec Detail
RFI	All panel with insulation
RSO	Roof panel with Insulation + Bottom panel without Insulation
SMF	Sandwich Manhole GRP Panel
ROI	Roof panel only Insulation
OLD	All panels should be half-size panel, not full-size
6X	Hydrolic pressure 6 times
50mm	Insulation of 50mm thickness
NSF	NSF61 compatible products(gasket : EPDM)



◆ Ladder

Spec Code	Spec Detail
SEL	External ladder : SUS304
SIL	Internal ladder : SUS304
SLL	External & Internal ladder : SUS304
SEL316	External ladder : SUS316
SIL316	Internal ladder : SUS316
SLL316	External & Internal ladder : SUS316

Note : Normal Spec : External ladder → HDG
Internal ladder → PVC

◆ Tanks

Spec Code	Spec Detail
TOP1/TOP2	Top sump (1 × 1 × 0.5) / (1 × 2 × 0.5)
DPL	Detour Current Panel (m*2)
SEA	Tank for Sea water
LLL	Tank figure : L-shaped
IRR	Tank figure : Irregular-Shaped

◆ Others

Spec Code	Spec Detail
HPU	Safe hoop cage for External ladder (HDG)
SHPU	Safe hoop cage for External ladder (SUS304)
WLIA / WLIG	Water level Indicator (Acryl / glass)
HAR	Handrail Frame for Roof (m)
IBV	Internal balance value

