

# OIL-FREE PLAIN GUIDE RAILS

—STANDARD TYPE (COPPER ALLOY • SKS3)—

# OIL-FREE PLAIN GUIDE RAILS

—BOLT HOLE PITCH DESIGNATION TYPE (COPPER ALLOY)—

Ⓜ Non JIS material definition is listed on P.1359 - 1360

**RoHS**

**Mounting bolt hole : 2**

**Mounting bolt hole : 3**

**Mounting bolt hole : 4**

**Table for Bolt Hole Size**

W	T	d1	d2	t1	ω1
12.5	10 · 15 · 20	8	4.5	5	5
15	10 · 15 · 20 · 25	9.5	5.5	6	6
20	15 · 20	11	6.5	7	9
	25 · 30	14	9	9	
25	20 · 25 · 30 · 35				17
30	30 · 35				

**Part Number** **M** **H**

<b>GRZ</b>	Grade-4 high strength brass (CAC304) (Old JIS : HBSc4) Special solid lubricant embedded	—
<b>GRSZ</b>	SKS3 Special solid lubricant embedded	53~56HRC

Ⓜ GRSZ ... Lubricant is not embedded in the lower surface.  
 Ⓜ All corners C≤1 unless specified.  
 Ⓜ Keep temperature under 80°C or lower.

**RoHS**

**Mounting bolt hole : 2 2H**

**Mounting bolt hole : 3 3H**

**Mounting bolt hole : 4 4H**

**Table for Bolt Hole Size**

W	T	d1	d2	t1	ω1
12.5	10 · 15 · 20	8	4.5	5	5
15	10 · 15 · 20 · 25	9.5	5.5	6	6
20	15 · 20	11	6.5	7	9
	25 · 30	14	9	9	
25	20 · 25 · 30 · 35				17
30	30 · 35				

**Part Number** **M**

<b>GRZF-□H</b>	Grade-4 high strength brass (CAC304) (Old JIS : HBSc4) Special solid lubricant embedded
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Ⓜ All corners C≤1 unless specified.  
 Ⓜ Keep temperature under 80°C or lower.

Part Number Type	W	T Selection	L	No. of bolt holes	A	B	C
GRZ (Copper alloy CAC304)	12.5	10	40	2	7.5	—	—
		15	50 60 70	3			
		20	80	4			
		25	90	4			
	15	10	40 50 60	2	7.5	—	—
		15	70 80 90 100 110 120	3			
		20	130	4			
		25	140	4			
	20	15	40 50 60 70 80 90	2	10	—	—
		20	100 110 120 130 140 150	3			
		25	160	4			
		30	180	4			
25	20	40 50 60 70 80 90	2	10	—	—	
	25	100 110	3				
	30	120 (130) 140 (150)	4				
	35	160	4				
30	30	120 140	3	12	—	—	
	35	160	4				
	20	180	4				
	25	200	4				
GRSZ (SKS3)	15	10	40 50 60	2	7.5	—	—
		15	70 80 90 100 110 120	3			
	20	15	50 60 70 80 90	2	10	—	—
		20	100 110 120 130 140 150	3			
25	20	100 110 120 130 140 150	3	10	—	—	
	30	160	4				

Ⓜ L dimensions enclosed in parentheses are not available for T35.

**Alterations** **Part Number** — T — L — (NA)  
 GRZ20 — 25 — 160 — NA

Alteration	Code	Spec.	1Code
	NA	No bolt holes. Ⓜ Applicable to GRZ only	Quotation

Part Number Type	No. (Bolt hole)	W	T Selection	L		Bolt hole pitch 0.5mm increments							
				10mm increments	20mm increments	A		B		C		D	
GRZF (Copper alloy CAC304)	2H	12.5	10	2H 40~70	—	6	B-10	A+10	2H L-6	B+10	3H L-6	C+10	4H L-6
			15	3H 60~100					3H C-10		4H D-10		
			20	4H 100					4H C-10		4H D-10		
			25	4H 100~150					4H C-11.5		4H D-11.5		
	3H	15	15	2H 40~70	—	7	B-11.5	A+11.5	2H L-7	B+11.5	3H L-7	C+11.5	4H L-7
				3H 60~150					3H C-11.5		4H D-11.5		
				4H 100~150					4H C-11.5		4H D-11.5		
				25					4H 100~150		4H C-11.5		4H D-11.5
	4H	20	20	2H 40~150	—	7.5	B-13	A+13	2H L-7.5	B+13	3H L-7.5	C+13	4H L-7.5
				3H 100~150					3H 160~200		4H D-13		
				4H 160~200					4H C-13		4H D-13		
				25					4H 160~200		4H C-13		4H D-13
25	25	25	2H 40~150	—	9	B-16	A+16	2H L-9	B+16	3H L-9	C+16	4H L-9	
			3H 100~150					3H 160~200		4H D-16			
			4H 160~200					4H C-16		4H D-16			
			30					4H 160~200		4H C-16		4H D-16	
30	30	30	2H 40~150	—	10.5	B-19	A+19	2H L-10.5	B+19	3H L-10.5	C+19	4H L-10.5	
			3H 100~150					3H 160~200		4H D-19			
			4H 160~200					4H C-19		4H D-19			
			35					4H 160~200		4H C-19		4H D-19	

Ⓜ Specify L dimensions marked\* in 20mm increments.

**Order** **Part Number** — T — L — A — B — C — D  
 2H GRZF-2H15 — 10 — 70 — A7 — B19  
 3H GRZF-3H15 — 10 — 100 — A7 — B19 — C31  
 4H GRZF-4H15 — 10 — 100 — A7 — B19 — C31 — D43

**Days to Ship** **5** Days Ⓜ Delivery days depend on subsidiary. P.45  
 Express B P.46

**Price** **Quantity discount rate** P.45

Quantity	1~9	10~19	20~30
Rate	—	5%	10%

Ⓜ To be quoted on price & lead time above Max. Q'ty.

**Alterations**

**Part Number** — T — L — A — B — (MC - CC)  
 GRZF-2H15 — 10 — 70 — A7 — B19 — MC

**5** Days

Alterations	Code	Spec.	1Code
	MC	Change to tap hole. Ⓜ Applicable to W12.5~25 Details P.688	Quotation
	CC	C chamfering Details P.688	