


# SINGLE-HEEL GUIDE RAILS

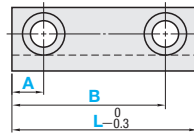
—FREE DESIGNATION TYPE / NON-OIL GROOVE • OIL GROOVE TYPE—

Ⓢ Non JIS material definition is listed on P.1351 - 1352

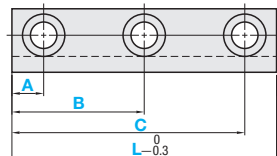


Part Number		M	H
Non-oil groove	Oil groove	SKS3	53~56HRC
FGRA-□H	FGRAM-□H	HPM2T equivalent	37~41HRC
FGRB-□H	FGRBM-□H		

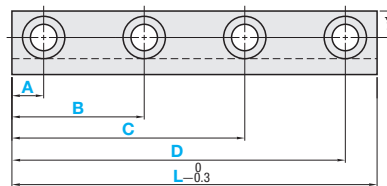
■ Mounting bolt hole : 2 [2H]



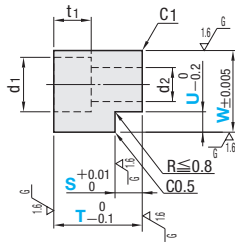
■ Mounting bolt hole : 3 [3H]



■ Mounting bolt hole : 4 [4H]



■ Heel Height (S) and Width (U) Settings



Setting Standard

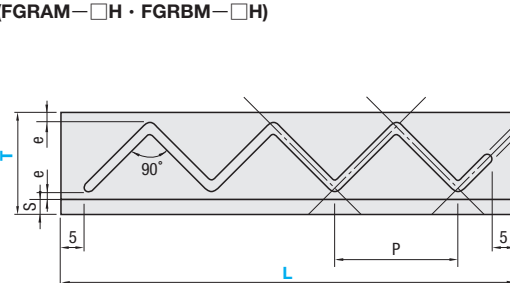
$S \leq T - (t_1 + 2)$
$U \leq W - (\omega_1 + \frac{d_2}{2} + 1)$

Ⓢ All corners  $C \leq 1$  unless specified.

■ Table for Bolt Hole Size

W	T	d1	d2	t1	$\omega_1$
10	10~20	8	4.5	5	4.5
12.5	10~30	8	4.5	5	5
15	10~14	8	4.5	5	5
	15~40	9.5	5.5	6	6
20	15~24	11	6.5	7	9
	25~50	14	9	9	9
25	20~50	14	9	9	10
30	25~50	17	11.5	11	11
40	30~50	19	12.5	13	13

■ Details of Oil Groove (FGRAM-□H • FGRBM-□H)





■ Calculation method for oil groove pitch  
 $P = (T - S - 2e - N) \times 2$

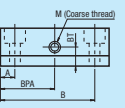

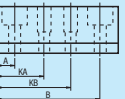


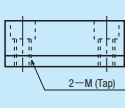

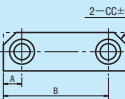

■ Oil Groove Pitch































T-S	P
7	2
7.5	3
10	8
12	12
15	18
17	22
20	28
22	32
25	38

Ⓢ Please note that if  $L \leq P + 10$ , there is the possibility that 1 cycle (1 pitch) of oil groove can not be cut.


Alterations  Part Number - T - L - S - U - A - B - (BP • KP • MC • CC)  
 FGRB-2H15 - 30 - 145 - S12 - U3.5 - A15.0 - B40.5 - MC




 Quotation

Alterations	Code	Spec.	1Code
	BP	Tapping Details  P.683	<b>Quotation</b>
	KP	Dowel hole boring Ⓢ Applicable to  HPM2T equivalent Details  P.683	
	MC	Change to tap hole Ⓢ Applicable to W10~25 Details  P.684	<b>Quotation</b>
	CC	C chamfering Details  P.684	

Part Number	Type	No. (Bolt hole)	W	T 1mm increments	L 5mm increments	S 1mm increments	U 0.5mm increments	Bolt hole pitch 0.5mm increments																		
								A		B		C		D												
								min.	max.	min.	max.	min.	max.	min.	max.											
Non-oil groove	FGRA (SKS3)	2H	10	10~20	35*	Refer to the setting standard before designating.	Refer to the setting standard before designating.	6	B-10	A+10	 L-6  C-10  C-10	B+10	 L-6  D-10	C+10	 L-6											
			12.5	10~30																						
			15	10~14																						
			15	15~40																						
			Oil groove	FGRAM (SKS3)	4H											20	15~24	40~200	7.5	B-13	A+13	 L-7.5  C-13  C-13	B+13	 L-7.5  D-13	C+13	 L-7.5
																25	25~50									
Oil groove	FGRBM (HPM2T equivalent)	4H	25	20~50	40~200	9	B-16	A+16	 L-9  C-16  C-16	B+16	 L-9  D-16	C+16	 L-9													
			30	25~50																						
			40	30~50																						
Oil groove	FGRBM (HPM2T equivalent)	4H	30	25~50	50~200	10.5	B-19	A+19	 L-10.5  C-19  C-19	B+19	 L-10.5  D-19	C+19	 L-10.5													
			40	30~50																						
Oil groove	FGRBM (HPM2T equivalent)	4H	30	30~50	50~200	11.5	B-21	A+21	 L-11.5  C-21  C-21	B+21	 L-11.5  D-21	C+21	 L-11.5													
			40	30~50																						

Ⓢ \* L35 : only applicable to non-oil groove type

Order  Part Number - T - L - S - U - A - B - C - D

 FGRA-2H15	-	30	-	145	-	S12	-	U3.5	-	A15.0	-	B40.5
 FGRA-3H15	-	30	-	145	-	S12	-	U3.5	-	A15.0	-	B40.5 - C95.0
 FGRA-4H15	-	30	-	145	-	S12	-	U3.5	-	A15.0	-	B40.5 - C95.0 - D13.0

Days to Ship  **Quotation**

Price  **Quotation**