

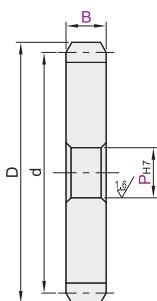
Spur Gears

Module 1.0 Pressure Angle 20°

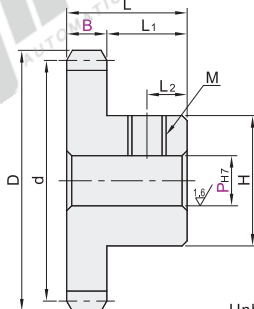
Code	Type	Material		Hardness	Surface Treatment
		GB	Equiv.		
VNF02	Straight Bore	45	S45C	—	Black Oxide
VNF03		0Cr18Ni9	SUS304	—	
VNF11		—	—	—	
VNF22	Straight Bore+Tap	45	S45C	40~55HRC	Black Oxide
VNF23		0Cr18Ni9	SUS304	—	
VNF31		—	—	—	
VNF42	Keyway+Tap	45	S45C	40~55HRC	Black Oxide
VNF43		0Cr18Ni9	SUS304	—	
VNF51		—	—	—	



Gear Shape A Shape



B Shape



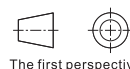
Shaft Bore Specifications P Shape Selection

Straight Bore	Straight Bore+Tap	Keyway+Tap

- ① The Straight Bore+Tap is only suitable for B-shape.
- ② If the Keyway+Tap is A-shaped, there are no screw holes and set screws.
- ③ For Keyway dimensions, please refer to the product introduction.

Unhardened gear accuracy JIS B 1702-1 Class 8

Hardened gear accuracy JIS B 1702-1 Class 9



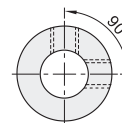
Part Number		Number of Teeth	B	Gears Shape	Shaft Bore Dia. P _{H7} 1 mm Inc.		d	D	H	L	L ₁	L ₂	M	
Code	Module				Straight Bore	Keyway+Tap								
Straight Bore VNF02 VNF03 VNF11	1.0	20	10	A	6~10	8N	20	22	16	10 (B=10)	4	M4		
		21				21	23	18						
		22				22	24							
		23			6~12	8N 10N	23	25						
		24				24	26	20						
		25	12				25	27		8 (B=12)				
		26			6~15	8N~12N	26	28	22					
		27					27	29						
		28			8~17	10N~12N	28	30	24					
		29			6~17	8N~15N	29	31	26					
30	12		8~17		30	32	27	28						
32			8~18	10N~15N	32	34								
34					34	36								
35					35	37								
36					36	38								
38	12				38	40		30						
40			8~20	10N~17N	40	42								
42					42	44								
44					44	46								
45					45	47								
46	12		A			46	48		20					
48				8~30	10N~27N	48	50	44						
50						50	52							
52						52	54							
54				8~32	10N~28N	54	56							
55	12		B			55	57		46					
56						56	58							
58						58	60							
60				10		60	62							
62						62	64							
64	12		10~35	12N~31N	64	66		50						
65							65					67		
66							66					68		
68							68					70		
70							70					72		
72	12		10~39	12N~35N	72	74		56						
75							75					77		
80							80					82		
84							84					86		
85							85					87		
90	12		10~42	15N~38N	90	92		60						
95							95					97		
96							96					98		
100							100					102		
110					17N~38N		110					112		
120	17~49	17N~45N	120	122		70								



Optional Processing

Code	Spec.
------	-------

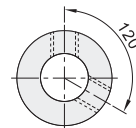
HC90 Adds another set screw at 90° position



[Ordering Code] HC90

- ① Adds another set screw at 90° position.
- ② Not applicable to Shape A.

HC120 Adds another set screw at 120° position



[Ordering Code] HC120

- ① Adds another set screw at 120° position.
- ② Not applicable to Shape A.

MC() Change Tapped Hole Dimensions

[Ordering Code] MC4

③ Tapped hole designation table

Number of Teeth	MC
20~29	M4
30~120	M3 M5

- ④ Not applicable to Shape A.



Please order as shown

Part Number	Code	Module	Number of Teeth	B	Gears Shape	Shaft Bore Dia. P _{H7} (1 mm Inc.)	d
VNF22—1.0—21—B12—B—P8	VNF22	1.0	20	10	A	6~10 8N	20
			21	12	B	6~12 8N 10N	21

⑤ Optional Processing

Part Number	Code	Module	Number of Teeth	B	Gears Shape	Shaft Bore Dia. P _{H7} (1 mm Inc.)	Optional Processing Code
VNF22	1.0	20	10	A		6~10 8N	HC90 HC120 MC()
			21	12	B	6~12 8N 10N	

VNF22—1.0—21—B12—B—P8—HC90



Discount price	Per	1~4	5~
Price	100%	Additional quotation	



Delivery	12
----------	----