

Module 1.5

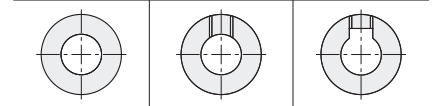
Pressure Angle 20°

Spur Gears

Code	Type	Material		Hardness	Surface Treatment
		GB	Equiv.		
VNJ02	Straight Bore	45	S45C	40~55HRC	Black Oxide
VNJ03		0Cr18Ni9	SUS304	—	—
VNJ11		0Cr18Ni9	SUS304	—	—
VNJ22	Straight Bore+Tap	45	S45C	40~55HRC	Black Oxide
VNJ23		0Cr18Ni9	SUS304	—	—
VNJ31		0Cr18Ni9	SUS304	—	—
VNJ42	Keyway+Tap	45	S45C	40~55HRC	Black Oxide
VNJ43		0Cr18Ni9	SUS304	—	—
VNJ51		0Cr18Ni9	SUS304	—	—

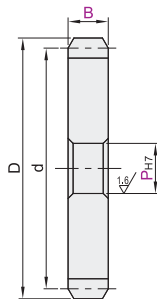


Shaft Bore Specifications P Shape Selection

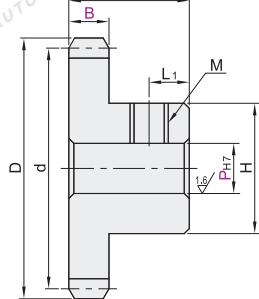


- ① The Straight Bore+Tap is only suitable for B-shape.
- ② If the Keyway+Tap is A-shaped, there are no screw holes and set screws.
- ③ For Keyway dimensions, please refer to the product introduction.

Gear Shape A Shape



B Shape



Unhardened gear accuracy JIS B 1702-1 Class 8
Hardened gear accuracy JIS B 1702-1 Class 9



Part Number	Code	Module	Number of Teeth	B	Gears Shape	Shaft Bore Dia. P _{H7} 1 mm Inc.		d	D	H	L	L ₁	M
						Straight Bore	Keyway+Tap						
Straight Bore	VNJ02	1.5	14	15	A	6~8		21	24	16	24	4.5	
			15			6~12		22.5	25.5	18			
			16			6~12		24	27	20			
			17			6~13		25.5	28.5	21			
			18			6~13	8N~12N	27	30	22			
			19			6~15	8N~12N	28.5	31.5	24			M4
			20			6~16		30	33	25			
			21			6~16		31.5	34.5	25			
			22			6~17		33	36	26			
			23			6~18	8N~13N	34.5	37.5	27			
			24			6~20	8N~15N	36	39	30			
Straight Bore + Tap	VNJ22	1.5	25	15	A	6~22	8N~17N	37.5	40.5	30	27	6	
			26			6~22	8N~17N	39	42	32			
			27			6~23	8N~18N	40.5	43.5	34			
			28			6~23	8N~18N	42	45	35			
			29			6~24	8N~19N	43.5	46.5	35			
			30			6~24	8N~19N	45	48	35			
			32					48	51				
			34					51	54				
			35			6~28	8N~24N	52.5	55.5	40			M5
			36			6~31	8N~28N	54	57				
			38			6~31	8N~28N	57	60				
Keyway+Tap	VNJ42	1.5	40	15	B			60	63		27	6	
			42					63	66				
			44			8~31	10N~28N	66	69	45			
			45					67.5	70.5				
			46					69	72				
			48			8~35	10N~31N	72	75				
			50			8~35	10N~31N	75	78				
			52					78	81				
			54					81	84	50			
			55			12~35	12N~31N	82.5	85.5				
			56					84	87				
			58					87	90				
Keyway+Tap	VNJ51	1.5	60	15	B			90	93		27	6	
			62					93	96				
			64			12~38	12N~35N	96	99				
			65					97.5	100.5	55			
			66					99	102				
			68					102	105				M6
			70					105	108				
			72					108	111				
			75					112.5	115.5				
			80			12~45	12N~42N	120	123	65			
			84					126	129				
			85					127.5	130.5				
Keyway+Tap	VNJ43	1.5	90	15	B			135	138		27	6	
			95					142.5	145.5				
			100					150	153				
			120			12~49	12N~45N	180	183	70			



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 <table border="1"> <thead> <tr> <th>Number of Teeth</th><th>MC</th></tr> </thead> <tbody> <tr> <td>15~24</td><td>M3 M5</td></tr> <tr> <td>25~48</td><td>M4 M6</td></tr> <tr> <td>50~120</td><td>M5 M8</td></tr> </tbody> </table> ④ Not applicable to Shape A.	Number of Teeth	MC	15~24	M3 M5	25~48	M4 M6	50~120	M5 M8
Number of Teeth	MC								
15~24	M3 M5								
25~48	M4 M6								
50~120	M5 M8								



Part Number	Code	Module	Number of Teeth	B	Gears Shape	Shaft Bore Dia. P _{H7}	Optional Processing
VNJ22	1.5	15	14	A	6~8	8N~12N	HC90 HC120 MC()
VNJ22	1.5	15	15	A	6~12	8N~12N	HC90 HC120 MC()
VNJ22	1.5	15	16	A	6~12	8N~12N	HC90 HC120 MC()

Discount price Per 1~4 5~ Price 100% Additional quotation	Delivery 12
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