JL - FCIインサートシリーズ

Fine Ceramics Insert

FCIインサート PAT.

Serialized with integral Type (M10 – M24), More improved reliability

■Features of the Product

Alumina ceramics which is the material made into the Fine Ceramic Insert is features which are half of metals in weight, highest next to diamond in hardness and durable both with acid and alkali. This, taking advantage of such features, is “the insert which is free from corrosion and causes of frost damages”. With integration of the sleeve and the body (threaded part), reliability in its performance has been improved.

- It is more than 96% in purity of Alumina, for the parts of body.
- The parts of thread in the body is in accordance with JIS B1021C
- It is more than 51.4kN and 95.8kN respectively for M12 and M16 in strength of the body at its parts having threads.
- It does not cause bimetallic corrosion to steel reinforcements. Integral wedge shaped body secure firmly the effects of anchoring.

■Uses

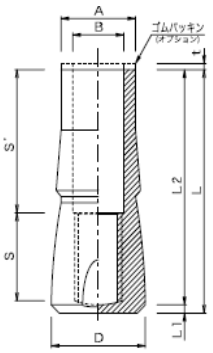
- Scaffoldings for construction of precast concrete bridges.
- Compliance with the code of Japan Pre-stressed Concrete Contractors Association (JPCCA).
- As the insert for which corrosion proof and insulation are required.

■ Others

- For the area of connection between fixing bolt and threads, the prescribed length is required to be kept.
- References are requested to be made to the next page for allowable tensile strength, dedicated mounting fixtures, caps for sealing holes etc.

■FCI

Dimensional drawing



■Standard Dimensions

in mm

Product's Code (FCI-)	Screw	FCI (Main body)								Packing/Option		Remarks
		L	L1	L2	D	A	B	S	S'	t		
M10N x 43	M10	43	2	41	22	17	11	18.5	23.5	1		
M12N x 60	M12	59.5	2	57.5	24	19	13	21.5	35	1.5	5	
M12N x C4	M12	79	2	77	24	19	13	21.5	54.5	1.5	5	For JPCCA
M16N x 65	M16	65.5	2	63.5	33	25	17	24	38.5	2	5	
M16 x 75	M16	75.5	2	73.5	33	25	17	24	48.5	2	5	
M16N x 85	M16	85.5	2	83.5	33	25	17	24	58.5	2	5	
M16N x C111	M16	106	2	104	33	25	17	24	79	2	5	For JPCCA
M20N x 100	M20	100	3	97	42	28	**21**	33	63	2		
M22N x 110	M22	110	4	106	45	31	23	37	69	2		
M24N x 120	M24	120	4	116	50	33	25	40	75	2		

Japan Life Co., Ltd.

1-55-5, Shinkoiwa, Karsushika-ku. Tokyo 124-0024, Japan
Tel: +81-3-3654-7641 Fax: +81-3-3655-7647
E-mail: info@japanlife.co.jp URL: www.japanlife.co.jp

■FIXTURES CORRESPONDING TO FCI

Correspond'g FCI	Hex. Bolt		Fixture E			Fixture CT			Fixture "Pakitto"	
	Shape	Length (mm)	Shape	Body	Bat. Bolt	Shape	Body	Bat. Bolt	Shape	Body
M10N x 43	*FPt=thickn's	FPt* +35		-	-		-	-		-
M12N x 60	of form panel	FPt* +51		-	M8x50		L=55	M6x50		L=51.5
M12N x C4		FPt* +70		-	-		L=70	M6x50		-
M16N x 65		FPt* +57		L=65	M8x50		L=50	M6x50		-
M16 x 75		FPt* +67		-	-		L=70	M6x50		L=58
M16N x 85		FPt* +77		-	-		L=70	M6x50		-
M16N x C111		FPt* +97		L=85	M8x50		L=95	M6x50		-
M20N x 100		FPt* +86		-	-		-	-		-
M22N x 110		FPt* +92		-	-		-	-		-
M24N x 120		FPt* +102		-	-		-	-		-

Design Conditions Provided for

JPCCA's Manual for Design and Installation of Inset

Translation is skipped for this time

It will be given in some other documents

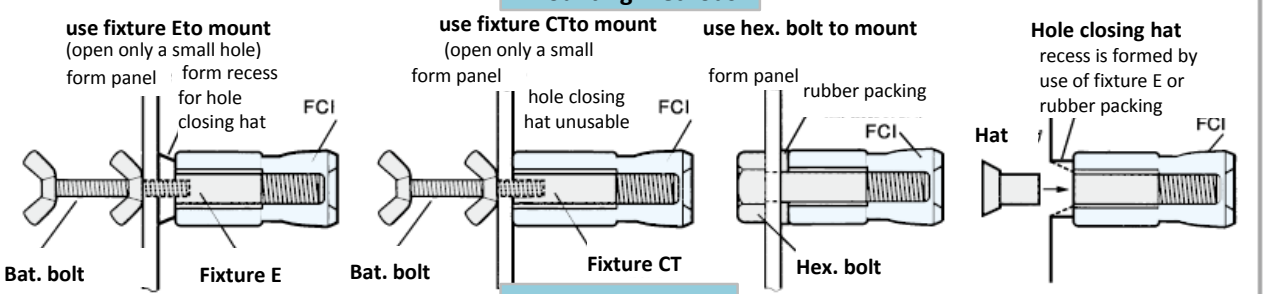
■CAPS TO BE EMBEDDED AFTER FIXING FCI

Shape	Thread	Hole Closing Hat	Protection Cap
Hole closing Hat	M10	–	C
	M12	◎	E
	M16	◎	I
Protection cap	M20	–	No.21
	M22	–	No.23
	M24	–	No.25

TENCILE STRENGTH OF FCI (Values Calcurated for JPCCA)

Thread Code	Insertion depth L (mm)	Outer diameter D (mm)	Tensile Strength/Concrete Corn Breaking: Pa1(kN)						Fixing Bolt		Remarks
			Concrete Strength: Fck(N/mm2)						Thread section area AS(mm)	Long term tensile strength Pa2(kN)	
			24	27	30	40	50	60			
M10N x 43	41	22	4.1	4.4	4.6	5.3	6	6.5	58	9.3	
M12N x 60	57	24	7.4	7.9	8.3	9.6	10.7	11.7	84.3	13.5	For JPCCA scaffoldings
M12N x C4	80	24	13.3	14.1	14.9	17.2	19.3	21.1	84.3	13.5	
M16N x 65	63	33	9.7	10.3	10.8	12.5	14	15.3	157	25.1	
M16 x 75	73	33	12.4	13.2	13.9	16	17.9	19.6	157	25.1	
M16N x 85	83	33	15.4	16.4	17.3	19.9	22.3	24.4	157	25.1	
M16N x C111	107	33	24	25.5	26.9	31	34.7	38	157	25.1	For JPCCA scaffoldings
M20N x 100	97	42	21.6	22.9	24.2	27.9	31.2	34.2	245	39.2	
M22N x 110	106	45	25.7	27.2	28.7	33.1	37	40.6	303	48.5	
M24N x 120	116	50	30.9	32.7	34.5	39.9	44.6	48.8	353	56.5	

Mounting Methods



Example of Use