# KLIMAS Sp. z o.o. ul. W. Witosa 135/137 Kuźnica Kiedrzyńska 42-233 Mykanów

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### PRODUCT DATA SHEET - KRM

## Section 1. PRODUCT DESCRIPTION

#### **BRASS DROP-IN ANCHOR - KRM**

Brass drop-in anchor KRM comprises drop-in sleeve with female thread in combination with a threaded pin or tightened hex head screw. Expansion section of the sleeve is divided by lengthwise cut-outs into either four or six portions (KRM-16). Sleeves are made from CU2 or CU3 grade brass. Fixing in a substrate is executed by screwing the threaded element which causes displacement of the expansion cone and thus creates a permanent anchorage. Sleeve KRW is used as an expansion piece for fasteners with metric thread (metric bolts, threaded rods, hanger bolts).



#### Recommended for substrates:

non-cracked reinforced and non-reinforced concrete of C20/25 ÷ C50/60 strength class

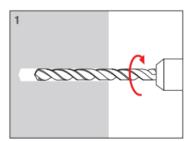
#### Advantages:

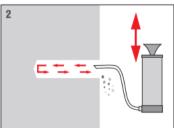
- fast and simple installation by expansion of sleeve through tightening of threaded rod or metric bolt
- ready to carry full capacity instantly
- flush fitting in substrate



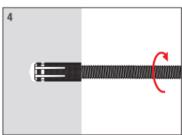
### Section 2. METHOD OF INSTALLATION

- Original sleeves delivered by the manufacturer can be used only 1.
- 2. Before installation check whether parameters of the substrate (where sleeves are to be installed) conform to parameters of the substrate used in testing, based on which characteristic loading resistances of connections were determined
- Install sleeves so that reinforcement of the substrate is not damaged 3.
- 4. Before installation, indicate the drilling points where sleeves are to be installed in accordance with installation guidelines
- 5. Then drill the holes in accordance with the parameters selected (diameter and depth of the hole), perpendicularly to the substrate
- Clean holes with SCF brush (3x) and blow out clean with PCF pump (3x)
- Insert the sleeve into the hole and then tighten threaded pin or screw by applying adequate torque until face of threaded pin or screw is pressed against inner face of the cone which will result in locking of the sleeve in the substrate









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## **PRODUCT DATA SHEET - KRM**

## **Section 3. TECHNICAL DATA**

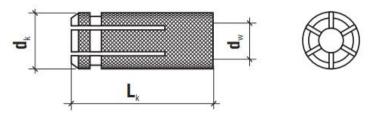
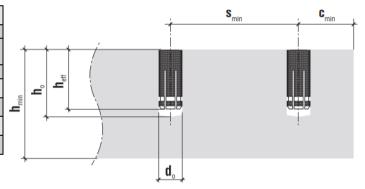


TABLE 1. TECHNICAL PARAMETERS AND INSTALLATION DATA									
Sleeve diameter	dk	[mm]	8	10	12	16			
Hole diameter	d <sub>0</sub>	[mm]	8	10	12	16			
Fixed member hole diameter	df	[mm]	7	9	12	14			
Min. anchorage depth	h <sub>eff</sub>	[mm]	25	31	35	41			
Min. hole depth	h <sub>0</sub>	[mm]	30	36	40	46			
Female thread length	Lg	[mm]	19	26	29	36			
Min. substrate thickness	h <sub>min</sub>	[mm]	100	100	100	100			
Min. spacing between sleeves	Smin	[mm]	75	93	105	123			
Min. distance from substrate edge	C <sub>min</sub>	[mm]	38	47	53	62			
Torque	T <sub>inst</sub>	[Nm]	7	16	31	51			

TABLE 2. RESISTANCE							
Туре	Min. anchorage depth	Non-cracked concrete C20/25 ÷ C50/60					
		Characteristic	Characteristic				
		pull-out strength	shear strength				
	h <sub>eff</sub> [mm]	N <sub>R,k</sub> [kN]	V <sub>R,k</sub> [kN]				
KRM-08	25	5.0	5.0				
KRM-10	31	7.0	7.0				
KRM-12	35	9.0	9.0				
KRM-16	41	11.0	11.0				



<sup>2.52 (</sup>pull-out) / 1.25 (shear)

TABLE 3. SELECTION TABLE							
Product code	Anchor diameter and length	Max. thickness of fixed	Female thread of threaded	Pieces			
		member	pin or screw	per pack			
	d <sub>k</sub> x L <sub>k</sub> [mm]	t <sub>fix</sub> [mm]	dw	[pcs.]			
KRM-080624	8 x 24	-	M6	50			
KRM-100831	10 x 31	-	M8	50			
KRM-121034	12 x 34	-	M10	50			
KRM-161241	16 x 41	-	M12	20			

## **Section 4. REMARKS**

- All previous versions of this Product Data Sheet shall cease to be valid
- Data given in this Product Data Sheet is in accordance with current knowledge and published in good faith. KLIMAS Sp. z o.o. is not responsible for correctness and quality of the fixing if recommendations regarding method of use and installation are not followed.

<sup>\*</sup>Recommended partial safety factor of: