

Page 1 of 2

Certificate No: LR2021533TA-02 Issue Date: 18/07/2022 Expiry Date: 17/07/2027

## **Type Approval Certificate**

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

Manufacturer SKF B.V.

Address Meidoornkade 14, Houten, 3992 AE, Netherlands

**Type** Engine Mountings

**Description** Adjustable Steel Chocks,

DIN 1.1191 / DIN 1.0570 / DIN 1.0577 / DIN 1.1201

(SM -CS / E-CS, SM -CSTR / E-CSTR)

DIN 1.4404 (SM -SS, SM E-SS), DIN 1.7225 - 42CrMo4+QT

(SM LP-ASTR, SM ELP-ASTR)

Trade Name SKF VIBRACON / SKF VIBRACON E and SKF VIBRACON LP / ELP (LOW PROFILE)

**Application** For use as adjustable steel chock on ships, classed or intended to be classed by

Lloyd's Register, for marine equipment, i.e. for installation of propulsion engines, auxiliary engines, generator installations, gear boxes and other

machinery components

Specified Standard Manufacturer's Specification(s)

Lloyd's Register Rules and Regulations for the Classification of Ships, July 2022

Breel Harrhijs

Matthijs Breel

Lead Specialist Propulsion Systems to Lloyd's Register EMEA

A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Page 2 of 2

Certificate No: LR2021533TA-02 Issue Date: 18/07/2022 Expiry Date: 17/07/2027

## **Type Approval Certificate**

**Ratings** See Appendix

Other Conditions Angular faults in alignment up to 4 degrees can be chocked with SM / SM-E

Elements

Angular faults in alignment up to 2 degrees can be chocked with SM LP / -ELP

Elements

SKF VIBRACON Chock Elements are not to be subjected to load in transverse

direction.

SKF VIBRACON Chock Elements are to be installed in accordance with the "SKF Vibracon Installation Guide", MP5517 EN-2021/12. Special attention is to be given to the maximum adjustment height applicable to the SKF VIBRACON

Chock Elements.

The holding down arrangement calculations to be in accordance with the

"Vibracon Application Design Instructions", Version 2.1, Sept. 2007.

Particulars and chock arrangement details are to be submitted for approval to

the Society for each application.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version: LR2021533TA

The Design Appraisal Document RTS-TA-PRJ11100369909/MB and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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Page 1 of 2

Certificate No: LR2021533TA-02 Issue Date: 18 July 2022 Expiry Date: 17 July 2027

## **Appendix**

For: SKF VIBRACON / SKF VIBRACON E and SKF VIBRACON LP / SKF VIBRACON ELP (LOW-PROFILE)

Trade Name / Type	SKF Vibacon (original):							
	SM 12 -CS S	M 12 -CSTR	SM 12 -SS					
	SM 16 -CS S	M 16 -CSTR	SM 16-SS	SM 16 LP -ASTR				
	SM 20 -CS S	M 20 -CSTR	SM 20 -SS	SM 20 LP -ASTR				
	SM 24 - CS S	M 24 -CSTR	SM 24 -SS	SM 24 LP -ASTR				
	SM 30 -CS S	M 30 -CSTR	SM 30 -SS	SM 30 LP -ASTR				
	SM 36 - CS S	M 36 -CSTR	SM 36 -SS	SM 36 LP -ASTR				
	SM 42 - CS S	M 42 -CSTR	SM 42 -SS	SM 42 LP -ASTR				
	SM 48 -CS S	M 48 -CSTR	SM 48 -SS					
	SM 56 -CS S	M 56 -CSTR	SM 56 -SS					
	SM 64 -CS S	M 64 -CSTR	SM 64 -SS					
Ratings	SKF Vibacon (original):							
	Size	Mach	ine Load (kN)	Design Load (kN)				
	SM 12	8		48				
	SM 16 SM 16-L	.P 15		90				
	SM 20 SM 20-L	P 25		140				
	SM 24 SM 24-L	.P 35		200				
	SM 30 SM 30-L	P 60		325				
	SM 36 SM 36-L	P 90		475				
	SM 42 SM 42-L	P 120		675				
	SM 48	160		850				
	SM 56	225		1150				
	SM 64	300		1500				

For SKF Vibracon E / ELP, see page 2

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Page 2 of 2

Certificate No: LR2021533TA-02 Issue Date: 18 July 2022 Expiry Date: 17 July 2027

**Appendix** 

For: SKF VIBRACON / SKF VIBRACON E and SKF VIBRACON LP / SKF VIBRACON ELP (LOW-PROFILE)

Trade Name / Type (cont'd)	SKF Vibracon E:						
	SM 12 E-CS SM 12 E-		-CSTR SM 12 E-SS				
	SM 16 E-CS	SM 16 E	-CSTR	SM 16 E-SS	SM 16 ELP -ASTR		
	SM 20 E-CS	SM 20 E	-CSTR	SM 20 E-SS	SM 20 ELP -ASTR		
	SM 24 E-CS	SM 24 E	-CSTR	<b>SM 24 E-SS</b>	SM 24 ELP -ASTR		
	SM 30 E-CS	SM 30 E	-CSTR	SM 30 E-SS	SM 30 ELP -ASTR		
	SM 36 E-CS	SM 36 E	-CSTR	SM 36 E-SS	SM 36 ELP -ASTR		
	SM 42 E-CS	SM 42 E	-CSTR	SM 42 E-SS	SM 42 ELP -ASTR		
	SM 48 E-CS	SM 48 E	-CSTR	SM 48 E-SS			
	SM 56 E-CS	SM 56 E	-CSTR	SM 56 E-SS			
	SM 64 E-CS SM 64 E-		-CSTR	SM 64 E-SS			
Ratings (continued)	SKF Vibracon E:						
	Size		Machi	ne Load (kN)	Design Load (kN)		
	SM 12-E		15		90		
	SM 16-E SM	16-ELP	25		140		
	SM 20-E SM	20-ELP	35		200		
	SM 24-E SM	24-ELP	60		325		
	SM 30-E SM	30-ELP	90		475		
	SM 36-E SM	36-ELP	120		650		
	SM 42-E SM	42-ELP	160		850		
	SM 48-E		200		1150		
	SM 56-E		260		1500		

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