

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	Kobelt Manufacturing Co. Ltd.
Address	8283-129 Street, Surrey BC, Canada, V3W 0A6
Place of Production	Kobelt Manufacturing Co. Ltd. 8283-129 Street, Surrey BC, Canada, V3W 0A6
Type	25, 25B, 35, 35B, 45
Description	Steering Hydraulic Cylinders in Single & Double Acting Versions
Trade Name	2510, 2510B, 2512, 2512B, 2514, 2514B, 3512, 3512B, 3515, 3515B, 3518, 3518B, 4516, 4520, 4524
Application	Marine and offshore use in Steering Gears
Specified Standard	Lloyds Register Rules and Regulations for Classification of Ships. Lloyds Register Rules and Regulations for Classification of Special Service Crafts. Lloyds Register Rules and Regulations for Classification of Mobile Offshore Units Lloyds Register Rules and Regulations for Classification of a Floating offshore Installation at a Fixed location

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

Daniel Rodrigues

Senior Specialist to Lloyd's Register EMEA
A member of the Lloyd's Register group

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Ratings

25 & 25B:
Bore Diameter in inches: 2.50
Rod Diameter in inches: 1.25
Pin Diameter in inches: 1.25
Stroke in inches: 10, 12 and 14
Maximum Working Pressure: 1600psi (110.3 bar)
Relief Valve Pressure: 2000psi (137.9 bar)
Test Pressure: 3000psi (206.8 bar)

35 & 35B:
Bore Diameter in inches: 3.50
Rod Diameter in inches: 1.75
Pin Diameter in inches: 1.75
Stroke in inches: 12, 15 and 18
Maximum Working Pressure: 1600psi (110.3 bar)
Relief Valve Pressure: 2000psi (137.9 bar)
Test Pressure: 3000psi (206.8 bar)

45:
Bore Diameter in inches: 4.50
Rod Diameter in inches: 2.25
Pin Diameter in inches: 2.00
Stroke in inches: 16, 20 and 24
Maximum Working Pressure: 1600psi (110.3 bar)
Relief Valve Pressure: 2000psi (137.9 bar)
Test Pressure: 3000psi (206.8 bar)

Additional Tests

Please refer to Machinery General Design Appraisal No. UKITSO/37416371/ENG

Other Conditions

Please refer to Machinery General Design Appraisal No. UKITSO/37416371/ENG

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.

The Design Appraisal Document LR2065289TA and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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