



LR Type Approval Certificate Extension

This is to certify that Certificate No. 93/60110(E3) for the undernoted products is extended and renumbered as shown.

PRODUCER	Valve Automation, Emerson Process Management	
PLACE OF PRODUCTION	18703 GH Circle PO Box 508 Waller, Texas 77484 United States of America	
DESCRIPTION	Quarter turn, scotch yoke, pneumatic or hydraulic actuators, double acting or spring return.	
TYPE	H, HD, SH & SHD series	
STANDARDS	SI 1996 No. 825 SI 1989 No. 978 SI 1996 No. 913	
RATINGS	Moment Arm (inches):	2 or 3
	Operating pressure (psi)	
	Pneumatic Actuators	40 to 250
	Hydraulic Actuators	500 to 3000
	Torque- double acting (lb.in)	
	Pneumatic Actuators	1600 to 51000
	Hydraulic Actuators	1750 to 51000
	Torque- spring return (lb.in)	
	Pneumatic Actuators	920 to 17040
	Hydraulic Actuators	920 to 14150
APPLICATION	Fixed or mobile offshore use. To drive quarter turn valves to open or closed position using air or hydraulic pressure in both directions (double acting) or air or hydraulic pressure in one direction (spring return)	
Certificate No.	93/60110 (E4)	
Issue Date	11 August 2008	
Expiry Date	10 August 2013	
Sheet	1 of 2	


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OTHER CONDITIONS

This type approval may contribute to the requirement of a Verification Scheme established by a Duty Holder SI 1996 No. 825 and SI 1996 No. 913

"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 North America, Inc. of any modification or changes to the equipment in order to obtain a valid certificate."

The attached Design Appraisal Document No. 93/60110(E4) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 93/60110(E3) to which this extension should be attached.

Certificate No.	93/60110 (E4)
Issue Date	11 August 2008
Expiry Date	10 August 2013
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