



Type Approval Certificate Extension

This is to certify that Certificate No. 96/60075(E6) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER	Emerson Process Management- Valve Automation
PLACE OF PRODUCTION	19200 NW Freeway Houston, Texas – 77065 USA
ALTERNATE PLACE OF PRODCUTION	Emerson Process Management Valve Automation (Tianjin) Co., Ltd No 15, Xingwang Road, Wuqing Development Area, Tianjin 301700 People's Republic of China Emerson Process Management Hungary Kft.-Valve Automation Berényi u. 72-100 (Videoton Industrial Park, building number:230) Székesfehérvár 8000 HUNGARY
DESCRIPTION	Quarter turn, scotch yoke, pneumatic or hydraulic actuators, flanged and external tie bar, spring return or double acting
TYPES	G01, G2, G3, G4, G5, G7, G8, G10 and G13 series
SPECIFIED STANDARD	Department of Energy Statutory Instruments No. 978:1989 No. 825:1996
Certificate No.	96/60075(E7)
Issue Date	29 Jan 2016
Expiry Date	5 Feb 2018
Sheet	1 of 3

Gopal Nair

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Operating pressure (psi)	Pneumatic 40 to 200	Hydraulic 500 to 5000
	Maximum output torque (lb.in)	
	Double acting	Spring return
G01 Pneumatic/hydraulic	40,500	40,500
G2 pneumatic/hydraulic	60,000	59,300
G3 pneumatic/hydraulic	105,000	78,300
G4 pneumatic/hydraulic	210,000	161,300
G5 pneumatic/hydraulic	480,000	386,000
G7 pneumatic/hydraulic	930,000	743,600
G8 pneumatic/hydraulic	1,500,000	1,146,400
G10 pneumatic/hydraulic	3,000,000	2,433,000
G13 pneumatic/hydraulic	6,000,000	4,918,000
Temperature (°C)	-40 to 177	

OTHER CONDITIONS

1. This type approval may contribute to the requirement of a verification scheme established by a Duty Holder.
2. Below minus 20 °C, materials of pressure retaining components and torque transmitting components are to be impact tested.
3. Seal compound is to be suitable for the working temperature, refer to manufacturer.
4. For applications on ESD valves the following are the limitations: -
 - (i) The actuators are to be fire proofed to the same rating of the valves and are to be protected against explosion or impact.
 - (ii) The actuators are to be spring return self-closing type.
 - (iii) Suitable local controls are to be provided at the installation to release the hydraulic/pneumatic supply inlet for local closing of the spring return actuators.
 - (iv) The manual/hydraulic over rides are not to be provided.
 - (v) The evaluation of the leakage rate of the valve is not part of the actuator approval and is to be verified by the owner/operator.

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

The Design Appraisal Document No. 96/60075(E7) and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 96/60075(E6) to which this extension should be attached.

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