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Guidance on Practice for Actuators for Motor Operated Valves

GP 12-70

**BP GROUP
ENGINEERING TECHNICAL PRACTICES**

Foreword

This is the first issue of Engineering Technical Practice (ETP) GP 12-70. This Guidance on Practice (GP) is based on the following heritage documents from merged BP companies:

BP Chemicals

CP 17-22-1 Actuators for motor operated valves

BP RPSE

GS 112-2 Electric Motor Operated Valve Actuators for Intermittent Operation of Isolation Valves

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1. Scope

This GP provides guidance for the design and installation of actuators for motor operated valves.

2. Normative references

The following normative documents contain requirements that, through reference in this text, revisions of, any of these publications do not apply. However, parties to agreements based on this technical practice are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies.

BP Engineering Technical Practices (ETP)

GIS 12-701	Actuators for motor operated valves (IEC)
GIS 12-702	Actuators for motor operated valves (ANSI)

European Standards

EN 50014	Electrical apparatus for potentially explosive atmospheres, general requirements
EN 50018	Electrical apparatus for potentially explosive atmospheres, flameproof enclosure 'd'

IEEE

IEEE Std 112	IEEE Standard Test Procedure for Polyphase Induction Motors and Generators.
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International Electrotechnical Commission (IEC)

IEC 60079-1	Electrical apparatus for explosive gas atmospheres: Part 1 – Flameproof enclosures "d"
IEC 60269	Low voltage fuses — Part 1: General requirements
IEC 60529	Degrees of protection provided by enclosures (IP Code)

International Organization for Standardization

ISO 5210	Industrial Valves — Multi-turn valve actuator attachments
ISO 5211	Industrial Valves — Part-turn valve actuator attachments

National Fire Protection Association (NFPA)

NFPA 70	National electrical code.
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NEMA

NEMA MG-1	Motors and Generators
NEMA 250	Enclosures for Electrical Equipment (1000 volts Maximum)

3. General

Actuators shall be self-contained units for local and remote operation of valves. In general the actuator shall comprise an electric motor, reduction gearing, reversing starter with local and remote control and monitoring facilities.

