

Actuator Capacity Controller

Technical Specifications

The Actuator Capacity Controller (ACC) is a compact, robustly designed controller that optimizes flow, precision, reliability and integration with Milton Roy® pumps.

FEATURES

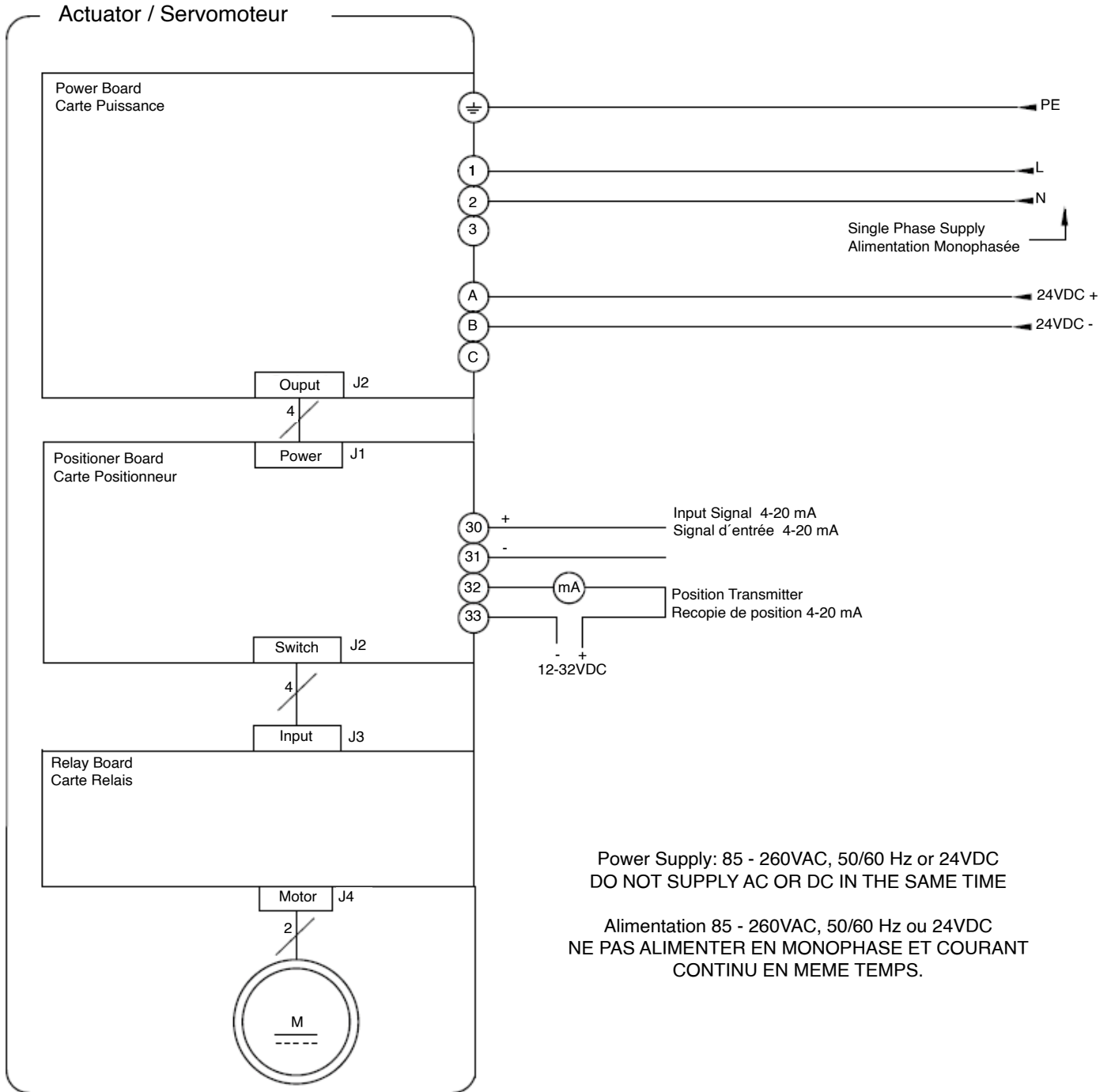
- High level of modulating accuracy to remote control the pumps.
- Explosion-proof certified versions available: IECEx, CSA NEMA 7, ATEX
- Watertight IP68-NEMA 4
- Special offshore version for O&G applications
- Flexible adjustment for flow rate 1:10 ratio to meet API 675 standard
- 85V - 260VAC 1 Phase 50/60 Hz, 24VDC
- Mechanical position indicator integrated inside cover to conveniently check levels
- Manual override integration for manual flow adjustment as needed



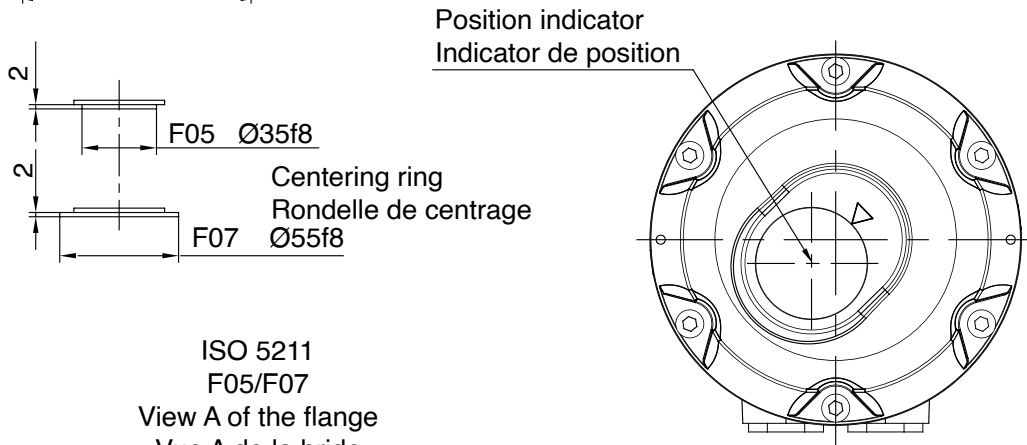
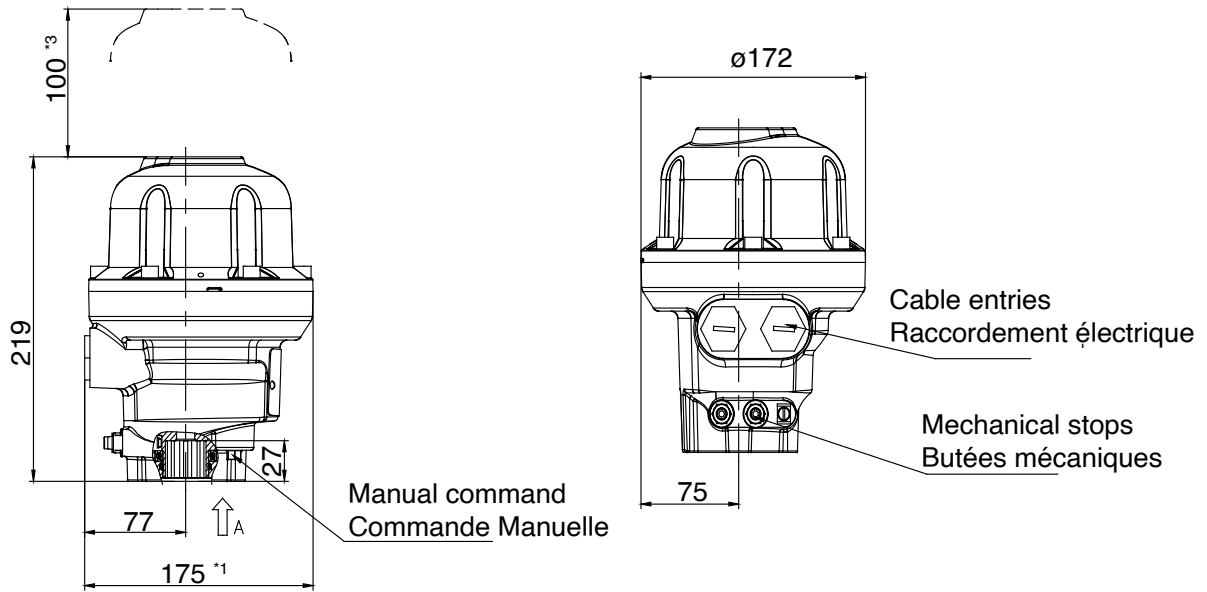
Technical Specifications		ACC - ¾ Turn	ACC - 10 Turns
GENERAL	Description	<ul style="list-style-type: none"> • ACC actuators include a multi-voltage board to supply a 24VDC motor • Compact gear case, emergency manual command and standard output with a square of 22 mm 	
	Torque range	• 70N.m	• 40N.m
	Operating Time	• 90 degrees in 15 sec	• 2.4 rpm
	Duty Classification	• Inching / Positioning: Class B actuators in compliance with EN15714-2	
ENCLOSURE - PROTECTION	Casing	<ul style="list-style-type: none"> • Aluminum gravity casting enclosure • Cover fastened by captive and stainless steel screws 	
	Weather Proof	<ul style="list-style-type: none"> • IP68 (in compliance with EN 60529, FM 3616, CSA 213, CSA 25) • NEMA 4X (comply with NEMA250) 	
	Explosion Proof	<ul style="list-style-type: none"> • IEC Ex db IIB T4/5/6. Temp. -4 to 160°F (-20 to +60°C) complying with ISO 60079-0, ISO 60079-1, ISO 80079-36, ISO 80079-37 • ATEX IIB T4/5/6. Temp. -4 to 160°F (-20 to +60°C) complying with EN 60079-0, EN 60079-1, EN 80079-36, EN 80079-37 • NEC500. NEMA 7 Class I div 1 group C & D, Class II group E, F et G. T4/5/6 	
	External Coating	• In standard, C4 coating according to ISO 12966 (C5 coating in option)	
	Paint Color	• Cover yellow color RAL1018; Body black color	
	Ambient Temperature Range	• -40 to +140°F / -40 to +60°C	

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MOTOR	Motor Technology	<ul style="list-style-type: none"> 24VDC motors with 2-wire connection to the control boards 	
	Motor Duty Rating	<ul style="list-style-type: none"> Inching / Positioning (in compliance with EN15714-2 Class B): S4-30% motor duty rating. Up to 120 starts per hour at peak of operation (Voltage ± 10%, frequency ±2%) Power: 30W AC: Is = 2A (starting current) DC: Is = 6A (starting current) 	
MECHANICAL SPECIFICATIONS	Gear Design	<ul style="list-style-type: none"> The actuator is mechanically self-locking and lubricated for product lifetime 	
	Manual Emergency Operation	<ul style="list-style-type: none"> Manual emergency operation via a 10 mm hexagonal manual shaft 	
	Output flange	<ul style="list-style-type: none"> The actuator flanges comply with ISO 5211 F05-F07 	
	Lubrication	<ul style="list-style-type: none"> The actuators are lubricated for the product lifetime and do not require any special service 	
ELECTRICAL SPECIFICATIONS	Power Supply	<ul style="list-style-type: none"> The actuators can operate on a wide variety of single phase power supply From 85VAC to 260VAC 50/60 Hz and 24VDC (12VDC single power supply available on request) 	
	Terminal Compartment	<ul style="list-style-type: none"> Push-in type terminals for controls and power supply Internal and external earth-grounding post 	
	Conduit Entries	<ul style="list-style-type: none"> 2 × ¾ NPT as standard (cable glands are not supplied) 	
POSITION SENSORS	Inching/Positioning Control	<ul style="list-style-type: none"> Command isolated from the feedback signals 4-20mA analog input command given through 2 wires 4-20mA analog output feedback received through 2 wires 	
	Travel Limit Systems	<ul style="list-style-type: none"> Limit switches actuated by adjustable cam-block 2 SPDT switches as standard (Open and Close) + 2 auxiliary switches (customer feedback) 250VAC-5A / 48VDC- 2.5A (resistive load) 	<ul style="list-style-type: none"> Operated by the analog positioner only Operated by the analog positioner only
EC DIRECTIVES AND STANDARDS	Compliance with Directives and Standard	<p>ACC actuators comply with:</p> <ul style="list-style-type: none"> Directive 2004/108/EC Electromagnetic compatibility Directive 2006/95/EC Low voltage The following harmonized standards: <ul style="list-style-type: none"> EN 61000-6-4: Generic emissions standard for industrial environments EN 61000-6-2: Generic immunity standard for industrial environments EN 60034-1: Rotating electrical machines Directive ATEX2014/34/UE 	

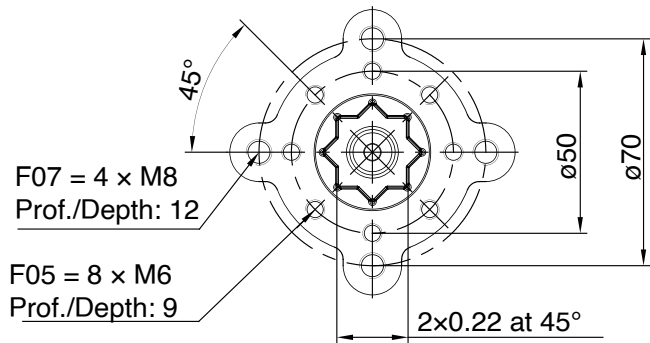
WIRING DIAGRAM



DIMENSIONS



ISO 5211
F05/F07
View A of the flange
Vue A de la bride



ACC CODES

Pump Model	Actuator Number	Type of Actuator	Description
mROY® A/B MILROYAL® D PRIMERROY® K/L PRIMERROYAL® K/L	020087000N	ACC-10T	10 turns Ex-proof
	0280088000N	ACC-10T	10 turns Waterproof
MAXROY® A/B/D	0280087100N	ACC-3/4T	¾ turn Ex-proof
	0280088100N	ACC-3/4T	¾ turn Waterproof

ACC SPARE PARTS LIST

Description	Kit Number
Seal kit	3051570001F
Cover kit	3051570003F
Mechanical indicator disc kit	3051570004F
Power board kit	3051570100F
Relay board kit	3051570300F
Positioner board kit	3051570201F

ACC ASSEMBLING KIT CODES

The ACC is mounted on the pump with a dedicated assembling kit. The assembling kit is a robust and water-tight mechanical coupling. Each pump model has its own assembling kit. Please refer to the code number in the following chart.

Pump Model	Assembling Kit Code	Pump Model	Assembling Kit Code
PRIMERROYAL® H	3051582100F	mROY® A - Plunger C/D/E	3051568100F
PRIMERROY® K (PKG) PRIMERROYAL® K (PK)	3051568500F	mROY® A - Plunger F	3051568110F
PRIMERROY® L (PLG) PRIMERROYAL® L (PL)	3051568600F	mROY® B - Plunger K/L	3051568120F
MILROYAL® D	3051568300F	mROY® B - Plunger R	3051568130F
MAXROY® A/D	3051568200F	mROY® XA	3051568000F
MAXROY® B 105	3051568210F	mROY® XB	3051568010F
MAXROY® B 145	3051568220F		