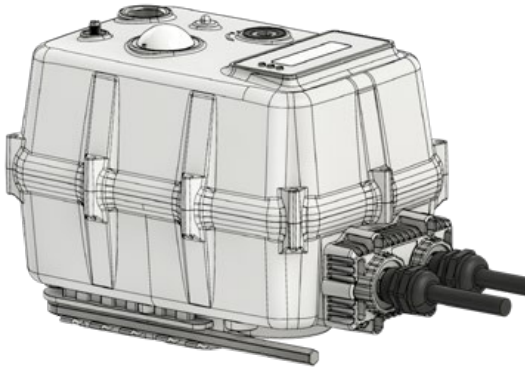


MA 20 P Series - Adv | Modulating

Overview, Specifications, Dimensional Data, Materials of Construction, Wiring Diagrams



MA 20 P Series - PC + PET Advanced- Modulating Control



Overview

The MA 20 Advanced Series are quarter-turn electric industrial service actuators delivering up to 1770"lbs torque in 24vac/vdc or 95~265vac models, and available in 2 position (Open/Close), Floating (Open/Close/Jog) or Modulating (4-20mA default or 2-10vdc) control schemes. The Advanced model eliminates the need to remove the cover to set travel stops, which are soft-set through the OLED Menu function. Other parameters are also accessible thru the same Menu program. Analog feedback and an internal anti-condensate heater are standard. Key features include:

- 24 volt models operate on AC or DC power supplies.
- 120vac & 230vac (autoswitching) models operate on 50 or 60Hz supplies.
- 3D Raised Position indicator
- 3m pre-wired field interface cable included
- An 8mm Manual override socket is top-mounted for ease of use.
- M20 polyamide cable gland (x2) and removable terminal block access plate
- MAM20R available with electronic fail-safe function

Specifications

		MAM20R-P24AD-ADSFS	MAM20S-P24AD-ADSNF	
24V	Supply	Torque Output (in-lb / Nm)	1416"lb / 160Nm	1770"lb / 200Nm
		Power Consumption (Max/Run/Hold)	50W / 9.6W / 2.4W	50W / 9.6W / 2.4W
		Peak Current (@ Rated Voltage)	2.0A, 5ms @ 24VDC	2.0A, 5ms @ 24VDC
		Fuse Rating	5A	5A
		Speed (90°) DC-60Hz/50Hz, seconds	25s Mains, 25s EFS	25s
		Duty Cycle (IEC60034)	S3-85% @ ≤85% rated torque	S3-85% @ ≤85% rated torque
		Motor Power	100W	100W
		Motor Protection, Temp / Class	155°C / Class F	155°C / Class F
		Fail-Safe (EFS)	SuperCap	none
		Fail Direction on loss of power	CW - PGRM	N/A
Modulating Control - Max starts / hour	50	300		
Product Weight (lbs / kg)		14.30lbs / 6.50 kg	14.30lbs / 6.50 kg	

		MAM20R-P9265-ADSFS	MAM20S-P9265-ADSNF	
95~ 265VAC	Supply	Torque Output (in-lb / Nm)	1416"lb / 160Nm	1770"lb / 200Nm
		Power Consumption (Max/Run/Hold)	50W / 9.6W / 2.4W	50W / 9.6W / 2.4W
		Peak Current (@ Rated Voltage)	0.22A, 5ms @ 220VAC	0.22A, 5ms @ 220VAC
		Fuse Rating	2A	2A
		Speed (90°) DC-60Hz/50Hz, seconds	25s Mains, 25s EFS	25s
		Duty Cycle (IEC60034)	S3-85% @ ≤85% rated torque	S3-85% @ ≤85% rated torque
		Motor Power	50W	100W
		Motor Protection, Temp / Class	155°C / Class F	155°C / Class F
		Fail-Safe (EFS)	SuperCap	none
		Fail Direction on loss of power	CW - PGRM	N/A
Modulating Control - Max starts / hour	50	300		
Product Weight (lbs / kg)		14.30lbs / 6.50 kg	14.30lbs / 6.50 kg	

ALL	Control	4-20mA & 2-10vdc, Input/Feedback, Field Selectable
	Electrical Entry	M20 polyamide cable gland (x2) & removable terminal block access plate
	Auxiliary Switch - Type	None, Analog feedback is standard
	Auxiliary Switch - End of Travel	None
	End-of-Travel Adjustment	Programmable thru OLED Menu
	Manual Override	8mm hex key, stored in lower housing clip
	De-clutch mechanism	Top-mounted clutch button
	Environmental Rating	IP67 Indoor / Outdoor (requires sun/rain shield)
	Ambient Operating Range	5°F to +140°F / -15°C to +60°C
	Humidity Range	0-95% RH
Altitude Limit		9850 ft / 3000 m

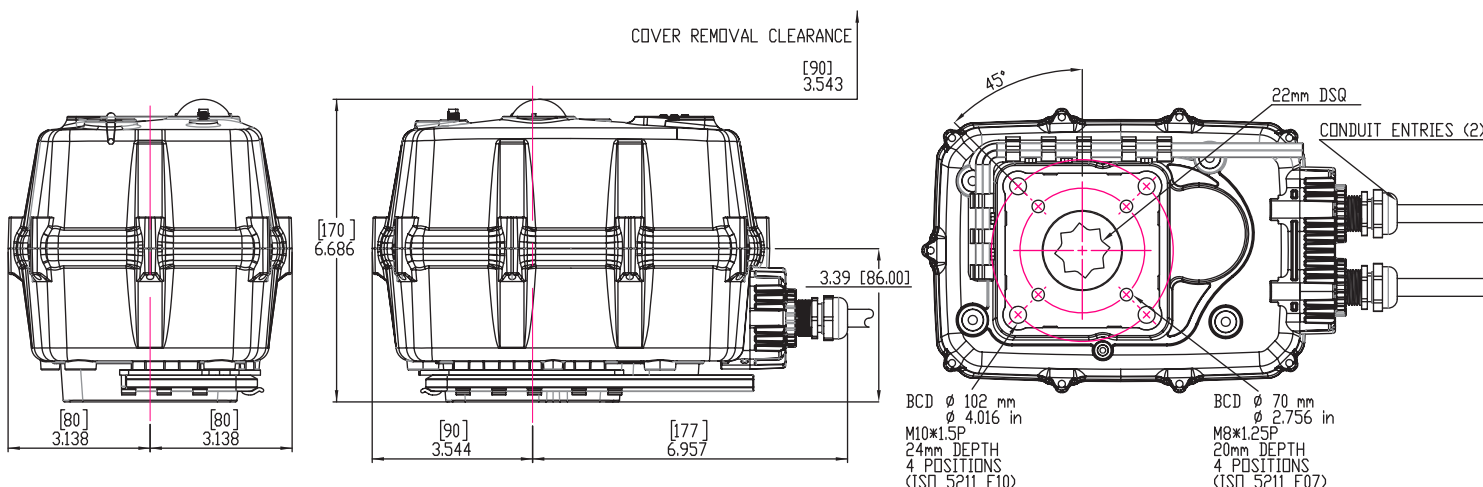
MA 20 P Series - Adv | Modulating

Overview, Specifications, Dimensional Data, Materials of Construction, Wiring Diagrams



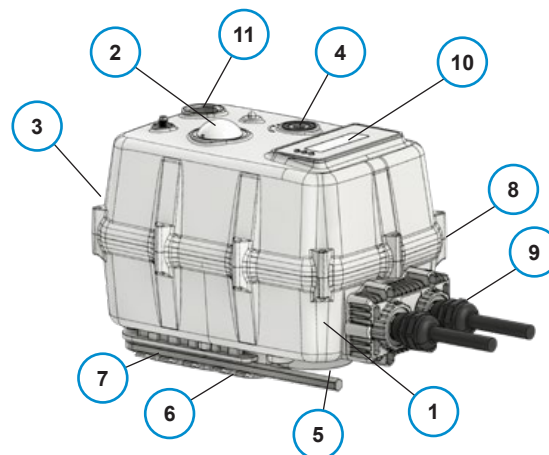
Website

Dimensional Drawing



Materials of Construction

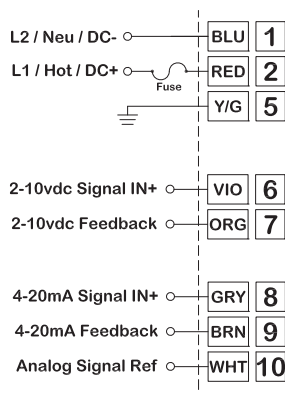
#	DESCRIPTION	MATERIALS
1	Actuator	PC + PET
2	Indicator	Transparent AS
3	Cover Screw (x10)	A304
4	Override Port	A304
5	Output Socket	NP Hardened Steel
6	ISO Mount Profiles	Cast Aluminum
7	8mm Hex Key	Tool Steel
8	Cover Seal	NBR
9	Waterproof Cable Gland	polyamide
10	Program Console	OLED Display
11	Clutch Button	PC



Wiring Diagrams

Typical wiring diagram shown.

Max-Air reserves the right to change specifications through a continuous-improvement program. Contact Max-Air for product specific wiring diagrams prior to engineering or installation efforts.



MAM Fail-Safe / Non Fail-Safe VAC/VDC Modulating