

DMA Actuator drives for - Motorised Butterfly Valve DMK

11.20

DUNGS®
Combustion Controls



Technical description

Various actuator drives are available for the Dungs DMK motorised butterfly valves:

- Actuators with cams
- Electronic actuators with analog output signal

The DMA...P/Q actuator is distinguished by:

- continuously adjustable cams
- a mechanical position indicator readable from the outside
- a freely selectable mounting position
- maintenance-free operation
- switchover between Automatic and Manual (option)
- position feedback (option)

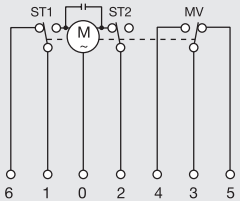
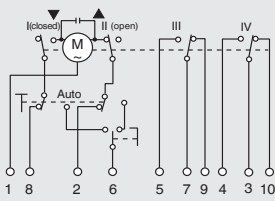
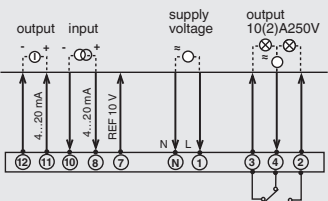
The selection of the actuator drive depends on the type of application.

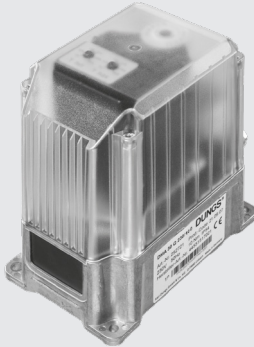
Application

The actuator drives, which guarantee a precise rotation between 0 and 90 °C, are used in combination with the DUNGS DMK motorised butterfly valve to control the gas supply or the air supply to gas-burning appliances e.g. gas burners.

Approvals

The actuator drives comply with the basic requirements of the EMC and low-voltage guideline.

Actuator drives Technical data			
Type	DMA 40 P 230/02 3 L	DMA 40 P 230/02 4 L	DMA 30 P 230/03 0 L
Order No.	226 240	238 810	226 239
Operating time for 90 °	40 s	40 s	30 s
Switch-on duration ED Motor/relay	25 % / 100 %	25 % / 100 %	25 % / 100 %
Voltage/frequency	~(AC) 230 V 50 Hz	~(AC) 230 V 50 Hz	~(AC) 230 V 50 Hz
Ambient temperature	0 °C to 60 °C	0 °C to 60 °C	0 °C to 50 °C
Weight	approx. 0.4 kg	approx. 0.5 kg	approx. 0.5 kg
Power consumption	max. 3 VA	max. 3 VA	max. 3 VA
Operating mode	automatic	automatic / manual	automatic / manual
Rotation angle adjustment	3 cams	4 cams	3 cams Potentiometer
Function, colours - min. - max. - potential-free, travelling	yellow red blue	yellow red 2 x blue	red yellow yellow y _{min.} y _{max.} -
Adjustment by	Lever	Lever	Lever Adjustment screw
Potentiometer	-	optionally retrofittable	yes
Control	~(AC) 230 V 50 Hz	~(AC) 230 V 50 Hz	4 to 20 mA
Output	-	-	4 to 20 mA
Separate power output	-	-	10 V
Direction of rotation of the shaft closed → open	left	left	left
Cable entry	1 x PG9	1 x PG9	2 x PG9
Nominal torque	200 Ncm	200 Ncm	300 Ncm
Static holding torque	200 Ncm	200 Ncm	200 Ncm
Permissible lateral force on the shaft	max. 60 N	max. 60 N	max. 60 N
Shaft diameter	8 _{h8} mm	8 _{h8} mm	8 _{h8} mm
Shaft flat area	1 x 16 mm	1 x 16 mm	1 x 16 mm
Degree of protection (DIN 40050)	IP 40	IP 40	IP 40
Protection class EN 50178	2	2	2
Diagram			

Actuator drives Technical data		
Type	DMA 30 Q 230/10 0 L	
Order No.	252 721	
Operating time for 90 °	30 s	
Switch-on duration ED Motor/relay	25 % / 100 %	
Voltage/frequency	~(AC) 230 V 50 Hz	
Ambient temperature	0 °C to 50 °C	
Weight	approx. 1.7 kg	
Power consumption	max. 3 VA	
Operating mode	automatic / manual	
Rotation angle adjustment	3 cams	Potentiometer
Function, colours - min. - max. - potential-free, travelling	red yellow yellow	y _{min.} y _{max.} -
Adjustment by	Lever	Adjustment screw
Potentiometer	yes	
Control	4 to 20 mA	
Output	4 to 20 mA	
Separate power output	10 V	
Direction of rotation of the shaft closed → open	left	
Cable entry	2 x M16 x 1,5 mm	
Nominal torque	1000 Ncm	
Static holding torque	500 Ncm	
Permissible lateral force on the shaft	max. 100 N	
Shaft diameter	10 _{h8} mm	
Shaft flat area	1,5 x 22 mm	
Degree of protection (DIN 40050)	IP 54	
Protection class EN 50178	1	
Diagram	