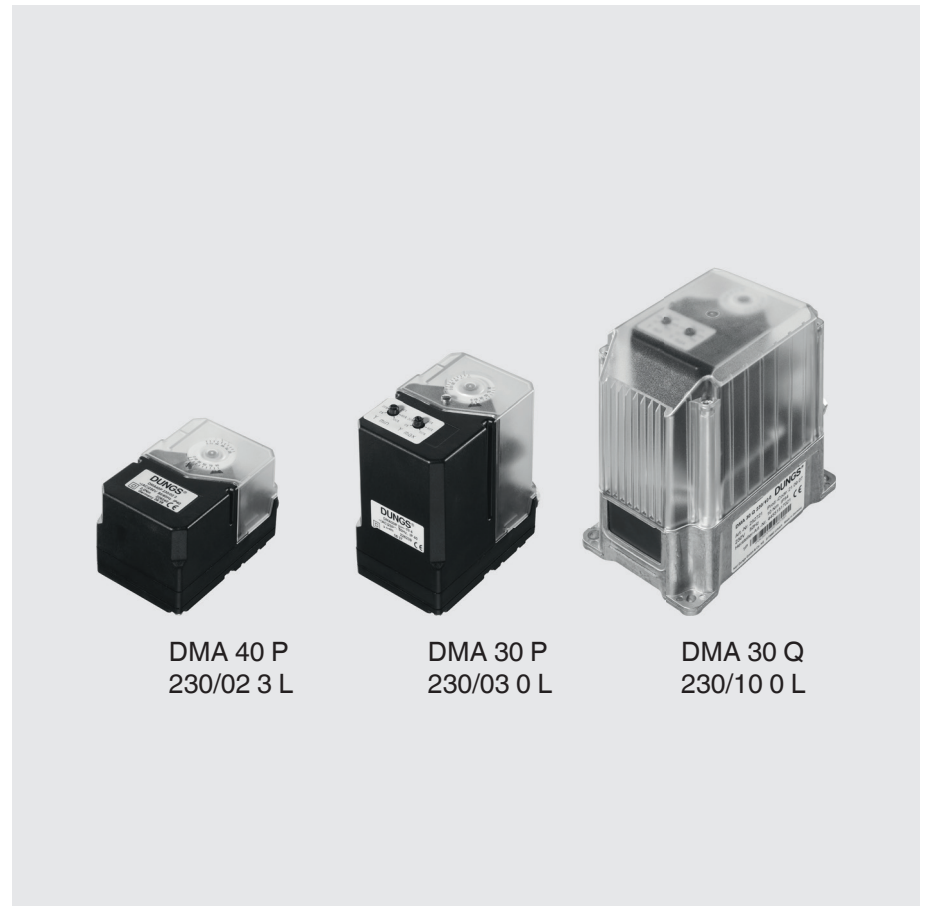


DMA Actuator drives for - Motorised Butterfly Valve DMK

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)

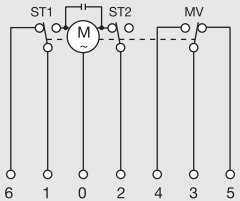
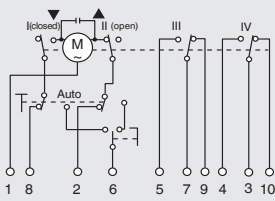
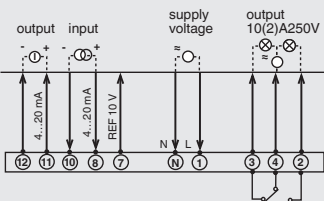
The selection of the actuator drive depends on the type of application.

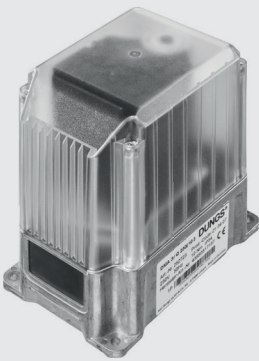
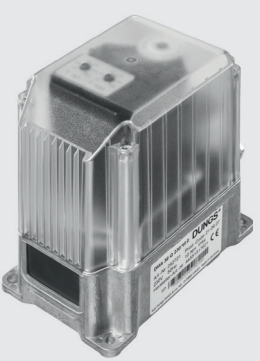
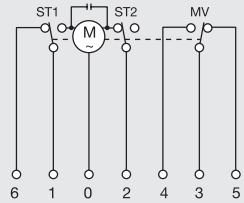
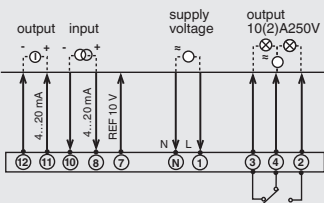
Application

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.

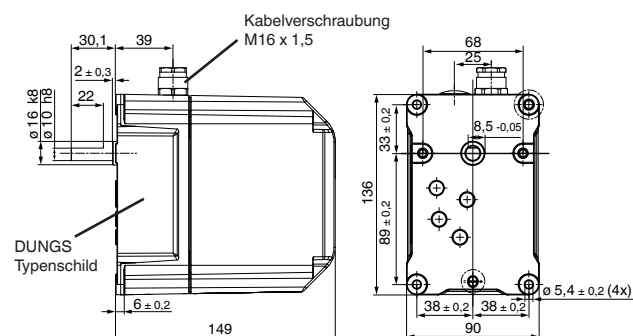
Approvals

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
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
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 3 L	DMA 30 Q 230/10 0 L	
Order No.	252 723	252 721		
Operating time for 90 °	30 s	30 s		
Switch-on duration ED Motor/relay	25 % / 100 %	25 % / 100 %		
Voltage/frequency	~(AC) 230 V 50 Hz	~(AC) 230 V 50 Hz		
Ambient temperature	0 °C to 60 °C	0 °C to 50 °C		
Weight	approx. 1.6 kg	approx. 1.7 kg		
Power consumption	max. 3 VA	max. 3 VA		
Operating mode	automatic	automatic / manual		
Rotation angle adjustment	3 cams	3 cams	Potentiometer	
Function, colours - min. - max. - potential-free, travelling	yellow red blue	red yellow yellow	y _{min.} y _{max.} -	
Adjustment by	Lever	Lever	Adjustment screw	
Potentiometer	-	yes		
Control	~(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		
Cable entry	1 x M16 x 1,5 mm	2 x M16 x 1,5 mm		
Nominal torque	1000 Ncm	1000 Ncm		
Static holding torque	500 Ncm	500 Ncm		
Permissible lateral force on the shaft	max. 100 N	max. 100 N		
Shaft diameter	10 _{h8} mm	10 _{h8} mm		
Shaft flat area	1,5 x 22 mm	1,5 x 22 mm		
Degree of protection (DIN 40050)	IP 54	IP 54		
Protection class EN 50178	1	1		
Diagram				

DUNGS®
Combustion Controls



Installation: direct mounting to DMK...-Q by customer possible

Actuator drives Type	Degree of protection	Ø _{Shaft}	Comment	Order No.
DMA 40 P 230/02 3 L	IP 40	8		226 240
DMA 40 P 230/02 4 L	IP 40	8		238 810
DMA 30 P 230/03 0 L	IP 40	8		226 239
DMA 30 Q 230/10 3 L	IP 54	10		252 723
DMA 30 Q 230/10 0 L	IP 54	10		252 721
Please state the motorised flap when ordering!				

Accessories	Order No.
Potentiometer retrofitting kit 1 kΩ	DMA 40 P 230/02 4 L 240 498

We reserve the right to make any changes in the interest of technical progress.

Head Offices and Factory
Karl Dungs GmbH & Co. KG
Karl-Dungs-Platz 1
D-73660 Urbach, Germany
Telephone +49 (0)7181-804-0
Telefax +49 (0)7181-804-166

Postal address
Karl Dungs GmbH & Co. KG
Postfach 12 29
D-73602 Schorndorf, Germany
e-mail info@dungs.com
Internet www.dungs.com