

# IP68 Actuators

ROTARY ACTUATORS IP68 WATERPROOF - PERMANENT IMMERSION

## USE

- permanent immersion in the shipbuilding industry
- agricultural and livestock industry
- agricultural and livestock industry
- systems using alternative energy
- automation plants
- water treatment systems
- industrial plants



# IP68 Actuator

## MAIN CHARACTERISTICS

- **WATERPROOF** - degree of protection: IP68
- connection to the ISO 5211 ball valve
- room temperature: -10°C ÷ 50°C
- sealed housing
- auxiliary limit microswitches
- with cables

## DEGREE OF PROTECTION IP68

- total protection against the penetration of solids and dust
- protection in case of permanent immersion in water at 1 m of depth

## OPTIONAL

- versions with different operating times
- spacer for insulation and manual opening

TECHNICAL FEATURES		Diamant PRO IP68	Compact PRO IP68	Universal PRO IP68
ELECTRICAL DATA	Power supply	230V 50/60 Hz • 24V 50/60 Hz • 110 V 50/60 Hz		
	Maximum power consumption during operation	7,5 VA	6 VA	13VA
	Power cable	Cable FROR 7G 1 mm <sup>2</sup> • Length 1,5 m		
	Auxiliary micro cable	Cable FROR 7G 1 mm <sup>2</sup> • Length 1,5 m		
	Auxiliary micro output	1A, resistive		
FUNCTIONAL DATA	Rated torque	11 Nm	22 Nm	40 Nm
	Electric control	2 / 3-point, ALL IN ONE		
	Rotation angle	90° • 180°		
	Operating time (90°)	35 sec	45 sec	55 sec
	Protection degree	IP68		
	Coupling to the ball valve	ISO 5211 - F03/F05	ISO 5211 - F03/F05	ISO 5211 - F05/F07
SAFETY	Operational room temperature	-10°C ÷ + 50°C		
	Storage and transport conditions	- 40°C ÷ +80°C, RH max 95% - no condensation		
	Maintenance	None		
	Certification	CE		



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## VERSIONS

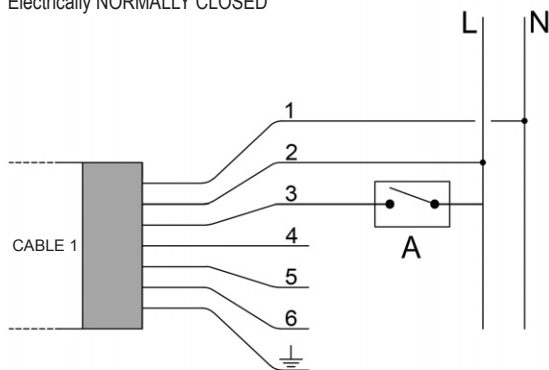
Actuator	Torque	Rotation angle	Operating time	Power supply	Base code
<b>Diamant PRO IP68</b>	11 Nm	90°	35 sec	230V 50/60 Hz	DH2222P
	11 Nm	90°	35 sec	110V 50/60 Hz	DH2122P
	11 Nm	90°	35 sec	24V 50/60 Hz	DH2422P
	11 Nm	180°	70 sec	230V 50/60 Hz	DH3222P
	11 Nm	180°	70 sec	110V 50/60 Hz	DH3122P
	11 Nm	180°	70 sec	24V 50/60 Hz	DH3422P
<b>Compact PRO IP68</b>	22 Nm	90°	45 sec	230V 50/60 Hz	CH2222P
	22 Nm	90°	45 sec	110V 50/60 Hz	CH2122P
	22 Nm	90°	45 sec	24V 50/60 Hz	CH2422P
	22 Nm	180°	90 sec	230V 50/60 Hz	CH3222P
	22 Nm	180°	90 sec	110V 50/60 Hz	CH3122P
	22 Nm	180°	90 sec	24V 50/60 Hz	CH3422P
<b>Universal PRO IP68</b>	40 Nm	90°	55 sec	230V 50 Hz *	UH2222P
	40 Nm	90°	55 sec	110V 50 Hz *	UH2122P
	40 Nm	90°	55 sec	24V 50 Hz *	UH2422P
	40 Nm	180°	110 sec	230V 50 Hz *	UH3222P
	40 Nm	180°	110 sec	110V 50 Hz *	UH3122P
	40 Nm	180°	110 sec	24V 50 Hz *	UH3422P

\* 60 Hz on request.

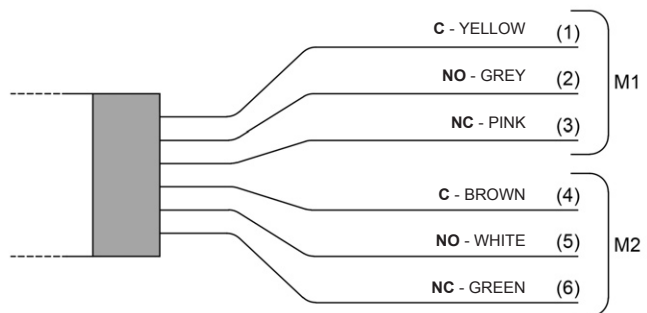
## ELECTRICAL CONNECTIONS

### 2-POINT CONNECTION

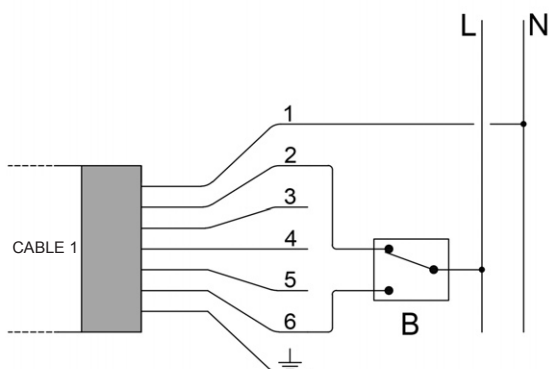
Electrically NORMALLY CLOSED



### AUXILIARY MICROSWITCHES CONNECTION



### 3-POINT CONNECTION



- A SWITCH control
- B DEVIATOR control

- NO Normally open
- NC Normally closed

- M1 Opening auxiliary micro
- M2 Closing auxiliary micro

1. Neutral
2. Closing phase
3. Opening phase (2 POINTS)
4. Outlet phase with open valve
5. Outlet phase with closed valve
6. Opening phase (3 POINTS)



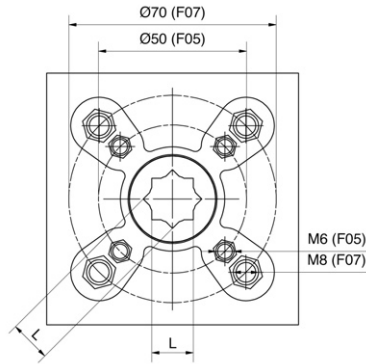
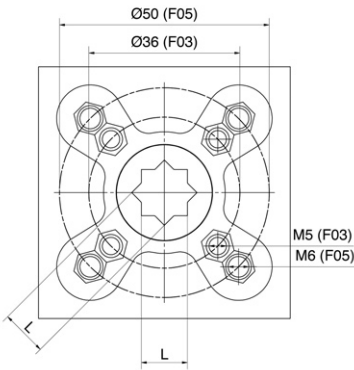
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## CONNECTIONS TO THE BALL VALVE

### Diamant PRO IP68 Compact PRO IP68

### Universal PRO IP68



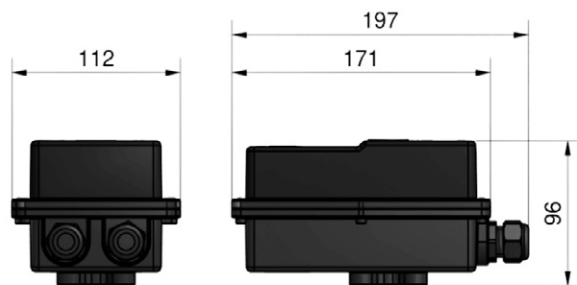
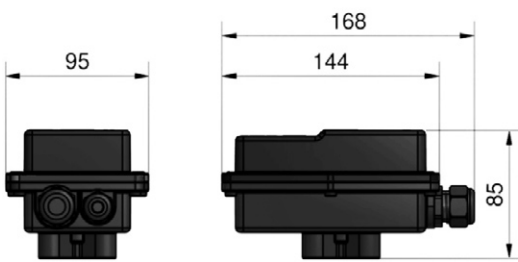
ISO Connection	L
F03	9 mm
F05	11 mm

ISO Connection	L
F05	11 mm
F07	14 mm

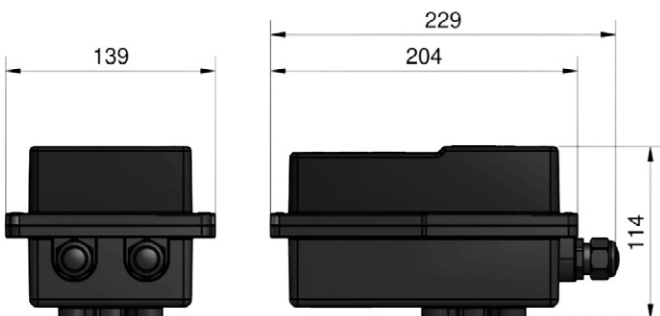
## OVERALL SIZE

### Diamant PRO IP68

### Compact PRO IP68



### Universal PRO IP68



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## EXAMPLE OF SPECIFICATIONS

**DIAMANT PRO IP68 ACTUATOR** • ALL IN ONE, 2-point ON/OFF and 3-point ON/OFF or modulating, nominal torque: 11 Nm, power supply: 230V– 50/60 Hz, 2 auxiliary micros, operating time: 35 sec / 90°, operating angle: 90°, degree of protection: IP68 - waterproof, sealed housing, cable length 1,5 m, for ball valve: 2-way, 3-way and by-pass, connection to the ball valve: ISO 5211 F03 - F05.

Brand: **COMPARATO**

Code: **DH2222P**

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