

# 502 BRASS BALL VALVE WITH UMA-3,5 ELECTRIC ACTUATOR

## MAIN CHARACTERISTICS

The 502 brass ball valve is dedicated to the use of low pressure and non corrosive standard fluids like water, air, and heavy fuel. The 502 valve has a high quality brass body, a chrome plated brass ball with full bore port, and PTFE seats. The stem tightness is with NBR o-ring and PTFE gland pack. The ISO pad allows an easy actuation. The UMA-3,5 actuator is a compact IP65 electric actuator with numerous functions. With French ACS certification, the 502 valve can be used for potable water applications.

## AVAILABLE MODELS

Sizes 1/4" to 4"

BSP ISO 7 threaded connections

Voltages 230 Vac, 24 Vac and 24 Vdc

## CLASSIFICATION ACC. TO PED 97/23

Not concerned for sizes  $\leq 1"$

A3§3 for sizes  $1" \frac{1}{4}$  to  $2"$

## LIMITS OF USE

PS : 16 bar at 20°C

TS : -10°C / +100°C

## OPTIONS

NPT connections

Dry cleaning for oxygen service

Stainless steel ball

Reinforced graphite PTFE seat

Heating device

60 Hz frequency actuator

## ACTUATOR TYPE UMA-3,5

See our technical data sheet FT22060 at the end of this document.



## MOTORIZATION WITH UMA-3,5

The actuators are sized for following conditions :

- Max. pressure differential up/downstream : 10 bar.

DN	Actuator
1/4"	UMA-3,5
3/8"	UMA-3,5
1/2"	UMA-3,5
3/4"	UMA-3,5
1"	UMA-3,5
1" 1/4	UMA-3,5
1" 1/2	UMA-3,5
2"	UMA-3,5

For every others operating conditions, please consult.

## OVERALL DIMENSIONS

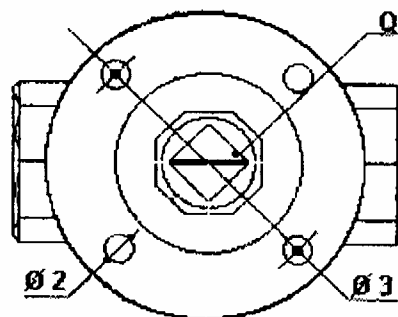
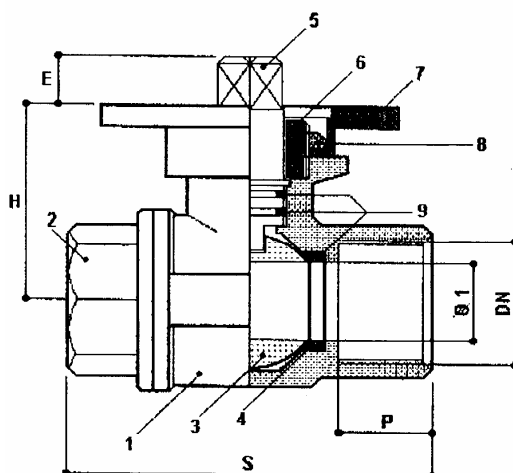
To know the overall dimensions of the 502+UMA-3,5 actuator, please consult the technical drawing n° 672, page 3 of this document.

Modifications reserved

# 502 BRASS BALL VALVE WITH UMA-3,5 ELECTRIC ACTUATOR

## CONSTRUCTION

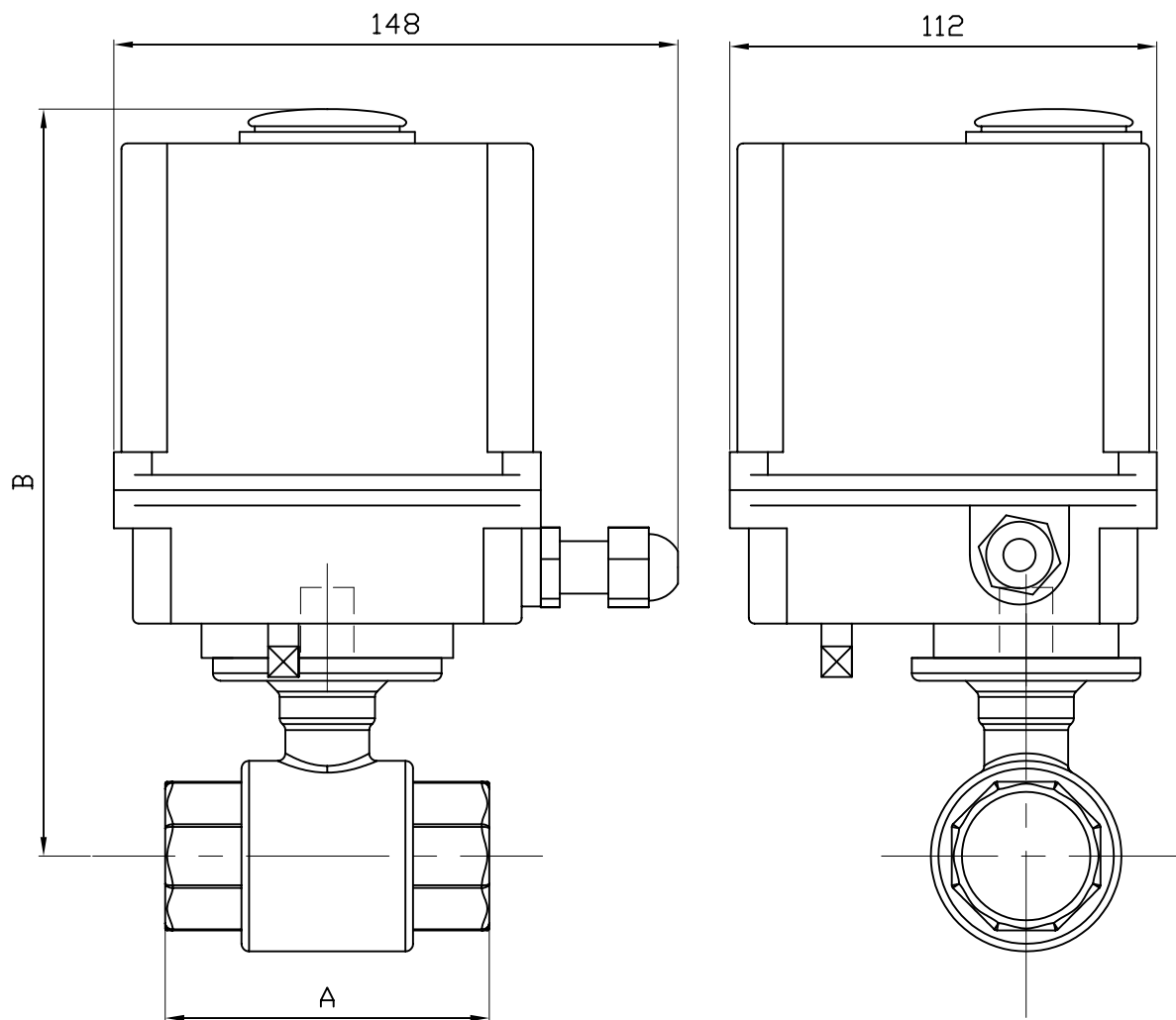
Item	Part	Material
1	Body	Nickelated brass CW617N
2	End	Nickelated brass CW617N
3	Ball	Chromed brass CW614N
4	Seat	PTFE
5	Stem	Brass CW614N
6	Nut	Brass CW614N
7	ISO pad	Nickelated brass CW617N
8	Nut	Brass CW614N
9	O-ring	NBR



## DIMENSIONS (mm)


DN	1/4"	3/8"	1/2"	3/4"	1"	1" 1/4	1" 1/2	2"	2" 1/2	3"	4"
Ø1	10	10	15	20	25	32	39	48	64	78	100
S	46	46	56	66	75	85	97	109	141	159	196
P	11,5	11,5	14	16	17	18	19	21	25	25	30
H	35	35	38	42	48	60	65	72	92	103	127
E	9	9	9	9	9	11	11	11	14	14	17
Q	11	11	11	11	11	11	11	11	14	14	17
Ø2	5,5/6,5	5,5/6,5	5,5/6,5	5,5/6,5	5,5/6,5	6,5	6,5	6,5	6,5	6,5	8,5
Ø3	50	50	50	50	50	50	50	50	50/70	50/70	70
ISO	F05	F05	F05	F05	F05	F05	F05	F05	F05/F07	F05/F07	F07

Modifications reserved



DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
A	46	46	56	66	75	85	97	109
B	179	179	182	186	192	204	209	216

Informations données à titre indicatif et sous réserve de modifications éventuelles

Ech:	Date : 20/04/2004	Dessiné par : F.G.	Tolérances générales : +/- 0.2	Modifications	Date	REV.
Servomoteur UMA-3.5 Vanne à sphère 502				Matière :		
				Poids (Kg) :		
 45, Rue du Ruisseau 38297 SAINT QUENTIN FALLAVIER				Traitement : SANS		
				Plan n° Ens 672		

# ELECTRIC ACTUATOR UMA 3,5 UMC 10/15

The electric actuators UMA 3.5 and UMC 10/15 are generally used for actuation ¼ turn valves like ball and butterfly valves.

UMA 3.5 : 35 Nm

UMC 10 : 100 Nm

UMC 15 : 150 Nm

## MECHANICAL CHARACTERISTICS

Enclosure "AA" nylon  
treated carbon steel gears  
Manual device with square shaft of 8mm  
Position indicator on the top  
Mounting pad ISO 5211  
Output with star drive

## ELECTRICAL CHARACTERISTICS

Thermal torque protection  
Electrical connection with PE  
2 adjustable limit switches  
2 adjustable auxiliary switches  
Heating resistance as optional

## SERVICE

30% of the time  
Maximum 10 starts per hour

## LIMITS OF USE

Temperature range: -10°C to +50°C  
Protection: IP65

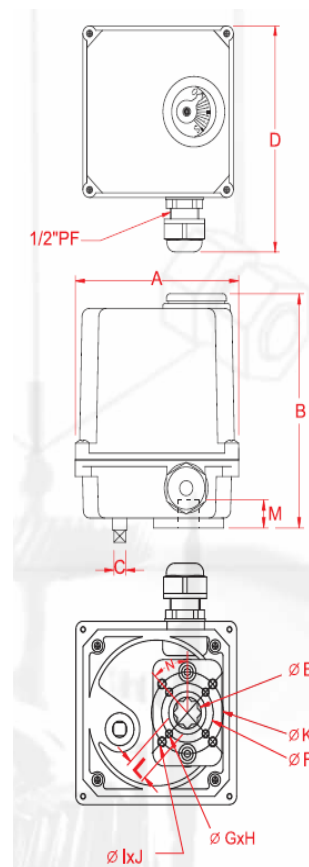
## APPROVALS

ISO 9001-CE  
CSA- UL429

## CONSTRUCTION

Body	Plastic" AA" Nylon 66
Cover	Plastic" AA" Nylon 66
gearbox	Treated Steel gears
Shaft	Chromed steel
Cams	Carbon steel

Data subject to alteration



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# ELECTRIC ACTUATOR UMA 3,5 UMC 10/15

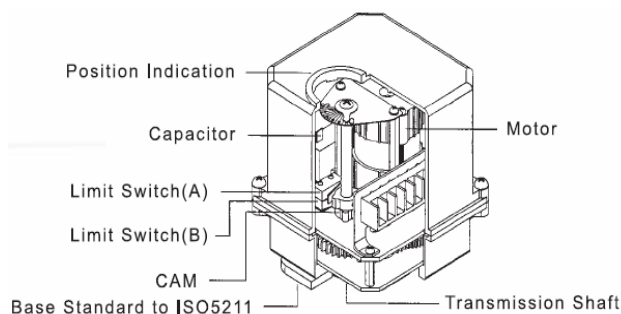
## DIMENSIONS

Dimensions (mm)	A	B	C	D	L	M
UMA 3,5	112	144	8	148	14	18.5
UMC 10 - 15	165	165	8	200	17	17.3

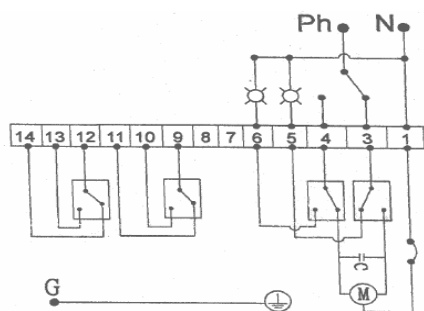
24V Version are 26 mm higher (B+26 mm)

## OTHER CHARACTERISTICS

Actuator	Torque (Nm)	Voltage	Time (s)	Power (W)	ISO	Star (mm)
UMA 3,5	35	230 V ac	10	10	F03 / F05	14
	35	24 V ac	15	10	F03 / F05	14
	35	24 V dc	15	10	F03 / F05	14
UMC 10	100	230 V ac	8	18	F07	17
	150	230 V ac	8	18	F07	17
UMC 15	150	24 V ac	8	25	F07	17
	150	24 V dc	8	25	F07	17



## WIRING



**230 Vac**  
**24 Vac**

1	Common
3	Opening phase
4	Closing phase
5	Open powered contact
6	Close powered contact
7	Heater
8	Heater
9	Auxiliary Common number one
10	NO Auxiliary contact number one
11	NC Auxiliary contact number one
12	Auxiliary Common number two
13	NO Auxiliary contact number two
14	NC Auxiliary contact number two

Data subject to alteration



Réf.: FT  
2206GB

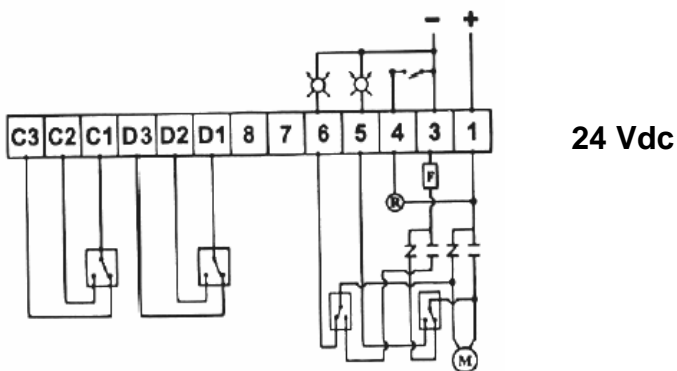
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# ELECTRIC ACTUATOR UMA 3,5 UMC 10/15

sometimes, 9, 10, 11, 12, 13 and 14 may be respectively called D1, D2, D3, C1, C2, C3.



24 Vdc

	Wire 1 with +
	Wire 3 with -
	Bridge between 3 and 4 Opening
	Without bridge Closing
5	Open powered contact
6	Close powered contact
7	Heater
8	Heater
D1	Auxiliary Common number one
D2	NO Auxiliary contact number one
D3	NC Auxiliary contact number one
C1	Auxiliary Common number two
C2	NO Auxiliary contact number two
C3	NC Auxiliary contact number two

## OPTIONS



## ADJUSTMENT OF THE LIMIT SWITCHES

1. The cams are fixed on the main shaft
2. Clockwise rotation = valve will close: the contact stops the motor
3. Counterclockwise rotation = valve will open: the contact stops the motor

Data subject to alteration