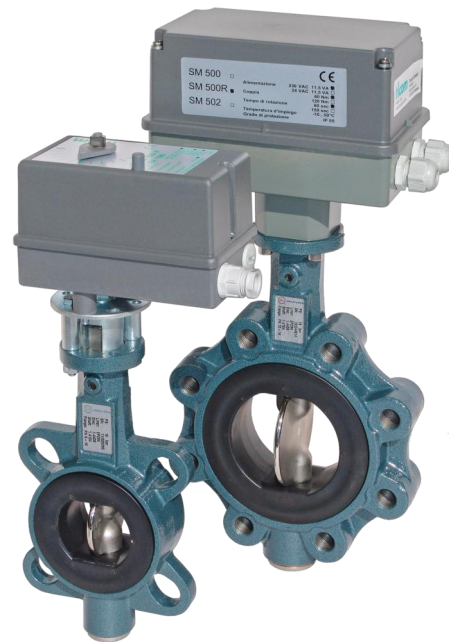


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Type Z011A + Z014A / DN 20 - DN 125

Highlights

- Actuators compatible with „Ticoval“-range
- High quality EBRO-valves
- Admissible for drinking water
- Low pressure loss
- Manual operation possible
- Maintenance-free
- 100% tight sealing



Application

Motorized butterfly valves with electric actuators are used for building control (e.g. heating, air-conditioning, solar), water and waste water technology and all sorts of industrial applications. The materials and sealing components used in this product cover various fluids (e.g. water, glycol with water) and are also admissible for drinking water.

“Ticofly” valves are used as on/off or regulating valves, depending on actuator used.

By using the same type of actuators for “Ticofly” butterfly valves and “Ticoval” ball valves, a key benefit is especially achieved by the uniform control when butterfly valves and ball valves are used in combination.

Key features / Technical data

Type / Description	EBRO Z011A	EBRO Z014A
Characteristics	A universally applicable wafer type valve according to EN 593. Flange accommodation DIN 2501	Lug type butterfly valve with threaded holes. This type enables the one-sided lugging of pipes. Flange accommodation DIN 2501
Flange gasket	integrated	integrated
Dimensions	DN 20 - DN 125	DN 20 - DN 125
Flanges	PN 6/10/16	PN 10/16
Temperature range	-20°C to +100°C	-20°C to +100°C
Max. pressure	10 bar	10 bar
Max. differential pressure Δp	DN 20 to DN 100: 10 bar DN 125: 3 bar	DN 20 to DN 100: 10 bar DN 125: 3 bar

Function

Function is free of water hammer. The motorized butterfly valve is operated by a single pole contact (e.g. thermostat, switch). Depending upon the position of the contact, the butterfly valve moves forth or back to the end position. The integrated relay in the actuator will then cause a switch over of the direction. Intermediary positions are not possible. Rotating direction is selectable by switch.

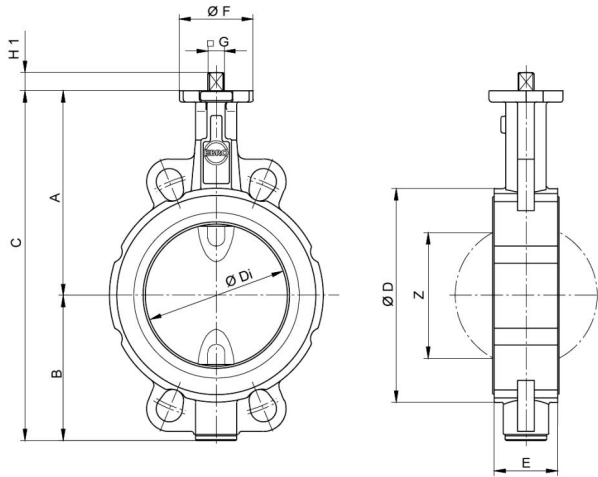
Actuators without relay operate with two separate power phases (one for each direction) and can be stopped in any intermediate valve position. Also available is the actuator EA103 (24V) with 0...10V DC adjustable control (ask for more details).

The actuators perform a maximum rotation of 90° and therefore open / close the valve completely.

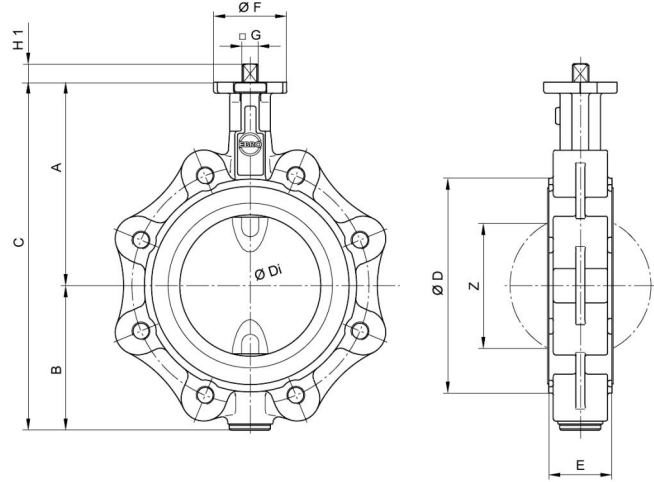
Quality features

- Reliable **high quality actuators** from our “Ticoval” ball valve range assure continuous problem-free operation.
- EBRO Butterfly valves comply with the requirements of the Heating System regulations dated 1st June 1994.
- The special construction of the liner (incorporating location beads for positioning within the body to prevent „working“ in operation) efficiently seals against the medium, the shaft locations and the connecting pipeworks flanges. **Supplementary gasket seals for the adjacent flanges are not required.**
- The **shaft is carried in multiple bearings** with shaft deflection due to high pressure being prevented, thus ensuring optimal guidance, positive location and long service life.
- The sealing surface of the disc being mirror finished guarantees the benefit of **low operating torque and tight valve sealing** up to the maximum working pressure. This design gives high flow characteristics.
- The shaft safety device prevents inadvertent shaft removal when fitting actuators or undertaking maintenance procedures.
- Can be disassembled, material-specific recycling possible.

Ticofly Wafer Pattern Butterfly Valve Z011A



Ticofly Lug Type Butterfly Valve Z014A



Product range

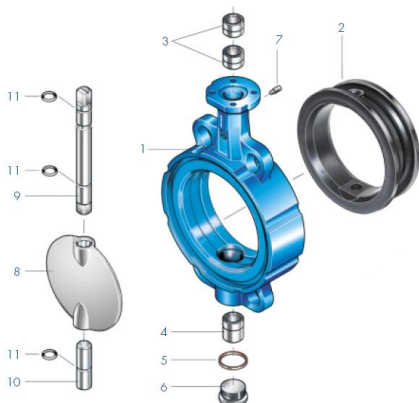
Dim. [DN]	Article-No.	Description	Δp max. [bar]
20	760.0311.000	Ticofly Z011A	10
25	760.0411.000	Ticofly Z011A	10
32	760.0511.000	Ticofly Z011A	10
40	760.0611.000	Ticofly Z011A	10
50	760.0711.000	Ticofly Z011A	10
65	761.0811.000	Ticofly Z011A	10
80	761.0911.000	Ticofly Z011A	10
100	761.0A11.000	Ticofly Z011A	10
125	761.0B11.000	Ticofly Z011A-3	3

Dim. [DN]	Article-No.	Description	Δp max. [bar]
20	760.0314.000	Ticofly Z014A	10
25	760.0414.000	Ticofly Z014A	10
32	760.0514.000	Ticofly Z014A	10
40	760.0614.000	Ticofly Z014A	10
50	760.0714.000	Ticofly Z014A	10
65	761.0814.000	Ticofly Z014A	10
80	761.0914.000	Ticofly Z014A	10
100	761.0A14.000	Ticofly Z014A	10
125	761.0B14.000	Ticofly Z014A-3	3

Dimensions, Weights and Kvs-values

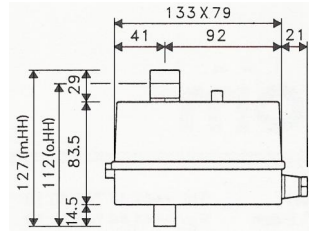
DN [mm]	Dim. [in]	A [mm]	B [mm]	C [mm]	D [mm]	Di [mm]	E [mm]	F [mm]	G [mm]	H1 [mm]	Z [mm]	Flange [ISO]	Weight [kg] Z011 / Z014	Kvs-value [m³/h]
20	¾	104	45	149	63	31,5	33	54	11	12	-	F04	1,3 / 2,1	32
25	1	104	45	149	63	31,5	33	54	11	12	-	F04	1,3 / 2,1	36
32	1 ¼	104	50	154	68	31,5	33	54	11	12	-	F04	1,4 / 2,1	40
40	1 ½	113	66	179	80	38,0	33	54	11	12	22	F04	1,8 / 4,0	50
50	2	126	84	210	95	48,5	43	54	11	12	25	F04	2,2 / 4,8	85
65	2 ½	134	93	227	115	63,5	46	54	11	12	45	F04	2,9 / 5,5	215
80	3	157	104	261	138	78,5	46	65	14	16	65	F05	4,0 / 8,6	420
100	4	167	115	282	158	98,5	52	65	14	16	85	F05	5,2 / 9,8	800
125	5	180	127	307	188	123,5	56	65	14	16	111	F05	6,9 / 10,1	1010

Materials butterfly valves

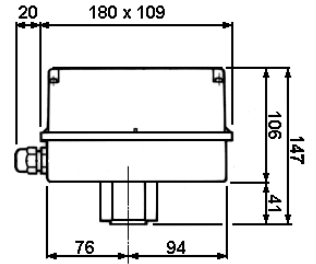


Description / Parts list	Material
1 Body	Z011A: Grey Cast Iron GG-25 Z014A: Nodular Cast Iron GGG-40
2 Seat	EPDM
3 / 4 Bearing bush	Brass MS 58
5 Seal DIN 7603	Copper
6 Plug screw DIN 908	Stainless Steel
7 Set screw DIN 915	Stainless Steel
8 Disc	Stainless Steel
9 / 10 Shaft	Stainless Steel
11 O-ring	NBR

Actuator EA100R



Actuator EA500R



Product range

Article-No.	Description	Feature
750.1000.100	EA100R	max. 20 Nm

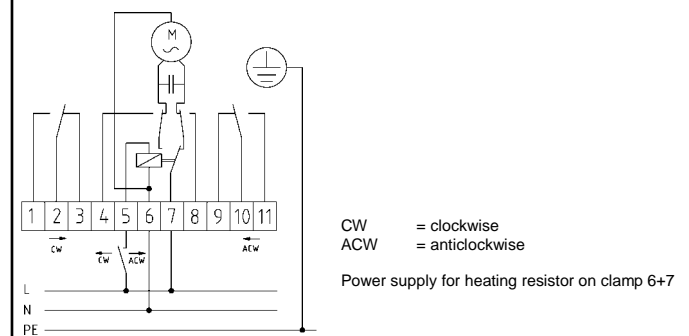
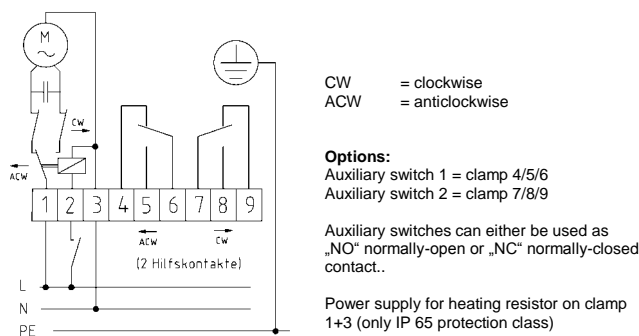
Article-No.	Description	Feature
750.1000.538	EA500R	max. 60 Nm

Technical data / Options

Actuator EA100R		Ordercode
Power supply	230V / 50Hz 24V / 50Hz	750.1000.0xx 750.2000.0xx
Relay	integrated (standard)	
Auxiliary switches	0 1 2	750.x000.0x0 750.x000.0x7 750.x000.0x8
Power consumption	3,5 VA	
Protection class	IP 40 IP 65 (with heating 5W)	750.x000.00x 750.x000.03x
Switching time	60 sec. for 90°	
Ambient temperature	-10°C to +50°C (avoid condensation inside actuator)	
Max. torque	20 Nm	
Hand lever	on request incl..	
Options: also available without relay or for 0...10V DC control		

Actuator EA500R		Ordercode
Power supply	230V / 50Hz 24V / 50Hz	750.1000.538 750.2000.538
Relay	integrated (standard)	
Auxiliary switches	2 integrated, 16/6A, 250V	
Power consumption	5,8 VA	
Protection class	IP 65 (with heating 5W)	
Switching time	60 sec. for 90°	
Ambient temperature	-10°C to +55°C (avoid condensation inside actuator)	
Max. Torque	60 Nm	
Mounting flange	F05 (ISO 5211 / DIN 3337), 4 screws M6x20 inkl.	



Electrical wiring diagram



Materials actuators

Part description	Material EA100R	Material EA500R
Housing	Polycarbonat, self extinguishing UL 94 VO	Aluminium diecasting, painted
Cover	Polycarbonat, self extinguishing UL 94 VO	Polycarbonat, self extinguishing acc. UL 94 VO
Cable gland	Polyamid, self extinguishing	Polyamid, self extinguishing
Gear	Steel, thermal treated	Steel, thermal treated
Hand lever	Plastic (IP 65 no lever)	(no lever)
Bearing	Bronze, self lubricating	Bronze, self lubricating

Combination actuator / butterfly valve

				Actuator	
				EA100R	EA500R
				750.1000.100	750.1000.538
					
Ticofly Wafer Pattern Butterfly Valve Z011A				Matching actuator	
Dim. [DN]	Article-No.	Description	Δp max. [bar]	EA100R	EA500R
20	760.0311.000	Ticofly Z011A	10	✓	
25	760.0411.000	Ticofly Z011A	10	✓	
32	750.0511.000	Ticofly Z011A	10	✓	
40	750.0611.000	Ticofly Z011A	10	✓	
50	750.0711.000	Ticofly Z011A	10	✓	
65	761.0811.000	Ticofly Z011A	10	✓	
80	761.0911.000	Ticofly Z011A	10		✓
100	761.0A11.000	Ticofly Z011A	10		✓
125	761.0B11.000	Ticofly Z011A-3	3	(on request)	✓
Ticofly Lug Type Butterfly Valve Z014A				Matching actuator	
Dim. [DN]	Article-No.	Description	Δp max. [bar]	EA100R	EA500R
20	760.0314.000	Ticofly Z014A	10	✓	
25	760.0414.000	Ticofly Z014A	10	✓	
32	750.0514.000	Ticofly Z014A	10	✓	
40	750.0614.000	Ticofly Z014A	10	✓	
50	750.0714.000	Ticofly Z014A	10	✓	
65	761.0814.000	Ticofly Z014A	10	✓	
80	761.0914.000	Ticofly Z014A	10		✓
100	761.0A14.000	Ticofly Z014A	10		✓
125	761.0B14.000	Ticofly Z014A-3	3	(on request)	✓

Notes

- Installation in any position except with actuator hanging downward position.
- At first putting into operation, observe correct function (electrical control / running angle).
- Mounting of actuator on valve in any 90° position possible.
- In case of power loss, gear can be disengaged by push button for manual operation with handlever or flat wrench (not possible on EA100R with protection IP65).

Further information

- Prices see separate price list.
- Further types of motorized butterfly valves on request.
- All listed articles are usually in stock.
- Errors and technical modifications are subject to change.