

# technical brochure

3-/4-WAY ROTARY MIXING VALVES ARV ProClick ELECTRIC ACTUATORS ARM ProClick



AFRISO

2017

# ProClick







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#### 3-/4-WAY ROTARY MIXING VALVES ARV ProClick

#### **Sleeve position indicator**

The thicker, raised part of the valve knob defines the position of the sleeve inside the valve. This makes the setting of the valve easier.

#### **Convenient knob**

A big knob with a visible positon indicator makes operating the valve manually very simple.



#### **Octagonal surfaces**

Special surfaces to catch the valve with a wrench make the installation easier in any position.

#### **Double-sided scale**

The scale is printed on both sides. On one side with "from 0 to 10" and on the other "from 10 to 0". This enables to mount the valve in various positions.

#### **ELECTRIC ACTUATORS ARM ProClick**

#### **ProClick system**

Mounting the actuator on the ARV ProClick valve requires only two steps, without the need for tools or any additional parts.

#### **Convenient knob**

A big knob with a visible positon indicator makes operating the actuator manually very simple.

#### **Electric cable** with plug

The control cable is plugged-in to the actuator. This assures easier mounting and electrical connections.



#### **LEDs**

The actuator indicates its movement direction via the legible LEDs. This assures a fast inspection even in dark boiler rooms.

#### **Double-sided scale**

The scale is printed on both sides. On one side with "from 0 to 10" and on the other "from 10 to 0". This enables to mount the actuator in various positions.

#### **Mode pushbutton**

An easy to use pushbutton enables switching the actuator from automatic to manual mode.



#### 3-/4-WAY ROTARY MIXING VALVES ARV ProClick



Under the article numbers showed in this brochure, the rotary mixing valves **ARV ProClick** are delivered in colourful boxes. The product name on the box is written in 4 languages (Polish, German, English, Russian). The technical data is written in Polish. Inside the box you will find the complete mixing valve and a Polish instruction manual.

#### **ELECTRIC ACTUATORS ARM ProClick**



The **ARM ProClick** actuators, with the article numbers stated herein, model **ARM** 323 and **ARM** 343 are delivered in colourful boxes. The product name is also written in four languages (Polish, German, English, Russian) and the technical data is in Polish. In the box you will find the **ARM ProClick** actuator with a 2 metre electric cable with plug, a mounting set for first generation of **ARV** valves and a Polish instruction manual.

#### **CONTROL SETS ARV+ARM ProClick**



If you decide to buy a control set, containing a 3- or 4-way **ARV ProClick** valve and an **ARM** 343 **ProClick** actuator, under the article numbers showed herein, we will deliver in a colourful bulk box. The name of the product will be written in 4 languages (Polish, German, English, Russian) and the technical data will be stated in Polish. Inside the bulk package there is a box with the **ARV ProClick** valve in standard outfit and a second box with the **ARM** 343 **ProClick** actuator. Please be aware that there is no mounting set for first generation of **ARV** valves included.

Other packaging options are possible. For larger quantities we can deliver according to your specific needs. ① Please inquire: zok@afriso.pl, +48 32 330 33 55.



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#### 3-way rotary mixing valves **ARV ProClick**



#### **APPLICATION**

3-way rotary valves are mainly used as mixing valves, where the desired temperature is achieved by mixing the hot water from the boiler and the cold water from the system return, in appropriate proportions. 3-way valves can also be used as switching or separating valves, when changing the flow direction between two outlets (e.g. central heating and domestic hot water preparation) is required. The 3-way **ARV ProClick** valves suit this application even better now, thanks to an improved inner construction. The leak rate is noticeably smaller, keeping a low torque to operate the valve.

Rotary mixing valves **ARV ProClick** can be used in many applications in different systems. They can work ① as mixing, switching or separating valves. Application examples 된 from page 9.

#### DESCRIPTION

3-way rotary mixing valves **ARV ProClick** with inner threads are made of brass. The connections have octagonal shape which makes mounting with a wrench easier. The valves have knobs for manual operation and rotation angle limiters for simple setting. The scale on top of the knob ensures good readability of the current valve position. On one side it is printed with "from 0 to 10" and on the other "from 10 to 0", so one can mount the valve in various positions. The thicker knob part shows the sleeve position inside the valve. The knob itself is made from a non-slip material. The durable plastic parts under the knob are used to mount the **ARM ProClick** actuator on the valve. The **ProClick** system does not require any tools. **ARV ProClick** valves require low torque.

No additional adapter to mount the **ARM ProClick** actuator is needed. All required parts are always under ① the **ARV ProClick** valve knob.

#### **TECHNICAL DATA**

Medium temperature	5–110°C
Medium pressure	max 10 bar
Differential pressure	max 1 bar
Body	brass CW617N
Sealing	EPDM
Internal leak rate (Δp=100 kPa)	max 0,2% for DN15-DN32, max 0,5% for DN40-DN50
Rotation angle	90°
Required torque	max 0,5 Nm for DN15–DN25, max 2 Nm for DN32, max 3 Nm for DN40–DN50
Glycol concentration	max 50%

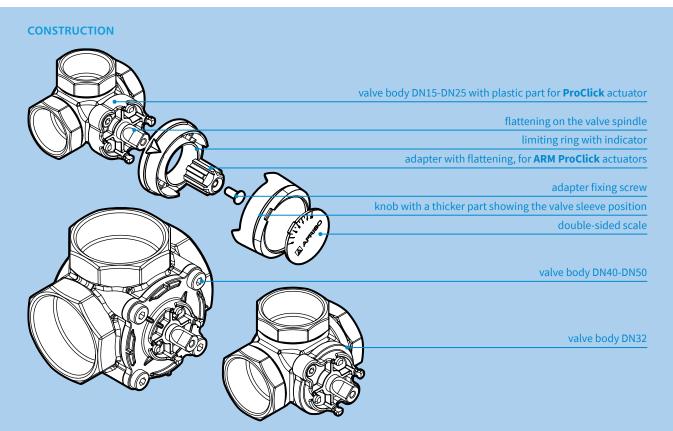
#### **APPROVALS AND CERTIFICATES**

The rotary mixing valves **ARV ProClick** comply with the Pressure Directive PED 2014/68/EU and according to article 4.3 (sound engineering practice) must not wear the CE mark.

#### **SELECTION TABLE**

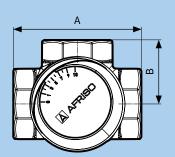
Art. No.	Туре	DN	Kvs [m³/h]	Connections
13 381 10	ARV 381	15	2,5	Rp½″
13 388 10	ARV 388	20	4	Rp³⁄4″
13 382 10	ARV 382	20	6,3	Rp³⁄4″
13 384 10	ARV 384	25	10	Rp1″
13 385 10	ARV 385	32	16	Rp11/4″
13 386 10	ARV 386	40	25	Rp1½″
13 387 10	ARV 387	50	40	Rp2″

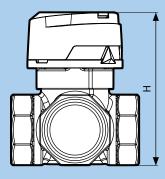


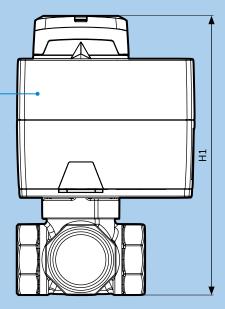


**DIMENSIONS** [mm]

ARM ProClick actuator





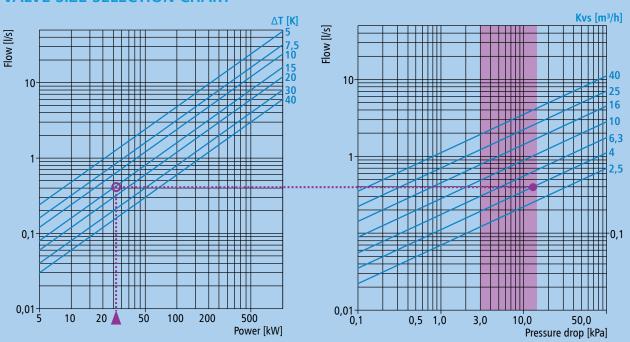


Art. No.	Туре	DN	А	В	Н	H1
13 381 10	ARV 381	15	70	35	81,5	150
13 388 10	ARV 388	20	70	35	81,5	150
13 382 10	ARV 382	20	70	35	81,5	150
13 384 10	ARV 384	25	70	35	83,5	152
13 385 10	ARV 385	32	84	42	90,5	159
13 386 10	ARV 386	40	106	53	110,5	179
13 387 10	ARV 387	50	106	53	110,5	179



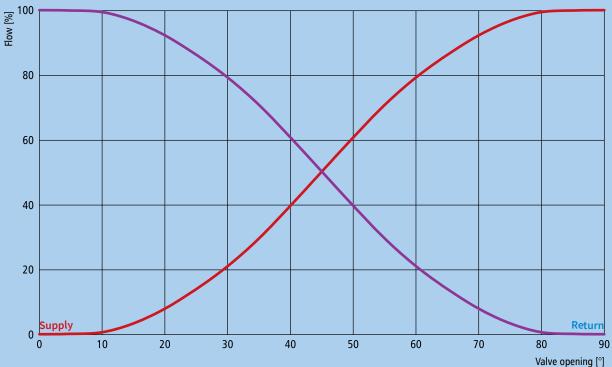
3-way rotary mixing valves ARV ProClick

### VALVE SIZE SELECTION CHART



When choosing an **ARV** valve size, at first one must determine the power needed by the system (in kW) and the appropriate temperature difference ( $\Delta$ T) between supply and return. From the power axis move up until the line will cross with the chosen  $\Delta$ T value. Next go right horizontally to the second chart to determine the Kvs value. One should choose the lowest value with which the line intersects inside the coloured area. The coloured area determines the optimum pressure drop on the valve. In typical systems it should equal from 3 to 15 kPa. Choosing the type with the lowest Kvs value within the coloured area, ensures proper pressure drop on the valve. The drop is mandatory for effective and correct functioning of the valve in the system.

The optimum temperature difference ( $\Delta$ T) for underfloor heating systems equals 5K and for radiator heating  $\bigcirc$  15 to 20K.

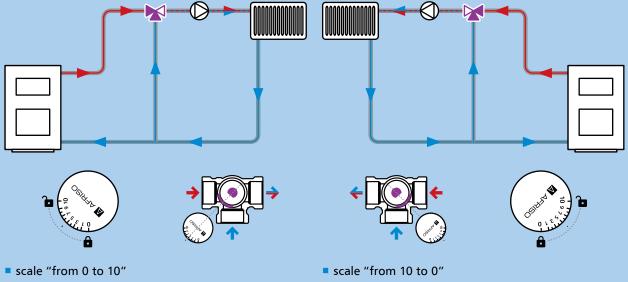


#### **FLOW CHART**



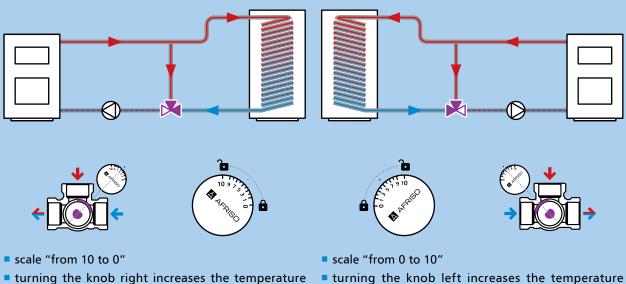
#### **MOST COMMON APPLICATIONS**

Mixing two streams with different temperatures on the stand pipe



- turning the knob right decreases the temperature in the supply pipe
- turning the knob left increases the temperature in the supply pipe
- turning the knob left decreases the temperature in the supply pipe
- turning the knob right increases the temperature in the supply pipe

#### Mixing two streams with different temperatures on the return pipe



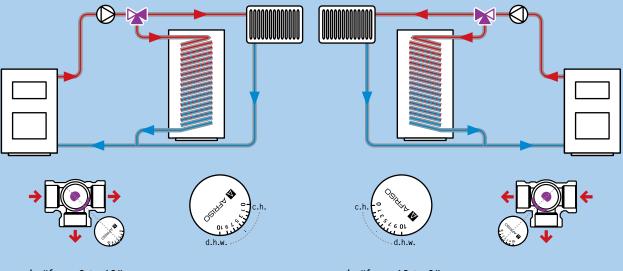
- turning the knob right increases the temperature in the return pipe
- turning the knob left decreases the temperature in the return pipe
- in the return pipeturning the knob right decreases the temperature in the return pipe

3-way valves acting as mixing valves require the pump to be mounted after them, on the mixed side. The valve ① is located on the suction side of the pump.

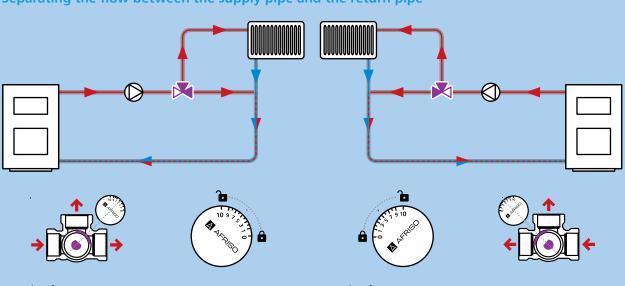


#### 10 3-way rotary mixing valves ARV ProClick

#### Switching between heating the domestic water tank and the heating circuit



- scale "from 0 to 10"
- turning the knob to the end left position closes the heating circuit and opens the domestic water circuit
- turning the knob to the end right position opens the heating circuit and closes the domestic water circuit
- scale "from 10 to 0"
- turning the knob to the end left position opens the heating circuit and closes the domestic water circuit
- turning the knob to the end right position closes the heating circuit and opens the domestic water circuit

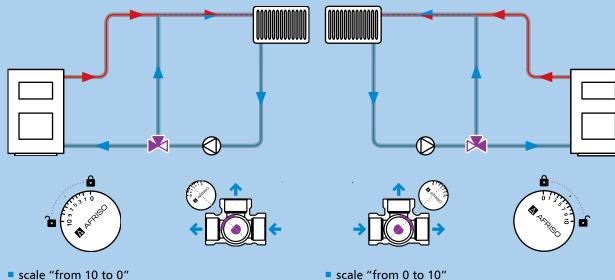


Separating the flow between the supply pipe and the return pipe

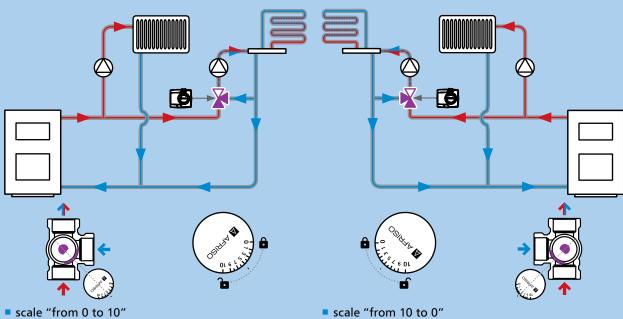
- scale "from 10 to 0"
- turning the knob right increases the hot flow through the heating system
- turning the knob left decreases the hot flow through the heating system, increasing the temperature of the water returning to the boiler
- scale "from 0 to 10"
- turning the knob left increases the hot flow through the heating system
- turning the knob right decreases the hot flow through the heating system, increasing the temperature of the water returning to the boiler

3-way valves acting as switching or separating valves require the pump to be mounted before them, on the supply side. The valve is located on the pressure side of the pump.





- turning the knob right increases the flow through
- the boiler, increasing the temperature of the water flowing to the heating circuit
- turning the knob left decreases the flow through the boiler, decreasing the temperature of the water flowing to the heating circuit
- turning the knob right decreases the flow through the boiler, decreasing the temperature of the water flowing to the heating circuit
- turning the knob left increases the flow through the boiler, increasing the temperature of the water flowing to the heating circuit



Mixing two streams with different temperatures for underfloor heating

Separating the flow between the return pipe and the supply pipe

- turning the valve right decreases the temperature in the underfloor heating system
- turning the valve left increases the temperature in the underfloor heating system
- turning the valve right increases the temperature in the underfloor heating system
- turning the valve left decreases the temperature in the underfloor heating system



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#### 4-way rotary mixing valves **ARV ProClick**



#### **APPLICATION**

4-way rotary mixing valves are commonly used with solid fuel boilers, as mixing valves which simultaneously increase the temperature of the water returning to the boiler. They can be also successfully utilized in systems with cast iron gas or oil boilers.

#### **DESCRIPTION**

4-way rotary mixing valves **ARV ProClick** with inner threads are made of brass. The connections have octagonal shape which makes mounting with a wrench easier. The valves have knobs for manual operation and rotation angle limiters for simple setting. The scale on top of the knob ensures good readability of the current valve position. On one side it is printed with "from 0 to 10" and on the other "from 10 to 0", so one can mount the valve in various positions. The thicker knob part shows the sleeve position inside the valve. The knob itself is made from a non-slip material. The durable plastic parts under the knob are used to mount the **ARM ProClick** actuator on the valve. The **ProClick** system does not require any tools. **ARV ProClick** valves require low torque.

No additional adapter to mount the **ARM ProClick** actuator is needed. All required parts are always under ① the **ARV ProClick** valve knob.

#### **TECHNICAL DATA**

Medium temperature	5–110°C
Medium pressure	max 10 bar
Differential pressure	max 1 bar
Body	brass CW617N
Sealing	EPDM
Internal leak rate (∆p=50 kPa)	max 1,5%
Rotation angle	90°
Required torque	max 1 Nm
Glycol concentration	max 50%

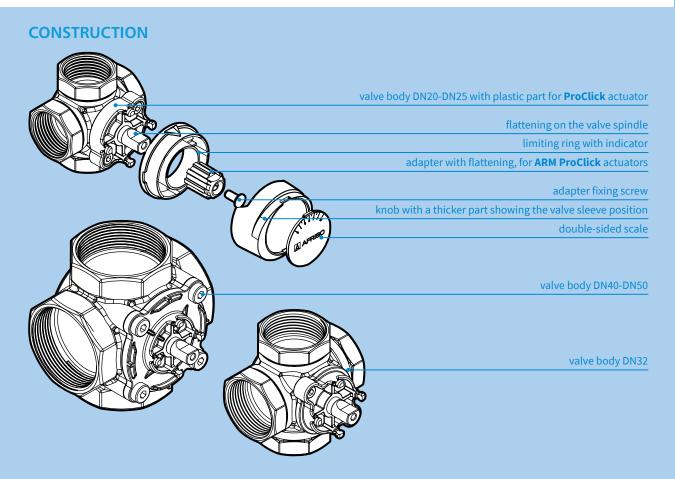
#### **APPROVALS AND CERTIFICATES**

The rotary mixing valves **ARV ProClick** comply with the Pressure Directive PED 2014/68/EU and according to article 4.3 (sound engineering practice) must not wear the CE mark.

#### **SELECTION TABLE**

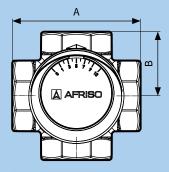
Art. No.	Туре	DN	Kvs [m³/h]	Connections
13 482 10	ARV 482	20	6,3	Rp³⁄4″
13 484 10	ARV 484	25	10	Rp1″
13 485 10	ARV 485	32	16	Rp1¼″
13 486 10	ARV 486	40	25	Rp1½″
13 487 10	ARV 487	50	40	Rp2″

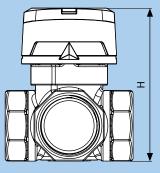


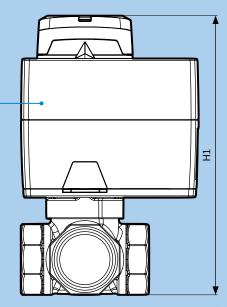


**DIMENSIONS** [mm]

ARM ProClick actuator



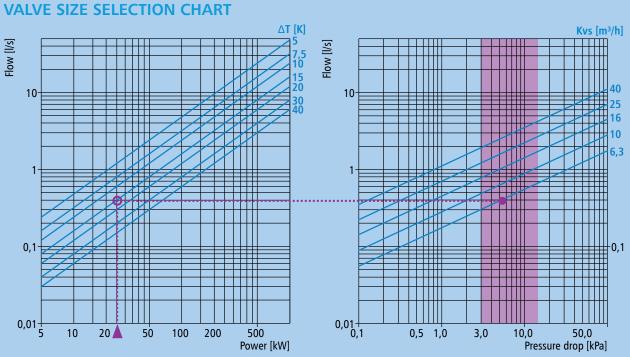




Art. No.	Туре	DN	А	В	Н	H1
13 482 10	ARV 482	20	70	35	81,5	150
13 484 10	ARV 484	25	70	35	83,5	152
13 485 10	ARV 485	32	84	42	90,5	159
13 486 10	ARV 486	40	106	53	110,5	179
13 487 10	ARV 487	50	106	53	110,5	179

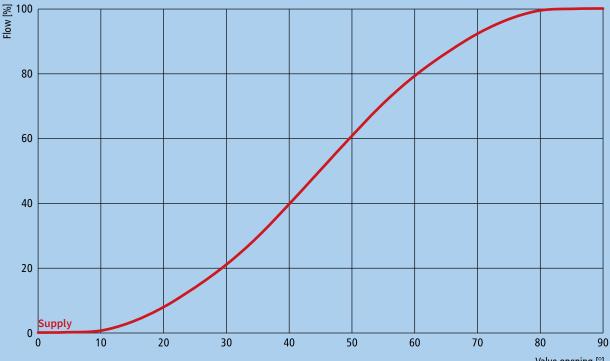


#### 4-way rotary mixing valves ARV ProClick



When choosing an ARV valve size, at first one must determine the power needed by the system (in kW) and the appropriate temperature difference ( $\Delta T$ ) between supply and return. From the power axis move up until the line will cross with the chosen  $\Delta T$  value. Next go right horizontally to the second chart to determine the Kvs value. One should choose the lowest value with which the line intersects inside the coloured area. The coloured area determines the optimum pressure drop on the valve. In typical systems it should equal from 3 to 15 kPa. Choosing the type with the lowest Kvs value within the coloured area, ensures proper pressure drop on the valve. The drop is mandatory for effective and correct functioning of the valve in the system.

The optimum temperature difference ( $\Delta T$ ) for underfloor heating systems equals 5K and for radiator heating  $\bigcirc$ 15 to 20K.



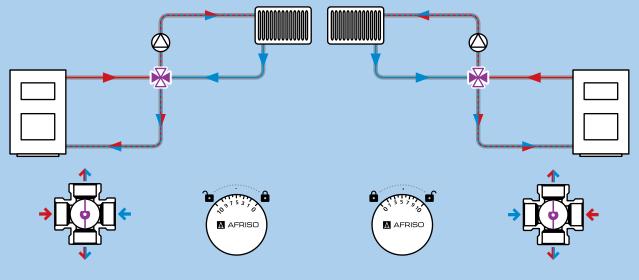
#### **FLOW CHART**

Valve opening [°]



#### **MOST COMMON APPLICATION**

Mixing two streams with increasing the returning water temperature simultaneously



- scale "from 10 to 0"
- turning the knob right increases the temperature in the supply pipe and decreases it in the return pipe
- turning the knob left decreases the temperature in the supply pipe and increases it in the return pipe
- scale "from 0 to 10"
- turning the knob right decreases the temperature in the supply pipe and increases it in the return pipe
- turning the knob left increases the temperature in the supply pipe and decreases it in the return pipe

4-way rotary mixing valves work as "double-mixing" valves. The hot water from the boiler blends with the cold water returning from the system. The mixed water is divided into two streams – one flows to supply the system and the other returns to the boiler, with increased temperature. Increasing the temperature of the water returning to the boiler protects the heat source from corrosion and increases its lifespan. This is a solution recommended by most of the solid fuel boiler manufacturers.



#### Electric actuators **ARM ProClick**

# **CE**

Electric actuators **ARM ProClick** are designed to operate on rotary mixing valves, which require a maximum tur-

#### **DESCRIPTION**

Electric actuators **ARM ProClick** stand out with unique functions and attractive design. The double-sided scale shows the valve position. Big LEDs determine the turning direction. Manual operation is possible thanks to the clutch in the form of a pushbutton. A very adhesive grease on the racks makes the **ARM ProClick** actuators maintenance-free. The actuators are delivered with a 2 metre electric cable with coloured wires. The cable is connected to the actuator with a covered plug. This enables mounting the actuator on the valve





ning torque of 6 Nm. They have a turning angle of 90°. One can operate them also manually using the knob.

without the cable. Mounting the ARM ProClick actuator on an ARV ProClick valve requires no tools and additional parts. The ARM ProClick actuators can be also utilized with the first generation ARV vales, and valves manufactured by other producers. Depending on the valve construction, the ARM ProClick actuator can be mounted via the ProClick mechanism or in a traditional way, using counter and mounting screws.

#### **TECHNICAL DATA**

Torque	6 Nm	
Rotation angle	90°	
Time to rotate by 90°	60 s, 120 s	
Control signal – supply voltage	3-point (SPDT) – 230 V AC	
Temperature range	0–50°C	
Power consumption	2,5-4 VA	
Safety class	II	
Protection degree	IP42	
Dimensions (H x W x D)	85,5 x 97 x 99 mm	
Electric cable supplied	2 m with plug	

#### **SCOPE OF SUPPLY**

electric actuator ARM ProClick with knob, double-sided scale and electric wire,

- mounting set for first generation of ARV valves, ESBE (MG, G, F), PAW, BRV,
- Polish instruction manual.

Rotary mixing valves **ARV** and actuators **ARM** with the **ProClick** system require no additional linking parts. One should only pull off the knob and blue ring from the valve. Next slide the **ARM ProClick** actuator onto the valve. The actuator should block itself on the valve. All that with no tools.

#### APPROVALS AND CERTIFICATES

Electric actuators **ARM** are produced according to the directives of the European Union regarding: low-voltage equipment LVD (2014/35/EU), electromagnetic compatibility EMC (2014/30/EU), restricting the use of hazardous substances RoHs (2011/65/EU). Electric actuators **ARM** comply also with the following standards: EN 60730-1, EN 60730-2-14.

#### **SELECTION TABLE**

ArtNr	Nazwa	Czas obrotu o 90°
14 323 10	ARM 323	60 s
14 343 10	ARM 343	120 s

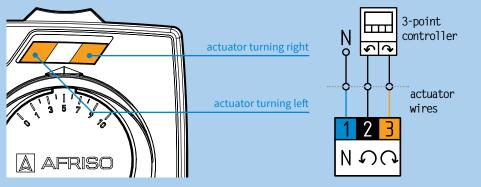
Electric actuators ARM with other parameters are still available in the first generation form **D** see page 20.



## **DIMENSIONS** [mm] **POSSIBLE MOUNTING POSITIONS** 97 99 85,5 AFRISC **MOUNTING PRINCIPLE ARV ProClick** valve 4 ProClick system counter pins flattening on the adapter ProClick system disconnecting pushbutton ARM ProClick actuator first generation **ARV** valve mounting set (Art. No. 14 101 10) ring with indicator knob with a thicker part showing the valve sleeve position double-sided scale

To mount the **ARM ProClick** actuator on the first generation of **ARV** valves please use the mounting ① set Art. No. 14 101 10, supplied with the **ARM ProClick** actuator.

#### **ACTUATOR LEDs**



Supply the controller with power according to the manual delivered with the product. Connect the neutral wire N of the actuator directly to the mains supply or to the controller, if it gives such a possibility.



#### 3-way control sets **ARV+ARM ProClick**

### C E APPLICATION

Sets of a 3-way mixing valve ARV ProClick and an electric actuator ARM ProClick are applicable in many types of

heating, cooling and other systems, where the most popular, 3-point control signal is used.

The scope of supply contains a fully equipped **ARV ProClick** valve with knob and an electric actuator ① **ARM ProClick**. The mounting set for first generation of **ARV** valves is not included.

#### DESCRIPTION

The sets consist of a brass 3-way mixing valve **ARV ProClick** and the most popular **ARM ProClick** actuator, type **ARM** 343 (230 V AC, 3-point, 120 s, 6 Nm).

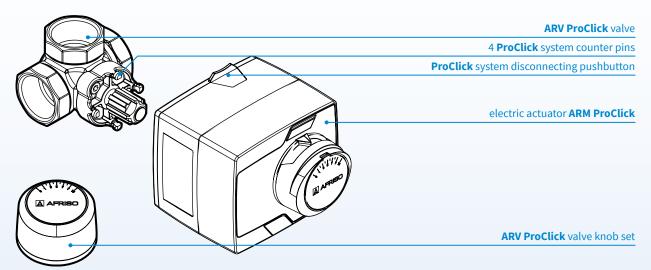
The valve and actuator are meant to be connected using the innovative **ProClick** system.

#### **APPROVALS AND CERTIFICATES**

The rotary mixing valves **ARV ProClick** comply with the Pressure Directive PED 2014/68/EU and according to article 4.3 (sound engineering practice) must not wear the CE mark.

Electric actuators **ARM** are produced according to the directives of the European Union regarding: low-voltage equipment LVD (2014/35/EU), electromagnetic compatibility EMC (2014/30/EU), restricting the use of hazardous substances RoHs (2011/65/EU). Electric actuators **ARM** comply also with the following standards: EN 60730-1, EN 60730-2-14.

#### **CONSTRUCTION**



#### **SELECTION TABLE**

Art. No.	Туре	DN	Kvs	Connections
13 382 44	ARV 382 + ARM 343	20	6,3	Rp³⁄₄″
13 384 44	ARV 384 + ARM 343	25	10	Rp1″
13 385 44	ARV 385 + ARM 343	32	16	Rp1¼″
13 386 44	ARV 386 + ARM 343	40	25	<b>Rp1</b> ½″
13 387 44	ARV 387 + ARM 343	50	40	Rp2″







CE

#### **APPLICATION**

Sets of a 4-way mixing valve **ARV ProClick** and an electric actuator **ARM ProClick** are applicable in many types of heating and other systems, where the most popular,

3-point control signal is used. Mostly used in heating systems where mixing, with increasing the return temperature simultaneously is required.

The scope of supply contains a fully equipped **ARV ProClick** valve with knob and an electric actuator ① **ARM ProClick**. The mounting set for first generation of **ARV** valves is not included.

#### **DESCRIPTION**

The sets consist of a brass 4-way mixing valve **ARV ProClick** and the most popular **ARM ProClick** actuator, type **ARM** 343 (230 V AC, 3-point, 120 s, 6 Nm).

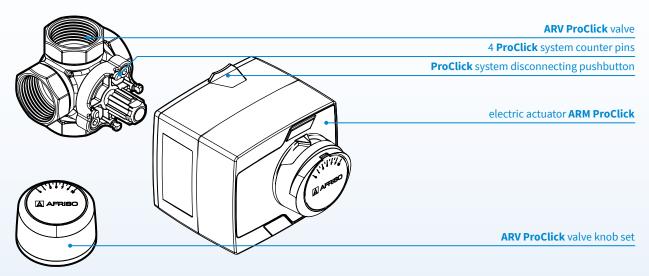
The valve and actuator are meant to be connected using the innovative **ProClick** system.

#### **APPROVALS AND CERTIFICATES**

The rotary mixing valves **ARV ProClick** comply with the Pressure Directive PED 2014/68/EU and according to article 4.3 (sound engineering practice) must not wear the CE mark.

Electric actuators **ARM** are produced according to the directives of the European Union regarding: low-voltage equipment LVD (2014/35/EU), electromagnetic compatibility EMC (2014/30/EU), restricting the use of hazardous substances RoHs (2011/65/EU). Electric actuators **ARM** comply also with the following standards: EN 60730-1, EN 60730-2-14.

#### **CONSTRUCTION**



#### **SELECTION TABLE**

Art. No.	Туре	DN	Kvs	Connections
13 482 44	ARV 482 + ARM 343	20	6,3	Rp¾″
13 484 44	ARV 484 + ARM 343	25	10	Rp1″
13 485 44	ARV 485 + ARM 343	32	16	Rp1¼″
13 486 44	ARV 486 + ARM 343	40	25	Rp11⁄2″
13 487 44	ARV 487 + ARM 343	50	40	Rp2″



#### 0 Electric actuators ARM - first generation



# CE

#### APPLICATION

Electric actuators **ARM** are designed to operate on rotary mixing valves. Depending on the model, they can operate on valves which require 6, 10 or 15 Nm of torque.

They have a turning angle of  $90^{\circ}$ . One can operate them also manually using the knob.

Using an **ARM** electric actuator one can easily automate the work of a 3-/4-way rotary valve. The 3-point signal is meant for valves working as mixing or separating valves. 2-point signal is used when the valve works in a diverting function. The **ARM** 994 model (proportional) is a very convenient solution when the control system uses the 0 (2)-10 V or 0 (4)-20 mA signal.

#### **DESCRIPTION**

The **ARM** actuators are delivered with two scales showing the valve position. LEDs determine the turning direction. Manual operation is possible thanks to a clutch, which you activate by turning the switch. The **ARM** actuators are maintenance-free. The actuators are delivered with a 2 metre electric cable with coloured wires. The **ARM** actuators can be utilized with the **ARV ProClick** and first generation of ARV valves.

Torque	6 Nm, 10 Nm, 15 Nm	
Rotation angle	90°	
Time to rotate by 90°	15 s, 30 s, 60 s, 90 s, 120 s, 240 s	
Control signal – supply voltage	ge	
2-point (SPST)	24 V ac/230 V ac	
3-point (SPDT)	24 V AC/230 V AC	
proportional	24 V ac/dc (010 V, 210 V, 020 mA, 420 mA)	
Auxiliary switch	optional (settable 0–90°)	
Temperature range	0–50°C	
Power consumption	2,5-4 VA	
Safety class	I	
Protection degree	IP42	
Dimensions (H x W x D)	84 x 102 x 89 mm	
Electric cable supplied	2 m	

#### DANE TECHNICZNE

#### **SCOPE OF SUPPLY**

The **ARM** actuators under the article numbers stated in the table that follows are delivered in white AFRISO boxes. A mounting set for **ARV ProClick** valves (Art. No. 14 101 01) and a second one for first generation **ARV** valves are included. The instruction manual can be delivered on request. Please inquire if the interesting language is available: zok@afriso.pl, +48 32 330 33 55.

#### **APPROVALS AND CERTIFICATES**

Electric actuators **ARM** are produced according to the directives of the European Union regarding: low-voltage equipment LVD (2014/35/EU), electromagnetic compatibility EMC (2014/30/EU), restricting the use of hazardous substances RoHs (2011/65/EU). Electric actuators **ARM** comply also with the following standards: EN 60730-1, EN 60730-2-14.

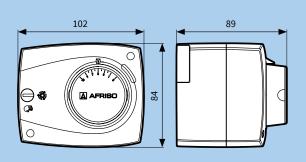


#### **MOST POPULAR FIRST GENERATION ARM ACTUATORS - SELECTION TABLE**

Art. No.	Туре	Torque	Rotation time by 90°	Control signal / voltage	Aux switch
78 204	ARM 302	6 Nm	15 s	3-point / 24 V AC	0
78 215	ARM 443	6 Nm	120 s	3-point / 230 V AC	•
78 216	ARM 342	6 Nm	120 s	3-point / 24 V AC	0
78 217	ARM 353	6 Nm	240 s	3-point / 230 V AC	0
78 225	ARM 723	6 Nm	60 s	2-point / 230 V AC	0
78 233	ARM 994	10 Nm	60/90/120 s	proportional / 24 V AC/DC	0

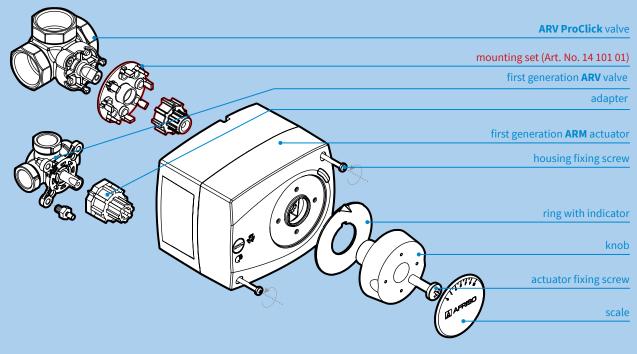
Electric actuators ARM with other parameters are also available in the first generation form. For larger quantities please inquire: zok@afriso.pl, +48 32 330 33 55.

#### **DIMENSIONS** [mm]



**POSSIBLE MOUNTING POSITIONS** 

#### **MOUNTING PRINCIPLE**

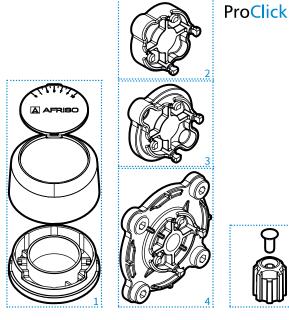


To mount the first generation **ARM** actuator on an **ARV ProClick** valve use the mounting set (Art. No. 14 101 01) delivered with the actuator.



#### **ROTARY MIXING VALVES ARV ProClick**

Art. No.	Description	
13 101 10	Sealing set for 3-way DN15 ARV ProClick valves	
13 102 10	Sealing set for 3-/4-way DN20, DN25, DN32 ARV ProClick valves	
13 114 10	Sealing set for 3-/4-way DN40, DN50 ARV ProClick valve	es
13 124 10	Knob set for ARV ProClick valves	1
13 125 10	Linking part for actuator, DN15, DN20, DN25 ARV ProClick valves	2
13 126 10	Linking part for actuator, DN32 ARV ProClick valves	3
13 127 10	Linking part for actuator, DN40, DN50 ARV ProClick valve	es 4
13 128 10	3-/4-way ARV ProClick valve adapter with flattening	5



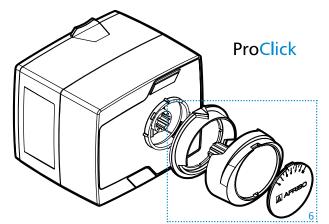


#### **MOUNTING SETS FOR ARM ProClick ACTUATORS ON ROTARY MIXING VALVES**

Art. No.	Description		
14 101 10	ARV AFRISO without ProClick system (first generation)		
14 103 10	Centra ZR/DR		
14 104 10	Centra DRU		
14 105 10	Siemens VBI, VBF		
14 106 10	Wita, Meibes		
14 107 10	ESBE VRG, Danfoss HRB (old generation)		
14 108 10	First		
14 109 10	Honeywell Corona V544, V543		
14 110 10	PAW K32, K33, K37		
14 111 10	Danfoss HRB, HFE, HRE		

#### **ELECTRIC ACTUATORS ARM ProClick**

Art. No.	Description	
14 115 10	Knob set for ARM ProClick actuator	6



## POPULAR MOUNTING SETS FOR FIRST GENERATION OF ARM ACTUATORS ON ROTARY MIXING VALVES

Art. No.	Description
14 101 01	ARV ProClick AFRISO
14 101 00	ARV AFRISO, ESBE (MG, G, F), Seltron, Somatherm, Hora, WIP, PAW, LK, BRV, IMIT, IVAR, HOVAL, OLYMP (6 Nm)
14 102 00	ARV AFRISO, ESBE (MG, G, F), Seltron, Somatherm, Hora, WIP, PAW, LK, BRV, IMIT, IVAR, HOVAL, OLYMP (10 Nm, 15 Nm)
14 107 00	ESBE VRG, Danfoss HRB (old generation)

Other mounting sets available on request. Please inquire: zok@afriso.pl, +48 32 330 33 55.





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