



## ANGLE VALVES A-80 MAC

A-80 SERIE

### SCOPE

A-80 MAC are 1/4 quarter turn angle brass ball valves designed for being connected to water pipe system. The special characteristics they have make them not surrender to the effects of lime on it.

They are used to shut off individually water supply to sinks, basins, cisterns and other places to proceed to repair or replace.

### SERVICE CONDITIONS

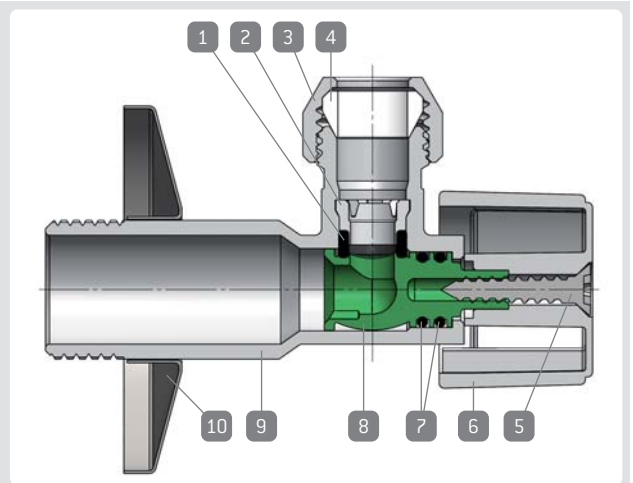
**Nominal pressure:** 16 bar.  
**Temperature range:** cold and hot water up to 95 °C.

**Test pressure:** 25 bar.  
**Fluid:** water intended to human consumption and domestic hot water.

### COMPONENTS

ITEM	COMPONENT	MATERIAL	TREATMENT
1	Seat	NBR	
2	Supporting clip	POM	
3	Nut <sup>1</sup>	European Brass CW614N	Chrome plated
4	Bicone <sup>1</sup>	Polyamide	
5	Screw	Stainless steel	
6	Handle	Zamak	Chrome plated
7	Seals	NBR	
8	Stem-ball	Polymeric antilime	
9	Body	European Brass CW617N	Chrome plated
10	Rosette	Stainless steel	

<sup>1</sup> according to model



### MAIN CONSTRUCTIVE FEATURES

#### ANTILIME POLYMERIC STEM-BALL

Stem and ball are manufactured in one piece made of special antilime polymer, which increases its resistance, allows a softer operation of the valve and blocks the lime adhesion on it.

This stem-ball has the same design than ARCO traditional brass-made shut off, used in A-80 serie from the very beginning. It has the same characteristics of leak tightness and loss of charge than this traditional one, but with the special advantage to prevent negative effects of lime.



## MAIN CONSTRUCTIVE FEATURES (continued)

### ANTILIME POLYMERIC STEM-BALL (continued)

In those installations where hardness of water and temperature make easier the addition of lime, together with the low frequency these valves are operated, leads to hard operation of the valve after long periods of time. This new anti-lime ball is the solution to avoid a hard operation and keep a constant flow rate.

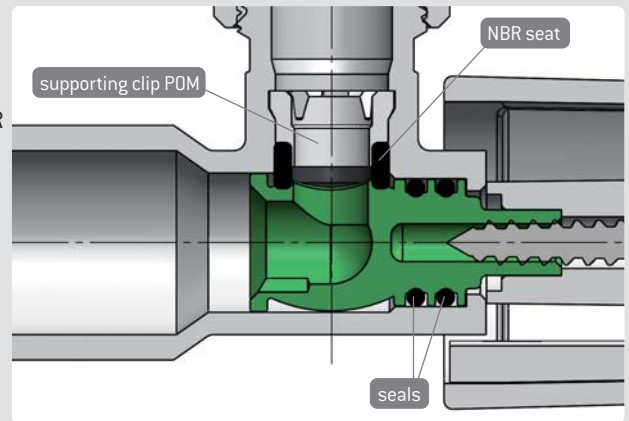
### INTERNAL AND EXTERNAL LEAK TIGHTNESS

#### INTERNAL Leak tightness

The supporting clip made of POM is placed in the valve to push the NBR seat against the stem-ball. This system can not be dismantled, avoiding improper manipulations.

#### EXTERNAL Leak tightness

A double NBR seal placed on the stem assure external leakness. This double joint system guarantees safety against external leakage, use, ageing,...

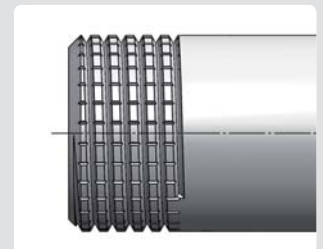


### NOVA METAL HANDLE

NOVA series metal handle has the high level characteristics of ARCO design: made of metal, polished and chromed finish, as the rest of the valve.

### KNURLED THREADS

A-80 angle valves have the classic knurled system of ARCO on the thread to facilitate the installation. It makes easier the application of teflon, esparto gras... to the thread, avoiding slidings of these elements while application.



## DIMENSIONS

### A-80 MAC without nut

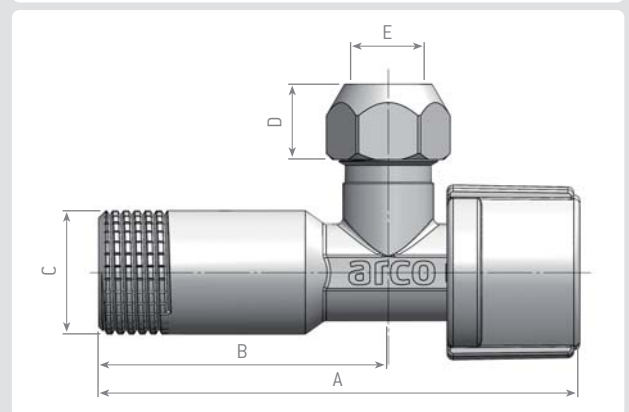
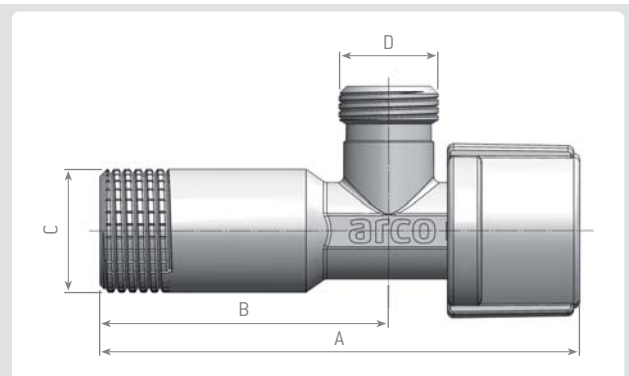
MEASURE	A	B	C	D
1/2 x 3/8	80	48	G 1/2A	G 3/8A
1/2 x 1/2	80	48	G 1/2A	G 3/8A

G Thread ISO 228

### A-80 MAC with standard nut

MEASURE	A	B	C	D	E
1/2 x 3/8 x 10	80	48	G 1/2A	12,5	10
1/2 x 1/2 x 12	80	48	G 1/2A	12,5	12

G Thread ISO 228

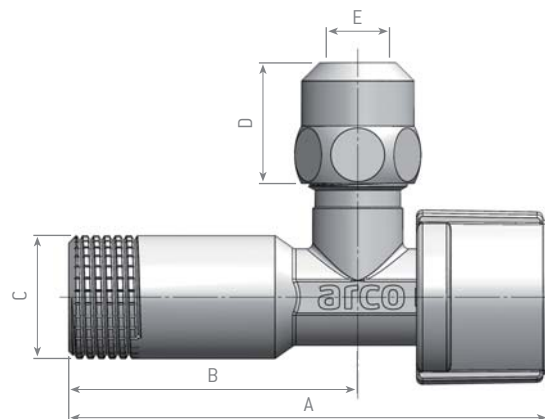


## DIMENSIONS (continued)

### A-80 MAC with long nut

MEASURE	A	B	C	D	E
1/2 x 3/8 x 10	80	48	G 1/2A	20	10

G Thread ISO 228



## PRODUCT RANGE AND VARIATIONS\*

### A-80 MAC LONG

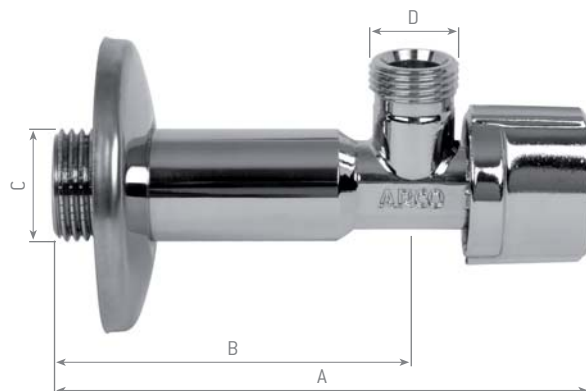
A-80 MAC LONG angle valves have a body size longer than other A-80 models. These valves are used for plumbing installations where network source connection is quite down the wall, being impossible to connect a normal body angle valve.

In this kind of installations, A-80 MAC LONG can be connected without any extra extender, saving time and cost of the work by up to 40%.

### A-80 MAC LONG

MEASURE	A	B	C	D
1/2 x 3/8	98	64	G 1/2A	G 3/8A

G Thread ISO 228



A (total length) A-80 MAC LONG: 98 mm.  
A (total length) A-80 MAC : 80 mm.

### POLISHED FINISH (according to model)

Some types are extra chromed polished finish, for those installations which high quality of finished are required.

### ASAG: TEFLON COVERING SELF-TAPPING RING (according to model)

Are models with a teflon system on the inner thread. They can be directly threaded to the water inlet without the need to apply teflon tape, esparto grass... or any other sealing material.

The valves with the self-tapping teflon ring save around 30% of time in the installation.

### BICONE COMBI TYPE (according to model)

Bicone made of NBR and poliamide, with a brass ring to increase the resistance in the union with the copper pipe.

Specially to step up safety and reliability in all public instalacions that can be improperly handled.

\* as present catalogue.



## PRODUCT RANGE AND VARIATIONS\* (continued)

### INDEXES (according to model)

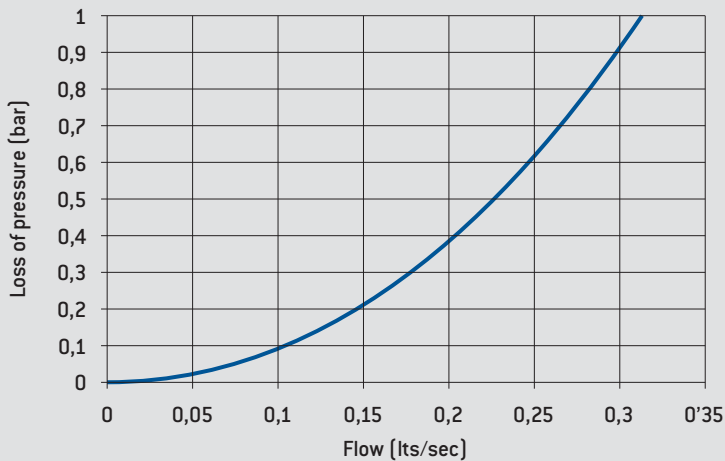
Some of our valves have blue and red indexes to clarify its connexion according to hot or cold water

\* as present catalogue.



## HYDRAULIC CHARACTERISTICS

Flow vs. Loss of pressure



Hydraulic characteristics obtained according to EN 1267.

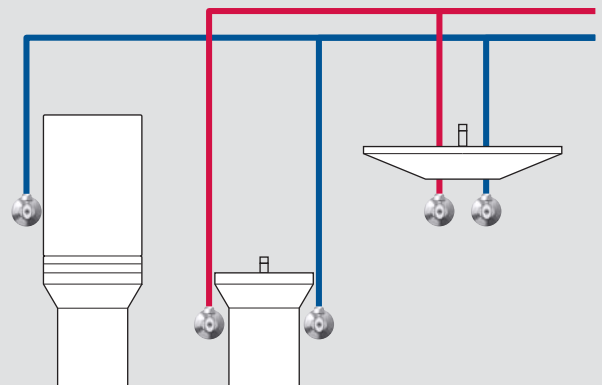
## INSTALLATION AND ASSEMBLY

The installation of valves must be done with the right tool, mostly with 15 spanner.

The tool should be adjusted to the flat sides of the body of the valve, avoiding the deformation of the zone by high pressure of the tool.

Components of the valve must not be altered. The substitution or desmantelling of the handle can provocate external leaks.

All quarter turn handle valves should work totally open.



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Every product has an impact on the environment during all stages of its life-cycle, including final disposal. All components of these valves can be recycled, deposit the valve in a green or recycled point when no longer useful.

Válvulas ARCO, S.L. reserves the right to change our products and specifications at any time and without prior notice.