



**GRIFERIA DE
LABORATORIO**



**ROBINETTERIE DE
LABORATOIRE**



**LABORATORY
FITTINGS**



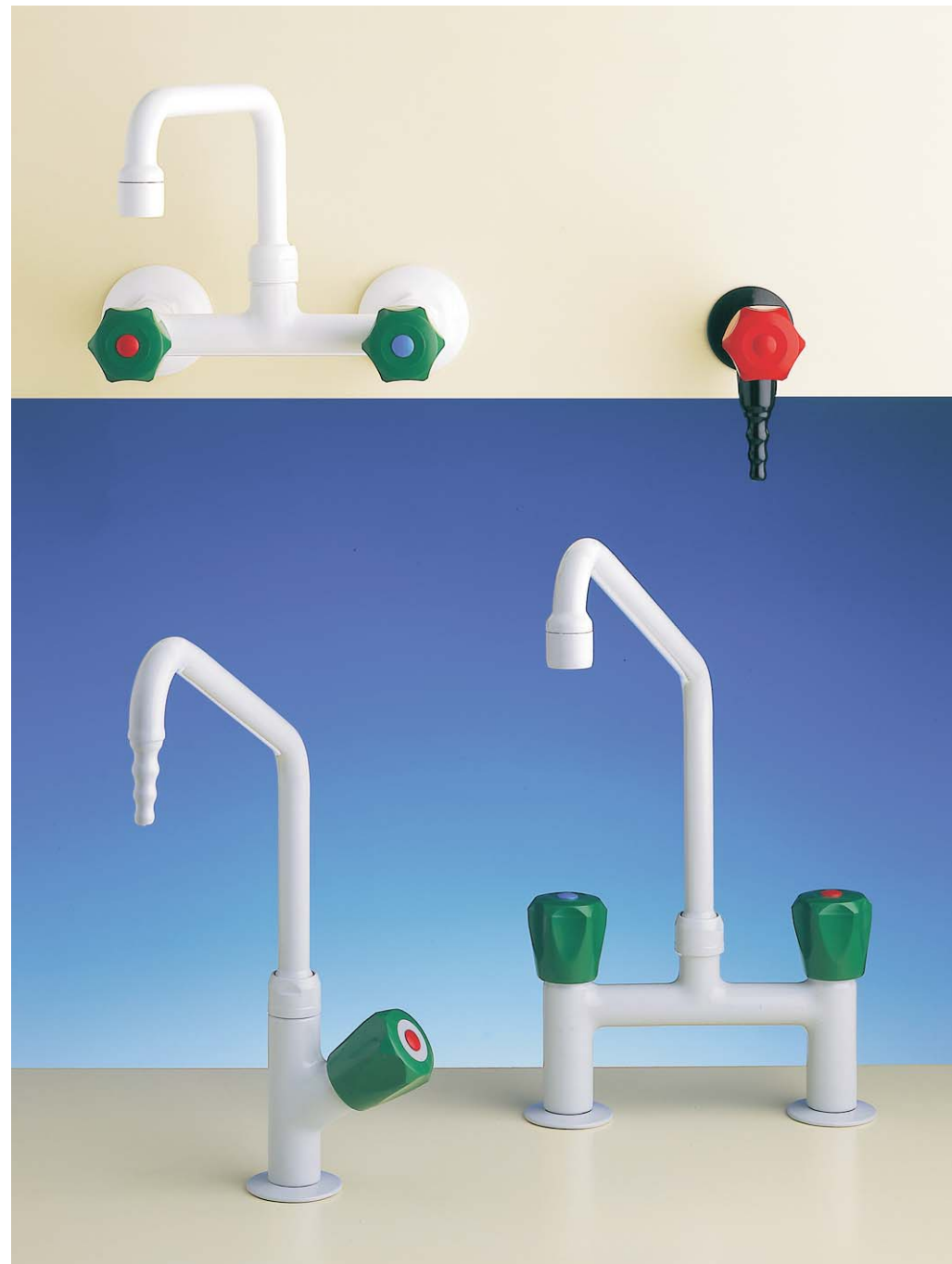
**TORNEIRAS PARA
LABORATORIO**



CARLOS ARBOLES S.A

LABORATORY TAPS

CATALOGUE OF LABORATORY TAPS



Since 1929, Arboles, has been manufacturing taps and fittings of various types and for a range of applications. We today specialise in two classes of products:

TAPS AND FITTINGS FOR LABORATORIES. EMERGENCY SHOWERS AND EYE WASHES.

In this catalogue we offer the complete range of our Taps and Fittings for Laboratories, which we have been supplying to the market since 1944.

Carlos Arboles, S.A. products are manufactured under strict quality control systems in accordance with ISO 9001.

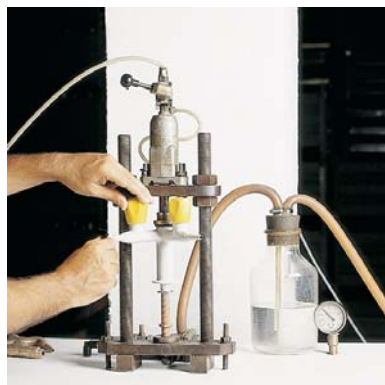


CARLOS ARBOLES S.A.
LABORATORY TAPS

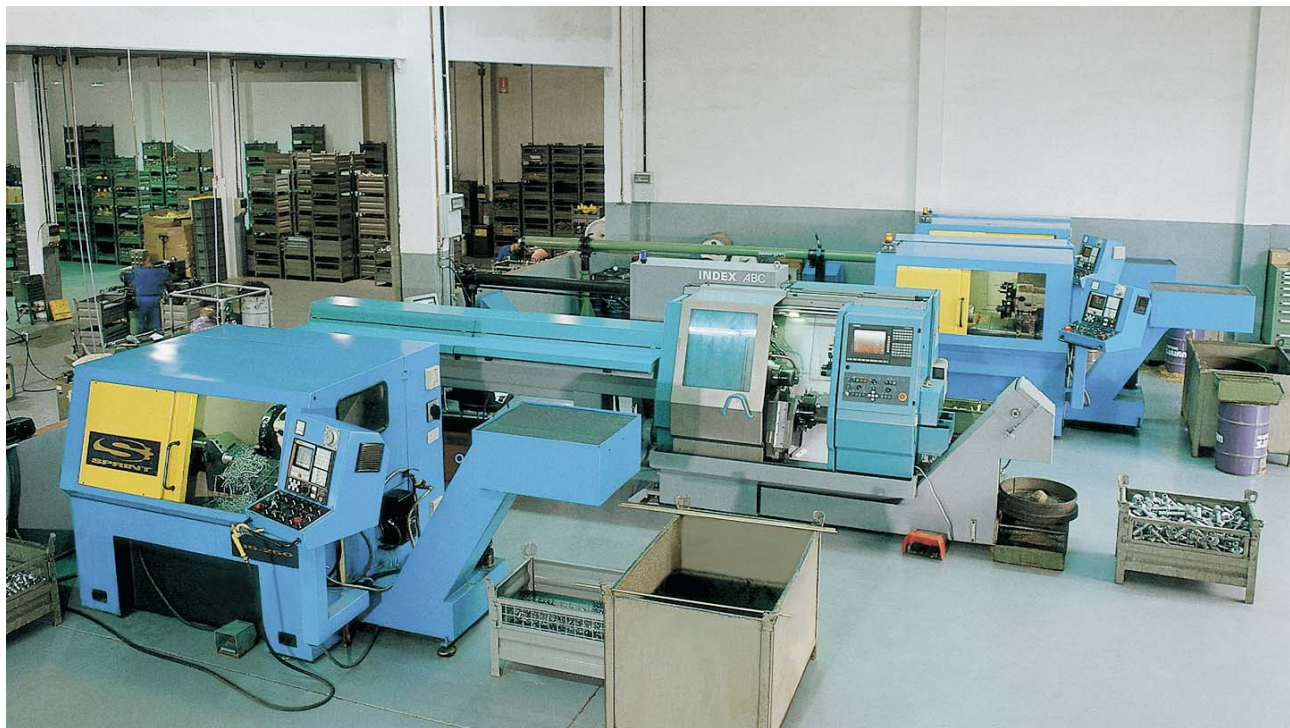
MANUFACTURING SYSTEMS



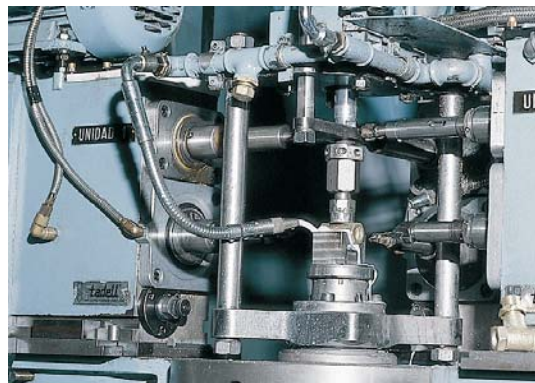
TECHNICAL DEPARTMENT



LEAK CONTROL



WORKSHOP WITH C.N.C. PRECISION LATHES



AUTOMATIC TURNING



CORROSION PROOF COATING

COLOUR CODE STANDARDS UNE-EN 13792



WPC COLD DRINKING WATER



C₂H₄ ETHYLENE



CO₂ CARBON DIOXIDE



VF VACUUM



WPH HOT DRINKING WATER



C₃H₆ PROPENE



Kr KRYPTON



VH VACUUM



WNC COLD INDUSTRIAL WATER



C₄H₈ BUTENE



Ne NEON



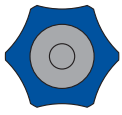
CH₂O FORMALDEHIDE



WST STEAM



C₂H₂ ACETYLENE



Ar ARGON



C₃H₈O PROPANOL



WCC PURE COLD WATER



Ar CH₄ ARGON-METHANE



He HELIUM



CH₄O METHANOL



WDC DECALCIFIED COLD WATER



H₂ HYDROGEN



NH₃ AMMONIAC



C₃H₆O ACETONE



WDI DISTILLED WATER



N₂ NITROGEN



NO₂ NITROGEN DIOXIDE



C₂HCl₃ TRYCHLOROETHYLENE



CH₄ METHANE



N₂O NITROGEN MONOXIDE



H₂S HYDROGEN SULFIDE



HClO₄ PERCHLORIC ACID



C₃H₈ PROPANE



CA COMPRESSED AIR



PH₃ PHOSPHINE



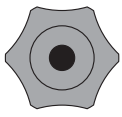
G NATURAL GAS



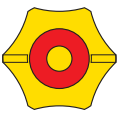
C₄H₁₀ BUTANE



O₂ OXYGEN



V VACUUM



LPG PROPANE-BUTANE GAS



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RESISTANCE TO VARIOUS CHEMICALS

Condition after 18 months contact.

G = Good F = Fail N = Not Recommended

	CONCENTRATION	RESISTANCE	
		20° C	40° C
INORGANIC BASES			
AMMONIUM HYDROXIDE	Concentrated	G	G
AMMONIA	Liquid or gas	G	G
LIME-WASH		G	G
POTASSIUM HYDROXIDE	50 %	G	F
SODIUM HYDROXIDE	5 %	G	G
SODIUM HYDROXIDE	10 %	G	F
SODIUM HYDROXIDE	50 %	G	F
INORGANIC ACIDS			
CHROMIC ACID	10 %	N	N
HYDROCHLORHIC ACID	1 %	G	F
PHOSPHORIC ACID	50 %	G	F
SULPHURIC ACID	1 %	G	F
INORGANIC SALTS			
ALUM		G	G
ALUMINIUM SULPHATE		G	G
AMMONIUM NITRATE	Concentrated solutions	G	G
AMMONIUM SULPHATE	"	G	G
BARIUM CHLORIDE	"	G	G
CALCIUM ARSENATE	"	G	G
CALCIUM CHLORIDE	"	G	G
CALCIUM SULPHATE	"	G	G
COPPER SULPHATE	"	G	G
DIAMMONIUM PHOSPHATE	"	G	G
MAGNESIUM CHLORIDE	50 %	G	G
POTASSIUM FERROCYANIDE	Concentrated solutions	G	G
POTASSIUM NITRATE	"	G	F
POTASSIUM SULPHATE	"	G	G
SODIUM CARBONATE	"	G	G
SODIUM CHLORIDE	Saturated	G	G
SODIUM SILICATE	Concentrated solutions	G	G
SODIUM SULPHIDE	"	G	F
TRISODIUM PHOSPHATE	"	G	G
OTHER INORGANIC PRODUCTS			
AGRICULTURAL SPRAYS		G	G
BLEACH SOLUTION		F	N
CHLORINE		N	N
FLUORINE		N	N
HYDROGEN		G	G
HYDROGEN PEROXIDE	20 vol	G	F
MERCURY		G	G
OXYGEN		G	G
OZONE		F	N
POTASSIUM PERMANGANATE	5 %	N	N
SEA WATER		G	G
SODA WATER		G	G
SULPHUR		G	G
WATER		G	G
ORGANIC ACIDS AND ANHYDRIDES			
CITRIC ACID		G	G
LACTIC ACID		G	G
OLEIC ACID		G	G
OXALIC ACID		G	G
STEARIC ACID		G	G
TARTARIC ACID	Saturated solution	G	G
URIC ACID		G	G
HYDROCARBONS			
ACETYLENE		G	G
BENZENE		G	G
BUTANE		G	G
CYCLOHEXANE		G	G
DECALIN		G	G
FORANE® 12 (CFC)		G	
FORANE® 22 (CFC)		G	
HEXANE		G	G
METHANE		G	G
NAPHTALENE		G	G
PROPANE		G	G
STYRENE		G	G
TOLUENE		G	G
XYLENE		G	G

	CONCENTRATION	RESISTANCE	
		20° C	40° C
ALCOHOLS			
BENZYL ALCOHOL		F	N
BUTANOL		G	F
ETHANOL	Pure	G	G
GLYCERINE	Pure	G	G
GLYCOL		G	G
METHANOL	Pure	G	F
ALDEHYDES AND KETONES			
ACETALDEHYDE		G	F
ACETONE	Pure	G	G
BENZALDEHYDE		G	F
CYCLOHEXANONE		G	F
FORMALDEHYDE	Technical	G	F
METHYLETHYLKETONE		G	G
METHYLISOBUTYLKETONE		G	G
CHLORINATD SOLVENTS			
METHYL BROMIDE		G	N
METHYL CHLORIDE		G	N
PERCHLOROETHYLENE		G	G
TRICHLOROETHYLENE		G	F
PHENOLS			
		N	N
SALTS, ESTERS, ETHERS			
AMYL ACETATE		G	G
BUTYL ACETATE		G	G
DIETHYL ETHER		G	
DIOCTYLPHOSPHATE		G	G
DIOCTYLPHTHALATE		G	G
ETHYL ACETATE		G	G
FATTY ACID ESTERS		G	G
METHYL ACETATE		G	G
METHYL SULFATE		G	F
TRIBUTYLPHOSPHATE		G	G
TRICRESYLPHOSPHATE		G	G
VARIOUS ORGANIC COMPOUNDS			
ANETHOLE		G	
CARBON DISULPHIDE		G	F
DIACETONE ALCOHOL		G	G
DIMETHYL FORMAMIDE		G	G
ETHYLENE CHLORHYDRIN		N	N
ETHYLENE OXIDE		G	G
FURFUROL		G	G
GLUCOSE		G	G
TETRAETHYL LEAD		G	
TETRAHYDROFURANE		G	G
VARIOUS PRODUCTS			
BEER		G	
CIDER		G	
CRUDE PETROLEUM		G	G
DIESEL FUEL		G	G
FRUIT JUICES		G	G
FUEL-OIL		G	G
GREASES		G	G
GROUND-NUT OIL		G	G
HIGH OCTANE PETROL		G	G
KEROSENE (Paraffin)		G	G
LINSEED CAKE		G	G
MILK		G	G
MUSTARD		G	
NORMAL PETROL		G	G
OILS		G	G
SOAP SOLUTION		G	
STEARIN		G	G
SOLVENT NAPHTA		G	G
TOWN GAS		G	G
TURPENTINE		G	G
VINEGAR		G	
WINE		G	

PLASTIC COATING

The anti-corrosive plastic coating is made of 11 polyimades. Technical features are as follows:

- Approximate thickness: 250 to 300 microns.
- Melting point: 184 to 186° C.
- Flammability: Self-extinguishable.
- Shore hardness D to 20° C, 75.

Overall, the coating is considerably resistant to base chemicals, sea water, saline environments, oils, grease aromatic solvents, organic acids, diluted mineral acids and aliphatic solvents.

Neither fungi, or micro-organisms stick to the surface nor does frost collect.



Resistance to boiling water:
Excellent adhesion after 2000 hours.

Resistance to exposure to the elements:
Excellent.

Resistance to salt spray:
There is no corrosion after 2000 hours exposure (ASTM B-117 or AFNOR X 41-002 standard).

Resistance to sea water:
There is no corrosion after 10 years exposure.

APPLICATION METHOD:
The previously prepared metallic part is heated in an oven at a constant temperature ranging between 300° C and 450° C, depending on the part mass and the nature of the metal, and as soon as it is removed from the oven, it is placed for three or four seconds in the powder suspended in a fluidification container.

When the powder comes into contact with the hot metallic surface it melts and coats the said metal part evenly depending on the temperature of the part, its thermal inertia and the duration of the immersion. The part is removed from the container and air-cooled.



TECHNICAL FEATURES

GENERAL STANDARDS

The laboratory fittings we produce are manufactured according to the following specific standards:

UNE-EN 13792

Colour code for fluids on operating devices of laboratory taps.

DIN 12898

Laboratory taps; outlet nozzles.

DIN 12919

Laboratory taps, connecting sleeves; tap columns, heights and flang dimensions.

DIN 3537

Gas valves \leq PN 4 requirements and test for approval of laboratory valves.

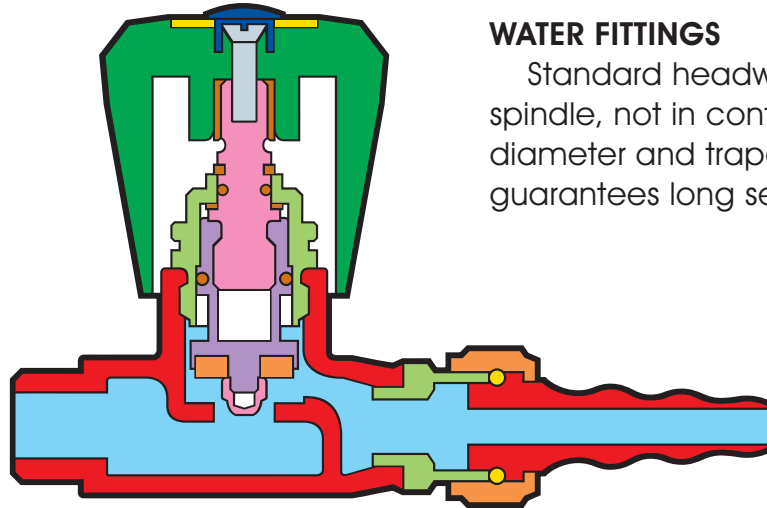
We can manufacture in line with other standards from other countries.

DIN 12918 -1

Laboratory taps. Part 1: Valves for water.

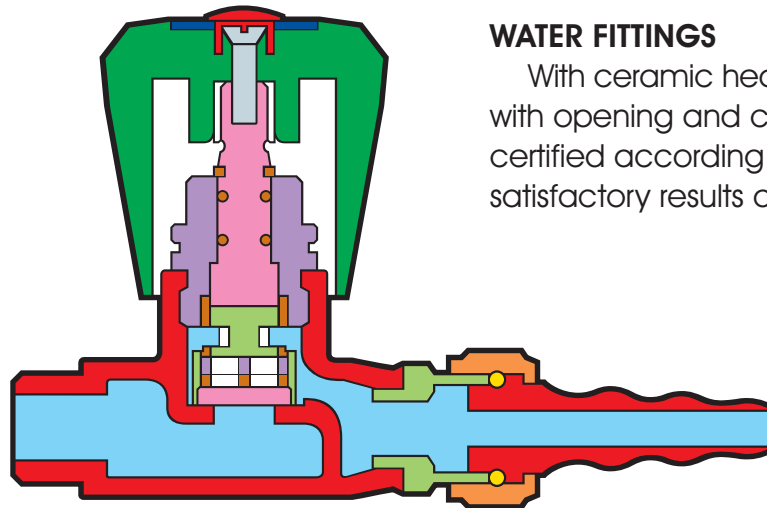
WATER FITTINGS

Standard headwork with non-rising spindle, not in contact with water, wide diameter and trapezoidal thread which guarantees long service-life.



WATER FITTINGS

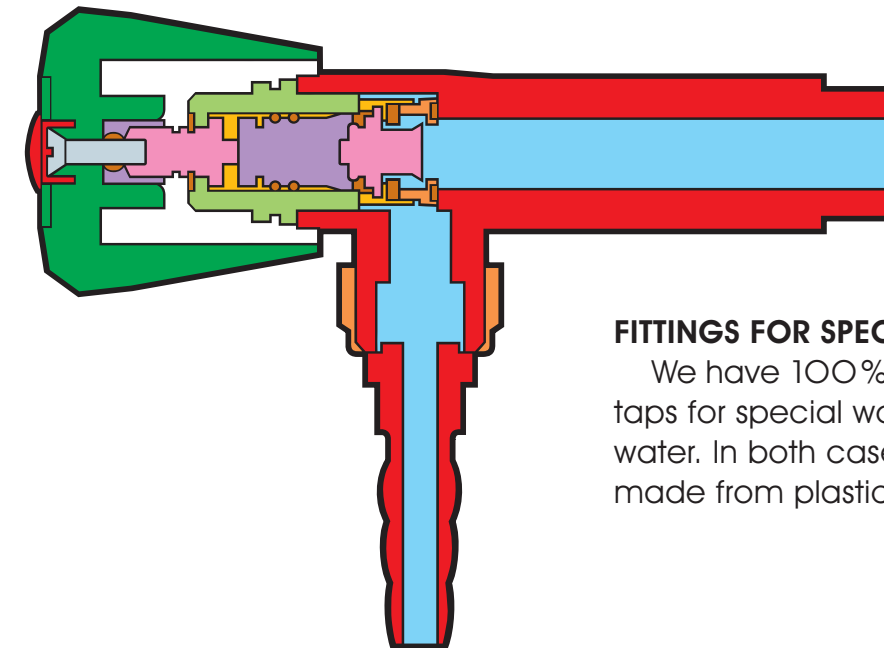
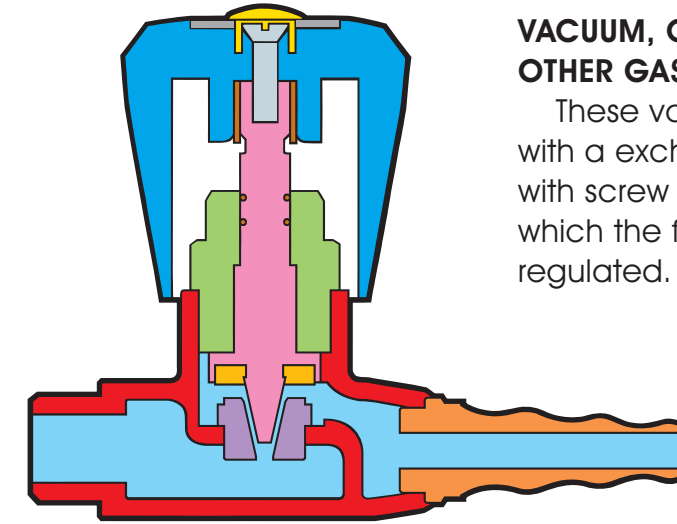
With ceramic head cartridge for long life, with opening and closing function 1/4 turn, certified according to EN 200 with satisfactory results after 250.000 cycles.



TECHNICAL FEATURES

VACUUM, COMPRESSED AIR AND OTHER GASES AND FLUIDS

These valves have a teflon washer with a exchangeable stainless steel seat, with screw pitch of 0,75 mm. through which the flow rate can be finely regulated.



FITTINGS FOR SPECIAL WATER

We have 100% plastic or stainless steel taps for special waters such as distilled water. In both cases the headwork are made from plastic.

SPECIAL PRODUCTIONS

Through our modular production system, we can produce particular models in line with our customer's needs and also develop new products.

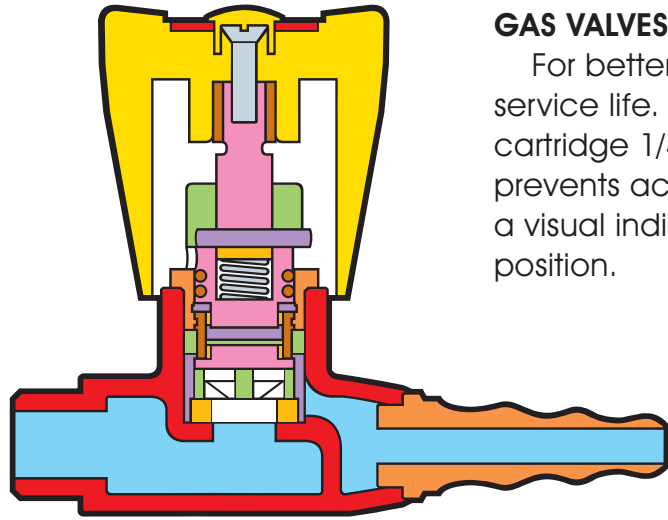


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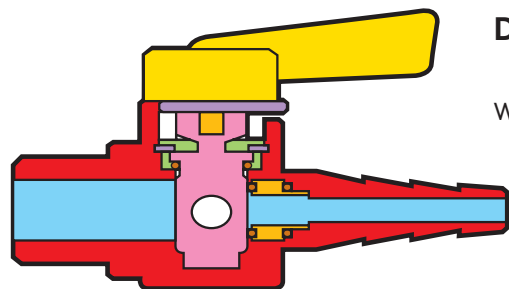
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TECHNICAL FEATURES



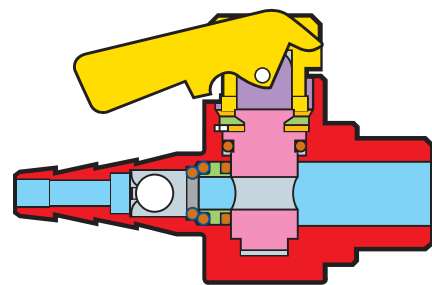
GAS VALVES

For better quality, safety and longer service life. The push and turn ceramic cartridge 1/4 turn with a catch that prevents accidental opening and a visual indication of open or closed position.



DROP LEVER GAS TAPS

Drop lever gas taps can be supplied with an anti rotation pin fitted and require a 5 mm. hole drilling 17 mm. from the centre of the shank.



NON RETURN DROP LEVER GAS TAPS

Non-return valves have been included in each nozzle to remove the risk of fluids and debris being introduced into the gas supply.





JORGE CORTINA NAVARRO
COMUNICACION INTEGRAL



Visit our website at: <http://www.carlosarboles.com>

CPG.CA.I.2011



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