INNOVATING SAFETY

GENERAL CATALOGUE - EDITION A.0

TECO®
INNOVATING SAFETY

INNOVATING SAFETY

30 YEARS

ANNIVERSARY

INNOVATING SAFETY

30 YEARS

ANNIVERSARY

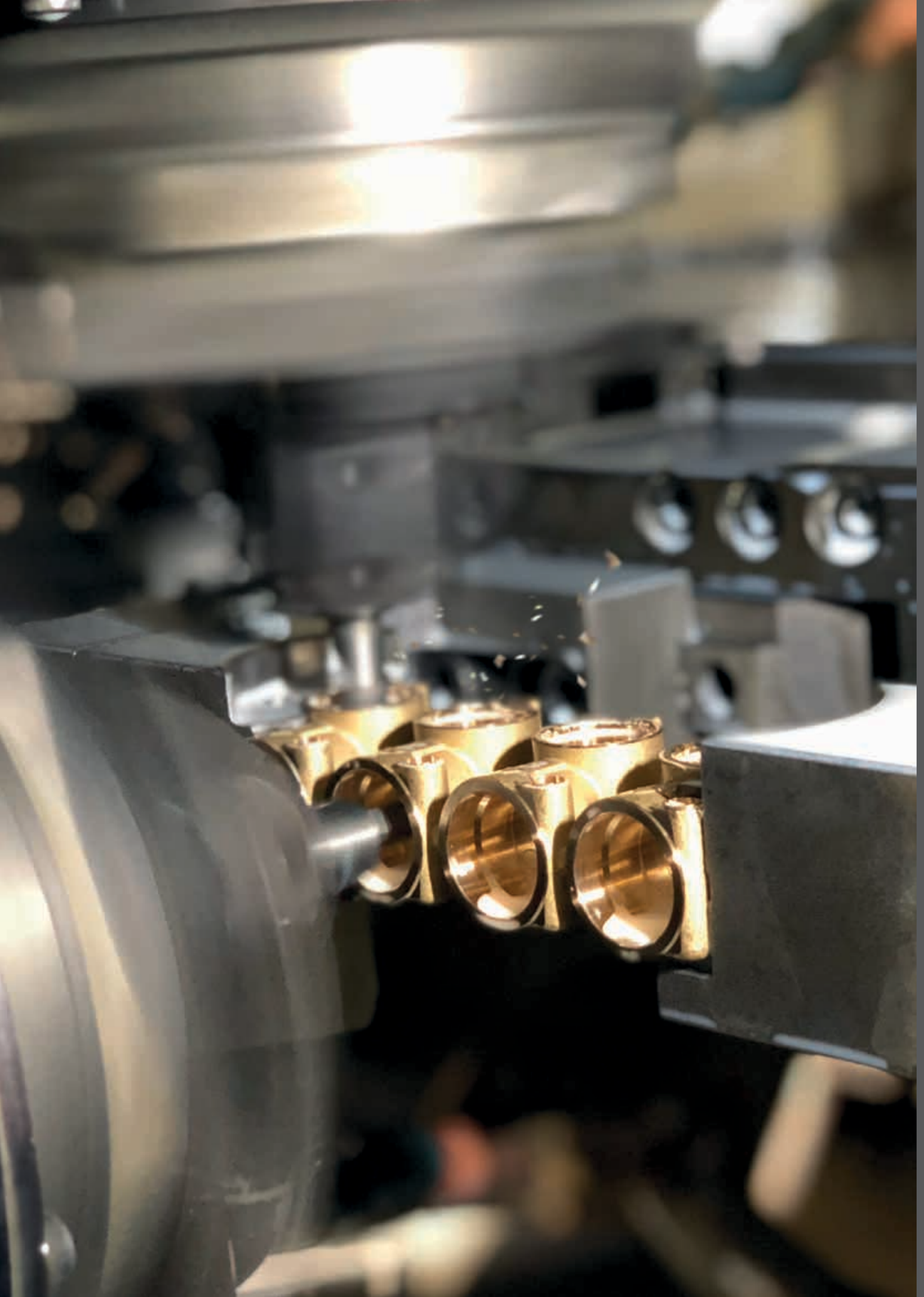
VIDEO

SINCE 1987, INNOVATING SAFETY

TECO is in Franciacorta, in the heart of North Italy, where, with passion and technical expertise, it designs and manufactures innovative shut-off and safety devices for water and gas systems, both domestic and industrial.

TECO designs and manufactures its own ideas. More than 95% of the product range is based on original designs created in house.

The result is over 30 years of promises kept, and satisfied Italian and international customers.



THE INGREDIENTS OF AN INNOVATIVE PRODUCT

TECO has chosen to develop all its products according to a philosophy of "INNOVATING SAFETY", for applications in which reliability must be guaranteed, such as:

- gas shut-off valves;
- domestic water and gas shut-off valves flush-mounted in the wall;
- gas safety devices that must intervene promptly and in a targeted manner only when needed.

For this reason, TECO has a fanatical focus on design and implementation details, because the product must keep the installer and end user safe.

In addition to safety, TECO innovation can also be seen in the extremely small sizes of its products, as well as in their prestigious aesthetic details.

PLACES OF EXCELLENCE

Automated and controlled processes, latest generation machinery, well-organised and bright environments.

TECO is in Provaglio Iseo, where its administration and central warehouse are located, and Camignone di Passirano, where its mechanical workshop is located, for a total of 7000 m2 of indoor area.

From prototyping to packaging, the design validation process passes through the internal laboratory. TECO LAB is the technological core of product development, where a multidisciplinary team of engineers and materials experts at a University level develop ideas that are then tested by simulating the worst possible system conditions.

TECO handles everything in house in an integrated manner, from production checks to 100% testing on the finished product.

CUSTOMERS, OUR MOST VALUABLE ASSET

Teco products are designed to exceed customer expectations, satisfying the needs of installers, designers and end users.

The TECO brand is present internationally through specialist distribution channels and in the most important thermal-hydraulic material showrooms.
TECO is also a technological OEM partner of the leading thermal-hydraulic system manufacturers worldwide.

THE STRENGTH OF TECO DESIGNS CAN ALSO BE SEEN IN CUSTOMISATIONS

Designs are based on original technologies developed in house. Software simulation of outlines and flows, rapid prototyping, endurance testing in the laboratory and specific testing.

These integrated activities make it possible to create ad hoc products in a short time, to support distribution partners and open new markets with specific innovative products.

The design and final application guide the choice of materials: not just brass alloys, but also special brasses, bronze, stainless steel and engineered polymers.

Made in Italy

THE FLUSH-MOUNTING PRODUCT SPECIALISTS

Small details make a difference.
The company has redefined chased installation by creating a new product category that combines "in the wall" techniques and "outside the wall" aesthetics.

The technique of the chased system is not hidden, but is exalted and made usable by aesthetic accessories in line with the trends of modern bathroom and kitchen environments.

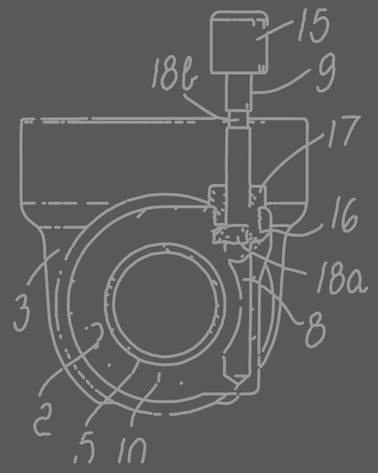
TECO®
INNOVATING SAFETY

FIREBAG® GST®

GAS AND SAFETY, FIRST OF ALL

Thanks to its thirty years of experience in the demanding German market, Teco has developed gas products and safety devices that offer important added value in terms of safety within the system in which they are installed, with an incredible safety/cost ratio.

Safety devices are not normal products, as they must ensure tightness and resistance in the event of fire and leakage. That is why they are engineered and tested to intervene promptly, only when they are needed.



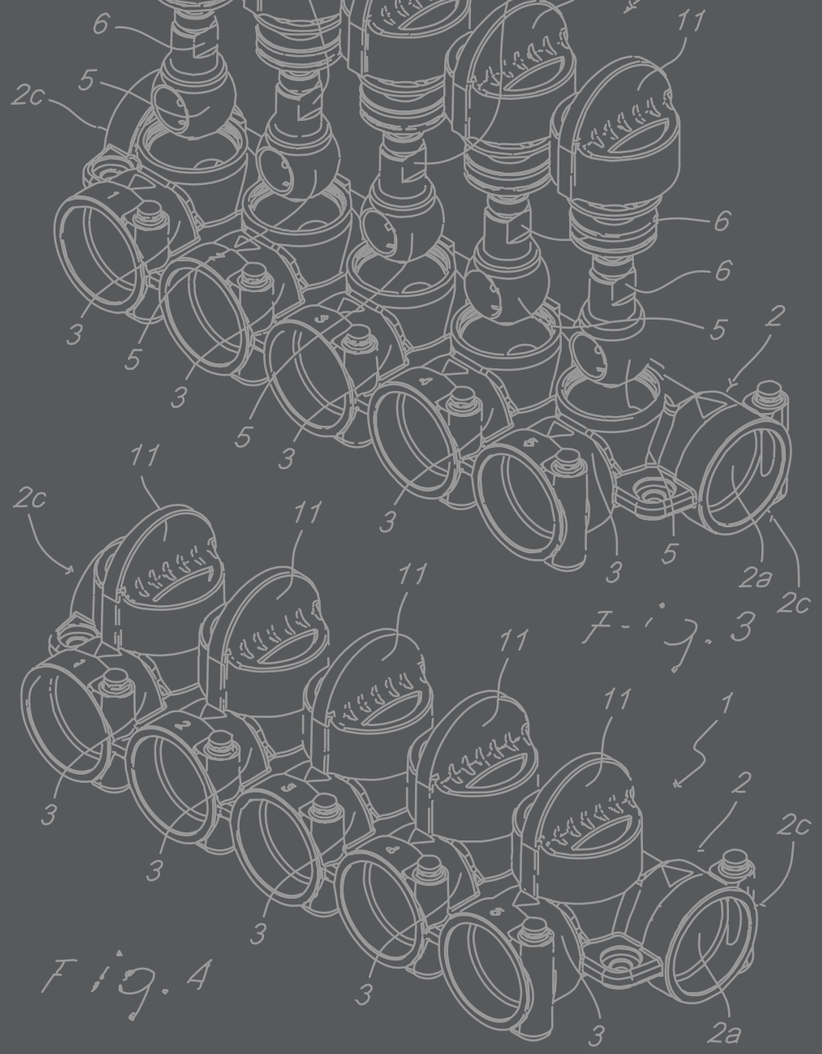


Fig. 3

Fig. 4

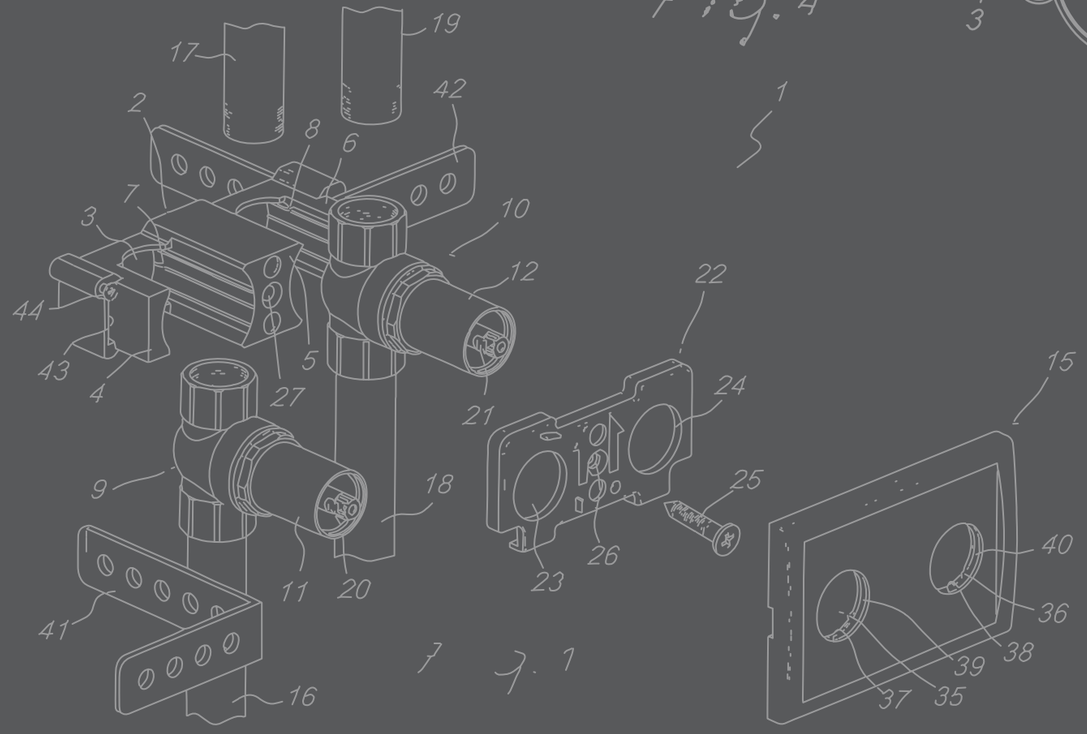


Fig. 1

WINNER 1995 - 2015
DESIGN PLUS
powered by: ISH

PATENTS, AN INNOVATIVE TOOL FOR GROWTH

TECO's design ideas are effective, innovative and simple, making them highly patentable. Technologies Made in Italy, leaders in Germany and Europe.

The Design Plus Award is awarded by a committee of German and European experts in the field of industrial design.

1995 - TAS
The Design Plus Award was given to Renato Colombo, founder of Teco, for the TAS design, a concept that later became the Firebag® product line.

2015 - K4
The Design Plus Award was given to the K4 domestic water manifold for both its technical and aesthetic content.

WINNER 2016 - 2018
Percorso
Efficienza © Innovazione

The Percorso Efficienza e Innovazione (Efficiency and Innovation Path) is awarded to products that have stood out at the Mostra Convegno di Milano international trade fair.

2016 - K4
The award was given to the K4 domestic water manifold during the MCE 2016 trade fair.

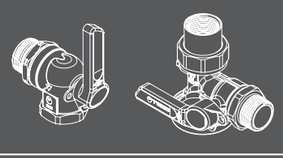
2018 - ULTRA
The award was given to the ULTRA shut-off valve during the MCE 2018 trade fair.

NEW DN20 FASTEC® connection **F14**

NEW Tap with flush design

NEW Compact TOP-ENTRY FASTEC® manifolds

NEW New versions: K4.3 - K4.1 - K4.0 **K4**



NEW New versions: G5 - G6

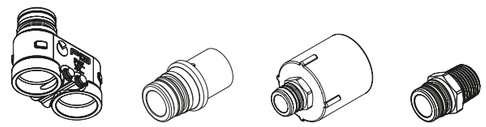
NEW Valves for gas hoses with quick connection and front handle

FASTEC®

QUICK CONNECTION FOR DOMESTIC WATER SYSTEMS

FASTEC® STORE

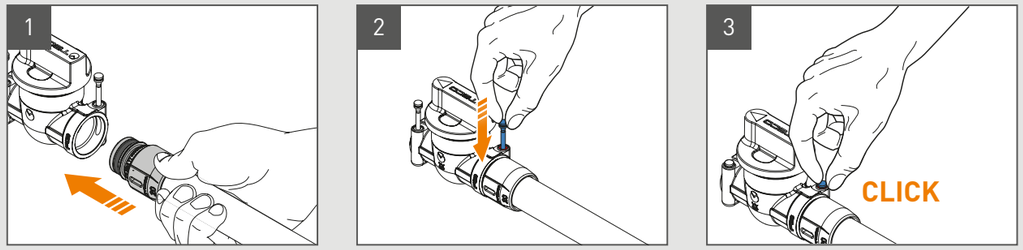
A range quick connection fittings for domestic water systems

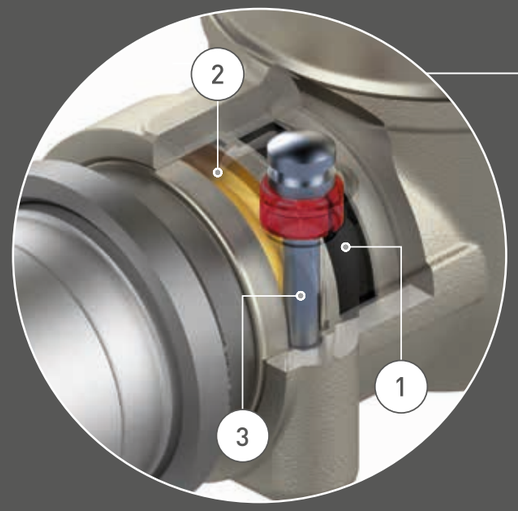


FASTEC®

SIMPLY SAFE

SIMPLE, QUICK AND REVERSIBLE CONNECTION





SAFETY

1. O-RING DIMENSIONED FOR A PERFECT SEAL
2. "PIN" SEAT
3. LOCKING "PIN"

NO TOOLS

During installation, no tools are required to connect the fittings

NO MAINTENANCE

The FASTEC connection does not require any maintenance over time

NO STRESS

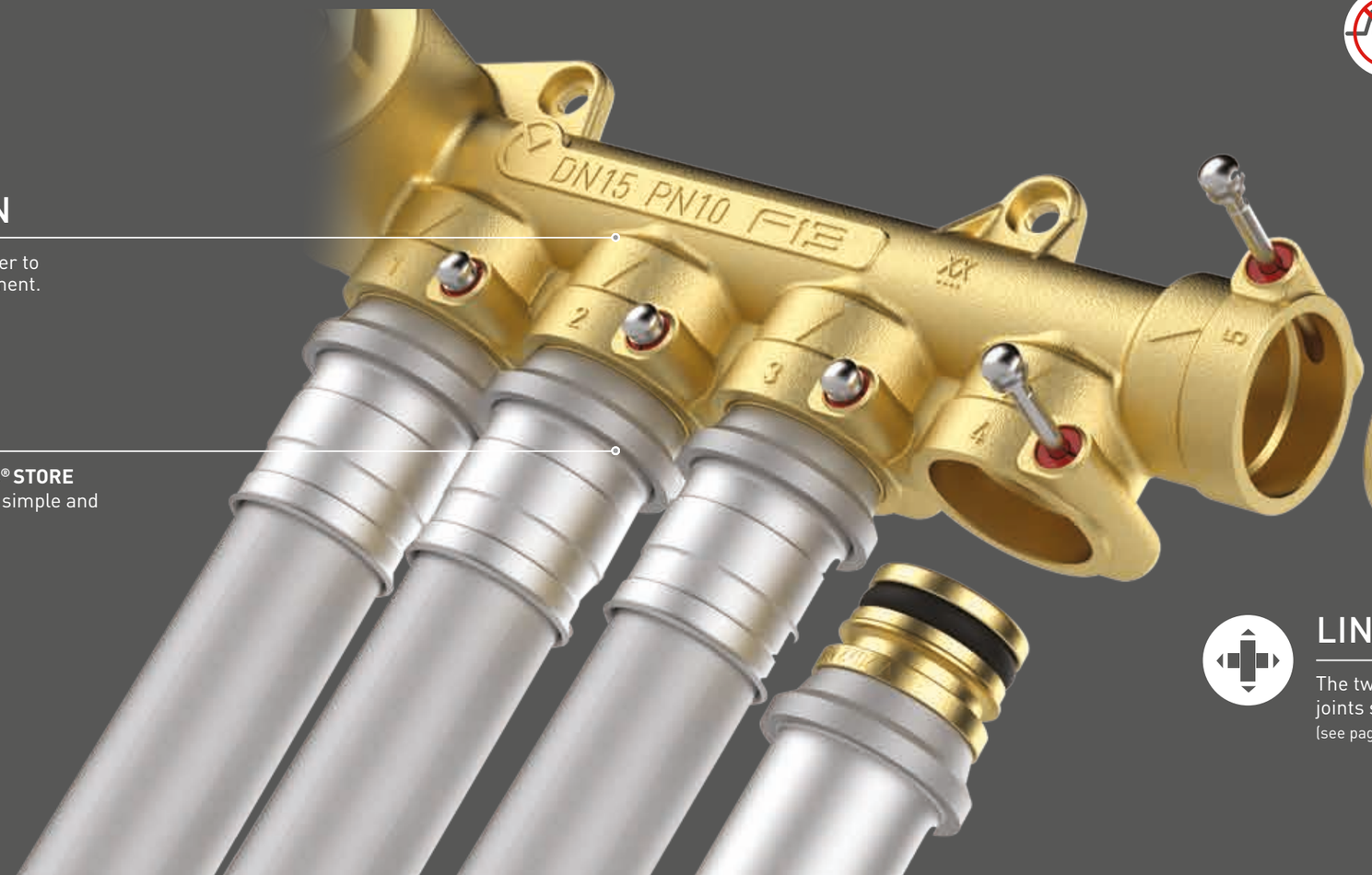
No mechanical stress on the joint

COMPACT INSTALLATION

The smaller sizes are easier to integrate into the environment.
(see page 26)

FLEXIBLE

The wide range of **FASTEC® STORE** fittings makes installation simple and flexible.
(see page 28)



LINK

The two-outlet transition joints simplify installation
(see page 27)

FASTEC®

THE FUTURE OF CONNECTION SINCE 2003

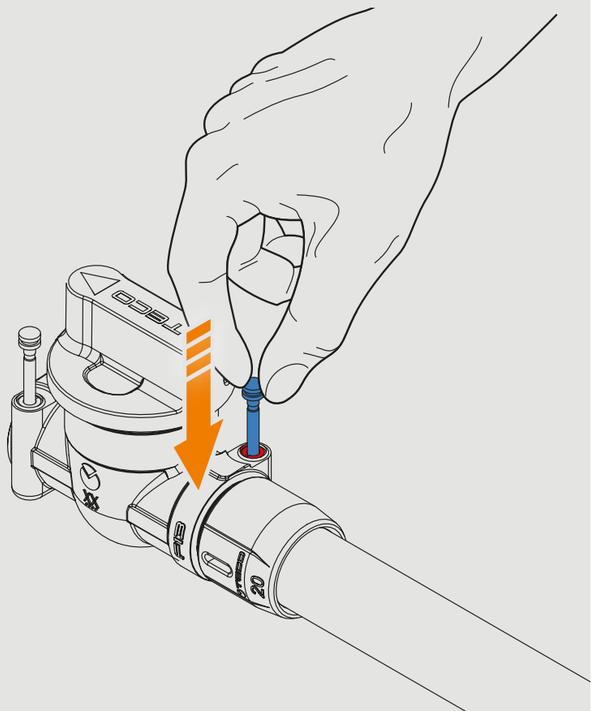
Patented FASTEC® latest-generation quick connection system: entirely designed, developed and made by TECO.
Over the years, this technology as gained recognition from many leading European manufacturers of thermo-hydraulic systems, which have chosen to expand their range by integrating the FASTEC® solution into their products.
And the diffusion of this innovation among pipe manufacturers and the massive production and installation of fittings since 2003 testify to the guarantee of reliability.

CERTIFIED

The FASTEC® connection is certified according to **DVGW W 534** for use in **DIN EN 13828** domestic water system and is unique of its kind.

100% TESTED

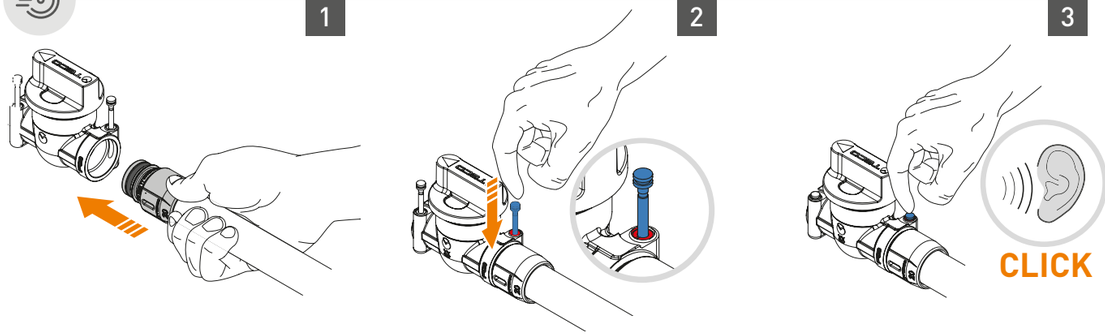
All FASTEC® fittings are hydraulically tested during production. **A protection cap is fitted over the O-ring seal.**



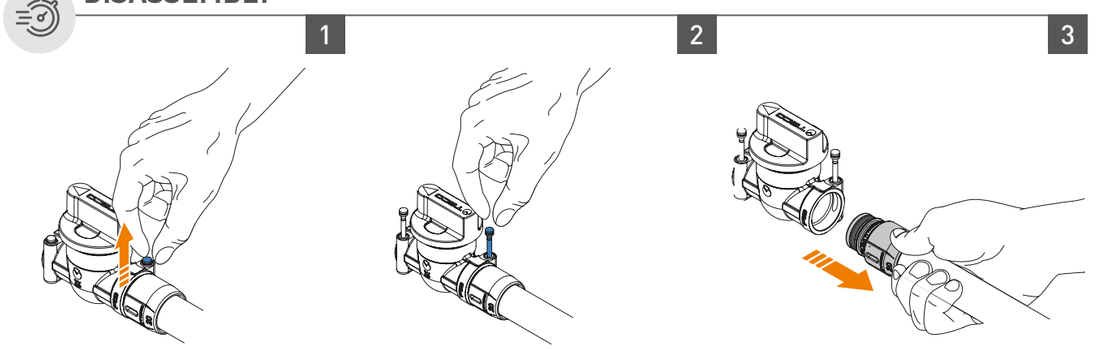
SIMPLE, QUICK AND REVERSIBLE

Connection and disassembly can only be done in a specific sequence.

CONNECTION



DISASSEMBLY

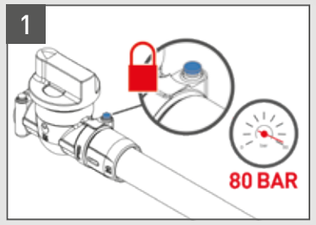


TECHNICAL SPECIFICATIONS

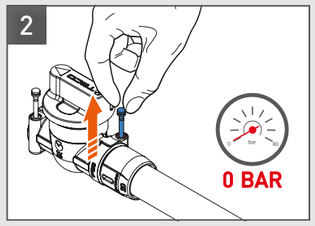
P. max 80 BAR

T. max 100°C

DIN EN 13828
DVGW W 534



The **PIN** remains locked even when there is low pressure in the system. FASTEC® connections are designed to withstand pressures of up to 80 BAR without any mechanical deformation.



It is only possible to operate the **PIN** and disconnect the fitting when there is no pressure (0 BAR).

NO STRESS

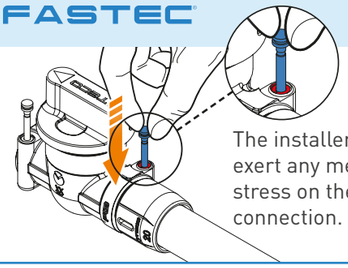
NO TOOLS

The FASTEC® connection is made manually without the need for any tools. This is why the joint is not subjected to mechanical stresses that could cause stress corrosion over time.

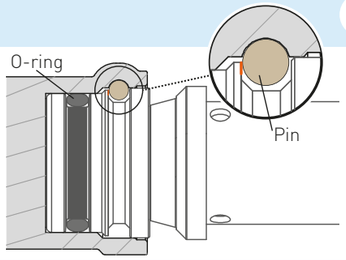
MIN.
MECHANICAL TENSION

MAX.
MECHANICAL TENSION

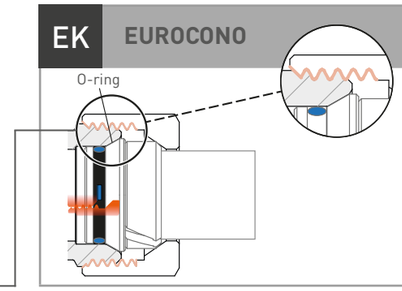
FASTEC® F



The installer cannot exert any mechanical stress on the connection.

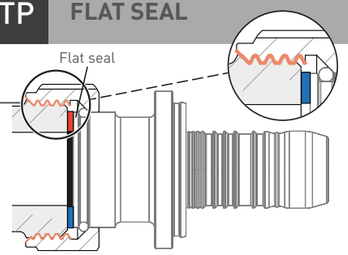


EK EUROCONO



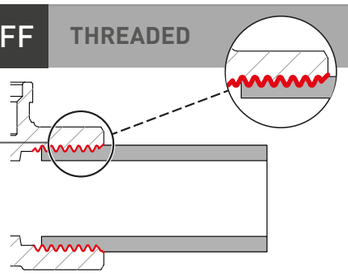
Mechanical stress on the joint due to the tightening force applied.

TP FLAT SEAL



Mechanical stress on the joint due to the tightening force applied to squeeze the seal.

FF THREADED



High mechanical stress on the joint due to the tightening force applied and the sealants between the threads.

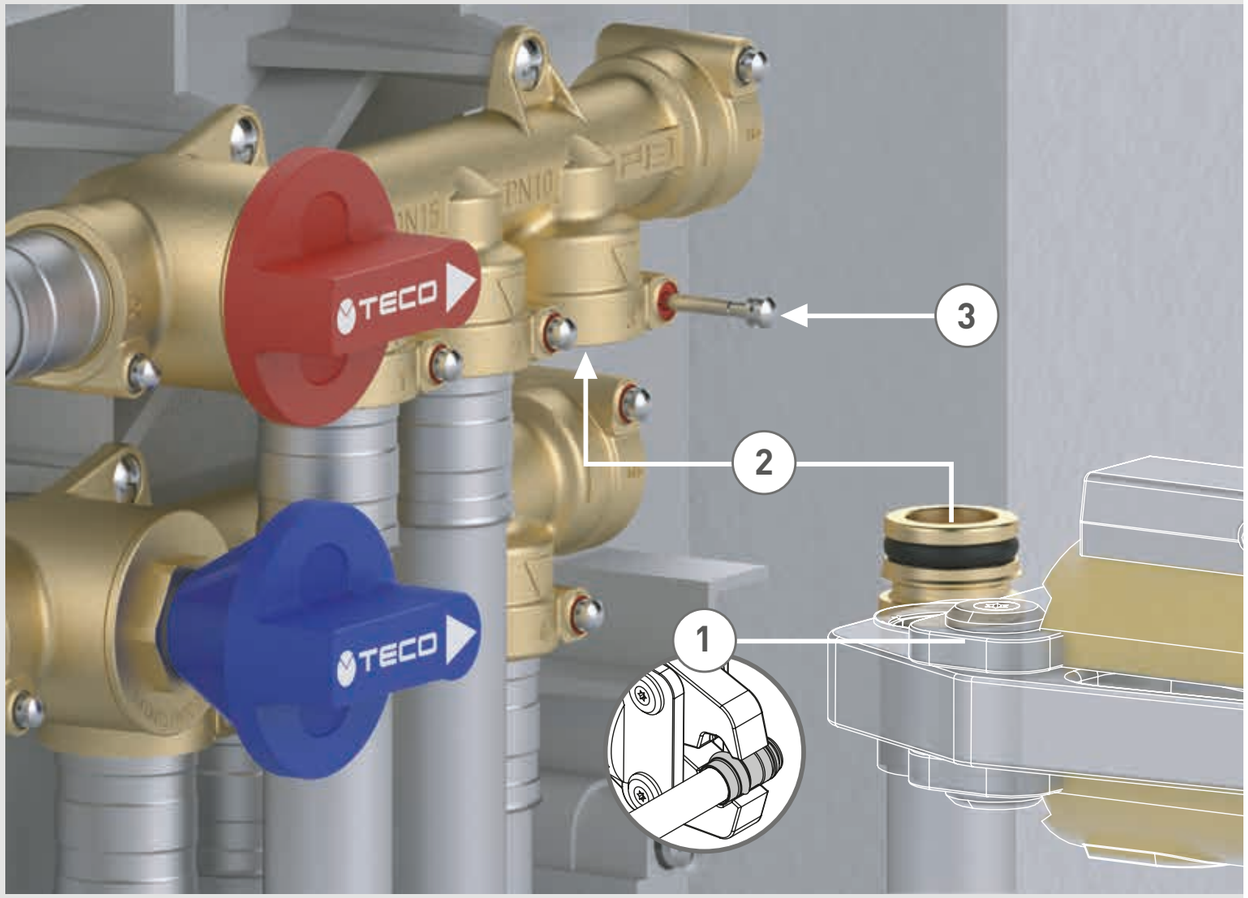
WHY CHOOSE A FASTEC® CONNECTION OVER TRADITIONAL SYSTEMS

EXCELLENT	★★★★	POOR	★★
SUFFICIENT	★★★	VERY POOR	★

	FASTEC®	EUROCONO SWIVEL NUT	FLAT SEAL SWIVEL NUT	THREADED
SEAL	★★★★	★★★★	★★★①	★★★①
QUICK CONNECTION SEE PAGE 23	★★★★	★★★	★★★	★★
MECHANICAL STRESS ON THE JOINT SEE PAGE 24	★★★★	★★★	★★★	★★
REVERSIBLE SEE PAGE 23	★★★★	★★★★	★★★★	★★★
INSTALLATION RISKS SEE PAGE 23	★★★★	★★★★	★★★	★★
COMPACT INSTALLATION SEE PAGE 26	★★★★	★★	★★	★★
NO MAINTENANCE	★★★★	★★★★	★	★★★
FLEXIBILITY SEE PAGE 28	★★★★	★★	★★	★
COST/BENEFIT RATIO	★★★★	★★★	★★	★★

① The seal of the threaded version with flat seals and swivel nuts is affected by the installer's professional ability.

COMPACT INSTALLATION

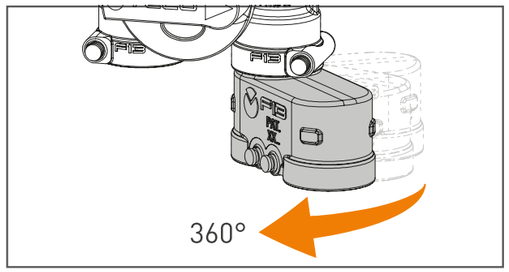


As it is possible to connect the pipe outside the wall recess **(1)** without using any tools **(2)**, you can carry out the assembly in very tight spaces **(3)**.

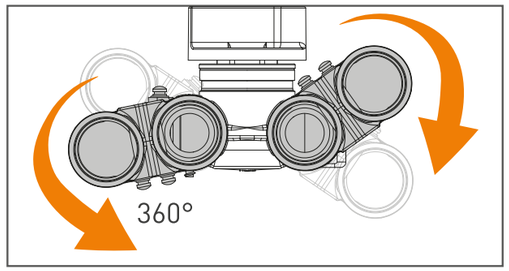
Combining the FASTEC® system with a new generation valve and manifold design has allowed us to create range of products with leading edge safety and ease of installation.

LINK

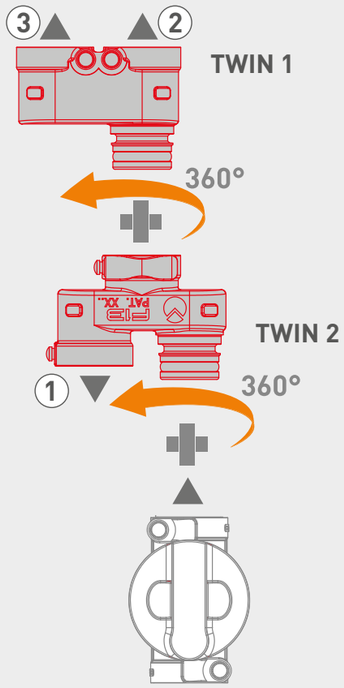
Patented FASTEC® transition fittings have 1 inlet and 2 outlets. They can be installed in very tight spaces and freely turned through 360°.



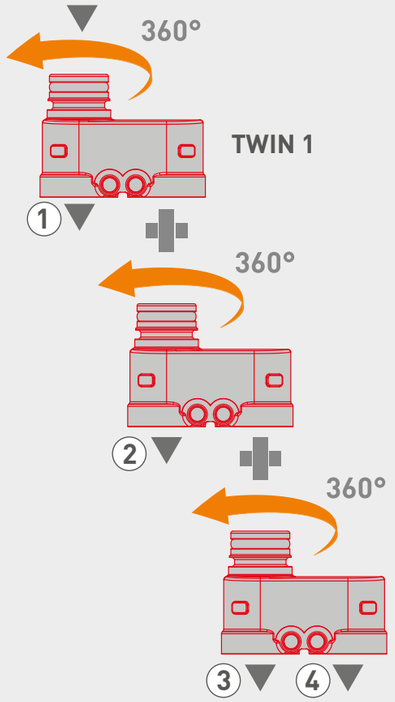
These features make it possible to:
- quickly add connections to the system;
- find optimal connection solutions in very tight spaces



3 OUTLETS

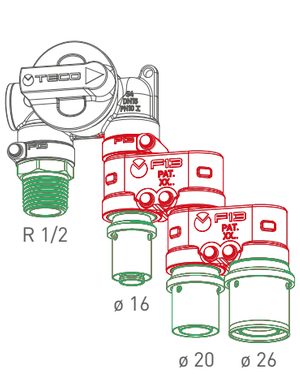


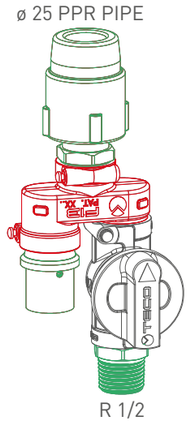
4 OUTLETS



FLEXIBILITY

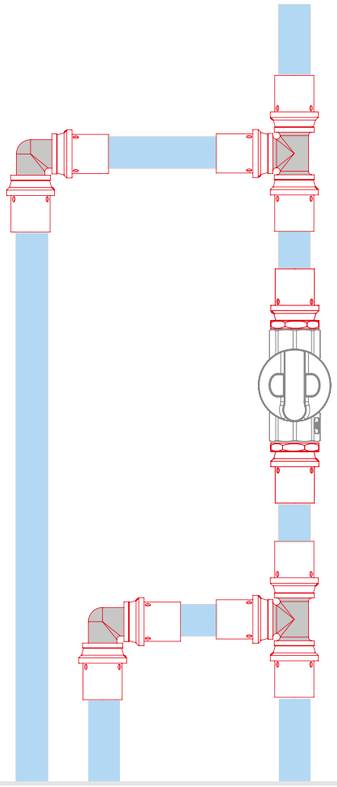
Finding the best solution on site to facilitate installation is one of the installer's most important needs. The "FASTEC® STORE" range of products offers installation combinations that were unthinkable with conventional systems. In this way you can simplify the conventional complex system schemes.

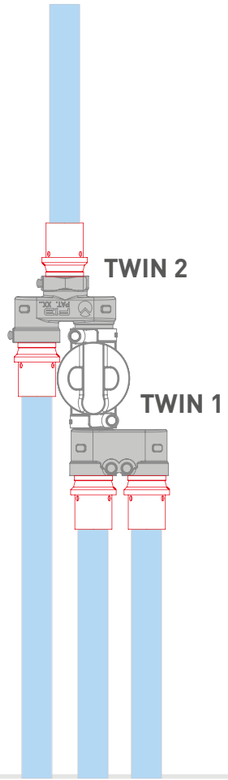




EXAMPLE APPLICATION COMPARISONS

MULTI-LAYER COMPOSITE	FASTEC
CONVENTIONAL SYSTEM WITH T-FITTINGS AND 90° ELBOWS	**FASTEC SYSTEM** INSTALLATION WITH FASTEC® TRANSITION JOINTS





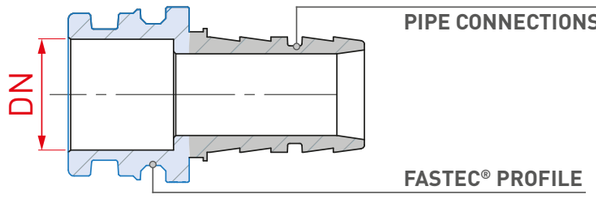
-50% SPACE

-50% INSTALLATION TIME

-75% JOINTS

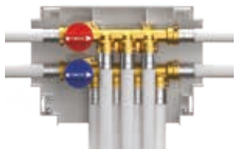
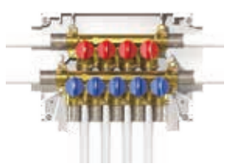
LABORATORY

FASTEC® FITTINGS RANGE



FASTEC		FITTING			BRAND
DN15	DN20	DIAMETER	THICKNESS		
F13	F14				
●		ø 16	2	FITTINGS FOR MULTI-LAYER COMPOSITE PIPES Original fittings from important multi-layer pipe manufacturers	IVAR, HENCO, +GF+, aquatechnik, PRANDELLI, uponor, TIEMME, APE raccorderie, COMISA
●			2.25		
●		ø 20	2		
●			2.25		
●			2.5		
●		ø 25	2.5		
	●	ø 26	3		
	●	ø 32	3		
●		ø 16	1.8	FITTINGS FOR PEX PIPES Original fittings from important PEX pipe manufacturers	MIXAL, PEXAL, +GF+ i-LITE, uponor, Industrial Blansol sa
●			2		
●			2.25		
●		ø 20	1.9		
●			2		
●			2.5		
●		ø 25	2.3		
	●	ø 26	3		
	●	ø 32	3		
●		ø 20		FITTINGS FOR PP-R PIPES	TECO
●		ø 25			
	●	ø 32			
●		R 1/2		THREADED FITTINGS	
●	●	R 3/4			
●	●			CLOSURE PLUGS	
●		TWIN 1		TRANSITION FITTINGS (TWIN 2, TWIN 1)	
●		TWIN 2			

VALVES AND DISTRIBUTION MANIFOLDS WITH FASTEC® CONNECTIONS

ULTRA® FLUSH-MOUNTING COCK (see page 40)	K4 MANIFOLDS AND VALVES (see page 106)	CK MANIFOLDS (see page 84)
ULTRA STRAIGHT VERSION  F13 F14	K4.0  F13 F14	CK.2  F13
ULTRA U VERSION  F13 F14	K4.1  F13 F14	CK.3  F13
ULTRA H-PLUS STRAIGHT VERSION  F13 F14	K4.2  F13	
ULTRA H-PLUS U VERSION  F13 F14	K4.3  F13	

FASTEC® FITTINGS FOR MULTI-LAYER COMPOSITE PIPES

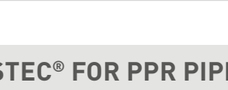
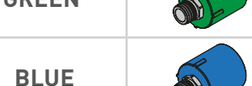
Original fittings from important multi-layer composite pipe manufacturers.

MANUFACTURERS	F13						F14			
	ø16		ø20		ø25/26		ø25/26		ø32	
MIXAL PEXAL	16x2 16x2,25	RF13M16101VA RF13M16102VA	20x2 20x2,25	RF13M20101VA RF13M20102VA	26x3	RF13M26101VA	26x3	RF14M26101VA	32x3	RF14M32101VA
IVAR	16x2 16x2,25	511115MP 511116MP	20x2 20x2,25 20x2,5	511118MP 511119MP 511120MP	25x2,5 26x3	511121MP 511122MP				
HENCO	16x2	41P-16	20x2	41P-20	26x3	41P-20				
+GF+ Alupex express	16x2,25	340101635	20x2,25	340101637						
+GF+ i-LITE	16x2	351816980	20x2	351820980						
+GF+ JRG Sanipex MT	16x2,25	Check with the manufacturer	20x2,5	Check with the manufacturer						
aquatechnik SAFETY	16x2	Check with the manufacturer	20x2	Check with the manufacturer						
PRANDELLI	16x2 16x2,25	Check with the manufacturer	20x2 20x2,5	Check with the manufacturer	26x3	Check with the manufacturer				
uponor	16x2	1087133	20x2,25	1087133						
TTIEMME	16x2	1651039	20x2	1651040	26x3	1651041				
APE raccorderie	16x2	ACA8000100	20x2	ACA8000200	26x3	ACA8000300				
COMISA	16x2	87.50.100	20x2	87.50.105						

FASTEC® FITTINGS FOR PEX PIPES

MANUFACTURERS	F13						F14			
	ø16		ø20		ø25/26		ø25/26		ø32	
MIXAL PEXAL	16x2 16x2,25	RF13M16101VA RF13M16102VA	20x2 20x2,25	RF13M20101VA RF13M20102VA	26x3	RF13M26101VA	26x3	RF14M26101VA	32x3	RF14M32101VA
Industrial Blansol sa	16x1,8	RF12100100	20x1,9	RF12100200	25x2,3	RF12100300				
+GF+ i-LITE	16x2,2	351816980	20x2,8	351820980	25x2,3	RF12100300				
uponor	16x1,8	1087135	20x1,9	1087136						

FASTEC® FITTINGS

DEVICES	F13				F14			
	Code	D1	D2	Pack	Code	D1	D2	Pack
TWIN 1 FITTING 	KA00F10001	F13M	2X F13F	10				
TWIN 2 FITTING 	KA00F10002	F13M	2X F13F	10				
K4.3 CONNECTION KIT 	KA00K00007	F13M		10				
CK.3 CONNECTION KIT	KA00K00008	F13M		10				
CAP 	KA00K00002	F13M		10	KA00K00010	F14M		10
1/2" MALE FITTING 	KA00K00003	F13M	M1/2"	10	KA00K00009	F14M	3/4	10
3/4" EUROCONO FITTING 	KA00K00004	F13M	EK 3/4"	10				

FASTEC® FOR PPR PIPES

FITTING		F13			F14	
		ø20	ø25	ø32	ø25	ø32
GREEN		RP20F31V00	RP25F31V00	RP32F31V00		
BLUE		RP20F31B00	RP25F31B00	RP32F31B00		

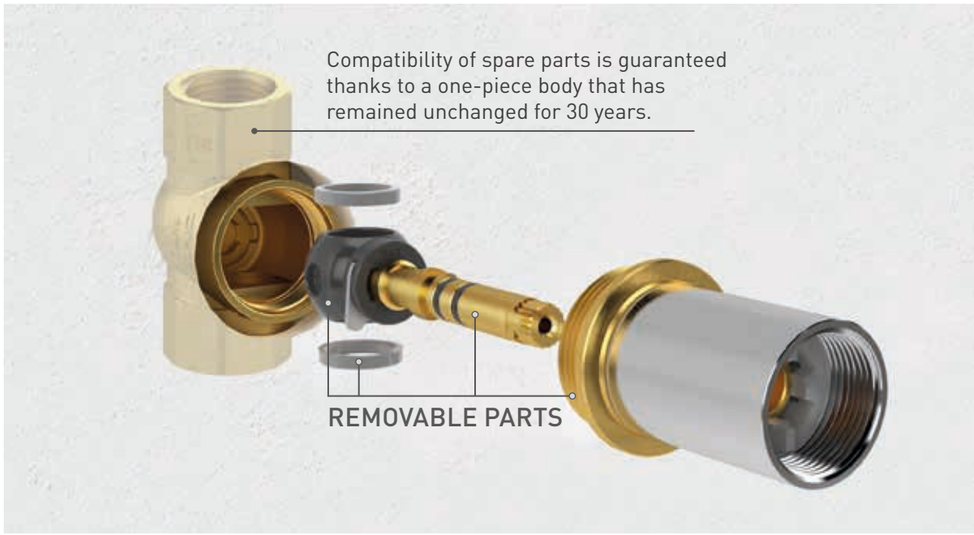
ULTRA®-164

FLUSH-MOUNTING TOP ENTRY VALVE

TOP ENTRY

INNOVATING SAFETY 30 YEARS ANNIVERSARY

Since 1987, the main feature of all Teco® plumbing products is their removable ball.



THE SPARE PARTS FOR THE SHUT-OFF ASSEMBLY ARE ALWAYS COMPATIBLE WITH ALL VALVES MADE

THE SPARE PART THAT RENEWS THE VALVE
It is possible to update valves that have already been installed with new generation Soft Turn shut-off assemblies that use innovative materials and technologies.

1987

CHROME POLYMER

2003

NON-STICK GREEN

2018

ENGINEERED

SOFT TURN
MAXIMUM CONTROL

The whole range of Teco products dedicated to conveying water is equipped with the new TECO CONTROL® (patented) shut-off assembly, which ensures a low operating torque that remains constant over time, known as soft turn.
The combination of engineered polymer balls and specially designed seals ensures correct operation in the event of emergency or when carrying out maintenance on the system.

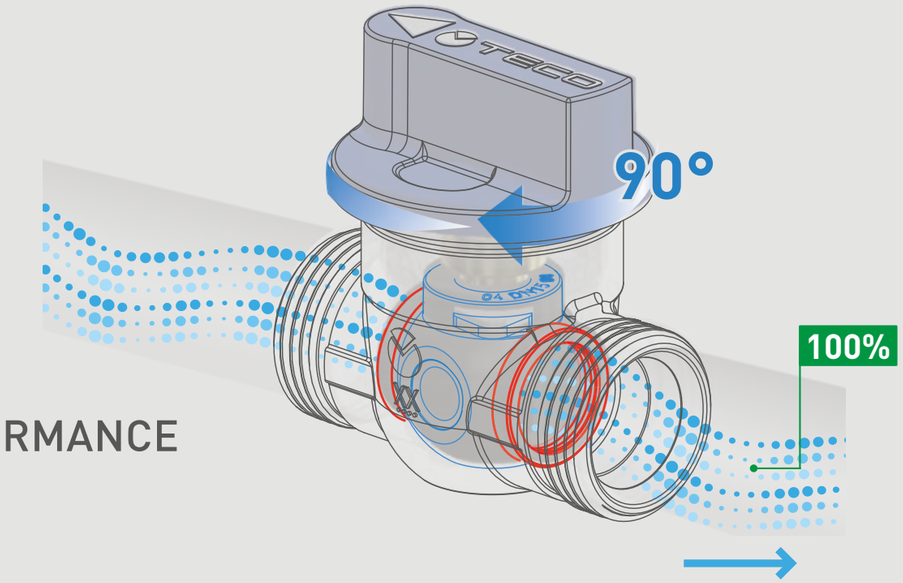
BENEFITS

- The ball prevents the formation of deposits that could make it jam
- Resistant to abrasion and impurities (sand)
- 100% compatible with drinking water
- No trapped water (DVGW W570)
- Chlorine resistant

NO BLOCK

The only ball that is not affected by hard water.

The PPSU (engineered polymer) balls combined with the seals prevent limescale from adhering.



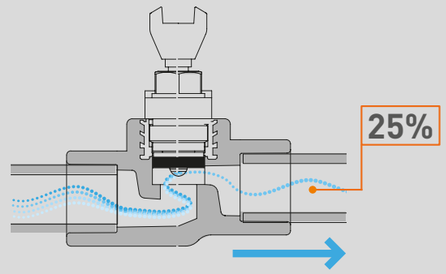
100%

HIGH PERFORMANCE

STANDARDS

The UNI-EN 806-2 standard: Paragraph 6.1:
Only install cut-off valves that do not excessively obstruct flow in the system (e.g. ball valves, gate valves).

Common solution with screw valve



THE STORY OF TOP ENTRY

The spare part has been the same for 30 years.

INNOVATING SAFETY 30 YEARS ANNIVERSARY

TECO was founded in 1987 with the intention of implementing a specific new technology for flush-mounting domestic water system applications.

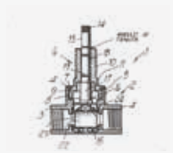
The SERIES 164 was developed as a result, and the market awarded it ideal flush-mounting VALVE for its build characteristics. Since the 164 SERIES was created, Teco further developed the flush-mounting concept to create a more complete range that was specifically dedicated chased installation.

1987

164

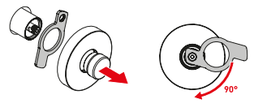
Accessories: the accessories are redesigned with a more modern design.

Production: TECO start manufacturing the 164 cock.



Patent: the TOP-ENTRY 1987 is created, with the patented TECO CONTROL.

1995



Design: accessory with neutro rosette and hidden operating key.

2003

Design: further updates to the accessory designs.

Green ball: continuous product improvement leads Teco to introduce the non-stick ball coating.

2008

Duplex: version with integrated dual valve.

2018

ULTRA Flush Accessories: an innovative update to the valve with flush accessories.

Soft Turn: engineered polymer ball and special seats to guarantee soft operation over time.

TODAY

ULTRA

1987 THE SHUT-OFF BODY DESIGN HAS REMAINED UNCHANGED FOR 30 YEARS. TODAY

ULTRA®

INNOVATING SAFETY 30 YEARS ANNIVERSARY

THE FUTURE OF FLUSH MOUNTING FOR OVER 30 YEARS

VIDEO

PRIZE-WINNING PRODUCT
Percorso Efficienza Innovazione mce 2018

FASTEC®

The FASTEC® connection system is fast, safe, space-saving and maintenance free. The wide range of FASTEC® STORE fittings makes installation simple and flexible.
(see page 32)

HIGH PERFORMANCE

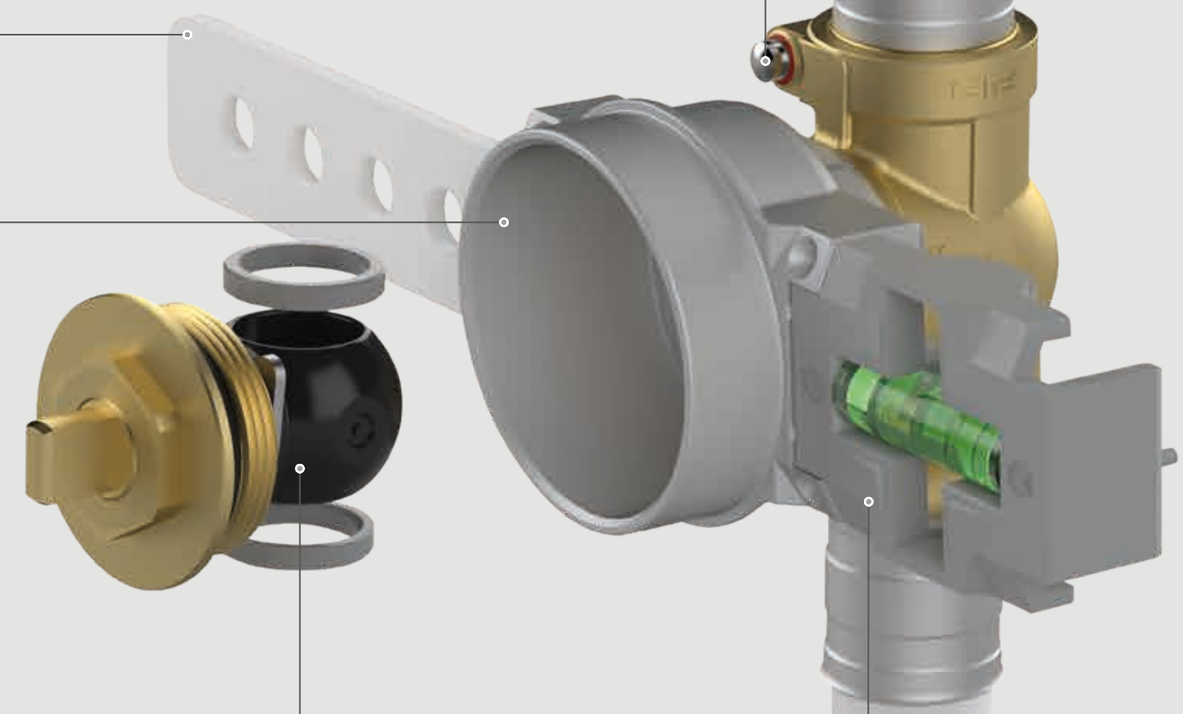
The TECO solution with effective flow and installation in accordance with the **EN 806-2** standard.
(see page 37)

T-BOX

The solution for precise and convenient installation.

H-PLUS VERSION

For installation with greater depth.



FLUSH WITH THE WALL

The control elements are designed to be flush with the wall to minimise protrusion and maximise the look.

ACCESSORIES

INNOVATIVE DESIGN

An innovative design with various finishes.

TOP-ENTRY

With the Top Entry system, the ball is fully removable and spare parts have been available for more than 30 years.
(see page 36)

SOFT TURN

90°

Shut-off valve, 90° closure with anti-jamming engineered polymer ball.
(see page 37)

LINK

Easy to configure several ULTRA valves together.
(see page 44)

DVGW product

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference Standard for Metal Materials	DIN EN 13828 DVGW W570-1
Working pressure	PN10 (10 bar)
Working temperature	0 °C + 95°C

CERTIFIED

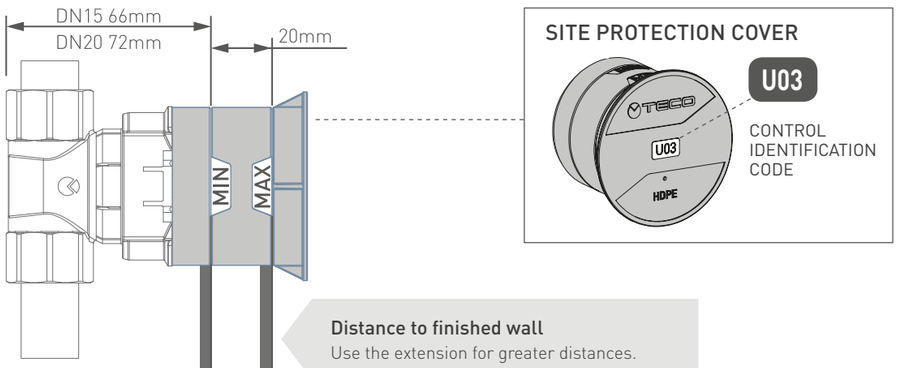
Installations for drinking water must be made to the highest standards to prevent trapping water, which could promote the development of microbe colonies (e.g. legionella). **ULTRA** valves were developed with build characteristics that prevent water from being trapped **(DVGW W570)**.

T-BOX

BENEFITS

Ultra has an adjustable BOX that offers 2 levels of adjustment:
- using the adjustable fixing brackets;
- using the depth adjustment on the accessory.

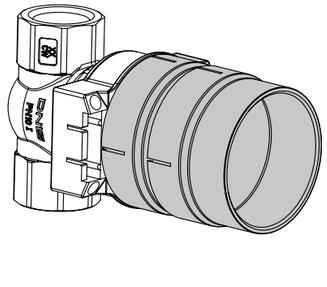
This makes it possible to find the correct cock position.



Distance to finished wall
Use the extension for greater distances.

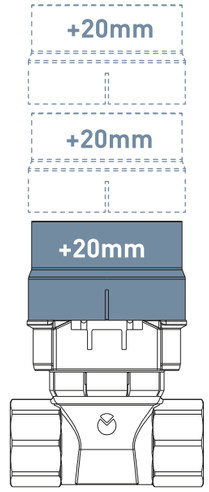
Distance to Plaster
Minimum cladding thickness.

MODULAR EXTENSION KIT



The extension kit is used whenever it is necessary to extend the operating control of the shut-off cock [+20 mm].

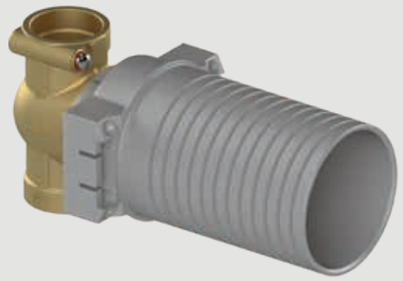
The kit is modular, so the cock control can be extended to the optimal position.

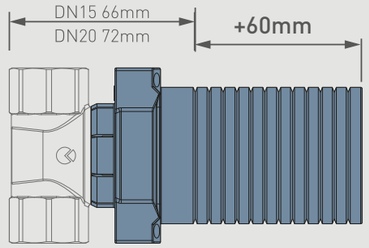


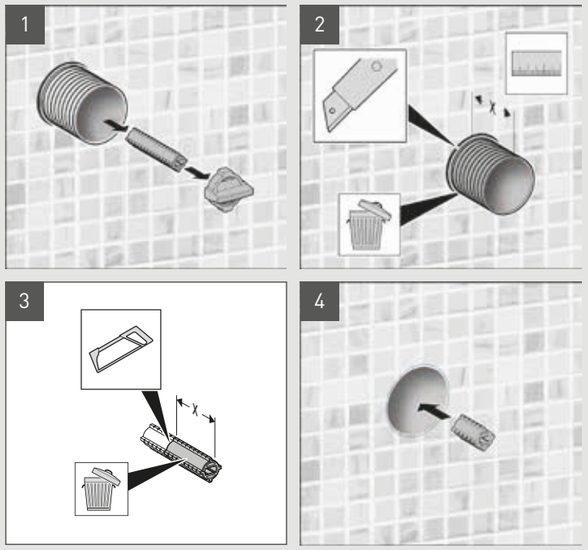
20MM EXTENSION KIT
CODE KA00U40003

H-PLUS VERSION INSTALLATION

If the cock has to be installed in walls with a thicker cladding, the H-Plus version offers a control that is 60mm longer than the standard version.







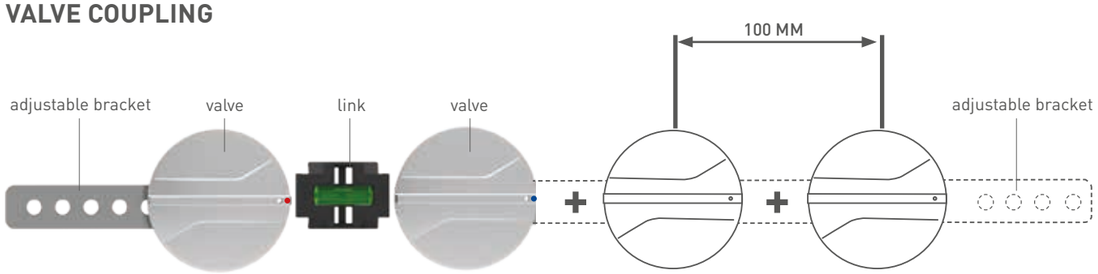
ONCE THE COCK IS INSTALLED, YOU CAN CUT THE BOX AND THE CONTROL PIN TO REACH THE CORRECT DEPTH

The H-Plus version uses the same accessories and spare parts as the standard version
The H-Plus version is normally used in GERMANY, AUSTRIA, SWITZERLAND and ARAB COUNTRIES

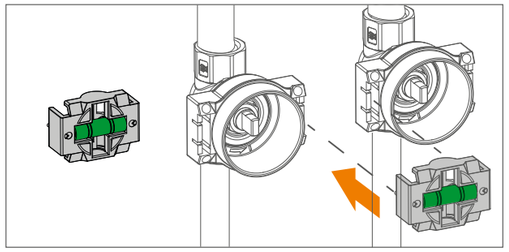
LINK

ASSEMBLY KIT
WITH ADJUSTABLE LEVEL
FOR TWO OR MORE COCKS

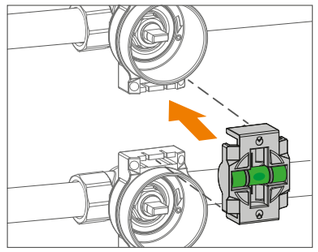
VALVE COUPLING



HORIZONTAL INSTALLATION



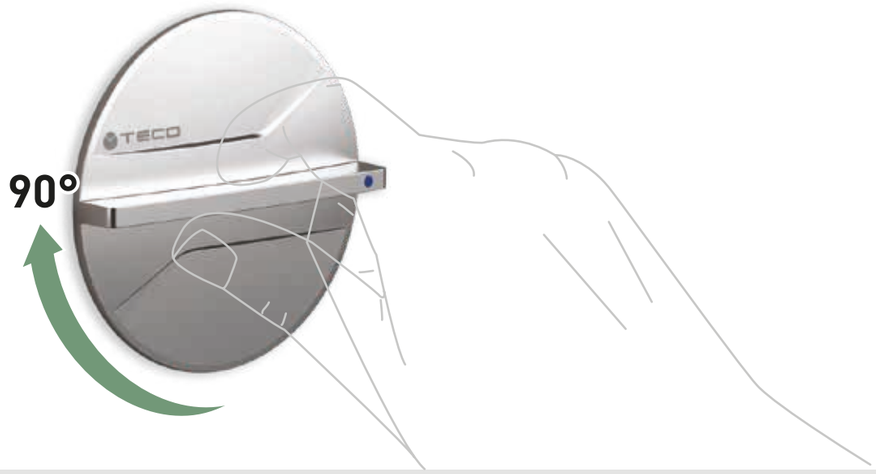
VERTICAL INSTALLATION

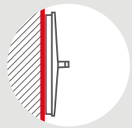


INNOVATIVE DESIGN

DESIGN ULTRA

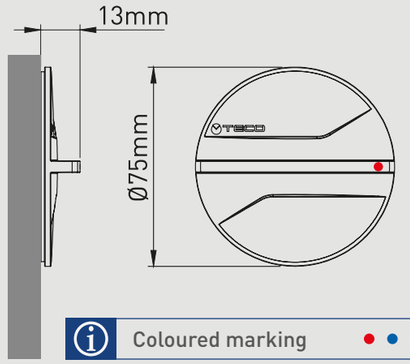
EXTERNAL CONTROL





ULTRA “FLUSH”

The Ultra control elements are designed to be flush with the wall to minimise protrusion and maximise the look.



FINISHES

U03

WHITE

POLISHED CHROME

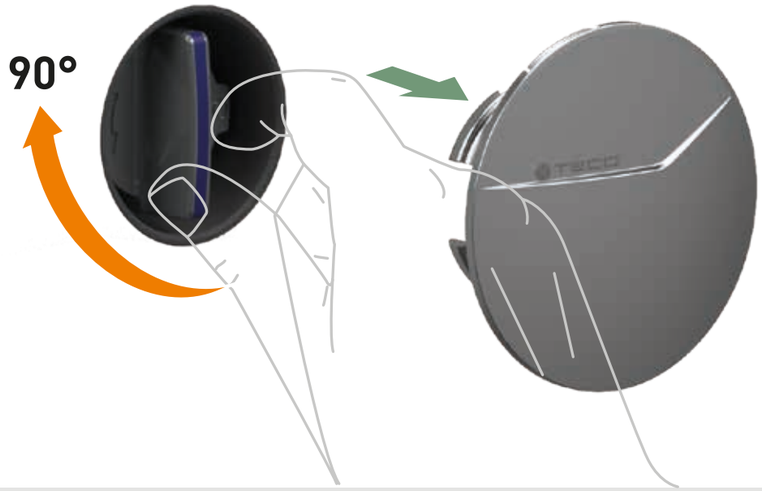
SILVER

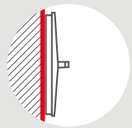
BLACK
SOFT TOUCH

DESIGN
INNOVATIVO

ULTRA FLUSH-MOUNTING

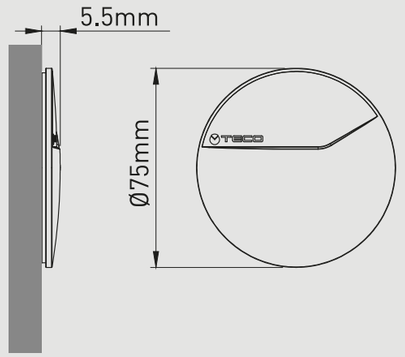
INTERNAL CONTROL





ULTRA “FLUSH”

The Ultra accessory is designed to be flush with the wall to minimise protrusion and maximise the look.



FINISHES

U03

WHITE

POLISHED CHROME

SILVER

BLACK
SOFT TOUCH

APPLICATIONS AND FUNCTIONS

- MAIN SHUT-OFF
- BATHROOM SHUT-OFF ("T" SYSTEM)
- SHOWER SHUT-OFF
- KITCHEN SHUT-OFF
- WASHING MACHINE SHUT-OFF
- GARDEN / BALCONY SHUT-OFF

ULTRA CONFIGURATOR, DEVICES AND ACCESSORIES

DEVICES							CONTROL ACCESSORIES
			CONNECTIONS				
	DN	CODE	1/2	3/4	FASTEC F13	FASTEC F14	
ULTRA STRAIGHT VERSION 	15	U4P3911100	●				**U03** EXTERNAL CONTROL 
	20	U4P4911100		●			
	15	F U4P3971100			●		
	20	F U4P4971100				●	WHITE UPLU0302600
ULTRA "U" VERSION 	15	F U4P3972100			●		POLISHED CHROME UPLU0302M00
	20	F U4P4972100				●	SILVER UPLU0302800
							BLACK SOFT TOUCH UPLU0302A00
ULTRA H-PLUS STRAIGHT VERSION 	15	U4P3911H00	●				**U03** INTERNAL CONTROL 
	20	U4P4911H00		●			
	15	F U4P3971H00			●		
	20	F U4P4971H00				●	WHITE UPLU0301600
ULTRA H-PLUS "U" VERSION 	15	F U4P3972H00			●		POLISHED CHROME UPLU0301M00
	20	F U4P4972H00				●	SILVER UPLU0301800
							BLACK SOFT TOUCH UPLU0301A00

FASTEC STORE **THE SHUT-OFF DEVICES USE FASTEC® STORE FITTINGS**

SEE PAGE 32

ULTRA

FLUSH SHUT-OFF VALVE

- ULTRA is a compact shut-off cock
- Full **flow**, in accordance with the **EN 806-2** standard
- Perfect flush mounting with T-Box **adjustable** depth
- Control accessories with minimum protrusion flush with the wall
- **TOP-ENTRY removable** shut-off valves with **Soft Turn anti-jamming** ball
- The **FASTEC®** connection is convenient and safe to work with

SPECIFICATIONS

Material	Body	Brass CW617
	Support	Nylon PA6
	Balls	Engineered polymer
Fittings		FASTEC®- Threaded F.
Working pressure		PN10 (10 bar)
Temperature		0°C + 95 °C
Standard and certification		DIN EN 13828 (KTW-W270) DVGW

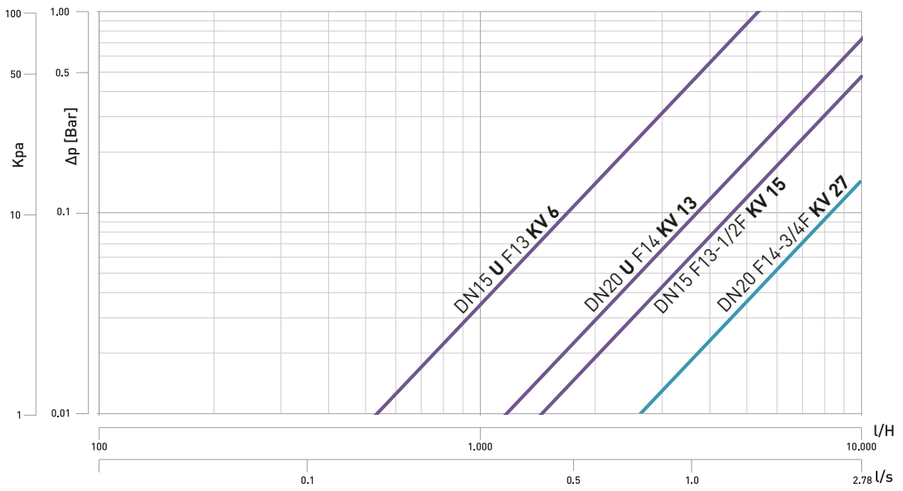
TECHNOLOGIES

HIGH PERFORMANCE · SOFT TURN · TOP-ENTRY · FASTEC® · T-BOX

DESIGN FEATURES

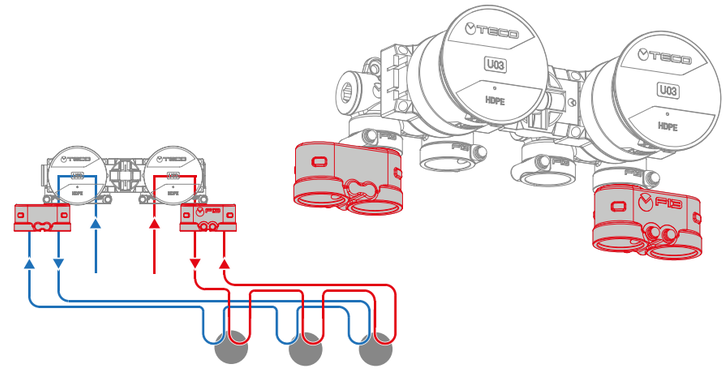
CERTIFIED PRODUCT · DESIGN · LINK · H-PLUS

FLOW LOSS DIAGRAM



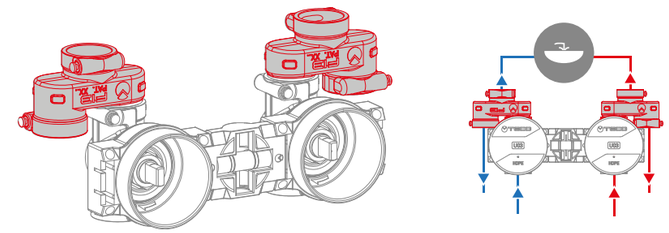
FASTEC®

TWIN 1 FITTING



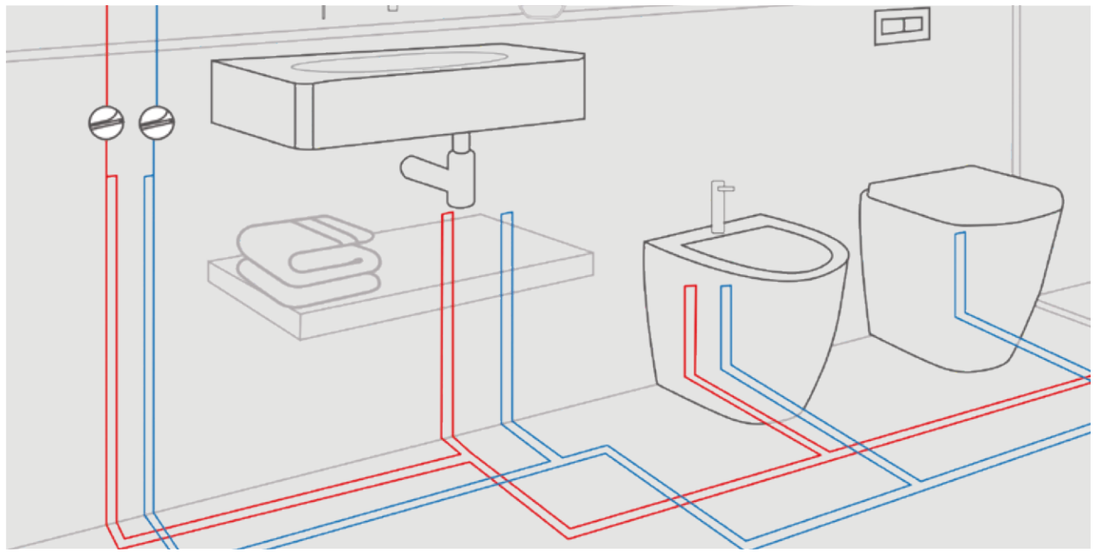
CODE KA00F10001

TWIN 2 FITTING



CODE KA00F10002

Fastec® Twin fittings make it possible to increase the number of connections. In this way you can simplify complex system solutions.



ULTRA FLUSH-MOUNTING VALVE

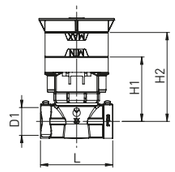
FASTEC

STRAIGHT VERSION

- PN10 (10 bar)
- 0 °C + 95 °C

INCLUDES: fixing brackets, site protection cover

DOES NOT INCLUDE: flush accessories and fittings



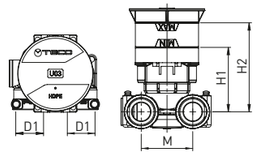
	Code	DN	D1	H1	H2	L	Pack
	U4P3911100	15	Rp1/2"	52.5	84	63	30
F	U4P3971100	15	F13	52.5	84	59	30
	U4P4911100	20	Rp3/4"	55.5	87	73	20
F	U4P4971100	20	F14	55.5	87	72	20

"U" VERSION

- PN10 (10 bar)
- 0 °C + 95 °C

INCLUDES: fixing brackets, site protection cover

DOES NOT INCLUDE: flush accessories and fittings



	Code	DN	D1	M	H1	H2	Pack
F	U4P3972100	15	F13	42	52.5	84	10
F	U4P4972100	20	F14	52.5	55.5	87	10

FASTEC STORE THE WHOLE RANGE OF FASTEC® FITTINGS IS DESCRIBED ON PAGE 32

ULTRA: Flush shut-off valve
Top Entry shut-off valve with removable ball and full flow that complies with the DIN EN 13828 standard. Engineered polymer ball and Soft Turn anti-jamming seals. Complete with installation box, adjustment brackets and site protection plug. Internal or external controls that are flush with the wall, with 90 degree operation. Available in four different finishes.
Temperature: 0 °C + 95 °C.
Working pressure 10 bar

ULTRA FLUSH-MOUNTING VALVE H-PLUS VERSION

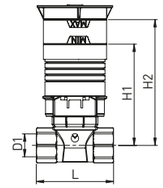
FASTEC

STRAIGHT H-PLUS VERSION

- PN10 (10 bar)
- 0 °C + 95 °C

INCLUDES: fixing brackets, site protection cover

DOES NOT INCLUDE: flush accessories and fittings



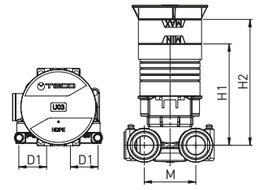
	Code	DN	D1	H1	H2	L	Pack
	U4P3911H00	15	Rp1/2"	82.5	102.5	63	10
F	U4P3971H00	15	F13	82.5	102.5	59	10
	U4P4911H00	20	Rp3/4"	115	135	73	10
F	U4P4971H00	20	F14	115	135	72	10

"U" H-PLUS VERSION

- PN10 (10 bar)
- 0 °C + 95 °C

INCLUDES: fixing brackets, site protection cover

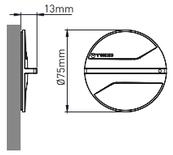
DOES NOT INCLUDE: flush accessories and fittings



	Code	DN	D1	M	H1	H2	Pack
F	U4P3972H00	15	F13	42	52.5	84	10
F	U4P4972H00	20	F14	52.5	115	135	10

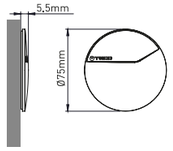
FASTEC STORE THE WHOLE RANGE OF FASTEC® FITTINGS IS DESCRIBED ON PAGE 32

B03 EXTERNAL FLUSH CONTROL



Code	Colour	Pack
UPLU0301600	White	10
UPLU0301M00	Polished Chrome	10
UPLU0301A00	Black	4
UPLU0301800	Silver	4

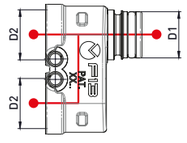
U03 INTERNAL FLUSH CONTROL



Code	Colour	Pack
UPLU0302600	White	10
UPLU0302M00	Polished Chrome	10
UPLU0302A00	Black	4
UPLU0302800	Silver	4

TWIN 1 FITTING

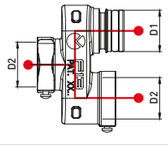
FASTEC® TWIN fitting



	Code	D1	D2	Pack
F	**KA00F10001**	F13M	2xF13F	10

TWIN 2 FITTING

FASTEC® TWIN T fitting



	Code	D1	D2	Pack
F	**KA00F10002**	F13M	2xF13F	10

LINK WITH ADJUSTABLE LEVEL

SEE PAGE 44

Code	Pack
KA00U40004	10

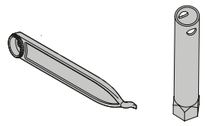
MODULAR EXTENSION KIT

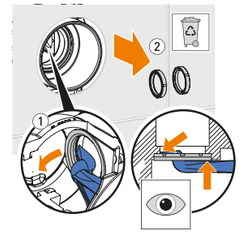
+ 20mm

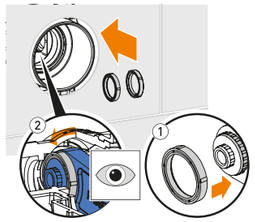
SEE PAGE 43

Code	DN	D1	M	H1	H2	Pack
KA00U40003	15	F13	42	52.5	84	10

SEAL MAINTENANCE TOOL KIT

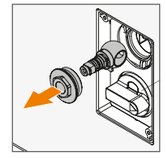






Code	Pack
KAI4990000	5

TECO CONTROL



Code	DN	Pack
KRTCU415000	15	6
KRTCU420000	20	4

Caution: Ultra accessories are not compatible with 164 accessories

SEAL KIT

Code	DN	Pack
KRSEI415000	15	6
KRSEI420000	20	4

ACCESSORY MAINTENANCE FRAME

THE MAINTENANCE FACEPLATE IS USED WHEN THE BOX IS INSTALLED INCORRECTLY AND PROTRUDES FROM THE WALL.

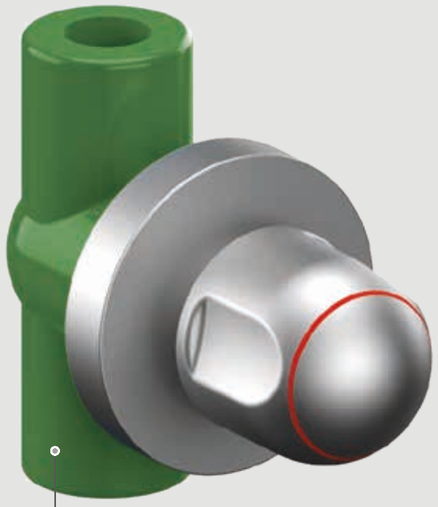
Code	D1	H	Finish	Pack
KRPLU408000	72	13	Satin chrome	5

164

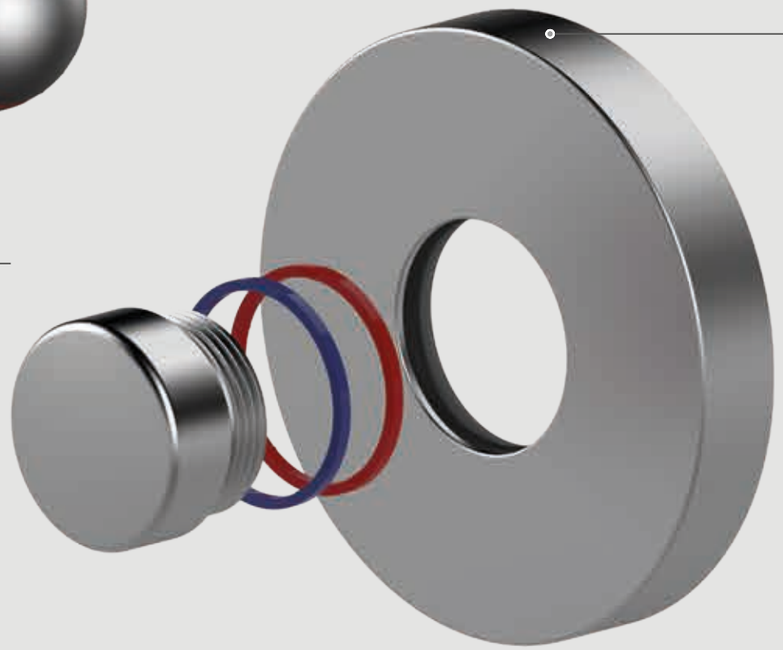
INNOVATING SAFETY 30 YEARS ANNIVERSARY

THE LEADER IN FLUSH MOUNTING FOR OVER 30 YEARS

VIDEO



VERSION FOR PP-R PIPE



ACCESSORIES

DESIGN INNOVATIVO

The wide range of accessories in different finishes offers many possible solutions that integrate into the design of the environment.

TOP-ENTRY

With the Top Entry system, the ball is fully removable and spare parts have been available for more than 30 years.
(see page 36)

SOFT TURN

Shut-off valve, 90° closure with anti-jamming engineered polymer ball.
(see page 37)

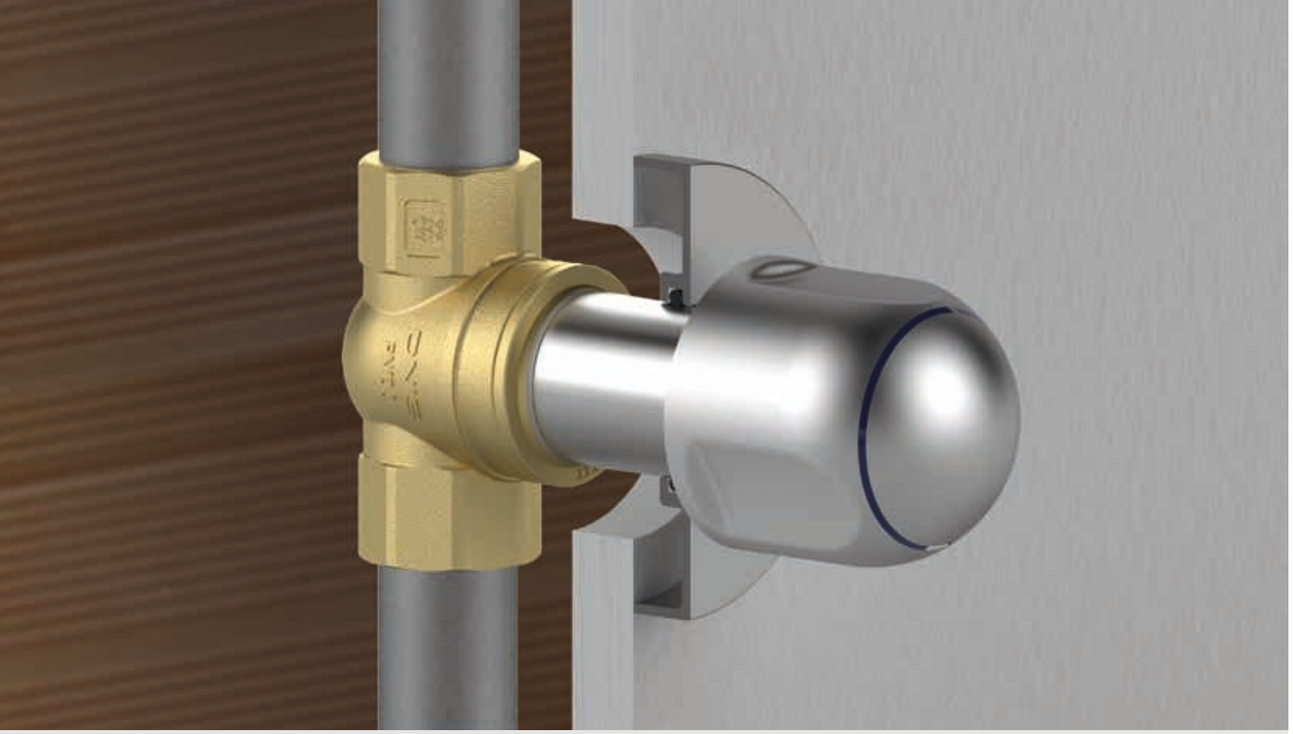
DVGW product

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standard for Metal Materials	DIN EN 13828 DVGW W570-1
Working pressure	PN10 (10 bar)
Temperature	0 °C + 95 °C

HIGH PERFORMANCE

100%

The TECO solution with effective flow and installation in accordance with the **EN 806-2** standard.
(see page 37)



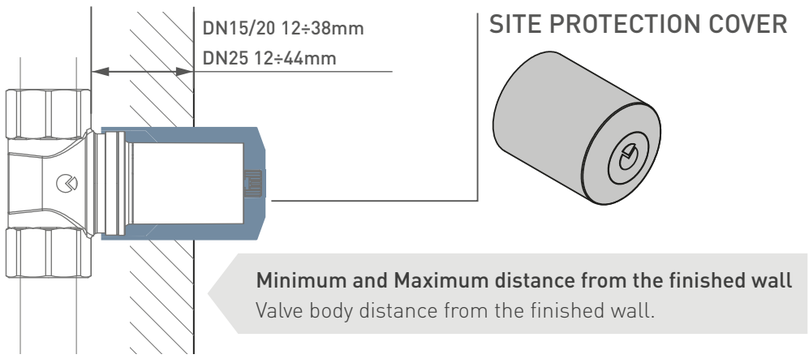
164

PRACTICAL TO INSTALL

BENEFITS

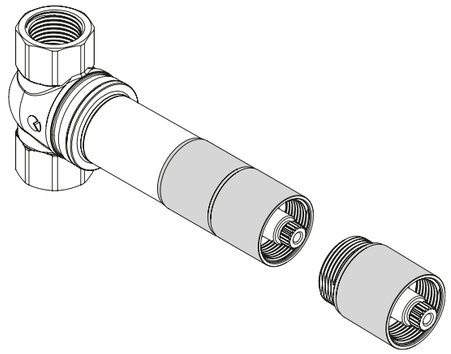
The site protection cover ensures full installation freedom:

- site plaster protection cover is easy to remove;
- the rosette also covers any imperfections in the cladding finish.

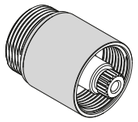


Minimum and Maximum distance from the finished wall
Valve body distance from the finished wall.

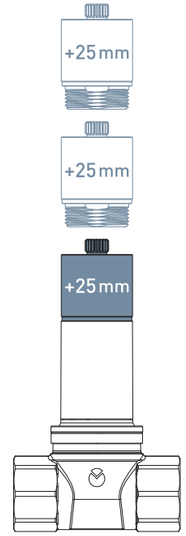
MODULAR EXTENSION KIT



The extension kit is used whenever it is necessary to extend the operating control of the shut-off cock [+25mm].
The kit is modular, so the cock control can be extended to the optimal position.



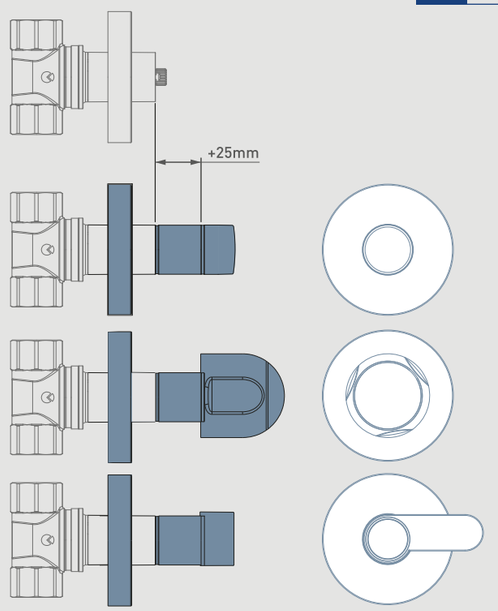
EXTENSION KIT 25mm
CODE I4095000



H-PLUS ACCESSORIES

If the cock has to be installed in walls with a thicker cladding, the H-PLUS version offers control accessories that are +25mm longer than for the standard version.

H-PLUS ACCESSORIES can be extended further.
The H-PLUS ACCESSORIES are normally used in GERMANY, AUSTRIA, SWITZERLAND and ARAB COUNTRIES.



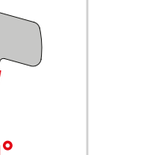
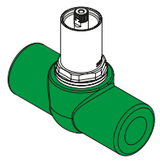
H PLUS threaded plug + rosette

H PLUS handle + rosette

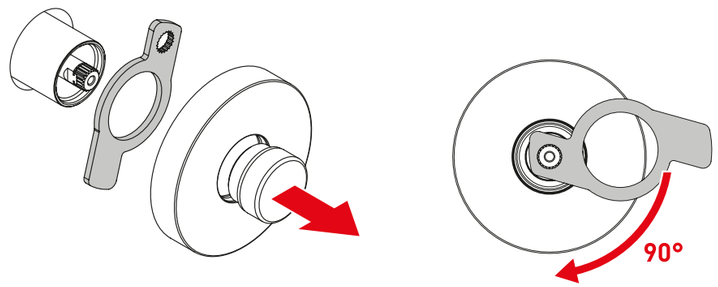
H PLUS lever + rosette

164

TOP-ENTRY

DEVICES						CONTROL ACCESSORIES
			CONNECTIONS			
	DN	CODE	1/2" EN 10226	3/4" EN 10226	1" EN 10226	
164 THREADED	15	I4T3911100	●			EXTERNAL CHROME CONTROL LEVER  CODE KAI4020000
	20	I4T4911100		●		
	25	I4T5911100			●	
	DN	CODE	PP-R Ø20	PP-R Ø25	PP-R Ø32	EXTERNAL CHROME CONTROL HANDLE  CODE KAI4030000
164 PP-R 	15	I403981V00 ●	●			
	15	I403982V00 ●		●		
	20	I404981V00 ●			●	CHROME NEUTRO ROSETTE WITH KEY  CODE KAI4010000
	15	I403981B00 ●	●			
	15	I403982B00 ●		●		
	20	I404981B00 ●			●	

HIDDEN KEY FOR NEUTRO ROSETTE



164

TOP-ENTRY SHUT-OFF COCK

- 164 is a compact shut-off cock
- **Full flow**, in accordance with the **EN 806-2** standard
- Top-Entry removable shut-off valve with Soft Turn full-flow anti-jamming balls

SPECIFICATIONS

Material	Body	Brass CW617
	Supporto	Nylon PA6
	Balls	Engineered Polymer
Connections		FASTEC®-Threaded F.
Working pressure		PN10 (10 bar)
Temperature		0 °C + 95 °C
Standard and certification		DIN EN 13828 (KTW-W270) DVGW W570-1

TECHNOLOGIES

HIGH PERFORMANCE

SOFT TURN

TOP-ENTRY

DESIGN FEATURES

CERTIFIED PRODUCT

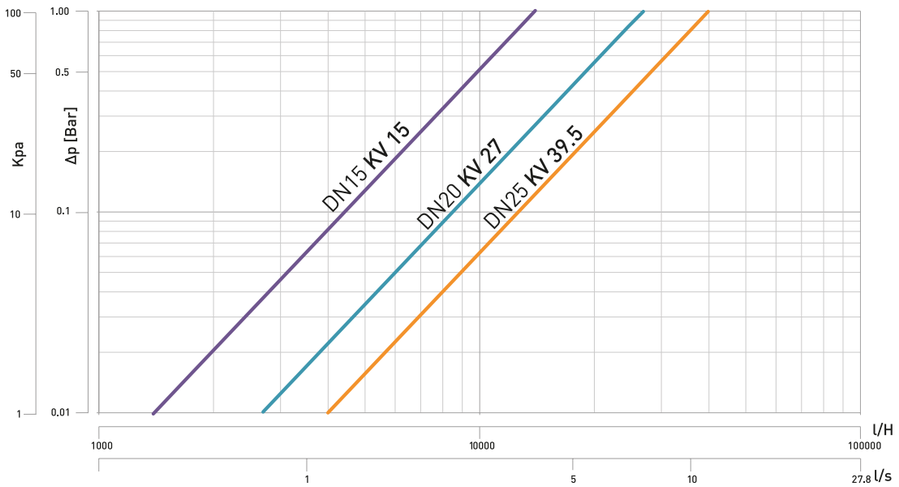
PP-R

PP-R

H-PLUS

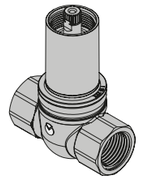
H-PLUS

FLOW LOSS DIAGRAM

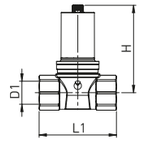


164 FLUSH-MOUNTING COCK

STRAIGHT THREADED VERSION



- PN10 (10 bar)
- 0 °C + 95 °C

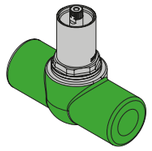


Code	DN	D1 EN 10226	H	L1	SW	Pack
I4T3911100	15	RP 1/2"	70	63	27	30
I4T4911100	20	RP 3/4"	74	73	32	20
I4T5911100	25	RP 1"	86	83	41	5

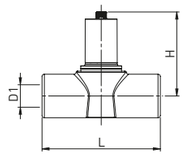
164 Flush-mounting shut-off cock
Top Entry shut-off valve with removable ball and full flow that complies with the DIN EN 13828 standard. Engineered polymer ball and Soft Turn anti-jamming seals. Complete with site protection cover. Cap accessories, lever or handle with 90 degree operation. Polished Chrome finish.
Temperature: 0°C + 95 °C
Working pressure: 10 bar.

164 PPR TOP-ENTRY COCK FOR PP-R PIPES

STRAIGHT PP-R VERSION

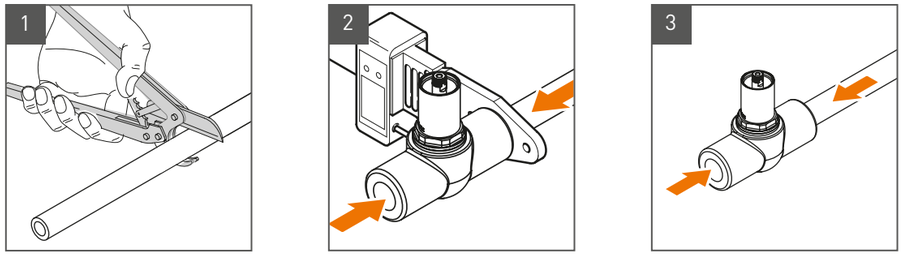


- PN10 (10 bar)
- 0-70 °C



Code	DN	Colour	D1	H	L1	Pack
I403981V00	15	●	ø20	70	101	20
I403982V00	15	●	ø25	70	101	20
I404981V00	20	●	ø32	74	121	5
I403981B00	15	●	ø20	70	101	20
I403982B00	15	●	ø25	70	101	20
I404981B00	20	●	ø32	74	121	5

THE TOP ENTRY PP-R SERIES OF COCKS IS COMPATIBLE WITH ALL PP-R PIPES
(Polypropylene Random Copolymer) MANUFACTURED IN ACCORDANCE WITH THE EN ISO 15874 STANDARD

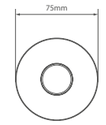


To make the connections quickly and correctly, it is essential to use tools that comply with the DVS2207 standards. The welding procedure must comply with the DVS2207 -2208 joint standards.

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Working pressure	PN10 (10 bar)
Temperature	+70 °C
Body material	Brass CW 617
Ball material	Engineered Polymer
Coating material PP-R	Polypropylene Copolymer Random
Reference Certification	Both the valve and the moulded **PP-R** coating have received many certifications. The valve is certified compliant with **DIN EN 13828.** The PP-R coating is made and certified compliant with the product standards: **EN ISO 15874 – DIN 8077/78 - DIN 16962**

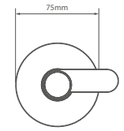
164 CONTROL ACCESSORIES

164 CHROME PLATED THREADED PLUG KIT



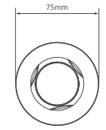
Code	Colour	Compatibility	Pack
KAI4010000	Polished chrome	164	10

164 CHROME PLATED LEVER KIT



Code	Colour	Compatibility	Pack
KAI4020000	Polished chrome	164	10

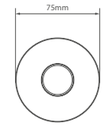
164 CHROME PLATED HANDLE KIT



Code	Colour	Compatibility	Pack
KAI4030000	Polished chrome	164	10

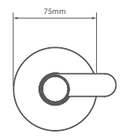
164 H-PLUS CONTROL ACCESSORIES

164 CHROME PLATED H-PLUS THREADED PLUG KIT +25mm



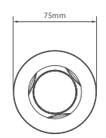
Code	Colour	Compatibility	Pack
KAI4011000	Polished chrome	164	10

164 CHROME PLATED H-PLUS LEVER KIT +25mm



Code	Colour	Compatibility	Pack
KAI4021000	Polished chrome	164	10

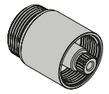
164 CHROME PLATED H-PLUS HANDLE KIT +25mm



Code	Colour	Compatibility	Pack
KAI4031000	Polished chrome	164	10

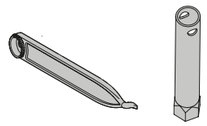
164 WATER SHUT-OFF ACCESSORIES

EXTENSION FOR 164 1/2"-3/4"-1" COCK

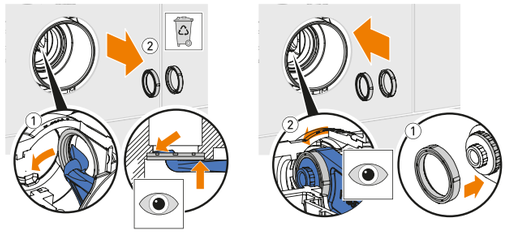


Code	Compatibility	Pack
I4095000	164	20

SEAL MAINTENANCE TOOL KIT

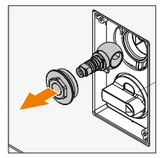


Code	Pack
KAI4990000	5



164 WATER SHUT-OFF VALVE SPARE PARTS

TECO CONTROL

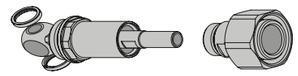


Code	DN	Key	Pack
I4099030GR	15	17	6
I4099040GR	20		4
I4099050GR	25	19	2

SEAL KIT

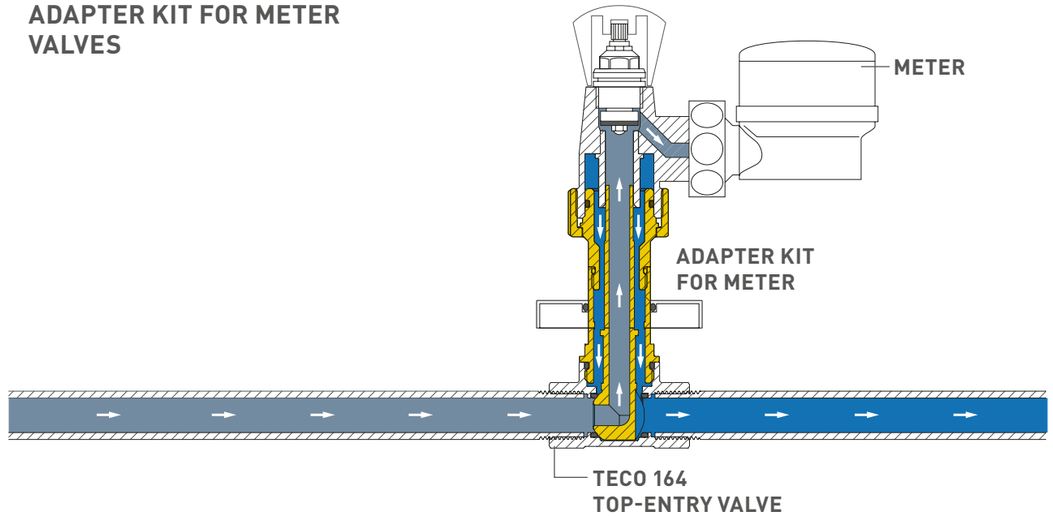
Code	DN	Pack
KRSEI415000	15	6
KRSEI420000	20	4
KRSEI425000	25	2

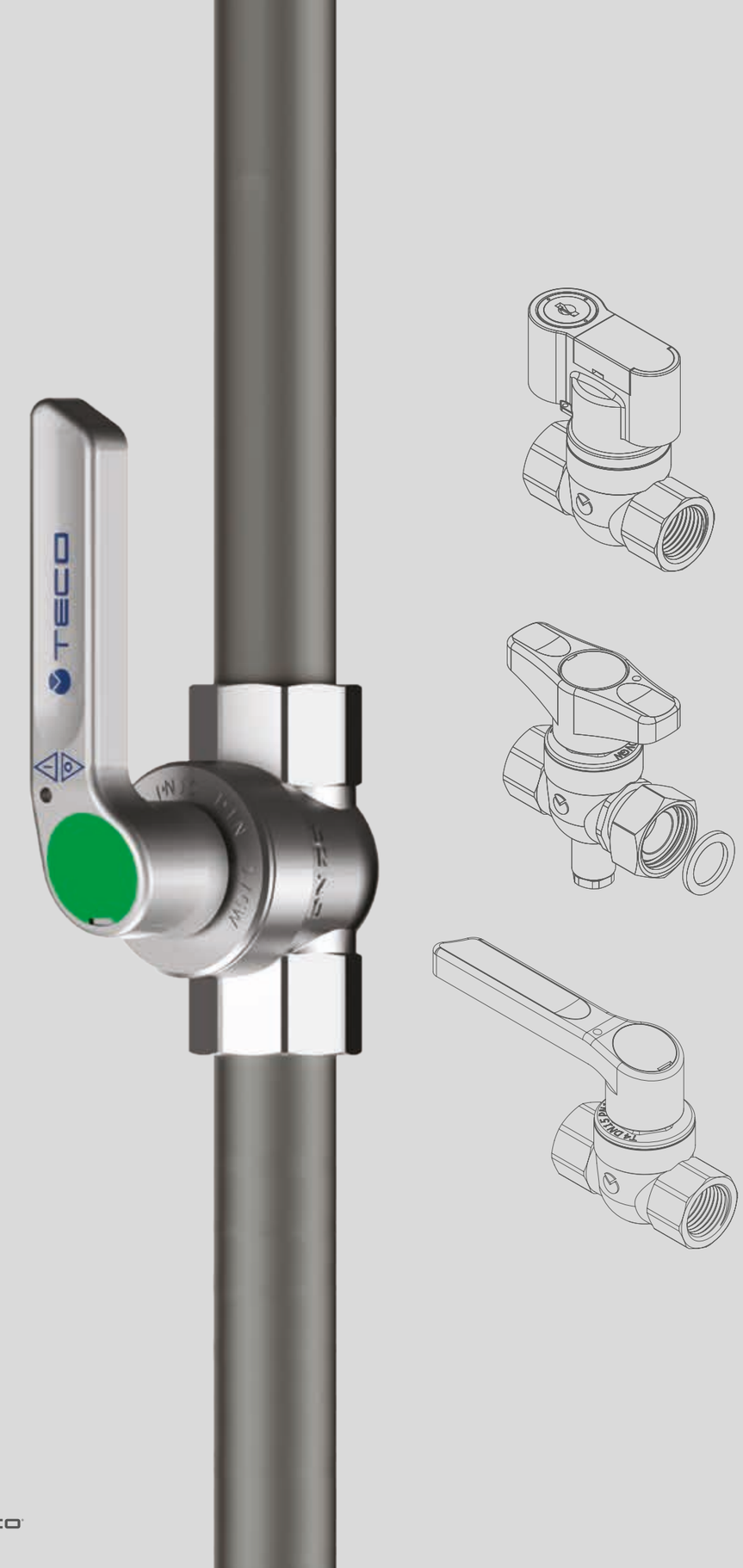
ADAPTER KIT FOR METER VALVES



Code	DN	Key	Compatibility	Pack
PR0013034004	15	30	SIMPLEX	1
PR0013034008	20	30	SIMPLEX	1

ADAPTER KIT FOR METER VALVES





T4 - T4J - T4 PUNTO BLU

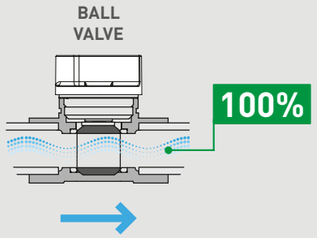
TOP ENTRY BALL SHUT-OFF VALVES

T4

TOP ENTRY BALL SHUT-OFF VALVES

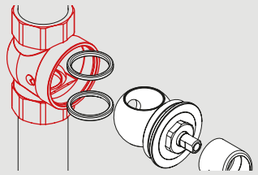
HIGH PERFORMANCE

Full flow.



SINGLE-PIECE BODY

The single-piece body makes T4 very strong, which is very important as it is the only element secured to the pipes.



CERTIFIED

Installations for drinking water must be made to the highest standards to prevent trapping water, which could promote the development of microbe colonies (e.g. legionella). **T4** valves were developed with build characteristics that prevent water from being trapped (**DVGW W570-1**).

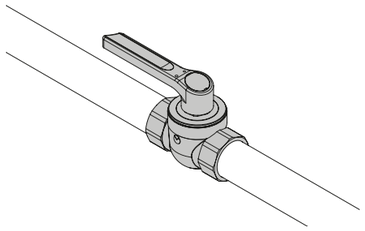
CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DIN EN 13828 (PN10) DVGW W 570-1
Working pressure	PN40 (40 bar)
Temperature	0°C +150 °C
Body material	CW617 Brass
Ball material	CW617 chrome plated brass
Control material	AL EN-AB44100 aluminium
Application	Water, heating, pneumatic, petrochemical and oil distribution systems. Suitable for non-aggressive fluids and vacuum.

TOP-ENTRY

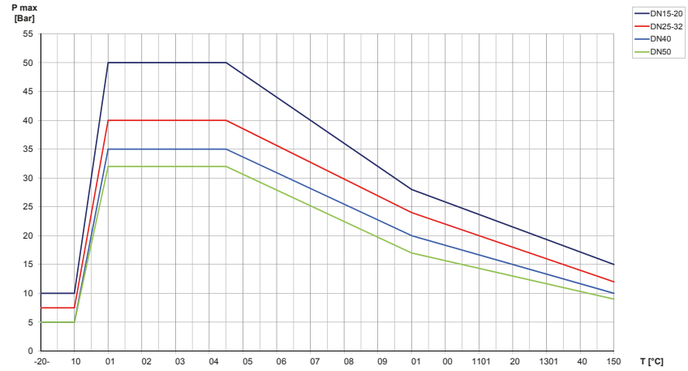
The Top Entry system ensures that the ball can be fully removed. Spare parts availability is guaranteed for more than 30 years.

INSTALLATIONS AND APPLICATIONS

Water, heating, pneumatic, hydraulic and petrochemical distribution systems.
T4 is suitable for non-aggressive fluids and vacuum systems.

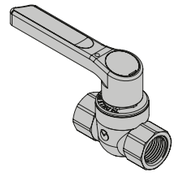


Temperature / Pressure

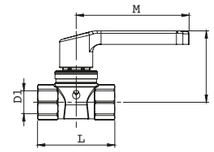


T4 "TOP ENTRY" THREADED SHUT-OFF VALVE

VALVE – STRAIGHT THREADED F/F VERSION

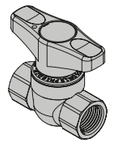


- Control lever
- PN40 (40 bar)
- 0-150 °C

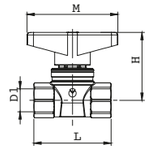


Code	DN	D1 EN-10226-1	L	H	M	SW	Pack
T4040300	15	Rp1/2"	63	58	92	27	50
T4040400	20	Rp3/4"	73	61	92	32	40
T4040500	25	Rp1"	83	71	124	41	20
T4040600	32	Rp1"1/4	100	76	124	50	15
T4040700	40	Rp1"1/2	110	82	147	55	10
T4040800	50	Rp2"	131	88	147	70	5

VALVE – STRAIGHT THREADED F/F VERSION



- Control handle
- PN40 (40 bar)
- 0-150 °C



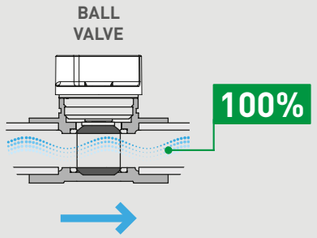
Code	DN	D1 EN-10226-1	L	H	M	SW	Pack
T4041300	15	Rp1/2"	63	55	74	27	50
T4041400	20	Rp3/4"	73	58	74	32	40

T4J

TOP ENTRY BALL SHUT-OFF VALVES FOR METERING SYSTEMS

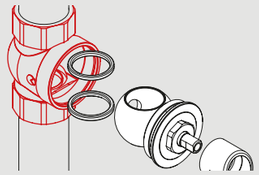
HIGH PERFORMANCE

Full flow.



SINGLE-PIECE BODY

The single-piece body makes T4J very strong, which is very important as it is the only element secured to the pipes.



CERTIFIED

Installations for drinking water must be made to the highest standards to prevent trapping water, which could promote the development of microbe colonies (e.g. legionella). **T4J** valves were developed with build characteristics that prevent water from being trapped (**DVGW W570-1**).

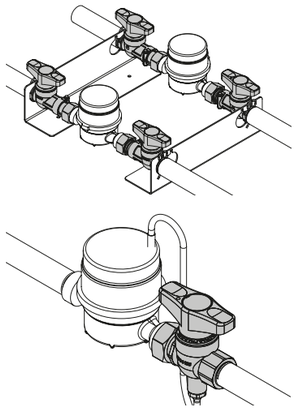
TOP-ENTRY

The Top Entry system ensures that the ball can be fully removed. Spare parts availability is guaranteed for more than 30 years.

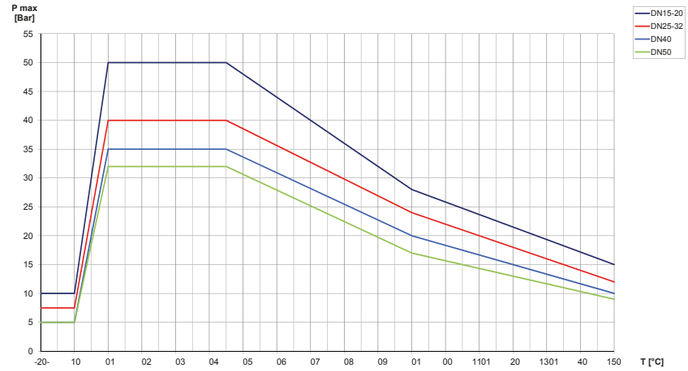
CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DIN EN 13828 (PN10) DVGW W 570-1
Working pressure	PN40 (40 bar)
Temperature	0°C +150 °C
Body material	CW617 Brass
Ball material	CW617 chrome plated brass
Control material	AL EN-AB44100 aluminium
Application	Water, heating, pneumatic, petrochemical and oil distribution systems. Suitable for non-aggressive fluids and vacuum.

INSTALLATIONS AND APPLICATIONS

Metering systems



Temperature / Pressure



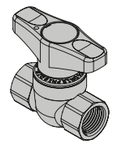
T4J | **"TOP ENTRY" VALVE FOR METERING SYSTEMS**

VALVE WITH PROBE FITTING – THREADED F/F VERSION

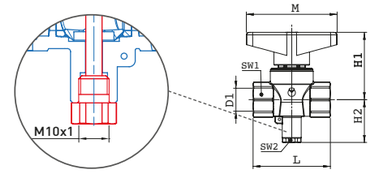
- Control lever
- PN40 (40 bar)
- 0-150 °C

Code	DN	D1 EN-10226-1	L	H1	H2	M	SW1	SW2	Pack
T40406J0	32	Rp1"1/4	100	76	37.5	124	50	14	15
T40407J0	40	Rp1"1/2	110	82	41	147	55	14	10
T40408J0	50	Rp2"	131	88	48.4	147	70	14	5

VALVE WITH PROBE FITTING – THREADED F/F VERSION



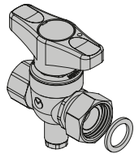
- Control handle
- PN40 (40 bar)
- 0-150 °C



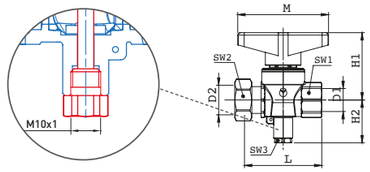
Code	DN	D1 EN-10226-1	L	H1	H2	M	SW1	SW2	Pack
T40413J0	15	Rp1/2"	63	55	32.5	74	27	14	45
T40414J0	20	Rp3/4"	73	58	32.5	74	32	14	35
T40415J0	25	Rp1"	73	88	35	94	41	14	20

T4J "TOP ENTRY" VALVE FOR METERING SYSTEMS

STRAIGHT VALVE WITH PROBE FITTING – THREADED/SWIVEL NUT VERSION

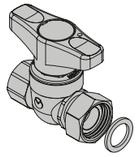


- Control handle
- PN40 (40 bar)
- 0-150 °C

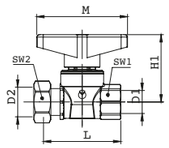


Code	DN	D1 EN-10226-1	D2 EN-228-1	L	H1	H2	M	SW1	SW2	SW3	Pack
T40413J0R	15	Rp1/2"	G3/4"	71	55	32.5	74	27	30	14	45
T40414J0R	20	Rp3/4"	G1"	73	58	32.5	74	32	37	14	35

STRAIGHT VALVE – THREADED / SWIVEL NUT VERSION

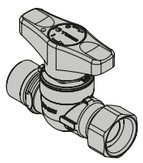


- Control handle
- PN40 (40 bar)
- 0-150 °C

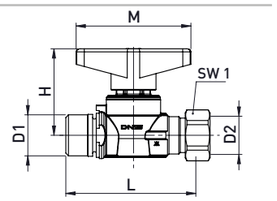


Code	DN	D1 EN-10226-1	D2 EN-228-1	L	H1	M	SW1	SW2	Pack
T40413J0	15	Rp1/2"	G3/4"	71	55	74	27	30	45
T40414J0	20	Rp3/4"	G1"	73	58	74	32	37	35

STRAIGHT VALVE – MX THREADED (ISO 228) / SWIVEL NUT VERSION

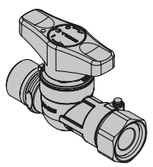


- Control handle
- PN40 (40 bar)
- 0-150 °C

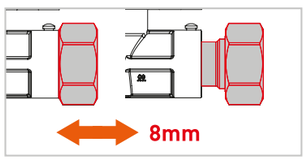


Code	DN	D1	D2	M	L	H	SW1	Pack
T403910400	15	Rp1/2"	G3/4"	74	84	55	30	45

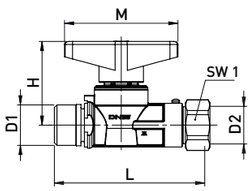
STRAIGHT VALVE WITH EXTENDER – MX THREADED (ISO 228) / SWIVEL NUT VERSION



- Control handle
- PN40 (40 bar)
- 0-150 °C



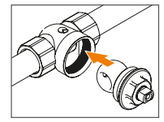
The FASTEC EX system allows an extension of 8 mm making it easier to connect the metering units.



Code	DN	D1	D2	M	L	H	SW1	Pack
T403910200	15	Rp1/2"	G3/4"	74	98+8*	55	30	45

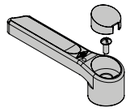
T4 - T4J SPARE PARTS

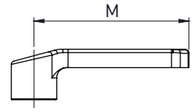
TECO CONTROL



Code	DN	Pack
KRLE040100	15	20
KRLE040200	20	15
KRLE040300	25	10
KRLE040400	32	5
KRLE040500	40	5
KRLE040600	50	2

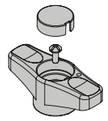
LEVER

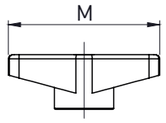




Code	DN	M	Pack
KRLE041100	15-20	92	20
KRLE041200	25-32	124	20
KRLE041300	40-50	147	10

HANDLE





Code	DN	M	Pack
KRMN041100	15-20	74	20
KRMN040300	25	94	10

SEAL KIT

Code	DN	Pack
5004000130	15	20
5004000140	20	15
5004000150	25	10
5004000160	32	10
5004000170	40	10
5004000180	50	10

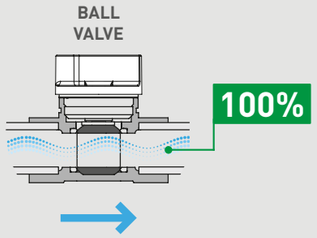
UNTO BLU®

SHUT-OFF VALVE WITH LOCK FOR LOW FLOW RATE SUPPLY

VIDEO

HIGH PERFORMANCE

Full flow.



SOFT TURN

Shut-off valve, 90° closure with anti-jamming engineered polymer ball.

PUNTO BLU

Handle with security lock for minimum supply.

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DIN EN 13828 DVGW W 570-1
Working pressure	PN10 (10 bar)
Temperature	0°C + 95 °C
Body material	CW617 Brass
Ball material	Engineered polymer
Control material	Nylon PA6
Application	Water, heating, pneumatic, petrochemical and oil distribution systems. Suitable for non-aggressive fluids and vacuum.

CERTIFIED

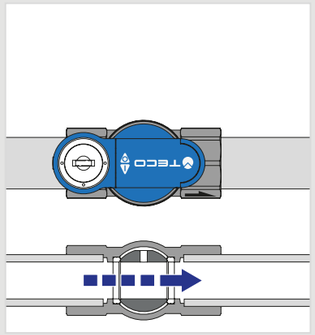
Installations for drinking water must be made to the highest standards to prevent trapping water, which could promote the development of microbe colonies (e.g. legionella). **PUNTO BLU** valves were developed with build characteristics that prevent water from being trapped (**DVGW W570-1**).

OPERATION

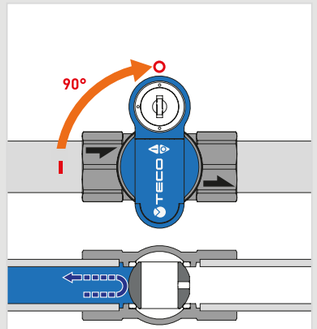
The technical characteristics of **PUNTO BLU** valves allow them to have a double function.

MAIN SHUT-OFF

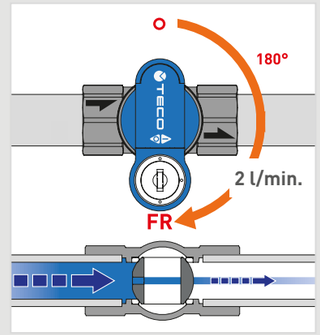
VALVE **OPEN (I)**



VALVE **CLOSED (0)**

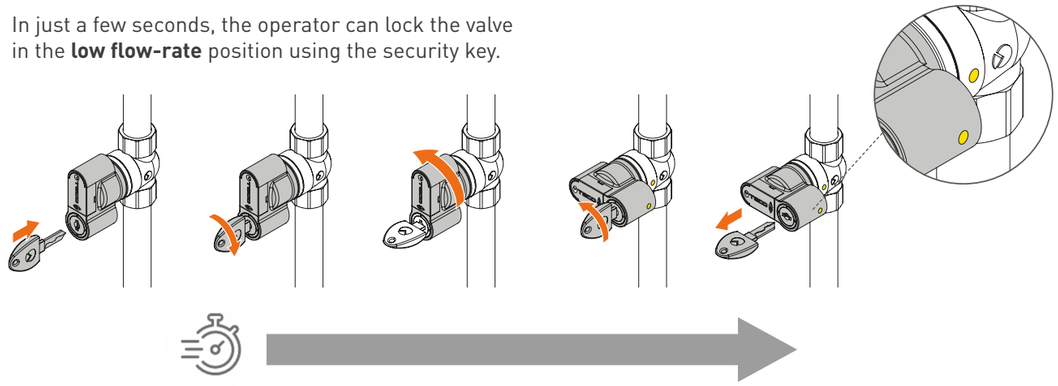


LOW FLOW RATE

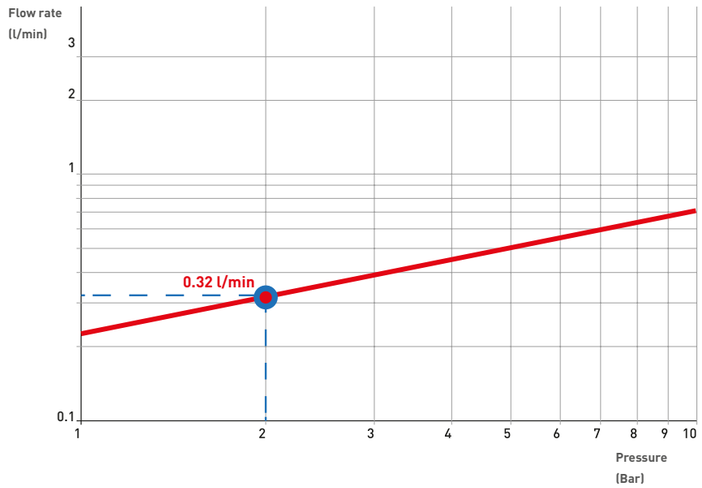


LOW FLOW-RATE SEQUENCE

In just a few seconds, the operator can lock the valve in the **low flow-rate** position using the security key.



FLOW-RATE GUARANTEED WITH FLOW REDUCTION



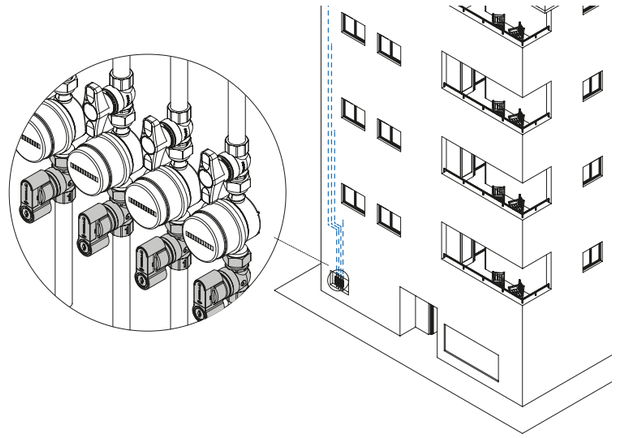
USE AND APPLICATIONS

Why do we recommend using the "PUNTO BLU®" shut-off valve with lock for minimum water supply?

The PUNTO BLU valve is the only instrument that lets you intervene quickly in the event of late payment, with the following benefits:

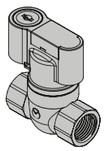
- block delivery while guaranteeing the minimum flow rate;
- limit the costs of intervening to suspend and restore delivery.

Use of the PUNTO BLU valve is supported by a huge amount of related literature, so the question of late payment is governed in accordance with the citizen's right to use water, since it is common property.

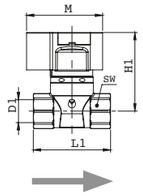


T4 PUNTO BLU | SHUT-OFF VALVE WITH LOCK FOR LOW FLOW RATE SUPPLY

T4 PUNTO BLU – THREADED

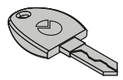


- PN10 (10 bar)
- 0-95 °C



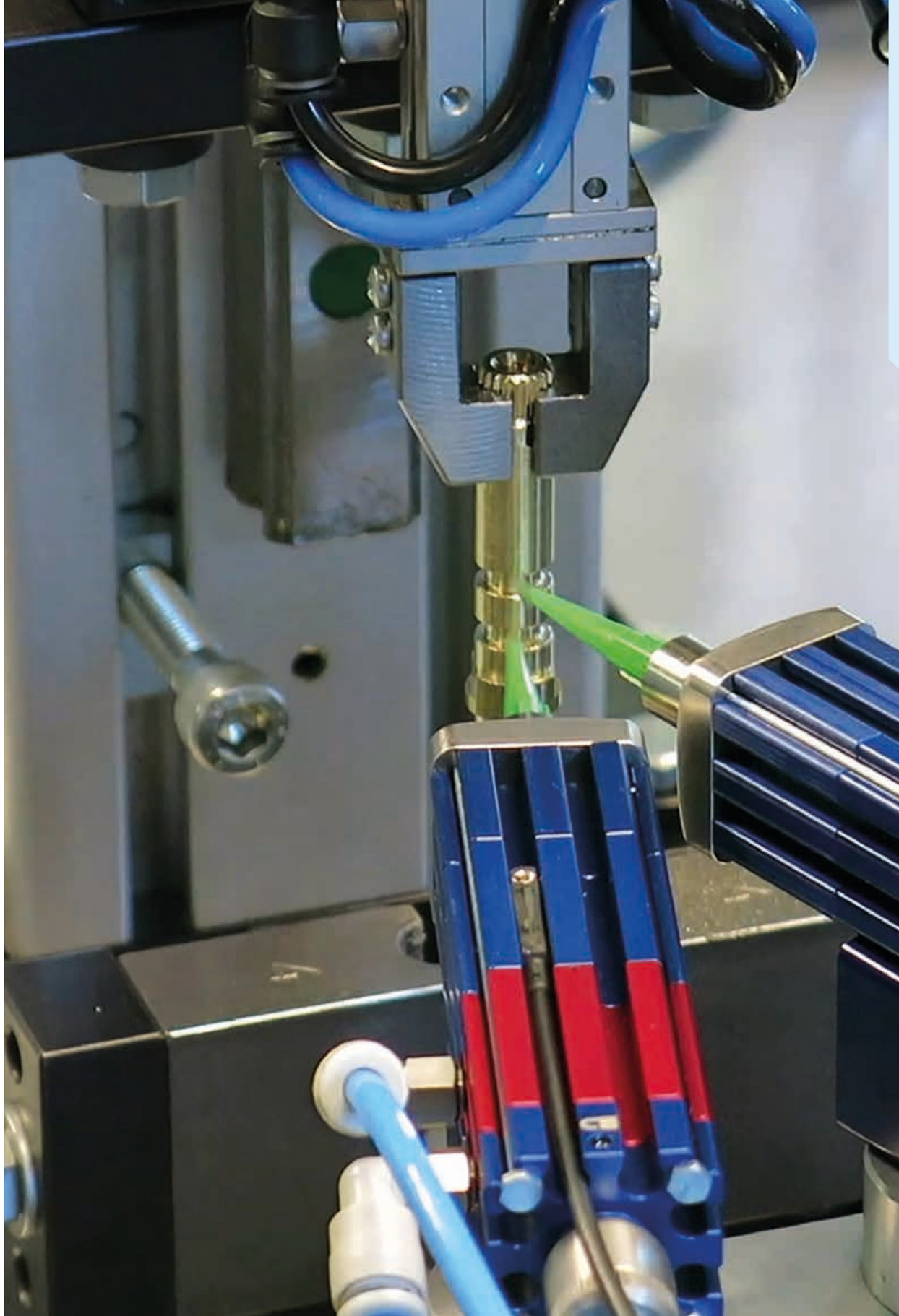
Code	DN	D1	L	H1	M	SW	Q l/min.	Pack
T403S11000	15	Rp1/2"	63	64	62	27	0.32	10
T404S11000	20	Rp3/4"	73	67	62	32	0.32	10

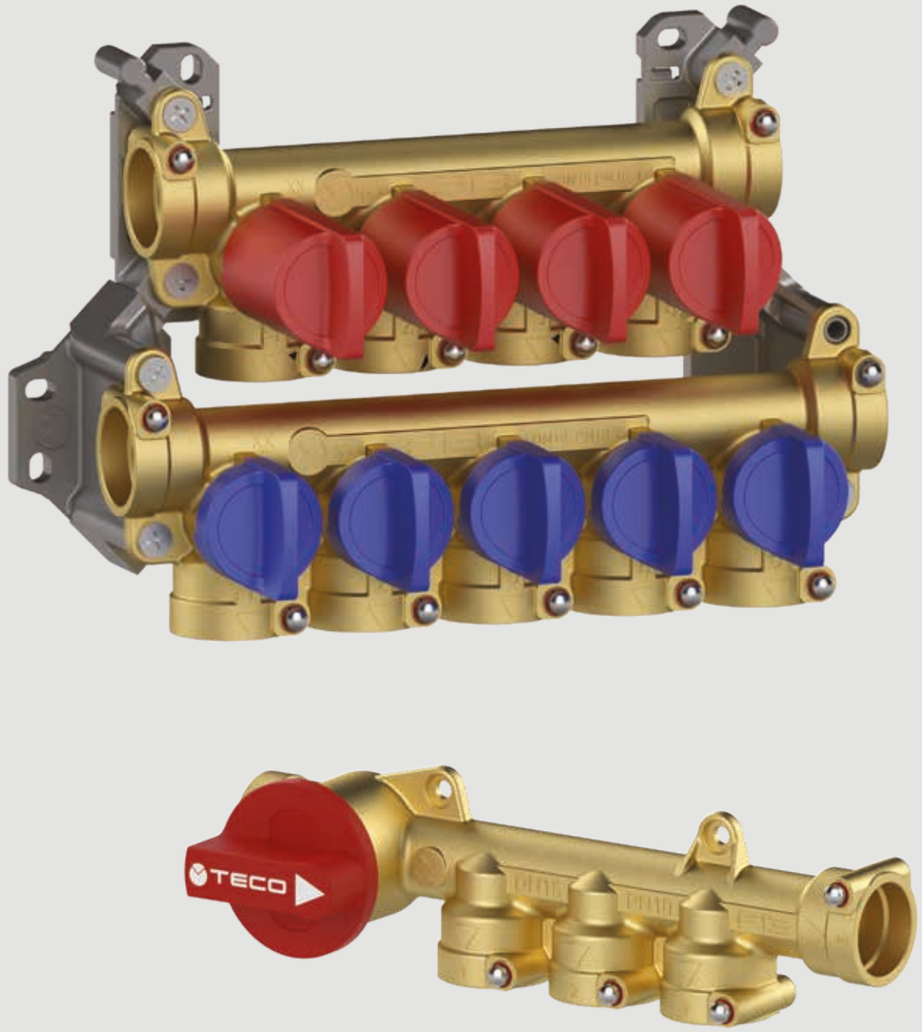
KEY FOR SECURITY LOCK



Code	Pack
KY5000	1

Security keys are only supplied to authorised personnel.





CK SERIES

FASTEC® MANIFOLD WITH BUILT-IN SHUT-OFF VALVES FOR DOMESTIC WATER SYSTEMS

FASTEC® MANIFOLDS

A PRECISE RESULT AT THE FASTEST SPEED

LINK

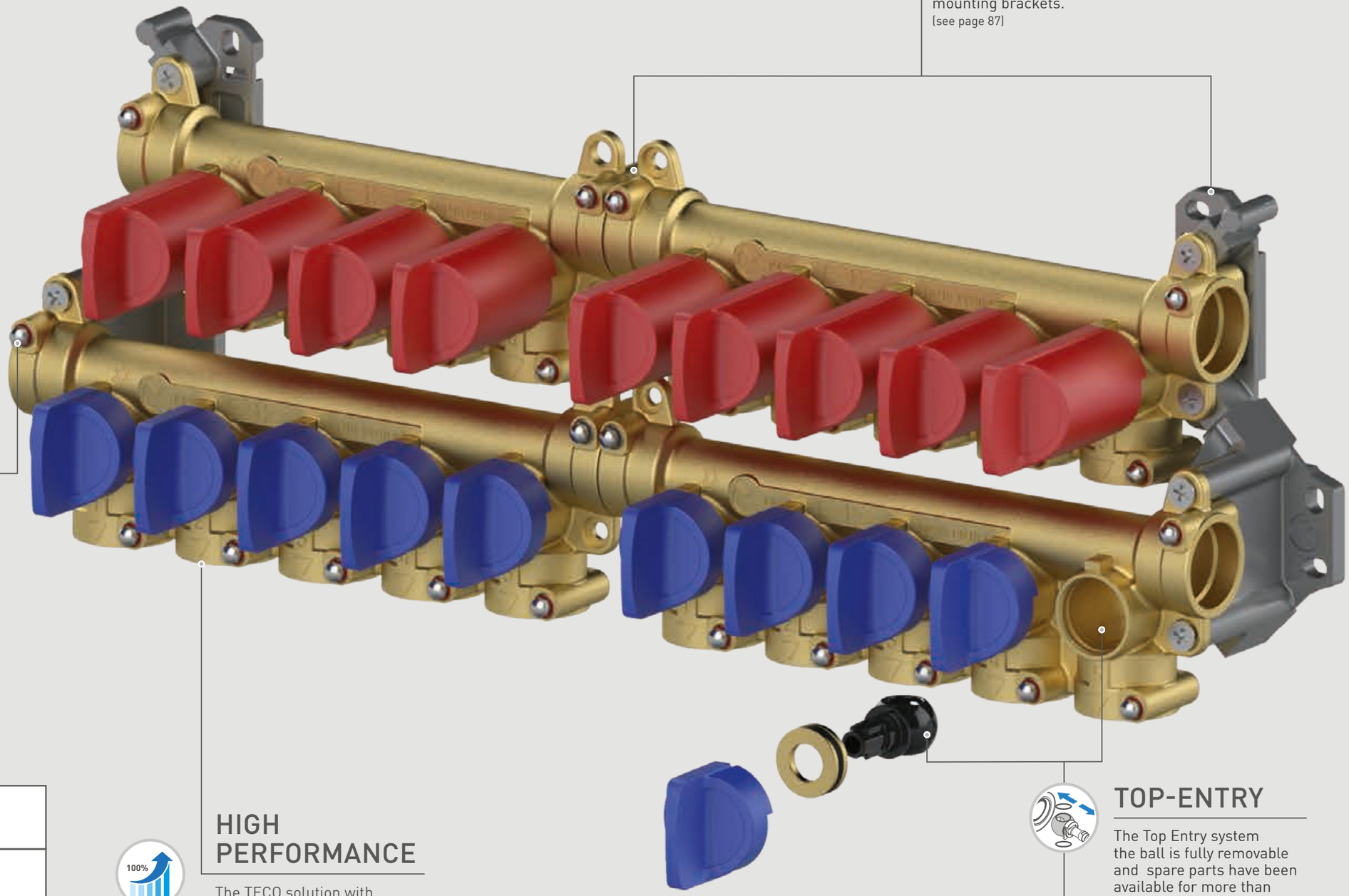
Connection manifold and modular mounting brackets.
(see page 87)

COMPACT INSTALLATION

The smaller sizes are easier to integrate into the environment.
(see page 86)

FASTEC

The FASTEC® connection system is fast, safe, space-saving and maintenance free.
The wide range of **FASTEC® STORE** fittings makes installation simple and flexible.
(see page 88)



HIGH PERFORMANCE

The TECO solution with effective flow and installation in accordance with the **EN 806-2** standard.
(see page 89)

TOP-ENTRY

The Top Entry system the ball is fully removable and spare parts have been available for more than more than 30 years.
(see page 36)

SOFT TURN

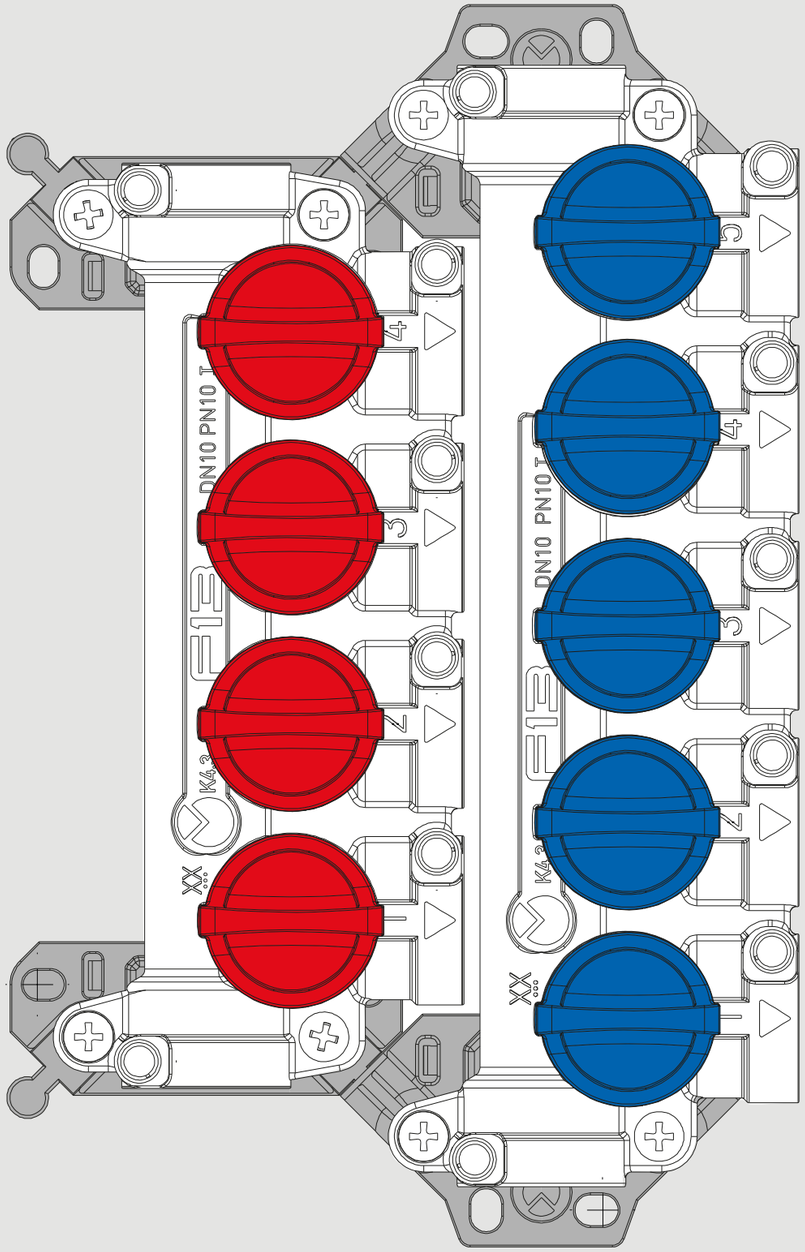
Shut-off valve, 90° closure with anti-jamming engineered polymer ball.
(see page 37)

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS

Reference Standard for Metal Materials	DIN EN 13828 DVGW W570-1
Working pressure	PN10 (10 bar)
Temperature	0°C + 95 °C

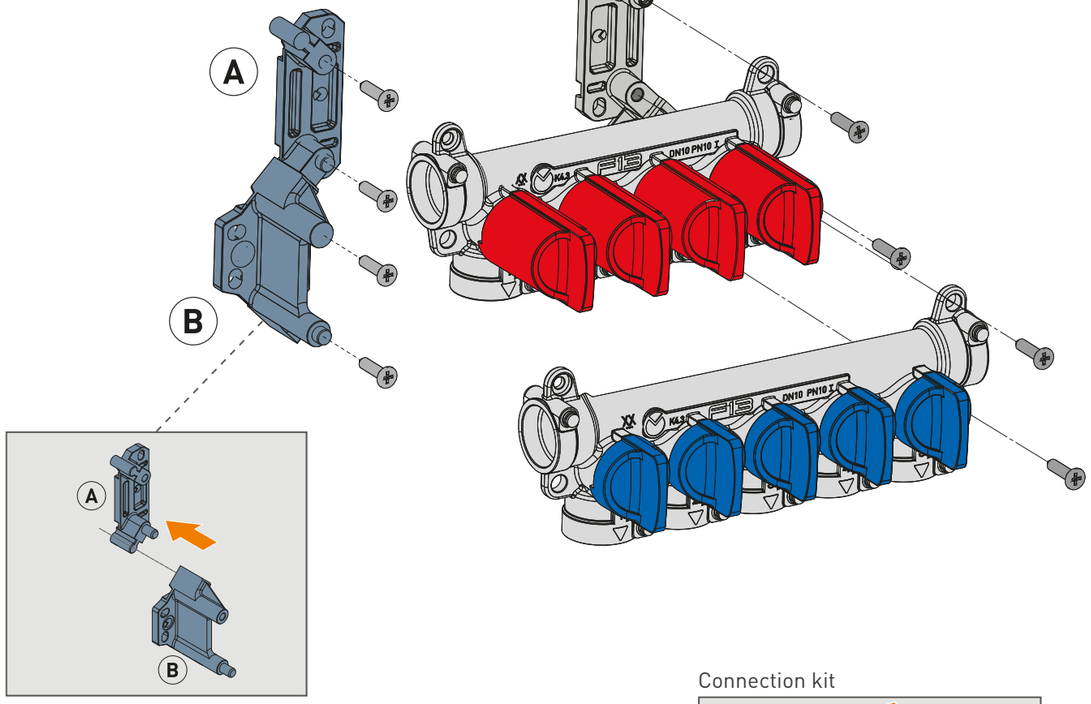
COMPACT INSTALLATION

The real size of a manifold with 5+4 outlets with shut-off valves.



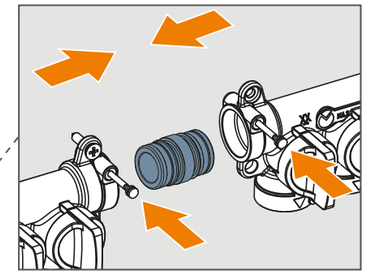
LINK

Possible to combine 2 manifolds in various solutions, up to 9+10 outlets with shut-off valves.

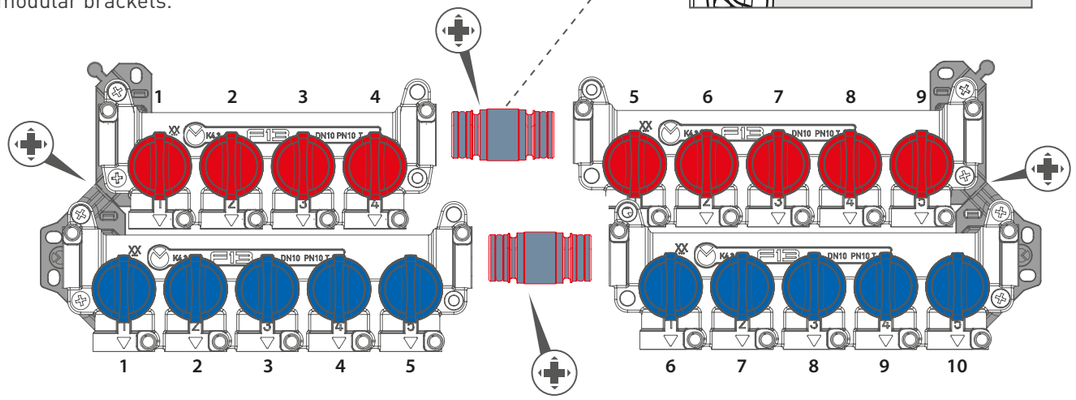


Modular mounting brackets

Connection kit



Modularity is ensured by the connection kit and the modular brackets.



FASTEC®

SIMPLY SAFE

NO TOOLS

During installation, no tools are required to connect the fittings.

NO MAINTENANCE

The FASTEC® connection does not require any maintenance over time.

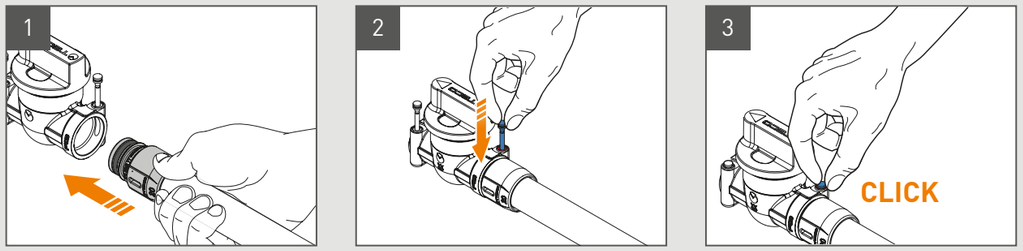
NO STRESS

No mechanical stress on the joint.

SAFETY

- LOCKING PIN
- O-RING DIMENSIONED FOR A PERFECT SEAL

SIMPLE, QUICK AND REVERSIBLE CONNECTION



HIGH PERFORMANCE

TECO TOP ENTRY® CK ball valves have an effective flow that complies with **EN 806-2: Paragraph 6.1.**

STANDARDS

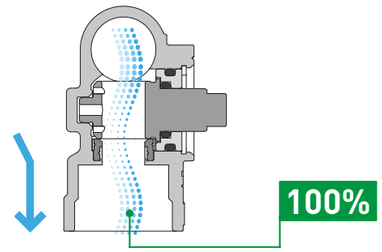
The EN 806-2 standard: Paragraph 6.1:
"Only install cut-off valves that do not excessively obstruct flow in the system (e.g. ball valves, gate valves)."

BENEFITS

- They have a low pressure drop
- They can replace screw valves, as recommended by **EN 806-2**

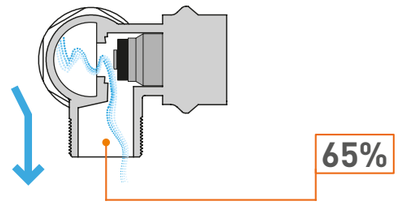
Solution TECO®
Installation to EN 806-2 standard

TECO MANIFOLD WITH OUTLET BALL VALVE



Common solution with screw valve

MANIFOLD WITH OUTLET SCREW VALVE



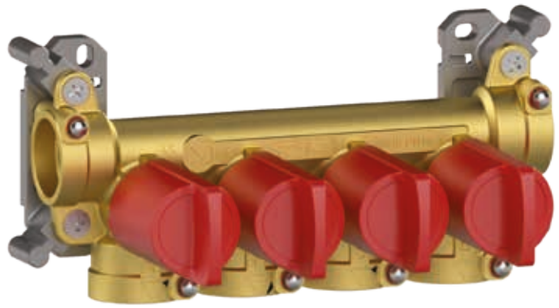
TOP-ENTRY

100% REMOVABLE

CK.3

FASTEC® MULTIPLE SHUT-OFF VALVE MANIFOLD

- CK.3 **compact** distribution manifold
- **Individual outlet shut-off valves** mean there is no need for valves under the basin
- Modular mounting brackets with quick wall fastening
- The **FASTEC®** connection is convenient and safe to work with, and does not require maintenance
- **TOP-ENTRY®** removable shut-off valve with **Soft Turn®** anti-jamming ball
- **FASTEC®** connection kit provides modularity



SPECIFICATIONS

Material	Body	CW617 Brass
	Mount	Nylon PA6
	Balls	Engineered polymer
Connections		FASTEC®
Working pressure		PN10 (10 bar)
Temperature		0 °C + 95 °C
Standard and certification		DIN EN 13828 (KTW-W270) DVGW W 570-1

TECHNOLOGIES

HIGH PERFORMANCE

SOFT TURN

FASTEC®

TOP-ENTRY

DESIGN FEATURES

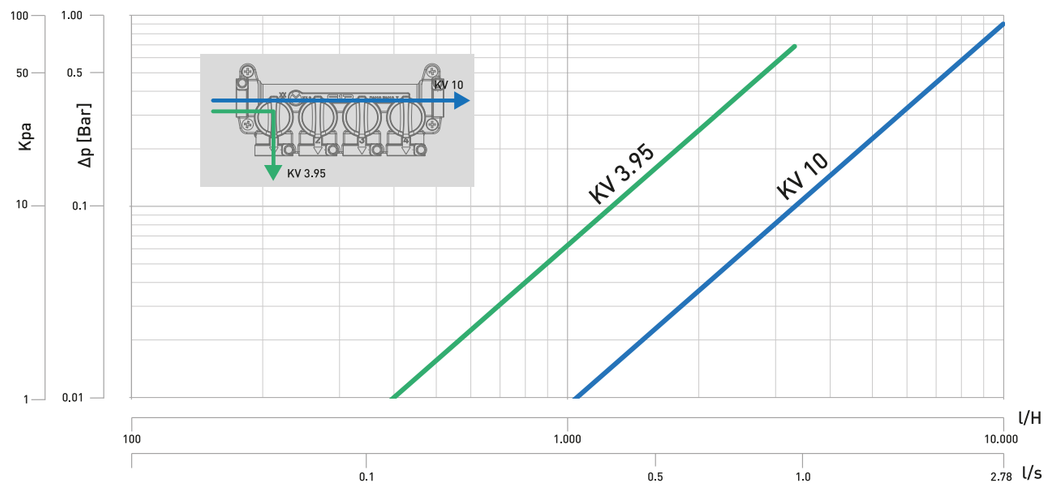
CERTIFIED PRODUCT

LINK

COMPACT

SHUT-OFF BUILT INTO THE MANIFOLD

PRESSURE DROP DIAGRAM

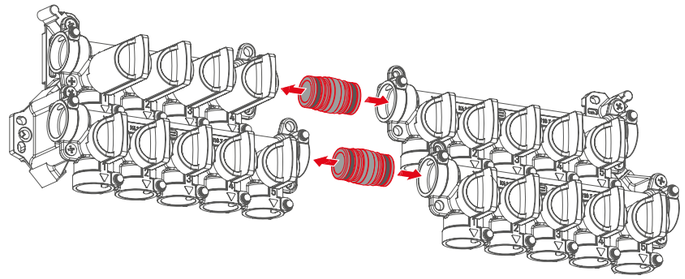


FASTEC®

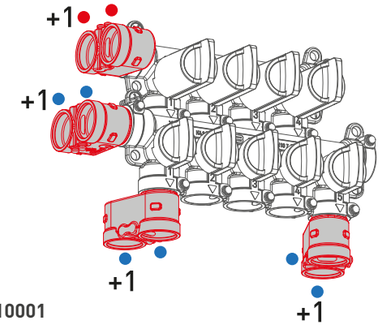
CONNECTION KIT

The FASTEC® kit provides the plumbing connections for 2 manifolds, giving up to 10+8 outlets with individual shut-off valves. **The performance of the individual manifold outlets remain almost unaffected.**

CODE KA00K00008

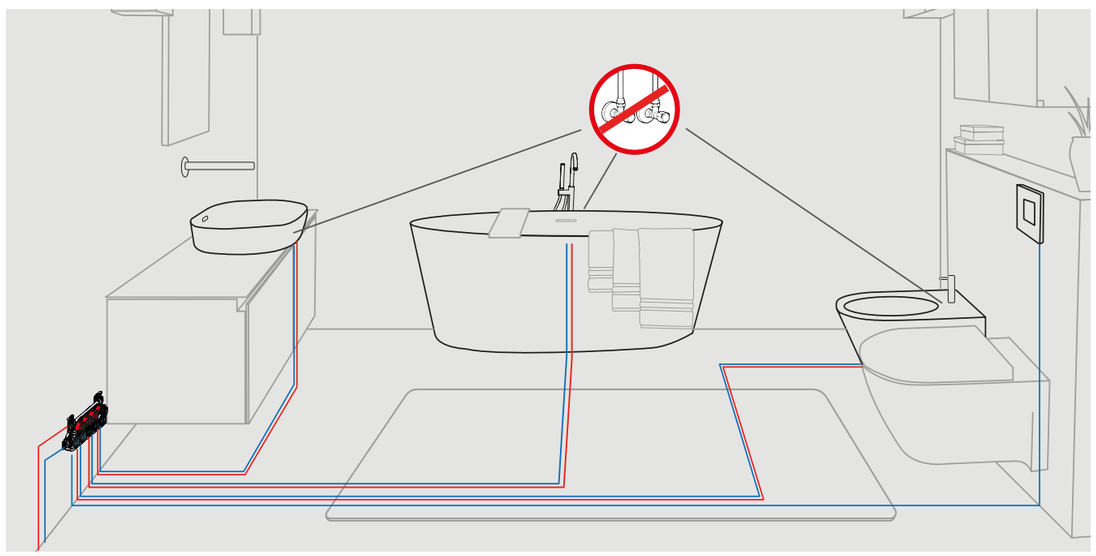


TWIN 1 FITTING



CODE KA00F10001

FASTEC® Twin fittings make it possible to increase the number of connections. In this way you can simplify complex system solutions.

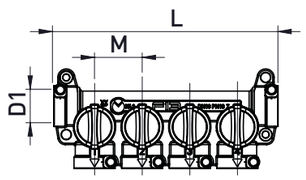


CK.3 MULTIPLE SHUT-OFF MANIFOLD FOR DOMESTIC WATER SYSTEMS

D03 COMPATIBLE FACEPLATE

- PN10 (10 bar)
- 0 °C + 95 °C

Multiple shut-off manifold
for domestic water systems



	Code	DN	Outlets	D1	M	L	Pack
F	CK034F10100	10	4	F13	32	151	5
F	CK035F10100	10	5	F13	32	183	5

FASTEC® STORE

THE CK.3 MANIFOLD USES FASTEC® STORE FITTINGS ONLY

SEE PAGE 32

CK.3 Multiple Shut-off Manifold with 6+5 outlets

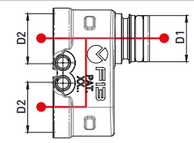
A compact distribution manifold kit with brass body and Top Entry® removable shut-off valves on each outlet in accordance with the **DIN EN 13828** standard, with "soft turn" seals and PPSU full-flow balls. Quick coupling fittings with FASTEC® technology and locking pin. Modular mounting brackets with quick wall fastening.
Temperature: 0°C + 95 °C.
Working pressure: 10 bar.

CK.3 FASTEC® ACCESSORIES

FASTEC

TWIN 1 FITTING

TWIN fitting
Fastec® connection



	Code	D1	D2	Pack
F	KA00F10001	F13M	2xF13F	10

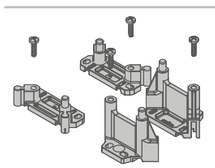
CONNECTION FITTINGS

Fitting for connecting
CK.3 manifolds

	Code	D1	Pack
F	KA00K00008	F13M	10

CK.3 ACCESSORIES

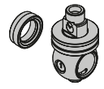
FIXING BRACKET KIT



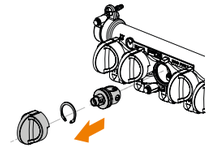
Code	DN	Pack
KA00K40006	250x160x20 mm	5

CK.3 SPARE PARTS

DN10.1 KIT TECO CONTROL

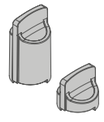


Spare part KIT
TECO-CONTROL



Code	DN	Pack
KR00K00002	10	1

HANDLE KIT



Control handle KIT

Code	Colour	Pack
KA00K40004	BLUE / RED	1

CK.2

FASTEC® SINGLE SHUT-OFF VALVE MANIFOLD

- CK.2 is a **compact** distribution manifold
- **Main shut-off**
- The **FASTEC®** connection is convenient and safe to work with
- TOP-ENTRY® removable shut-off valves with "Soft Turn" full-flow anti-jamming balls

SPECIFICATIONS		
Material	Body	CW617 Brass
	Balls	Engineered polymer
Fittings		FASTEC®
Working pressure		PN10 (bar)
Temperature		0 °C + 95 °C
Standard and certification		DIN EN 13828 (KTW-W270) DVGW

TECHNOLOGIES

HIGH PERFORMANCE

SOFT TURN

FASTEC®

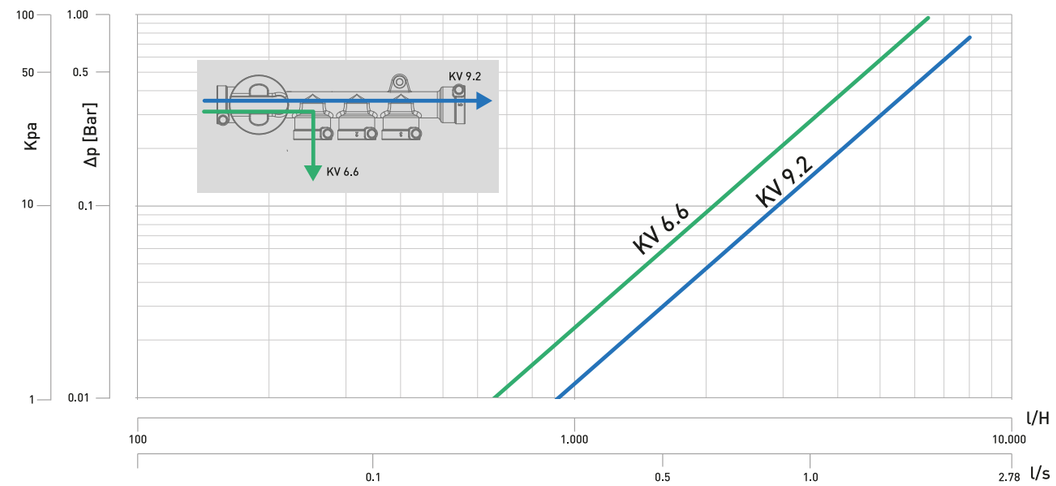
TOP-ENTRY

DESIGN FEATURES

CERTIFIED PRODUCT

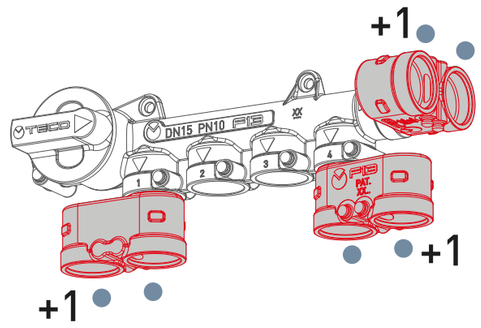
COMPACT

FLOW LOSS DIAGRAM



FASTEC®

TWIN 1 FITTING

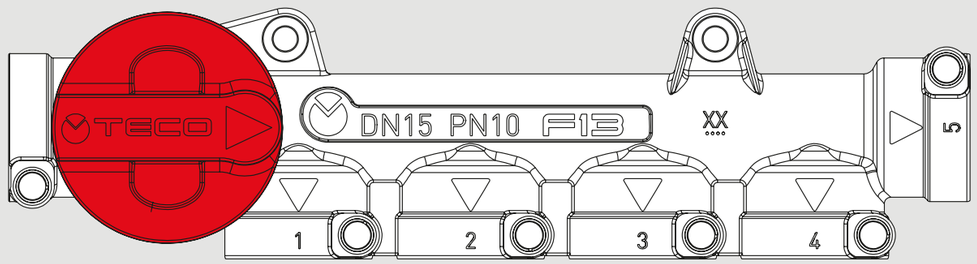


FASTEC® Twin fittings make it possible to increase the number of connections.
In this way you can simplify complex system solutions.

CODE KA00F10001

COMPACT INSTALLATION

The real size of a manifold with 5 outlets.



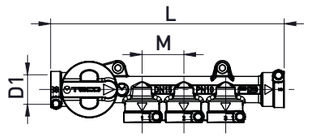
1:1 SCALE

CK.2 SINGLE SHUT-OFF MANIFOLD FOR DOMESTIC WATER SYSTEMS

- PN10 (10 bar)
- 0 °C + 95 °C

Single shut-off manifold for domestic water systems.

4-port hot water
5-port cold water



	Code	DN	Outlets	D1	M	L	Pack
F	CK024F10100	15	4	F13	32	179	5
F	CK025F10100	15	5	F13	32	179	5

FASTEC STORE

THE CK.2 MANIFOLD USES FASTEC® STORE FITTINGS ONLY

SEE PAGE 32

CK.2 Single Shut-Off Manifold

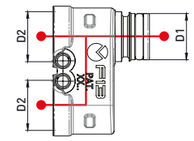
A compact distribution manifold with brass body and Top Entry removable shut-off valves on each outlet in accordance with the **DIN EN 13828** standard, with "soft turn" seals and PPSU full-flow balls. Quick coupling fittings with FASTEC® technology and locking pin.
Opening and closing by turning the handles through 90°.
Temperature: 0°C + 95 °C.
Working pressure: 10 bar.

CK.2 FASTEC® ACCESSORIES

FASTEC

TWIN 1 FITTING

TWIN fitting
Fastec® connection

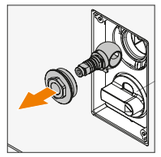


	Code	D1	D2	Pack
F	KA00F10001	F13M	2xF13F	10

CK.2 SPARE PARTS

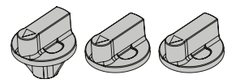
TECO CONTROL KIT

TECO-CONTROL spare parts kit



Code	DN	Pack
KR00K00001	15	1

HANDLE KIT



2 BLUE (TOP + BOTTOM) 1 RED

Code	Colour	Pack
KA00K40001	BLUE / RED	1

K SERIES

FLUSH-MOUNTING DISTRIBUTION AND SHUT-OFF SYSTEM

K SERIES

CONTROL AND SAFETY WHERE YOU WANT

FAST AND SAFE TO INSTALL, PRACTICAL TO USE

SAFETY

EASY TO USE

INNOVATIVE DESIGN

PRACTICAL TO INSTALL

The K series was developed for installers, designers and end users, who want a domestic system that is accessible and convenient to use.

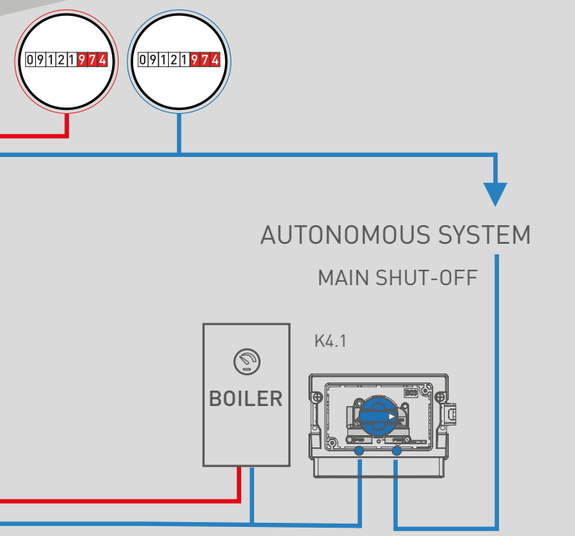
The faceplate for the stopcocks and manifolds is the system control point.

Their small sizes and the range of finishes make the devices more accessible and easy to place in any modern living context, while complying with the installation standards.

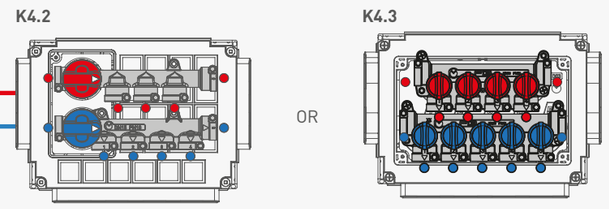
The system is now as easy to manage as an electric switch. The user can perceive the value of the selected materials and careful design.

SYSTEM DIAGRAM

DOMESTIC WATER SYSTEM

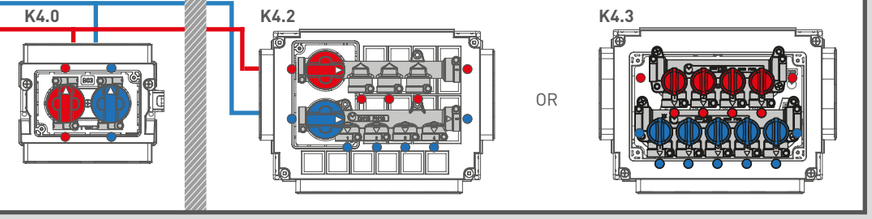


CASE 1 KITCHEN + BATHROOM DISTRIBUTION: SINGLE MANIFOLD



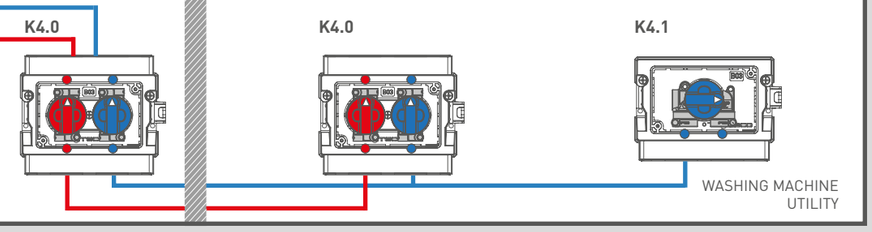
CASE 2 KITCHEN SHUT-OFF + BATHROOM DISTRIBUTION WITH MANIFOLD

KITCHEN DIST. | BATHROOM DIST.



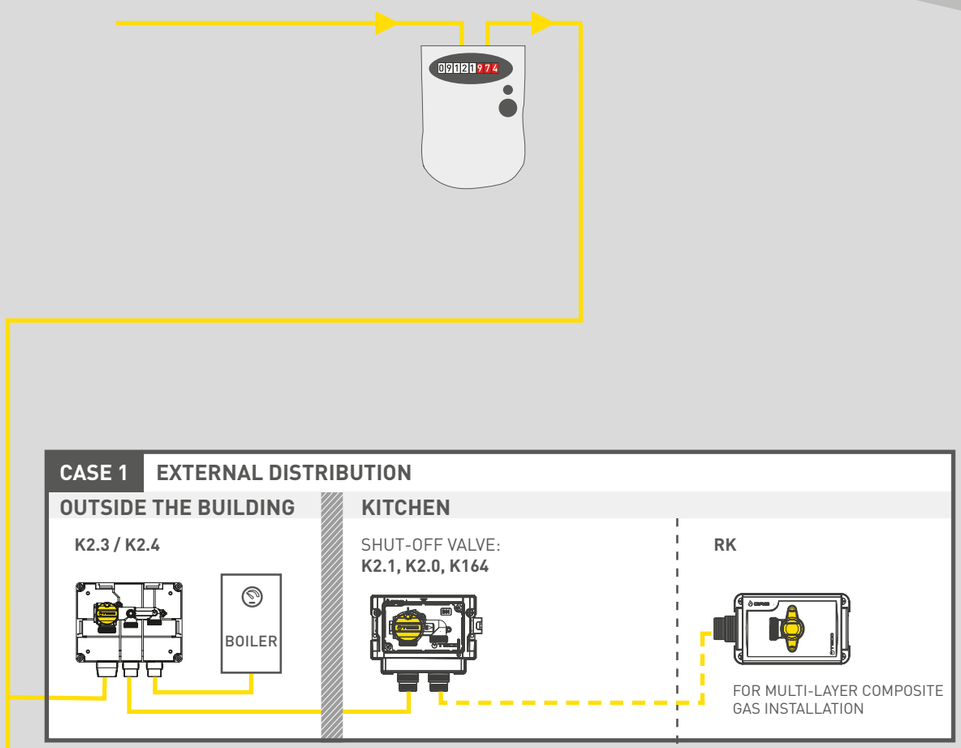
CASE 3 KITCHEN SHUT-OFF + BATHROOM SHUT-OFF

KITCHEN DIST. | BATHROOM DIST.



SYSTEM DIAGRAM

GAS

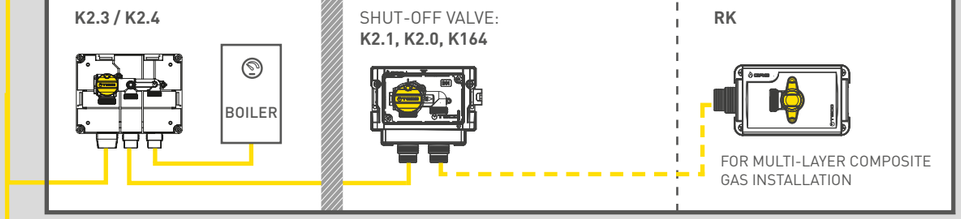


CASE 1 EXTERNAL DISTRIBUTION

OUTSIDE THE BUILDING | KITCHEN

CASE 2 INTERNAL DISTRIBUTION

INSIDE THE HOUSE | KITCHEN



CASE 3 DISTRIBUTION WITHIN A SINGLE ZONE

DISTRIBUTION AND SHUT-OFF SYSTEM FOR DOMESTIC WATER SYSTEMS

K4 is a distribution and shut-off system from domestic water system that makes it possible to install devices in any environment without compromising its look. The distinctive design of the faceplates and their finish creates a pleasant effect when integrated with the environment.

MANY TECHNOLOGIES FOR A SINGLE SOLUTION

FAST AND SAFE TO INSTALL, PRACTICAL TO USE

VIDEO

DESIGN PLUS

Industrial design and innovative product awards at ISH 2015.

ACCESSIBILITY

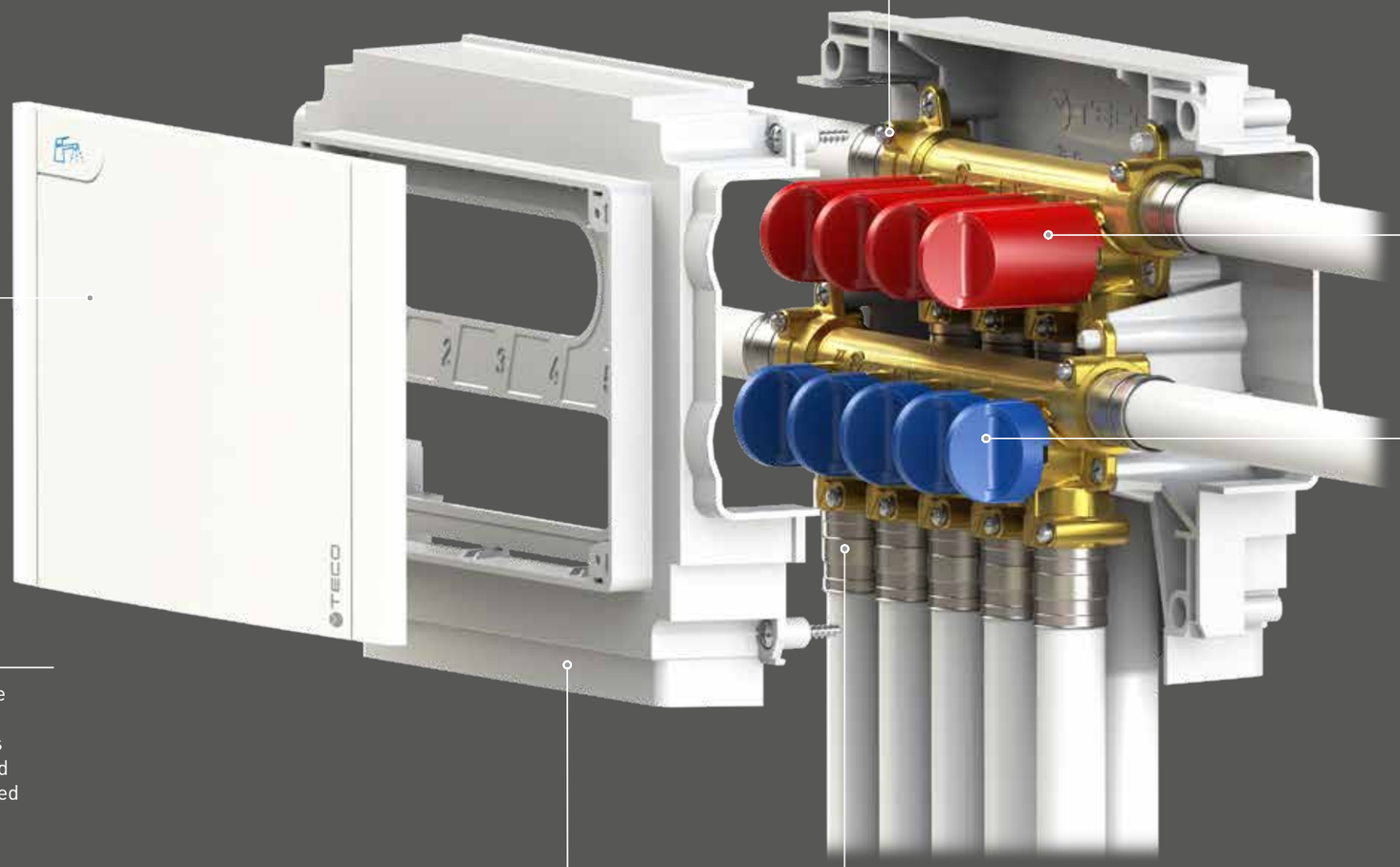
INSIDE-OUTSIDE

Built to be installed inside and outside the building.

CERTIFIED

Installations for drinking water must be made to the highest standards to prevent trapping water, which could promote the development of microbe colonies (e.g. legionella). **K4** valves were developed with build characteristics that prevent water from being trapped (**DVGW W570**).

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference Standard for Metal Materials	DIN EN 13828 DVGW W570-1
Working pressure	PN10 (10 bar)
Temperature	0°C + 95 °C



FASTEC

Connection system. FASTEC®, fast, safe and compact.
The wide range of **FASTEC® STORE** fittings makes installation simple and flexible.
(see page 32)

SOFT TURN

Shut-off valve, 90° closure with anti-jamming engineered polymer ball.
(see page 37)

TOP-ENTRY

With the Top Entry system, the ball is fully removable and spare parts have been available for more than more than 30 years.
(see page 36)

LINK

Possibility of modular box coupling.
(see page 111)

SANDWICH BOX

Improves accessibility during installation.
(see page 112)

HIGH PERFORMANCE

The TECO solution with effective flow and installation in accordance with the **EN 806-2** standard.
(see page 113)

COMPACT INSTALLATION

The smaller sizes are easier to integrate into the environment.

COMPACT INSTALLATION

DESIGN PLUS

THE DESIGN FOR EVERY LOOK

The innovative design of the K series faceplate integrates perfectly with any living environment.

D03 K4.3

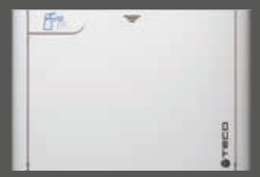
White

KPLD0301600

Polished Chrome

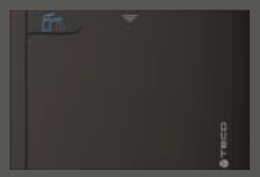
KPLD0301M00

Silver



KPLD0301800

Black Soft Touch



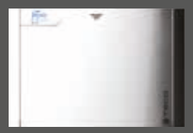
KPLD0301A00

B03 K4.0-K4.1-K4.2

White

KPLB0301600

Polished Chrome



KPLB0301M00

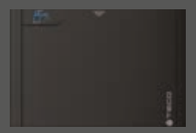
Silver

KPLB0301800

Copper

KPLB0301700

Black Soft Touch



KPLB0301A00

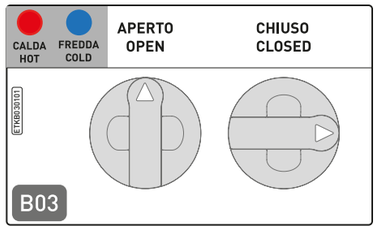
ACCESSIBILITY

MAXIMUM CONTROL

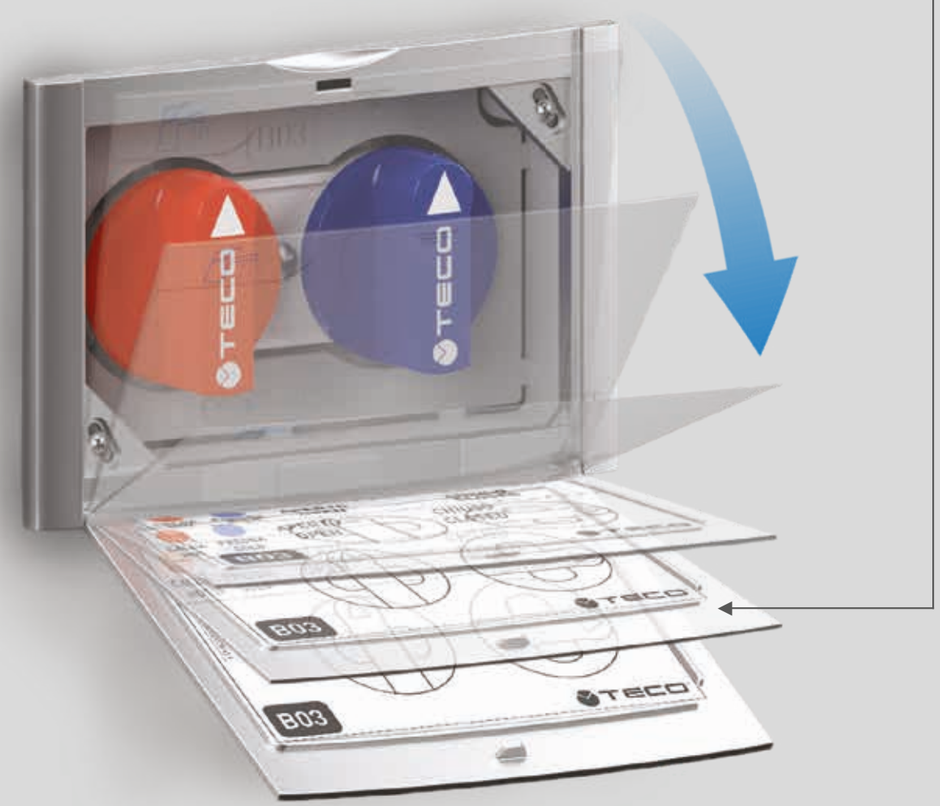
The faceplate is available in various variants and finishes, allows access the operating controls and makes them easy to use.

The explanatory legend has been designed for the end user.

VALVE EXPLANATORY LEGEND



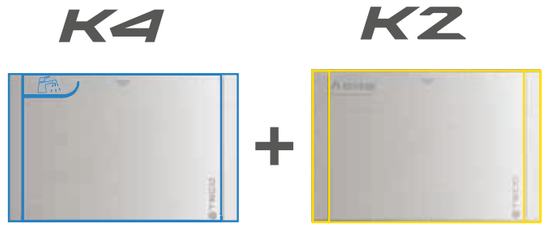
Clear instructions allow the end user to use it safely.

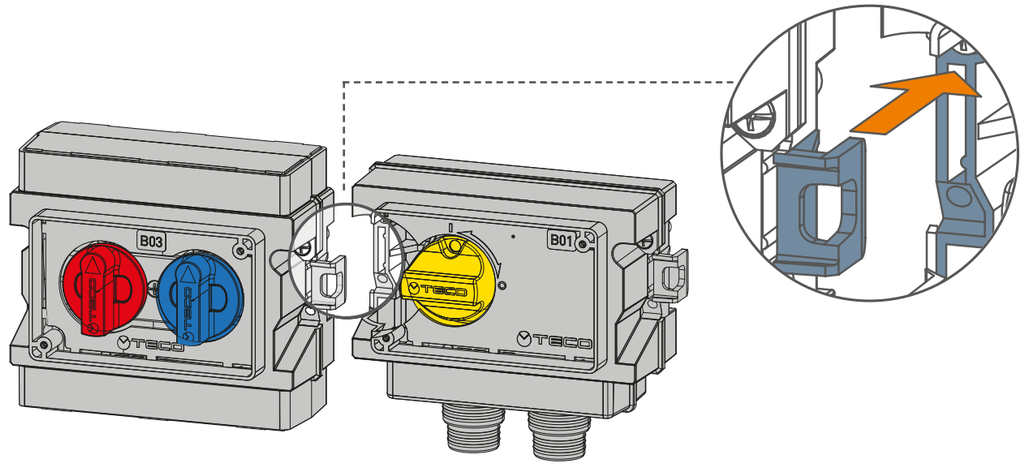


LINK

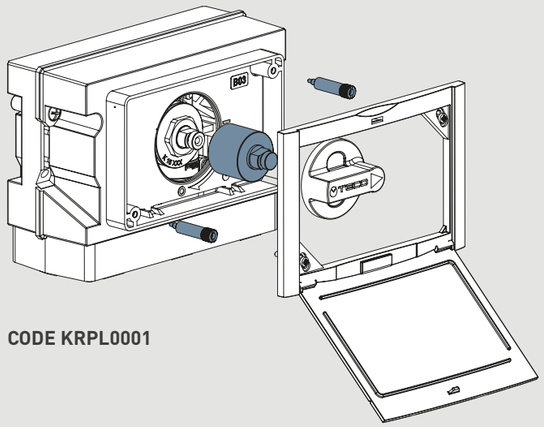
STRENGTH THROUGH UNITY

All valves in the K series for water systems (K4) and gas systems (K2) can be linked for secure and precise alignment.

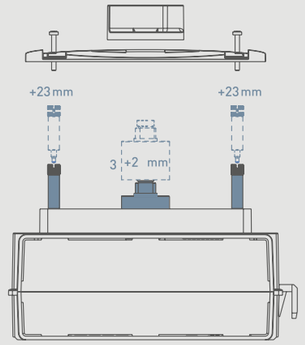




MODULAR EXTENSION KIT



CODE KRPL0001



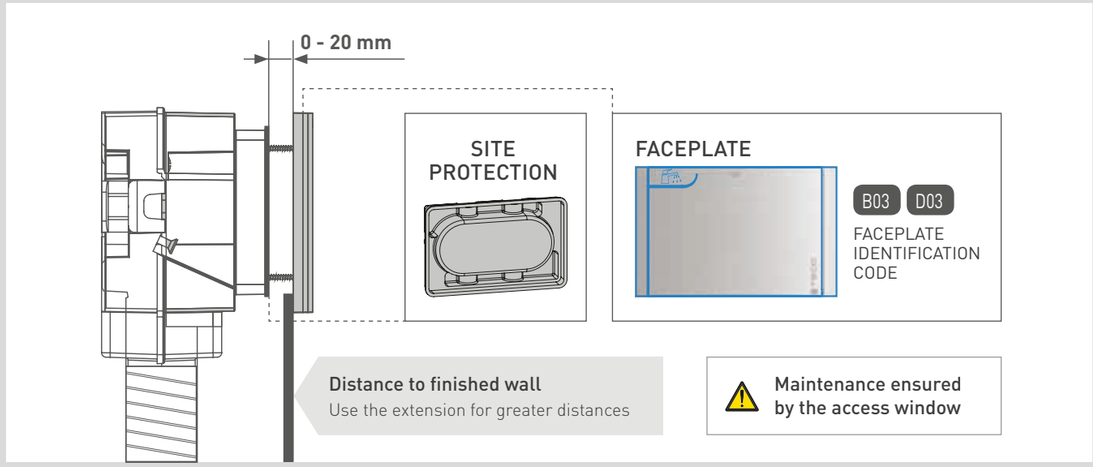
The extension kit is used whenever it is necessary to extend the operating control of the shut-off cock, so that the cock control can be in the optimal position.

SANDWICH BOX

PRACTICAL TO INSTALL

BENEFITS

- Less deep (can be installed in a 10 cm finished wall)
- Strong structure
- Special brackets can adjust the installation depth in the wall
- Easier access during installation



HIGH PERFORMANCE

TECO TOP ENTRY® ball valves have an effective flow that complies with **EN 806-2 standard: Paragraph 6.1.**

STANDARDS

The EN 806-2 standard: Paragraph 6.1:
"Only install cut-off valves that do not excessively obstruct flow in the system (e.g. ball valves, gate valves)."

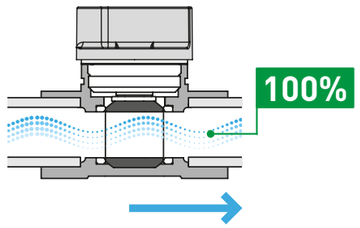
BENEFITS

- They have a low pressure drop
- They can replace screw valves, as recommended by **EN 806-2**

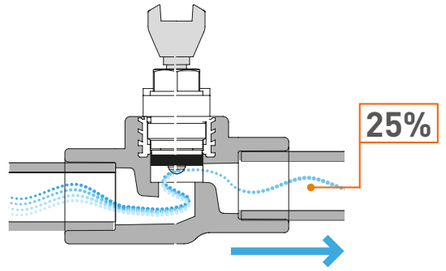
Solution TECO®
Installation to **EN 806-2** standard

Common solution with screw valve

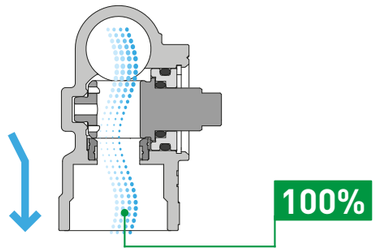
TECO BALL VALVE



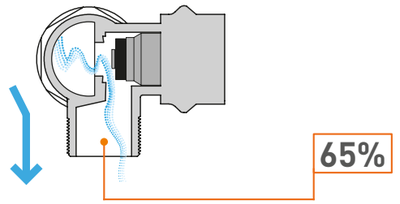
SCREW VALVE



TECO MANIFOLD WITH OUTLET BALL VALVE



MANIFOLD WITH OUTLET SCREW VALVE



APPLICATIONS AND FUNCTIONS

K4.0

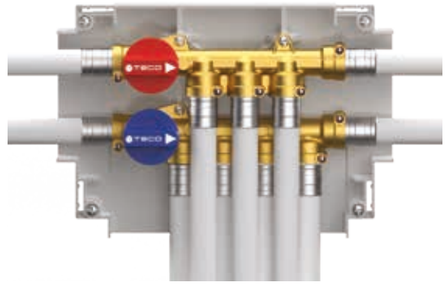
- MAIN SHUT-OFF (CENTRAL SYSTEM)
- BATHROOM SHUT-OFF ("T" SYSTEM)
- SHOWER SHUT-OFF
- KITCHEN SHUT-OFF
- MAIN BOILER SHUT-OFF

K4.1

- MAIN SHUT-OFF (AUTONOMOUS SYSTEM)
- WASHING MACHINE SHUT-OFF
- GARDEN / BALCONY SHUT-OFF

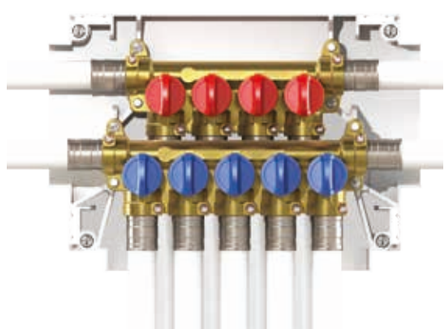
K4.2

- BATHROOM WATER DISTRIBUTION
- BATHROOM + KITCHEN WATER DISTRIBUTION
- SINGLE SHUT-OFF FOR HOT AND COLD WATER



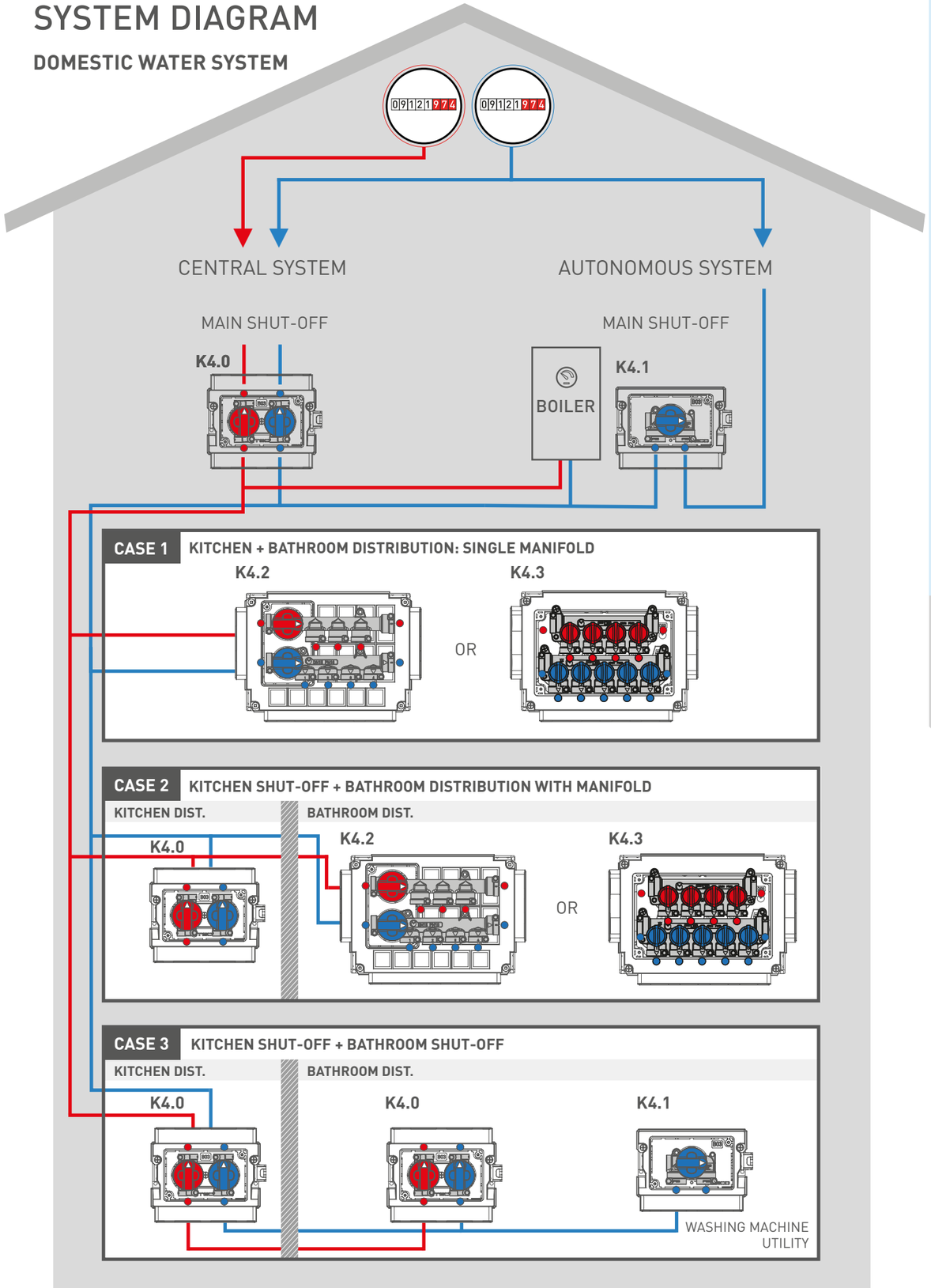
K4.3

- BATHROOM WATER DISTRIBUTION WITH SINGLE SHUT-OFF
- BATHROOM + KITCHEN WATER DISTRIBUTION
- INDIVIDUAL SHUT-OFFS FOR HOT AND COLD WATER

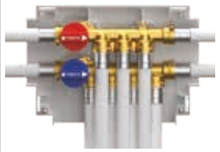
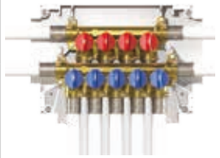


SYSTEM DIAGRAM

DOMESTIC WATER SYSTEM



K4 DEVICE AND FACEPLATE CONFIGURATOR

DEVICES								FACEPLATES
	DN	CODE	CONNECTIONS			FASTEC		
			EK3/4" ISO 228-1	Rp1/2" EN 10226	Rp3/4" EN 10226	F13	F14	
K4.0 	15	K400BE10100	•					
	15	K400B110100		•				B03 
	20	K400B110200			•			
	15	F K400BF10100				•		
	20	F K400BF30100					•	
	15/20	F K400BF50100				•	•	
K4.1 	15	K401BE10100	•					WHITE KPLB0301600
	15	F K401BF10100				•		POLISHED CHROME KPLB0301M00
	20	F K401BF30100					•	SILVER KPLB0301800
K4.2 	15	F K402BF10100 Outlets 5 + 4				•		COPPER KPLB0301700
K4.3 	15	F K403DF10100 Outlets 5 + 4				•		BLACK SOFT TOUCH KPLB0301A00
	15	F K403DF10200 Outlets 4 + 3				•		D03  WHITE KPLD0301600 POLISHED CHROME KPLD0301M00 SILVER KPLD0301800 BLACK SOFT TOUCH KPLD0301A00

FASTEC STORE **THE SHUT-OFF DEVICES USE FASTEC® STORE FITTINGS** SEE PAGE 32

K4.3

MULTIPLE SHUT-OFF MANIFOLD

WINNER 2015
DESIGN PLUS
powered by: ISH

- K4.3 **compact** distribution manifold
- **Shut-off valves on the individual outlets** so there is no need for valves under the basin
- With **flush-mounting, serviceable Sandwich box**
- The **FASTEC®** connection is convenient and safe to work with, and does not require maintenance
- The **faceplates** allow **full** access to the manifold
- The faceplate Design and finishes are suitable for exposed installation
- **TOP-ENTRY® removable shut-off valves**with **Soft Turn® full-flow anti-jamming balls**

SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	PS
	Balls	Engineered polymer
Connections		FASTEC®
Working pressures		PN10 (EN13828)
Temperature		0-95 °C
Standard and certification		DIN EN 13828 (KTW-W270) DVGW

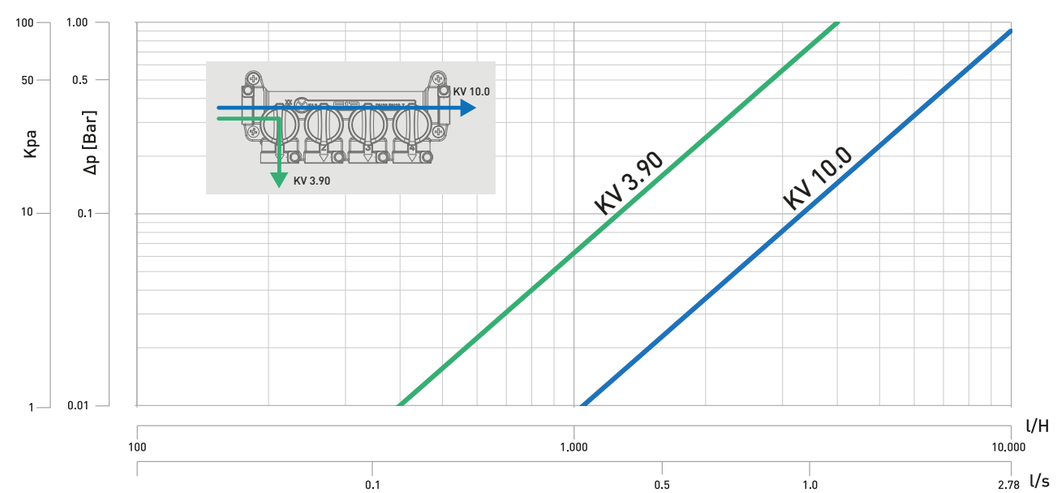
TECHNOLOGIES

- HIGH PERFORMANCE
- SOFT TURN
- FASTEC®
- TOP-ENTRY

DESIGN FEATURES

- CERTIFIED PRODUCT
- SANDWICH BOX
- ACCESSIBILITY
- COMPACT
- DESIGN
- SHUT-OFF BUILT INTO THE MANIFOLD

PRESSURE DROP DIAGRAM

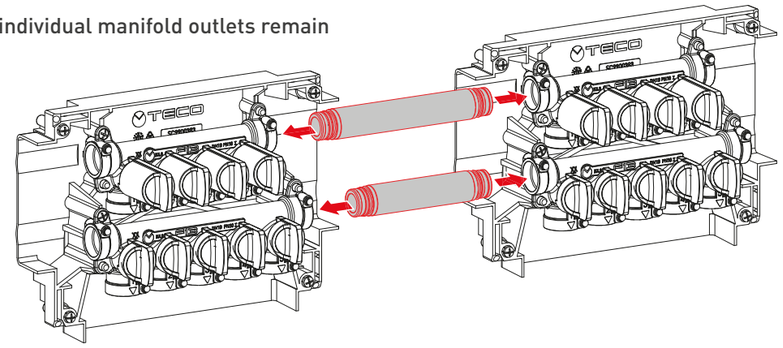


FASTEC®

CONNECTION KIT

The FASTEC® kit provides the plumbing connections for 2 manifolds, giving up to 10+8 outlets with individual shut-off valves.
The performance of the individual manifold outlets remain almost unaffected.

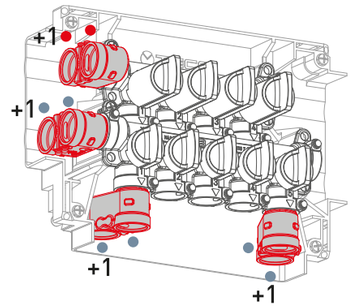
CODE KA00K00007

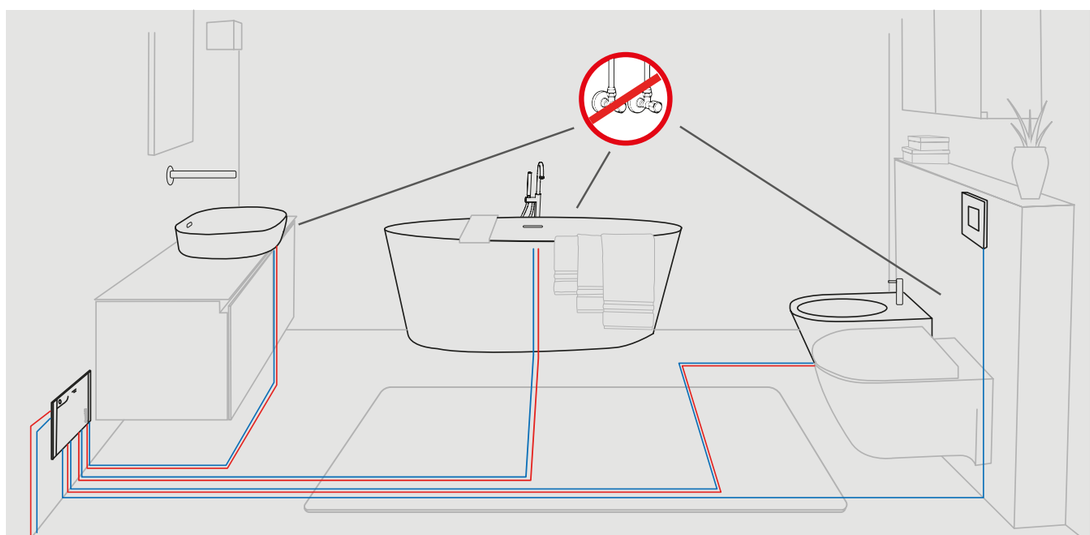


TWIN 1 FITTING

Fastec® Twin fittings make it possible to increase the number of connections. In this way you can simplify complex system solutions.

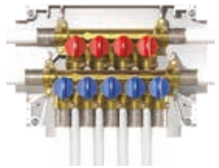
CODE KA00F10001





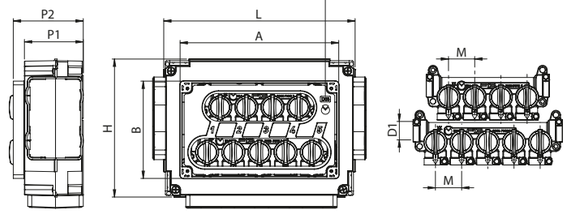
K4.3 MULTIPLE SHUT-OFF MANIFOLD FOR DOMESTIC WATER SYSTEMS

D03 COMPATIBLE FACEPLATE



- PN10 (10 bar)
- 0 °C + 95 °C

INCLUDES: fixing bracket, site protection cover
DOES NOT INCLUDE: faceplate and fittings



	Code	DN	Outlets	D1	M	L	H	P1	P2	A	B	Pack
F	K403DF10100	10	5 + 4	F13	32	234	170	72	85	194	119	5
F	K403DF10200	10	4 + 3	F13	32	234	170	72	85	194	119	5

FASTEC STORE

THE K4.3 MANIFOLD USES FASTEC® STORE FITTINGS ONLY

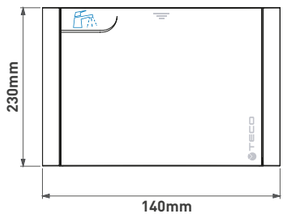
SEE PAGE 32

K4.3 Multiple shut-off manifold

A compact pre-assembled distribution manifold kit with 5+4 outlets, brass body with Top Entry® removable shut-off valves (5 or 4 cold + 4 or 3 hot) on each outlet in accordance with the **DIN EN 13828** standard, with "soft turn" seals and PPSU full-flow balls. Quick coupling fittings with FASTEC® technology and locking pin. Sandwich box housing made of impact-resistant PS, with plaster protection cover. Manually openable faceplate, available in four finishes.
Temperature: 0 °C + 95 °C.
Working pressure: 10 bar.

D03 FACEPLATES

Faceplate **230x140mm.**



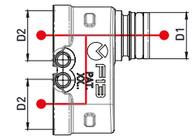
Code		Finish	Pack
KPLD0301600		White	5
KPLD0301M00		Polished chrome	1
KPLD0301800		Silver	1
KPLD0301A00		Black	1

K4.3 FASTEC® ACCESSORIES

FASTEC

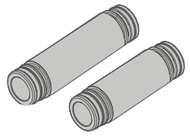
TWIN 1 FITTING

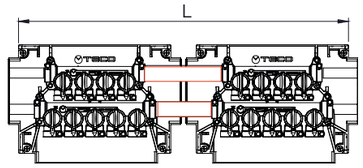
Fastec TWIN
Fastec® connection

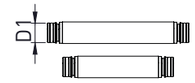


	Code	D1	D2	Pack
F	KA00F10001	F13M	2xF13F	10

CONNECTION KIT



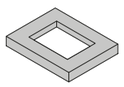




	Code	D1	Pack
F	KA00K00007	F13M	5

K4.3 ACCESSORIES

MAINTENANCE FRAME



THE MAINTENANCE FRAME IS USED WHEN THE BOX IS INSTALLED INCORRECTLY AND PROTRUDES FROM THE WALL

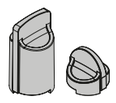
Code	DN	Pack
KRPL0005	250x160x20 mm	1

K4.3 SPARE PARTS

TECO CONTROL KIT

Code	DN	Pack
KR00K00002	10	1

HANDLE KIT



Control handle KIT (2)

Code	Colour	Pack
KA00K40004	BLUE / RED	1

K4.2

SINGLE SHUT-OFF MANIFOLD

- K4.2 **compact** distribution manifold
- **Main shut-off**
- With **flush-mounting and serviceable Sandwich box**
- The **FASTEC®** connection is convenient and safe to work with, and does not require maintenance
- The **compact faceplates** make it possible to access the shut-off valves
- The faceplate Design and finishes are suitable for exposed installation
- TOP-ENTRY® removable shut-off valves with Soft Turn® full-flow anti-jamming balls

SPECIFICATIONS		
Material	Body	CW617 Brass
	Sandwich Box	PS
	Balls	Engineered polymer
Connections		FASTEC®
Working pressures		PN10
Temperature		0-95 °C
Standard and certification		DIN EN 13828 (KTW-W270) DVGW

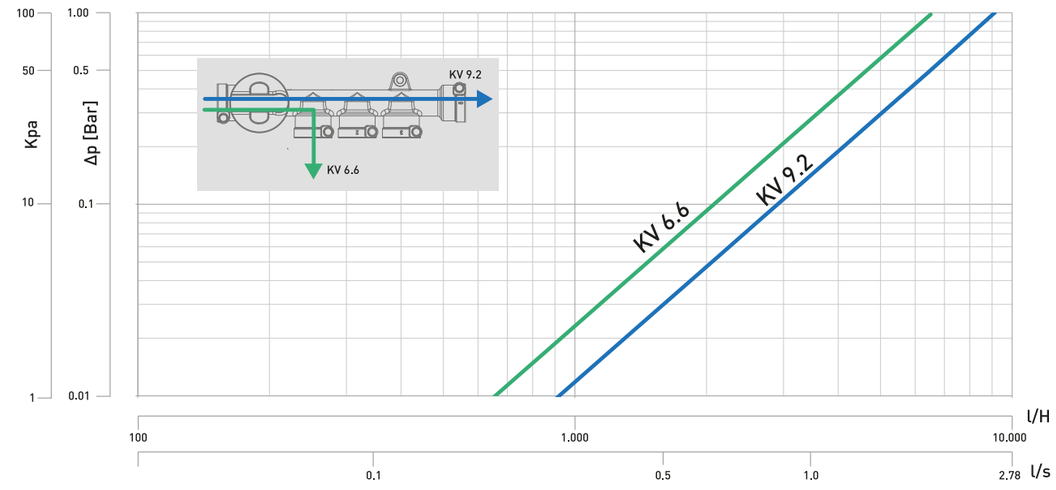
TECHNOLOGIES

- HIGH PERFORMANCE
- SOFT TURN
- FASTEC®
- TOP-ENTRY

DESIGN FEATURES

- CERTIFIED PRODUCT
- SANDWICH BOX
- ACCESSIBILITY
- COMPACT
- DESIGN

FLOW LOSS DIAGRAM

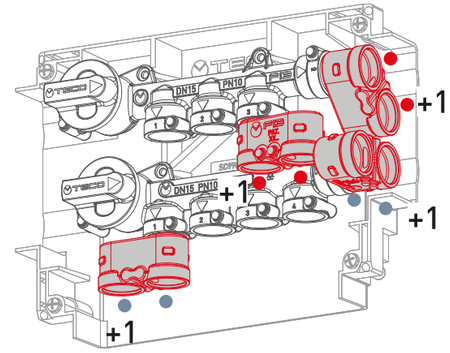


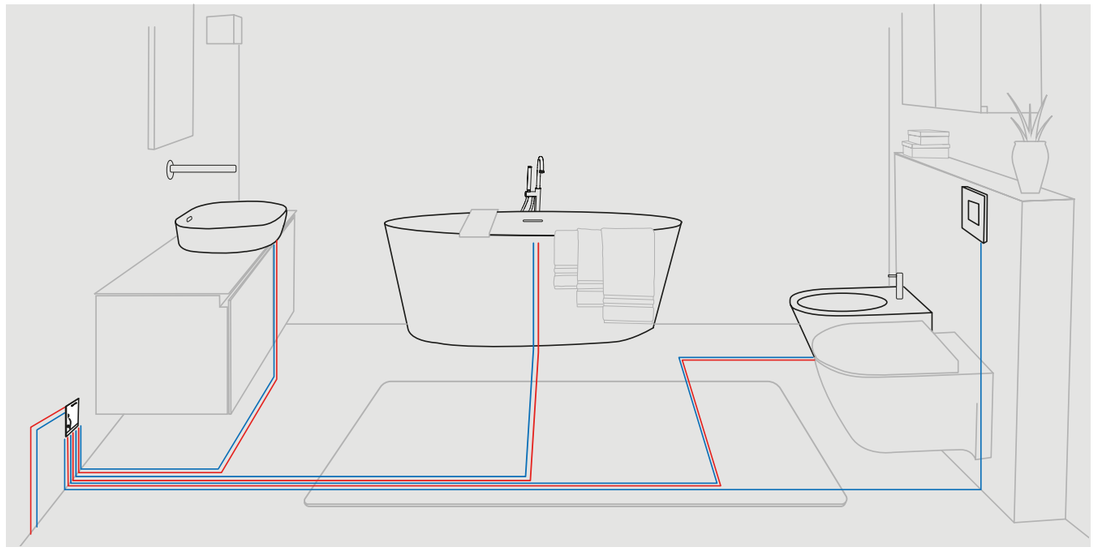
FASTEC®

TWIN 1 FITTING

Fastec® Twin fittings make it possible to increase the number of connections. In this way you can simplify complex system solutions.

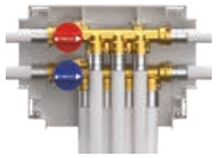
CODE KA00F10001





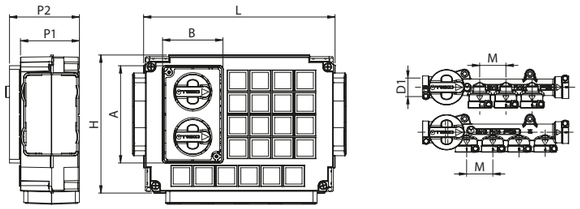
K4.2 SINGLE SHUT-OFF MANIFOLD FOR DOMESTIC WATER SYSTEMS

B03 COMPATIBLE FACEPLATE



- PN10 (10 bar)
- 0 °C + 95 °C

INCLUDES: fixing bracket, site protection cover
DOES NOT INCLUDE: faceplate and fittings



	Code	DN	D1	M	L	H	P1	P2	A	B	Faceplate	Pack
F	K402BF10100	10	F13	32	234	170	72	85	119	74	B03	5

FASTEC STORE

THE K4.2 MANIFOLD USES FASTEC® STORE FITTINGS ONLY

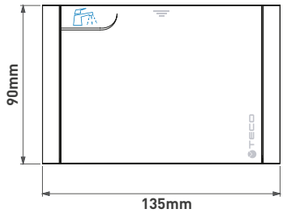
SEE PAGE 32

K4.2 Single Shut-off Manifold with 5+4 outlets

A compact pre-assembled distribution manifold kit with 5+4 outlets, brass body with Top Entry® removable hot/cold shut-off valves in accordance with the **DIN EN 13828** standard, with "soft turn" seals and PPSU full-flow balls. Quick coupling fittings with FASTEC F13 technology and locking pin. Easily serviceable sandwich box made of impact-resistant PS, with depth adjustment brackets and plaster protection cover.
Opens and closes by turning the handles by 90°, manually openable faceplate available in five finishes.
Temperature: 0 °C + 95 °C.
Working pressure: 10 bar.

B03 FACEPLATES

Faceplate **135x90mm.**



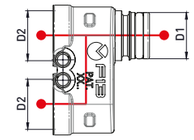
Code		Finish	Pack
KPLB0301600		White	10
KPLB0301M00		Polished chrome	5
KPLB0301800		Silver	5
KPLB0301A00		Black	5
KPLB0301700		Copper	5

K4.2 FASTEC® ACCESSORIES

FASTEC

TWIN 1 FITTING

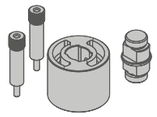
TWIN fitting
Fastec® connection



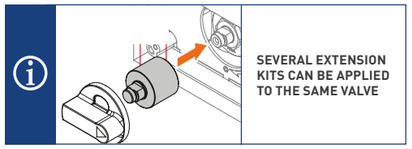
	Code	D1	D2	Pack
F	KA00F10001	F13M	2xF13F	10

K4.2 ACCESSORIES

MODULAR EXTENSION KIT



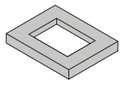
Extension ·23mm· modular + screws + faceplate extensions



SEVERAL EXTENSION KITS CAN BE APPLIED TO THE SAME VALVE

Code	Pack
KRP0001	1

B03 MAINTENANCE FRAME



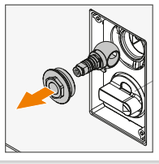
THE MAINTENANCE FRAME IS USED WHEN THE BOX IS INSTALLED INCORRECTLY AND PROTRUDES FROM THE WALL

Code	DN	Pack
KRPL0004	150x100x20 mm	1

K4.2 SPARE PARTS

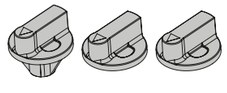
TECO CONTROL KIT

TECO-CONTROL spare parts kit



Code	DN	Pack
KR00K00001	15	1

HANDLE KIT



2 BLUE (TOP + BOTTOM) 1 RED

Code	Colour	Pack
KA00K40001	BLUE / RED	1

K4.1

SINGLE SHUT-OFF

- K4.1 **compact** shut-off cock
- **Main shut-off**
- With **flush-mounting, serviceable Sandwich box**
- The **FASTEC®** connection is convenient and safe to work with
- The **faceplates** make it possible to access the shut-off valves
- The faceplate **Design** and **finishes** are suitable for exposed installation
- TOP-ENTRY® removable shut-off valves with Soft Turn® anti-jamming ball

SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	PS
	Balls	Engineered polymer
Connections		FASTEC® Eurocono (ISO 228-1)
Working pressures		PN10
Temperature		0 °C + 95 °C
Standard and certification		DIN EN 13828 (KTW-W270) DVGW

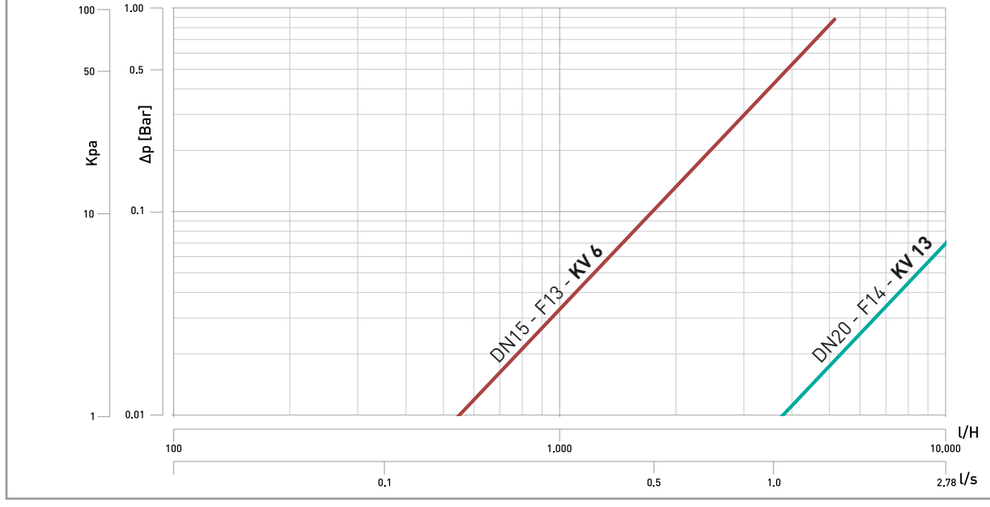
TECHNOLOGIES

HIGH PERFORMANCE · SOFT TURN · FASTEC® · TOP-ENTRY

DESIGN FEATURES

CERTIFIED PRODUCT · SANDWICH BOX · ACCESSIBILITY · COMPACT · DESIGN · LINK

FLOW LOSS DIAGRAM



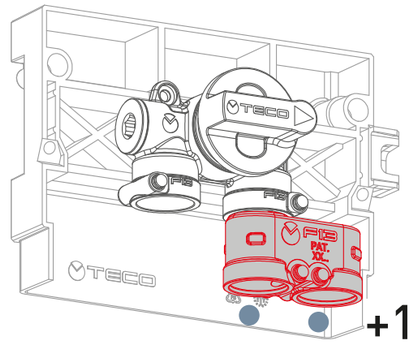
FASTEC®

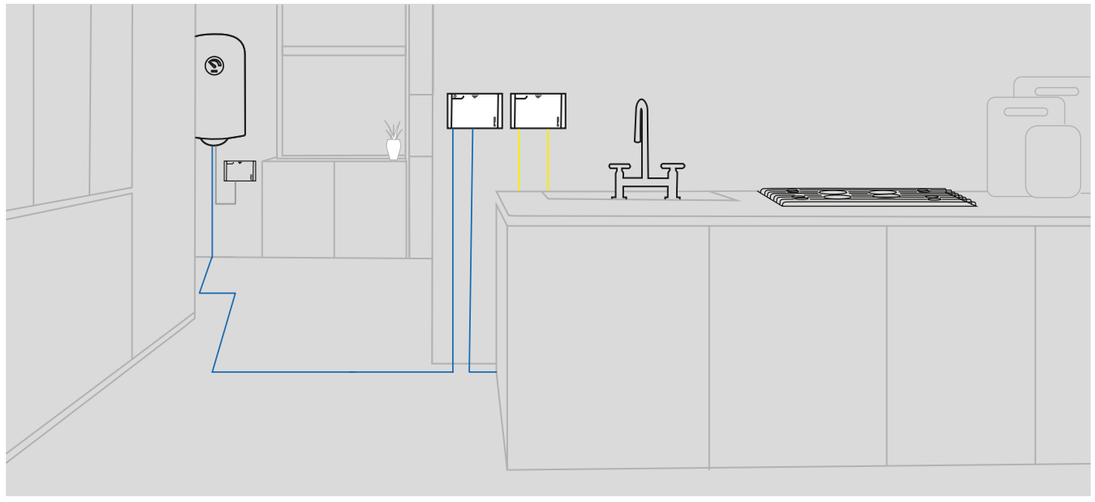
TWIN 1 FITTING

Fastec® Twin fittings make it possible to increase the number of connections. In this way you can simplify complex system solutions.

The **FASTEC® TWIN Fitting** can be used either upstream or downstream from the device.

CODE KA00F10001



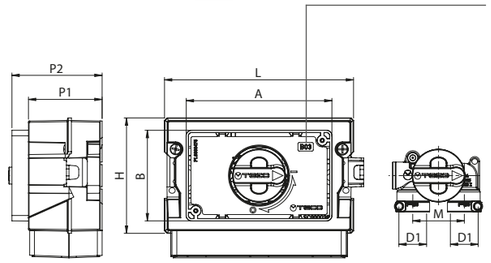


K4.1 SHUT-OFF VALVES FOR DOMESTIC WATER SYSTEMS

B03 COMPATIBLE FACEPLATE

- PN10 (10 bar)
- 0 °C + 95 °C

INCLUDES: fixing bracket, site protection cover
DOES NOT INCLUDE: faceplate and fittings



	Code	DN	D1	M	L	H	P1	P2	A	B	Faceplate	Pack
	K401BE10100	15	EK3/4"	42	154	94	60	73	119	74	B03	10
F	K401BF10100	15	F13	42	154	94	60	73	119	74	B03	10
F	K401BF30100	15	F14	52.5	194	94	60	73	119	74	B03	5

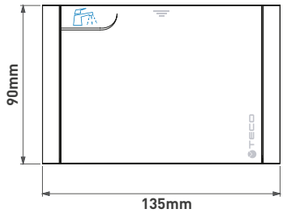
FASTEC STORE **THE WHOLE RANGE OF FASTEC® FITTINGS IS DESCRIBED ON PAGE 32**

K4.1 Single shut-off valve

Removable ball valve with brass body and Top Entry® system, conforms to the **DIN EN 13828** standard, with light "Soft turn®" control, complete with easily serviceable sandwich box. Brackets and protection covers included. Opens and closes by operating the handle, manually openable faceplate available in five finishes.
Temperature: 0 °C + 95 °C.
Working pressure: 10 bar.

B03 FACEPLATES

Faceplate **135x90mm.**

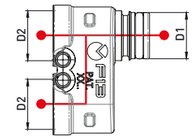


Code		Finish	Pack
KPLB0301600		White	10
KPLB0301M00		Polished chrome	5
KPLB0301800		Silver	5
KPLB0301A00		Black	5
KPLB0301700		Copper	5

K4.1 FASTEC® ACCESSORIES

TWIN 1 FITTING

TWIN fitting
Fastec® connection



	Code	D1	D2	Pack
F	KA00F10001	F13M	2xF13F	10

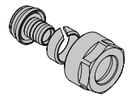
K4.1 ACCESSORIES

ADAPTER TO CONVERT A EUROCONO SEAL TO A FLAT SEAL

Compatible with all fittings
with an ISO228 swivel nut

Code	D1 ISO 228-1	Pack
AP004003	3/4"-EK	10

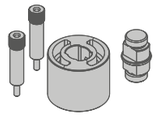
EUROCONO COMPRESSION FITTING FOR MULTI-LAYER COMPOSITE PIPES



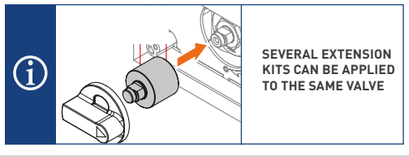
Code	D1 ISO 228-1	D2 PIPE	Pack
KA00K00005	3/4"-EK	16x2	10
KA00K00006	3/4"-EK	20x2	10

K4.1 ACCESSORIES

MODULAR EXTENSION KIT



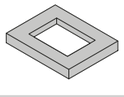
Extension ·23mm· modular +
screws + faceplate extensions



SEVERAL EXTENSION KITS CAN BE APPLIED TO THE SAME VALVE

Code	Pack
KPR0001	1

MAINTENANCE FRAME



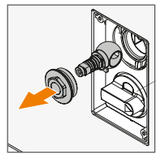
THE MAINTENANCE FRAME IS USED WHEN THE BOX IS INSTALLED INCORRECTLY AND PROTRUDES FROM THE WALL

Code	DN	Pack
KRPL0004	150x100x20 mm	1

K4.1 SPARE PARTS

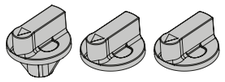
TECO CONTROL KIT

TECO-CONTROL spare parts kit



Code	DN	Pack
KR00K00001	15	1

HANDLE KIT



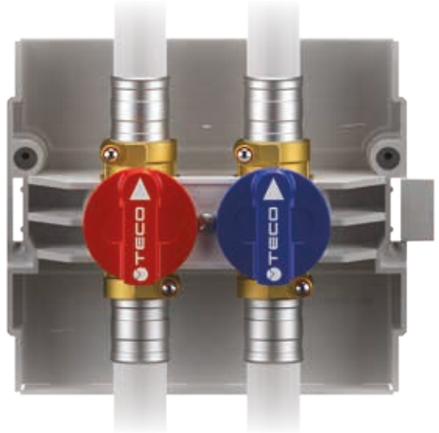
2 BLUE (TOP + BOTTOM) 1 RED

Code	Colour	Pack
KA00K40001	BLUE / RED	1

K4.0

DUAL SHUT-OFF

- K4.0 is a **compact** shut-off kit
- **Main shut-off**
- With **flush-mounting, serviceable Sandwich box**
- The **FASTEC®** connection is convenient and safe to work with
- The **compact faceplates** make it possible to access the shut-off valves
- The faceplate **Design** is suitable for exposed installation
- TOP-ENTRY® removable shut-off valves with Soft Turn® full-flow anti-jamming balls



SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	PS
	Balls	Engineered polymer
Connections		FASTEC® Eurocono (ISO 228-1) F threaded (EN10226)
Working pressures		PN10
Temperature		0 °C + 95 °C
Standard and certification		DIN EN 13828 (KTW-W270) DVGW

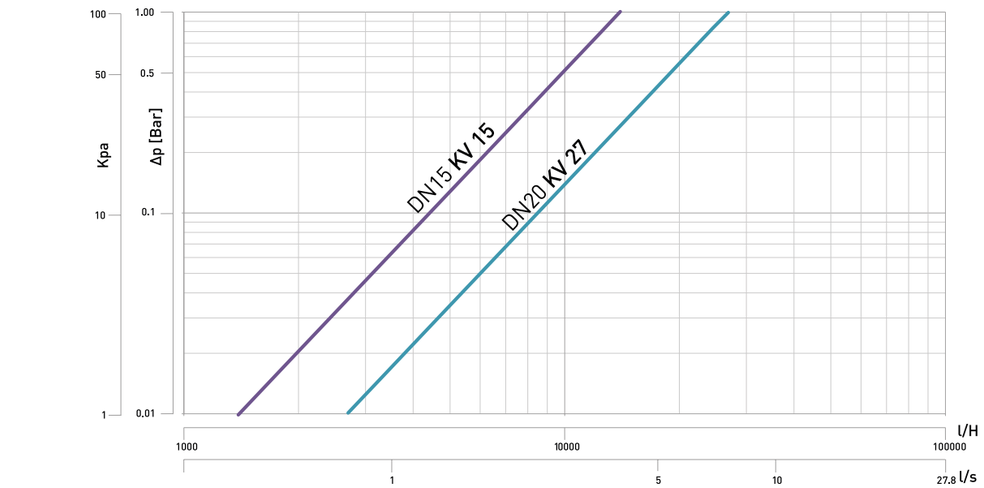
TECHNOLOGIES

- HIGH PERFORMANCE
- SOFT TURN
- FASTEC®
- TOP-ENTRY

DESIGN FEATURES

- CERTIFIED PRODUCT
- SANDWICH BOX
- ACCESSIBILITY
- COMPACT
- DESIGN

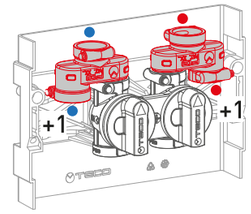
FLOW LOSS DIAGRAM

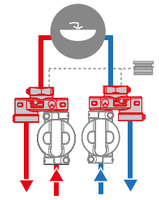


FASTEC®

TWIN 2 FITTING

CODE KA00F10002

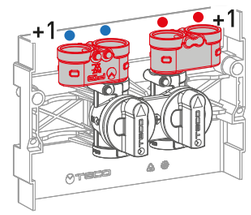


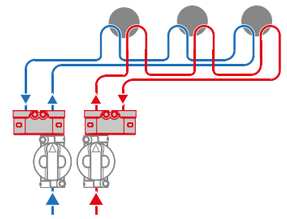


FASTEC® plug
CODE KA00K00002

TWIN 1 FITTING

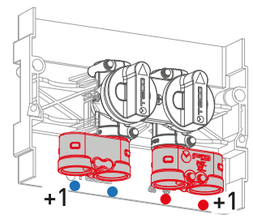
CODE KA00F10001

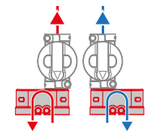




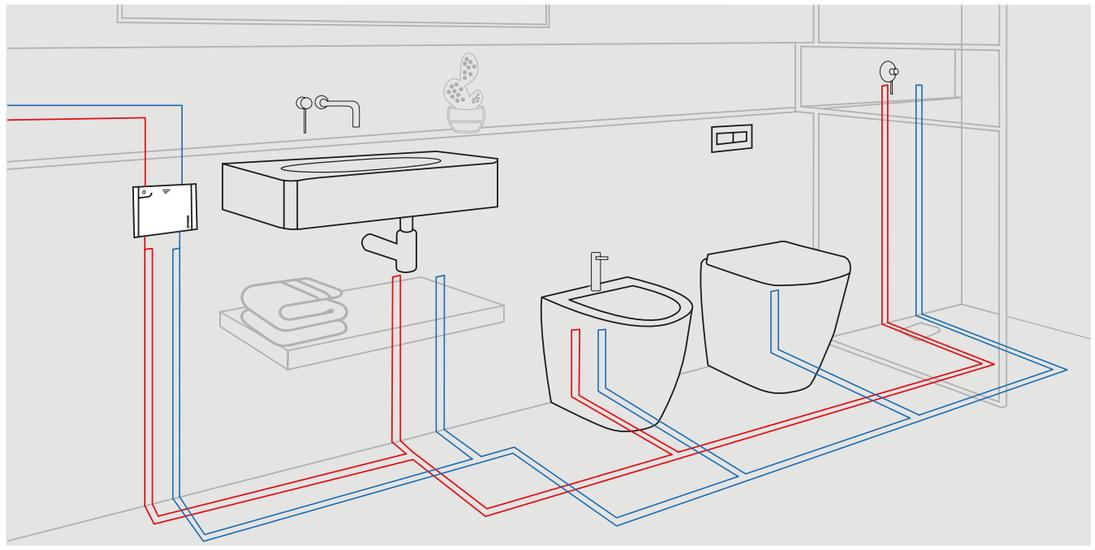
TWIN 1 FITTING

CODE KA00F10001





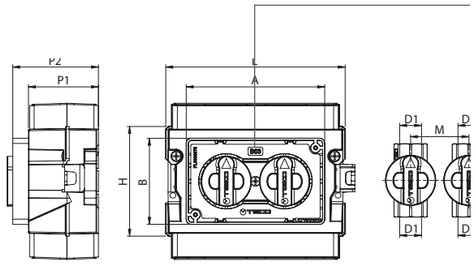
Fastec® Twin fittings make it possible to increase the number of connections. In this way you can simplify complex system solutions.



B03 COMPATIBLE FACEPLATE

- PN10 (10 bar)
- 0 °C + 95 °C

INCLUDES: fixing bracket, site protection cover
DOES NOT INCLUDE: faceplate and fittings



	Code	DN	D1	D2	M	L	H	P1	P2	A	B	Pack
	K400BE10100	15	EK3/4"	EK3/4"	50	154	115	60	73	119	74	10
F	K400BF10100	15	F13	F13	50	194	115	60	73	119	74	10
	K400B110100	15	Rp1/2"	Rp1/2"	50	154	115	60	73	119	74	10
F	K400BF30100	20	F14	F14	50	194	154	60	73	119	74	5
	K400B110200	20	Rp3/4"	Rp3/4"	50	194	154	60	73	119	74	5
F	K400BF50100	15/20	F13	F14	50	194	154	60	73	119	74	5

FASTEC STORE

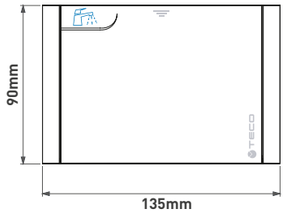
THE WHOLE RANGE OF FASTEC® FITTINGS
IS DESCRIBED ON PAGE 32

K4.0 "DUPLEX" dual shut-off valve

Kit with dual hot and cold valve with removable ball, conforms to the **DIN EN 13828** standard, with light "soft turn" control, complete with easily serviceable sandwich box. Brass body with Top Entry system. Brackets and protection covers included. Opens and closes by operating the handles, manually openable faceplate available in five finishes.
Temperature: 0 °C + 95 °C.
Working pressure: 10 bar.

B03 FACEPLATES

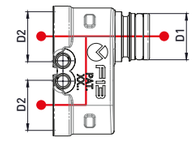
Faceplate **135x90mm.**



Code		Finish	Pack
KPLB0301600		White	10
KPLB0301M00		Polished chrome	5
KPLB0301800		Silver	5
KPLB0301A00		Black	5
KPLB0301700		Copper	5

TWIN 1 FITTING

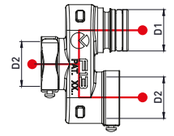
TWIN fitting
Fastec® connection



	Code	D1	D2	Pack
F	KA00F10001	F13M	2xF13F	10

TWIN 2 FITTING

TWIN T fitting
FASTEC® connection



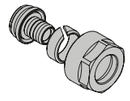
	Code	D1	D2	Pack
F	KA00F10002	F13M	2xF13F	10

EUROCONO ADAPTER - FLAT SEAL

EUROCONO adapter -
Flat Seal

Code	D1 ISO 228-1	Pack
AP004003	3/4"-EK	10

EUROCONO COMPRESSION FITTING FOR MULTI-LAYER COMPOSITE PIPES

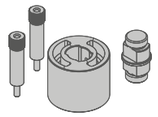


EUROCONO
compression fitting for
connecting multi-layer
composite pipes

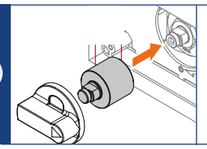
Code	D1 ISO 228-1	D2 PIPE	Pack
KA00K00005	3/4"-EK	16x2	10
KA00K00006	3/4"-EK	20x2	10

K4.0 ACCESSORIES

MODULAR EXTENSION KIT



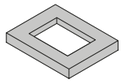
Extension ·23mm· modular +
screws + faceplate extensions



SEVERAL EXTENSION KITS CAN BE APPLIED TO THE SAME VALVE

Code	Pack
KPR0001	1

B03 MAINTENANCE FRAME



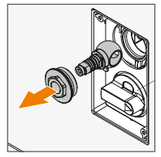
THE MAINTENANCE FRAME IS USED WHEN THE BOX IS INSTALLED INCORRECTLY AND PROTRUDES FROM THE WALL

Code	DN	Pack
KRPL0004	150x100x20 mm	1

K4.0 SPARE PARTS

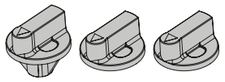
TECO CONTROL KIT

TECO-CONTROL spare parts kit



Code	DN	Pack
KR00K00001	15	1

HANDLE KIT



2 BLUE (TOP + BOTTOM) 1 RED

Code	Colour	Pack
KA00K40001	BLUE / RED	1

DISTRIBUTION AND SHUT-OFF SYSTEM FOR CHASED DOMESTIC GAS LINES

K2 is a distribution and shut-off system for chased gas lines in domestic systems. It makes it possible to comply with the accessibility requirements specified by the standards without compromising the look of the environment. The distinctive design of the faceplates and their finish creates a pleasant effect when integrated with the environment.

THE GAS SYSTEM FOR PROFESSIONALS

EASY TO USE, SAFE AND COMPLIANT

VIDEO

HTB

HTB high-temperature resistant build **EN 1775** (650° / 30 minutes).

SANDWICH BOX

Improves accessibility during installation and is gas-tight in accordance with **UNI 7129-2015**.
(see page 148)

LINK

Possibility of modular box coupling.
(see page 149)

DESIGN PLUS

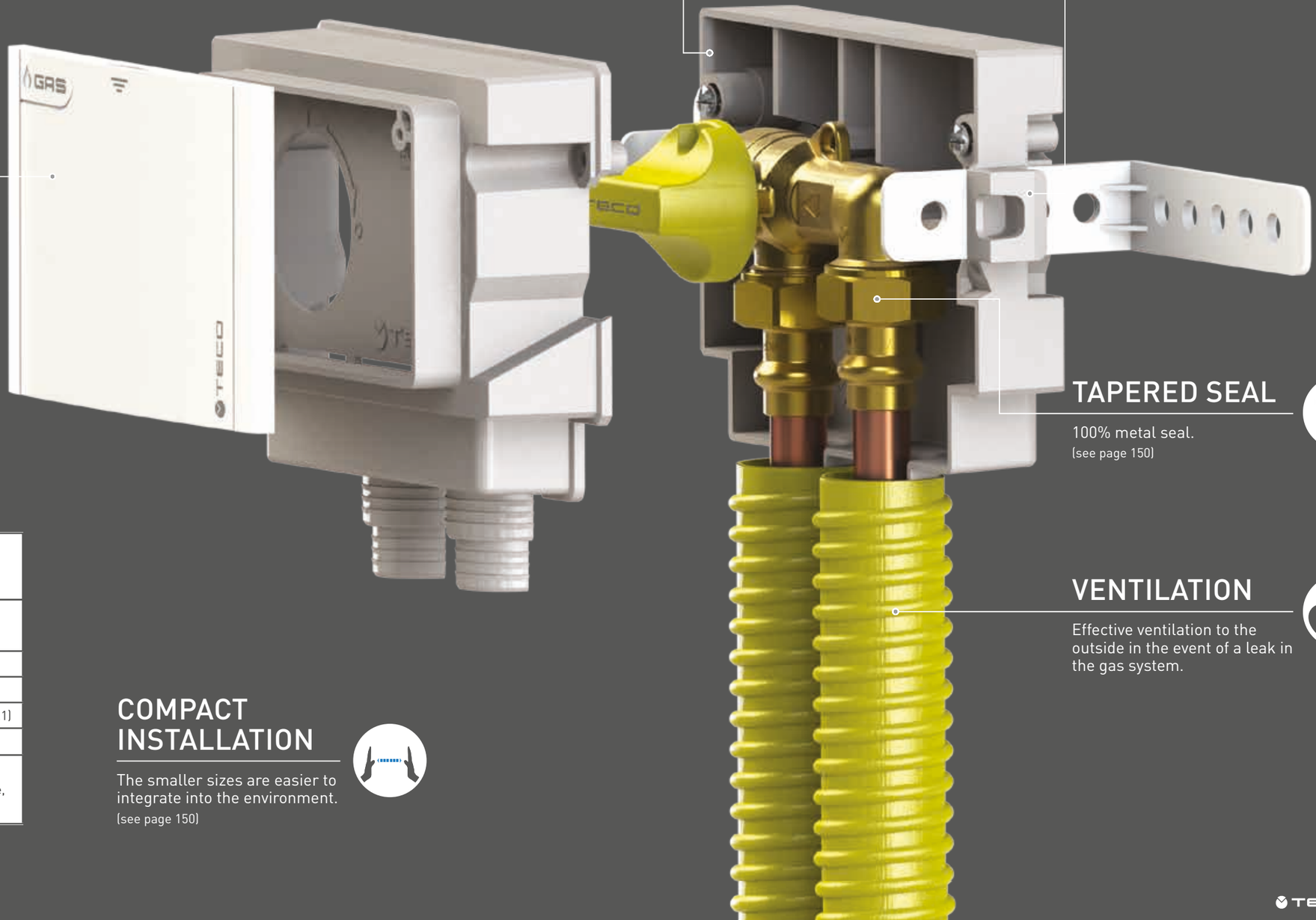
Industrial design and innovative product awards at ISH 2015.

ACCESSIBILITY

The gas control that is always to hand and complies with UNI 7129 - 2015 standard.

INSIDE-OUTSIDE

Built to be installed inside and outside the building.



TAPERED SEAL

100% metal seal.
(see page 150)

VENTILATION

Effective ventilation to the outside in the event of a leak in the gas system.

COMPACT INSTALLATION

The smaller sizes are easier to integrate into the environment.
(see page 150)

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS

Reference standards	DIN-EN 331
Working pressure	MOP5 (5 bar)
Temperature	-20 °C +60 °C
Heat resistance	HTB 650 °C for 30' (DIN EN 331 B0.1)
Connections	"TC" tapered seal
Applications	For all types of gas as specified in EN 437 and DWG G260/1 (Methane, Butane, Propane)

K2 ENSURES COMPLIANCE

FULLY COMPLIANT WITH THE UNI 7129:2015 GAS STANDARD

To summarise the requirements of the UNI 7129 -1/2015 standard, a domestic system must have an entry point (or post-meter valve), a main shut-off valve (if not provided at the entry point) and utility valves. The goal is to equip the system with accessible devices to stop the flow of gas when needed or in the event of an emergency.

1 | A main shut-off valve is required when the entry point is not located within the house or places exclusively related to it (balcony, courtyard, garden, etc.). The main shut-off valve may be installed outside the building (in the aforementioned places) or inside, immediately after it passes through the external perimeter wall. The valve must always be accessible and controllable.

2 | The system must have a utility cock upstream from each hose or pipe connection. It must be in an accessible location (i.e. anyone can reach it at any time).

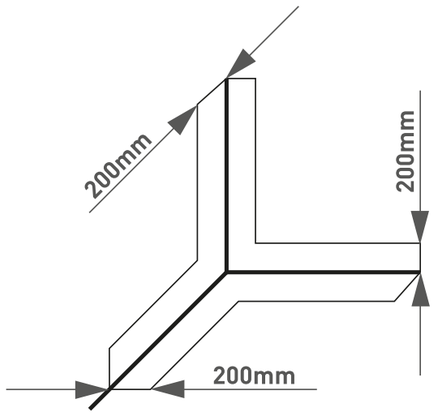
3 | When using metal-plastic fittings and pipes, the installations must use fittings or valves that do not transmit mechanical stresses from other system components.

LAYING IN CHASES, THE SAFE AND PROTECTED SYSTEM

Regardless of the material used in the system, laying in chases remains unchanged by the updated standard.

Pipes must be laid more than 200 mm from corners; if that is not possible, the pipes must be orthogonal to the walls and the chase must be identified in the drawings (photographs are also allowed).

Ref. **UNI 7129 -1/2015** Chap. 4.5.5.4



IT'S EASY TO BE COMPLIANT (7129 - 2015)

All connections must be made in serviceable, ventilated boxes.

VENTILATION

The boxes for K2 series valves and manifolds comply with the **UNI 7129-1/2015** standard as they ensure effective ventilation to the outside in the event of system leaks, without the need to use sealant.

Ref. **UNI 7129 -1/2015** Chap. 4.5.5.9

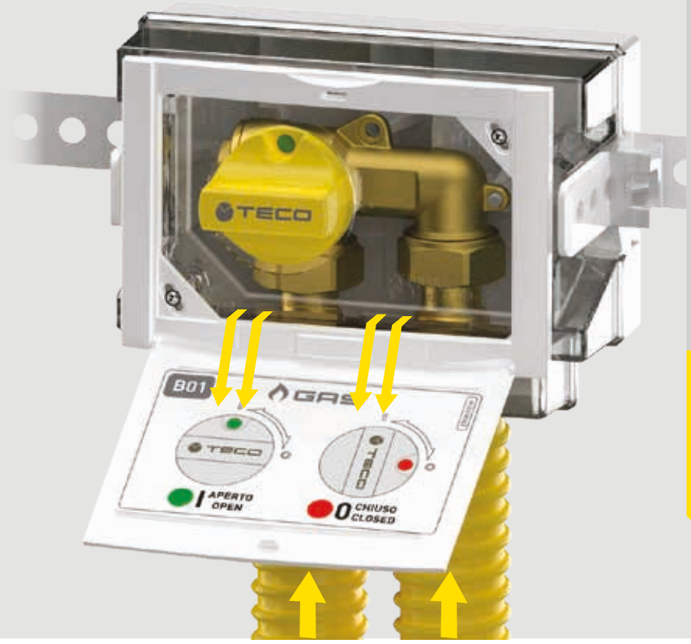
GAS-TIGHT BOX

The sandwich box is gas-tight with respect to the wall, preventing any gas leaks from creating a hazard by penetrating into the wall.

Ref. **UNI 7129 -1/2015** Chap. 4.5.5.9

ALWAYS SERVICEABLE

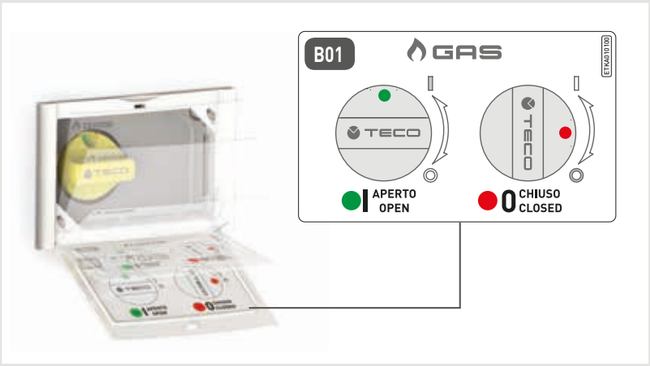
K2 devices can be inspected as well as disassembled and reassembled without any masonry work.



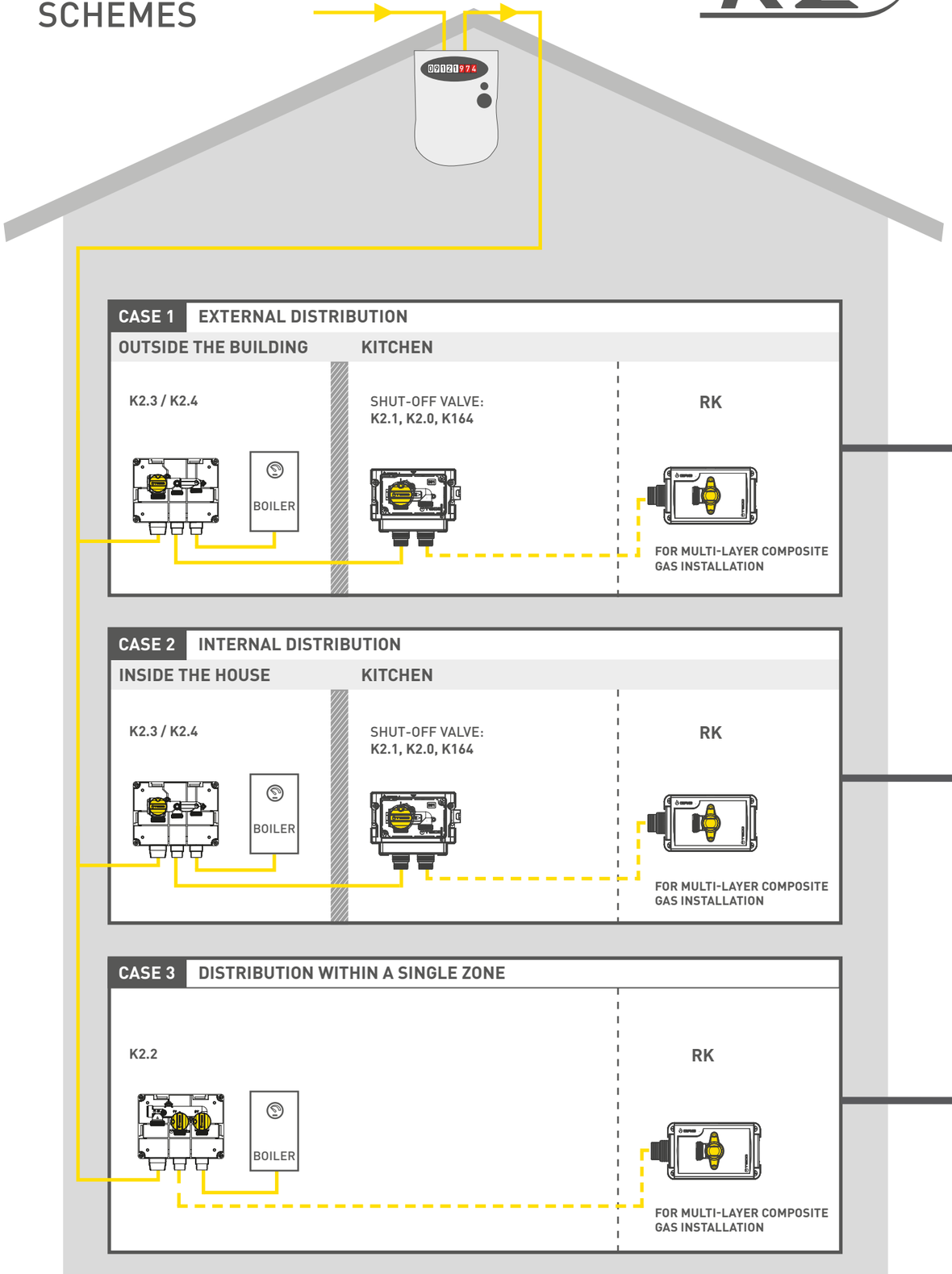
ALWAYS ACCESSIBLE

One of the fundamental safety concepts in a gas system is to ensure that it is always accessible. In this way, the user can use the shut-off valve preventively and not only in the event of an emergency.

Ref. **UNI 7129 -1/2015** Chap. 4.6.3.6.1



GAS SYSTEM SCHEMES



INSTALLATION IN ACCORDANCE WITH THE STANDARDS

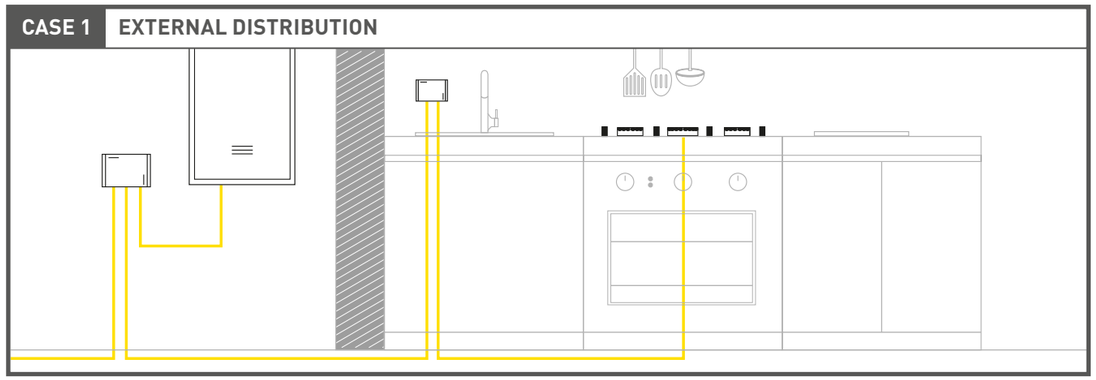
The K2 system guarantees the accessibility required by the **UNI 7129-1** standard without restricting the installation.

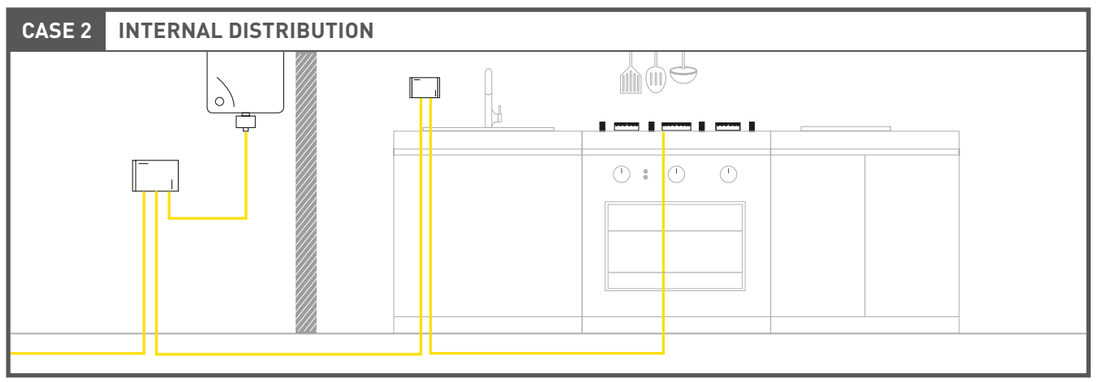
SINGLE AND MULTIPLE MAIN SHUT-OFF VALVES

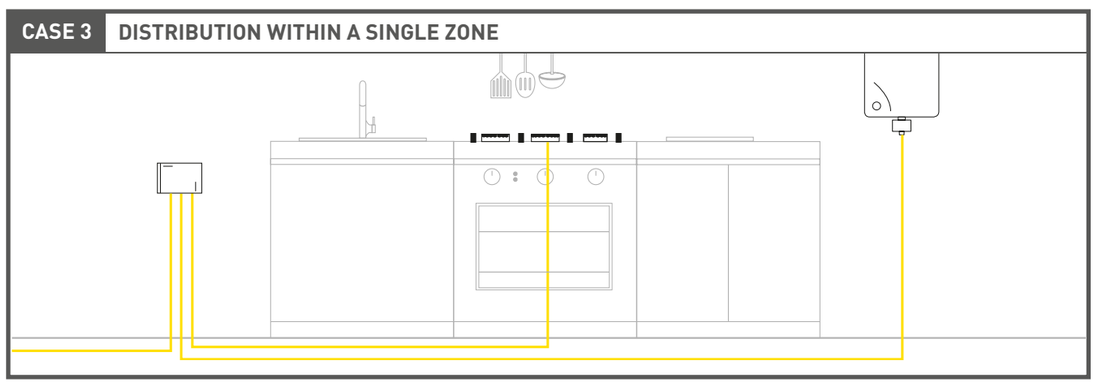
Systems must have a main shut-off device and a device (cock, valve) to "isolate the internal system".
The aforementioned device is usually installed upstream from the first branch/joint in the system. Alternatively, it is possible to isolate the various parts of the system downstream from a branch using several shut-off devices that comply with the **UNI EN 331** standard.

UTILITY SHUT-OFF VALVES

Upstream from each utility appliance, i.e. upstream from each hose or pipe connection, there must always be a utility cock between the appliance and the rest of the system. It must be located in an accessible place.







K2 EXTERNAL INSTALLATION

Product and faceplates of the K2 system can be installed outside as they are made of materials that are resistant to **sunlight** and **weather.**

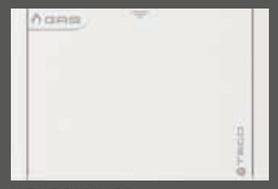
DESIGN PLUS

THE DESIGN FOR EVERY LOOK

The innovative design of the K2 series faceplate integrates perfectly with any living environment.

D01 K2.4

WHITE



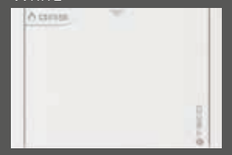
KPLD0101600

SILVER

KPLD0101800

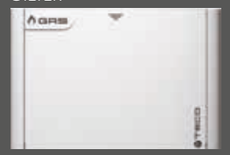
C01 K2.2 - K2.3

WHITE



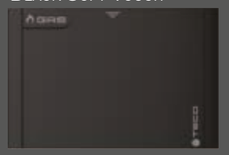
K7PL0001

SILVER



K7PL0002

BLACK SOFT TOUCH



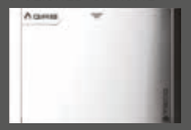
K7PL0003

B01 K2.1 - K2.0

WHITE

KPLB0101600

POLISHED CHROME

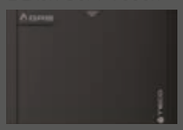


KPLB0101M00

SILVER

KPLB0101800

BLACK SOFT TOUCH



KPLB0101A00

COPPER

KPLB0101700

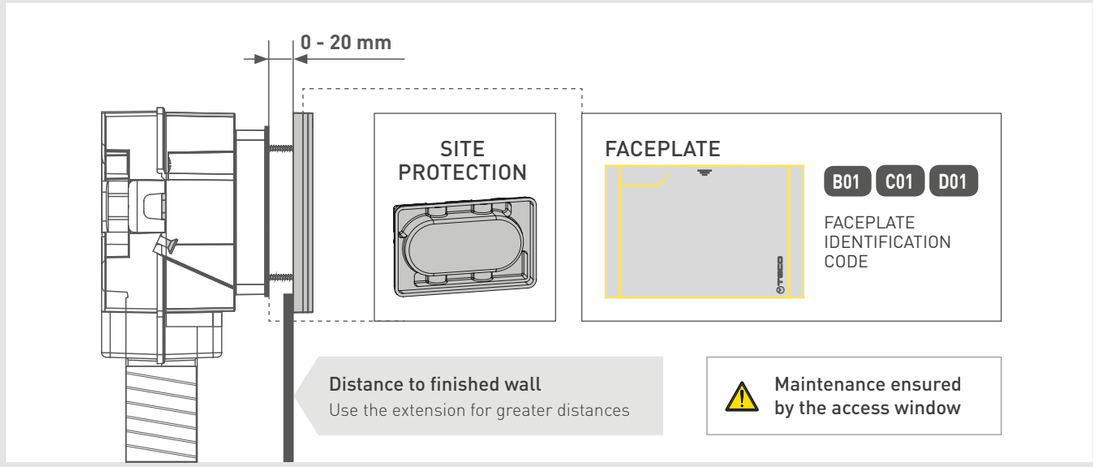
A01 **K2.0 SPARE PARTS** (2009 -2017 PRODUCTION)
See page 174

SANDWICH BOX

PRACTICAL TO INSTALL

BENEFITS

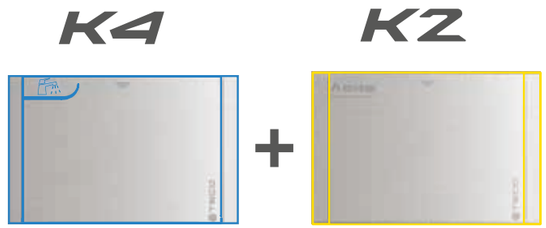
- Less deep (can be installed in a 10 cm finished wall)
- Strong structure
- Special brackets can adjust the installation depth in the wall
- Easier access during installation
- The part in the wall is gas-tight and ventilated to the environment

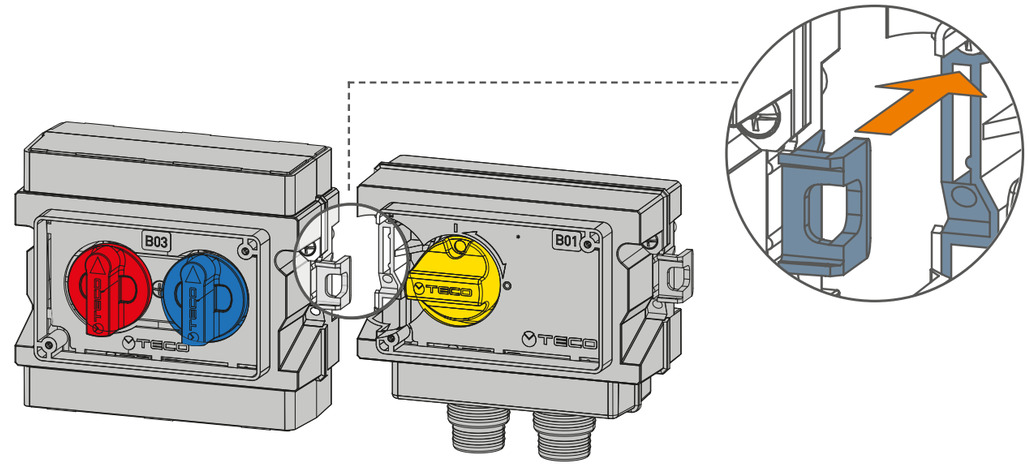


LINK

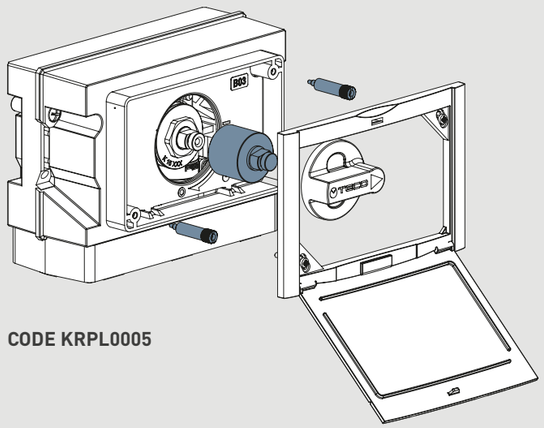
STRENGTH THROUGH UNITY

All valves in the K series for water systems (K4) and gas systems (K2) can be linked for secure and precise alignment.

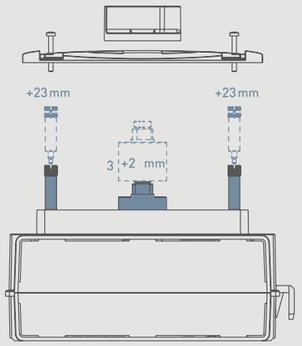




MODULAR EXTENSION KIT



CODE KRPL0005



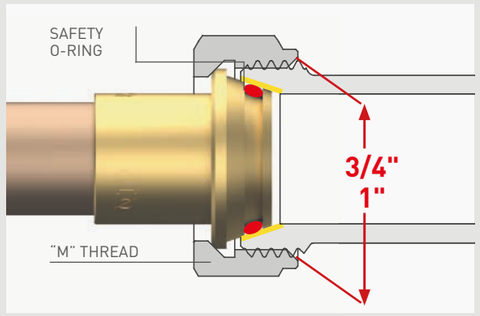
The extension kit is used whenever it is necessary to extend the operating control of the shut-off cock, so that the cock control can be in the optimal position.

COMPACT INSTALLATION

TC TAPERED SEAL

Every device in the K2 range is connected using a "TC" TAPERED SEAL, which was designed to provide a 100% safe connection that can be re-tightened following an intervention.

The tapered seal is not compatible with Eurocono connections.



100% METAL SEAL

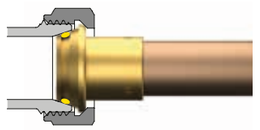
CAN BE RE-TIGHTENED

HTB RESISTANCE 650°C - 30 MINUTES (EN 1775)

TC CONNECTIONS

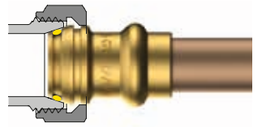
1"

FITTING
S (soldered) D2 EN1254-5



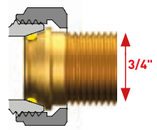
Ø22mm: K0CS2202
Ø28mm: K0CS2802

FITTING
P (press-fit) D2 VP 614



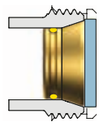
Ø22mm: K0CP2202
Ø28mm: K0CP2802

FITTING
F (threaded) D2 EN10226-1



1": K0CF3401

ADAPTER
TP (flat seal) D2



1": AP005001

K2.2 — 1 — 2

K2.3 — 1 — 2

K2.4 — 1 — 3

K2.1 — 2

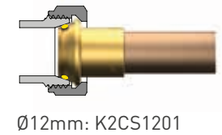
K2.0 — 2

K164 — 2

RK — 1

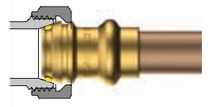
3/4"

FITTING
S (soldered) D2 EN 1254-5



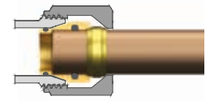
Ø12mm: K2CS1201
Ø14mm: K2CS1401
Ø15mm: K2CS1501
Ø16mm: K2CS1601
Ø18mm: K2CS1801
Ø22mm: K2CS2201

FITTING
P (press-fit) D2 VP 614



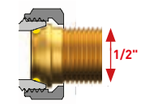
Ø15mm: K2CP1501
Ø18mm: K2CP1801
Ø22mm: K2CP2201

FITTING
R (compression) D2 EN 1254-2



Ø14mm: K0CR1401
Ø16mm: K0CR1601
Ø18mm: K0CR1801

FITTING
F (threaded) D2 EN10226-1



3/4": K0CF1201

ADAPTER
TP (flat seal) D2

3/4": AP004001

CHOICE OF DEVICES AND FACEPLATES

K2 FACEPLATES

D01

WHITE KPLD0101600 · SILVER KPLD0101800

C01

WHITE K7PL0001 · SILVER K7PL0002 · BLACK SOFT TOUCH K7PL0003

B01

WHITE KPLB0101600 · POLISHED CHROME KPLB0101M00 · SILVER KPLB0101800 · BLACK SOFT TOUCH KPLB0101A00 · COPPER KPLB0101700

POLISHED CHROME

FACEPLATE INCLUDED IN THE PRODUCT

WHITE

FACEPLATE INCLUDED IN THE PRODUCT

PRODUCT CHOICE GUIDE

K2.4 K204DC10100

K2.3 K203CC10100

K2.2 K202CC10100

K2.1 K201BC10100

K2.0 TC: K200BC10100 F1/2: K200B110100

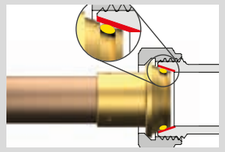
K164 TC: K113KC0100 F1/2: K113KF0100

RK RK13KC0100

CONNECTION CHOICES

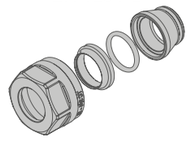
■ 1”	■ x1	■ x1	■ x1				
● 3/4”	● x3	● x2	● x2	● x2	● x2	● x2	● x1

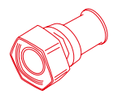
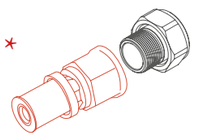
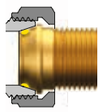
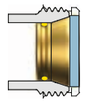
TC



TAPERED SEAL:
- **100% SAFE**
- **CAN BE RE-TIGHTENED**
- **NOT EUROCONO COMPATIBLE**

Every device in the K2 range is connected using a “TC” TAPERED SEAL, which was designed in accordance with the **ISO228-1** standard in order to provide a 100% safe connection that can be re-tightened following an intervention. The tapered seal is not compatible with Eurocono connections.

CONNECTIONS	DIAMETERS	COPPER PIPES – SOLDERED EN 1254-5	COPPER PIPES – CRIMPED DVGW G5614	COPPER PIPES – COMPRESSION EN 1254-2
				
■ TC-1”	Ø22	K0CS2202	K0CP2202	
	Ø28	K0CS2802	K0CP2802	
● TC-3/4”	Ø12	K2CS1201		
	Ø14	K2CS1401		K0CR1401
	Ø15	K2CS1501	K2CP1501	
	Ø16	K2CS1601		K0CR1601
	Ø18	K2CS1801	K2CP1801	K0CR1801
	Ø22	K2CS2201	K2CP2201	

MULTI-LAYER COMPOSITE PIPES			MALE THREAD	FLAT SEAL
TECO does not supply fittings for the multi-layer composite system				
*  FITTING WITH TAPERED SEAL SWIVEL NUT	*  FITTING WITH FLAT SEAL SWIVEL NUT	*  FEMALE THREADED FITTING	 Fitting for threaded connection in accordance with EN 10226-1	 Adapter for connecting to all types of fittings with a flat seal and nut
	AP005001	K0CF3401	K0CF3401	AP005001
	AP004001	K0CF1201	K0CF1201	AP004001

* Fitting of the multi-layer composite gas system manufacturer

K2.2

2-PORT MULTIPLE SHUT-OFF GAS MANIFOLD

- K2.2 **compact** distribution manifold
- **Shut-off ball valve for each outlet** with open/closed indication
- With **flush-mounting and readily serviceable Sandwich box**
- Box with connections with sheath that is **gas-tight** with respect to the wall and **ventilation** to the outside
- **TECO Tapered Seal** connection: heat resistant **in the event of fire (HTB)**
- The **faceplates allow full** service access to the manifold
- The faceplate **Design** and **finishes** are suitable for exposed installation
- **Punto Arancio®** pressure fitting

SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	ABS
	Balls	CW617 Brass
Connections		TAPERED SEAL and ISO 228 M thread
Working pressure		MOP 5
Temperature		-20 °C +60 °C
High temperature resistance		(B01) 0.1 bar 650°C for 30min
Standard and certification		DIN EN 331 DVGW

TECHNOLOGIES

HEAT RESISTANCE

TAPERED SEAL

DESIGN FEATURES

CERTIFIED PRODUCT

SANDWICH BOX

ACCESSIBILITY

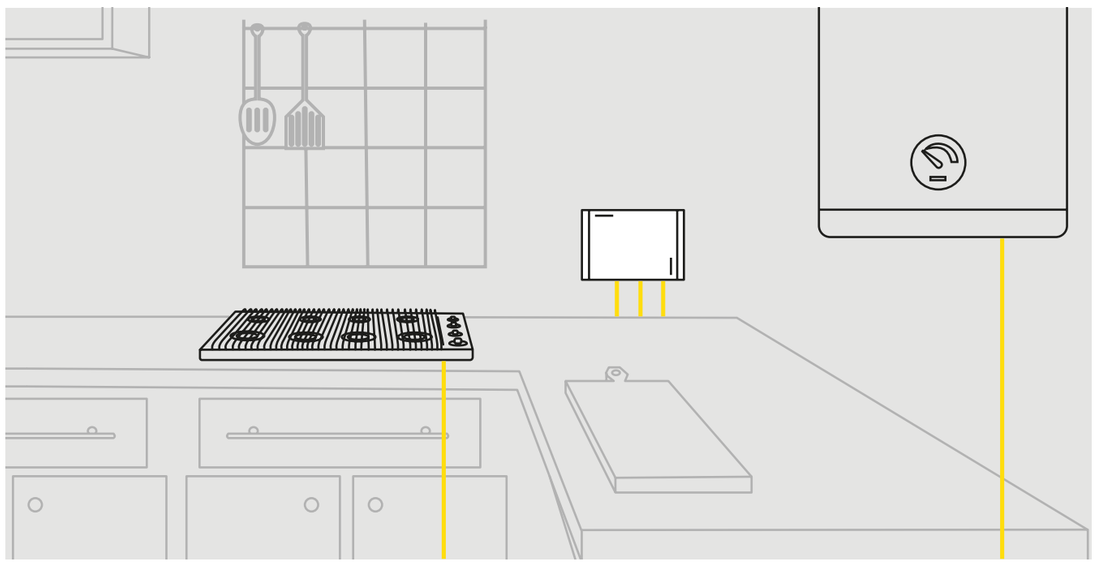
PRESSURE TESTED

COMPACT

DESIGN

VENTILATION

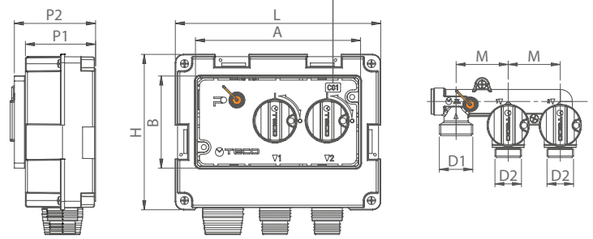
INSIDE-OUTSIDE



C01 COMPATIBLE FACEPLATE

- MOP 5
- -20 °C +60 °C

INCLUDES: fixing bracket, site protection cover.
DOES NOT INCLUDE: faceplate and fittings, Punto Arancio kit.



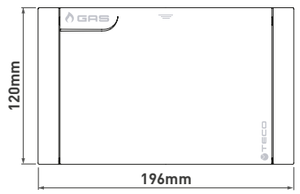
Code	DN	D1	D2	M	L	H	P1	P2	A	B	Faceplate	Pack
K202CC10100	15	TC1"	TC3/4"	52	205	155	70	83	165	92	C01	5

K2.2 Flush-mounting gas manifold

Manifold with two outlet pressure fittings, complete with ball valves that comply with the **DIN EN 331** standard.
Inlet with 1" tapered seal and 3/4" outlets.
The kit includes a readily serviceable sandwich box, which is gas-tight with ventilation to the environment and sealed sheath connections. Brass body. Brackets and protection covers included. Opens and closes by operating the handles, complete with "open/closed" indicator, manually openable faceplate, available in three finishes.
Temperature: –20 °C +60 °C.
Working pressure: MOP 5.
The connections are certified and guaranteed to seal at high temperature HTB 650°C for 30'.

C01 FACEPLATES

Faceplate **196x120mm.**



Code	Finish	Pack
K7PL0001	White	5
K7PL0002	Silver	1
K7PL0003	Black Soft Touch	1

TC FITTINGS FOR TAPERED SEALS SEE PAGE 170

K2 ACCESSORIES (EXTENSIONS, SPANNER ...) SEE PAGE 172

PUNTO ARANCIO ACCESSORIES SEE PAGE 179

K2.3

2-PORT SINGLE SHUT-OFF GAS MANIFOLD

- K2.3 **compact** distribution manifold
- **Main shut-off** ball valve with open/closed indication
- With **flush-mounting and readily serviceable Sandwich box**
- Box with connections with sheath that is **gas-tight** with respect to the wall and **ventilation** to the outside
- **TECO Tapered Seal** connection: heat resistant **in the event of fire (HTB)**
- The **faceplates allow full** service access to the manifold
- The faceplate **Design** and **finishes** are suitable for exposed installation
- **Punto Arancio®** pressure fitting

SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	ABS
	Balls	CW617 Brass
Connections		TAPERED SEAL and ISO 228 M thread
Working pressure		MOP 5
Temperature		-20 °C +60 °C
High temperature resistance		(B01) 0.1 bar 650°C for 30min
Standard and certification		DIN EN 331 DVGW

TECHNOLOGIES

HEAT RESISTANCE

TAPERED SEAL

DESIGN FEATURES

CERTIFIED PRODUCT

SANDWICH BOX

ACCESSIBILITY

PRESSURE TESTED

COMPACT

DESIGN

VENTILATION

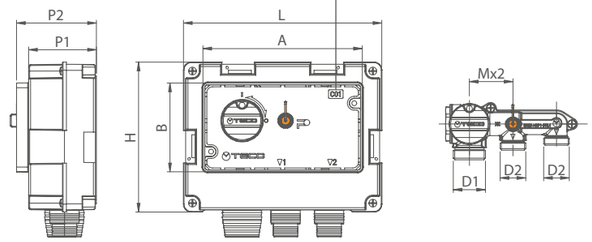
INSIDE-OUTSIDE

K2.3 2-PORT SINGLE SHUT-OFF GAS MANIFOLD

C01 COMPATIBLE FACEPLATE

- MOP 5
- -20 °C +60 °C

INCLUDES: fixing bracket, site protection cover.
DOES NOT INCLUDE: faceplate and fittings, Punto Arancio kit.



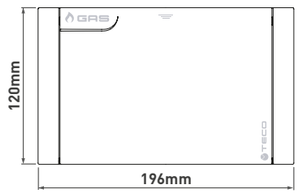
Code	DN	D1	D2	M	L	H	P1	P2	A	B	Faceplate	Pack
K203CC10100	20	TC1"	TC3/4"	45	205	155	70	83	165	92	C01	5

K2.3 Flush-mounting gas manifold

Manifold with two outlet pressure fittings. Inlet with ball valve that complies with the **DIN EN 331** standard, 1" tapered seal and 3/4" outlets. The kit includes a readily serviceable sandwich box, which is gas-tight with ventilation to the environment and sealed sheath connections. Brass body. Brackets and protection covers included. Opens and closes by operating the handle, complete with "open/closed" indicator, manually openable faceplate, available in three finishes.
Temperature: –20 °C +60 °C.
Working pressure: MOP 5
The connections are certified and guaranteed to seal at high temperature HTB 650°C for 30'.

C01 FACEPLATES

Faceplate **196x120mm.**



Code	Finish	Pack
K7PL0001	White	5
K7PL0002	Silver	1
K7PL0003	Black Soft Touch	1

TC FITTINGS FOR TAPERED SEALS SEE PAGE 170

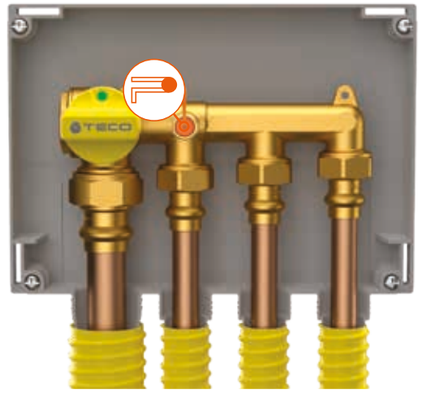
K2 ACCESSORIES (EXTENSIONS, SPANNER ...) SEE PAGE 172

PUNTO ARANCIO ACCESSORIES SEE PAGE 179

K2.4

3-PORT SINGLE SHUT-OFF GAS MANIFOLD

- K2.4 **compact** distribution manifold
- **Main shut-off** ball valve with open/closed indication
- With **flush-mounting and readily serviceable Sandwich box**
- Box with connections with sheath that is **gas-tight** with respect to the wall and **ventilation** to the outside
- **TECO Tapered Seal** connection: heat resistant **in the event of fire (HTB)**
- The **faceplates allow full** service access to the manifold
- The faceplate **Design** and **finishes** are suitable for exposed installation
- **Punto Arancio®** pressure fitting



SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	ABS
	Balls	CW617 Brass
Connections		TAPERED SEAL and ISO 228 M thread
Working pressure		MOP 5
Temperature		-20°C +60°C
High temperature resistance		(B01) 0.1 bar 650°C for 30min
Standard and certification		DIN EN 331 DVGW

TECHNOLOGIES

HEAT RESISTANCE

TAPERED SEAL

DESIGN FEATURES

CERTIFIED PRODUCT

SANDWICH BOX

ACCESSIBILITY

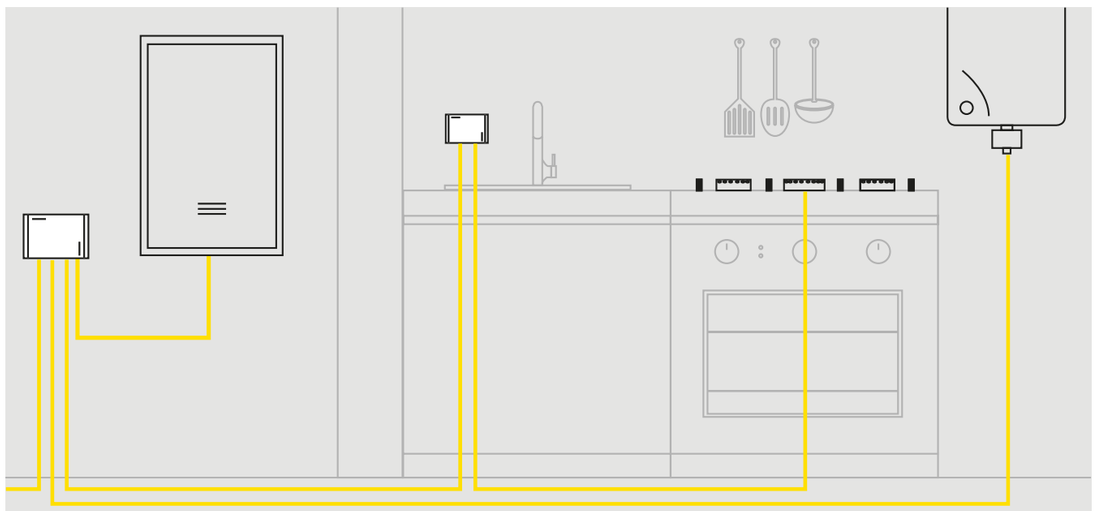
PRESSURE TESTED

COMPACT

DESIGN

VENTILATION

INSIDE-OUTSIDE

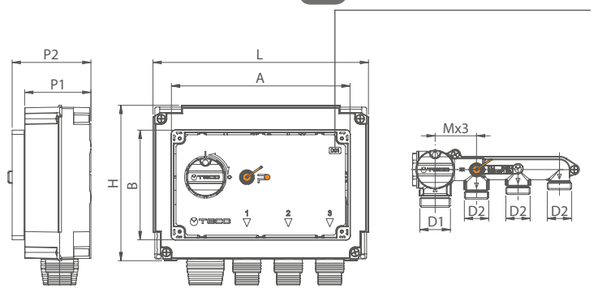


K2.4 3-PORT SINGLE SHUT-OFF GAS MANIFOLD

D01 COMPATIBLE FACEPLATE

- MOP 5
- -20 °C +60 °C

INCLUDES: fixing bracket, site protection cover.
DOES NOT INCLUDE: faceplate and fittings, Punto Arancio kit.

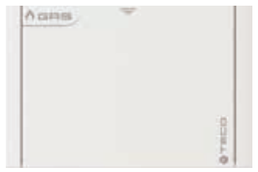


Code	DN	D1	D2	M	L	H	P1	P2	A	B	Faceplate	Pack
K204DC10100	20	TC1"	TC3/4"	45	234	170	72	85	194	119	D01	5

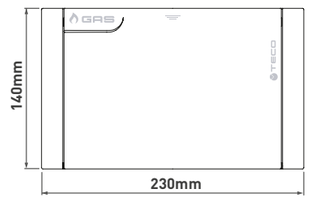
K2.4 Flush-mounting gas manifold

Manifold with three outlet pressure fittings. Inlet with ball valve that complies with the **DIN EN 331** standard, 1" tapered seal and 3/4" outlets. The kit includes a readily serviceable sandwich box, which is gas-tight with ventilation to the environment and sealed sheath connections. Brass body. Brackets and protection covers included. Opens and closes by operating the handle, complete with "open/closed" indicator, manually openable faceplate, available in three finishes.
Temperature: –20 °C +60 °C.
Working pressure: MOP 5
The connections are certified and guaranteed to seal at high temperature HTB 650°C for 30'.

D01 FACEPLATES



Faceplate **230x140mm.**



Code	Finish	Pack
KPLD0101600	White	5
KPLD0101800	Silver	1

TC FITTINGS FOR TAPERED SEALS SEE PAGE 170

K2 ACCESSORIES (EXTENSIONS, SPANNER ...) SEE PAGE 172

PUNTO ARANCIO ACCESSORIES SEE PAGE 179

K2.1

FLUSH-MOUNTING "U" GAS SHUT-OFF COCK

- K2.1 **compact** shut-off cock
- **"U" shape** with inlet and outlet at the bottom
- With **flush-mounting and readily serviceable Sandwich box**
- Box with connections with sheath that is **gas-tight** with respect to the wall and **ventilation** to the outside
- **TECO Tapered Seal** connection: heat resistant **in the event of fire (HTB)**
- The **compact faceplates** make it possible to access the shut-off valves
- The faceplate **Design** and **finishes** are suitable for exposed installation

SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	PS
	Balls	CW617 Brass
Connections		TAPERED SEAL and ISO 228 M thread
Working pressure		MOP 5
Temperature		-20 °C +60 °C
High temperature resistance		(B01) 0.1 bar 650°C for 30min
Standard and certification		DIN EN 331 DVGW

TECHNOLOGIES

HEAT RESISTANCE

TC
TAPERED SEAL

DESIGN FEATURES

CERTIFIED PRODUCT

SANDWICH BOX

ACCESSIBILITY

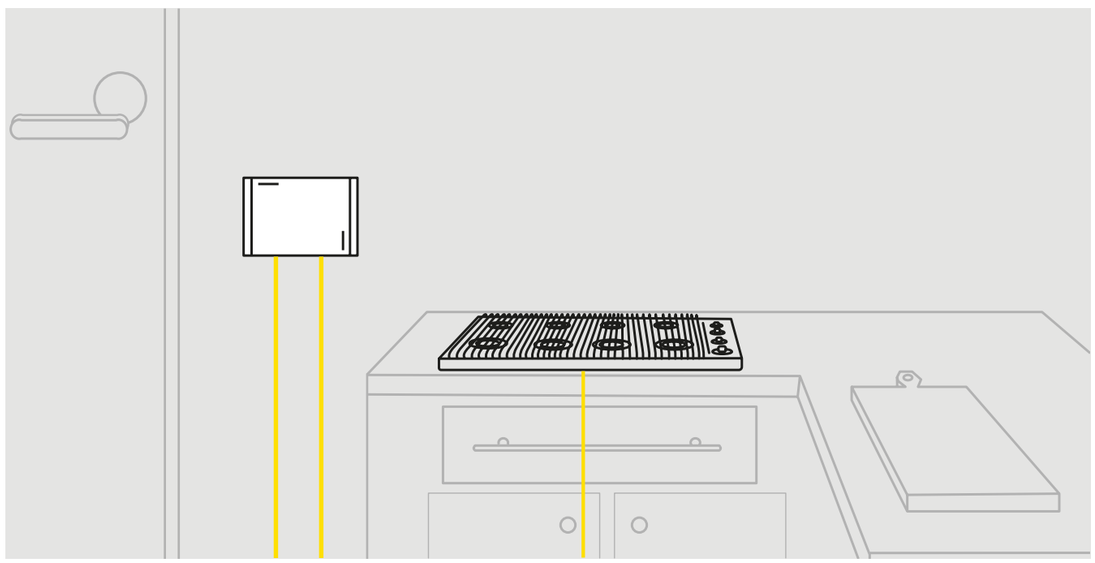
LINK

COMPACT

DESIGN

VENTILATION

INSIDE-OUTSIDE

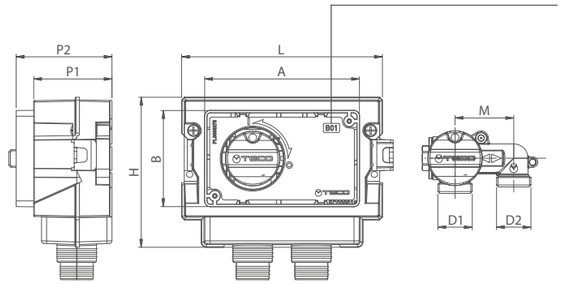


K2.1 FLUSH-MOUNTING "U" GAS SHUT-OFF COCK

B01 COMPATIBLE FACEPLATE

- MOP 5
- -20°C +60 °C

INCLUDES: fixing bracket, site protection cover.
DOES NOT INCLUDE: faceplate and fittings.

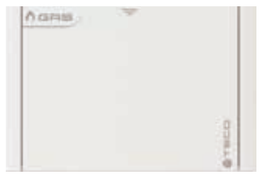


Code	DN	D1	D2	M	L	H	P1	P2	A	B	Faceplate	Pack
K201BC10100	15	TC3/4"	TC3/4"	45	154	115	60	73	119	74	B01	10

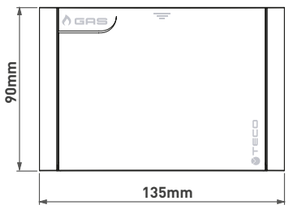
K2.1 Flush-mounting gas valve

A ball valve that complies with the **DIN EN 331** standard, with the inlet and outlet at the bottom, 3/4" tapered seal connections, complete with readily serviceable sandwich box that is gas-tight and ventilated to the environment, and gas-tight sheath connections. Brass body. Brackets and protection covers included. Opens and closes by operating the handle, manually openable faceplate, available in five finishes.
Temperature: –20 °C +60 °C.
Working pressure: MOP 5
The connections are certified and guaranteed to seal at high temperature HTB 650°C for 30'.

B01 FACEPLATES



Faceplate **135x90mm.**



Code	Finish	Pack
KPLB0101600	White	10
KPLB0101M00	Polished chrome	10
KPLB0101800	Silver	5
KPLB0101A00	Black Soft Touch	5
KPLB0101700	Copper	5

TC **FITTINGS FOR TAPERED SEALS** SEE PAGE 170

KZ **ACCESSORIES** (EXTENSIONS, SPANNER ...) SEE PAGE 172

K2.0

FLUSH-MOUNTING STRAIGHT GAS SHUT-OFF COCK

- K2.0 **compact** shut-off cock
- Straight inlet and outlet
- With **flush-mounting, serviceable Sandwich box**
- Box with connections with sheath that is **gas-tight** with respect to the wall and **ventilation** to the outside
- **TECO Tapered Seal** connection: heat resistant **in the event of fire (HTB)**
- The **compact faceplates** make it possible to access the shut-off valves
- The faceplate **Design** and **finishes** are suitable for exposed installation

SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	PS
	Balls	CW617 Brass
Connections		TAPERED SEAL and ISO 228 M thread EN 10226-1 Female Thread:
Working pressure		MOP 5
Temperature		-20 °C +60 °C
High temperature resistance		(B01) 0.1 bar 650°C for 30min
Standard and certification		DIN EN 331 DVGW

TECHNOLOGIES

HEAT RESISTANCE

TC

TAPERED SEAL

DESIGN FEATURES

CERTIFIED PRODUCT

SANDWICH BOX

ACCESSIBILITY

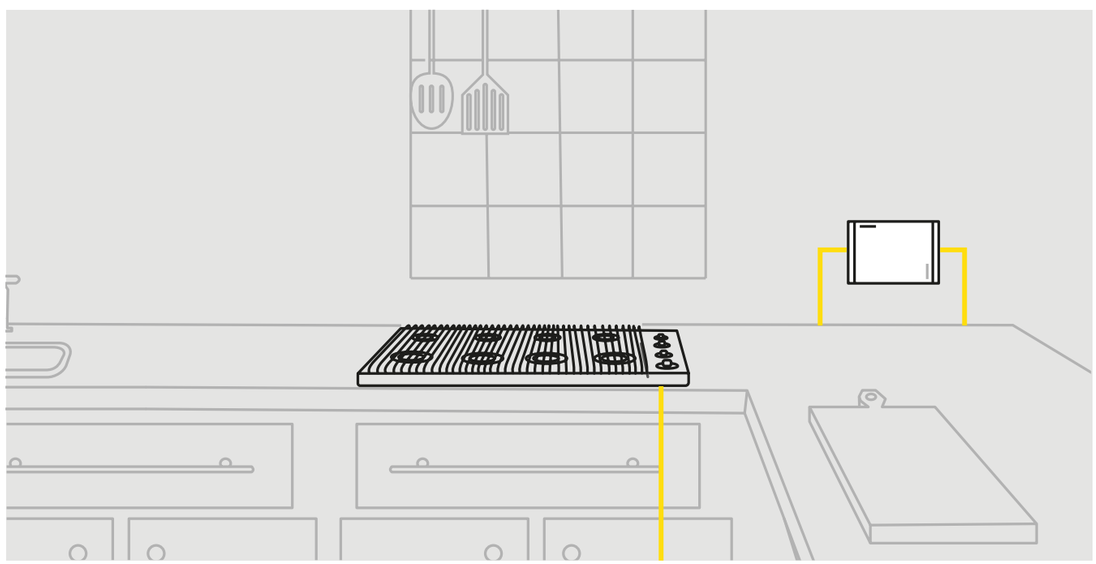
LINK

COMPACT

DESIGN

VENTILATION

INSIDE-OUTSIDE

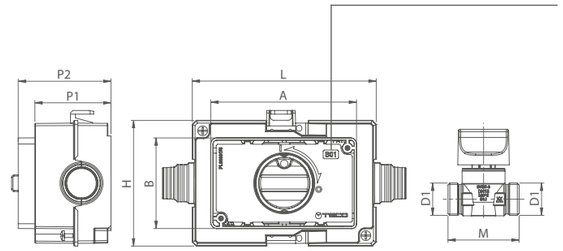


K2.0 FLUSH-MOUNTING STRAIGHT GAS SHUT-OFF COCK

B01 COMPATIBLE FACEPLATE

- MOP 5
- -20 °C +60 °C

INCLUDES: fixing bracket, site protection cover.
DOES NOT INCLUDE: faceplate and fittings.

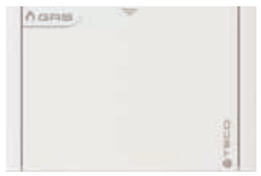


Code	DN	D1	M	L	H	P1	P2	A	B	Faceplate	Pack
K200BC10100	15	TC3/4"	58	150	102	62	75	119	74	B01	10
K200B110100	15	Rp1/2"	63	150	102	62	75	119	74	B01	10

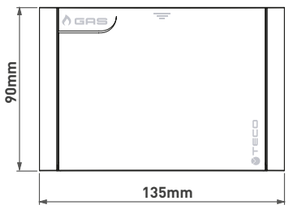
K2.0 Flush-mounting gas valve

A ball valve that complies with the **DIN EN 331** standard, with the inlet and outlet at the side, 3/4" tapered seal connections, complete with readily serviceable sandwich box that is gas-tight and ventilated to the environment, and gas-tight sheath connections. Brass body. Brackets and protection covers included. Opens and closes by operating the handle, manually openable faceplate, available in five finishes.
Temperature: –20 °C +60 °C.
Working pressure: MOP 5
The connections are certified and guaranteed to seal at high temperature HTB 650°C for 30'.

B01 FACEPLATES



Faceplate **135x90mm**



Code	Finish	Pack
KPLB0101600	White	10
KPLB0101M00	Polished chrome	10
KPLB0101800	Silver	5
KPLB0101A00	Black Soft Touch	5
KPLB0101700	Copper	5

TC **FITTINGS FOR TAPERED SEALS** SEE PAGE 170

KZ **ACCESSORIES** (EXTENSIONS, SPANNER ...) SEE PAGE 172

K164

FLUSH-MOUNTING GAS SHUT-OFF COCK WITH LEVER

- K164 **compact** shut-off cock
- Straight inlet and outlet
- With **flush-mounting, serviceable Sandwich box**
- Connections with sheath that is **gas-tight** with respect to the wall and **ventilation** to the outside
- **TECO Tapered Seal** connection: heat resistant **in the event of fire (HTB)**
- The **compact faceplate** makes it possible to access the shut-off valves

SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	PP
	Balls	CW617 Brass
Connections		TAPERED SEAL and ISO 228 M thread EN 10226-1 Female Thread:
Working pressure		MOP 5
Temperature		-20 °C +60 °C
High temperature resistance		(B01) 0.1 bar 650°C for 30min
Standard and certification		DIN EN 331 DVGW

TECHNOLOGIES

HEAT RESISTANCE

TC

TAPERED SEAL

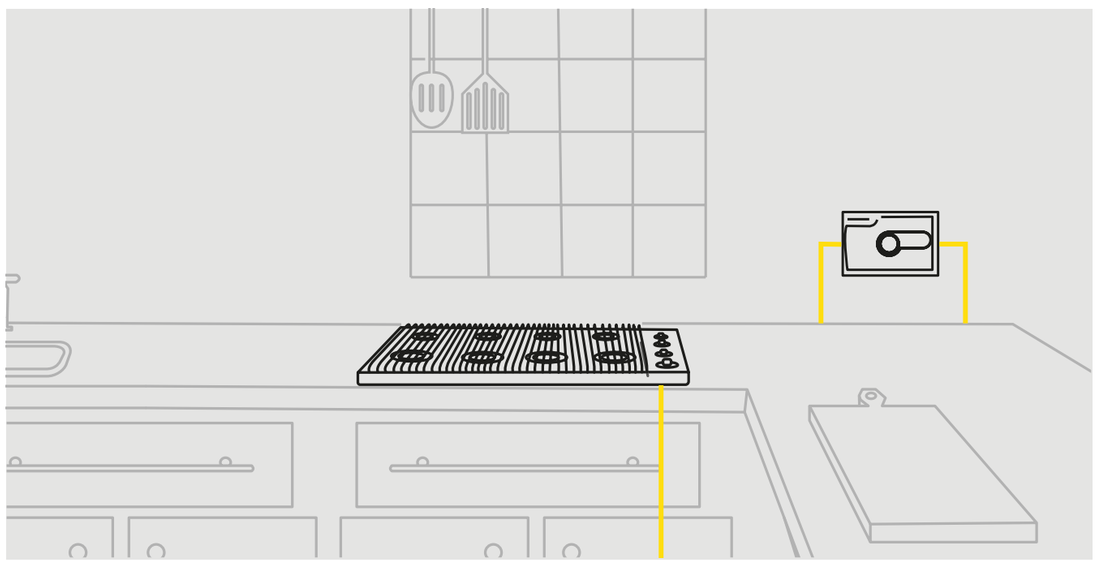
DESIGN FEATURES

CERTIFIED PRODUCT

SANDWICH BOX

COMPACT

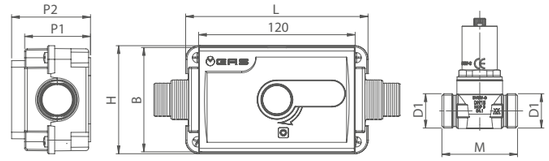
VENTILATION



K164 FLUSH-MOUNTING GAS SHUT-OFF COCK WITH LEVER

- MOP 5
- -20 °C +60 °C

INCLUDES: fixing bracket, site protection cover, chrome plated faceplate and control lever.
DOES NOT INCLUDE: fittings.



Code	DN	D1	D2	M	L	H	P1	P2	A	B	Pack
K113KC0100	15	TC3/4"	TC3/4"	58	140	83	51	61	120	80	10
K113KF0100	15	Rp1/2"	Rp1/2"	63	140	83	51	61	120	80	10

K164 Flush-mounting gas valve

A ball valve that complies with the **DIN EN 331** standard, with the inlet and outlet at the side, 3/4" tapered seal connections, complete with readily serviceable sandwich box that is gas-tight and ventilated to the environment, and gas-tight sheath connections. Brass body. Brackets and protection covers included. Closed and opened by operating a lever. Complete with faceplate that allows maintenance work.
Temperature: –20 °C +60 °C.
Working pressure: MOP 5
The connections are certified and guaranteed to seal at high temperature HTB 650°C for 30'.

ACCESSIBLE AND EASY TO OPERATE

TC FITTINGS FOR TAPERED SEALS SEE PAGE 170

KZ ACCESSIBLE AND EASY TO OPERATE (EXTENSIONS, SPANNER ...) SEE PAGE 172

RK

FLUSH-MOUNTING GAS BOX WITH OUTLET FITTING

- **RK** outlet fitting that protrudes from the wall
- With **flush-mounting and readily serviceable Sandwich box**
- Connections with sheath that is **gas-tight** with respect to the wall and **ventilation** to the outside
- **TECO Tapered Seal** connection: heat resistant **in the event of fire (HTB)**
- The **compact faceplate** makes it possible to access the shut-off valves
- The faceplate **Design** is suitable for exposed installation

SPECIFICATIONS

Material	Body	CW617 Brass
	Sandwich Box	PP
Connections		TAPERED SEAL and ISO 228 M thread ISO-228 Female Thread
Working pressure		MOP 5
Temperature		-20 °C +60 °C
High temperature resistance		(B01) 0.1 bar 650°C for 30min
Standard and certification		DIN EN 331 DVGW

TECHNOLOGIES

HEAT RESISTANCE

TC

TAPERED SEAL

DESIGN FEATURES

CERTIFIED PRODUCT

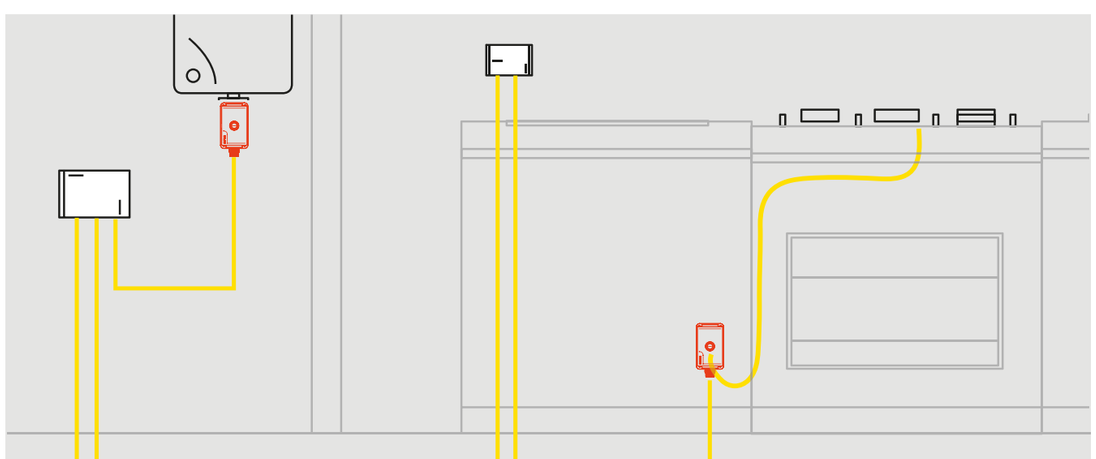
SANDWICH BOX

INSIDE-OUTSIDE

COMPACT

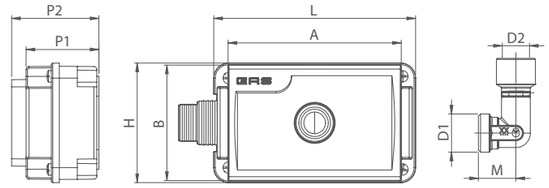
VENTILATION

Reference Standard - UNI 7129-1 : 2015 : 4.3.2.2
The fittings can be buried or laid in chases as long as they are put in suitable serviceable boxes with unsealed covers. The joints at the fittings in the boxes must be suitably protected against corrosion in accordance with **UNI EN 12954**.



RK FLUSH-MOUNTING GAS BOX WITH OUTLET FITTING

INCLUDES: fixing bracket, site protection cover and white faceplate.
DOES NOT INCLUDE: fittings.



Code	DN	D1	D2	M	L	H	P1	P2	A	B	Pack
RK13KC0100	15	TC3/4"	G 1/2"	26	140	83	51	61	120	80	10

RK Flush-mounting gas fitting
A 1/2" female elbow fitting with 3/4" tapered seal connection. It comes complete with a readily serviceable sandwich box, which is gas-tight with ventilation to the environment and sealed sheath connections. Brass body. Brackets and protection covers included. Complete with faceplate that allows maintenance work.
The connections are certified and guaranteed to seal at high temperature HTB 650°C for 30'.

RK ACCESSORIES

FIREBAG® FITTING WITH THERMAL SAFETY DEVICE

When connecting gas appliances to the system, we recommend installing the RT406 elbow fitting with the built-in Firebag® thermal safety device to the RK kit outlet.

The device is heat-activated and prevents gas from leaking out of the distribution network in the event of fire, thereby limiting its spread.

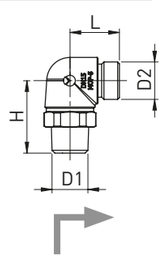
It is designed to activate in the range from 95 °C to 100 °C, and is guaranteed to operate at 925 °C for an hour.

For further details, see the FireBag® catalogue.

FIREBAG®

90° FITTING

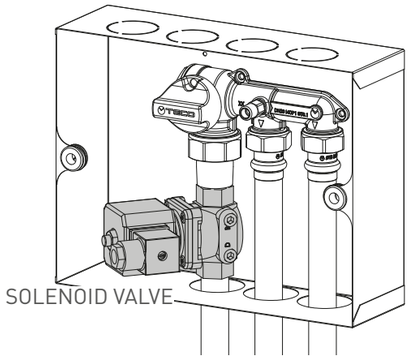
- MOP 5
- -20°C +60 °C
- Trip temp. 100 °C - 5K
- HTB 925°C for 60' (GT5 DIN 3586)



Code	DN	D1	D2	L	H	SW	TAE	Pack
RT406C00	15	R1/2"	G1/2"	40	28	27	X	10

SK METAL BOX

K2 MANIFOLDS THAT CAN BE USED WITH THE METAL BOX



Use the SK metal box whenever you need space to install a safety solenoid valve.

TECHNOLOGIES

HEAT RESISTANCE

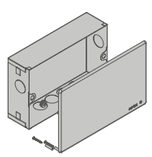
TAPERED SEAL

DESIGN FEATURES

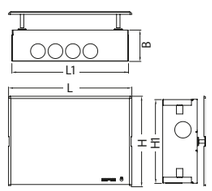
CERTIFIED PRODUCT

PRESSURE TESTED

METAL MANIFOLD BOX



Readily serviceable metal box for K2 manifolds
- metal box
- cover with adjustable height

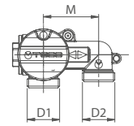


Code	L	L1	H	H1	B	Pack
SK00001011	330	300	210	195	80	1

K2.1 K2.2 K2.3 K2.4 MANIFOLDS THAT CAN BE USED WITH THE METAL BOX

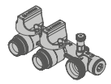
K2.1 "U" SHUT-OFF VALVE

- MOP 5
- -20 °C +60 °C

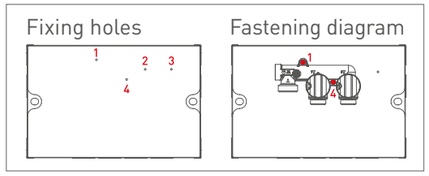


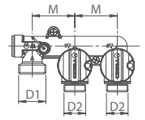
Code	DN	D1	D2	M	Pack
K201BC19900	15	300	210	195	5

K2.2 MULTIPLE SHUT-OFF MANIFOLD X2



- MOP 5
- -20 °C +60 °C

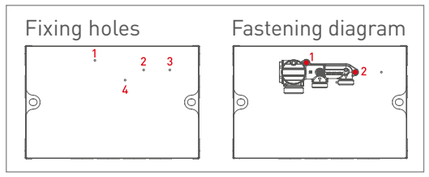


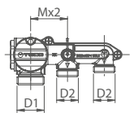


Code	DN	D1	D2	M	Pack
K202CC19900	15	TC1"	TC3/4"	52	5

K2.3 SINGLE SHUT-OFF DISTRIBUTION MANIFOLD X2

- MOP 5
- -20 °C +60 °C

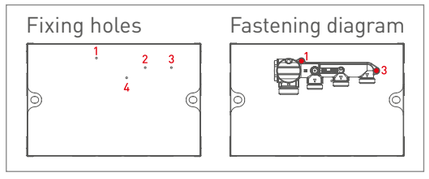


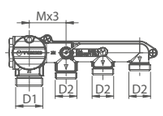


Code	DN	D1	D2	M	Pack
K203CC19900	20	TC1"	TC3/4"	45	5

K2.4 SINGLE SHUT-OFF DISTRIBUTION MANIFOLD X3

- MOP 5
- -20 °C +60 °C

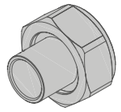




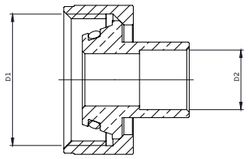
Code	DN	D1	D2	M	Pack
K204DC19900	20	TC1"	TC3/4"	45	5

TC

BRONZE SOLDERED FITTINGS



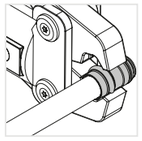
Fitting for soldered copper pipe
connection that complies with EN 1254-5

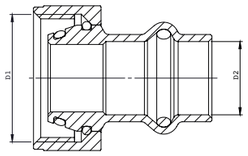


Code	D1 ISO228-1	D2	Pack
K2CS1201	TC 3/4"	ø12mm	10
K2CS1401	TC 3/4"	ø14mm	10
K2CS1501	TC 3/4"	ø15mm	10
K2CS1601	TC 3/4"	ø16mm	10
K2CS1801	TC 3/4"	ø18mm	10
K2CS2201	TC 3/4"	ø22mm	10
K0CS2202	TC 1"	ø22mm	5
K0CS2802	TC 1"	ø28mm	5

RG UNIPRESS® PRESS-FIT FITTING

Fitting for press-fit copper pipe
connection that complies with DVGW
G5614 and UNI 11065.

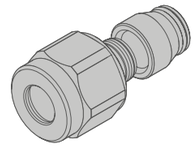




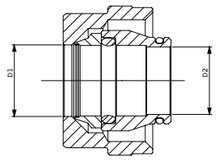
Code	D1 ISO228-1	D2	Pack
K2CP1501	TC 3/4"	ø15mm	10
K2CP1801	TC 3/4"	ø18mm	10
K2CP2201	TC 3/4"	ø22mm	10
K0CP2202	1"	ø22mm	5
K0CP2802	1"	ø28mm	5

TC

COMPRESSION FITTING

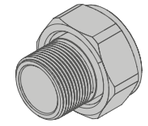


Compression fitting for copper pipe
connection that complies with EN 1254-2

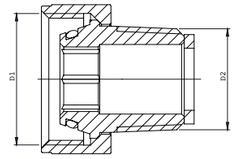


Code	D1 ISO228-1	D2	Pack
K0CR1401	TC 3/4"	ø14mm	10
K0CR1601	TC 3/4"	ø16mm	10
K0CR1801	TC 3/4"	ø18mm	10

THREADED FITTING



Fitting for threaded connection that complies
with EN 10226-1.



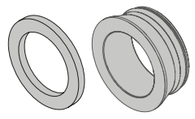
Code	D1 ISO228-1	D2 EN 1254-5	Pack
K0CF1201	TC 3/4"	1/2"	10
K0CF3401	TC 1"	3/4"	5

For multi-layer composite systems, the UNI 11344 standard permits the use of fittings provided by the pipe-fitting system manufacturer. Therefore, there are two possible solutions.

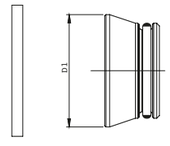
TP flat seal: Adapter to convert a tapered seal to a flat seal with gasket. Compatible with all fittings with an ISO228 swivel nut.

F threaded fitting: threaded fitting + female press-fit fitting for multi-layer composite pipes.

ADAPTER FOR FLAT SEAL FITTINGS

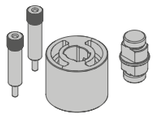


Adapter for connecting to all types of
fittings with a FLAT SEAL with nut and
gasket

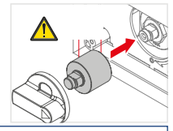


Code	D1 ISO228-1	Pack
AP004001	TC 3/4"	10
AP005001	TC 1"	5

MODULAR EXTENSION KIT



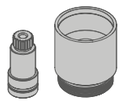
23mm modular extension



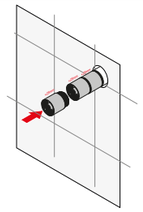
SEVERAL EXTENSION KITS CAN BE APPLIED TO THE SAME VALVE

Code	Pack
KPR0001	10

MODULAR EXTENSION FOR 164K VERSION



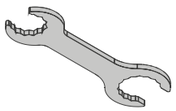
25mm modular extension



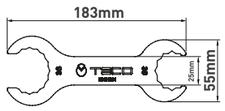
SEVERAL EXTENSION KITS CAN BE APPLIED TO THE SAME VALVE

Code	L (mm)	Pack
I4095000	23	20

INSTALLATION SPANNER

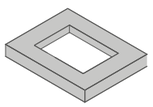


AIDS INSTALLATION AND MAINTENANCE OF K2 PRODUCTS.



Code		Pack
K0CH001	SW 30 - SW 38 spanner	1

MAINTENANCE FRAME



Dimensions

150x100x20 mm **B01**

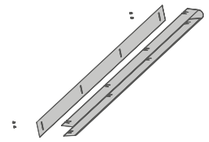
215x160x20 mm **C01**

250x160x20 mm **D01**

THE MAINTENANCE FRAME IS USED WHEN THE BOX IS INSTALLED INCORRECTLY AND PROTRUDES FROM THE WALL.

Code		Pack
KRPL0004	B01 COMPATIBLE	1
KRPL0002	C01 COMPATIBLE	1
KRPL0005	D01 COMPATIBLE	1

MODULAR DUCTING FOR LAYING PIPES IN CHASES OUTSIDE THE BUILDING



Serviceable metal ducting for laying pipes in chases outside the building.
+ galvanized sheet metal duct + cover complete with screws

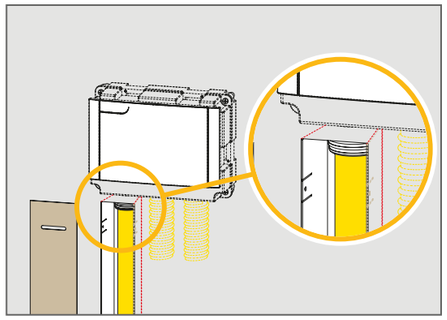
Dimensions:
H750 x L50 mm x D70mm

Code	Pack
KA00K00001	10

STANDARDS

NOTES ON THE STANDARDS

As prescribed by the **UNI 7129** standard, pipes cannot be installed in chases outside the building. If it is necessary to hide the pipes (e.g. when there is cladding), they can be installed in dedicated ventilated metal ducting.



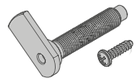
HANDLE

Control handle

Code	Pack
K7MN0001	1
K2MN0001*	1

A01 *K2.0 SPARE PARTS (2009 -2017 PRODUCTION)

FACEPLATE ADJUSTMENT KIT C01

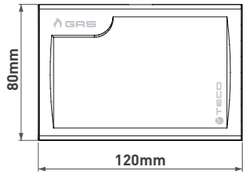


Adjustment kit (20mm)
pin + screws + o-ring (x2)

Code	Pack
KRPL0003	1

A01 K2.0 FACEPLATES

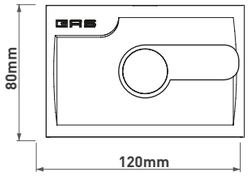
FACEPLATES COMPATIBLE WITH VALVES (2009 - 2017 PRODUCTION)
COMPATIBLE VALVE CODES:
K213KC0100 - K213KF0100



Code	Finish	Pack
K2PL0001	White	1
K2PL0002	Polished chrome	1
K2PL0003	Silver	1
K2PL0004	Black	1

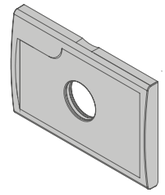
K164 CHROME PLATED FACEPLATE + LEVER SPARE PARTS KIT

Faceplate **120x80mm**
+ control lever

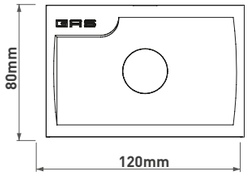


Code	Finish	Pack
K1PL0001	Polished chrome	1

RK WHITE FACEPLATE



Faceplate **120x80mm**



Code	Finish	Pack
RKPL0001	White	1

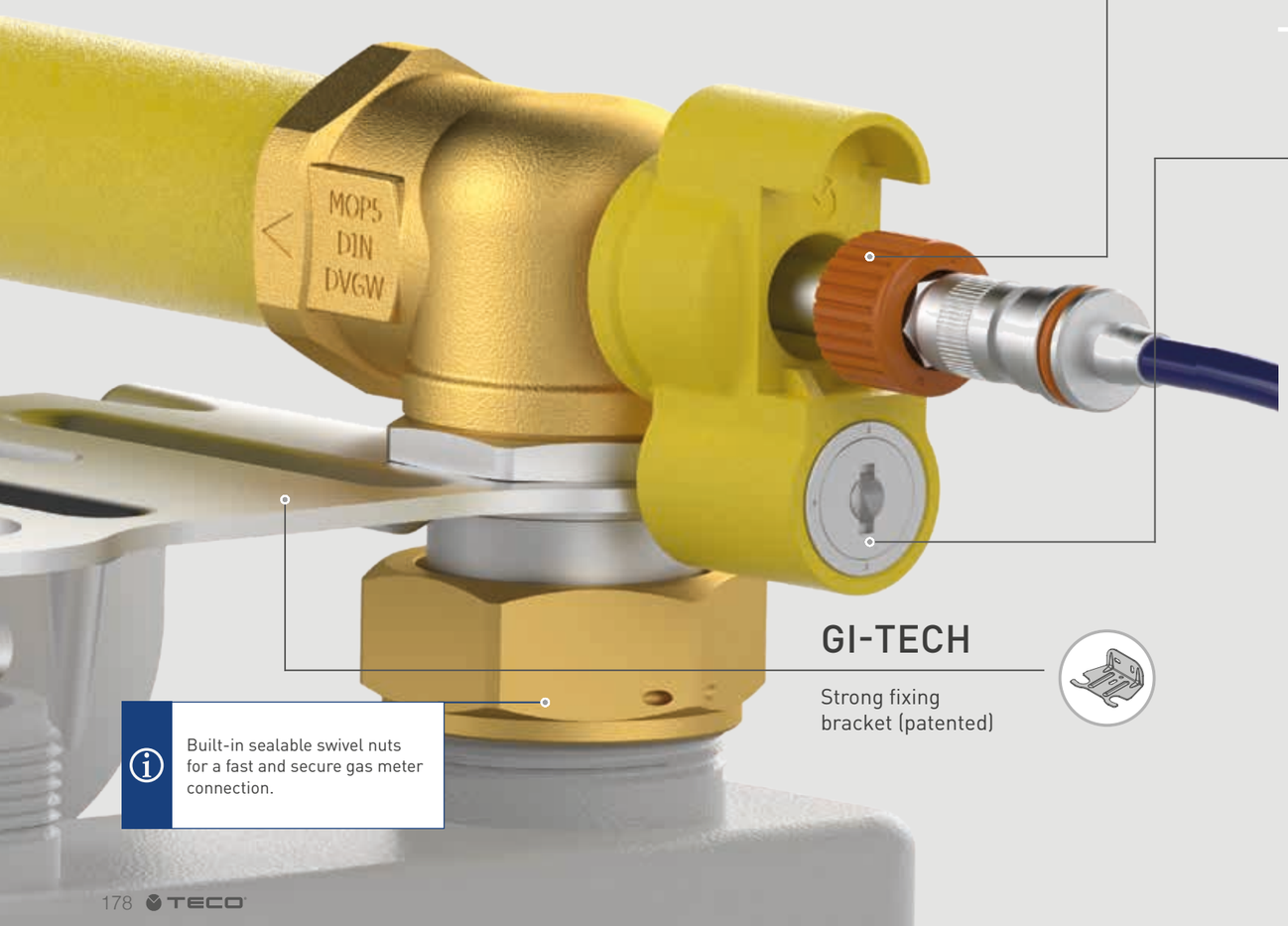
METER VALVES

G2 PUNTO ARANCIO - G5 - KM3 - G6

PRACTICAL AND SAFE

Shut-off valve with PUNTO ARANCIO® pressure fitting and KEY CLICK® safety handle.

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DINEN 331 DVGW VP 308
Working pressure	MOP 5 (5 bar)
Working temperature	-20°C +60 °C
High temperature resistance	HTB 650°C for 30' (DIN EN331 B0.1)
Application	For all types of gas as specified in EN 437 and DWG G260/1 (Methane, Butane, Propane)



Built-in sealable swivel nuts for a fast and secure gas meter connection.

GI-TECH

Strong fixing bracket (patented)

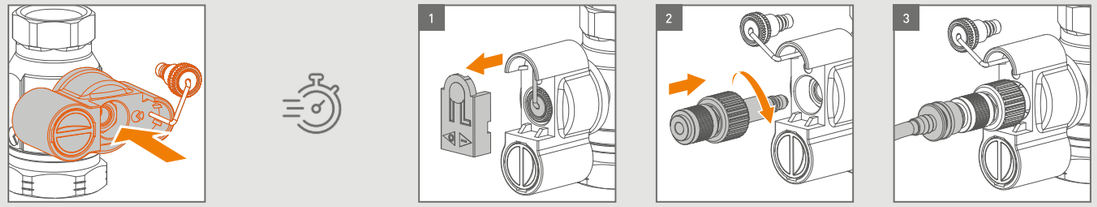
PRESSURE FITTING PUNTO ARANCIO

Testing the pressure in your system has never been so easy and safe.

EASY
The connection for measuring gas-tightness or system pressure is right at the most accessible point of the system; the control handle is at the front. **You can test the system in just a few seconds.**

SAFE
Thanks to the patented double safety valve, there is no risk of gas leaking while connecting.

THE PRESSURE FITTING ALWAYS ON THE FRONT MAKES THE OPERATION SIMPLE



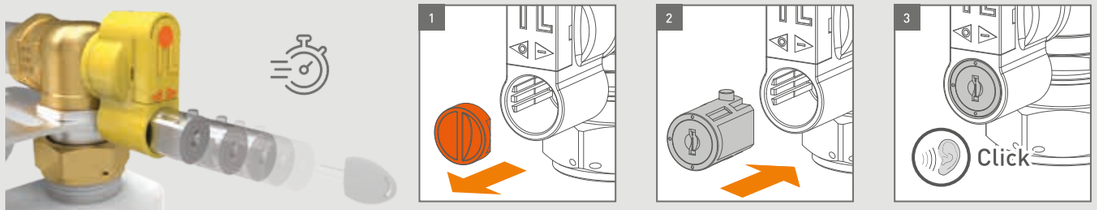
STANDARDS

The PUNTO ARANCIO® pressure fitting is DVGW certified in accordance with VP 308 and meets all of the regulatory requirements of **UNI 7129-2015** (4.1 page 8), and **UNI 11137** (points 5.1 and 5.7).

KEY CLICK®

Transforming the valve by adding a safety lock has never been so simple and fast.

BENEFITS
Key Click®
lets you add the safety lock at any time. This means always having the optimal solution in accordance with the requirements of (**UNI 7129-2015** Chap. 4.1).



Remove the closing cap. | Insert the lock. | You will hear a "click" when the lock barrel is fully inserted.

STANDARDS

As required by the **UNI 7129-2015** standard, the valve must be used with a lock when access to the meter is not exclusive.

PRESSURE POINT STANDARD

UNI 7129-2015: ENTRY AND PRESSURE TESTING POINT THE ENTRY POINT OF AN INTERNAL SYSTEM ALWAYS CONSISTS OF A SHUT-OFF DEVICE.

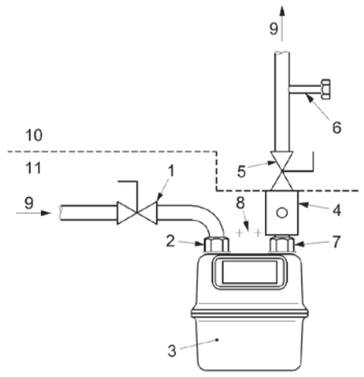
A | Measurement assembly scheme for a gas system connected to a mains supply.

1. Meter inlet shut-off device (normally provided by the supplier)
2. Inlet shank
3. Meter
4. Possible meter pressure fitting; it may also be provided on the shut-off device 1, or directly on the fixing bracket or outlet shank (provided by the supplier)
5. Entry point (customer's responsibility)
6. Pressure fitting complete with plug. It may also be provided directly on the shut-off device 5 (customer's responsibility)
7. Outlet shank
8. Fixing bracket
9. Gas
10. Gas system
11. Provided by the supplier

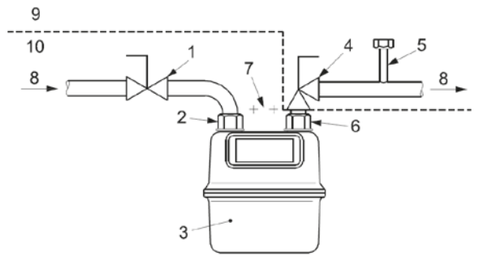
B | Measurement assembly scheme for a gas system connected to a mains supply

1. Meter inlet shut-off device (normally provided by the supplier)
2. Inlet shank
3. Meter
4. Entry point (customer's responsibility)
5. Pressure fitting complete with plug. It may also be provided directly on the shut-off device 5 (customer's responsibility)
6. Outlet shank
7. Fixing bracket
8. Gas
9. Gas system
10. Provided by the supplier

A |



B |

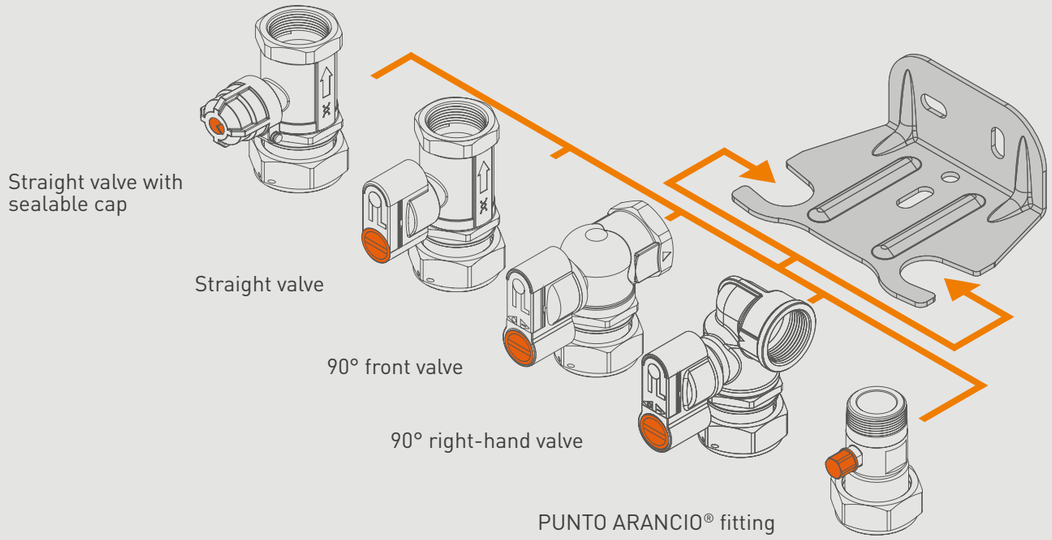


Ref. **UNI 7129 -1/2015** Chap. 4.5.5.4

Gi·TEC

GAS METER BRACKET (PATENTED)

The various versions of the G2 valves and fittings can be freely combined with the Gi-TEC fixing brackets. It is therefore possible to compose the most suitable kit for the system.



INSTALLATION

STRONG STRUCTURE

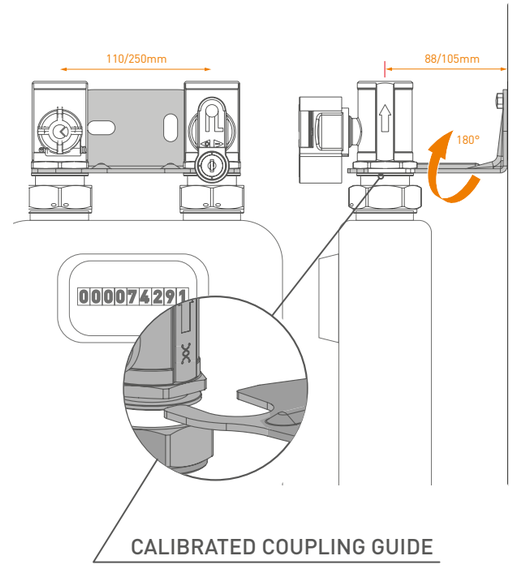
The strong and simple structure of the GI-TEC bracket ensures stable installation that can withstand strong mechanical forces. The brackets are supplied with fixing screws and plugs and comply with **UNI 7129 Chap. 4.1**.

RAPID INSTALLATION

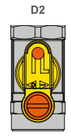
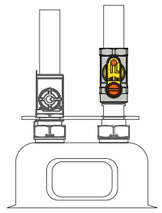
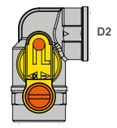
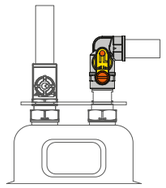
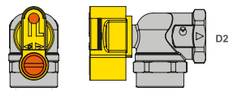
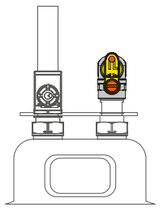
The whole range of valves and fittings with shanks for meters can be fitted on the Gi-Tec bracket quickly and without using screws, thanks to the special calibrated coupling guide. The bracket position can be reversed.

RANGE

The Gi-TEC brackets are available with distance between centres of 110 and 250mm.



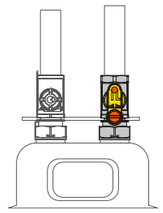
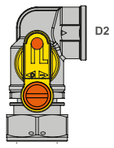
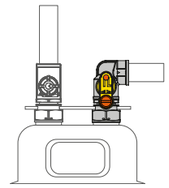
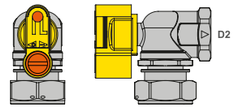
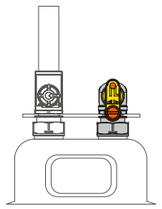
Brackets with a special distance between centres are available on request.

	THREADED VERSIONS					APPLICATION
		KEY CLICK	CODE	D1 EN 10226-1	D2 EN 10226-1	
STRAIGHT VALVE		•	G243010000	Rp3/4"	Rp3/4"	
		•	G243010100	Rp1"	Rp1"	
BALL 90° RH		•	G243110100	Rp1"	Rp1"	
90° FRONT VALVE		•	G243110300	Rp3/4"	Rp3/4"	
		•	G243110100	Rp1"	Rp1"	

THE **"KEY CLICK" LOCK (OPTIONAL)** MAKES THE VALVES SUITABLE FOR NON-EXCLUSIVE ACCESS AREAS.

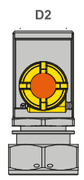
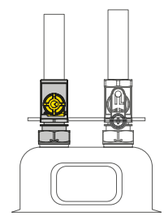
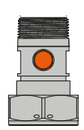
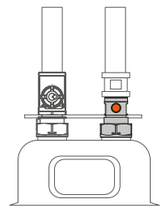
STANDARDS

As required by the **UNI 7129-2015** standard, the valve must be used with a lock when access to the meter is not exclusive.

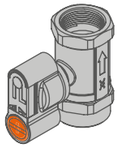
	THREADED VERSIONS WITH SWIVEL NUT					APPLICATION
		KEY CLICK	CODE	D1 EN 10226-1	D2 EN 10226-1	
STRAIGHT VALVE		•	G2430B0100	G1"1/4	Rp3/4"	
		•	G2430B0200	G1"1/4	Rp1"	
		•	G2430B0300	G1"	Rp3/4"	
		•	G2430B0400	G1"	Rp1"	
BALL 90° RH		•	G2431B0200	G1"1/4	Rp1"	
		•	G2431B0400	G1"	Rp1"	
90° FRONT VALVE		•	G2431B0300	G1"1/4	Rp1"	
		•	G2431B0500	G1"	Rp1"	

THE **"KEY CLICK" LOCK (OPTIONAL)** MAKES THE VALVES SUITABLE FOR NON-EXCLUSIVE ACCESS AREAS.

VALVES FOR METERS BELONGING TO THE SUPPLY COMPANY

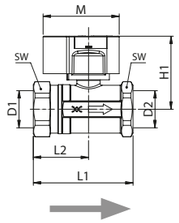
THREADED VERSION WITH SWIVEL NUT				APPLICATION
	CODE	D1 EN 10226-1	D2 EN 10226-1	
 VALVE WITH SEALABLE CAP	G2C30B0100	G1"1/4	Rp3/4"	
	G2C30B0200	G1"1/4	Rp1"	
	G2C30B0400	G1"	Rp1"	
 FITTING WITH PRESSURE PORT	R2130B0100	G1"1/4	Rp1"	

STRAIGHT VALVE – F/F VERSION



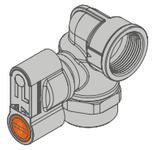
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)

Valves with provision for "KEY CLICK" locks (OPTIONAL)



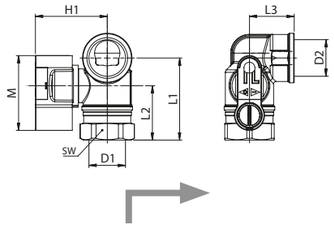
Code	DN	D1	D2	L1	L2	H1	M	SW	Pack
G243010000	20	Rp3/4"	Rp3/4"	76	40	60	62	41	10
G243010100	25	Rp1"	Rp1"	82	45	60	62	41	10

90° RIGHT-HAND VALVE – F/F VERSION



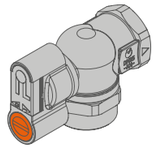
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)

Valves with provision for "KEY CLICK" locks (OPTIONAL)



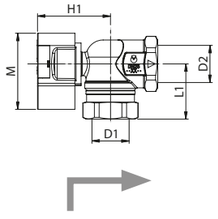
Code	DN	D1	D2	L1	L2	H1	M	SW	Pack
G243110100	25	Rp1"	Rp1"	68	45	60	62	41	10

90° FRONT VALVE – F/F VERSION



- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)

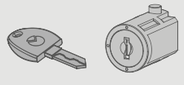
Valves with provision for "KEY CLICK" locks (OPTIONAL)



Code	DN	D1	D2	L1	H1	H2	M	SW	Pack
G243110300	20	Rp3/4"	Rp3/4"	45	60	39	62	41	10
G243110200	25	Rp1"	Rp1"	45	60	39	62	41	10

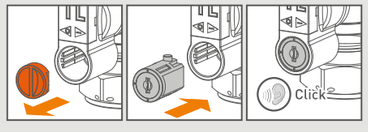
"KEY CLICK®" LOCK AND KEY (OPTIONAL)

Code: KA00KC0001

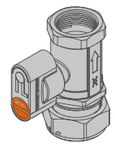


SEE PAGE 179

KEY CLICK® quickly transforms your valve with a security handle.
The lock can be integrated with a click.

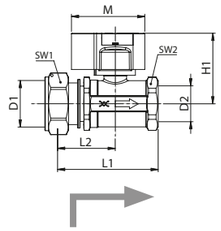


STRAIGHT VALVE – F/SWIVEL NUT VERSION



- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)

Valves with provision for "KEY CLICK" locks (OPTIONAL)

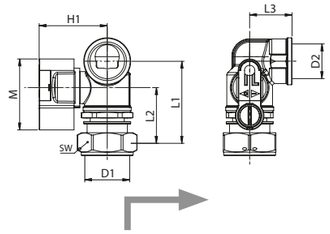


Code	DN	D1	D2	L1	L2	H1	M	SW1	SW2	Pack
G2430B0100	20	G1"1/4	Rp3/4"	85	49	60	62	46	32	10
G2430B0200	25	G1"1/4	Rp1"	85	49	60	62	46	41	10
G2430B0300	20	G1"	Rp3/4"	85	49	60	62	38	32	10
G2430B0400	25	G1"	Rp1"	85	49	60	62	38	41	10

90° RIGHT-HAND VALVE – F/SWIVEL NUT VERSION

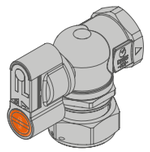
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)

Valves with provision for "KEY CLICK" locks (OPTIONAL)



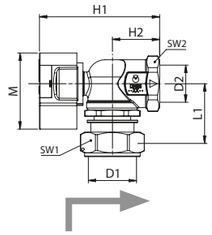
Code	DN	D1	D2	L1	L2	H1	M	SW	Pack
G2431B0200	25	G1"1/4	Rp1"	72	49	60	62	46	10
G2431B0400	25	G1"	Rp1"	72	49	60	62	38	10

90° FRONT VALVE – F/SWIVEL NUT VERSION



- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)

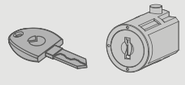
Valves with provision for "KEY CLICK" locks (OPTIONAL)



Code	DN	D1	D2	L1	H1	H2	M	SW1	SW2	Pack
G2431B0300	25	G1"1/4	Rp1"	49	60	39	62	46	41	10
G2431B0500	25	G1"	Rp1"	49	60	39	62	38	41	10

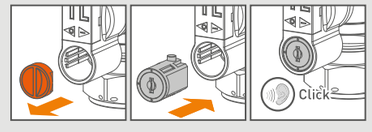
"KEY CLICK®" LOCK AND KEY (OPTIONAL)

Code: KA00KC0001



SEE PAGE 179

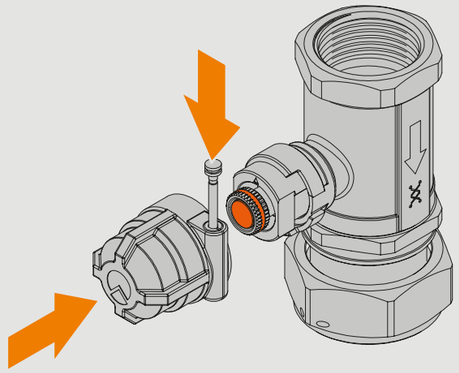
KEY CLICK® quickly transforms your valve with a security handle.
The lock can be integrated with a click.



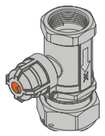
SEALABLE
FASTEC® SEALABLE

100% SECURE PROTECTION

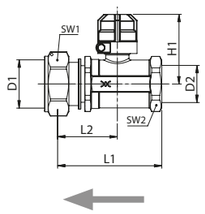
The FASTEC® sealable cap (patented) is easy to apply and guarantees secure protection against tampering with the valve.



STRAIGHT VALVE WITH SEALABLE CAP – F/SWIVEL NUT VERSION

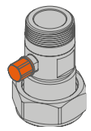


- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)

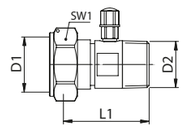


Code	DN	D1	D2	L1	L2	H1	SW1	SW2	Pack
G2C30B0100	20	G1"1/4	Rp3/4"	85	49	57	46	32	10
G2C30B0200	25	G1"1/4	Rp1"	85	49	57	46	41	10
G2C30B0400	25	G1"	Rp1"	87	51	57	37	41	10

PUNTO ARANCIO® FITTING – F/SWIVEL NUT VERSION



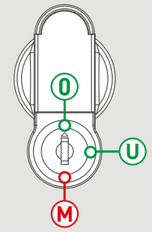
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)



Code	D1	D2	L1	SW	Pack
R2130B0100	G1"1/4	R1"	61	46	10

HANDLE WITH SECURITY LOCK

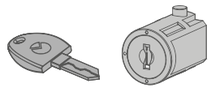
UNI7129-1:2008 4.1 standard requires the use of a valve that has a handle with security key when it can also be accessed by unauthorised people.



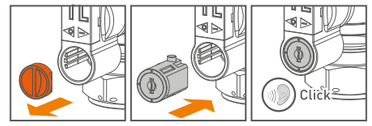
OPERATION

- (O) The key can be removed. The valve can be closed even without the key.
- (U) The key cannot be removed. The valve can be opened.
- (M) Function only available with the **SKELETON KEY**: prevents use of the **user** key.

KEY CLICK® LOCK AND KEY



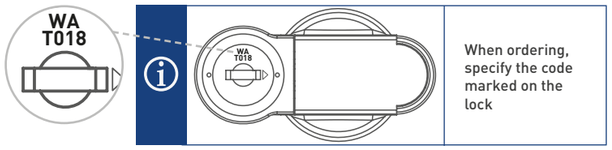
KEY CLICK® quickly transforms your valve with a security handle. The lock can be integrated with a "click".



Code	Pack
KA00KC0001	5

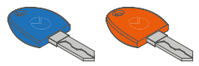
KEY FOR SECURITY LOCK

Replacement key for handle with security lock



Code	Pack
KY1000	1

SKELETON KEY

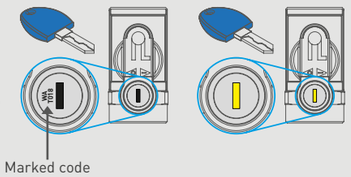


Code	Colours	Pack
KY2000	Blue	1
KY2001	Orange	1

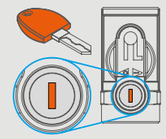
SKELETON KEY SCHEME

The skeleton key is available in two versions, depending on the type of lock to be unlocked/ locked. The locks have guards (retractable dirt protection cap) of different colours to identify the lock type.

BLACK OR YELLOW guard
Blue key

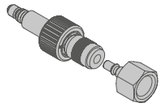


ORANGE guard
Orange key

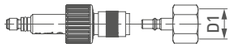


Skeleton keys (passpartout) are only supplied to authorised personnel.

KIT FOR PRESSURE FITTING



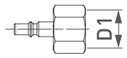
Punto Arancio® pressure fitting
and F 1/4" threaded quick coupling



Code	D1	Pack
KP1000	1/4	5

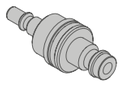
QUICK COUPLING

For PUNTO ARANCIO® pressure fitting kit
Connection: thread F-1/4"



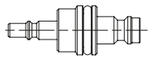
Code	D1	Pack
KP2000	1/4	5

"TESTO" - "WÖHLER" QUICK COUPLING



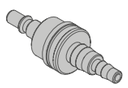
Compatible with the PUNTO
ARANCIO® pressure fitting kit

Compatible with
"TESTO" -
"WÖHLER"
appliances



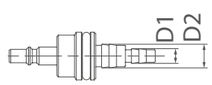
Code	Pack
KP2001	5

"SEITRON" QUICK COUPLING



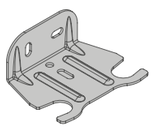
Compatible with the PUNTO
ARANCIO® pressure fitting kit

Compatible with
"SEITRON"
appliances



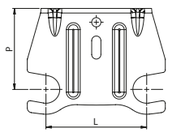
Code	D1	D2	Pack
KP2002	Ø4	Ø7	5

GI-TEC GAS METER BRACKET

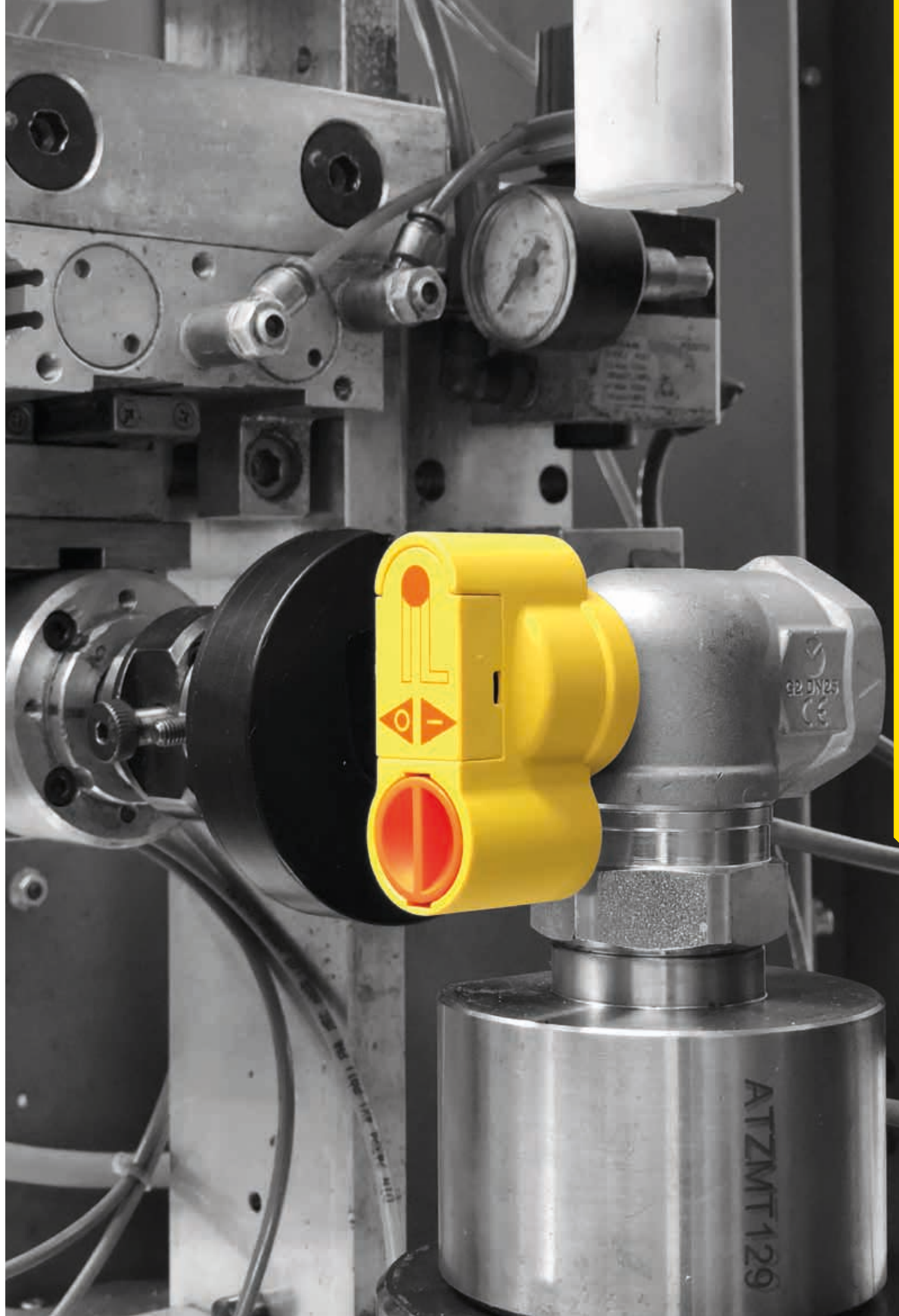


Compatible with valves and
fittings with swivel nut and PUNTO
ARANCIO® pressure fitting

Brackets with a special distance between centres are available on request.



Code	L	p	Pack
KM12000100	110	88	5
KM22000100	250	105	1



G5

METER VALVES FOR 90° DUAL-PIPE GAS METERS

G5 valves are specifically for dual-pipe gas meters.
The valves are available with GST® and FIREBAG® safety devices.
The size range from DN20 to DN50 makes it suitable for use in both residential and industrial gas systems.

HTB

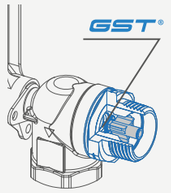
High temperature resistance of 650° for 30 minutes, as required by **EN331:2016 Class C1**

PADLOCKABLE LEVER

All of the valves can be padlocked in the closed position.

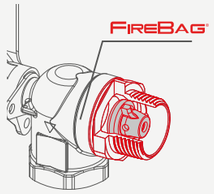
GST®

G5 valves are available with the GST excess flow safety device built into the steel inlet fitting.
The valve sizes remain unchanged.
The GST excess flow safety device is built in accordance with the **DVGW VP 305-1** standard and is built into the **DN25** valve; it has a flow rate V_{GAS} **2.5 - 4.0 - 6.0 m³/h** at a maximum pressure of **100 mbar.**
(see page 245)



FIREBAG® - TAE

G5 valves are available with the FIREBAG® thermal safety device built into the steel inlet fitting. The valve sizes remain unchanged.
FIREBAG® complies with the requirements of the **DIN 3586** standard and is built into the **DN20-25-32** valves. The thermal device activates at a temperature of **100°C - 5K** and can withstand temperatures of up to **650°C for 30 minutes** at a pressure of **5 bar**.
(see page 231)

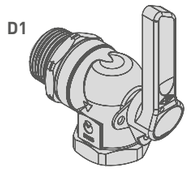


G5 valves are supplied with a single built-in safety device.

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DIN EN 331 DIN 3586 DVGW VP305-1:12/2007 K/M
Pressure	MOP 5 (5 bar)
Working temperature	-20 °C +60 °C
High temperature resistance	HTB 650°C for 30' (DIN EN331 C1)
Application	For all types of gas as specified in EN 437 and DVGW G260/1 (Methane, Butane, Propane)

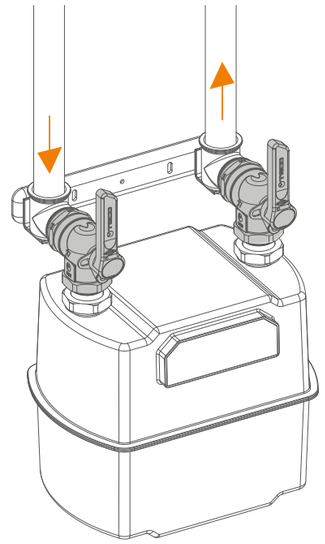
90° VERSION

G5 90° VALVE



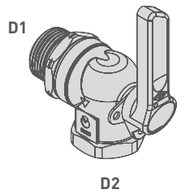
DN	D1 EN 10226-1	D2 EN 10226-1	FIREBAG TAE	GST® GS m³/h
20	R3/4"	Rp3/4"		
25	R1"	Rp1"		
32	R1"1/4	Rp1"1/4		
40	R1"1/2	Rp1"1/2		
50	R2"	Rp2"		
20	R3/4"	Rp3/4"	●	
25	R1"	Rp1"	●	
32	R1"1/4	Rp1"1/4	●	
25	R1"	Rp1"		V_{GAS} 2.5
25	R1"	Rp1"		V_{GAS} 4.0
25	R1"	Rp1"		V_{GAS} 6.0

APPLICATION



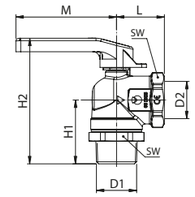
Versions with GST and FIREBAG safety devices can be installed downstream from the meter.

G5 90° VALVE – VERSION FOR DUAL-PIPE GAS METERS



- Padlockable lever

- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 C1)
- HTB 650° for 30' (DIN EN331 C5) - TAE



Code	DN	FIREBAG TAE	GST® GS m³/h	D1	D2	L	H1	H2	M	SW	Pack
G51219L100	20			R3/4"	Rp3/4"	34	84	43	82	32	10
G51319L100	25			R1"	Rp1"	38	102	52	82	41	10
G51419L100	32			R1"1/4	Rp1"1/4	46	135	59	124	50	5
G51519L100	40			R1"1/2	Rp1"1/2	51	150	65	124	55	3
G51619L100	50			R2"	Rp2"	61	158	74	124	70	1
G52219L100	20	●		R3/4"	Rp3/4"	343	84	43	82	32	10
G52319L100	25	●		R1"	Rp1"	38	102	52	82	41	10
G52419L100	32	●		R1"1/4	Rp1"1/4	46	135	59	124	50	5
G53319L200	25		V_{GAS} 2.5	R1"	Rp1"	38	102	52	82	41	10
G53319L300	25		V_{GAS} 4.0	R1"	Rp1"	38	102	52	82	41	10
G53319L400	25		V_{GAS} 6.0	R1"	Rp1"	38	102	52	82	41	10

KM3

INSTALLATION KIT FOR DUAL-PIPE GAS METER

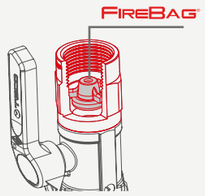
The installation kit for dual-pipe gas meters has a modular structure that covers all installation needs. It is possible to create all necessary combinations from the individual components. However, TECO has chosen to supply pre-packaged kits for rapid and safe installation.
The four type of KM3 lit can be equipped with gas safety devices of both the FIREBAG® thermal and GST® excess flow types.

GST®

The valves are available with the GST excess flow safety device built into the steel inlet fitting. The valve sizes remain unchanged.
The GST excess flow safety device is built in accordance with the **DVGW VP 305-1** standard and is built into the valves/fittings; it has a flow rate V_{GAS} **2.5 - 4.0 - 6.0 m³/h** at a maximum pressure of **100 mbar.**
(see page 245)

FIREBAG® - TAE

KM3 valves are available with the FIREBAG thermal safety device built into the steel inlet fitting. The valve sizes remain unchanged.
FIREBAG complies with the requirements of the **DIN 3586** standard and is built into the valves/ fittings. The thermal device activates at a temperature of **100°C - 5K** and can withstand temperatures of up to **650°C for 30 minutes** at a pressure of **5 bar**.
(see page 231)



KM3 valves are supplied with a single safety device.

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DIN EN 331 DIN 3586 DVGW VP305-1:12/2007 K/M DVGW G5614
Working pressure	MOP 5 (5 bar)
Working temperature	-20 °C +60 °C
High temperature resistance	HTB 650°C for 30' (DIN EN331 B1)
Application	For all types of gas as specified in EN 437 and DVGW G260/1 (Methane, Butane, Propane)

Valves with safety devices must be installed upstream from the meter.

Pay attention to the arrow hat indicates the gas flow direction.

UNIPRESS®

Teco also offers the valves with crimp connections compatible with copper pipes in accordance with the **DVGW G 5614** standard and in compliance with **UNI 1065**. The fittings are compatible with the crimping tools for DVGW certified -M- or -V- systems.

PADLOCKABLE LEVER

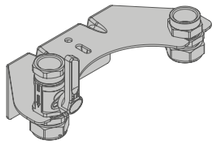
All of the valves can be padlocked in the closed position

GI-TEC

Strong fixing bracket

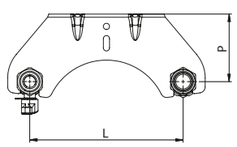
Built-in sealable swivel nuts for a fast and secure gas meter connection.

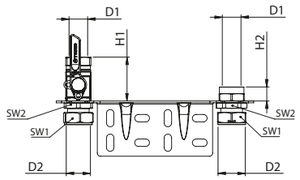
VALVE + FITTING KIT – THREADED VERSION



- Fixing bracket
- Padlockable lever

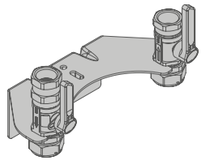
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B1)
- HTB 650° for 30' (DIN EN331 C5) - TAE





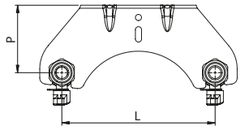
Code	DN	FIREBAG TAE	GST® GS m³/h	D1	D2	L	P	H1	H2	SW1	SW2	Pack
KM3VF1RC100	25			Rp1"	G1"1/4	250	110	71	23	46	46	1
KM3VT1RC100	25	●		Rp1"	G1"1/4	250	110	95	23	46	46	1
KM3VG1RC100	25		V_{GAS} 2.5	Rp1"	G1"1/4	250	110	95	23	46	46	1
KM3VG2RC100	25		V_{GAS} 4.0	Rp1"	G1"1/4	250	110	95	23	46	46	1
KM3VG3RC100	25		V_{GAS} 6.0	Rp1"	G1"1/4	250	110	95	23	46	46	1

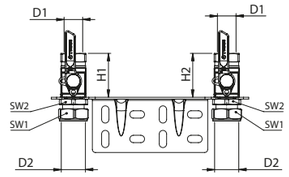
KIT WITH 2 VALVES – THREADED VERSION



- Fixing bracket
- Padlockable lever

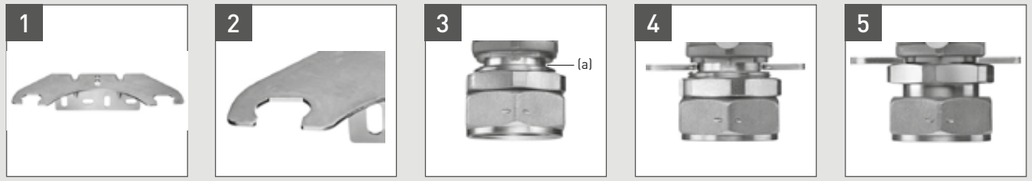
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B1)
- HTB 650° for 30' (DIN EN331 C5) - TAE





Code	DN	FIREBAG TAE	GST® GS m³/h	D1	D2	L	P	H1	H2	SW1	SW2	Pack
KM3VF1VF200	25			Rp1"	G1"1/4	250	110	71	71.5	46	46	1
KM3VT1VF200	25	●		Rp1"	G1"1/4	250	110	95	71.5	46	46	1
KM3VG1VF200	25		V_{GAS} 2.5	Rp1"	G1"1/4	250	110	95	71.5	46	46	1
KM3VG2VF200	25		V_{GAS} 4.0	Rp1"	G1"1/4	250	110	95	71.5	46	46	1
KM3VG3VF200	25		V_{GAS} 6.0	Rp1"	G1"1/4	250	110	95	71.5	46	46	1

APPLICATION CALIBRATED COUPLING GUIDE

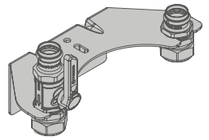


1 Installation bracket with connection for fitting and ball valve.

2 Insert the fitting and the ball valve **(3)** with calibrated guide (a) and lock the spanner in the anti-rotation block **(4)**.

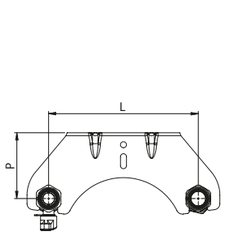
5 Secure with the lock nut.

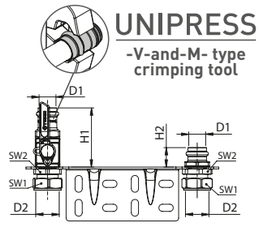
VALVE + FITTING KIT – CRIMP VERSION



- Fixing bracket
- Padlockable lever

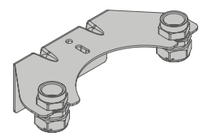
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B1)
- HTB 650° for 30' (DIN EN331 C5) - TAE





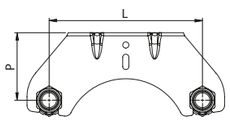
Code	DN	FIREBAG TAE	GST® GS m³/h	D1	D2	L	P	H1	H2	SW1	SW2	Pack
KM3PP1RC100	25			Ø28	G1"1/4	250	110	99	32	46	46	1
KM3PT1RC100	25	●		Ø28	G1"1/4	250	110	95	32	46	46	1
KM3PG1RC100	25		V_{GAS} 2.5	Ø28	G1"1/4	250	110	99	32	46	46	1
KM3PG2RC100	25		V_{GAS} 4.0	Ø28	G1"1/4	250	110	99	32	46	46	1
KM3PG3RC100	25		V_{GAS} 6.0	Ø28	G1"1/4	250	110	99	32	46	46	1

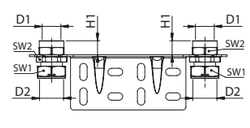
KIT WITH 2 FITTINGS – THREADED VERSION



- Fixing bracket

- MOP 5
- -20 °C +60 °C





Code	DN	D1	D2	L	P	H1	SW1	SW2	Pack
KM3RC1RC100	25	Rp1"	G1"1/4	250	110	23	46	46	1

Open

Closed

CLOSING THE VALVE

When the lever is in the "CLOSED" position, it can be locked with a device (e.g. a padlock) to protect the system against involuntary opening of the valve.

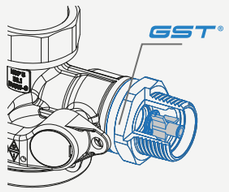
G6

METER VALVE FOR SINGLE-PIPE GAS METERS

G6 valves are specifically for single-pipe gas meters and are available with Firebag® and GST® safety devices.
The range includes both the straight and elbow version, both with a built-in pressure fitting.

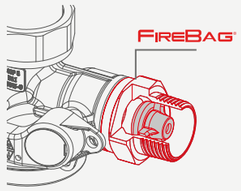
GST®

The valves are available with the GST® excess flow safety device built into the steel inlet fitting. The valve sizes remain unchanged.
The GST® excess flow safety device is built in accordance with the **DVGW VP 305-1** standard and is built into the valves/fittings; it has a flow rate V_{GAS} **2.5 - 4.0 - 6.0 m³/h** at a maximum pressure of **100 mbar.**
(see page 245)



FIREBAG® - TAE

G6 valves are available with the FIREBAG® thermal safety device built into the steel inlet fitting. The valve sizes remain unchanged.
The FIREBAG® device meets the requirements of the **DIN 3586** standard and is built into the valves/fittings. The thermal device activates at a temperature of **100°C - 5K** and can withstand temperatures of up to **650°C for 30 minutes** at a pressure of **5 bar**.
(see page 231)



G6 valves are supplied with a single built-in safety device.

DVGW product · SVGW SSIGE

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DIN EN 331 DIN 3376/T2 DIN 3586 DVGW VP305-1:12/2007 K/M DVGW G 5614 DVGW VP 308
Working pressure	MOP 5 (5 bar)
Working temperature	-20 °C +60 °C
High temperature resistance	HTB 650°C for 30' (DIN EN331 B0.1)
Application	For all types of gas as specified in EN 437 and DVGW G260/1 (Methane, Butane, Propane)

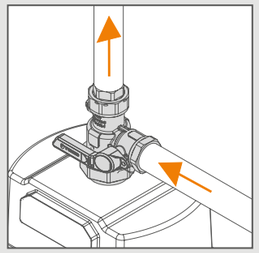
UNIPRESS®

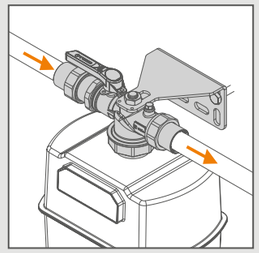
Teco also offers the valves with crimp connections compatible with copper pipes in accordance with the **DVGW G 5614** standard and in compliance with **UNI 1065**.
The fittings are compatible with the crimping tools for DVGW certified -M- or -V- systems.

HTB

High temperature resistance of 650° for 30 minutes, as required by **EN1775 and DIN EN331.**

FULL RANGE


Right-angle version


Straight version

GI-TEC

Strong fixing bracket (supplied with straight single-pipe valves only)

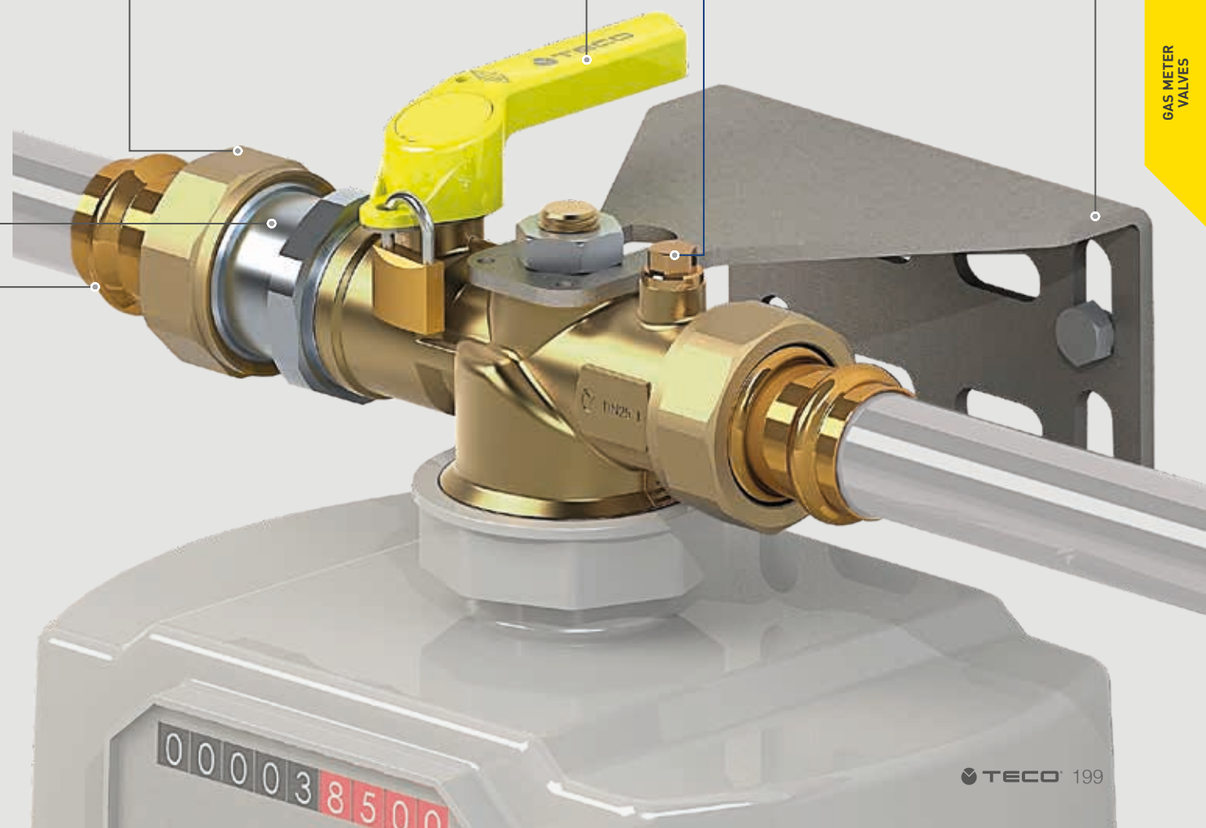
PADLOCKABLE LEVER

All of the valves can be padlocked in the "CLOSED" position

TAPERED SEAL

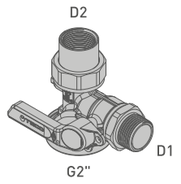
Fitting with tapered seal
DIN 3436

PRESSURE FITTING
All G6 valves for single-pipe gas meters have a pressure fitting that is certified in accordance with DVGW VP 308



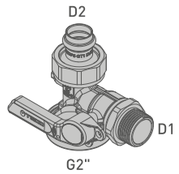
90° VERSION

DIN 3376-T2 90° threaded valve with threaded fitting



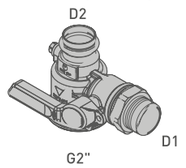
DN	D1 EN 10226-1	D2 EN 10226-1	FIREBAG TAE	GST® GS m³/h
25	R1"	Rp1"		
25			●	
25				V_{GAS} 2.5
25				V_{GAS} 4.0
25				V_{GAS} 6.0

DIN 3376-T2 90° threaded valve with crimp fitting



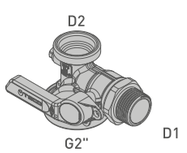
DN	D1 EN 10226-1	D2 mm	FIREBAG TAE	GST® GS m³/h
25	R1"	ø22		
25			●	
25				V_{GAS} 2.5
25				V_{GAS} 4.0
25				V_{GAS} 6.0

DIN 3376-T2 90° threaded/crimp one-piece valve



DN	D1 EN 10226-1	D2 mm	FIREBAG TAE	GST® GS m³/h
25	R1"	ø28		
25			●	
25				V_{GAS} 2.5
25				V_{GAS} 4.0
25				V_{GAS} 6.0

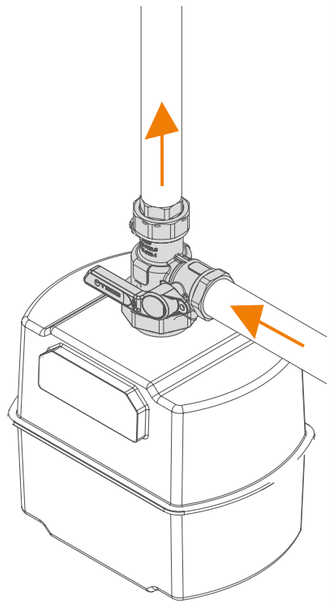
DIN 3376-T2 90° threaded valve with connection for DIN 3436 fittings



DN	D1 EN 10226-1	D2 ISO228-1	FIREBAG TAE	GST® GS m³/h
25	R1"	G1"3/8		
25			●	
25				V_{GAS} 2.5
25				V_{GAS} 4.0
25				V_{GAS} 6.0

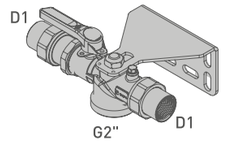
DIN 3436 fittings

APPLICATION



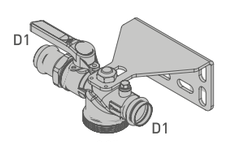
STRAIGHT VERSION

DIN 3376-T2 straight valve with threaded fittings



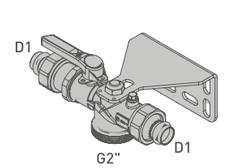
DN	D1 EN 10226-1	FIREBAG TAE	GST® GS m³/h
25	R1"		
25		●	
25			V_{GAS} 2.5
25			V_{GAS} 4.0
25			V_{GAS} 6.0

DIN 3376-T2 straight single-piece valve with crimp fittings



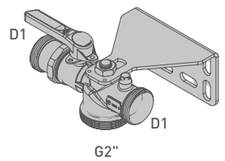
DN	D1 mm	FIREBAG TAE	GST® GS m³/h
25	ø28		
25		●	
25			V_{GAS} 2.5
25			V_{GAS} 4.0
25			V_{GAS} 6.0

DIN 3376-T2 straight valve with crimp fittings



DN	D1 EN 10226-1	FIREBAG TAE	GST® GS m³/h
25	ø22		
25		●	
25			V_{GAS} 2.5
25			V_{GAS} 4.0
25			V_{GAS} 6.0

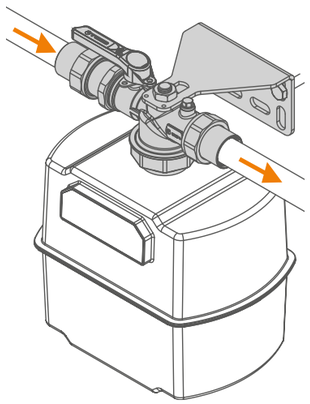
DIN 3376-T2 straight threaded valve with connection for DIN 3436 fittings



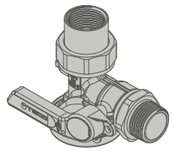
DN	D1 ISO228-1	FIREBAG TAE	GST® GS m³/h
25	G1"3/8		
25		●	
25			V_{GAS} 2.5
25			V_{GAS} 4.0
25			V_{GAS} 6.0

DIN 3436 fittings

APPLICATION

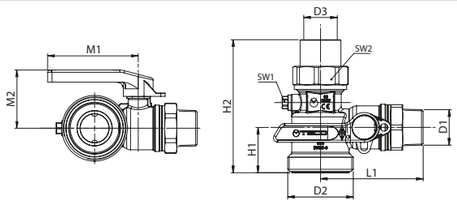


90° VALVE
INLET: R1" THREAD - OUTLET: RP1" FITTING



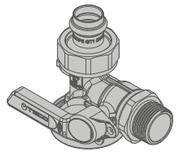
- Padlockable lever
- G1/8" pressure fitting

- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)
- HTB 650° for 30' (DIN EN331 C5) - TAE



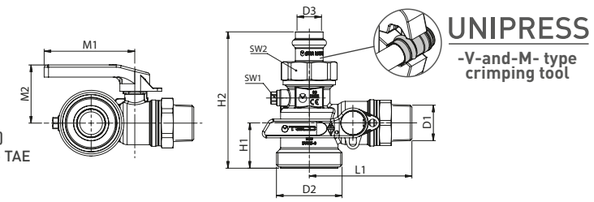
Code	DN	FIREBAG TAE	GST GS m³/h	D1	D2	D3	L1	H1	H2	M1	M2	SW1.	SW2	Pack
G61315L100	25			R1"	G2"	Rp1"	83	41	112	82	53	12	48	10
G62315L100	25	●		R1"	G2"	Rp1"	93	41	112	82	53	12	48	10
G63315L200	25		V_{GAS}=2.5	R1"	G2"	Rp1"	90	41	112	82	53	12	48	10
G63315L300	25		V_{GAS}=4.0	R1"	G2"	Rp1"	90	41	112	82	53	12	48	10
G63315L400	25		V_{GAS}=6.0	R1"	G2"	Rp1"	90	41	112	82	53	12	48	10

90° VALVE
INLET: R1" THREAD - OUTLET: CRIMP FITTING, DIAM. 22MM



- Padlockable lever
- G1/8" pressure fitting

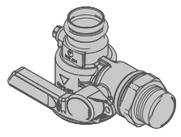
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)
- HTB 650° for 30' (DIN EN331 C5) - TAE



UNIPRESS
-V-and-M- type crimping tool

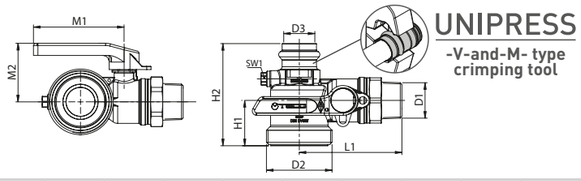
Code	DN	FIREBAG TAE	GST GS m³/h	D1	D2	D3	L1	H1	H2	M1	M2	SW1.	SW2	Pack
G6131DL100	25			R1"	G2"	Ø22	83	41	114	82	53	12	48	10
G6231DL100	25	●		R1"	G2"	Ø22	93	41	114	82	53	12	48	10
G6331DL200	25		V_{GAS}=2.5	R1"	G2"	Ø22	90	41	114	82	53	12	48	10
G6331DL300	25		V_{GAS}=4.0	R1"	G2"	Ø22	90	41	114	82	53	12	48	10
G6331DL400	25		V_{GAS}=6.0	R1"	G2"	Ø22	90	41	114	82	53	12	48	10

90° SINGLE-PIECE VALVE
INLET: R1" THREAD - OUTLET: CRIMP, DIAM. 28MM



- Padlockable lever
- G1/8" pressure fitting

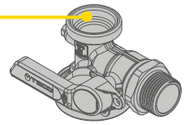
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 C1)



UNIPRESS
-V-and-M- type crimping tool

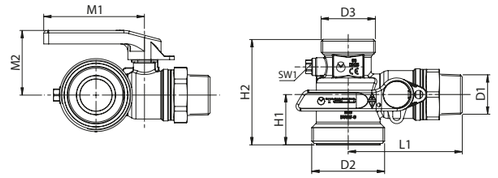
Code	DN	FIREBAG TAE	GST GS m³/h	D1	D2	D3	L1	H1	H2	M1	M2	SW1.	SW2	Pack
G6131SL100	25			R1"	G2"	Ø28	93	41	93	82	53	12	48	10
G6231SL100	25	●		R1"	G2"	Ø28	93	41	93	82	53	12	48	10
G6331SL200	25		V_{GAS}=2.5	R1"	G2"	Ø28	90	41	93	82	53	12	48	10
G6331SL300	25		V_{GAS}=4.0	R1"	G2"	Ø28	90	41	93	82	53	12	48	10
G6331SL400	25		V_{GAS}=6.0	R1"	G2"	Ø28	90	41	93	82	53	12	48	10

90° THREADED VALVE WITH CONNECTION FOR DIN 3436 FITTINGS
INLET: R1" THREAD - OUTLET: G1"3/8 CONNECTION



- Padlockable lever
- G1/8" pressure fitting

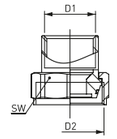
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)
- HTB 650° for 30' (DIN EN331 C5) - TAE



Code	DN	FIREBAG TAE	GST GS m³/h	D1	D2	D3	L1	H1	H2	M1	M2	SW1.	SW2	Pack
G61316L100	25			R1"	G2"	G1"3/8	83	41	77	82	53	12	48	10
G62316L100	25	●		R1"	G2"	G1"3/8	93	41	77	82	53	12	48	10
G63316L200	25		V_{GAS}=2.5	R1"	G2"	G1"3/8	90	41	77	82	53	12	48	10
G63316L300	25		V_{GAS}=4.0	R1"	G2"	G1"3/8	90	41	77	82	53	12	48	10
G63316L400	25		V_{GAS}=6.0	R1"	G2"	G1"3/8	90	41	77	82	53	12	48	10

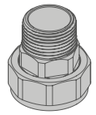
DIN 3436 G1" 3/8 FITTINGS WITH TAPERED SEALS

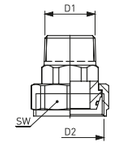
RP 1" FITTING



Code	D1 ISO 228	D2 EN 10226-1	SW	Pack
CD0131453100	Rp1"	1"3/8	48	10

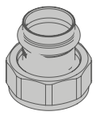
R1" FITTING

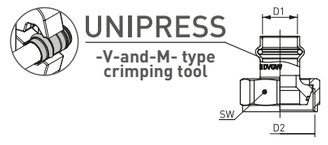




Code	D1 ISO 228	D2 EN 10226-1	SW	Pack
CD0131453200	R1"	1"3/8	48	10

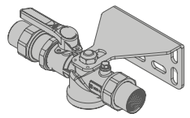
CRIMP FITTING





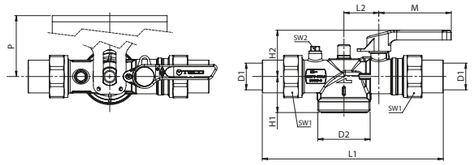
Code	D1 ISO 228	D2 EN 10226-1	SW	Pack
CD01314B3100	Ø22	1"3/8	48	10
CD01314B4100	Ø28	1"3/8	48	10

STRAIGHT VALVE
INLET: RP1" FITTING - OUTLET: RP1" FITTING



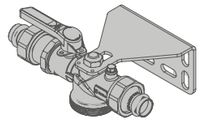
- Padlockable lever
- G1/8 pressure fitting
- Steel fixing bracket

- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)
- HTB 650° for 30' (DIN EN331 C5) - TAE



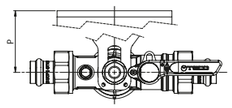
Code	DN	FIREBAG TAE	GST GS m3/h	D1	D2	H1	H2	L1	L2	M	SW1	P	Pack
G61305L100	25			Rp1"	G2"	41	52	204	40	82	10	100+120	5
G62305L100	25	●		Rp1"	G2"	41	52	204	40	82	10	100+120	5
G63305L200	25		V_{GAS} 2.5	Rp1"	G2"	41	52	204	40	82	10	100+120	5
G63305L300	25		V_{GAS} 4.0	Rp1"	G2"	41	52	204	40	82	10	100+120	5
G63305L400	25		V_{GAS} 6.0	Rp1"	G2"	41	52	204	40	82	10	100+120	5

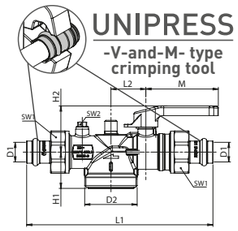
STRAIGHT VALVE
INLET: CRIMP FITTING, DIAM. 22 - OUTLET: CRIMP FITTING, DIAM. 22



- Padlockable lever
- G1/8 pressure fitting
- Steel fixing bracket

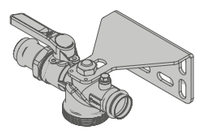
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)
- HTB 650° for 30' (DIN EN331 C5) - TAE





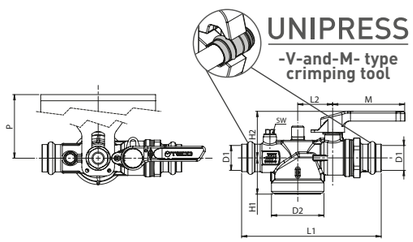
Code	DN	FIREBAG TAE	GST GS m3/h	D1	D2	H1	H2	L1	L2	M	SW2	SW2	P	Pack
G6130DL100	25			Ø22	G2"	41	52	210	40	82	48	10	100+120	5
G6230DL100	25	●		Ø22	G2"	41	52	210	40	82	48	10	100+120	5
G6330DL200	25		V_{GAS} 2.5	Ø22	G2"	41	52	210	40	82	48	10	100+120	5
G6330DL300	25		V_{GAS} 4.0	Ø22	G2"	41	52	210	40	82	48	10	100+120	5
G6330DL400	25		V_{GAS} 6.0	Ø22	G2"	41	52	210	40	82	48	10	100+120	5

STRAIGHT SINGLE-PIECE VALVE
INLET: CRIMP, DIAM. 28 - OUTLET: CRIMP, DIAM. 28



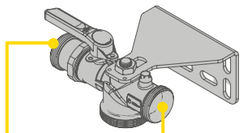
- Padlockable lever
- G1/8 pressure fitting
- Steel fixing bracket

- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 C1)



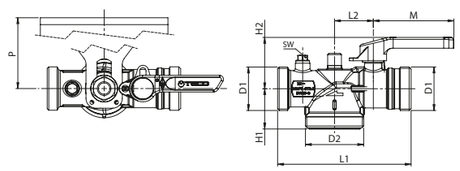
Code	DN	FIREBAG TAE	GST GS m3/h	D1	D2	H1	H2	L1	L2	M	SW	P	Pack
G6130SL100	25			Ø28	G2"	41	52	158	40	82	10	100+120	5
G6230SL100	25	●		Ø28	G2"	41	52	158	40	82	10	100+120	5
G6330SL200	25		V_{GAS} 2.5	Ø28	G2"	41	52	158	40	82	10	100+120	5
G6330SL300	25		V_{GAS} 4.0	Ø28	G2"	41	52	158	40	82	10	100+120	5
G6330SL400	25		V_{GAS} 6.0	Ø28	G2"	41	52	158	40	82	10	100+120	5

STRAIGHT THREADED VALVE WITH CONNECTION FOR DIN 3436 FITTINGS
INLET: G 1"3/8 CONNECTION - OUTLET: G 1"3/8 CONNECTION



- Padlockable lever
- G1/8 pressure fitting
- Steel fixing bracket

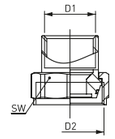
- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN331 B0.1)
- HTB 650° for 30' (DIN EN331 C5) - TAE



Code	DN	FIREBAG TAE	GST GS m3/h	D1	D2	H1	H2	L1	L2	M	SW	P	Pack
G61306L100	25			G1"3/8	G2"	41	52	136	40	82	10	100+120	5
G62306L100	25	●		G1"3/8	G2"	41	52	136	40	82	10	100+120	5
G63306L200	25		V_{GAS} 2.5	G1"3/8	G2"	41	52	136	40	82	10	100+120	5
G63306L300	25		V_{GAS} 4.0	G1"3/8	G2"	41	52	136	40	82	10	100+120	5
G63306L400	25		V_{GAS} 6.0	G1"3/8	G2"	41	52	136	40	82	10	100+120	5

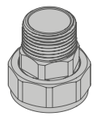
DIN 3436 G1" 3/8 FITTINGS WITH TAPERED SEALS

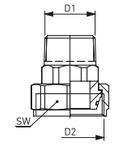
RP 1" FITTING



Code	D1 ISO 228	D2 EN 10226-1	SW	Pack
CD0131453100	Rp1"	1"3/8	48	10

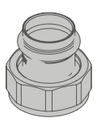
R1" FITTING





Code	D1 ISO 228	D2 EN 10226-1	SW	Pack
CD0131453200	R1"	1"3/8	48	10

CRIMP FITTING

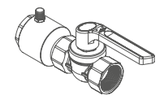


Code	D1 ISO 228	D2 EN 10226-1	SW	Pack
CD01314B3100	Ø22	1"3/8	48	10
CD01314B4100	Ø28	1"3/8	48	10

G4 - G4F

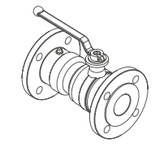
VALVES FOR GAS SYSTEMS WITH THERMAL SAFETY DEVICE

G4
Shut-off valve with Firebag® thermal safety device
DN15 - DN50 threaded version



207

G4F
Shut-off valve with Firebag® thermal safety device
DN25 - DN150 flanged version



210

G4

SHUT-OFF VALVE WITH THERMAL SAFETY DEVICE

THREADED VERSION

FULL RANGE:
Threaded version from DN15 (1/2") to DN50 (2").

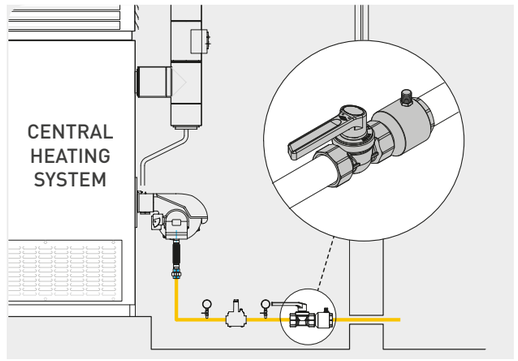
FIREBAG® - TAE

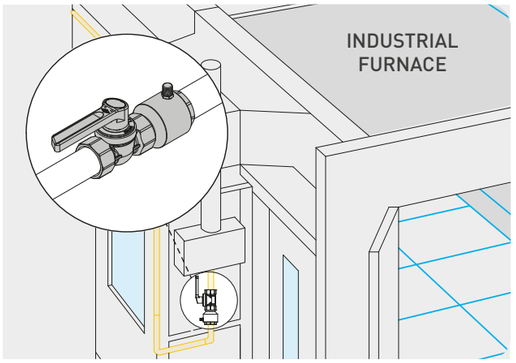
G4 valves have a FIREBAG® thermal safety device built into the steel inlet fitting.
FIREBAG® complies with the requirements of the **DIN 3586** standard and activates at a temperature of **100°C -5K and withstands up to 925°C for 60 minutes** at a pressure of **5 bar**.
(see page 231)

DVGW product · SVGW SSIGE

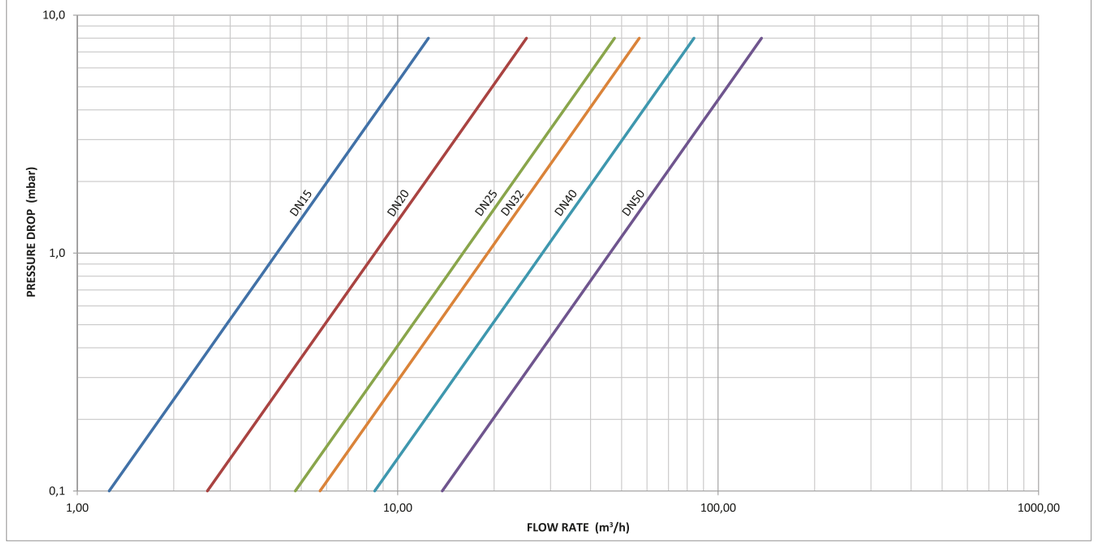
CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DIN EN 331 DIN 3586
Working pressure	MOP 5 (5 bar)
Working temperature	-20 °C +60 °C
High temperature resistance	HTB 650°C for 30' (DIN EN331 C5)
FIREBAG® trip temperature	100°C - 5K
Application	For all types of gas as specified in EN 437 and DWG G260/1 (Methane, Butane, Propane)

INSTALLATION AND APPLICATION EXAMPLES



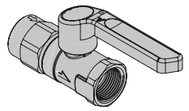


G4 PRESSURE DROP

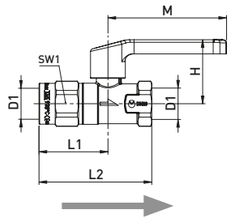


G4 THREADED SHUT-OFF VALVE WITH FIREBAG® THERMAL SAFETY DEVICE

STRAIGHT VALVE – THREADED F/F VERSION



- MOP 5
- -20 °C +60 °C
- HTB 650° for 30' (DIN EN 331 C5)



Code	DN	FIREBAG® TAE	D1	L1	L2	H	M	SW	Pack
G221010100	15	●	Rp1/2"	46	75	58	46	27	15
G222010100	20	●	Rp3/4"	53	86	61	49	32	10
G223010100	25	●	Rp1"	68	105	71	52	41	5
G424010100	32	●	Rp1"1/4	122	172	76	72	50	5
G425010100	40	●	Rp1"1/2	126	180	82	76	60	5
G426010100	50	●	Rp2"	153	216	88	85	70	5

G4F

SHUT-OFF VALVE

FLANGED VERSION

FULL RANGE:
Flanged version from DN25 to DN150.

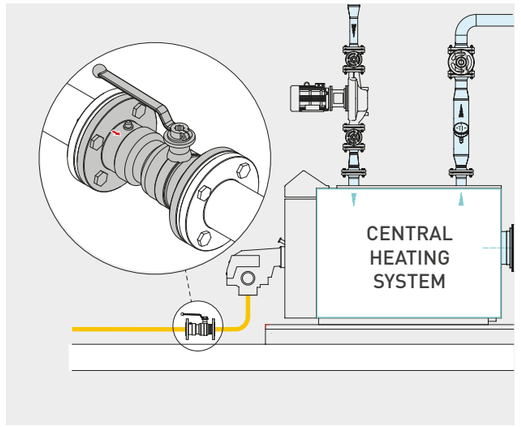
FIREBAG® - TAE

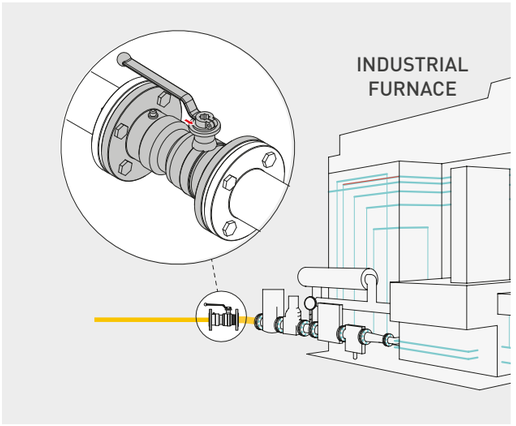
G4F valves have a FIREBAG® thermal safety device built into the steel inlet fitting.
FIREBAG® complies with the requirements of the **DIN 3586** standard and activates at a temperature of **100°C -5K** and withstands up to **650°C for 30 minutes** at a pressure of **16 bar** (using the MS2 flange assembly kit).
(see page 231)

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS

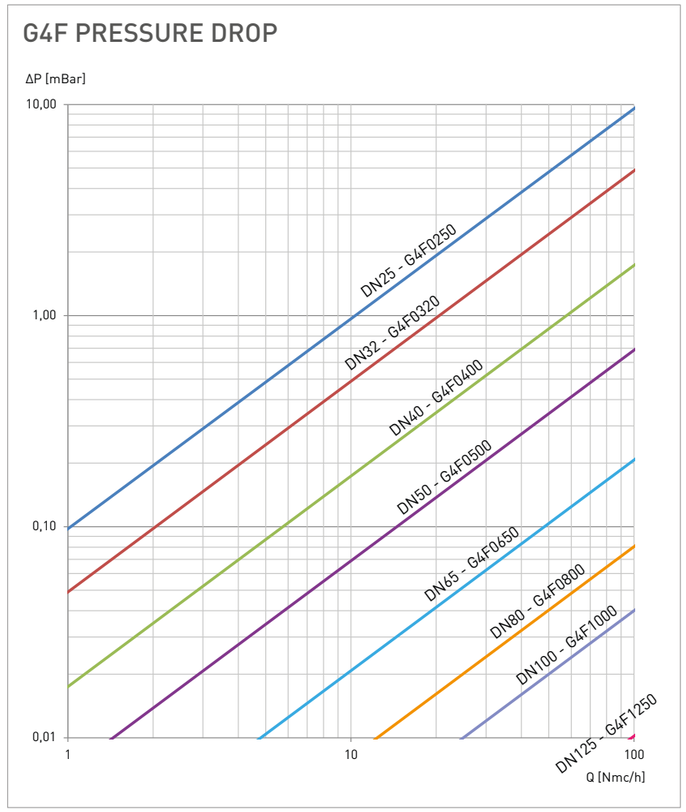
Reference standards	DIN EN 13774 DIN 3586 EN 1092-2 EU/2016/426 gas appliances regulation PED2014/68/EU directive
Working pressure	MOP 16 (16 bar)
Working temperature	-20 °C +60 °C
High temperature resistance	HTB 650 °C for 30' (GT5) **HTB 650 °C for 30' (GT16)
FIREBAG® trip temperature	100 °C - 5K
Application	For all types of gas as specified in EN 437 and DWG G260/1 (Methane, Butane, Propane)

INSTALLATION AND APPLICATION EXAMPLES



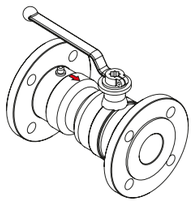


G4F PRESSURE DROP



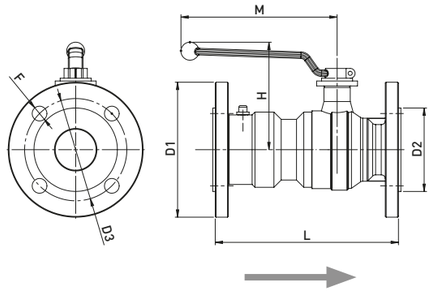
G4F FLANGED SHUT-OFF VALVE WITH FIREBAG® THERMAL SAFETY DEVICE

FLANGED VALVE DIN EN 1092



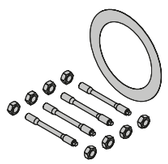
- MOP 16
- -20 °C +60 °C
- HTB 650°C for 30' (GT16)

The HTB 650°C for 30' (GT16) seal is only guaranteed for 30' if the MS2 assembly kit is used.

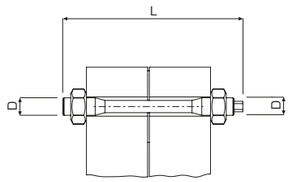


Code	DN	FIREBAG TAE	D1	D2	D3	F	L	H	M	Pack
G4TF0250	25	●	115	68	85	14	160	114	165	1
G4TF0320	32	●	140	80	100	18	180	125	165	1
G4TF0400	40	●	150	90	110	18	200	136	185	1
G4TF0500	50	●	165	105	125	18	230	143	185	1
G4TF0650	65	●	185	125	145	18	290	158	230	1
G4TF0800	80	●	200	140	160	18	310	186	360	1
G4TF1000	100	●	220	160	180	18	350	203	360	1
G4TF1250	125	●	250	190	210	18	400	223	360	1
G4TF1500	150	●	285	216	240	22	480	230	625	1

MS2 FLANGE ASSEMBLY KIT

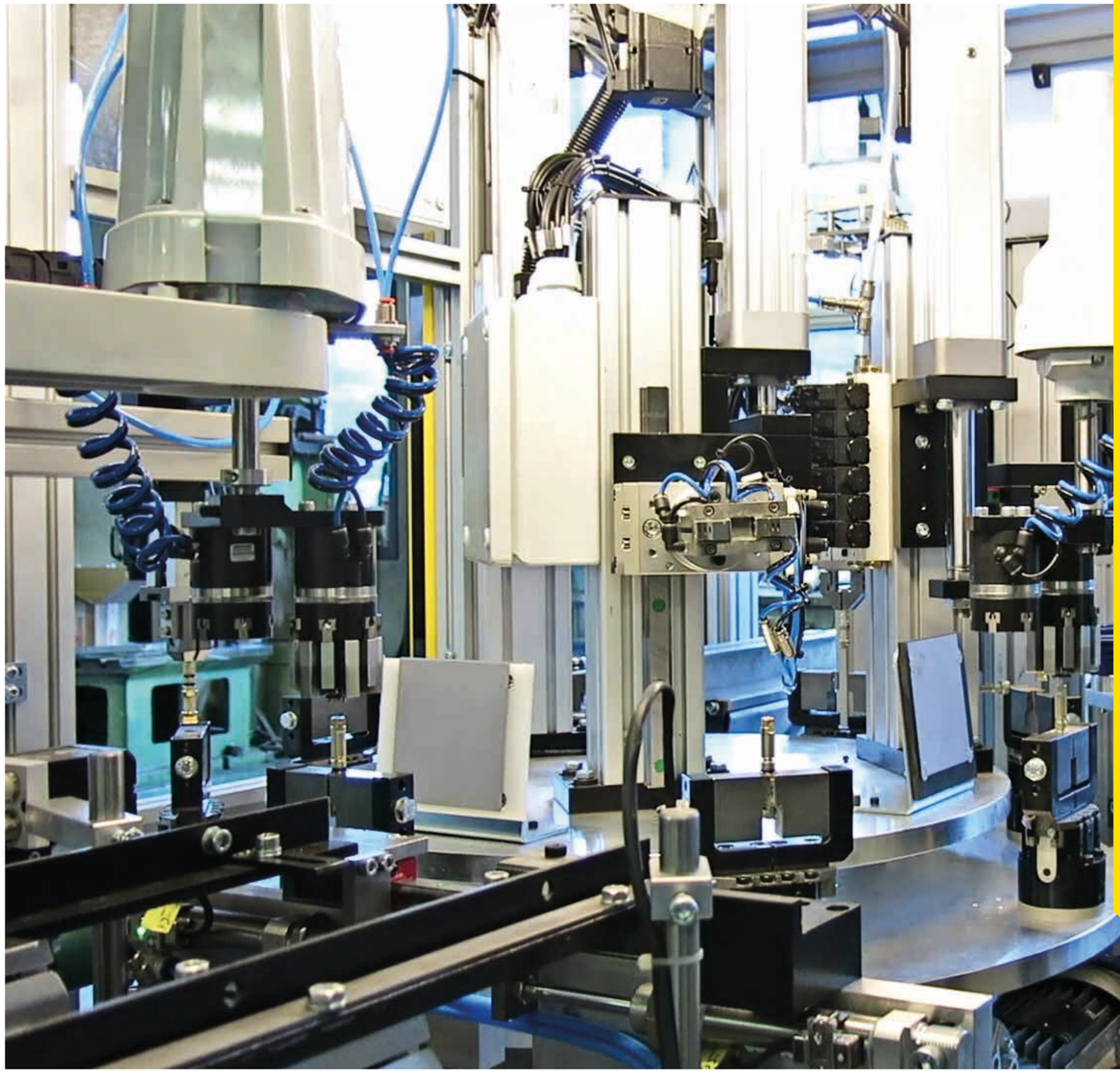


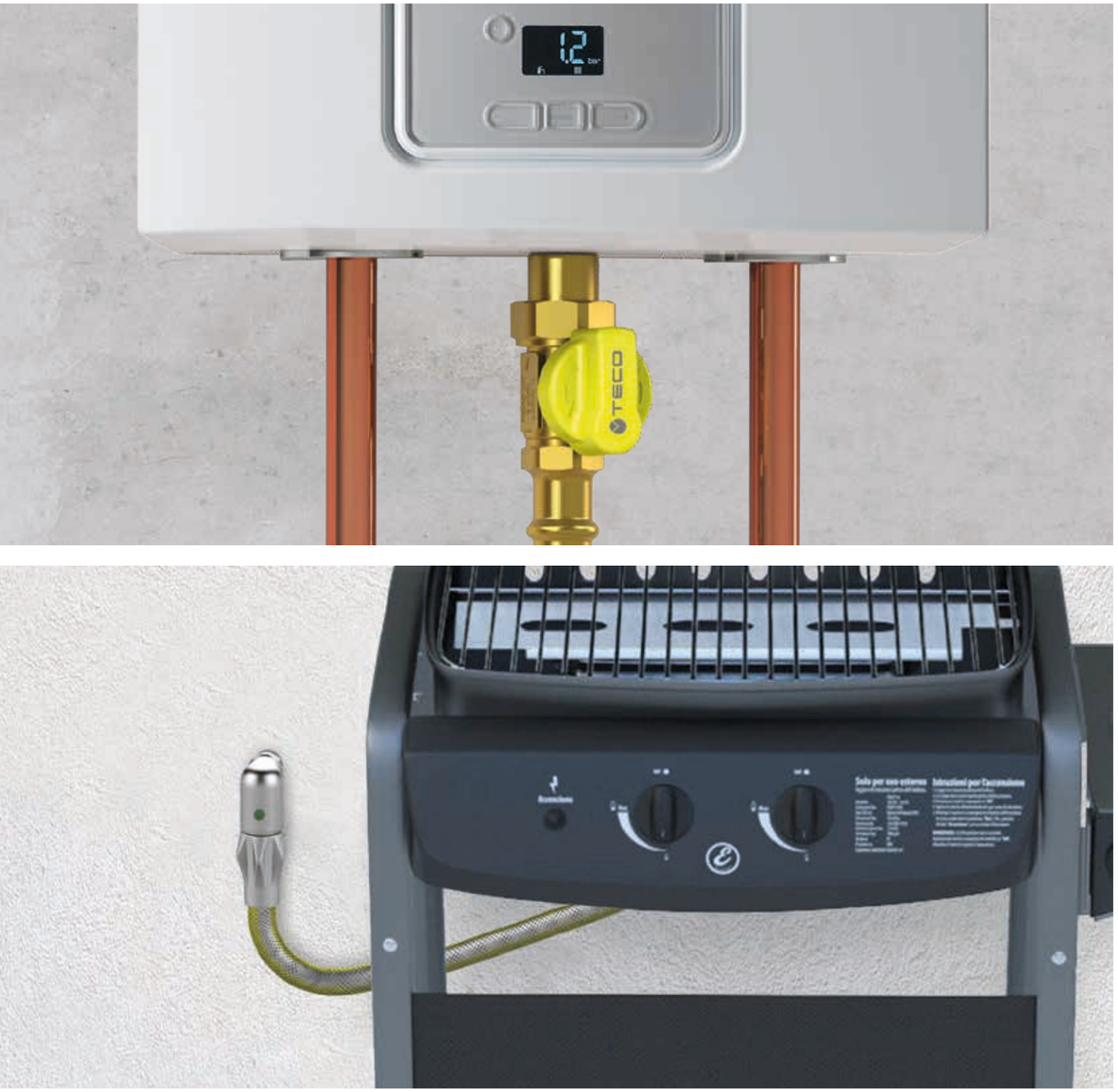
- HTB 650°C for 30' (GT16)



Code	DN
MS2025	25
MS2032	32
MS2040	40
MS2050	50
MS2065	65

Code	DN
MS2080	80
MS2100	100
MS2125	125
MS2150	150
MS2200	200





G2/R2-R4

VALVES FOR GAS APPLIANCES

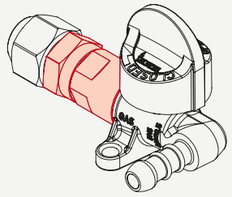
G2

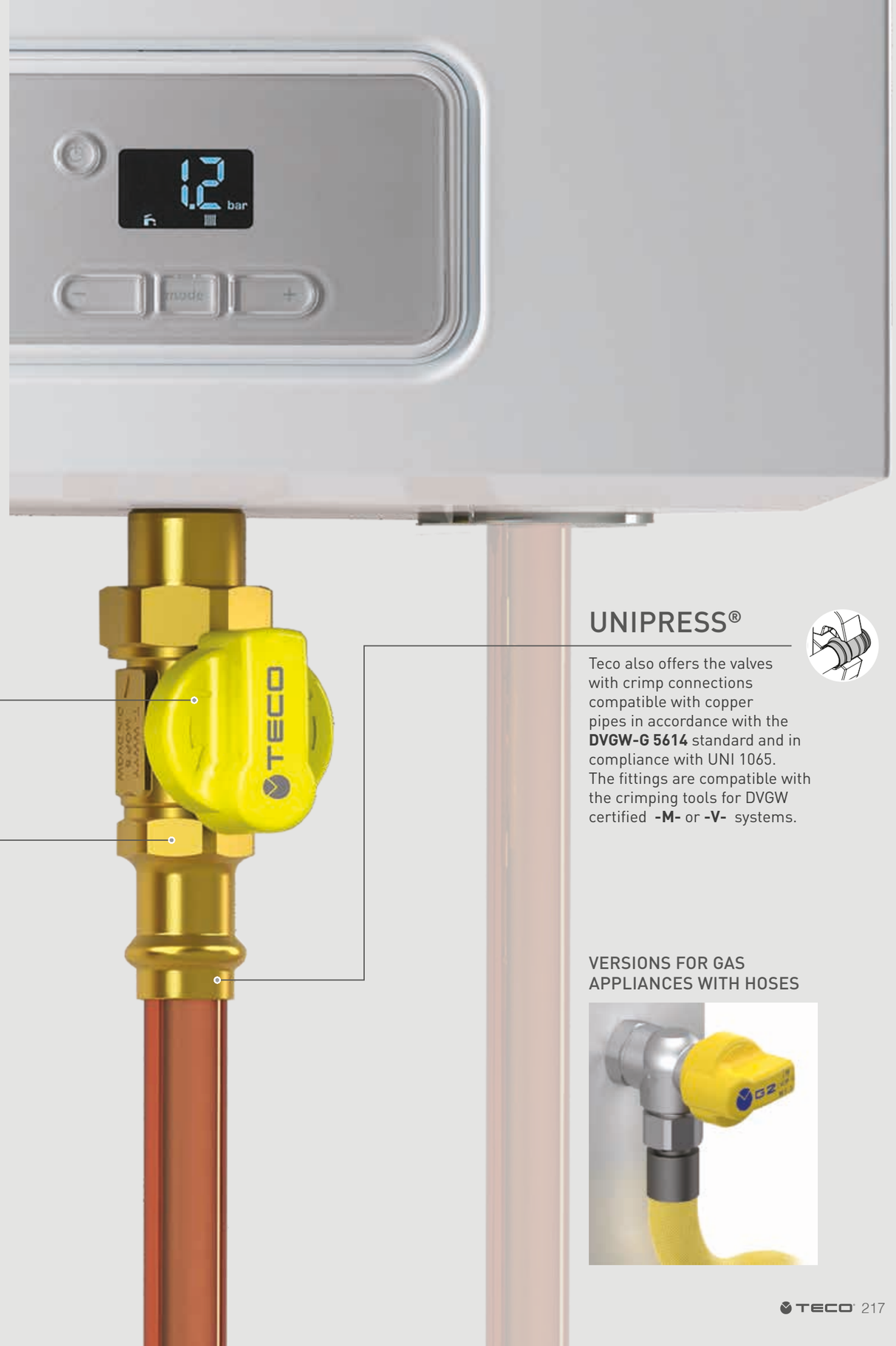
VALVES FOR GAS APPLIANCES WITH FIREBAG® THERMAL SAFETY DEVICE

G2 valves are designed and built to guarantee maximum safety in gas systems.
They have FIREBAG® thermally activated safety device and TECOBLOCK handles.
The range includes both the straight and elbow version, in DN15-20-25 sizes.

TECO INNOVATING SAFETY oem

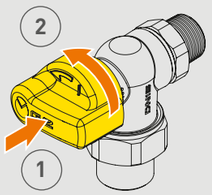
Over the years, numerous "tailor made" versions have joined the catalogue range of products. Our research and development department, TECO R&D, has developed customised constructional or technical features for products, supporting customer requests and the system engineering needs of the market through mutual cooperation.





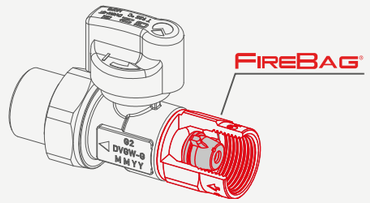
TECOBLOCK HANDLE

TECOBLOCK system for locking the valve in the closed position.
It can never be opened accidentally. The valve can only be opened after pressing the handle.



FIREBAG® - TAE

The valves have a FIREBAG® thermal safety device built into the steel inlet fitting. This solution makes it possible to leave the valve dimensions unchanged. FIREBAG® is built in accordance with the **DIN 3586** standard and is built into **DN15-20-25** valves; it activates at a temperature of **100°C -5K** and can withstand up to 650 °C for 30' at a pressure of **5 bar**.
(see page 231)



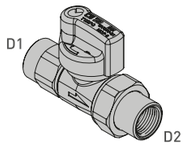
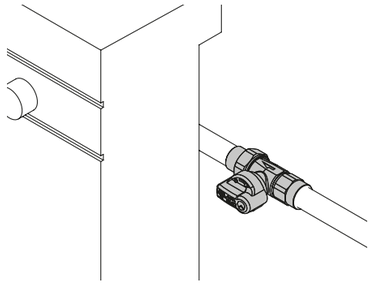
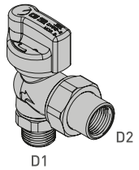
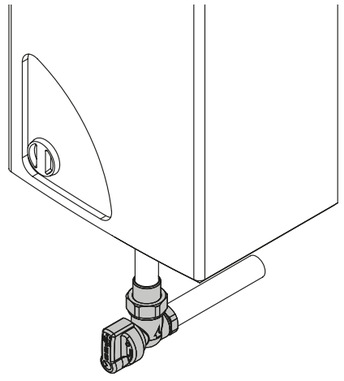
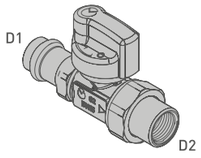
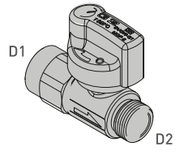
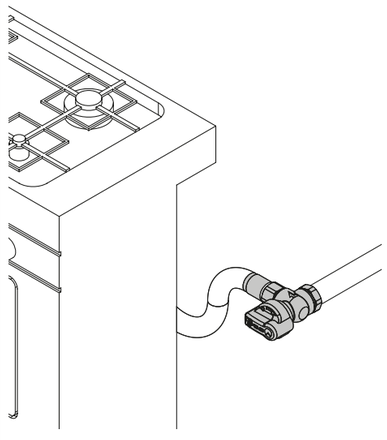
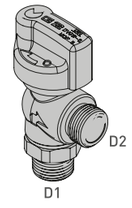
UNIPRESS®

Teco also offers the valves with crimp connections compatible with copper pipes in accordance with the **DVGW-G 5614** standard and in compliance with UNI 1065.
The fittings are compatible with the crimping tools for DVGW certified **-M-** or **-V-** systems.

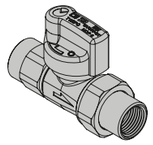
VERSIONS FOR GAS APPLIANCES WITH HOSES

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS

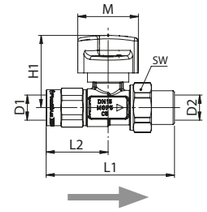
Reference standards	DIN EN 331 DIN 3586 DIN DVGW G5614 UE 2016/426
Working pressure	MOP 5 (5 bar)
Temperature	-20 °C +60 °C
High temperature resistance	HTB 650 °C for 30' (DIN EN331 C5)
Application	For all types of gas as specified in EN 437 and DVGW G260/1 (Methane, Butane, Propane)

VERSION	DN	FIREBAG TAE	D1 EN 10226-1	D2 EN 10226-1	APPLICATION EXAMPLES
STRAIGHT VALVE WITH FIREBAG®, THREADED / THREADED FITTING VERSION 	15	●	Rp1/2"	Rp1/2"	
	20	●	Rp3/4"	Rp3/4"	
	25	●	Rp1"	Rp1"	
90° VALVE WITH FIREBAG®, THREADED / THREADED FITTING VERSION 	15	●	R1/2"	Rp1/2"	
	20	●	R3/4"	Rp3/4"	
	25	●	R1"	Rp1"	
STRAIGHT VALVE WITH FIREBAG®, CRIMP / THREADED FITTING VERSION 	DN	FIREBAG TAE	D1 DVGW G5614	D2 EN 10226-1	
	15	●	Ø15	Rp1/2"	
	15	●	Ø18	Rp3/4"	
	20	●	Ø22	Rp1"	
STRAIGHT VALVE WITH FIREBAG®, THREADED VERSION 	DN	FIREBAG TAE	D1 EN 10226-1	D2 ISO 228-1	
	15	●	Rp1/2"	G1/2"	
90° VALVE WITH FIREBAG®, THREADED VERSION 	DN	FIREBAG TAE	D1 EN 10226-1	D2 ISO 228-1	
	15	●	R1/2"	G1/2"	

STRAIGHT VALVE WITH FIREBAG®, THREADED / THREADED FITTING VERSION

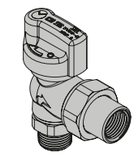


- TECOBLOCK handle
- MOP 5
- -20 °C +60 °C
- HTB 650 °C for 30' (DIN EN331 C5)

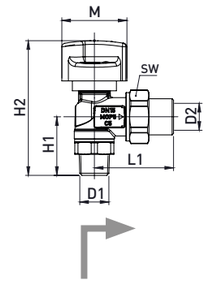


Code	DN	FIREBAG TAE	Finish	D1	D2	M	L1	L2	H1	SW	Pack
G2T106C00	15	●	Chrome	Rp1/2"	Rp1/2"	45	95	46	54	34	15
G2T107C00	20	●	Chrome	Rp3/4"	Rp3/4"	45	109	54	57	41	10
G2T110C00	25	●	Chrome	Rp1"	Rp1"	45	135	68	59	48	5
G2T106B00	15	●	Yellow	Rp1/2"	Rp1/2"	45	95	46	54	34	15
G2T107B00	20	●	Yellow	Rp3/4"	Rp3/4"	45	109	54	57	41	10

90° VALVE WITH FIREBAG®, THREADED / THREADED FITTING VERSION

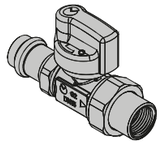


- TECOBLOCK handle
- MOP 5
- -20 °C +60 °C
- HTB 650 °C for 30' (DIN EN331 C5)

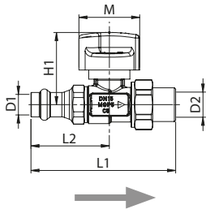


Code	DN	FIREBAG TAE	Finish	D1	D2	M	H1	H2	L1	SW	Pack
G2T406C00	15	●	Chrome	Rp1/2"	Rp1/2"	45	40	93	53	34	15
G2T407C00	20	●	Chrome	Rp3/4"	Rp3/4"	45	43	96	55	41	10
G2T410C00	25	●	Chrome	Rp1"	Rp1"	45	50	108	80	48	5

STRAIGHT VALVE WITH FIREBAG®, CRIMP / THREADED FITTING VERSION

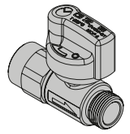


- TECOBLOCK handle
- MOP 5
- -20 °C +60 °C
- HTB 650 °C for 30' (DIN EN331 C1)

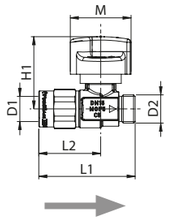


Code	DN	FIREBAG TAE	Finish	D1	D2	M	L1	L2	H	SW	Pack
G2210PC100	15	●	Yellow	Ø15	Rp1/2"	45	58	107	54	34	10
G2210PC200	20	●	Yellow	Ø18	Rp1/2"	45	58	107	54	34	10
G2220PC100	25	●	Yellow	Ø22	Rp3/4"	45	63	118	57	41	10

STRAIGHT VALVE WITH FIREBAG®, THREADED VERSION

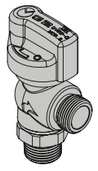


- TECOBLOCK handle
- MOP 5
- -20 °C +60 °C
- HTB 650 °C for 30' (DIN EN331 C5)

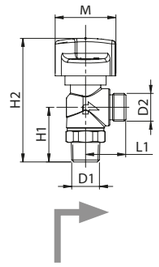


Code	DN	FIREBAG TAE	Finish	D1	D2	M	L1	L2	H1	Pack
G2T100C00	15	●	Chrome	Rp1/2"	G1/2"	45	72	46	54	20

90° VALVE WITH FIREBAG®, THREADED VERSION

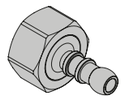


- TECOBLOCK handle
- MOP 5
- -20 °C +60 °C
- HTB 650 °C for 30' (DIN EN331 C5)

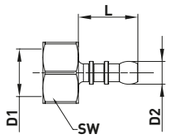


Code	DN	FIREBAG TAE	Finish	D1	D2	M	H1	H2	L1	Pack
G2T400C00	15	●	Chrome	Rp1/2"	G1/2"	45	40	93	30	20

HOSE CONNECTION FITTING



Accessory for hoses with threaded nut F 1/2" ISO 228 + seal



Code	D1	D2	hose Ø	L	SW	Pack
G4900C00	G1/2"	9	8	23	24	20
G4902C00	G1/2"	14	13	44	24	20

R2

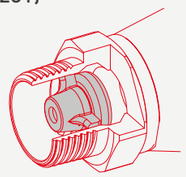
VALVES FOR GAS HOSES WITH QUICK CONNECTION

VERSION WITH FRONT CONTROL

Since 1992, TECO manufactures the valves with a quick safety connection **[DIN3383]**. R2 is the shut-off valve with front control. The easily accessible front handle facilitates opening and closing the valve.

FIREBAG® - TAE

The valve has a thermal FIREBAG® safety device built into the steel inlet fitting. The FIREBAG® is built in accordance with the **DIN 3586** standard. It activates at a temperature of **100°C -5K** and withstands up to 650°C for 30' at a pressure of **0.5 bar**.
(see page 231)

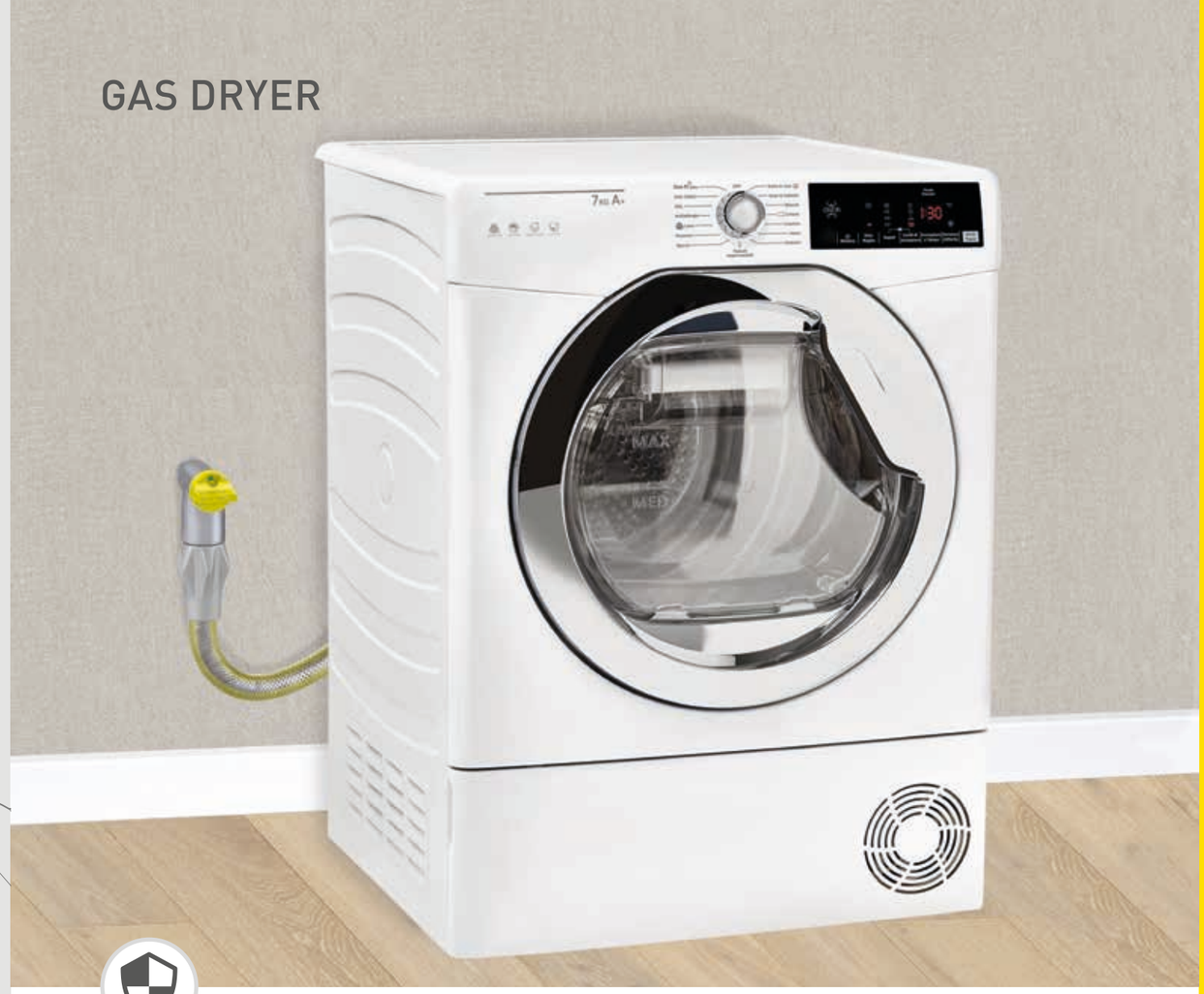


CERTIFICATIONS AND TECHNICAL SPECIFICATIONS - R2 VALVE	
Reference standards	DIN EN 15069 DIN 3586
Pressure	MOP 0.5 (0,5 bar)
Temperature	-20°C +60 °C
High temperature resistance	HTB 650°C for 30' (GT 0.5 EN 1775)
Application	For all types of gas as specified in EN 437 and DVGW G260/1 (Methane, Butane, Propane)

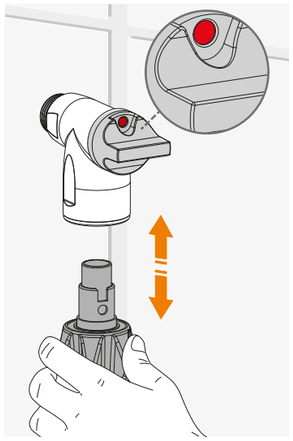
CERTIFICATIONS AND TECHNICAL SPECIFICATIONS - RTD HOSE	
Reference standards	EN 14800:2007
Pressure	MOP 0.5 (0,5 bar)
Inlet: **Bayonet quick coupling**	DIN EN 15069
Outlet	Threaded to EN 10226-1
Internal hose	Stainless steel AISI 316
Protective sheath	Transparent PVC

Also for outdoor applications with temperatures of -20°C

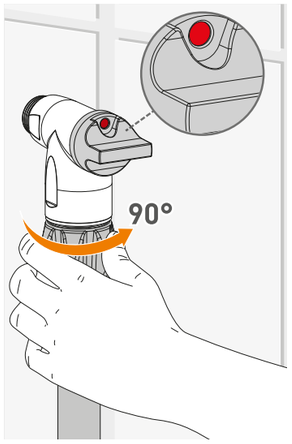
GAS DRYER



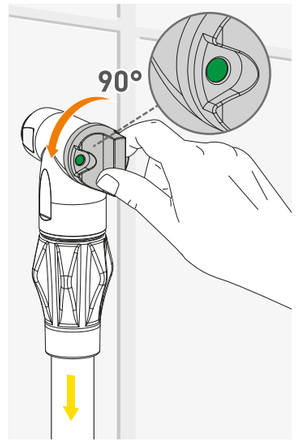
SAFE CONNECTION



Hose insertion is QUICK and SAFE The hose can only be disconnected when the valve is closed.

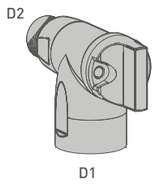
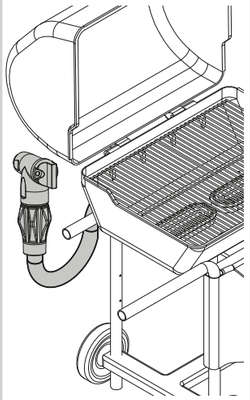
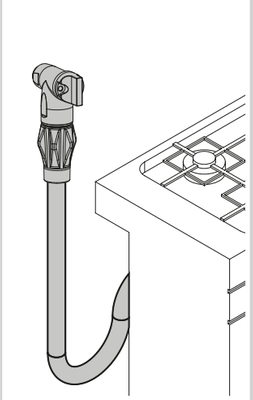
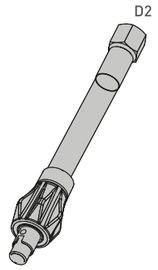
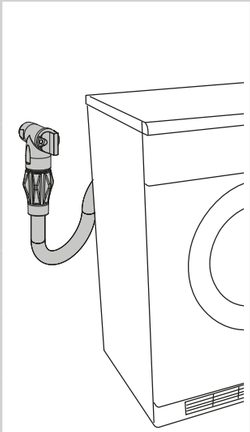
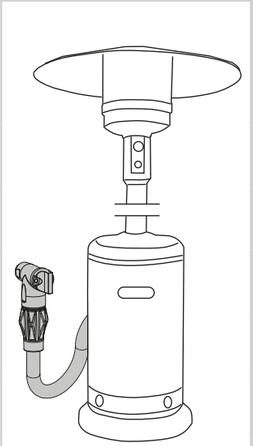


Turning the hose handle by 90° clamps it to the valve. The valve can only be opened in this position.

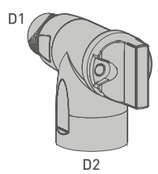
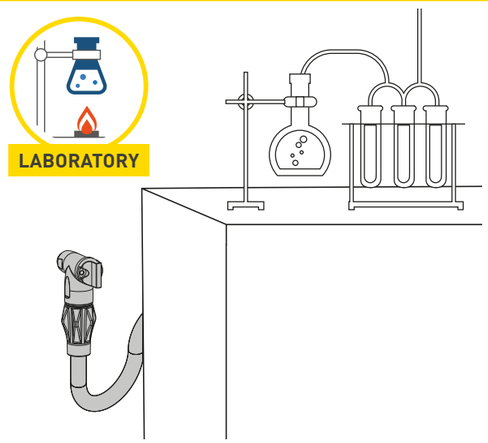


The valves is opened and closed using the control handle on the front.

R2 PRODUCT RANGE

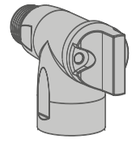
R2					APPLICATION EXAMPLES
R2 	DN	FIREBAG TAE	D1 EN 10226-1	D2	 
	12	●	R1/2"	DIN 3383-1	
RTD HOSE 	L		D1 EN 10226-1	D2	 
	500		Rp1/2"	DIN 3383-1	
	750		Rp1/2"	DIN 3383-1	
	1000		Rp1/2"	DIN 3383-1	
	1250		Rp1/2"	DIN 3383-1	
	1500		Rp1/2"	DIN 3383-1	
	2000		Rp1/2"	DIN 3383-1	

R2L

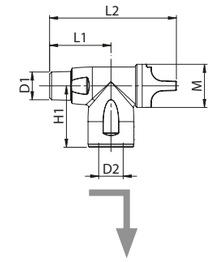
	DN	FIREBAG TAE	D1 EN 10226-1	D2	
	12	●	R1/2"	DIN 3383-1	

R2 VALVE WITH QUICK CONNECTION AND FRONT CONTROL

DIN-EN15069 90° VALVE
For DIN-EN14800 hoses



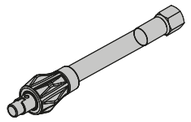
- MOP 5
- -20 °C +60 °C
- HTB 650 °C for 30' (GT 0.5 EN 1775)



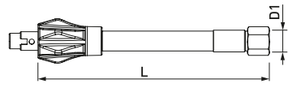
Code	DN	FIREBAG TAE	Finish	D1	D2	M	L1	L2	H1	Pack
R221100100	12	●	Polished chrome	R1/2"	DIN 3383-1	32	45	94	45	20

RTD CONNECTION HOSE

RTD HOSE
DIN-EN14800 hose



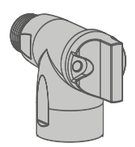
- MOP 5
- 0-120 °C



Code	D1	D2	L mm	Pack
R4TD0500	Rp1/2"	DIN 3383-1	500	1
R4TD0800	Rp1/2"	DIN 3383-1	750	1
R4TD1000	Rp1/2"	DIN 3383-1	1000	1
R4TD1250	Rp1/2"	DIN 3383-1	1250	1
R4TD1500	Rp1/2"	DIN 3383-1	1500	1
R4TD2000	Rp1/2"	DIN 3383-1	2000	1

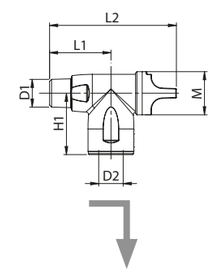
R2L VALVE WITH QUICK CONNECTION AND FRONT CONTROL FOR LABORATORY USE

DIN 3383-4 90° VALVE FOR LABORATORY USE
For DIN 30664-T4 hoses



- MOP 5
- -20 °C +60 °C
- HTB 650 °C for 30' (GT 0.5 EN 1775)

LABORATORY



Code	DN	FIREBAG TAE	Finish	D1	D2	M	L1	L2	H1	Pack
R221100200	12	●	Polished chrome	R1/2"	DIN 3383-1	32	45	94	45	20

VALVES GAS APPLIANCES

R4

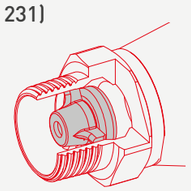
VALVES FOR GAS HOSES WITH QUICK CONNECTION

CONTROL VERSION WITH HANDLE ON HOSE

Since 1992, TECO manufactures the R4 range valves with a quick connection **[DIN3383]**.
R4 is the shut-off valve with quick connection that only lets gas pass when the hose is inserted.
The valve is opened and closes using the handle located on the hose.

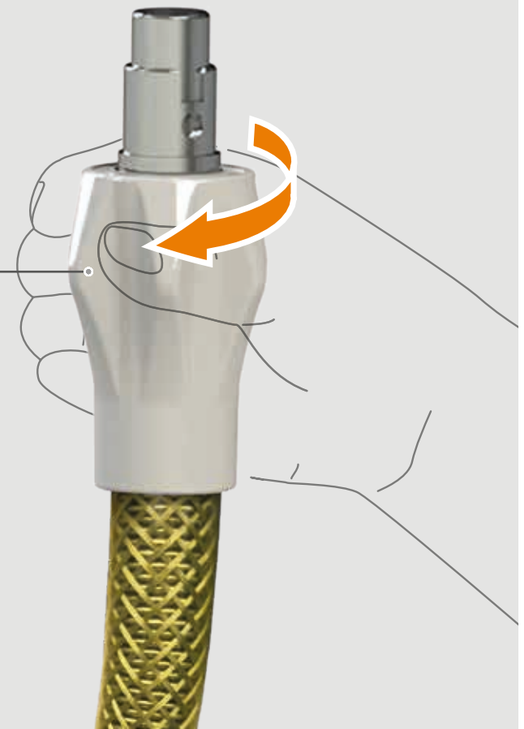
FIREBAG® - TAE

The valve has a thermal FIREBAG® safety device built into the steel inlet fitting. The FIREBAG is built in accordance with the **DIN 3586** standard. It activates at a temperature of **100°C -5K** and withstands up to 650 °C for 30' at a pressure of **0.5 bar**.
(see page 231)



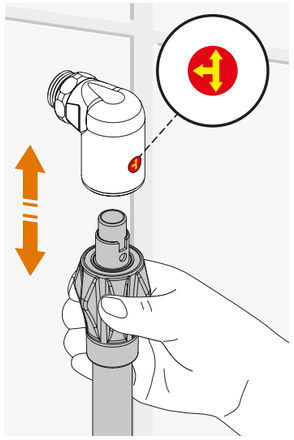
A version without FIREBAG® is also available, with HTB seal 650 °C for 30' C05
(Code R4030C00 - see page 229)

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS - R4 VALVE	
Reference standards	DIN EN 15069 DIN 3586
Pressure	MOP 0.5 (0,5 bar)
Temperature	-40 °C +60 °C
High temperature resistance	FIREBAG® with HTB seal 650 °C for 30' C0.5
Application	For all types of gas as specified in EN 437 and DVGW G260/1 (Methane, Butane, Propane)

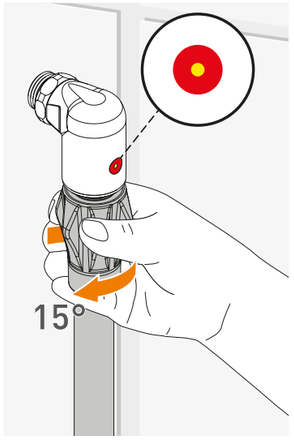


CERTIFICATIONS AND TECHNICAL SPECIFICATIONS - RTD HOSE	
Reference standards	DIN-EN 14800:2007
Pressure	MOP 0.5 (0,5 bar)
Inlet: **Bayonet quick coupling**	DIN EN 15069
Outlet	Threaded to EN 10226-1
Internal hose	Stainless steel AISI 316
Protective sheath	Transparent PVC

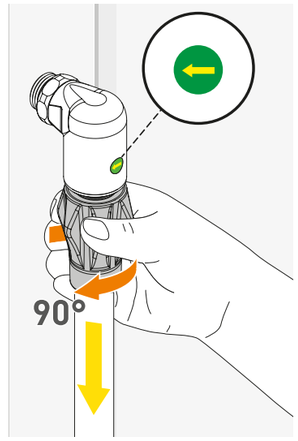
SAFE CONNECTION



Hose insertion is QUICK and SAFE. The hose can only be disconnected when the valve is closed.

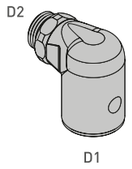
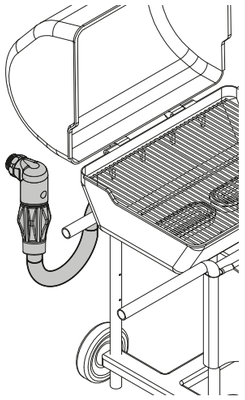
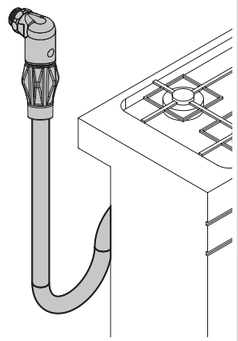
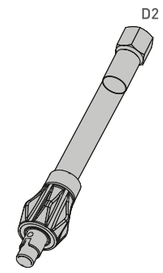
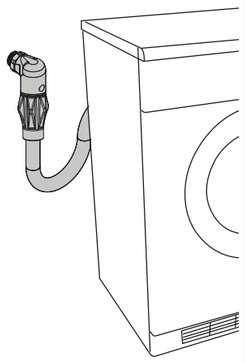
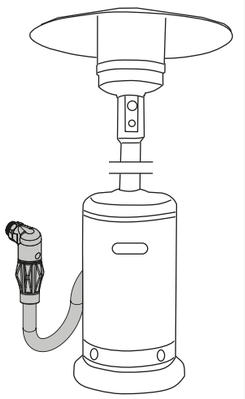


Turning the hose handle by 15° clamps it to the valve. In this position ,the valve remains closed.

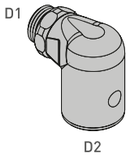
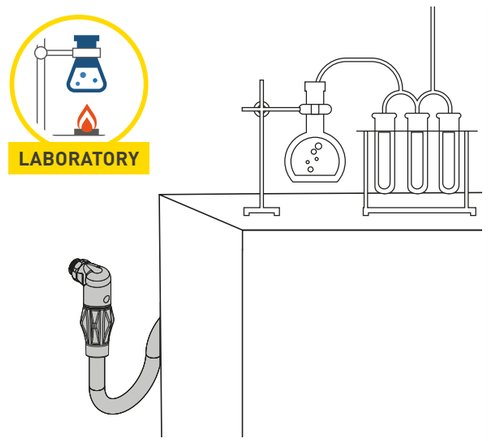


Turning the hose handle further opens the gas flow. The hose cannot be disconnected with the valve open.

R4 PRODUCT RANGE

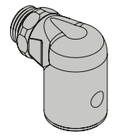
R4					APPLICATION
R4 	**DN**	**FIREBAG TAE**	**D1** EN 10226-1	**D2**	 
	12	●	R1/2"	DIN 3383-1	
	12		R1/2"	DIN 3383-1	
RTD HOSE 	**L**		**D1** EN 10226-1	**D2**	 
	500		Rp1/2"	DIN 3383-1	
	750		Rp1/2"	DIN 3383-1	
	1000		Rp1/2"	DIN 3383-1	
	1250		Rp1/2"	DIN 3383-1	
	1500		Rp1/2"	DIN 3383-1	
	2000		Rp1/2"	DIN 3383-1	

R4L

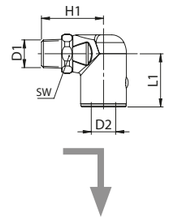
R4L					
	**DN**	**FIREBAG TAE**	**D1** EN 10226-1	**D2**	LABORATORY 
	12	●	R1/2"	DIN 3383-4	

R4 VALVE WITH QUICK CONNECTION AND CONTROL ON THE HOSE

DIN-EN15069 90° VALVE
For EN14800 hoses



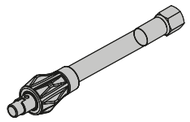
- MOP 0.5
- -40 °C +60 °C
- HTB 650 °C for 30' (GT 0.5 EN 1775)



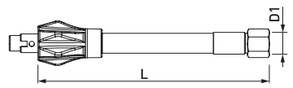
Code	DN	FIREBAG TAE	Finish	D1	D2	H1	L1	SW	Pack
R4TAS030C00	12	●	Polished chrome	R1/2"	DIN 3383-1	46	40	27	20
R4030C00	12		Polished chrome	R1/2"	DIN 3383-1	46	40	27	20

RTD CONNECTION HOSE

RTD HOSE
DIN-EN14800 hose



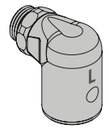
- MOP 0.5
- 0 °C + 120 °C



Code	D1	D2	L mm	Pack
R4TD0500	Rp1/2"	DIN 3383-1	500	1
R4TD0800	Rp1/2"	DIN 3383-1	750	1
R4TD1000	Rp1/2"	DIN 3383-1	1000	1
R4TD1250	Rp1/2"	DIN 3383-1	1250	1
R4TD1500	Rp1/2"	DIN 3383-1	1500	1
R4TD2000	Rp1/2"	DIN 3383-1	2000	1

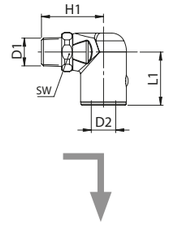
R4L DIN 3383-4 LABORATORY VALVE WITH CONTROL HANDLE ON THE HOSE

DIN 3383-4 90° LABORATORY VALVE
For DIN 30664-T4 hoses



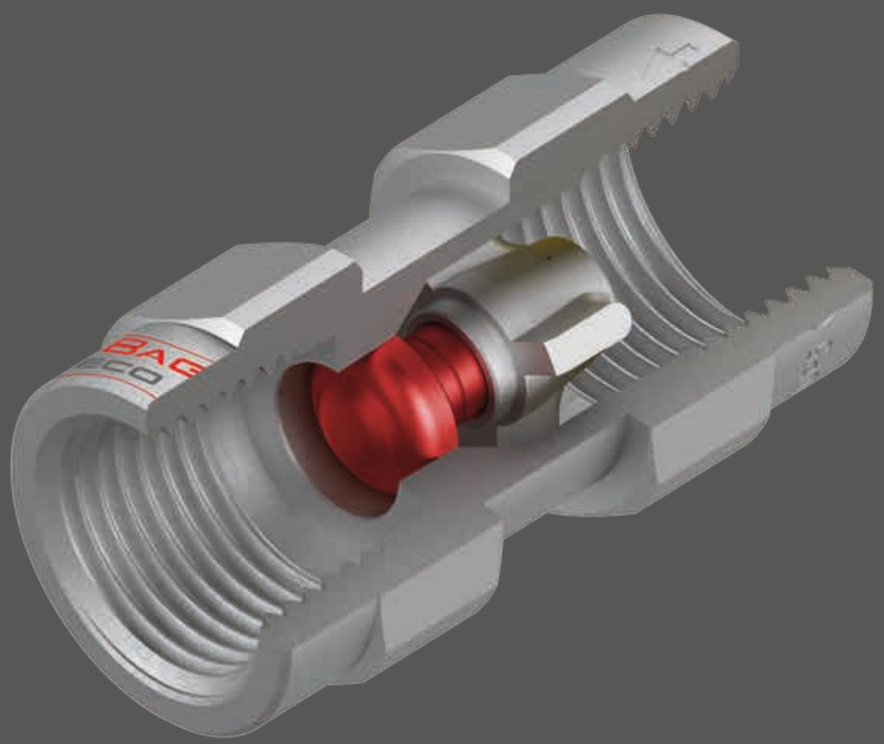
- MOP 0.5
- -40 °C +60 °C
- HTB 650 °C for 30' (GT 0.5 EN 1775)

LABORATORY



Code	DN	FIREBAG TAE	Finish	D1	D2	H1	L1	SW	Pack
R421100200	12	●	Polished chrome	R1/2"	DIN 3383-1	46	40	27	20

VALVES GAS APPLIANCES



FIREBAG®

THERMALLY ACTIVATED SAFETY DEVICE FOR GAS SYSTEMS

FIREBAG®

THERMALLY ACTIVATED SAFETY DEVICE

FIREBAG® is a thermally activated passive safety device, which cuts off the gas flow.
It is designed to activate in the range from 95 °C to 100 °C, and is guaranteed to function at 925 °C for 60' at a maximum pressure of 5 BAR (16 bar for the flanged version).

FULL RANGE
Threaded version from DN15 to DN50
Flanged version from DN25 to DN200

TAE

FIREBAG® is TECO's commercial name for the thermally activated safety device, defined as **TAE** in the German standard (thermisch auslösende Absperreinrichtung).

VIDEO

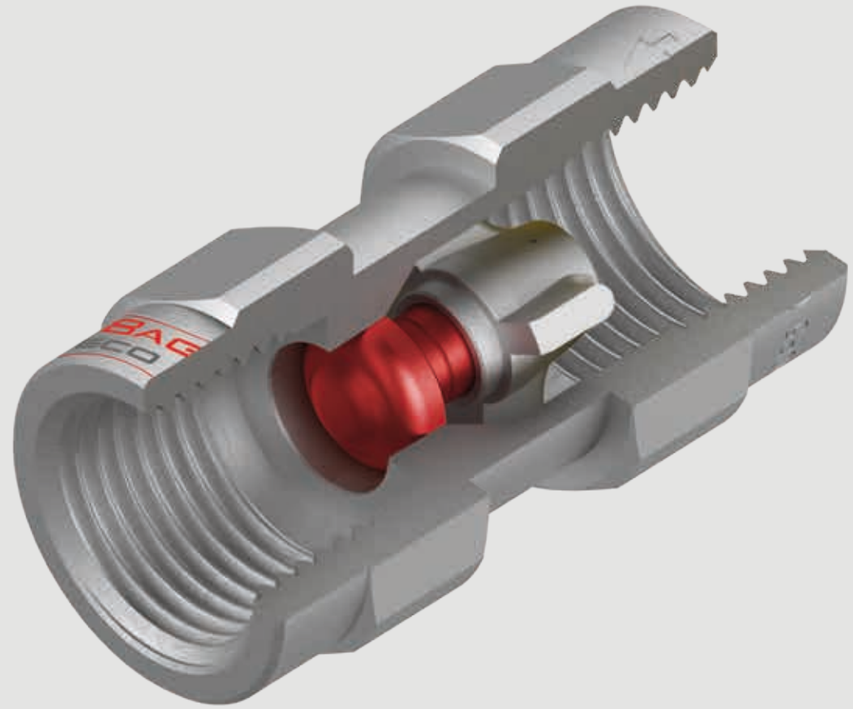
DESIGN PLUS

DESIGN PLUS

Design and technology award in 1995.

COMPACT INSTALLATION

Because of its small size, it is built into most TECO gas valves.



SINCE 1995

TECO developed and manufactures the FIREBAG since 1995, when the German technical standards for design and installation of gas systems covered this device.
Over 10 million installed Firebag devices manufactured by TECO are a guarantee of the effectiveness and quality of the product.

SAFETY

Installing FIREBAG® raises the safety level in gas systems.

NO MAINTENANCE

FIREBAG® does not require any kind of maintenance over time.

AUTOMATIC

It is not powered by an energy source or external signals.

DVGW product

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DIN 3586 DIN EN 1092-1 PED 97/23/CE directive UE-2016-426 directive
Pressure	MOP 5 (5 bar)
Working temperature	0 °C - 60 °C
FIREBAG® trip temperature	100°C -5k
High temperature resistance	HTB 925°C for 60' (GT5 DIN 3586)
Application	For all types of gas as specified in EN 437 and DVGW G260/1 (Methane, Butane, Propane)

DVGW-Registrierungsbescheid

DVGW Zertifizierung Certification

Prüfzeichen:
DVGW G95e001

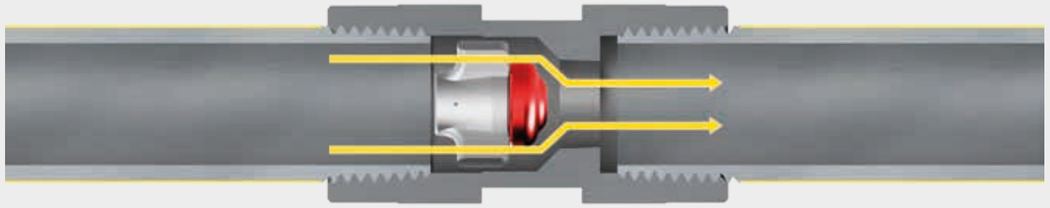
Inhaber des Prüfzeichens: TECO s.r.l. Via S. Caterina 9 I-25060 Camignone di Passirano,BS Italien
Vertreiber: Sinef Brandschutz AG Bienestr. 2 CH-7000 Chur
Antrag vom: 08.03.1995
Prüfbericht vom: 08.03.1995
Aktenzeichen: 95/G39/46/606 (Fr)
DVGW-Prüflaboratorium: Forschungsstelle am Engler-Bunte-Institut e. V.,Karlsruhe
Produktgruppe: Gasarmaturen
Prüfgrundlage: Sicherheitstechnischen Anforderungen des DVGW-Regelwerks. Die thermisch auslösende Absperrarmatur wurde nach DVGW-VP 301 (05. 1984) beurteilt.
Typ: **TAS 21-ST/100, DN 15, 20, 25**
Der Registrierungsbescheid ist gültig bis zum 31.03.1998
Produkt und Beschreibung: Thermisch auslösende Absperrarmatur in Durchgangsform mit metallisch dichtender Absperrkugel zum Schutz unmittelbar nachgeschalteter Objekte in der Hausinstallation oder Anbau an Mehrfachreglergräte für Gasfeuerstätten, für alle Gase nach dem DVGW-Arbeitsblatt G 260/I
Nenndruck: PN 4
Beurteilt nach: DVGW-VP 301 (05. 1984)
Weitere Angaben siehe Rückseite.
Der Registrierung liegt das DVGW-Arbeitsblatt G 669 zugrunde.
Dieser Registrierungsbescheid ist Eigentum des DVGW
28.08.95 ch
Datum, Leiter der Zertifizierungsstelle
DVGW Deutscher Verein des Gas- und Wasserfaches e.V. Technisch-wissenschaftliche Vereinigung
Josef-Wirmer-Straße 1–3
53123 Bonn
Telefon 02 28/91 88 - 5
Telefax 02 28/91 88 - 990

FIREBAG - GAS SAFETY DEVICES

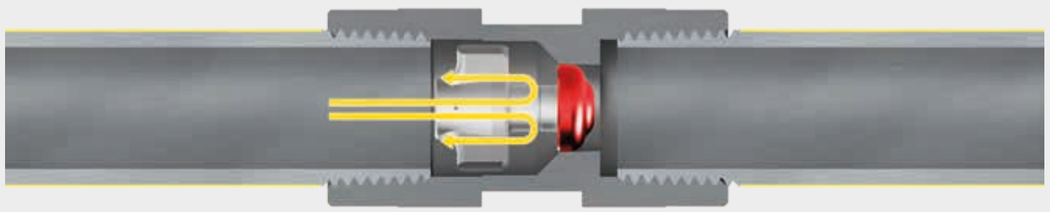
OPERATION

FIREBAG® is composed of an external steel body and an internal thermosensitive device.
When the external temperature reaches 100°C-5K, the metal alloy that holds the cut-off to the cartridge melts, and the compression force of the spring pushes the cut-off against the gas flow orifice, closing it completely.

Inactive **T<95°C**

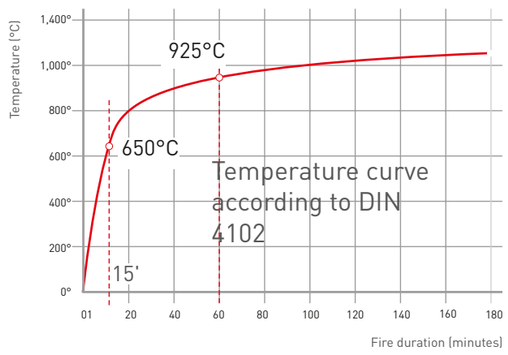


Thermally activated **T>100°C**



THERMAL RESISTANCE 925 °C FOR 60'

FIREBAG® can withstand a temperature of **925 °C for 60'**. Laboratory tests simulating a fire show that the temperature already exceeds 650 °C after 15' (see picture), which is the minimum limit specified in the **DIN 3586** standard.
FIREBAG® performance is significantly higher than required by the standard.



SAFETY

FIREBAG® prevents gas from leaking out of the distribution network in the event of fire, thereby limiting its spread.

Installing **FIREBAG®** in a gas distribution system raises the safety level because it intervenes even when the cause of the fire is not related to the system itself (passive safety).

Moreover:

- it is maintenance free;
- it does not require the periodic checks needed to ensure correct operation of components with active activation;
- it cannot be disabled by an external action.

It remains functional even while the **FIREBAG®** is undergoing maintenance.

That is why for over 20 years the German technical regulations **(TRGI)** prescribe the use of **FIREBAG®** upstream from the gas appliances.

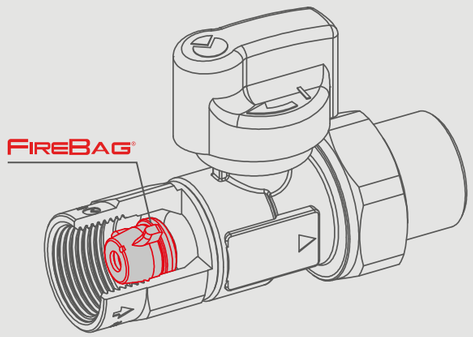
RELIABILITY

The FIREBAG® safety device must guarantee long-term operational reliability in accordance with the prescribed parameters.

Failure to operate or unwanted closure could create very hazardous critical conditions; for this reason, despite its simple construction, the FIREBAG® undergoes strict checks during the manufacturing process.

COMPACT INSTALLATION

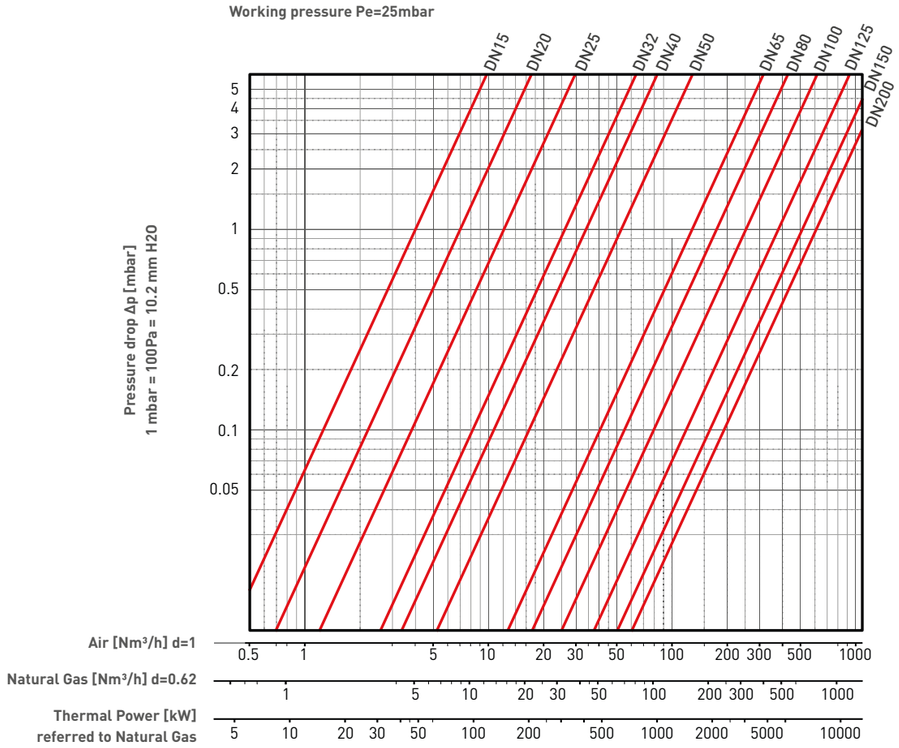
FIREBAG® is very compact.
For this reason, it is built into most TECO gas valves.
In addition to the technical benefits, this gives an economic saving without any additional cost to the installer.



CHOOSING THE FIREBAG®

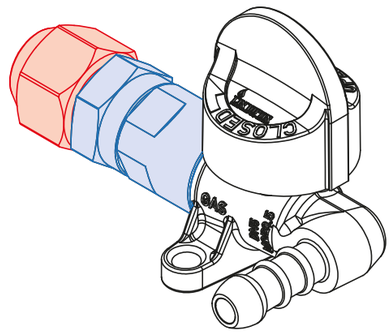
The FIREBAG® must be chosen according to the following parameters:

- According to the working pressure:
  Max. 5 BAR
  Max. 16 BAR for the flanged version with the special assembly KIT
- According to the application:
  Natural Gas
  LPG
- According to the **installed power** of the individual appliances **in kW** and the relative pressure drop.



TECO® INNOVATING SAFETY oem

Over the years, numerous "tailor made" versions have joined the catalogue range of products. Our research and development department, TECO R&D, has developed customised constructional or technical features for products, supporting customer requests and the system engineering needs of the market through mutual cooperation.



STANDARDS

In Germany, the reference standards for applying thermally activated devices was issued by the Muster-Feuerungsverordnung (FeuVo of 02/95 - edition 09/97), in which point 4, paragraph 6 specifies that the upstream pipes in points subject to fire outbreak must be equipped with a device:

- that automatically cuts off the flow of gas when the external temperature exceeds 100 °C (**DIN 3586** product standard).
- that it withstands a temperature up to 650 °C for at least 30 minutes (permitting gas seepage measured in air of no more than 30 l/h).

The **DVGW-TRGI 05/2008** technical regulation for gas installation and the **DVGW-G 616-617-618** worksheet specify that all gas appliances for environmental heating, water heating and domestic kitchens must have thermal closure device immediately before the appliances, unless the appliances are already autonomously fitted with such devices.

In Europe, the **EN 2007-10** standard on functional recommendations for gas pipes inside buildings, prescribes that the circuit must be designed, built and protected to ensure that the consequences of a fire cannot lead to an explosion or to the fire spreading rapidly.

As an alternative to fire compartmentation in the system, or the need to build it with components that have certified fire resistance, the standard prescribes inserting a manual or automatic shut-off device that can be operated when a fire outbreak is detected.
In addition to having certified fire resistance, **FIREBAG®** can automatically shut off the gas flow, activating itself without the aid of a flame or temperature detection system.

The Italian UNI 7129 standard ed. 2015, referring to the **EN 1775** standard, acknowledges the fire prevention and high-temperature resistance criteria of components used in gas distribution systems.

Regarding installation direction on gas appliances, the **European Directive (EU) 2016/426** contains the following provisions (Annex 1 Essential Requirements):

- §3.1.3 Appliances must be designed and manufactured in such a way as to minimise the risk of explosion in the event of an external fire.
- §3.1.9. All pressurized parts of an appliance must withstand the mechanical and thermal stresses to which they are subjected without any deformation affecting safety.
- §3.1.11. If an appliance is equipped with safety and controlling devices, the functioning of the safety devices must not be overruled by that of the controlling devices .
- §3.2.1. Appliances must be designed and manufactured in such a way that the gas leakage rate is not hazardous.

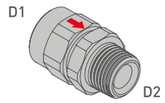
When built into the gas supply valve, the **FIREBAG®** device contributes to meeting the aforementioned provisions.

BIOGAS FIREBAG®
Specific versions for use with biogas are available on request (DVGW G262 - 2.1.10)

LABORATORY TESTS AT HIGH TEMPERATURE

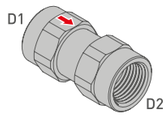
FIREBAG® FITTING

FIREBAG® FEMALE/ MALE FITTING



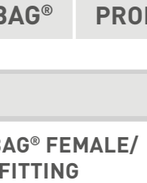
DN	D1 EN 10226-1	D2 EN 10226-1
15	Rp1/2"	R1/2"
20	Rp3/4"	R3/4"
25	Rp1"	R1"
32	Rp1"1/4	R1"1/4
40	Rp1"1/2	R1"1/2
50	Rp2"	R2"

FIREBAG® FEMALE/ FEMALE FITTING



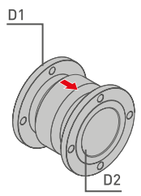
DN	D1 EN 10226-1	D2 EN 10226-1
15	Rp1/2"	Rp1/2"
20	Rp3/4"	Rp3/4"
25	Rp1"	Rp1"
32	Rp1"1/4	Rp1"1/4
40	Rp1"1/2	Rp1"1/2
50	Rp2"	Rp2"

FIREBAG® 90° MALE/ MALE FITTING



DN	D1 EN 10226-1	D2 ISO 228-1
15	Rp1/2"	G1/2"

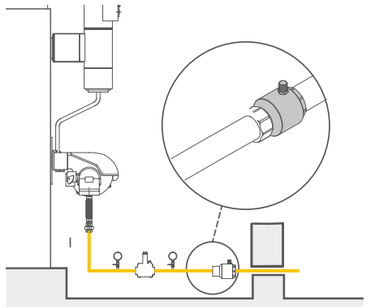
FIREBAG® FLANGED FITTING

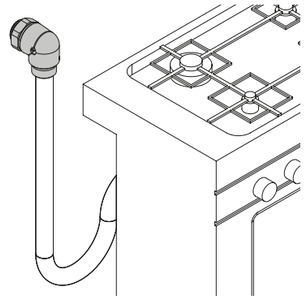


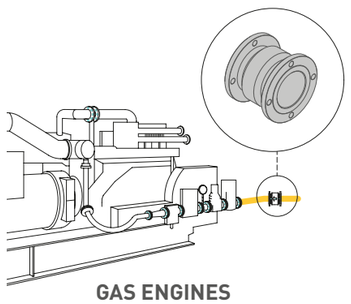
DN	D1 DIN EN 1092-1	D2 DIN EN 1092-1
25	115	68
32	140	80
40	150	90
50	165	105
65	185	125
80	200	140
100	220	160
125	250	190
150	285	216
200	340	271

APPLICATION EXAMPLES

HEATING PLANT





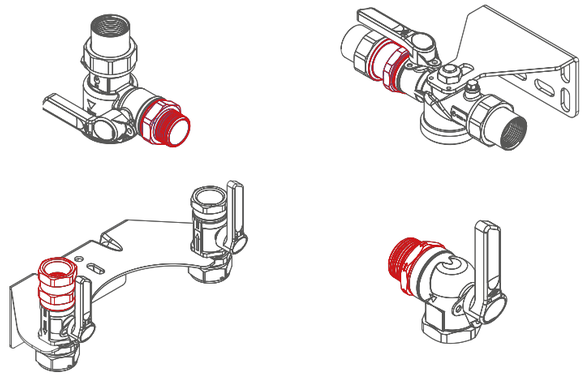


GAS ENGINES

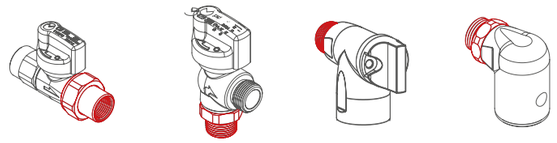
BIOGAS FIREBAG®
Specific versions for use with biogas are available on request (DVGW G262 - 2.1.10)

VALVES WITH BUILT-IN FIREBAG® THERMAL DEVICE

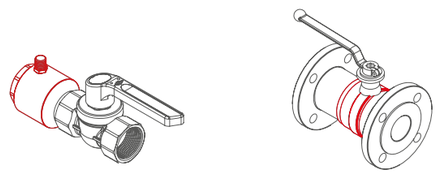
Valves for gas meters (see page 177)



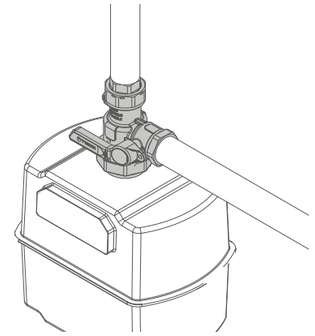
Valves for gas appliances (see page 215)

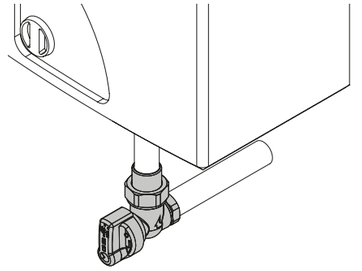


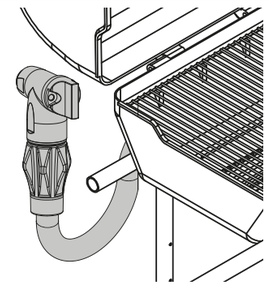
Threaded and flanged valves for gas systems (see page 207)



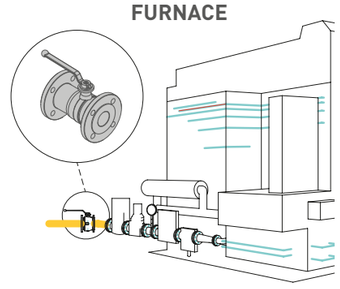
APPLICATION EXAMPLES



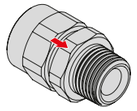




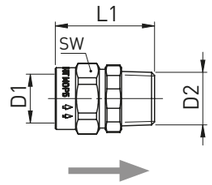
INDUSTRIAL FURNACE



FIREBAG® FITTING – FEMALE/MALE THREADED VERSION

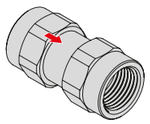


- MOP 5
- -20 °C +60 °C
- Trip temp. 100 °C - 5K
- HTB 925 °C for 60' (GT5 DIN 3586)

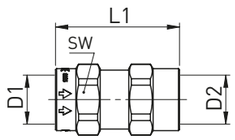


Code	DN	FIREBAG TAE	D1	D2	L1	SW	Pack
TASK100FM1	15	●	Rp1/2"	R1/2"	46	27	60
TASK200FM1	20	●	Rp3/4"	R3/4"	49	32	50
TASK300FM1	25	●	Rp1"	R1"	56	41	25
TASK400FM1	32	●	Rp1"1/4	R1"1/4	90	50	6
TASK500FM1	40	●	Rp1"1/2	R1"1/2	90	55	6
TASK600FM1	50	●	Rp2"	R2"	110	70	6

FIREBAG® FITTING – FEMALE/FEMALE THREADED VERSION

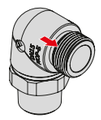


- MOP 5
- -20 °C +60 °C
- Trip temp. 100 °C - 5K
- HTB 925°C for 60' (GT5 DIN 3586)

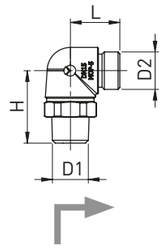


Code	DN	FIREBAG TAE	D1	D2	L1	SW	Pack
TASK100FF1	15	●	Rp1/2"	Rp1/2"	46	27	60
TASK200FF1	20	●	Rp3/4"	Rp3/4"	49	32	30
TASK300FF1	25	●	Rp1"	Rp1"	56	41	20
TASK400FF1	32	●	Rp1"1/4	Rp1"1/4	90	50	6
TASK500FF1	40	●	Rp1"1/2	Rp1"1/2	90	55	6
TASK600FF1	50	●	Rp2"	Rp2"	110	70	6

FIREBAG® FITTING – 90° MALE/MALE THREADED VERSION

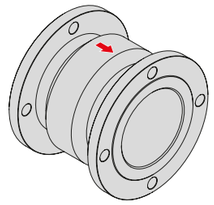


- MOP 5
- -20 °C +60 °C
- Trip temp. 100 °C - 5K
- HTB 925°C for 60' (GT5 DIN 3586)



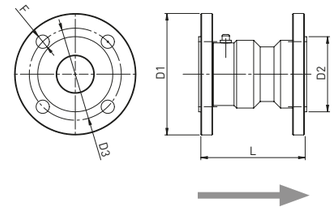
Code	DN	FIREBAG TAE	D1	D2	L	H	SW	Pack
RT406C00	15	●	R1/2"	G1/2"	40	28	27	10

FIREBAG® FITTING FLANGED VERSION DIN EN 1092-1



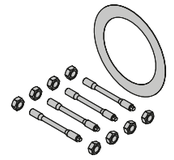
- MOP 16*
- -20 °C +60 °C
- Trip temp. 100 °C - 5K
- HTB 650°C for 30' (GT16 DIN EN 13774)

The HTB GT16 650°C seal is only guaranteed for 30' if the MS2 assembly kit is used.

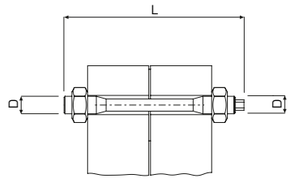


Code	DN	FIREBAG TAE	D1	D2	D3	F	L	HOLES	Pack
TASF02500	25	●	115	68	85	14	80	4	1
TASF03200	32	●	140	80	100	18	90	4	1
TASF04000	40	●	150	90	110	18	90	4	1
TASF05000	50	●	165	105	125	18	110	4	1
TASF06500	65	●	185	125	145	18	125	4	1
TASF08000	80	●	200	140	160	18	125	8	1
TASF10000	100	●	220	160	180	18	175	8	1
TASF12500	125	●	250	190	210	18	175	8	1
TASF15000	150	●	285	216	240	22	200	8	1
TASF20000	200	●	340	271	295	22	200	12	1

MS2 FLANGE ASSEMBLY KIT

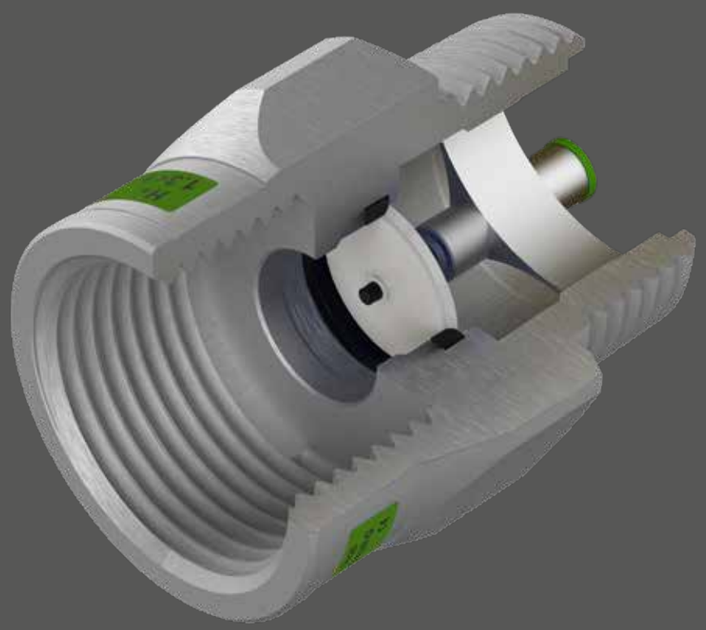


- HTB 650°C for 30' (GT16)



Code	Size
MS2025	25
MS2032	32
MS2040	40
MS2050	50
MS2065	65

Code	DN
MS2080	80
MS2100	100
MS2125	125
MS2150	150
MS2200	200



GST®

EXCESS FLOW VALVE FOR GAS SYSTEMS

GST®
GST® DN 15-50 fitting

GST®

EXCESS FLOW VALVE

GST® instantly blocks gas flow in the pipeline whenever the closure flow rate (Vs) is accidentally exceeded.

VIDEO

POSITION COMPACT

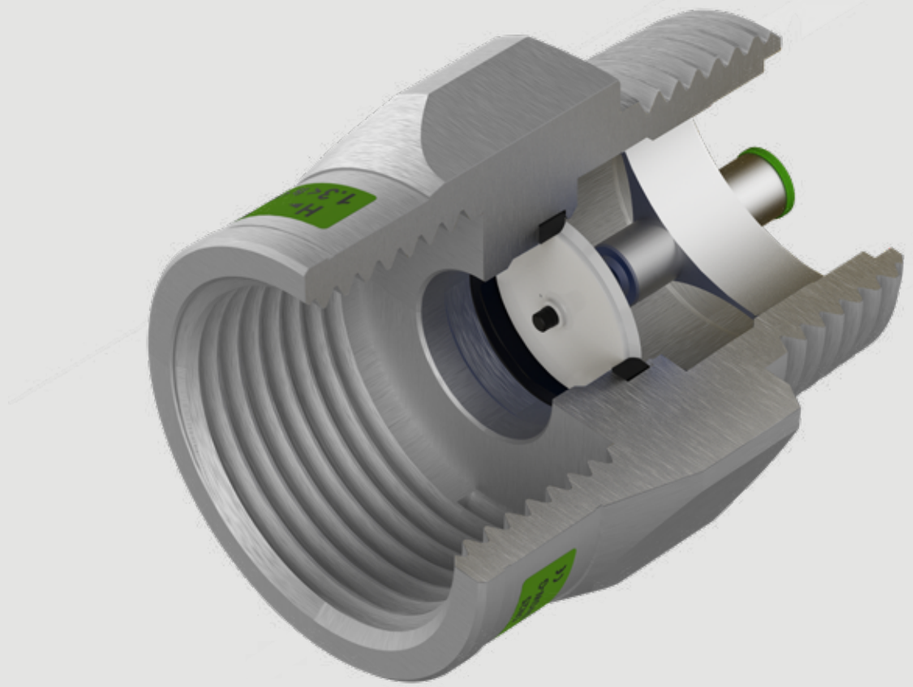
Horizontal and vertically upwards
***fs* min. = 1.30** **_fs_ max. = 1.45**
(see page 251)

COMPACT INSTALLATION

Because of its small size, it is built into the G5-G6 gas meter valves.

FULL RANGE
Threaded version from DN 15 to DN 50 (V_{GAS} 1.6 – 16 m^3/h)

GS GST® is TECO's commercial name for the excess flow safety device, specified as **GS** in the German standard (Gasströmungswächter).



DVGW product

CERTIFICATIONS AND TECHNICAL SPECIFICATIONS	
Reference standards	DVGW VP305-1:12/2007 DVGW TRGI 2008 DVGW TRF 2012
Pressure	15-100 mbar
Temperature	-20 °C +60 °C
Pressure drop	≤ 0.5 mbar (50 Pa)
fs min.	1.30
fs.max.	1.45
Overflow value VL	37.5 l/h at 100 mbar (gas)
External heat resistance	925 °C for 60'
Internal heat resistance	trip at 120 °C / 200 °C for 10'
Application	For all types of gas as specified in EN 437 and DVGW G260/1 (Methane, Butane, Propane)


DVGW

Zertifikat über ein DVGW Prüfzeichen
certificate for a DVGW test mark

SINCE 2002

TECO developed and manufactures GST since 2002, when the German technical standards for design and installation of gas systems (TRGI) covered excess flow devices.

SAFETY

Installing GST® raises the safety level in gas systems.

NO MAINTENANCE

GST® does not require any kind of maintenance over time.

AUTOMATIC

It is not powered by an energy source, and operates mechanically.

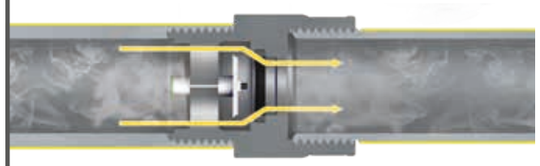
OPERATION

Legend	V_{GAS}	Nominal gas flow rate of GST® **(d=0.64)**
	fs	Closure factor (*fs=Vs / V_{GAS}*) ***fs* min. = 1.30** ***fs* max. = 1.45**
	Vs	Gas closure flow rate (d=0.64) **Vs = V_{GAS} x *fs***
	VL	Flow rate through the bypass orifice ≤ **37.5 l/h at 100 mbar (gas)**

When inserted in the system, the **GST®** remains inactive **(FIG.1)** until the closure flow rate is reached **(Vs).**
As soon as the flow rate reaches the closure valve **(Vs)** for any accidental reason, the **GST®** closes instantly **(FIG.2)**.

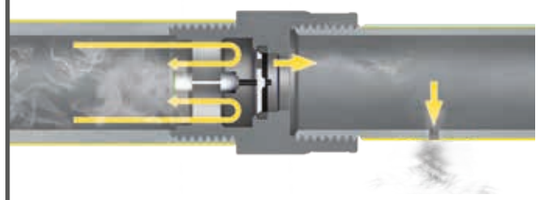
It is reset automatically by the bypass orifice on the cut-off, and the overflow **VL** that this creates balances the pressure upstream and downstream from the device when the conditions that caused the **GST®** to close have been removed **(FIG.3)**

FIG. 1 GST® OPEN



The GST® is normally OPEN as long as the closure flow value **Vs** is not reached.

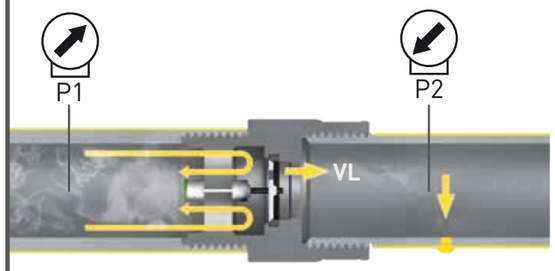
FIG. 2 GST® CLOSED



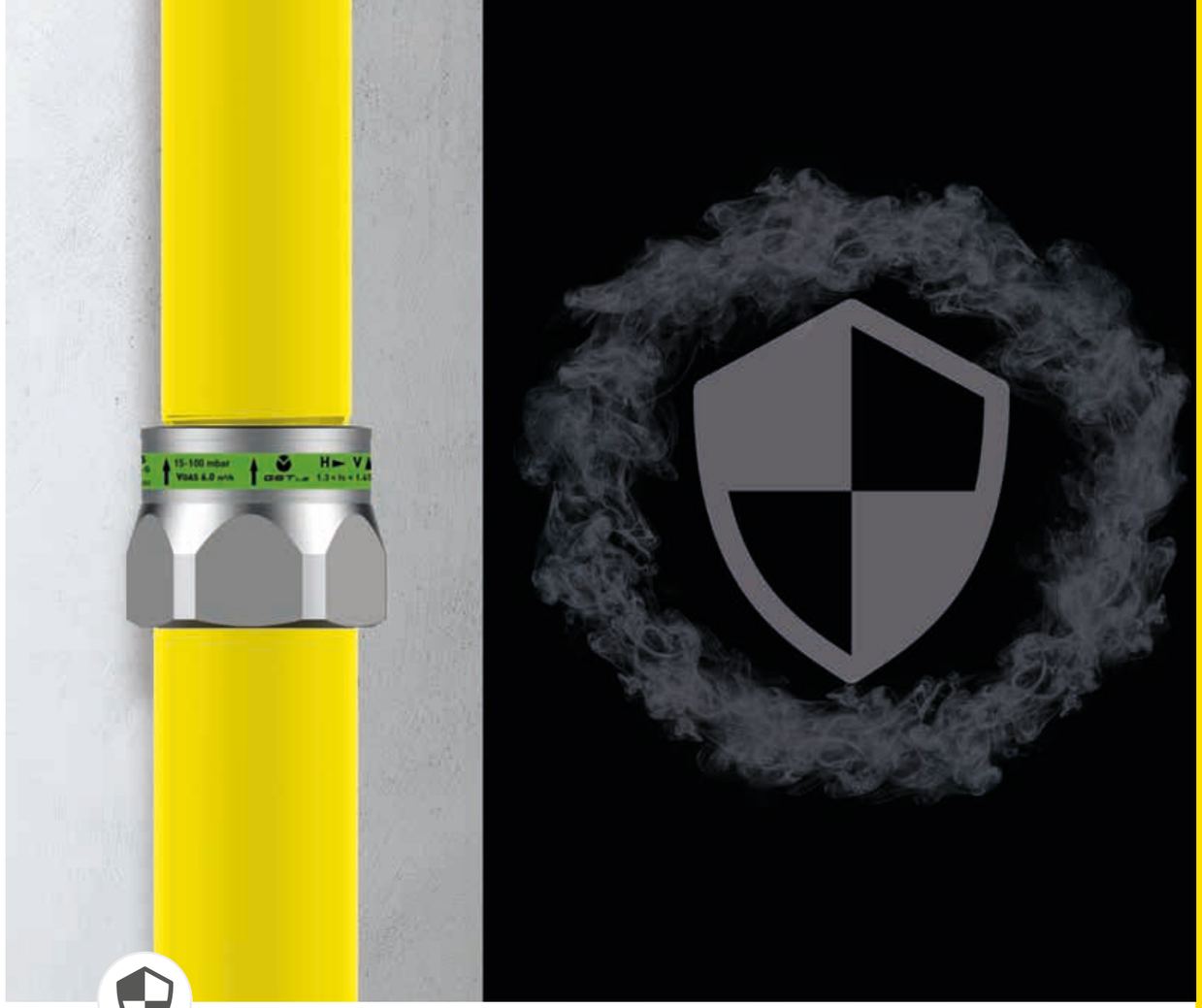
The GST® CLOSES when the closure flow value **Vs** is reached.

Vs = V_{GAS} x fs
(*fs* min. = 1.30 - *fs* max. = 1.45)

FIG. 3 AUTOMATIC RESET



The bypass orifice **(VL)** on the GST® cut-off ensures an automatic reset after the system has been repaired and **re-pressurised**.
When the upstream pressure **P1** and downstream pressure **P2** are equal, the GST® REOPENS.



SAFETY

GST® devices are installed to protect the system and guarantee a **higher safety level** in the following cases:

- **against tampering, both criminal and not**, performed by unauthorised personnel;
- **in systems that use non-metal pipes**, in order to make them safe against the risk of explosion due to fire **(DVGW VP632)**;
- **breakage/disconnection of hoses for gas appliances**;
- **breakage of pipes due to natural disasters.**

Installing the GST in a gas system raises the safety level because it intervenes even when the cause is not related to the system itself
(passive safety).

Moreover:

- it is maintenance free;
- it does not require the periodic checks needed to ensure correct operation of components with active activation;
- it cannot be disabled by an external action.

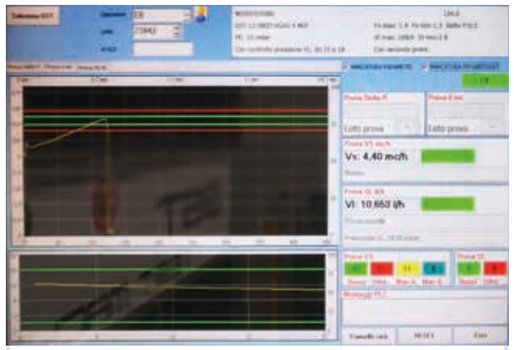
It remains functional even while the GST® is undergoing maintenance.

Over 2.5 million installed GST devices manufactured by TECO are a guarantee of the effectiveness and quality of the product.
That is why for over than 15 years the German technical regulations on gas installation (TRGI-TRF) prescribe the use of GST® in accordance with **VP 305-1.**

RELIABILITY

GST® safety devices must guarantee reliable closure only within the tight parameters defined by the DVGW VP305-1 German product standard. Failure to operate or unwanted closure could potentially create very hazardous situations; for this reason, despite its simple construction, the GST® undergoes strict checks during the manufacturing process.
Its reliability is defined by the quality of the components and continual improvement of the manufacturing processes through numerous tests on each lot.

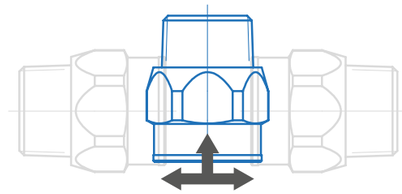
All internal parts of the **GST®** are built to ensure long-term operation.
The spring in the GST® is fully protected from the flow of gas (patented) so that it does not come into contact with impurities that could alter its proper operation over time. For the same reason, the overflow orifice is also protected when the cut-off is open.
Moreover, the GST® can dampen any flow peaks when attaching a gas appliance, which could cause the device to close.



ALL GST® DEVICES ARE 100% TESTED AND THE TEST PARAMETERS ARE TRACEABLE WITH A UNIQUE IDENTIFICATION CODE FOR EACH DEVICE.

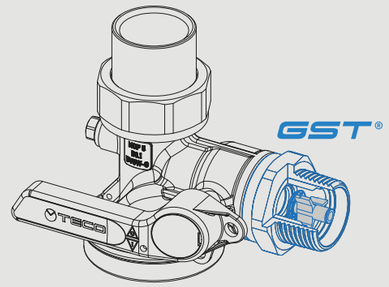
POSITION COMPACT

Right from the development stage, Teco designed the **GST®** to be installed **horizontally** or **vertically upwards**, with a closure factor **"*fs* min. = 1.30 and *fs* max. = 1.45"**, giving a closure flow rate 30 – 40% higher than the nominal flow rate.
This performance means that a single device can be used in systems with either metal (M) or plastic (K) pipes.



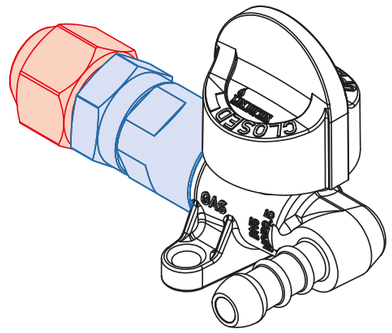
COMPACT INSTALLATION

Because of its very small size, the GST® device is built into the gas meter valves.
In addition to the technical benefits, this gives an economic saving without any additional cost to the installer.



TECO® INNOVATING SAFETY oem

Over the years, numerous "tailor made" versions have joined the catalogue range of products. Our research and development department, TECO R&D, has developed customised constructional or technical features for products, supporting customer requests and the system engineering needs of the market through mutual cooperation.

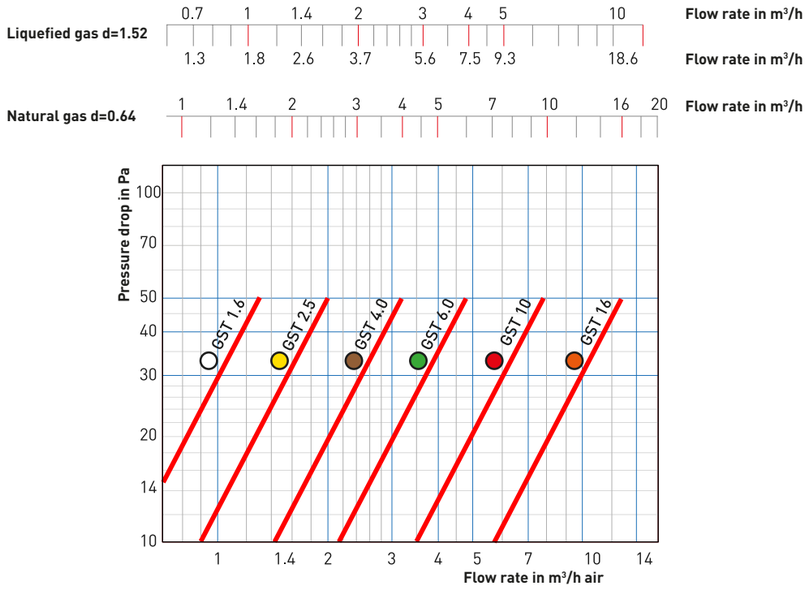


CHOOSING THE GST®

The GST must be chosen according to the following parameters:

- According to the working pressure:
  Pe 15–100 mbar
- According to the application:
  Natural Gas
  LPG
- According to the installed power given by the sum of the individual downstream appliances:
  Σ kW
- According to the type of installation:
  Main pipeline
  Ofttake pipeline
- According to the type of system piping:
  Metal (M)
  Plastic (K)

PRESSURE DROP GRAPH

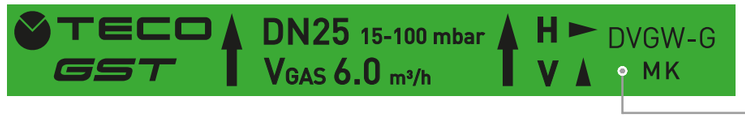


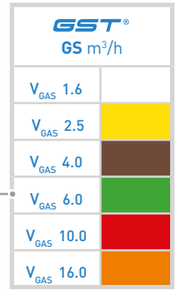
GST IDENTIFICATION MARKING

In accordance with the standards, the GST® is supplied with a label that describes its technical specifications (DVGW VP 305-1).

- Pressure range "15 mbar - 100 mbar"
- Gas flow direction (arrow)
- Nominal diameter
- Type of GST® (M/K)
- "DVGW" marking
- Installation position

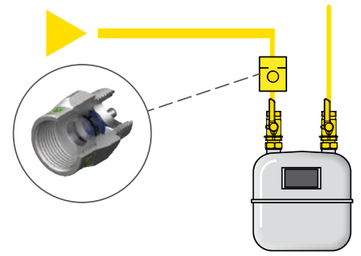
The colour of the label identifies the device flow rate





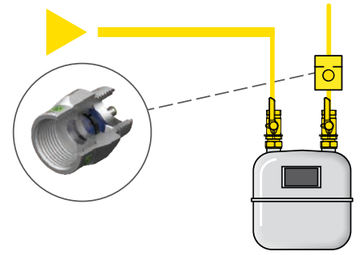
INSTALLATION EXAMPLES

UPSTREAM FROM THE METER



* Where possible, the GST® is usually installed upstream from the gas meter.

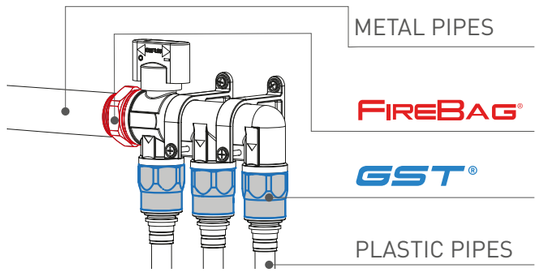
DOWNSTREAM FROM THE METER



* If the supply line is managed by the gas distribution company, the GST® can be installed downstream from the gas meter.

* The choice of GST® is the same regardless of whether it is upstream or downstream from the gas meter.

DOWNSTREAM FROM A SYSTEM WITH PLASTIC PIPES

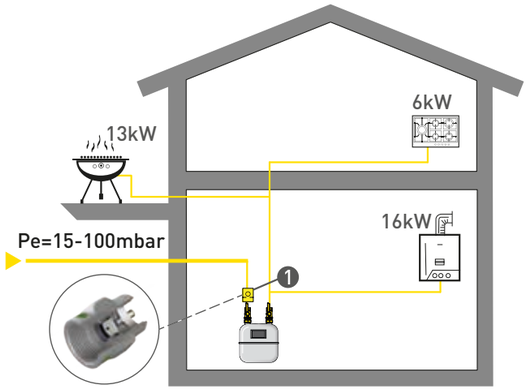


In installations with plastic pipes, in addition to using the FIREBAG®, it is mandatory to install a GST® on each offtake (according to the TRGI standard).

PARAMETERS FOR CHOOSING THE GST® (TRGI 2008)

EXAMPLES OF **NATURAL GAS** SYSTEMS

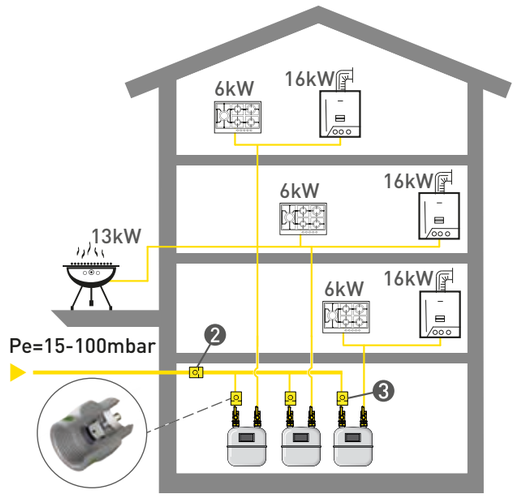
GST® IN A SINGLE-FAMILY DWELLING



GST® installed on the main pipeline upstream from the gas meter valve.
Nominal total load of the downstream appliances:
ΣQNL = 35 kW natural gas

1 Choice ref. 1
GST® fitting V_{GAS} **6.0 m³/h**

GST® IN A MULTI-FAMILY DWELLING



GST® installed on the main pipeline:
total nominal load:
ΣQNL = 79 kW natural gas

2 Choice ref. 2
GST® fitting V_{GAS} **10 m³/h**

GST® installed on an offtake pipeline upstream from the gas meter valve.
Nominal total load of the downstream appliances:
ΣQNL = 22 kW natural gas

3 Choice ref. 3
GST® fitting V_{GAS} **4.0 m³/h**

PARAMETERS FOR CHOOSING THE GST® TRG 2008 METAL PIPES

GST® identification marking	Power in kW	
	Offtake pipeline	Main pipeline
V_{GAS} 2.5 m³/h	≤ 17	≤ 21
V_{GAS} 4.0 m³/h	18 – 27 (3)	22 – 34
V_{GAS} 6.0 m³/h	28 – 41	35 – 51 (1)
V_{GAS} 10 m³/h	42 – 68	52 – 86 (2)
V_{GAS} 16 m³/h	69 – 110	87 – 138

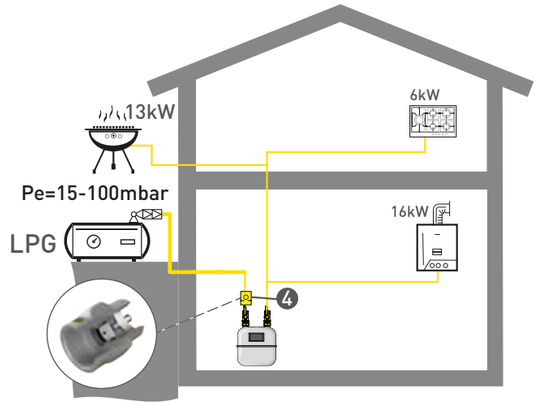
PARAMETERS FOR CHOOSING THE GST® TRG 2008 PLASTIC PIPES

GST® identification marking	Power in kW	
	Offtake pipeline	Main pipeline
V_{GAS} 1.6 m³/h	≤ 11	≤ 13
V_{GAS} 2.5 m³/h	12 – 17	14 – 22
V_{GAS} 4.0 m³/h	18 – 27	23 – 34
V_{GAS} 6.0 m³/h	28 – 41	35 – 51
V_{GAS} 10 m³/h	42 – 68	52 – 86
V_{GAS} 16 m³/h	69 – 110	87 – 138

PARAMETERS FOR CHOOSING THE GST® (TRGI 2008) PLASTIC PIPES

EXAMPLES OF **LPG** SYSTEMS

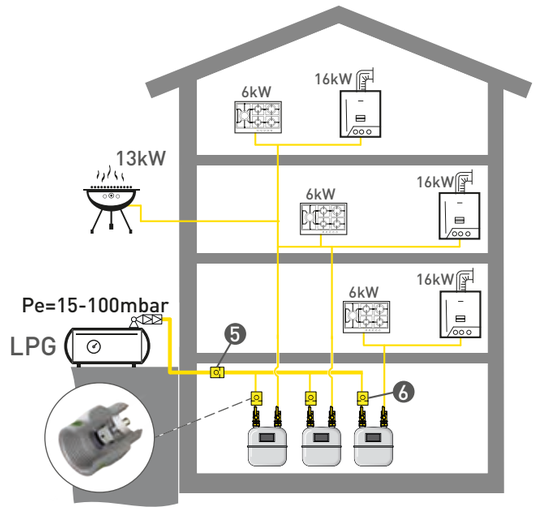
GST® IN A SINGLE-FAMILY DWELLING



GST® installed on the main pipeline upstream from the gas meter valve.
Nominal total load of the downstream appliances:
ΣQNL =35 kW LPG

4 Choice ref. 4
GST® fitting V_{GAS} **2.5 m³/h**

GST® IN A MULTI-FAMILY DWELLING



GST® installed on the main pipeline:
total nominal load:
ΣQNL = 79 kW LPG

5 Choice ref. 5
GST® fitting V_{GAS} **6.0 m³/h**

GST® installed on an offtake pipeline upstream from the gas meter valve.
Nominal total load of the downstream appliances:
ΣQNL = 22 kW LPG

6 Choice ref. 6
GST® fitting V_{GAS} **2.5 m³/h**

PARAMETERS FOR CHOOSING THE GST® TRF-2012 LIQUEFIED GAS

GST® identification marking	Power in kW	
	Offtake pipeline	Main pipeline
V_{GAS} 1.6 m³/h	≤ 18	≤ 25
V_{GAS} 2.5 m³/h	19 – 28 (6)	26 – 40 (4)
V_{GAS} 4.0 m³/h	29 – 45	41 – 64
V_{GAS} 6.0 m³/h	46 – 67	65 – 96 (5)
V_{GAS} 10 m³/h	68 – 112	97 – 160

DEFINITION

DVGW-TRGI 2008
Mandatory technical regulation for the planning, construction, modification and installation of natural gas installations.

DVFG-TRF 2012
Mandatory technical regulation for the planning, construction, modification and installation of natural LPG installations.

DVGW VP 305-1
Excerpt of DVGW-TRGI 2008 that prescribes excess flow valves for residential installations.

DVGW-TRGI 2008, TRF2012 and TECO GST®
The TECO gas programme allows complete gas installations in accordance with **DVGW-TRGI 2008** "Technical standards for gas installations" and **TRF2012** "Technical standards for LPG installations".
DVGW-TRGI 2008 applies to all gas installations in buildings for all gas families that comply with the DVGW Arbeitsblatt G 260 worksheet (except LPG) with up to 1 bar of working pressure.
The **DVFG-TRF 2012** technical standards apply to liquefied gas installations supplied with liquefied gas by cylinders or fixed liquefied gas containers with a capacity < 3 t.
As an active safety device in gas installations, the GST® excess flow valve is built in accordance with the **DVGW VP 305-1** product standard, which requires the gas supply to be cut off in the event of abnormal gas dispersion. The goals of GST® protection are:

- fire and explosion prevention in plastic pipes
- protection against tampering in metal pipes

In both cases, in working domestic installations the GST® must be installed immediately after the main shut-off device or immediately after the gas pressure regulator.

Type of GS / closure factor / installation position

If the GST® closure flow rate is reached, the gas flow is cut off. The excess flow device was built so that the nominal flow rate remains stable and open. For the K type, regulation ensures that the closure factor is in the range 1.3 – 1.45 (30–40% higher than the nominal flow rate). The closure factor fs specifies the ratio of the closure flow rate Vs to the nominal flow rate VN (fs max = VS / V_{GAS}). Our GST® excess flow device can be used for gas installations made with either plastic or metal pipes, and can be installed either horizontally or vertically upwards.
The GST® excess flow device is only applicable with pressures in the range 15-100 hPa (mbar), which are found in most gas installations.
To ensure that the GST® will activate, it is necessary to calculate the overall nominal flow rate of the gas appliances installed in the system, and calculate the pipe sizing (pressure drop calculation) to identify the correct excess flow device.
GST® devices are chosen according to the requirements of the technical standards (Section 7.2 of **TRGI 2008** or Section 7.11.2 of **TRF 2012**), and it may be necessary to align the pipe lengths during installation.
For non-metal pipes, the technical regulations require installation of a GST® and a thermal safety device (see page 231).

According to **DVGW-TRGI 2008** and **TRF2012**, there are two possible methods for choosing the GST®:

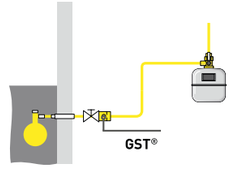
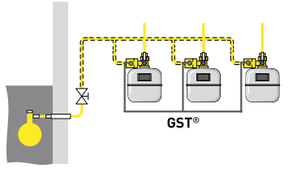
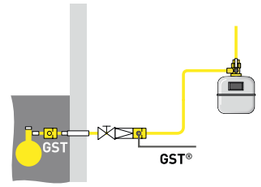
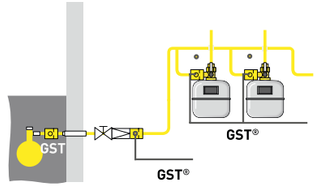
- the procedure for a single gas appliance connection scheme;
- the procedure for connecting several devices.

INSTALLATION SCHEME

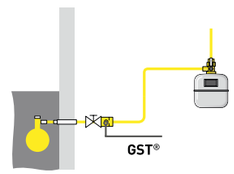
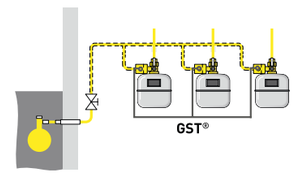
As stated earlier, the parameters for choosing the GST® are expressed in the German installation standards **TRGI 2008** and **TRF 2012** according to:

- the nominal installed power;
- the type of pipe;
- the type of gas appliance installation.

Example of installation in accordance with the TRGI 2008 German installation regulations

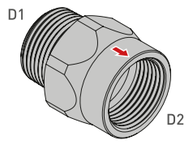
Pressure Range	Single-family and multi-family dwellings with gas central heating systems	Multi-family dwellings with independent gas heating systems for each apartment
Low Pressure <25 mbar		
<25 mbar up to 100 mbar		
Medium and high pressure >100 mbar up to 5 bar		

Example of installation in accordance with the TRF 2012 German installation regulations

Single-family and multi-family dwellings with gas central heating systems	Multi-family dwellings with independent gas heating systems for each apartment
	

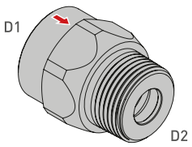
GST® FITTING

GST® fitting
MALE/FEMALE



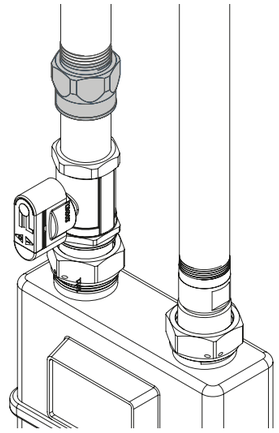
DN	D1 EN 10226-1	D2 EN 10226-1	GST® GS m³/h	
15	R1/2"	Rp1/2"	V_{GAS} 1.6	
15	R1/2"	Rp1/2"	V_{GAS} 2.5	
20	R3/4"	Rp3/4"	V_{GAS} 2.5	
20	R3/4"	Rp3/4"	V_{GAS} 4.0	
25	R1"	Rp1"	V_{GAS} 2.5	
25	R1"	Rp1"	V_{GAS} 4.0	
25	R1"	Rp1"	V_{GAS} 6.0	
32	R1"1/4	Rp1"1/4	V_{GAS} 10.0	
40	R1"1/2	Rp1"1/2	V_{GAS} 16.0	
50	R2"	Rp2"	V_{GAS} 16.0	

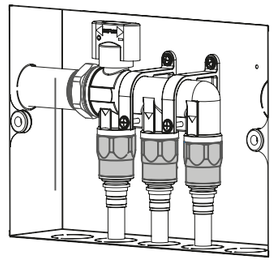
GST® fitting
FEMALE/MALE



DN	D1 EN 10226-1	D2 EN 10226-1	GST® GS m³/h	
15	Rp1/2"	R1/2"	V_{GAS} 1.6	
15	Rp1/2"	R1/2"	V_{GAS} 2.5	
20	Rp3/4"	R3/4"	V_{GAS} 2.5	
20	Rp3/4"	R3/4"	V_{GAS} 4.0	
25	Rp1"	R1"	V_{GAS} 2.5	
25	Rp1"	R1"	V_{GAS} 4.0	
25	Rp1"	R1"	V_{GAS} 6.0	
32	Rp1"1/4	R1"1/4	V_{GAS} 10.0	
40	Rp1"1/2	R1"1/2	V_{GAS} 16.0	
50	Rp2"	R2"	V_{GAS} 16.0	

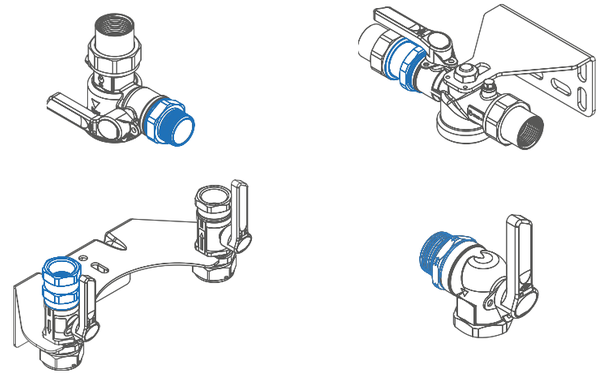
APPLICATION EXAMPLES



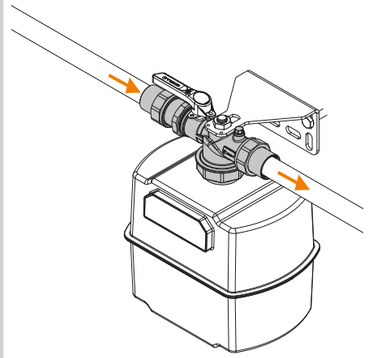


VALVES WITH BUILT-IN GST® DEVICE

Valves for gas meters (see page 177)

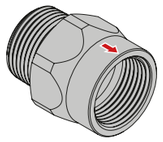


APPLICATION EXAMPLES

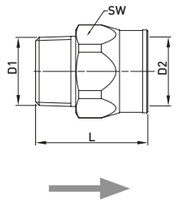


GST® EXCESS FLOW SAFETY DEVICE FOR GAS SYSTEMS

GST® FITTING – MALE/FEMALE THREADED VERSION

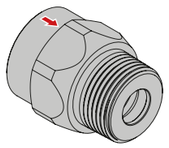


- 15-100 mbar
- -20 °C +60 °C
- fs 1.30-1.45

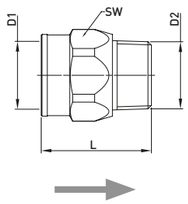


Code	DN	D1	D2	L1	SW	GST® GS m³/h		Pack
GS01110100	15	R1/2"	Rp1/2"	52	27	V_{GAS} 1.6		20
GS01210100	15	R1/2"	Rp1/2"	52	27	V_{GAS} 2.5		20
GS02210200	20	R3/4"	Rp3/4"	52	32	V_{GAS} 2.5		15
GS02310200	20	R3/4"	Rp3/4"	54	41	V_{GAS} 4.0		15
GS03210300	25	R1"	Rp1"	54	41	V_{GAS} 2.5		10
GS03310300	25	R1"	Rp1"	54	41	V_{GAS} 4.0		10
GS03410300	25	R1"	Rp1"	54	41	V_{GAS} 6.0		10
GS04510400	32	R1"1/4	Rp1"1/4	67	50	V_{GAS} 10.0		6
GS05610500	40	R1"1/2	Rp1"1/2	76	60	V_{GAS} 16.0		6
GS06610600	50	R2"	Rp2"	80	70	V_{GAS} 16.0		6

GST® FITTING – FEMALE/MALE THREADED VERSION



- 15-100 mbar
- -20 °C +60 °C
- fs 1.30-1.45



Code	DN	D1	D2	L1	SW	GST® GS m³/h		Pack
GS01120100	15	Rp1/2"	R1/2"	52	27	V_{GAS} 1.6		20
GS01220100	15	Rp1/2"	R1/2"	52	27	V_{GAS} 2.5		20
GS02220200	20	Rp3/4"	R3/4"	52	32	V_{GAS} 2.5		15
GS02320200	20	Rp3/4"	R3/4"	54	41	V_{GAS} 4.0		15
GS03220300	25	Rp1"	R1"	54	41	V_{GAS} 2.5		10
GS03320300	25	Rp1"	R1"	54	41	V_{GAS} 4.0		10
GS03420300	25	Rp1"	R1"	54	41	V_{GAS} 6.0		10
GS04520400	32	Rp1"1/4	R1"1/4	67	50	V_{GAS} 10.0		6
GS05620500	40	Rp1"1/2	R1"1/2	76	60	V_{GAS} 16.0		6
GS06620600	50	Rp2"	R2"	80	70	V_{GAS} 16.0		6

METROLOGICAL LAB: **PROFILOMETER**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004
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003
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