

### FLIP 1

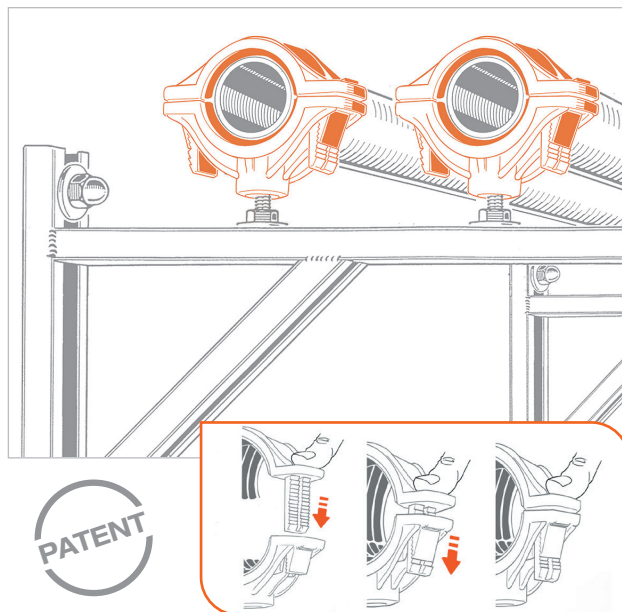
#### Fast locking pipe clamp

#### APPLICATION

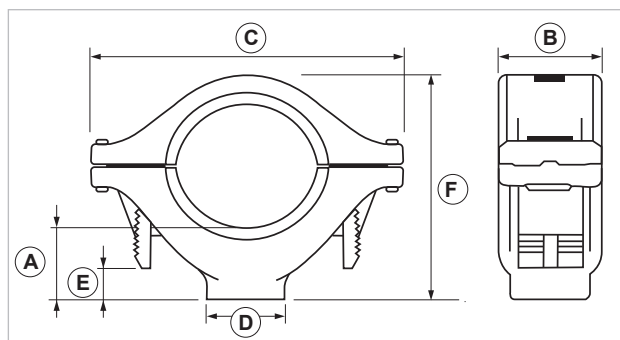
Pipe lines fastening for water and sanitary systems, heating systems, drainpipes, and electric canalization, both indoor and outdoor.

#### FEATURES AND BENEFITS

- > It can be closed with the **simple fingers pressure**. No tools are required.
- > The **PA 6.6 material** makes it particularly **long-lasting and resistant** to atmospheric agents, UV rays and corrosion.
- > It is recommended **for every kind of pipe lines**.
- > The locking system is adjustable in order to allow the creation of both **fixed and sliding points on the same pipe clamp**.
- > Its **bi-material technology**, provided with the EPDM internal sheath, ensures **excellent sound-proof performances**.
- > Available in 3 different colors - **grey, yellow and brown** - to guarantee the best looking result in every kind of application.
- > The pipe can be inserted during installation by inserting one of the two splines in the fixed half of the clamp, setting the pipe, and then locking the clamp around it without using any tool.



**FLIP**  
system



COD	TYPE	For pipes Ø mm	Color	A	B	C	D	E	F
180105	FLIP1 3/8"	14-18	Grey	18	20	53	M8	7	38
180110	FLIP1 1/2"	20-24	Grey	20	25	65	M8	9	43
180115	FLIP1 3/4"	25-30	Grey	20	25	70	M8	13	48
180120	FLIP1 1"	32-36	Grey	20	25	78	M8	8	57
180125	FLIP1 1 1/4"	38-44	Grey	20	27,5	86	M8	10	63
180130	FLIP1 1 1/2"	44-50	Grey	24	27,5	92	M8-M10	12	74
180135	FLIP1 2"	56-63	Grey	24	28	105	M8-M10	15	86
180140	FLIP1 2 1/2"	74-80	Grey	24	30	123	M8-M10	24	105
180145	FLIP1 3"	84-90	Grey	26	30	136	M8-M10	29	117

# FLIP® SYSTEM

## PIPE CLAMPS AND PIPE LINES FIXINGS

### YELLOW

Used to fasten **gas** pipe lines.

### BROWN

Used to fasten **copper** pipe lines.



COD	TYPE	For pipes Ø mm	Color	A	B	C	D	E	F
180205	FLIP1G 3/8"	14-18	Yellow	18	20	53	M8	7	38
180210	FLIP1G 1/2"	20-24	Yellow	20	25	65	M8	9	43
180215	FLIP1G 3/4"	25-30	Yellow	20	25	70	M8	13	48
180220	FLIP1G 1"	32-36	Yellow	20	25	78	M8	8	57
180225	FLIP1G 1 1/4"	38-44	Yellow	20	27,5	86	M8	10	63
180230	FLIP1G 1 1/2"	44-50	Yellow	24	27,5	92	M8-M10	12	74
180235	FLIP1G 2"	56-63	Yellow	24	28	105	M8-M10	15	86
180305	FLIP1M 3/8"	14-18	Brown	18	20	53	M8	7	38
180310	FLIP1M 1/2"	20-24	Brown	20	25	65	M8	9	43
180315	FLIP1M 3/4"	25-30	Brown	20	25	70	M8	13	48
180320	FLIP1M 1"	32-36	Brown	20	25	78	M8	8	57
180325	FLIP1M 1 1/4"	38-44	Brown	20	27,5	86	M8	10	63
180330	FLIP1M 1 1/2"	44-50	Brown	24	27,5	92	M8-M10	12	74
180335	FLIP1M 2"	56-63	Brown	24	28	105	M8-M10	15	86
180340	FLIP1M 2 1/2"	74-80	Brown	24	30	123	M8-M10	24	105

### MATERIAL TECHNICAL DATA

#### MATERIAL

Polyamide PA 6.6 stabilized against UV rays

#### AVAILABLE COLORS

Grey RAL 7035 | Yellow RAL 1003 | Brown RAL 8014

#### VIBRATION-PROOF RUBBER

Vibration-proof sheath with black EPDM thermoplastic elastomer

#### HARDNESS

60 Shore A

#### INSERT

Brass CW614N - EN 12164

#### TEMPERATURE

-20°C | +100°C

#### PERFORMANCE UNDER FIRE SITUATIONS - Body and seal

Self-extinguishment according to UL94 regulation: "V2" class | "HB" class

### DIMENSIONS

Type	Flip 1 3/8"	Flip 1 1/2"	Flip 1 3/4"	Flip 1 1"	Flip 1 1 1/4"	Flip 1 1 1/2"	Flip 1 2"	Flip 1 2 1/2"	Flip 1 3"	Tol.
Diameter	14-18	20-24	25-30	32-36	38-44	44-50	56-63	74-80	84-90	-
H	38	38	48	57	63	74	86	105	117	± 1
L	53	65	70	78	86	92	105	123	136	± 1
S	20	25	25	25	27,5	27,5	28	30	30	± 0.5
A	18	20	20	20	20	24	24	24	26	± 1
B	7	9	13	8	10	12	15	24	29	± 1
Ø Insert	M8	M8	M8	M8	M8	M8 M10	M8 M10	M8 M10	M8 M10	-
Ø Hole per screw	6	6	6	6	6	6	6	6	6	± 0.2
Weight (g)	24	35	38	46	53	64	74	100	114	± 1

Values are expressed in millimeters when not differently specified.

### RECOMMENDED LOADS

Recommended loads <sup>1</sup>										
Type	Flip 1 3/8"	Flip 1 1/2"	Flip 1 3/4"	Flip 1 1"	Flip 1 1 1/4"	Flip 1 1 1/2"	Flip 1 2"	Flip 1 2 1/2"	Flip 1 3"	Unit of measurement
No influences										
Traction	0,45	0,85	0,90	1,20	0,12	1,30	1,50	1,70	1,70	kN
Shear	0,70	0,72	0,75	0,75	0,75	0,70	0,65	0,45	0,40	kN
UV rays influence up to 2 years <sup>2</sup>										
Traction	0,60	1,00	1,10	1,40	1,50	1,60	1,90	2,40	2,20	kN
Shear	0,75	0,78	0,80	0,80	0,80	0,75	0,70	0,50	0,40	kN
Salt spray influence up to 2 years <sup>3</sup>										
Traction	0,40	0,72	0,75	0,95	1,00	1,15	1,30	1,60	1,50	kN
Shear	0,55	0,60	0,62	0,62	0,60	0,55	0,70	0,35	0,30	kN

1. All tests were carried out at the EQI-European Quality Institute Srl certified laboratory.
2. Testing Flip1 1" 32-36 exposed to UV degradation according to UNI9922:92 4h UV(B) and 4h condensation (200h). Values recorded for the remaining testing clamps are estimated.
3. Testing Flip1 1" 32-36 exposed to degradation in salt spray conditions according to UNI EN ISO 9227:06 - NSS TYPE (200h). Values recorded for the remaining testing clamps are estimated.

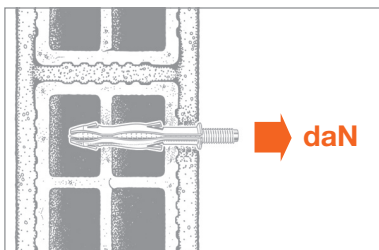
All values are expressed in mm when not differently specified.

All levels of tensile strength and shear resistance are average values and they are related to the break of the testing item.

A safety coefficient of 3 has been used.

1kN=100 kg

### ANCHORING SYSTEM



#### EXTRACTION TEST:

The screw is inserted by hammering. Recommended load is the average resistance loads with a safety coefficient.

Data expressed in daN.

1 daN=1 kg

\*In solid walls the screw is inserted by screwing.

TYPE	Plastered hollow brick	Concrete*	Gasbeton*	Tuff*
10TN with hammering screw 8x90	33	108	10	19

Chemical resistance to reagents					
Reagent	Notes about reagents	Temperature (°C)	Time (days)	PDL RATING <sup>4</sup>	Notes about resistance
Oil		23		8	Very good resistance
Motor oil		81	3	6	
	5W30	23	60	9	
Mineral oil		23		8	Resistant
		93	1	1	
Ethylene glycol		23	56	6	Little changes in properties
		23	7	6	
Petrol	Gas oil	23		8	Very good resistance
	Lead-free petrol	23	21	9	
Gasolio		22	30	9	
	Diesel oil	23		8	Resistant

<sup>4/</sup> This evaluation has been developed by PDL and it has a maximum value of 10 and a minimum value of 1.  
Bibliography: CHEMICAL RESISTANCE, vol. I - Thermoplastics, Second Edition, PDL Handbook Series, Plastic Design Library, 13 Eaton avenue Norwich, NY.

### INSTALLATION

FLIP fast locking pipe clamp can be easily and rapidly installed either with a threaded rod or with a mechanical plug and a M8 or M10 coupling screw, according to the specific type of clamp. Make a hole with the right plug depth. Screw the coupling screw into the plug and install the FLIP's fixed part - together with the insert- on the screw. Since you just have to push the moving part of the item to tighten the pipe line, fastening the latter is extremely fast. A better cohesion of the pipe clamp's surface on the pipe line is guaranteed by the sheath deformation. Either fixed or sliding points can be created in the installation by keeping the pipe clamp more or less tightened to the pipe line. In case of particularly long pipe lines, tools able to compensate for expansion are to be considered. Another way to install the pipe clamp is to fasten its fixed part with a countersunk head screw, screwing it in a wall plug - such as the DSW10 plug and a 6x70 countersunk head screw. Thanks to the so called Apriflip tool - made up of two Philips screwdrivers, with 3mm diameter - it is very easy to open the pipe clamp. You just have to completely insert the Apriflip's pivots into the specific hole of the clamp and pull out: doing so the moving part gets free and the pipe line can be removed.

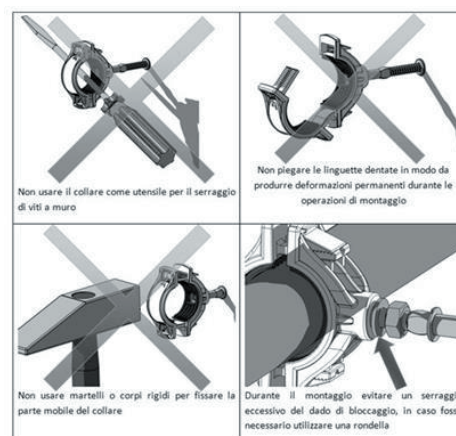
### INSTALLATION TOOLS AND RECOMMENDATIONS

At low temperatures the pipe clamp loses the flexibility that is needed during installation, and its resistance to crash decreases (low temperatures help to guarantee a good endurance of the clamp once it has been installed). Avoid hitting the moving part of the pipe clamp with a hammer to close it because it might damage the serrated splines.

While using the clamp, the highest temperature affordable is 100°C. While screwing the item to the wall, don't use tools to force pipe clamp's tightening to the fixing kit (plug/ threaded rod / double thread screw).

Don't keep the splines out of shape for long in order not to compromise their functionality.

The flexibility of the material allows you to close the pipe clamp in the first place, and to open it again later on. If the splines have been deformed due to a wrong use of the item, make them rest (do not assemble them together) until they recover their original shape.



**FLIP® SYSTEM****PIPE CLAMPS AND PIPE LINES FIXINGS****PACKAGING**

In plastic bag

**STORAGE**

It is recommended to storage the item at a temperature higher than 10°C: at low temperatures the pipe clamp tends to lose the flexibility needed during installation.

**RELATED ITEMS**

> FLIP System product range

**DATA 09-2022 REV. 01**

The current technical data sheet substitutes and cancels the previous ones. The details provided fit our current knowledge of the product. It cannot lead us to any sort of responsibility or compensation.

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