

# US CATALOG



FLUID POWER DISTRIBUTION SYSTEMS





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## LEGEND

<b>A</b>	in.	Height, dimension
<b>B</b>	in.	Width, dimension
<b>C</b>	in.	Slots width
<b>D - d</b>	in.	Diameter
<b>E</b>	in.	Hexagon, wrench
<b>F</b>	lbs.	Force
<b>G</b>	"	Gas thread NPT
<b>I - i</b>	in.	Distance between slots
<b>J x</b>	in. <sup>4</sup>	Moment of inertia along x
<b>J y</b>	in. <sup>4</sup>	Moment of inertia along y
<b>L</b>	in.	Length
<b>N°</b>	_	Code number
<b>n°</b>	_	Quantity number
<b>P</b>	oz.	Weight
<b>S</b>	in.	Thickness
<b>T</b>	-	Threaded hole
<b>α°</b>	°	Angle
		Only on request

### IMPORTANT

The drawings contained in the catalog are typical and not binding. Teseo srl is continuously improving products and features and reserves the rights to modify design and dimensions at any time.

### WARNING!

For a correct application of products carefully read the technical data in this catalog and on our website [www.teseoair.com](http://www.teseoair.com). Thoroughly read the instruction manual before attempting installation.

## WHO WE ARE

TESEO, founded in 1988, immediately began to prove to the worldwide market its character in pioneering, innovative and creative ability, capable of developing exclusive products and patent several technological solutions.

**At the begining of the 90's it was the first company worldwide to develop a modular aluminum piping system for the distribution of compressed air.**

Today such systems are internationally appreciated for the distribution of fluid energy such as compressed air and vacuum, both for small laboratories and for large industry.



Hundreds of miles of modular profiles by TESEO are installed in many application fields and can count on several important references: automotive industry, textile, mechanical, automation and many many others (visit our website for more information).



TESEO follows the whole production process of its products, and takes care of every step from the designing to the manufacturing of the finished component, through a network of selected partner companies.

From the main factory in Italy, the product is distributed all over the world by a diffused sales organization. Quality and safety are fundamental points for TESEO and are assured by its own Quality Management System according to ISO 9001, and by a specific philosophy on design, development and testing. The piping systems are built respecting the safety requirements prescribed by several norms and are certified by different international laboratories.

Besides the production and selling of the products, TESEO also supports its own partners and customers through the designing and sizing of air lines. The developing of customized solutions for machines or production lines, consulting on inquiries and technical training, supervision during the installation and testing of the system, are a few of the services that we offer.

## WHAT WE DO

### Teseo Srl designs, manufactures and supply:

- Pipes and fittings in aluminium for assembling distribution pipeworks for compressed air, vacuum and other fluids under pressure. (product lines AP and HBS).
- Modular manifolds for machines and pneumatic control panels. (product line AM).
- Accessories including benches, trolleys and pivoting arms to build production and assembling lines. (product lines ATS, SAB and WBA).

### To complement the range of products, Teseo Srl grants a package of support services:

- Sizing and design of compressed air networks.
- Design of manifolds for machines.
- Design of assembling and production lines.
- Expert advise on norms and regulations, and pipework certification support.
- Technical and commercial training for installers and dealers of TESEO products.



## WHY BUY A TESEO SYSTEM

The choice of a TESEO modern modular piping system in aluminum allows eliminating the hidden costs of a compressed air system management, some are listed below. Such costs are constantly increasing during the entire lifetime of your distribution system.

Typical hidden costs eliminated or reduced by TESEO aluminum piping are:

- **costs for air leaks.** The patented clamping and sealing concept of our piping system are eliminating a huge problem, thus saving a lot of energy normally wasted.
- **costs of air treatment, maintenance or repairing machines and tools.** Aluminum is not affected by rusting or corrosion, so inside TESEO piping air is always as clean as after the treatment done at the source. This is guaranteeing longer life to the devices connected.
- **costs for downtime and labour for each modification.** A TESEO aluminum pipe work is easy to modify and to extend, as an energy manifold inside the factory. Adding a new machine or point of use takes few minutes to be operative.
- **costs for the low flow rate and high pressure drop.** High precision aluminum extruded profiles of TESEO piping have a smooth inner surface. The friction of air flowing through the tubing is considerably lower than in a conventional rough steel or black steel pipe. Such a feature can be easily translated into less pressure drop and extra flow with the same electric power supply consumption. Contact our sales representative or website to get more information.



**HIGH TECH DESIGN**

**LIGHT WEIGHT**

**HEAVY DUTY PROFILES AND ACCESSORIES**

**100% METAL PIPES & FITTING**

**100% RECYCLABLE ALUMINUM**

**ENERGY EFFICIENT**

**SAFE AND RELIABLE**



## FLUID POWER IN THE FACTORY AND ON MACHINE

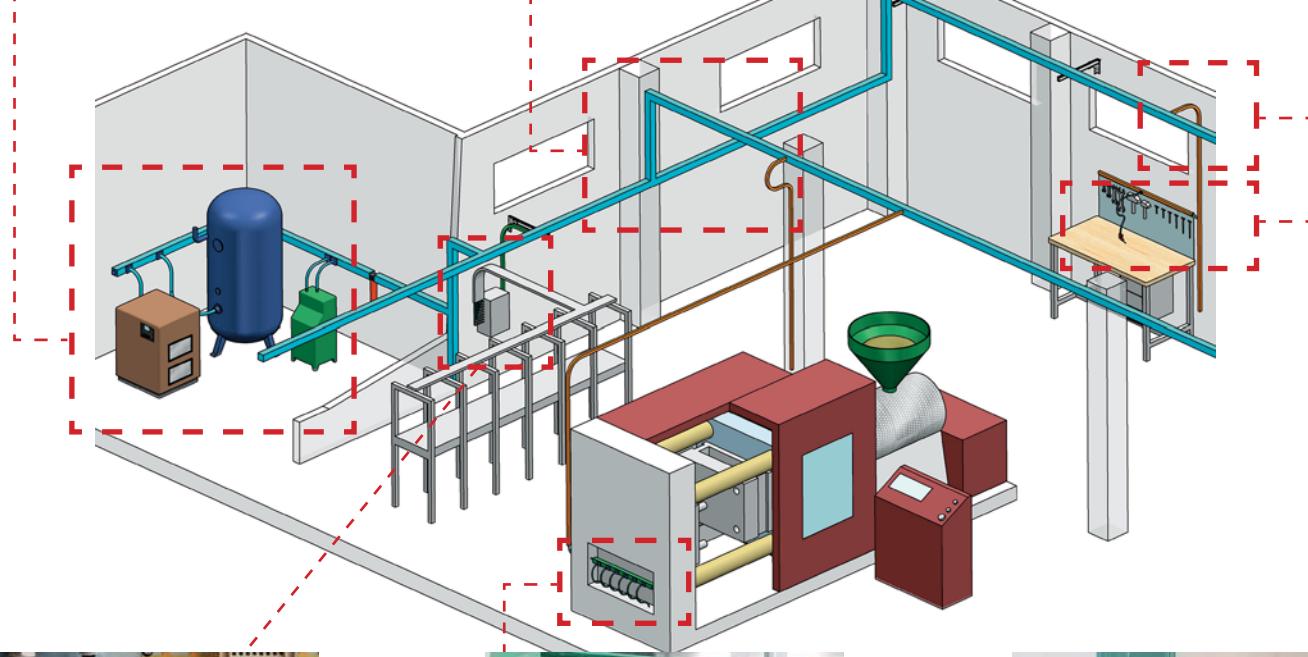
Bypasses for air treatment equipment.



Aluminum distribution pipe for compressed air, vacuum and other non dangerous gases, from 20 to 110 mm diameter.



Drops to the point of use, are fast and easy to assemble or modify.



Distribution manifolds integrated on pneumatic control panels for automation.



Modular distribution manifolds on machines or automatic lines.



Feeding lines for pneumatic tools along walls or workbenches.

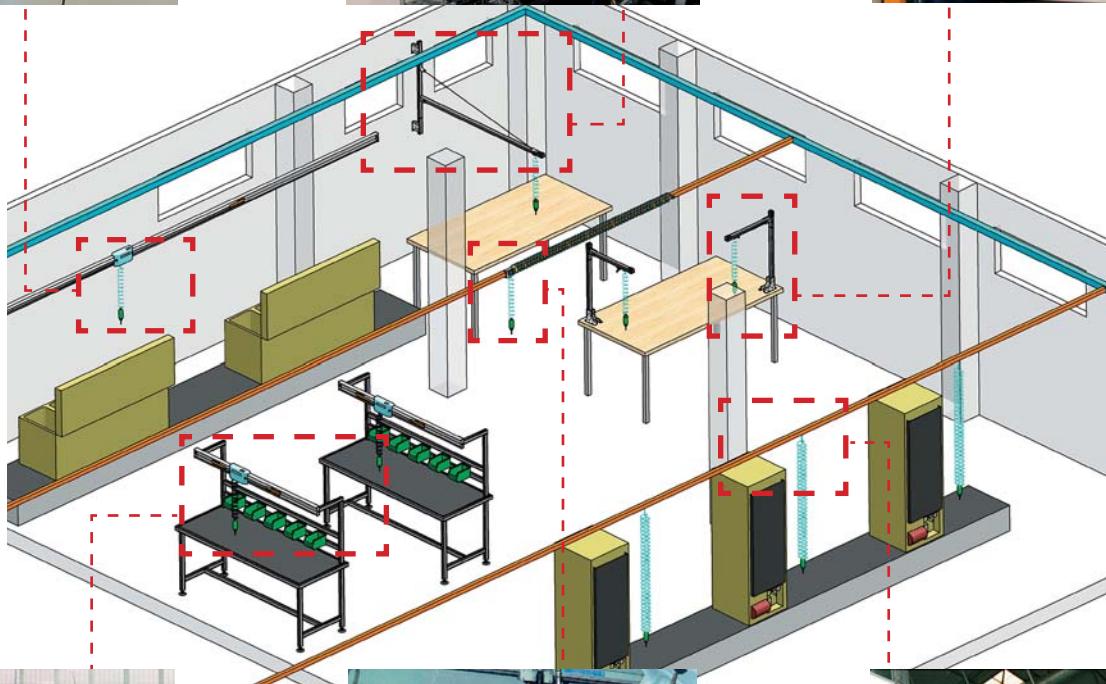
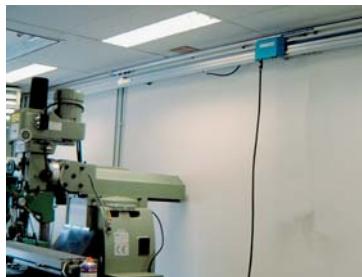


## ERGONOMIC SOLUTIONS FOR PNEUMATIC TOOLS

Modular track and trolleys on aluminum rail for compressed air and electrical distribution.

Hollow aluminum pivoting arms are pressurized for supplying air to tools covering a wide radius.

Swinging arms on benches, support and feed pneumatic tools.



Workbenches for assembly operated with pneumatic and electrical tools.

Trolleys running overhead on the aluminum pipework supporting and feeding pneumatic tools.

Assembly and production lines built combining aluminum profiles and glider pads.



## HBS HOLLOW BAR SYSTEM

The great innovation of this unique system lies in the methods and means to add lines of compressed air and other fluids under pressure.

The system is mainly composed of an extruded aluminum bar, which presents an external rectangular section with tee slots and an internal bore of large dimension to carry a considerable flow of compressed air.

A wide selection of straight joints, T or L joints allows for airlines of whatever length and shape.

To complete the installation we supply a number of outlet plates of various dimensions and shapes.

The whole system is leak free due to positive o-ring seals.

Compared to conventional systems, the following advantages stand out:

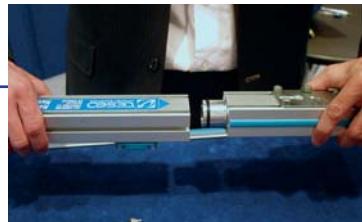
- Fast installation
- Quick installation of additional outlets
- Easy to modify and add
- Clean and smooth inner and outer surfaces
- Integrated modular system
- Impressive looks

### EASY TO ASSEMBLE

#### DEBURRING MOUNTING



#### ASSEMBLING TIGHTENING

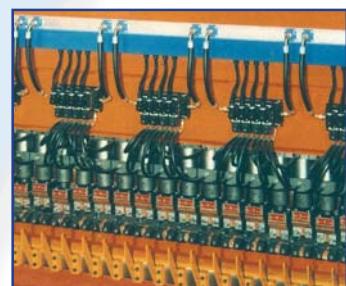


## COMPRESSED AIR AND FLUIDS PIPING SYSTEMS



HBS

## MODULAR MANIFOLDS INTEGRATED ON MACHINES



## ASSEMBLY AND PRODUCTION LINES





## HBS IS A TOP-QUALITY PRODUCT

and for diameters 25, 32, 50, 63 it is certified by the Quality Certificate n. B 97 02 14506 004 issued by TÜV from Munich. Moreover in USA it is provided with the approval according to the ANSI B.31.3-B.31.9 directive. The HBS system is covered by many different international patents.

HBS is designed with a 3D CAD system in accordance with the UNI ISO norms regarding design, such as UNI 4820, UNI 5456 and others.

Teseo's design team collaborates with specialised external organizations and university departments.

HBS components are tested in an internal test laboratory at our head-quarters as well as by independent labs accredited by SINAL, SIT, ISPESL, UNI.

HBS components are produced using raw material with a level quality satisfying the UNI EN 755-2, UNI EN 755-3, UNI EN 515, UNI EN 573-3, UNI EN 1706, UNI 5931, UNI EN 1461, UNI ISO 3601 and other norms.

**Teseo srl's management system is certified in accordance with UNI EN ISO 9001:2000 norm.**



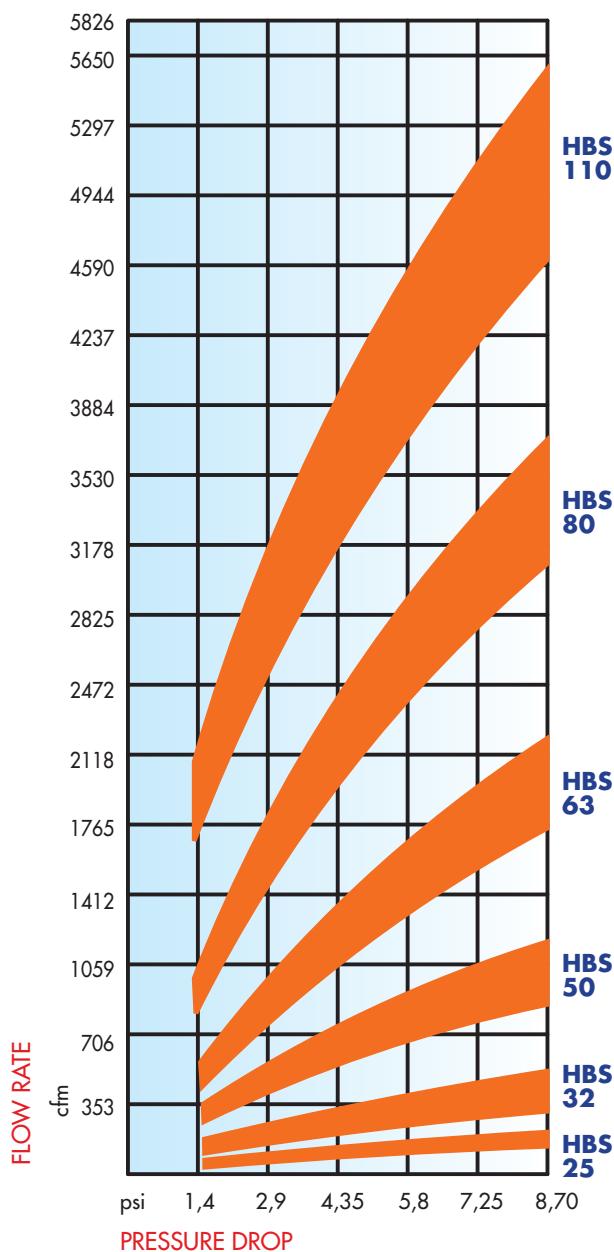
INDICATIVE DIAGRAM FOR THE CHOICE OF THE HBS DIAMETER ACCORDING TO COMPRESSOR INSTALLED MAX POWER

Compressor power hp	HBS D	US D (inc.)	Indicative flow rate (L 98,4 ft - 87 psi - Δ 3%) cfm
20	25	1"	70,6
43	32	1" 1/4	141,3
94	50	2"	423,8
188	63	2" 1/2	706,5
295	80	3" +	1413
740	110	4" +	2648,6



Graphs of compressed air flow rates and related pressure drops in a line 98,40 ft long (68°F - 14,7 psi). The data used have been provided by the POLYTECHNIC INSTITUTE OF TURIN.

See online software (page 71)



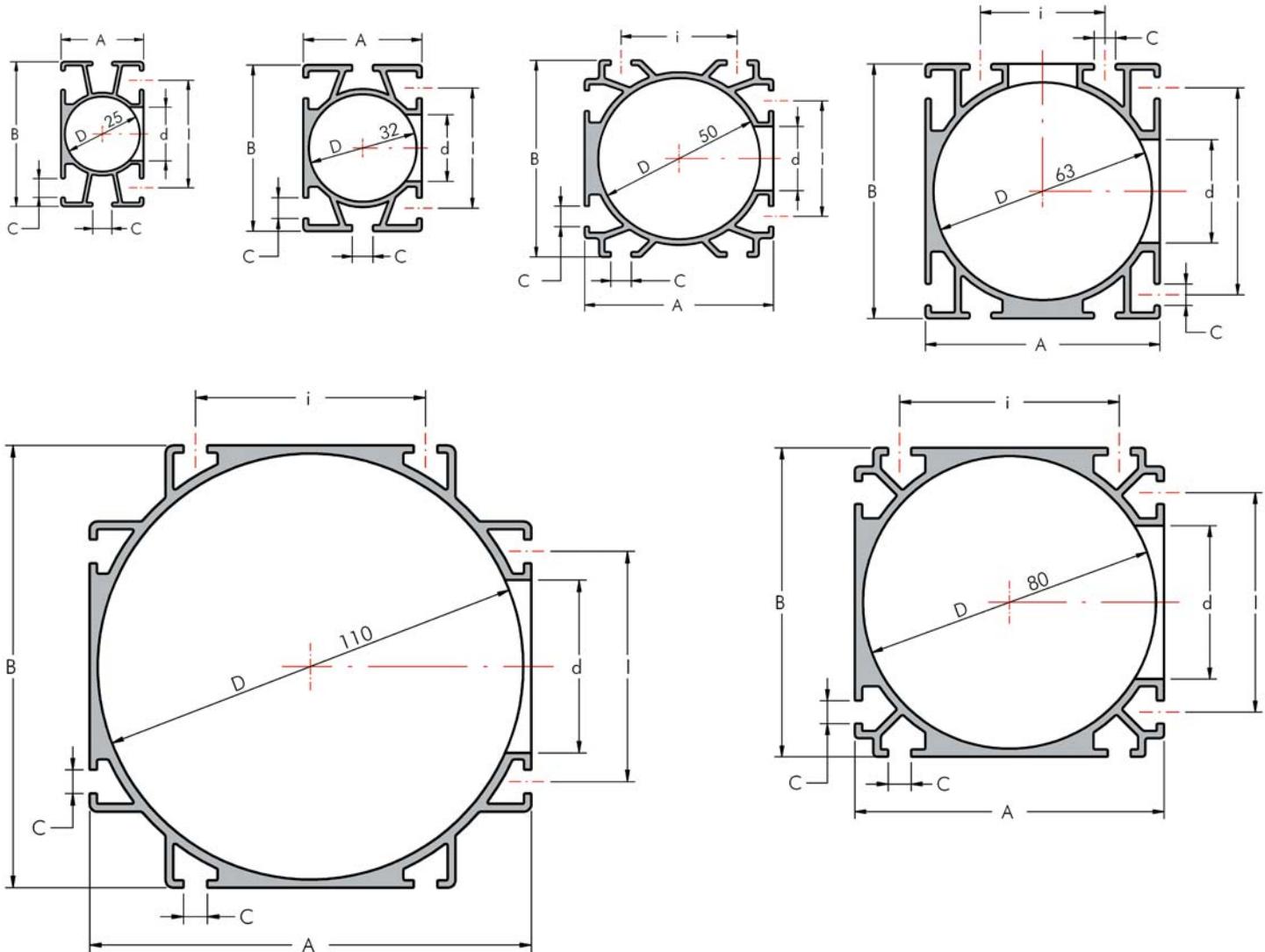
AIR PRESSURE: 87 → 174 psi





## PROFILES DIMENSION

HBS



### SIZE DIMENSIONS

HBS	US	Dimensions				Max hole	Inner volume	Weight	Moment of inertia	Section Area		
D	D in.	A in.	B in.	I in.	i in.	C in.	d in.	V gal/ft	P oz/ft	Jx in. <sup>4</sup>	Jy in. <sup>4</sup>	in. <sup>2</sup>
25	1"	1,10	1,93	1,42	-	0,24	0,71	0,04	7,9	0,17	0,06	0,76
32	1"1/4	1,42	1,96	1,42	-	0,24	0,79	0,07	14	0,29	0,16	1,24
50	2"	2,36	2,36	1,42	1,42	0,24	0,79	0,16	20,4	0,76	0,80	3,04
63	2"1/2	2,68	2,91	2,36	1,42	0,24	1,18	0,25	31,6	1,78	1,41	4,82
80	3"	3,35	3,35	2,36	2,36	0,24	1,65	0,4	35,5	2,89	2,89	7,8
110	4"	4,53	4,53	2,36	2,36	0,24	1,69	0,75	45,2	5,73	5,73	14,7



## TECHNICAL CHARACTERISTICS

Extruded Aluminum .....	alloy EN AW-6060 UNI EN 573-3:1996
International designations .....	ANSI 6060 - DIN1748/1: AlMgSi 0,5 BS 6060
Chemical composition .....	Si: 0,45 - Mg: 0,45 - Fe: 0,3
Heat treatment .....	T5, T6 or T66
Surface treatment (upon request) .....	Chemical silver anodization
Specific weight, density .....	lb/in. <sup>3</sup> 0,099
Electric conductivity .....	% IACS 53
Thermic conductivity .....	W/m·K 200
Specific heat .....	J/Kg·K 96
Coefficient of expansion .....	in./ft · °F 5,2·10 <sup>-4</sup>
Tensile strength .....	lb/in. <sup>2</sup> 34080
Yield strength .....	lb/in. <sup>2</sup> 28400
Modulus of elasticity .....	lb/in. <sup>2</sup> 9514000
Brinell hardness .....	HB 70÷80
Melting range .....	°F 1112-1202
O-ring material .....	NBR 70
Operating temperature .....	°F -68/+248
Screw material .....	Steel 8.8
Screw driving torque .....	90÷120 inch lbs
Outlet thread .....	NPT
Terminal thread .....	NPT
Max operating pressure .....	217 psi
Failure test pressure .....	813 psi

### Compatibility with fluids

Compressed air, Vacuum and Other fluids\*.

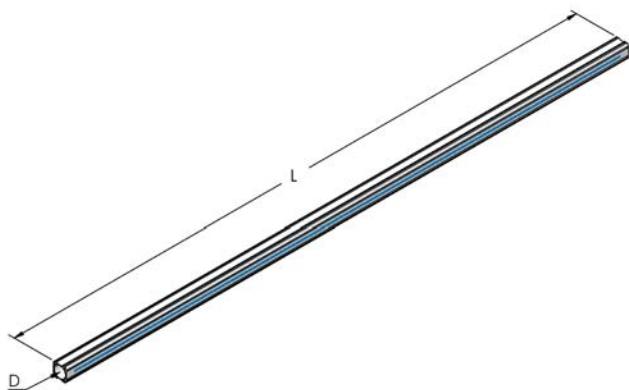
#### \*WARNING!

For further information, please contact to Teseo srl technical department.

HBS	US
D internal	D inch
25	1"
32	1"1/4
50	2"
63	2"1/2
80	3"
110	4"

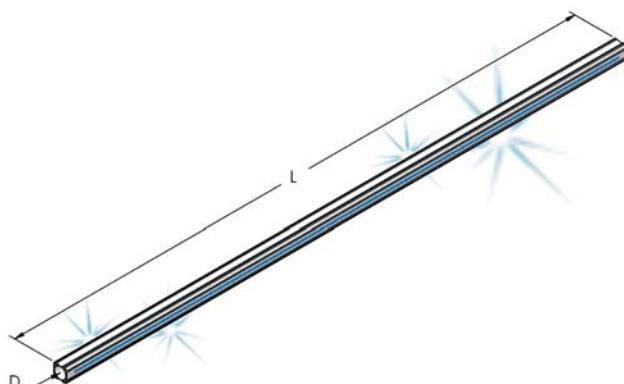


## NATURAL ALUMINUM HOLLOW BAR



D	L ft	Part no.	P lbs.	n°
25	16,4	800 028 500	8,82	32
32	16,4	800 036 500	12,57	24
50	16,4	800 060 500	19,84	16
63	16,4	800 068 500	30,42	12
80	16,4	800 085 500	36,82	8
110	16,4	800 114 500	46,30	4
25	8,2	800 028 250	4,40	32
32	8,2	800 036 250	6,39	24
50	8,2	800 060 250	9,92	16
63	8,2	800 068 250	15,21	12
80	8,2	800 085 250	18,29	8
110	8,2	800 114 250	23,15	4

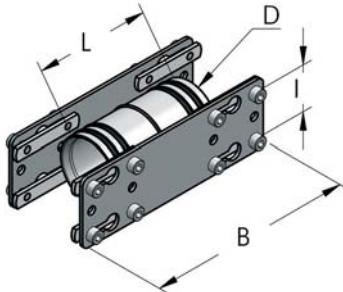
## ANODISED ALUMINUM HOLLOW BAR



D	L ft	Part no.	P lbs.	n°
25	16,4	801 028 500	8,82	32
32	16,4	801 036 500	13,89	24
50	16,4	801 060 500	20,94	16
63	16,4	801 068 500	30,86	12
80	16,4	801 085 500	37,48	8
110	16,4	801 114 500	46,96	4
25	8,2	801 028 250	4,41	32
32	8,2	801 036 250	6,83	24
50	8,2	801 060 250	10,36	16
63	8,2	801 068 250	15,43	12
80	8,2	801 085 250	18,74	8
110	8,2	801 114 250	23,37	4

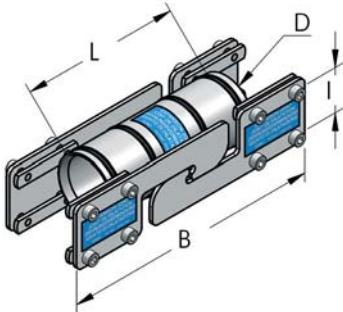


## STRAIGHT JOINT, COMPLETE



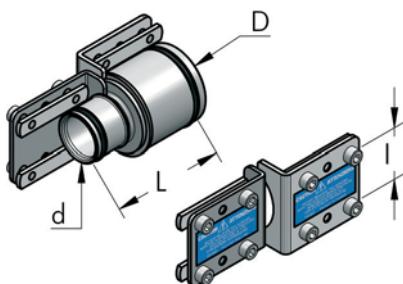
D	I in.	L in.	B in.	Part no.	P oz.	n°
25	1,42	1,57	4,72	003 000 020	6,315	20
32	1,42	1,97	4,72	003 001 020	7,015	20
50	1,42	3,54	6,30	003 002 020	20,11	10
63	1,42/2,36	4,17	6,30	003 003 020	27,16	10
80	2,36	5,12	6,30	003 004 020	33,51	10
110	2,36	7,09	9,06	003 005 020	70,55	5

## SLIDING JOINT, COMPLETE



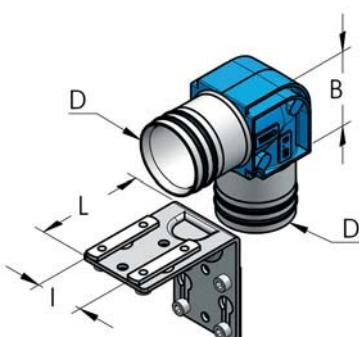
D	I in.	L in.	B in.	Part no.	P oz.	n°
25	1,42	2,56	7,87	003 000 021	14,82	10
32	1,42	3,15	7,87	003 001 021	15,87	10
50	1,42	5,12	7,87	003 002 021	27,51	10
63	2,36	5,91	7,87	003 003 021	35,27	5
80	2,36	7,09	7,87	003 004 021	49,38	5
110	2,36	11,02	11,02	003 005 021	88,18	5

## REDUCTION JOINT STRAIGHT, COMPLETE



D	d in.	L in.	I in.	Part no.	P oz.	n°
32	25	2,36	1,42	003 001 049	9,52	10
50	32	3,15	1,42	003 002 049	21,90	10
63	50	4,13	1,42	003 003 049	27,40	5
80	63	4,92	2,36	003 004 049	51,85	5
110	80	11,02	2,36	003 005 049	105,82	2

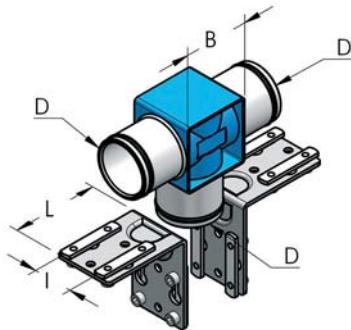
## L JOINT, COMPLETE



D	I in.	L in.	B in.	Part no.	P oz.	n°
25	1,42	2,36	1,18	003 000 022	8,46	20
32	1,42	2,36	1,65	003 001 022	9,88	20
50	1,42	3,15	2,36	003 002 022	18,70	10
63	1,42/2,36	3,15	2,95	003 003 022	49,38	10
80	2,36	3,15	3,35	003 004 022	91,78	10
110	2,36	4,33	6,50	003 005 022	105,82	5

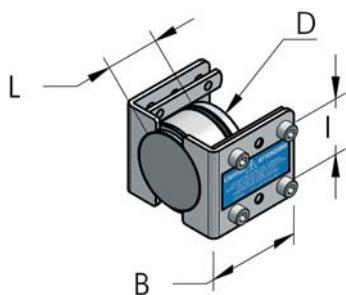


## T JOINT, COMPLETE



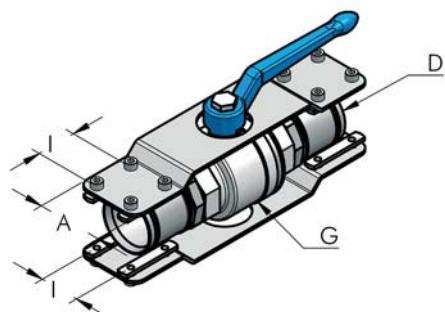
D	I in.	L in.	B in.	Part no.	P oz.	n°
25	1,42	2,36	1,18	003 000 024	14,11	10
32	1,42	2,36	1,97	003 001 024	15,17	10
50	1,42	3,15	2,36	003 002 024	28,92	10
63	1,42-2,36	3,15	2,95	003 003 024	74,07	10
80	2,36	3,15	3,35	003 004 024	123,46	5
110/80	2,36	4,33	9,06	003 005 023	137,57	2
110	2,36	4,33	9,06	003 005 024	141,09	2

## CLOSED TERMINAL, COMPLETE



D	I in.	L in.	B in.	Part no.	P oz.	n°
25	1,42	0,79	2,36	003 000 026	4,23	20
32	1,42	0,98	2,36	003 001 026	4,23	20
50	1,42	1,58	2,36	003 002 026	15,17	10
63	2,36	1,97	2,36	003 003 026	24,69	10
80	2,36	2,60	2,36	003 004 026	47,62	5
110	2,36	7,99	4,33	003 005 026	70,55	2

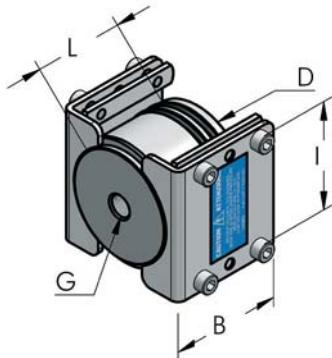
## BALL VALVE, COMPLETE



D	G	I in.	A in.	Part no.	P oz.	n°
25	3/4"	1,42	1,97	003 000 046	22,22	10
32	1"	1,42	1,97	003 001 046	39,51	10
50	1"1/2	1,42	2,36	003 002 046	79,31	10
63	2"	1,42	2,36	003 003 046	118,52	10
80	2"1/2	2,36	2,83	003 004 046	186,95	5
110	4"	2,36	3,07	003 005 046	444,45	2

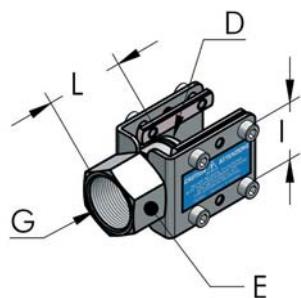


## TERMINAL WITH THREADED HOLE, COMPLETE



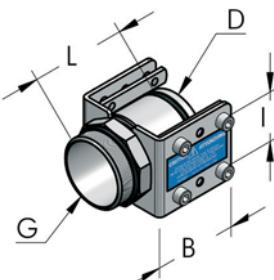
D	G	L in.	B in.	I in.	Part no.	P oz.	n°
25	1/4" - NPT	0,87	2,36	1,42	003 000 425	4,02	20
32	1/4" - NPT	0,98	2,36	1,42	003 001 425	4,59	20
32	1/2" - NPT	0,98	2,36	1,42	003 001 431	4,51	20
50	1/4" - NPT	1,57	2,36	1,42	003 002 425	15,52	20
50	1/2" - NPT	1,57	2,36	1,42	003 002 429	15,17	20
63	1/4" - NPT	1,97	2,36	2,36	003 003 425	23,14	20
80	1/4" - NPT	2,60	3,15	2,36	003 004 425	45,86	20
80	1/2" - NPT	2,60	3,15	2,36	003 004 429	45,86	20
110	3/8" - NPT	7,99	4,33	2,36	003 005 425	70,55	20

## FEMALE THREADED TERMINAL, COMPLETE



D	G	E in.	L in.	I in.	Part no.	P oz.	n°
25	3/4" - NPT	1,18	1,57	1,42	003 000 427	4,23	20
32	1" - NPT	1,42	1,97	1,42	003 001 427	4,94	20
50	1"1/2" - NPT	2,05	2,76	1,42	003 002 428	11,99	20
63	1"1/2" - NPT	2,56	2,95	2,36	003 003 428	15,52	10
80	1" - NPT	-	2,60	2,36	003 004 427	32,45	20
80	2" - NPT	3,23	3,74	2,36	003 004 428	32,45	10
110	2"1/2" - NPT	4,53	5,91	2,36	003 005 428	70,55	20

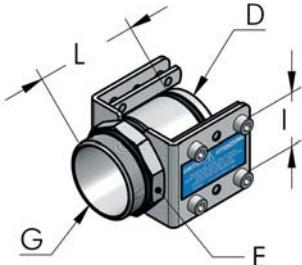
## MALE THREADED TERMINAL, COMPLETE



D	G	L in.	B in.	I in.	Part no.	P oz.	n°
25	3/4" - NPT	1,42	2,36	1,42	003 000 429	3,88	20
32	1" - NPT	1,73	2,36	1,42	003 001 430	8,11	20
50	1"1/2" - NPT	2,95	2,36	1,42	003 002 430	11,64	20
63	2" - NPT	3,15	2,36	2,36	003 003 430	15,17	10
80	2"1/2" - NPT	4,02	3,15	2,36	003 004 430	22,93	10

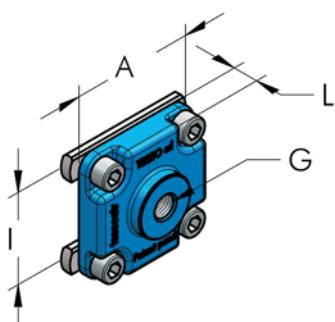


## MALE THREADED TERMINAL, COMPLETE



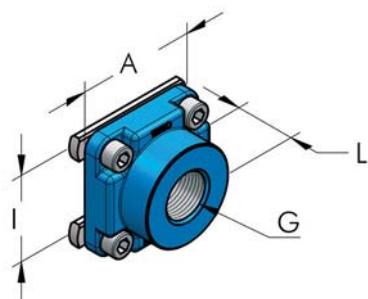
D	G	L in.	E in.	I in.	Part no.	P oz.	n°
25	1" - NPT	1,57	1,42	1,42	003 000 430	4,59	20
32	1"1/4 - NPT	2,05	1,97	1,42	003 001 429	6,70	20
50	2" - NPT	2,95	2,56	1,42	003 002 431	15,52	20
63	2"1/2 - NPT	3,54	3,23	2,36	003 003 431	23,28	10
80	3" - NPT	4,72	3,54	2,36	003 004 431	29,28	10
110	4" - NPT	5,91	4,53	2,36	003 005 431	52,91	20

## FEMALE OUTLET PLATE, COMPLETE



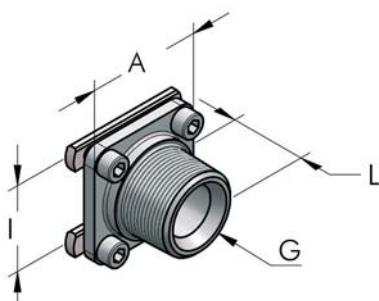
I in.	G	A in.	L in.	Part no.	P oz.	n°
1,42	1/8" - NPT	1,89	0,39	003 001 432	2,82	20
1,42	1/4" - NPT	1,89	0,39	003 001 433	2,82	20
1,42	3/8" - NPT	1,89	0,39	003 001 434	2,82	20

## FEMALE OUTLET PLATE, COMPLETE



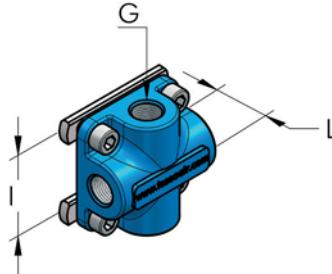
I in.	G	A in.	L in.	Part no.	P oz.	n°
1,42	1/2" - NPT	1,97	0,98	003 002 433	3,88	20
1,42	3/4" - NPT	1,97	0,98	003 002 434	3,70	20
1,42	1" - NPT	1,97	0,98	003 002 435	3,17	20
2,36	1/2" - NPT	2,76	1,18	003 003 433	8,82	10
2,36	3/4" - NPT	2,83	1,18	003 003 434	7,76	20
2,36	1" - NPT	2,83	1,18	003 003 435	7,05	10
2,36	1"1/2 - NPT	2,83	1,18	003 003 436	5,3	10

## MALE OUTLET PLATE, COMPLETE



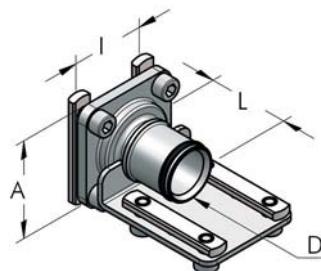
I in.	G	A in.	L in.	Part no.	P oz.	n°
1,42	1" - NPT	1,89	1,42	003 002 436	4,23	20
2,36	2" - NPT	2,76	1,93	003 004 436	21,16	10

### FEMALE MULTIPLE OUTLET PLATE, COMPLETE



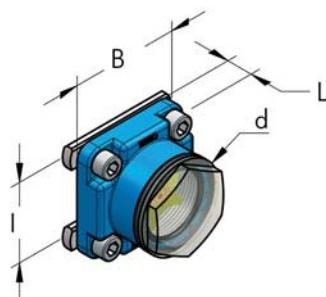
I in.	Uscite Outlets	G	L in.	Part no.	P oz.	n°
1,42	2	1/4" - NPT	0,94	003 001 436	4,23	20
1,42	2	3/8" - NPT	0,94	003 001 437	4,06	20
1,42	4	1/4" - NPT	0,94	003 001 438	3,88	20
1,42	4	3/8" - NPT	0,94	003 001 439	3,53	20

### REDUCTION PLATE, COMPLETE



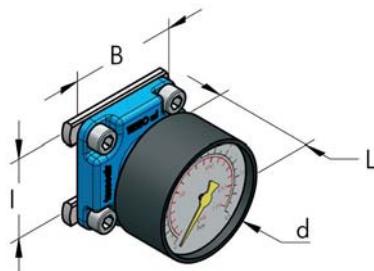
D	I in.	A in.	L in.	Part no.	P oz.	n°
25	1,42	1,89	1,57	003 000 037	6,70	20
32	1,42	1,89	1,73	003 002 037	7,05	20
50	2,36	2,76	2,36	003 003 037	18,70	10
63	2,36	2,76	2,83	003 004 037	21,52	10

### CONDENSATE LEVEL SIGHT GLASS



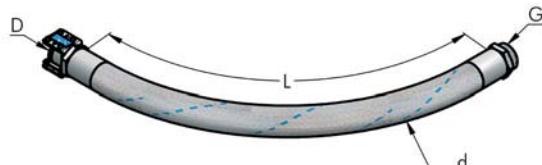
I in.	d in.	L in.	B in.	Part no.	P oz.	n°
1,42	1,57	0,39	1,89	003 001 044	3,53	20

### PRESSURE GAUGE, COMPLETE



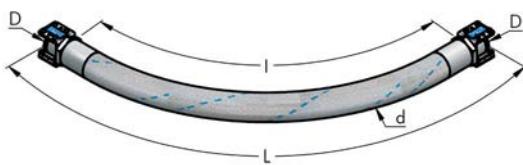
I in.	d in.	L in.	B in.	Part no.	P oz.	n°
1,42	1,98	1,77	1,89	003 001 048	5,08	10

## FLEXIBLE PIPE FOR CONNECTION TO COMPRESSOR



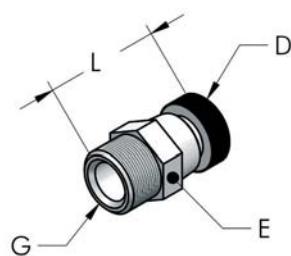
D	G	L in.	d in.	Part no.	P oz.	n°
25	1" - NPT	39,37	1,46	003 000 458	59,97	20
32	1"1/4 - NPT	39,37	1,73	003 001 458	77,60	20
50	2" - NPT	39,37	2,56	003 002 458	141,10	20
63	2"1/2 - NPT	51,18	3,03	003 003 458	165,79	20
80	3" - NPT	62,99	3,54	003 004 458	204,59	20

## FLEXIBLE JOINT FOR HBS-HBS CONNECTION



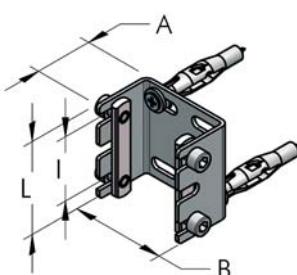
D	d in.	L in.	I in.	Part no.	P oz.	n°
25	1,46	39,37	41,34	003 000 059	67,02	10
32	1,73	39,37	42,52	003 001 059	84,66	10
50	2,53	39,37	43,30	003 002 059	151,68	10
63	3,03	51,18	57,09	003 003 059	176,37	10
80	3,54	63,00	70,87	003 004 059	224,23	10

## CONDENSATE DRAIN



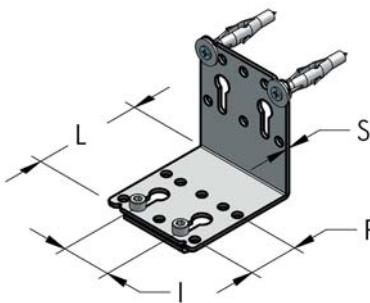
G	D in.	L in.	E in.	Part no.	P oz.	n°
1/4" - NPT	0,51	1,02	0,55	435 013 035	0,71	10
3/8" - NPT	0,55	1,06	0,67	435 016 024	1,06	10

## U BRACKET, COMPLETE



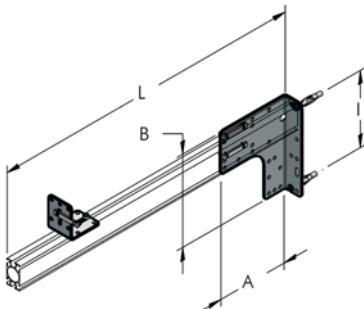
I in.	B in.	L in.	A in.	Part no.	P oz.	n°
1,42	1,97	2,05	1,18	003 000 040	4,94	20

## FIXING "L" PLATE, COMPLETE



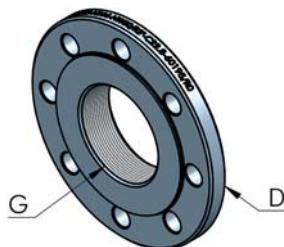
I in.	P in.	L in.	S in.	Part no.	P oz.	n°
1,42	1,42	2,36	0,08	003 001 040	3,53	20
1,42-2,36	1,42	3,15	0,12	003 003 040	9,17	20
1,42-2,36	1,42/2,36	5,51	0,14	003 004 040	15,17	20

## SUPPORT BRACKET, COMPLETE



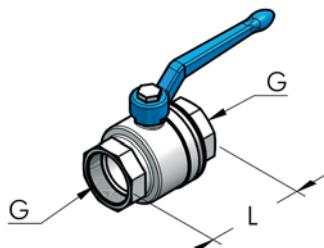
A in.	B in.	I in.	L in.	Part no.	P oz.	n°
5,12	6,69	5,51	23,62	003 001 070	45,86	10
5,12	6,69	5,51	*	003 001 071	12,70	10

## FEMALE FLANGE



D in.	G	Holes no.	Part no.	P oz.	n°
7,87	3" - NPT	8	436 084 035	134,04	10
8,66	4" - NPT	8	436 113 040	176,37	10

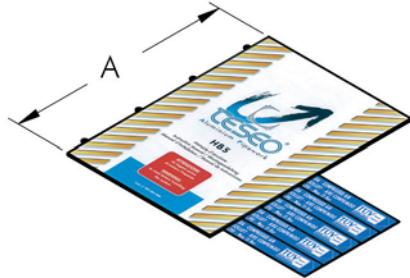
## BALL VALVE



G	L in.	Part no.	P oz.	n°
1/2" - NPT	1,97	434 020 050	6,00	10
3/4" - NPT	2,68	434 025 070	10,58	10
1" - NPT	3,15	434 032 080	14,81	10
1"1/2" - NPT	3,94	434 047 100	34,92	10
2" - NPT	4,53	434 059 120	56,44	10
2"1/2" - NPT	5,99	434 074 150	125,22	10



## INSTRUCTION MANUAL + LABELS



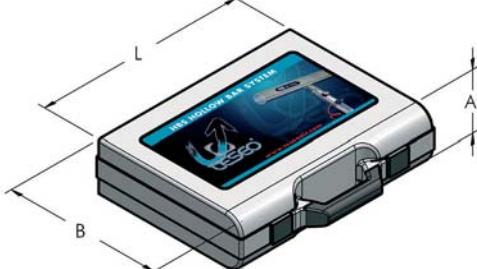
A in.	Description	Part no.	P oz.	n°
11,82	Assembly instruction and adhesive labels	003 001 093	2,12	1

## ADESIVE COLOUR STICKERS



L in.	Color	Part no.	P oz.	n°
12,20	Green RAL 6029	104 028 315	1,02	11
12,20	Brown RAL 8003	104 028 316	1,02	11
12,20	Grey RAL 7000	104 028 317	1,02	11
12,20	Red RAL 3020	104 028 318	1,02	11
12,20	Yellow RAL 1028	104 028 319	1,02	11

## DEMO SUIT-CASE

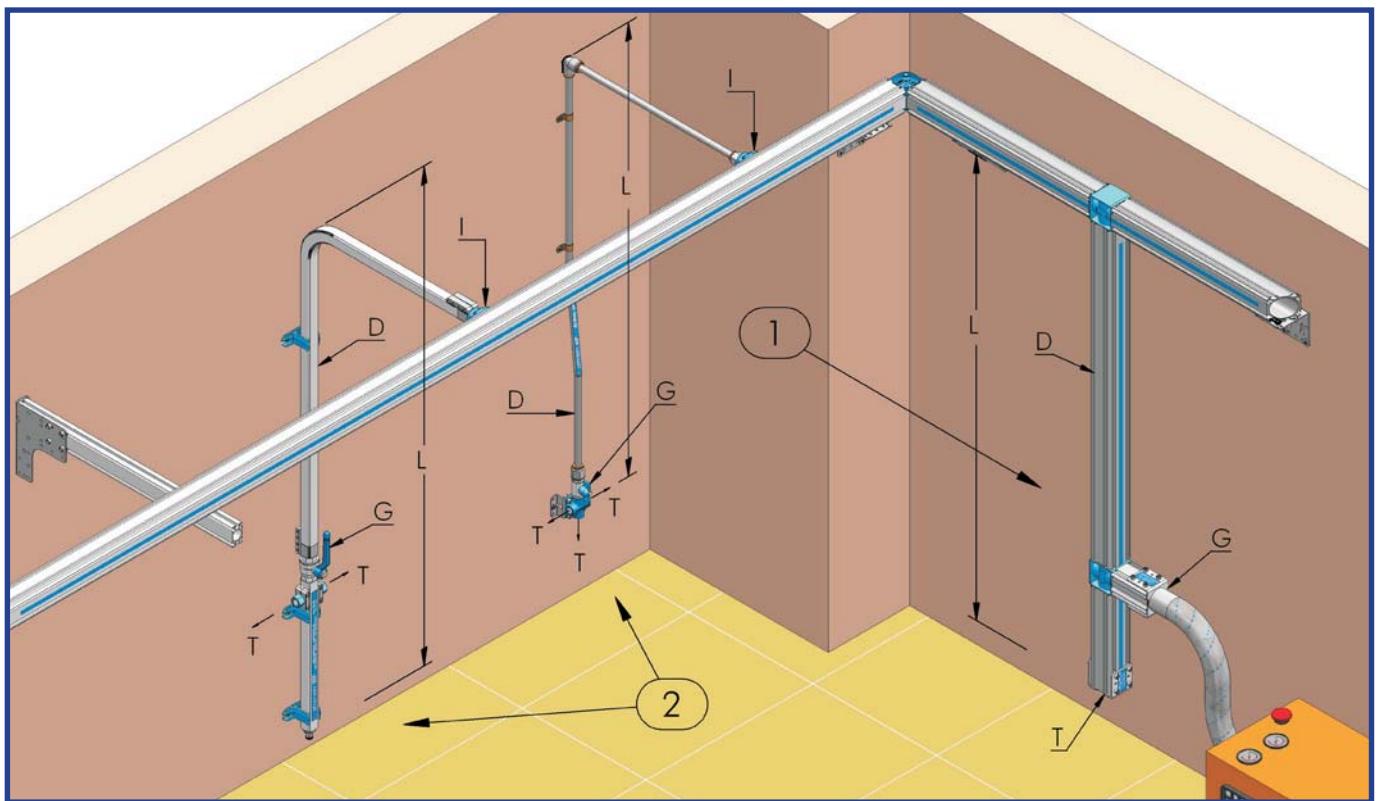


A in.	B in.	L in.	Description	Part no.	P oz.	n°
5,12	14,96	19,29	22 HBS parts	003 001 090	158,73	1



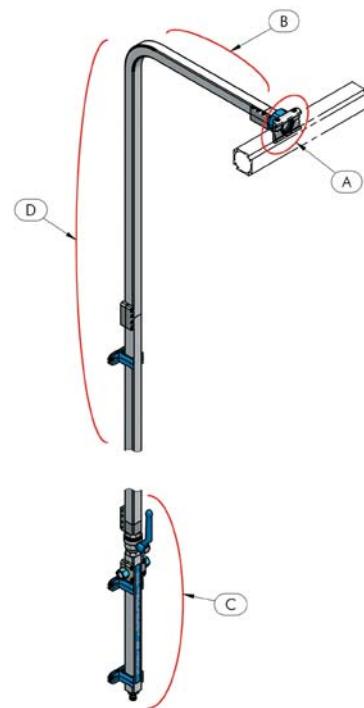
## DISTRIBUTION NET EXAMPLE

Feeding column / Drop column



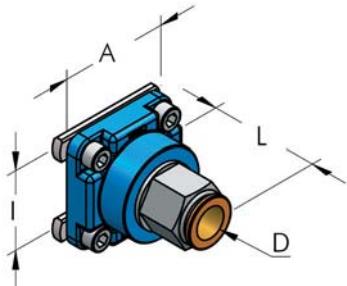
## DESIGN YOUR DROP COLUMN

- A - Determine the size of the main line and of the desired drops.
- B - Determine where the drops will be installed.
- C - Determine length of pipe and fittings required.



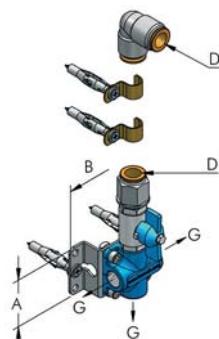


## REDUCTION PLATE FOR D14 COLUMN, COMPLETE



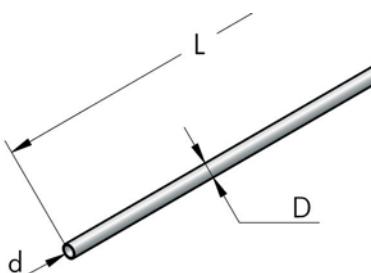
I in.	D in.	A in.	L in.	Part no.	P oz.	n°
1,42	0,55	1,97	1,97	003 001 134	5,64	20
2,36	0,55	2,83	2,17	003 003 134	10,58	20

## 3 OUTLET BLOCK FOR COLUMN DROP D14, COMPLETE



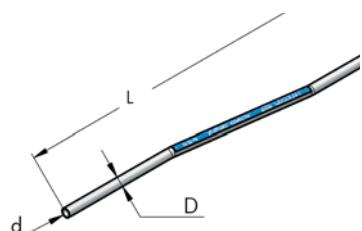
D in.	G	A in.	B in.	Part no.	P oz.	n°
0,55	3/8" - NPT	1,89	3,35	003 001 468	17,64	20

## STRAIGHT PIPE FOR COLUMN DROP D14

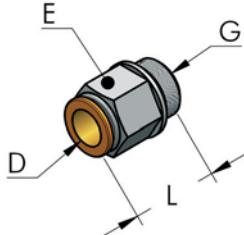


D in.	d in.	L ft.	Part no.	P oz.	n°
0,55	0,47	3,28	425 014 100	3,74	20
0,55	0,47	16,40	425 014 500	18,70	20

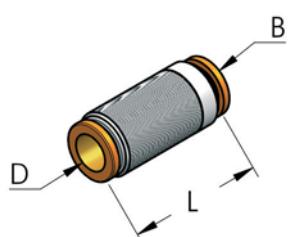
## BENT PIPE FOR COLUMN DROP D14



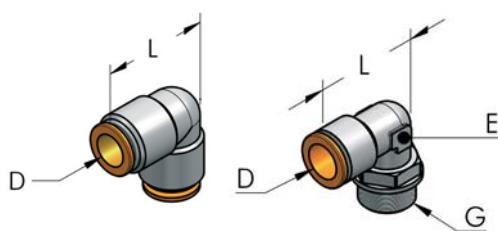
D in.	d in.	L ft.	Offset in.	Part no.	P oz.	n°
0,55	0,47	16,40	1,18	804 014 500	18,87	20

**MALE THREADED STRAIGHT PUSH FITTING**

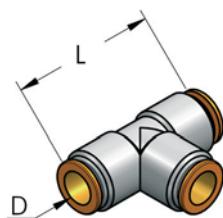
D in.	G	L in.	E in.	Part no.	P oz.	n°	
0,55	3/8" - NPT	1,42	0,87	413 016 036	1,62	20	
0,55	1/2" - NPT	1,34	0,87	413 020 034	1,68	20	

**STRAIGHT PUSH FITTING**

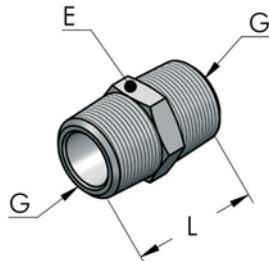
D in.	B in.	L in.	Part no.	P oz.	n°	
0,55	0,79	1,89	413 014 048	2,19	20	

**L PUSH FITTING (TUBE x TUBE & TUBE x NPT)**

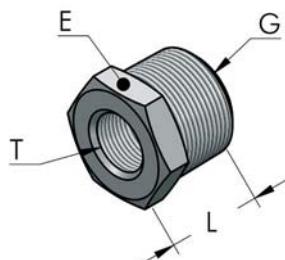
D in.	G	L in.	E in.	Part no.	P oz.	n°	
0,55	-	1,38	-	414 014 035	3,72	20	
0,55	1/2" - NPT	1,38	0,71	414 020 035	3,10	20	

**T PUSH FITTING**

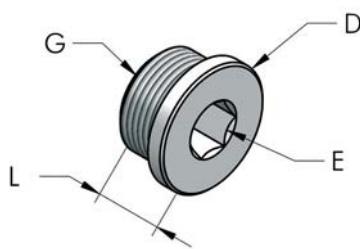
D in.	L in.	Part no.	P oz.	n°	
0,55	2,76	414 014 070	3,89	20	

**MxM THREADED NIPPLE**

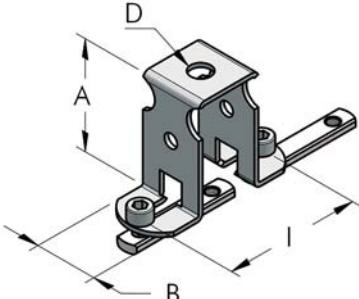
<b>G</b>	<b>L</b> in.	<b>E</b> in.	<b>Part</b> no.	<b>P</b> oz.	<b>n°</b>	
3/8" - NPT	1,10	0,67	417 016 028	0,92	20	
1/2" - NPT	1,38	0,87	417 020 033	1,55	20	
3/4" - NPT	1,57	1,06	417 025 040	2,75	20	
1" - NPT	1,34	1,34	417 032 034	2,82	20	
1 1/2" - NPT	2,36	2,16	417 047 060	10,23	20	

**MxF NIPPLE WITH TAPERED THREAD**

<b>G</b>	<b>T</b>	<b>L</b> in.	<b>E</b> in.	<b>Part</b> no.	<b>P</b> oz.	<b>n°</b>	
1/2" - NPT	1/4" - NPT	0,63	0,94	417 020 016	1,09	20	

**THREADED PLUG, WITH SEAL**

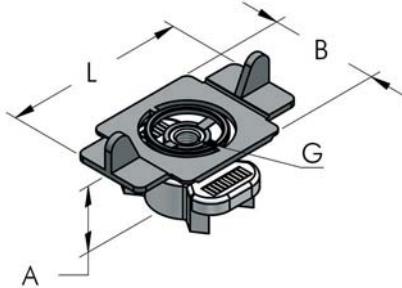
<b>G</b>	<b>D</b> in.	<b>L</b> in.	<b>E</b> in.	<b>Part</b> no.	<b>P</b> oz.	<b>n°</b>	
1/4" - NPT	0,71	0,43	0,24	418 013 011	0,35	20	
3/8" - NPT	0,83	0,51	0,31	418 016 013	0,71	20	
1/2" - NPT	1,02	0,59	0,39	418 020 015	1,13	20	

**HANGING BRACKET, COMPLETE**

<b>I</b> in.	<b>A</b> in.	<b>B</b> in.	<b>D</b> in.	<b>Part</b> no.	<b>P</b> oz.	<b>n°</b>	
1,42-2,36	1,97	1,10	0,39	003 001 074	3,53	20	

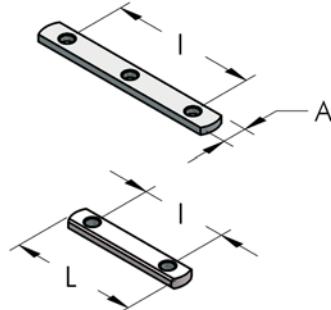


## HEXAGONAL NUT M6 FOR HILTI SYSTEM



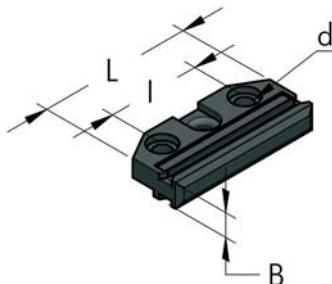
L in.	B in.	A in.	G	Part no.	P oz.	n°
1,97	1,18	0,59	M6	233 006 034	0,78	50

## SMALL PLATE WITH M6 HOLES



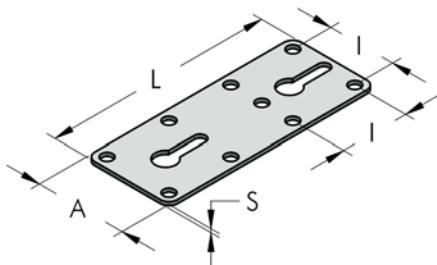
I in.	A in.	L in.	Holes no.	Part no.	P oz.	n°
1,42	0,39	2,05	2	725 010 052	0,42	100
2,36	0,39	3,15	2	725 010 080	0,81	50
2,36	0,39	3,07	3	725 010 081	0,78	50

## INSULATING BLOCK

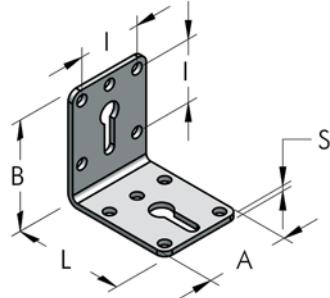


d in.	L in.	I in.	B in.	Part no.	P oz.	n°
0,24	2,36	1,42	0,39	003 001 075	0,92	20

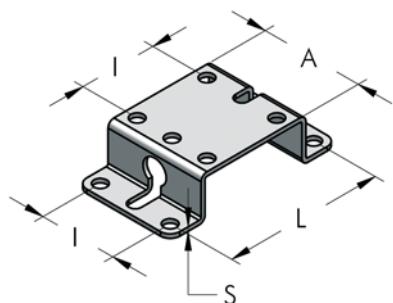
## STRAIGHT PLATE, IN GALVANIZED STEEL



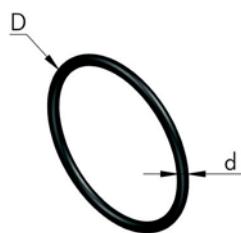
A in.	L in.	I in.	S in.	Part no.	P oz.	n°
1,89	4,72	1,42	0,08	711 048 120	2,82	20
2,13	6,30	1,42	0,10	711 056 160	5,15	20
2,83	6,30	1,42-2,36	0,10	711 072 160	7,09	20
3,07	9,45	1,42-2,36	0,14	711 078 230	14,89	20

**L-PLATE, GALVANIZED STEEL**

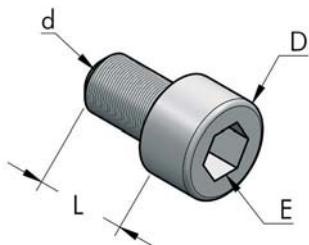
A in.	B in.	L in.	I in.	S in.	Part no.	P oz.	n°
1,89	2,36	2,36	1,42	0,08	721 048 060	2,72	20
2,13	3,15	3,15	1,42	0,10	732 056 080	5,22	20
2,83	3,15	3,15	1,42-2,36	0,12	732 072 090	8,64	20
3,07	3,70	5,51	1,42-2,36	0,14	732 078 140	14,81	20

**FIXING BRACKET, GALVANIZED STEEL**

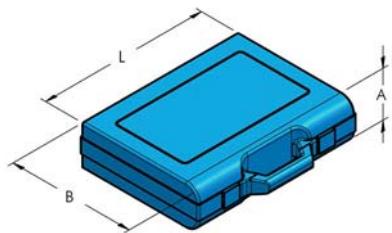
A in.	L in.	I in.	S in.	Part no.	P oz.	n°
1,89	2,83	1,42	0,08	735 048 120	2,75	20

**O-RING SEAL NBR70**

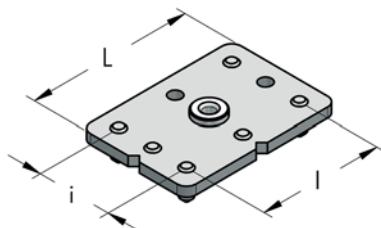
D in.	d in.	Cod. AS-BS	Part no.	P oz.	n°
0,98	0,07	019	271 020 002	0,01	100
1,26	0,10	121	271 027 003	0,02	100
1,97	0,10	132	271 044 003	0,052	100
2,48	0,10	140	271 057 003	0,042	100
3,15	0,10	150	271 073 003	0,05	100
4,33	0,14	241	271 101 004	0,14	100

**ALLEN SCREW, GALVANIZED STEEL**

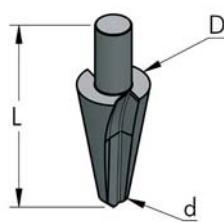
d in.	L in.	D in.	E in.	Part no.	P oz.	n°
M6	0,31	0,39	0,20	212 006 008	0,15	100
M6	0,39	0,39	0,20	212 006 010	0,16	100
M6	0,47	0,39	0,20	212 006 012	0,17	100
M6	0,55	0,39	0,20	212 006 014	0,18	100
M6	0,71	0,39	0,20	212 006 018	0,20	100

**BASIC TOOL BOX**

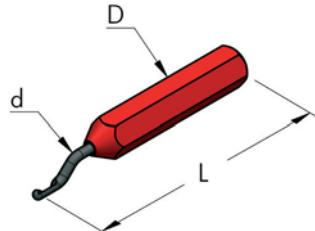
<b>A</b> in.	<b>B</b> in.	<b>L</b> in.	<b>Part</b> no.	<b>P</b> oz.	<b>n°</b>
1,97	7,48	9,45	003 001 092	24,69	1

**DRILLING JIG**

<b>l</b> in.	<b>i</b> in.	<b>L</b> in.	<b>Part</b> no.	<b>P</b> oz.	<b>n°</b>
2,36	1,42	3,15	911 036 060	6,70	1

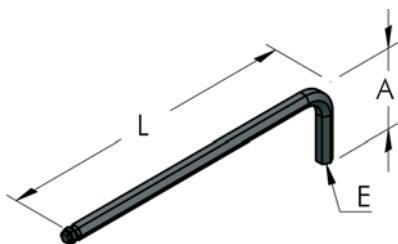
**DRILLING TOOL**

<b>D</b> in.	<b>d</b> in.	<b>L</b> in.	<b>Part</b> no.	<b>P</b> oz.	<b>n°</b>
0,79	0,31	2,44	922 020 062	1,62	1

**DEBURRING TOOL**

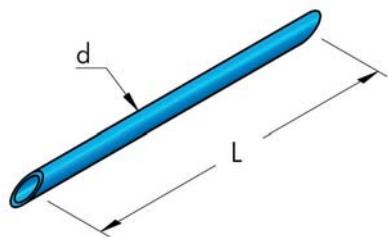
<b>d</b> in.	<b>D</b> in.	<b>L</b> in.	<b>Part</b> no.	<b>P</b> oz.	<b>n°</b>
0,01	0,55	5,90	909 012 130	1,94	10
0,01	<b>Spare blade</b>		909 003 047	0,11	10



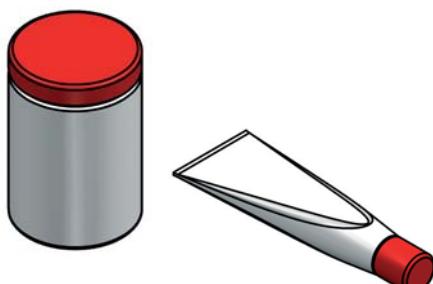
**ALLEN WRENCH**

E in.	A in.	L in.	Part no.	P oz.	n°
0,20	1,34	5,51	901 130 005	1,05	10

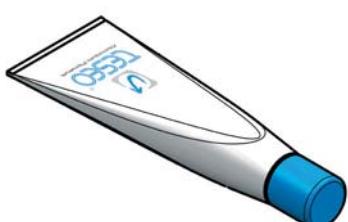
HBS

**TUBES TO HOLD SMALL PLATE IN POSITION**

d in.	L in.	Mat	Part no.	P oz.	n°
0,03	5,90	PVC	421 006 015	0,18	10

**"O" RING LUBE**

Part no.	P oz.	n°
111 003 100	35,27	20
111 003 010	3,52	20

**PTFE BLUE GREASE**

Part no.	P oz.	n°
114 003 005	1,76	20

## AP MULTIFLUID PIPING SYSTEM

This product patented by TESEO is the result of years of research and experience in installing thousands of distribution systems made up of aluminum profiles all over the world.

AP is suitable for compressed air distribution lines or for main line drops.

If compared with other systems, some of the advantages AP offers are:

- Easy and quick to assembly, no special tools required, it can be assembled without special skills.
- Its simple section is symmetric and can be used on all sides. Easy to cut and bend.
- Equipped with numerous accessories which are composed of simple modular elements compatible both with the present HBS system and steel pipes with BSP or NPT threads.
- AP is more convenient than a traditional piping system with the quick mounting, and very competitive price.

### EASY TO ASSEMBLE

#### DEBURRING MOUNTING



#### ASSEMBLING TIGHTENING





## COMPRESSED AIR AND FLUIDS PIPING SYSTEMS



## MODULAR MANIFOLDS INTEGRATED ON MACHINES





## AP IS A SAFE AND RELIABLE SYSTEM

All components of AP system were tested by AQM center ([www.aqm.it](http://www.aqm.it)), test laboratory accredited by SINAL. Teseo submitted AP components to pressure tests with extreme temperatures and pressures in order to verify all parts meet design standards.

Also in USA it meet the approval of the ANSI B.31.-B.31.9 directive. The AP system is covered by different international patents.

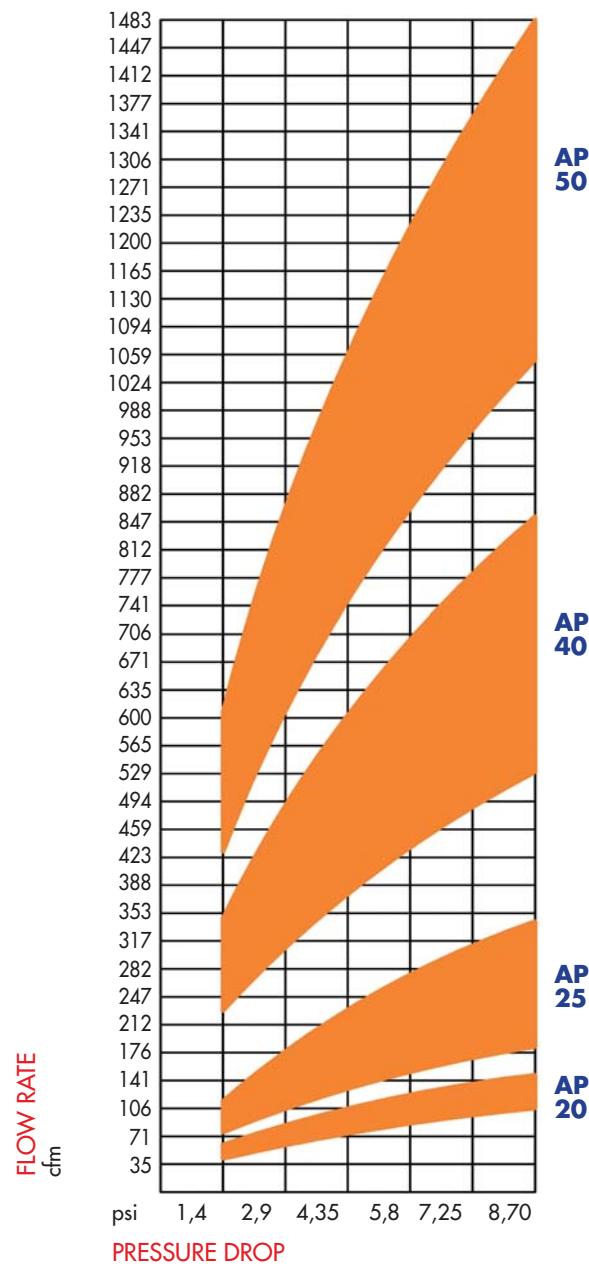
AP is designed with a 3D CAD system in accordance with the UNI ISO norms regarding design, such as UNI 4820, UNI 5456 and others. Teseo's design team collaborates with specialised external organizations and university departments. AP components are tested in an internal test laboratory at our head-quarters as well as by independent labs accredited by SINAL, SIT, ISPESL, UNI. AP components are produced using raw material with a level of quality that satisfies the UNI EN 755-2, UNI EN 755-3, UNI EN 515, UNI EN 573-3, UNI EN 1706, UNI 5931, UNI EN 1461, UNI ISO 3601 and other norms.

**Teseo srl's management system is certified in accordance with UNI EN ISO 9001:2000 norm.**



Graphs of compressed air flow rates and related pressure drops in a line 98,40 ft long (68 °F - 14.7 psi). The data used has been provided by the POLYTECHNIC INSTITUTE OF TURIN.

See online software (page 71)

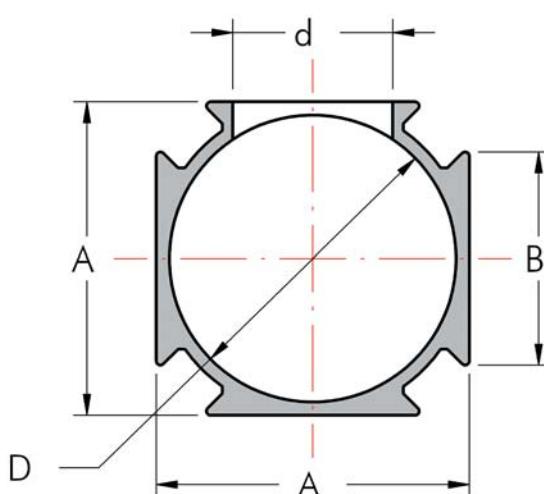
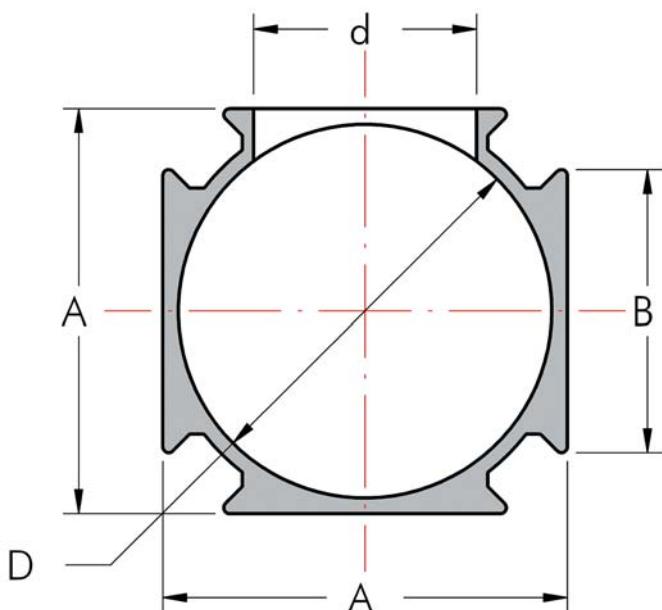
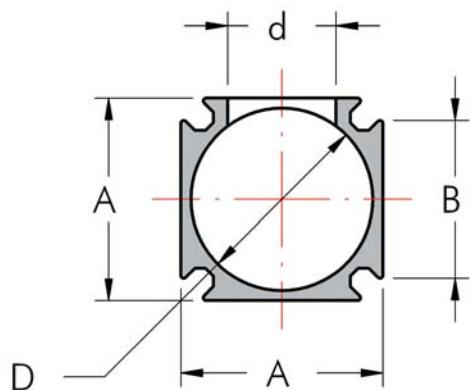
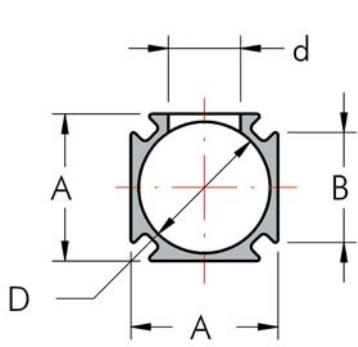


AIR PRESSURE: 87→174 psi



## PROFILES DIMENSIONS

AP



### SIZE DIMENSIONS

AP	US	Dimensions	Max hole	Weight	Moment of inertia	Inner volume		
D	D in.	A in.	B in.	d in.	P oz./ft	Jx in. <sup>4</sup>	Jy in. <sup>4</sup>	V gal/ft
20	3/4"	0,09	0,06	0,04	39,11	0,02	0,02	0,025
25	1"	0,11	0,08	0,06	64,10	0,05	0,05	0,04
40	1 1/2"	0,18	0,12	0,09	127,11	0,26	0,26	0,11
50	2"	0,22	0,15	0,12	183,61	0,57	0,57	0,16

## TECHNICAL CHARACTERISTICS

Extruded Aluminum .....	alloy EN AW-6060 UNI EN 573-3:1996
International designations .....	ANSI 6060 - DIN1748/1: AlMgSi 0,5 BS 6060
Chemical composition .....	Si: 0,45 - Mg: 0,45 - Fe: 0,3
Heat treatment .....	T5, T6 or T66
Surface treatment (upon request) .....	Chemical silver anodization
Specific weight, density .....	lb/in. <sup>3</sup> 0,099
Electric conductivity .....	% IACS 53
Thermic conductivity .....	W/m·K 200
Specific heat .....	J/Kg·K 96
Coefficient of expansion .....	in./ft · °F 5,2·10 <sup>-4</sup>
Tensile strength .....	lb/in. <sup>2</sup> 34080
Yield strength .....	lb/in. <sup>2</sup> 28400
Modulus of elasticity .....	lb/in. <sup>2</sup> 9514000
Brinell hardness .....	HB 70÷80
Melting range .....	°F 1112-1202
O-ring material .....	NBR 70
Operating temperature .....	°F -68/+248
Screw material .....	Steel 8.8
Screw driving torque .....	90÷120 inch lbs
Outlet thread .....	NPT
Terminal thread .....	NPT
Max operating pressure .....	217 psi
Failure test pressure .....	813 psi

### Compatibility with fluids

Compressed air, Vacuum, Argon, Nitrogen, Carbon dioxide, Mineral oil\*, Synthetic oil\*, Other fluids\*.

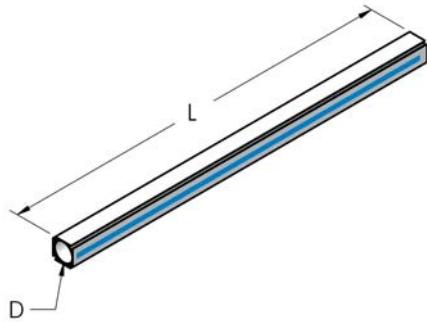
#### \*WARNING!

For further information, please contact Teseo srl technical department.

AP	US
D internal	D Inch
20	3/4"
25	1"
40	1" 1/2
50	2"

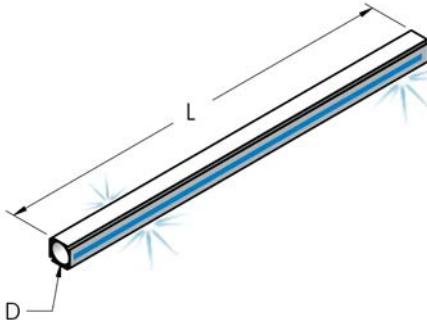


## NATURAL ALUMINUM EXTRUDED PIPE



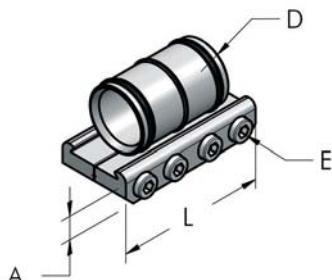
D	L ft.	Part no.	P oz.	n°	
20	16,4	800 020 500	67,02	100	
25	16,4	800 025 500	105,82	64	
40	16,4	800 040 500	204,58	36	
50	16,4	800 050 500	296	16	
20	8,2	800 020 250	33,51	100	↗
25	8,2	800 025 250	52,91	64	↗
40	8,2	800 040 250	102	36	↗
50	8,2	800 050 250	148	16	↗

## ANODIZED ALUMINUM EXTRUDED PIPE



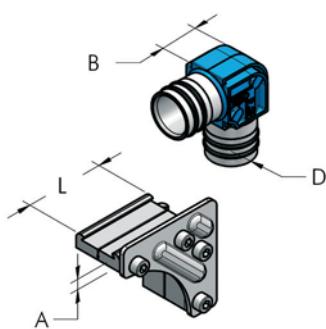
D	L ft.	Part no.	P oz.	n°	
20	16,4	801 020 500	67,02	100	↗
25	16,4	801 025 500	105,82	64	↗
40	16,4	801 040 500	204,58	36	↗
50	16,4	801 050 500	296	16	↗
20	8,2	801 020 250	33,51	100	↗
25	8,2	801 025 250	52,91	64	↗
40	8,2	801 040 250	102	36	↗
50	8,2	801 050 250	148	16	↗

## STRAIGHT JOINT, COMPLETE

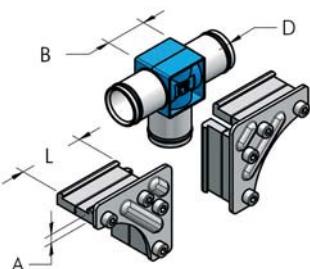


D	L in.	A in.	E in.	Part no.	P oz.	n°	
20	1,81	0,35	0,16	006 020 020	1,37	10	
25	2,36	0,39	0,16	006 025 020	3,03	10	
40	3,15	0,47	0,2	006 040 020	7,05	10	
50	5,90	0,47	0,2	006 050 020	13,93	10	

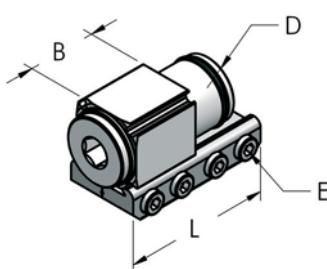
## L JOINT, COMPLETE



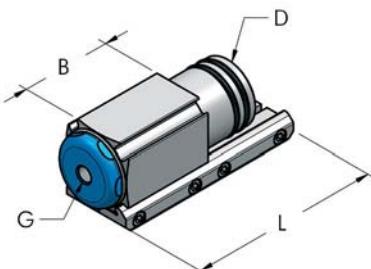
D	L in.	A in.	B in.	Part no.	P oz.	n°	
20	1,81	0,35	0,86	006 020 022	3,98	10	
25	1,81	0,39	1,18	006 025 022	5,99	10	
40	3,15	0,47	3,93	006 040 022	28,21	10	↗
50	5,90	0,47	5,90	006 050 022	56,43	10	↗

**T JOINT, COMPLETE**

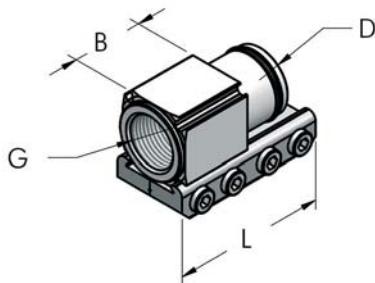
D	L in.	A in.	B in.	Part no.	P oz.	n°
20	1,81	0,35	0,94	006 020 024	7,26	10
25	1,81	0,39	1,18	006 025 024	11,64	10
40	3,15	0,47	6,3	006 040 024	38,09	10
50	5,90	0,47	9,6	006 050 024	84,65	10

**CLOSED TERMINAL, COMPLETE**

D	L in.	E in	B in.	Part no.	P oz.	n°
20	1,81	0,16	0,94	006 020 026	2,47	10
25	2,36	0,16	1,10	006 025 026	4,41	10
40	3,15	0,2	1,37	006 040 026	10,58	10
50	5,90	0,2	2,95	006 050 026	25,04	10

**TERMINAL WITH THREADED HOLE, COMPLETE**

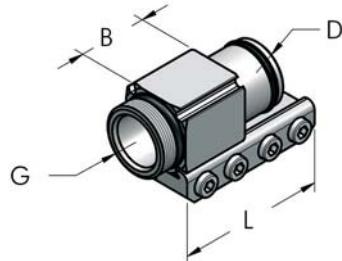
D	G	L in.	B in.	Part no.	P oz.	n°
40	1/8" - NPT	3,15	1,38	006 040 415	10,41	10
40	3/8" - NPT	3,15	1,38	006 040 416	10,23	10
40	1/2" - NPT	3,15	1,38	006 040 417	9,88	10
40	3/4" - NPT	3,15	1,38	006 040 418	9,52	10
40	1/4" - NPT	3,15	1,38	006 040 425	9,17	10
50	1/8" - NPT	5,91	2,95	006 050 415	24,87	10
50	1/2" - NPT	5,91	2,95	006 050 417	24,34	10
50	3/4" - NPT	5,91	2,95	006 050 418	23,63	10
50	1" - NPT	5,91	2,95	006 050 419	23,10	10
50	1/4" - NPT	5,91	2,95	006 050 425	24,69	10

**FEMALE TERMINAL THREADED, COMPLETE**

D	G	L in.	B in.	Part no.	P oz.	n°
20	3/8" - NPT	1,81	0,94	006 020 428	1,90	10
25	1/2" - NPT	2,36	1,10	006 025 428	3,70	10
40	1" - NPT	3,15	1,38	006 040 427	9,17	10
50	1"1/4 - NPT	5,91	2,95	006 050 427	21,69	10
50	1"1/2 - NPT	5,91	2,95	006 050 428	19,93	10

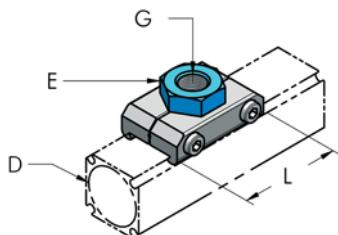


## MALE TERMINAL THREADED, COMPLETE



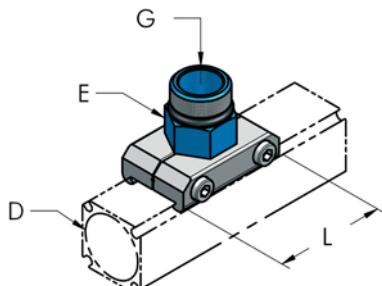
D	G	L in.	B in.	Part no.	P oz.	n°
20	1/2" - NPT	1,81	0,94	006 020 430	2,01	10
25	3/4" - NPT	2,36	1,10	006 025 430	3,88	10
40	1"1/4 - NPT	3,15	1,38	006 040 429	8,64	10
50	1"1/2 - NPT	5,91	2,95	006 050 429	23,10	10

## FEMALE OUTLET PLATE, COMPLETE



D	G	L in.	E in.	Part no.	P oz.	n°
20	1/4" - NPT	1,81	0,87	006 020 433	1,27	10
20	3/8" - NPT	1,81	0,87	006 020 434	1,41	10
25	1/4" - NPT	1,81	0,87	006 025 433	1,31	10
25	3/8" - NPT	1,81	0,87	006 025 434	1,62	10
25	1/2" - NPT	1,81	1,18	006 025 435	1,94	10
40	1/8" - NPT	2,76	1,42	006 040 432	5,22	10
40	1/4" - NPT	2,76	1,42	006 040 433	4,94	10
40	3/8" - NPT	2,76	1,42	006 040 434	4,76	10
40	1/2" - NPT	2,76	1,42	006 040 435	4,59	10
40	3/4" - NPT	2,76	1,42	006 040 436	4,23	10
50	1/4" - NPT	2,91	1,97	006 050 433	6,88	10
50	1/2" - NPT	2,91	1,97	006 050 434	6,70	10
50	3/4" - NPT	2,91	1,97	006 050 435	7,58	10
50	1" - NPT	2,91	1,97	006 050 436	6,88	10

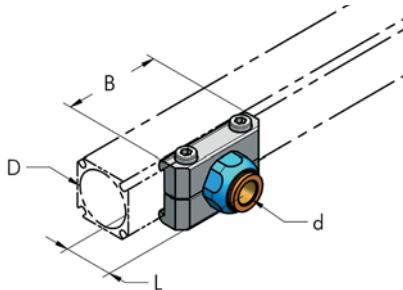
## MALE OUTLET PLATE, COMPLETE



D	G	L in.	E in.	Part no.	P oz.	n°
20	3/8" - NPT	1,81	0,87	006 020 463	1,27	10
25	1/2" - NPT	1,81	0,87	006 025 464	1,73	10
40	1/2" - NPT	2,76	1,42	006 040 462	4,76	10
40	3/4" - NPT	2,76	1,42	006 040 463	4,94	10
40	1" - NPT	2,76	1,42	006 040 464	4,94	10
50	3/4" - NPT	2,91	1,97	006 050 463	6,70	10
50	1" - NPT	2,91	1,97	006 050 464	6,53	10
50	1"1/4 - NPT	2,91	1,97	006 050 465	6,70	10
50	1"1/2 - NPT	2,91	1,97	006 050 466	6,88	10

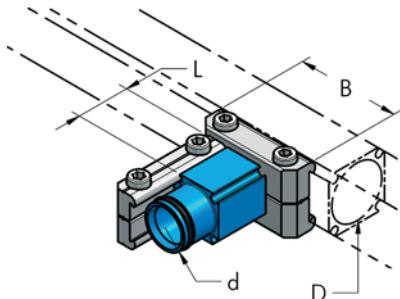


## OUTLET PLATE WITH QUICKFIT, COMPLETE



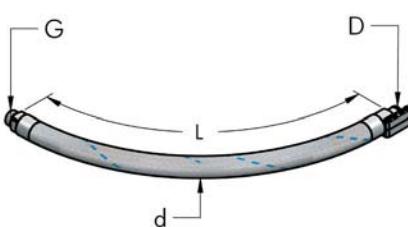
D	d in.	B in.	L in.	Part no.	P oz.	n°	
20	0,31	1,81	0,91	006 020 084	3,95	10	
20	0,39	1,81	1,02	006 020 085	6,70	10	
25	0,31	1,81	0,91	006 025 084	8,29	10	
25	0,39	1,81	0,91	006 025 085	8,68	10	
40	0,39	2,76	0,91	006 040 085	11,22	10	
40	0,47	2,76	1,02	006 040 086	13,05	10	

## REDUCTION PLATE, COMPLETE



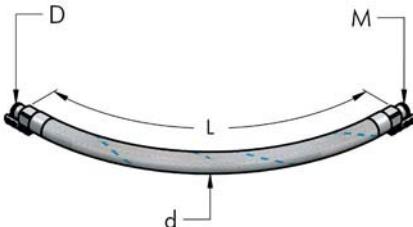
D	d	B in.	L in.	Part no.	P oz.	n°	
25	20	1,81	0,94	006 020 039	3,95	10	
40	20	2,76	0,94	006 040 037	6,70	10	
40	25	2,76	1,10	006 040 038	8,29	10	
50	40	2,91	1,38	006 040 039	13,5	10	
50	20	2,91	1,38	006 050 038	11,22	10	
50	25	2,91	2,36	006 050 039	13,05	10	

## FLEXIBLE PIPE FOR CONNECTION FROM TESEO PIPE TO NPT 220 PSI



D	G	L in.	d in.v	Part no.	P oz.	n°	
20	1/2" - NPT	27,56	1,18	006 020 458	17,64	1	
25	3/4" - NPT	27,56	1,38	006 025 458	26,46	1	
40	1"1/4" - NPT	39,37	1,97	006 040 458	105,82	1	
50	2" - NPT	39,37	2,56	006 050 458	143,74	1	

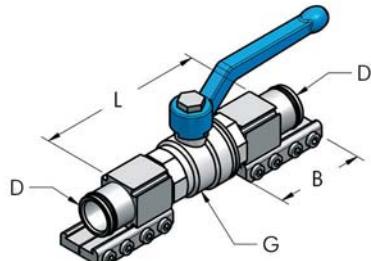
## FLEXIBLE JOINT FOR AP-AP CONNECTION 220 PSI



D	M	L in.	d in.	Part no.	P oz.	n°	
20	20	27,56	1,18	006 020 059	17,99	1	
25	25	27,56	1,38	006 025 059	29,28	1	
40	40	39,37	1,97	006 040 059	107,59	1	
50	50	39,37	2,56	006 050 059	151,68	1	

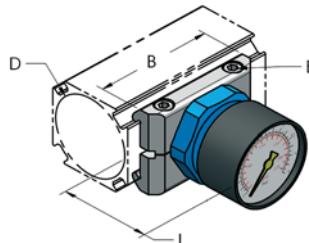


## BALL VALVE, COMPLETE



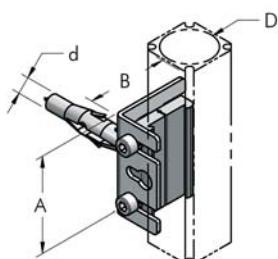
D	G	L in.	B in.	Part no.	P oz.	n°
20	1/2"	3,94	1,81	006 020 046	10,23	10
25	3/4"	4,65	2,20	006 025 046	17,64	10
40	1"1/4	5,91	2,76	006 040 046	44,09	10
50	1"1/2	9,65	5,91	006 050 046	86,42	10

## MANOMETER, COMPLETE



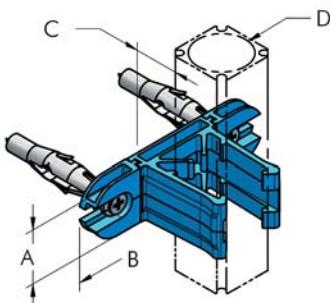
D	L in.	B in.	E in.	Part no.	P oz.	n°
20	2,28	1,81	0,16	006 020 048	2,47	10
25	2,05	2,20	0,16	006 025 048	2,65	10
40	2,28	2,76	0,20	006 040 048	6,14	10
50	2,28	2,91	0,20	006 050 048	8,11	10

## L PLATE, COMPLETE



D	d in.	A in.	B in.	Part no.	P oz.	n°
20	0,28	1,97	1,57	006 020 040	2,47	10
25	0,28	1,97	1,57	006 025 040	2,65	10
40	0,28	3,15	2,36	006 040 040	4,94	10
50	0,28	3,15	2,36	006 050 040	5,64	10

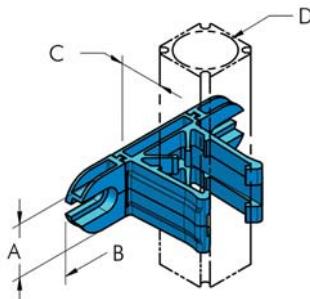
## SNAP CLAMP, COMPLETE



D	A in.	B in.	C in.	Part no.	P oz.	n°
20	0,79	2,76	0,79	006 020 041	0,60	10
25	0,98	3,46	0,67	006 025 041	0,88	10
40	1,57	5,31	1,69	006 040 041	6,17	10
50	1,97	5,91	1,57	006 050 041	7,51	10

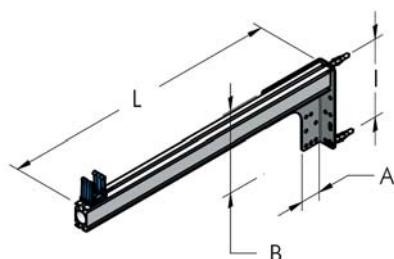


## SNAP CLAMP



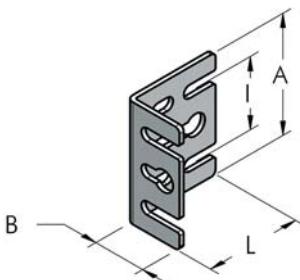
D	A in.	B in.	C in.	Part no.	P oz.	n°
20	0,79	2,76	0,79	006 020 042	0,60	10
25	0,98	3,46	0,67	006 025 042	0,88	10
40	1,57	5,31	1,69	006 040 042	4,94	10
50	1,97	5,91	1,57	006 050 042	6,14	10

## SUPPORT BRACKET, COMPLETE



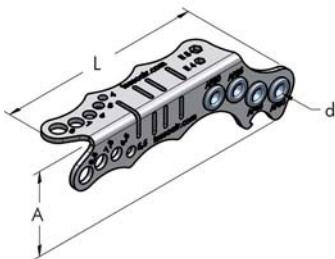
A in.	B in.	L in.	I in.	Part no.	P oz.	n°
5,35	6,85	23,62	5,58	006 020 070	45,86	10
5,35	6,85	23,62	5,58	006 025 070	45,86	10
5,35	6,85	23,62	5,58	006 040 070	49,38	10
5,35	6,85	23,62	5,58	006 050 070	51,15	10

## L-PLATE IN GALVANIZED STEEL



A in.	B in.	I in.	L in.	Part no.	P oz.	n°
1,97	0,98	1,18	1,57	732 020 050	1,31	10
2,60	1,38	1,97	1,85	732 066 080	2,12	10

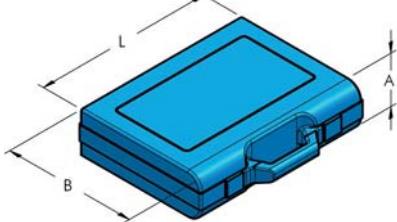
## DRILLING JIG AP



A in.	d in.	L in.	Part no.	P oz.	n°
1,77	0,24	5,35	911 020 050	3,17	1

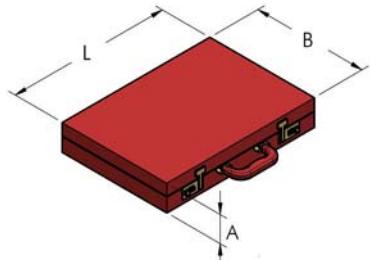


## BASIC TOOL BOX



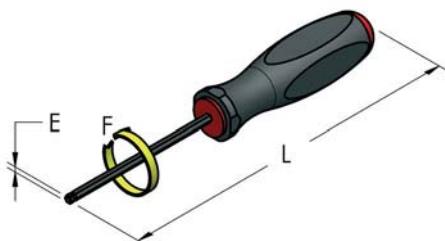
A in.	B in.	L in.	Part no.	P oz.	n°
1,97	7,48	9,45	006 020 092	21,16	1

## DEMO SUIT-CASE



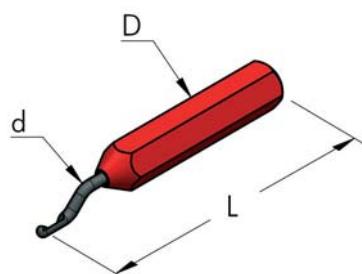
A in.	B in.	L in.	Part no.	P oz.	n°
3,15	13,39	17,32	006 020 090	130,51	1

## ALLEN SCREW DRIVER



E in.	L in.	F lbs·ft	Part no.	P oz.	n°
0,16	7,87	4,4-7,4	901 170 004	1,41	1

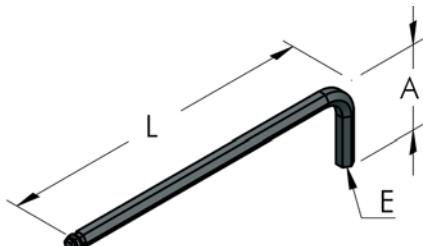
## DEBURRING TOOL



d in.	D in.	L in.	Part no.	P oz.	n°
0,12	0,55	5,91	909 012 130	1,94	10
0,12	Spare blade		909 003 047	0,11	10

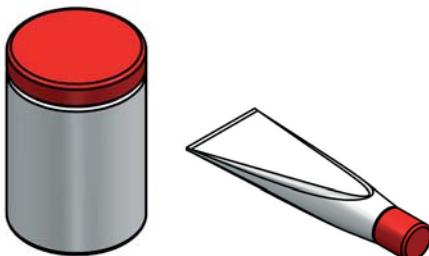


## ALLEN WRENCH



E in.	A in.	L in.	Part no.	P oz.	n°
0,20	1,34	5,51	901 130 005	1,06	10

## "O"-RING LUBE



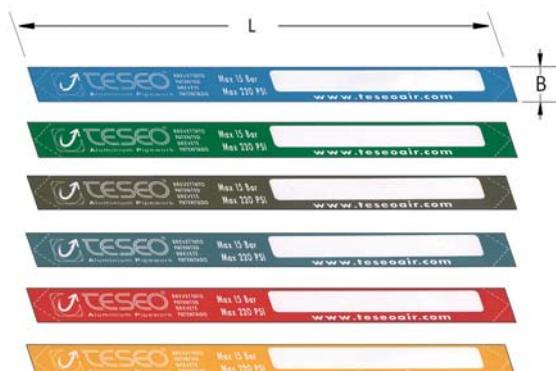
Part no.	P oz.	n°
111 003 100	35,27	20
111 003 010	3,53	20

## PTFE BLUE GREASE



Part no.	P oz.	n°
114 003 005	1,76	20

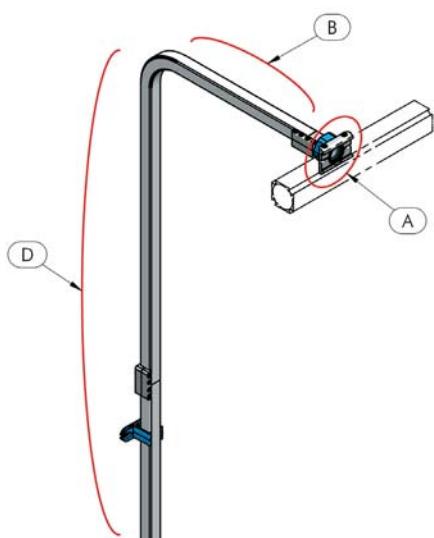
## 220 PSI ADHESIVE COLOR STICKERS



L in.	B in.	Color	Part no.	P oz.	n°
12,2	0,59	Blue RAL 5015	104 015 310	1,02	11
12,2	0,59	Green RAL 6029	104 015 315	1,02	11
12,2	0,59	Brown RAL 8003	104 015 316	1,02	11
12,2	0,59	Grey RAL 7000	104 015 317	1,02	11
12,2	0,59	Red RAL 3020	104 015 318	1,02	11
12,2	0,59	Yellow RAL 1028	104 015 319	1,02	11
12,2	1,10	Blue RAL 5015	104 025 150	1,02	11
12,2	1,10	Green RAL 6029	104 028 315	1,02	11
12,2	1,10	Brown RAL 8003	104 028 316	1,02	11
12,2	1,10	Grey RAL 7000	104 028 317	1,02	11
12,2	1,10	Red RAL 3020	104 028 318	1,02	11
12,2	1,10	Yellow RAL 1028	104 028 319	1,02	11



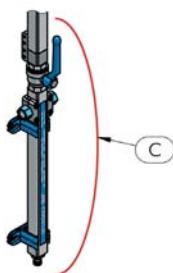
## DESIGN YOUR DROP COLUMN



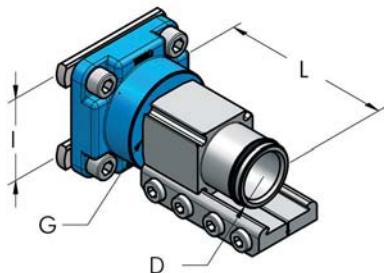
A - Determine the size of the main line and of the desired drops.

B - Determine where the drops will be installed.

C - Determine length of pipe and fittings required.

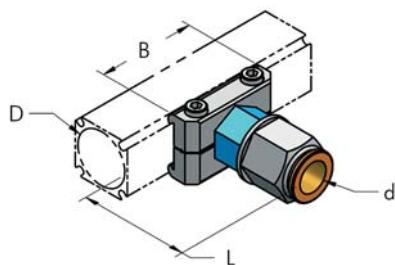


## REDUCTION PLATE HBS - AP, COMPLETE



D	G in.	I in.	L in.	Part no.	P oz.	n°
20	1/2"	1,42	1,93	006 020 037	6,35	1
20	1/2"	2,36	2,13	006 020 038	6,70	1
25	3/4"	1,42	1,93	006 025 037	10,93	1
25	3/4"	2,36	2,13	006 025 038	11,99	1
50	1"1/2	2,36	4,13	006 050 037	28,92	1

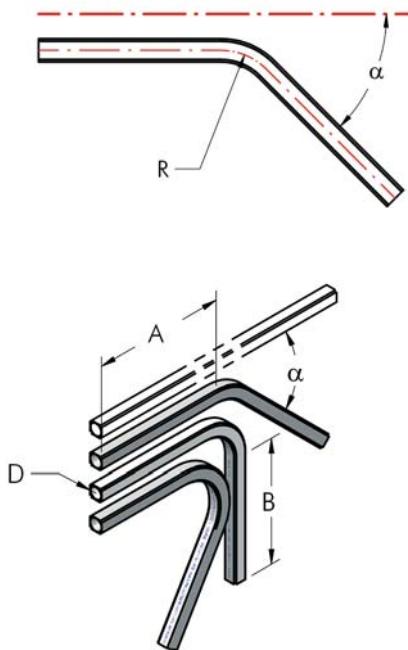
## OUTLET PLATE WITH D14 QUICKFIT, COMPLETE



D	d in.	B in.	L in.	Part no.	P oz.	n°
20	0,55	1,81	20,1	006 020 134	3,35	20
25	0,55	2,20	2,05	006 025 134	3,53	20
40	0,55	2,76	1,97	006 040 134	6,70	20
50	0,55	2,91	1,97	006 050 134	8,47	20

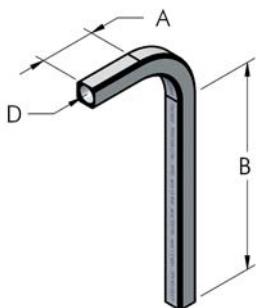


## ANGLE CURVED PIPE



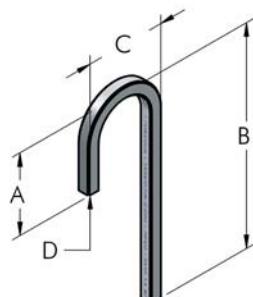
D	A in.	B in.	R in.	$\alpha^\circ$	Part no.	P lbs.	n°	Box
20	8,66	9,84	7,03	30	804 020 047	0,44	5	
20	8,66	9,06	7,03	45	804 020 048	0,44	5	
20	8,66	8,27	7,03	60	804 020 049	0,44	5	
20	6,30	7,87	7,03	120	804 020 057	0,44	5	
20	6,30	7,09	7,03	135	804 020 058	0,44	5	
20	6,30	6,30	7,03	150	804 020 059	0,44	5	
25	8,66	9,45	7,03	30	804 025 047	0,66	5	
25	8,66	8,66	7,03	45	804 025 048	0,66	5	
25	8,66	7,87	7,03	60	804 025 049	0,66	5	
25	6,30	7,09	7,03	120	804 025 057	0,66	5	
25	6,30	6,30	7,03	135	804 025 058	0,66	5	
25	6,30	5,51	7,03	150	804 025 059	0,66	5	
40	7,48	8,66	5,91	30	804 040 047	1,54	5	
40	7,48	7,48	5,91	45	804 040 048	1,54	5	
40	7,48	6,30	5,91	60	804 040 049	1,54	5	
50	7,48	8,66	5,91	30	804 050 047	2,20	5	
50	7,48	7,48	5,91	45	804 050 048	2,20	5	
50	7,48	6,30	5,91	60	804 050 049	2,20	5	

## 90° CURVED PIPE



D	A in.	B in.	R in.	Part no.	P lbs.	n°	Box
20	3,15	12,60	3,03	804 020 050	0,44	5	
20	12,20	22,83	3,03	804 020 100	0,88	5	
20	14,57	79,53	3,03	804 020 250	1,98	5	
25	2,76	11,81	3,03	804 025 050	0,66	5	
25	12,20	22,44	3,03	804 025 100	1,32	5	
25	14,57	79,13	3,03	804 025 250	3,31	5	
40	5,31	9,45	5,91	804 040 050	2,20	5	
50	5,31	9,45	5,91	804 050 050	2,31	5	

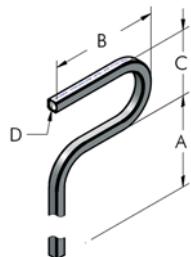
## 180° CURVED PIPE



D	A in.	B in.	C in.	Part no.	P lbs.	n°	Box
20	3,15	12,20	6,93	804 020 060	0,55	5	
20	3,54	47,64	6,93	804 020 149	1,21	5	
25	3,94	10,24	7,16	804 025 060	0,88	5	
25	4,33	45,67	7,16	804 025 149	1,98	5	

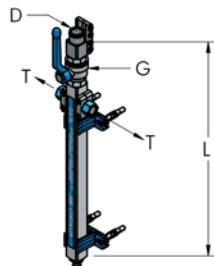


## 180°-90° CURVED PIPE



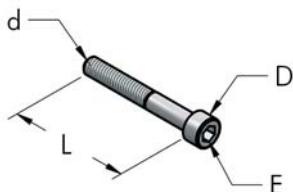
D	A in.	B in.	C in.	R in.	Part no.	P lbs.	n°
20	42,86	11,65	6,93	3,03	804 020 148	2,09	5
25	39,37	11,89	7,16	3,03	804 025 148	3,31	5

## DROP COLUMN MANIFOLD COMPLETE WITH ACCESSORIES



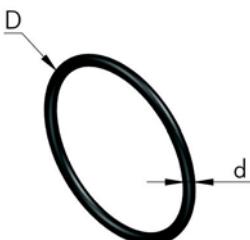
D	L in.	G	T	Part no.	P oz.	n°
20	17,32	1/2"	3/8" -NPT	006 020 455	23,99	1
25	17,32	3/4"	3/8" -NPT	006 025 455	37,39	1

## ALLEN SCREW, GALVANIZED STEEL



d in.	L in.	D in.	E in.	Part no.	P oz.	n°
M5	0,79	0,33	0,16	212 005 020	0,14	20
M5	0,98	0,33	0,16	212 005 025	0,18	20
M6	1,38	0,39	0,20	212 006 035	0,35	20
M6	1,77	0,39	0,20	212 006 045	0,49	20

## O-RING SEAL NBR70



D in.	d in.	code NORM- AS/BS	Part no.	P oz.	n°
0,63	0,07	2050 - 014	271 012 002	0,003	10
0,79	0,07	2062 - 014	271 016 002	0,005	10
0,98	0,07	2081 - 019	271 020 002	0,007	10
1,57	0,12	0350/03	271 035 003	0,04	10
1,97	0,10	3175 - 132	271 044 003	0,04	10