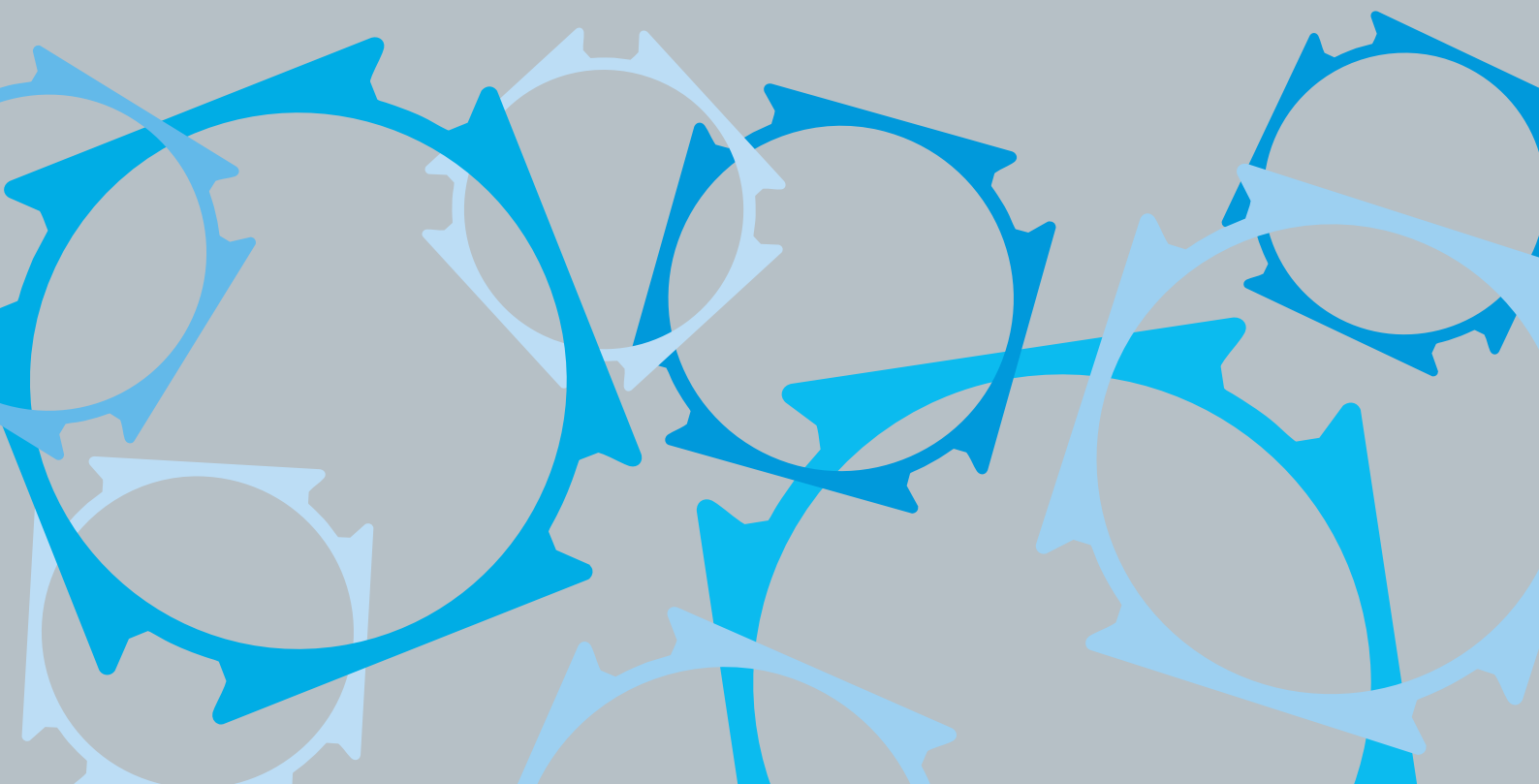


TESEO®





PIONEERS OF INNOVATION

When you choose a TESEO solution, you're not just purchasing a product or service for your business – **you're benefiting from the expertise of a Company that has made industrial design history**, revolutionising the way fluid distribution and compressed air systems are conceived.

High-quality, efficient, and sustainable solutions – **the result of passionate design, research, and development**, driven by an industrial design mindset and the excellence embedded in **Italy's long tradition of design know-how**, one of the most recognised and appreciated aspects of Italian culture worldwide.

All this comes with the confidence and reassurance that **you will be fully supported throughout the entire lifecycle of your systems** – thanks to the genuine, family-rooted approach on which the Company was founded.

These are the principles that still guide the Company today and continue to inspire the leadership of TESEO – **a well-established Italian business with international recognition**.

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LEGEND

A	mm	Height, dimension
B	mm	Width, dimension
C	mm	Slot opening
D - d	mm	Diameter
E	mm	Hexagon, wrench
F	Kg - Nm	Force
G	”	Gas thread (BSPP/BSPT or NPT)
I - i	mm	Distance between slots
J x	cm^4	Moment of inertia along x
J y	cm^4	Moment of inertia along y
L	mm	Length
N°	_	Code number, item
n°	_	Quantity number
P	g	Weight
R	mm	Radius
S	mm	Thickness
T	-	Threaded hole
V	dm^3	Inside volume
∝°	°	Angle
✍		Only on request - check availability
⚙		Technical data required for the development of the offer

TESEO Product Families:

HBS – Hollow Bar System

APS – Aluminium Piping System

MPS – Multifluid Piping System

DCS – Drop Column Systems

ATS – Air & Electric Track Supply

WBA – Workbench for Assembly

SAB – Swinging Arm Bracket

MTS – Modular Trolley System

AMS – Aluminium Manifold System

WTK – Work Tool Kit

TAC – Treatments, Automations, Components

TIG - Technical Installation Guide

In this catalogue, **you will find in certain product tables one or more coloured tags** — like the ones shown on the left – **which indicate the compatibility and applicability of a product from one family with other product families**.

IMPORTANT! The drawings contained in this catalogue are to be considered as indicative and non-binding. In its ongoing commitment to product improvement, TESEO Srl reserves the right to modify the shapes and dimensions of the various products at any time, without compromising the functionality for which they have been designed.
WARNING! To ensure the correct application of a TESEO product, please read the technical data provided in this catalogue carefully. Before installation, make sure to read the instruction manual thoroughly.
PLEASE NOTE: All texts, images, photographs, and drawings included in this catalogue are the property of TESEO Srl and/or protected by trademark and/or copyright. Any copying or reproduction, even partial, of the content or images in any form is strictly prohibited. Use of these materials by third parties is permitted only with prior written authorisation from TESEO Srl and solely for purposes that do not harm the reputation or interests of TESEO Srl.

OUR HISTORY

1ST WORLD'S FIRST Since 1988

TESEO was founded in **1988** and, **initially operating as a supplier of components to the textile industry**, quickly identified numerous issues associated with traditional **compressed air distribution** systems. **The most common conventional systems suffered from several limitations**, such as low flow rates, high pressure losses, rust and fluid contamination, and difficulties in modifying installations. In response to these challenges, in the early 1990s **TESEO developed HBS – the first modular aluminium profile system for compressed air distribution ever introduced on the global market.**

By combining the properties of a **structural aluminium profile** with the **full bore of a pipe**, TESEO created one of the most innovative systems to emerge in the field of fluid power. A **modern high-tech design, ease of use,** and **flexibility** were the first standout features. Additionally, the **superior energy efficiency** of TESEO's piping systems, enabled by the low friction of the extruded aluminium profiles' internal surfaces, offered a further significant advantage over traditional piping solutions.

In doing so, **TESEO established a new market niche**: **modular aluminium systems for the distribution of non-hazardous gases**. The success was immediate, confirmed by the appearance of numerous imitations attempting to replicate the features and performance of the original. In a short time, thanks to its innovative characteristics and the broad range of diameters — from 3/4" up to an impressive 4" (110 mm internal diameter) — **TESEO's modular pipework became an international benchmark, from small artisan workshops to large industrial facilities.**

The Company's journey since its founding has been characterised by swift progress and key achievements: from the development of the domestic market, to the first steps across Europe, and ultimately the establishment of a global network of branches and distributors.



At the same time, **TESEO's spirit of innovation has continued to fuel technical development, leading to the introduction of new products** — from the APS and MPS ranges, expanding the offering in modular aluminium piping, to ergonomic solutions that have set benchmarks in the global market. These include the AMS modular aluminium manifolds, WBA internally pressurised workbenches, and the SAB, ATS, and MTS systems, which deliver overhead fluid power and help operators work more efficiently and effectively — **all within a framework of economic, environmental, social, and energy sustainability.**

Today, **TESEO stands out as a modern and dynamic Company, supported by a lean and highly motivated management team.** A passion for quality and a commitment to continuous improvement guide the Company's strategy, aiming to maintain — and where possible enhance — its reputation for **excellence in quality and service, recognised and appreciated by customers worldwide.**

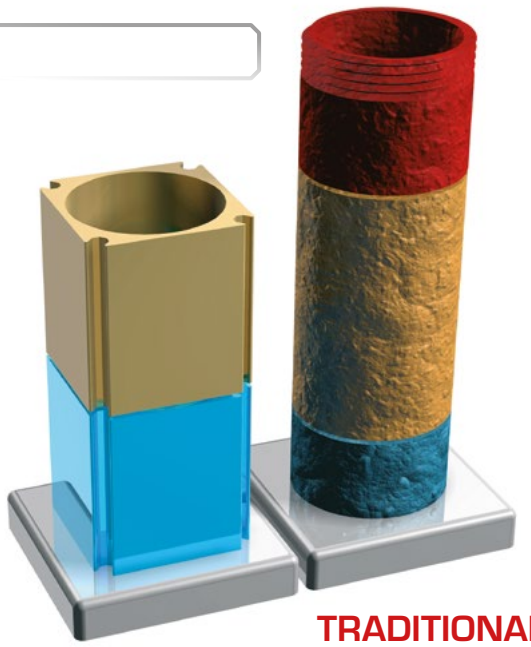


WHY CHOOSE A TESEO SYSTEM

Choosing a modern TESEO modular piping system means cutting hidden costs — expenses that often grow over time as compressed air networks age.

Below are some of the key costs you can avoid or reduce with TESEO:

- **Air leakage costs:** the patented locking and sealing system used in our piping products eliminates a major problem, ensuring significant energy savings that would otherwise be wasted.
- **Costs of air treatment, maintenance, and repair of machines and tools:** aluminium does not rust or corrode, meaning that within a TESEO pipeline the air remains as clean as it was immediately after treatment. This helps extend the service life of all connected devices.
- **Machine downtime and labour costs for modifications:** a TESEO distribution system is easy to modify and extend, acting like an energy manifold within the factory. Adding a new machine or an additional outlet point takes just a few minutes to become fully operational.
- **Costs related to limited flow rates and high pressure drops:** TESEO's high-precision extruded profiles have a smooth internal surface. This greatly reduces friction compared to traditional black or galvanised steel piping. The result is a lower pressure drop and greater flow rate for the same electricity consumption.



TESEO Systems

TRADITIONAL Systems

- Hidden costs (Air quality, modifications, low efficiency and air leaks)
- Labour costs
- Material costs

Please contact our sales agents or visit our website for more information.

- HIGH-TECH DESIGN
- LIGHTWEIGHT
- HEAVY DUTY PROFILES AND ACCESSORIES
- 100% METAL PIPES & FITTING
- 100% RECYCLABLE ALUMINIUM
- ENERGY SAVING
- SAFE AND RELIABLE



TESEO SALES NETWORK

Compressed air is now used across an incredibly wide range of industries and applications — from textiles to precision engineering, from the automotive sector to pharmaceuticals. **Distribution systems and manifolds for compressed air are essential to virtually every type of production activity and machinery.** In the distribution of pressurised fluids, aluminium is becoming the material of choice, thanks to TESEO, which introduced it to the sector as a modern alternative to outdated galvanised steel or welded iron pipework. The growing demand in recent years has driven a corresponding expansion of TESEO's sales network.

TESEO's sales force is equipped to provide direct support to customers, while also supplying and assisting a widespread international network of distributors, resellers, and installers.



ENGINEERING AND CONSULTING FIRMS

They play a key role in specifying modular systems and are increasingly collaborating with **TESEO for the design and sizing of compressed air distribution systems and other non-hazardous fluid networks.**

CONNECT WITH US!

website

PLUS

- ECO-FRIENDLY
- RECYCLABLE
- WASTE-FREE
- ZERO LEAKAGE
- ENERGY-EFFICIENT
- LONG LASTING
- DURABLE
- TESEO WARRANTY
- EASY TO INSTALL
- PLUG & PLAY
- SYSTEM DESIGN
- TECHNICAL CONSULTING
- HIGH-TECH DESIGN
- LIGHTWEIGHT
- ROBUST
- HIGH PERFORMANCE
- LOW COSTS
- OPTIMISED COSTS
- HIGH ENERGY
- SAVINGS

FLUID POWER FOR IN-PLANT AND ON-MACHINE APPLICATIONS

Bypasses and manifolds for equipping technical rooms for air compression and treatment.
The AMS, APS and HBS ranges are ideal.

HBS APS AMS



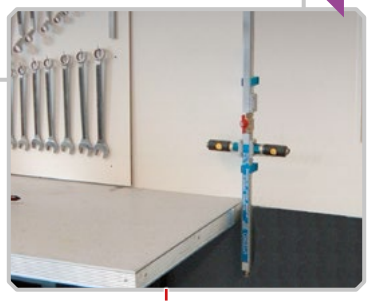
Aluminium distribution networks for compressed air, vacuum, argon, nitrogen, carbon dioxide, mineral and synthetic oils, non-hazardous gases, and other fluids, available in internal diameters from 20 to 110 mm.

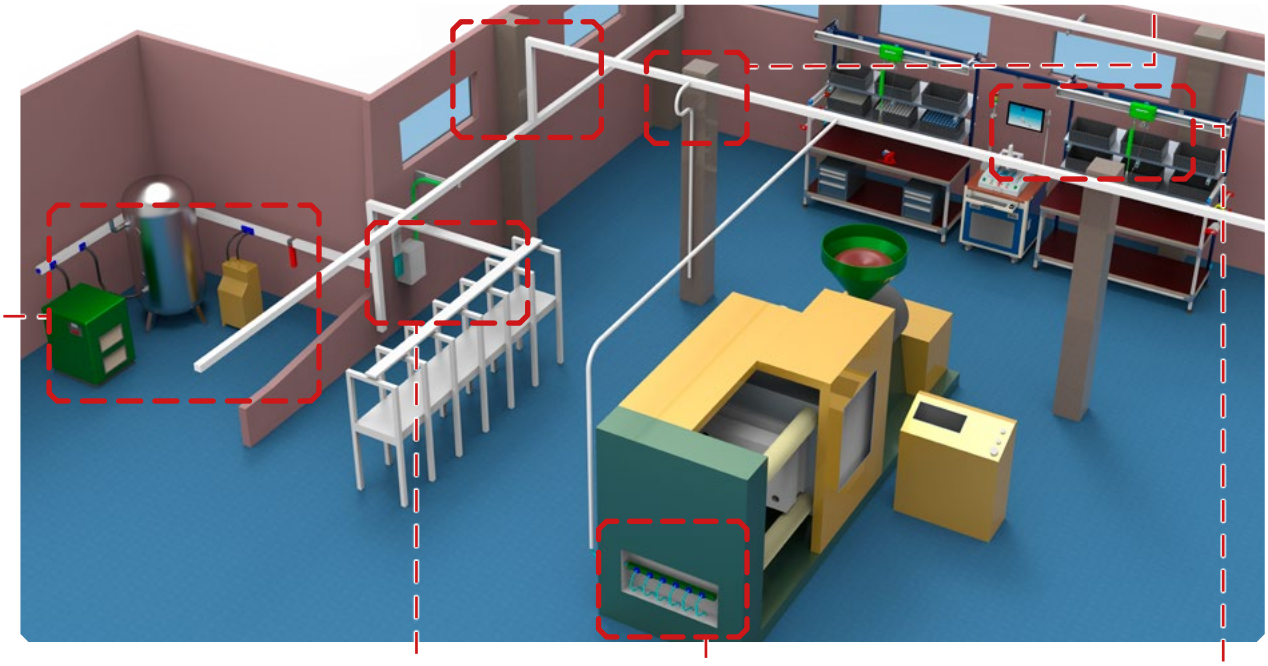
HBS APS MPS



Aluminium drop columns for compressed air and other fluids, with internal diameters from 20 to 110 mm. The HBS, APS, MPS and DCS ranges are ideal.

HBS APS MPS DCS







Distribution manifolds integrated with pneumatic control panels for automation systems. AMS range.

AMS



Modular distribution manifolds for machine-side or automated line applications. AMS range.

AMS



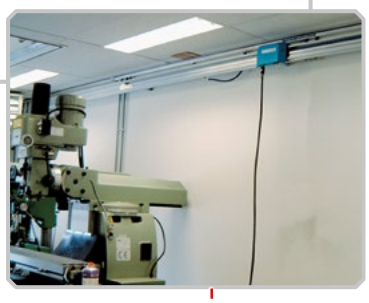
Supply lines for pneumatic tools, installed along walls or on workbenches. AMS, DCS and WBA ranges.

AMS DCS WBA

ERGONOMIC SOLUTIONS FOR PNEUMATIC TOOLS

Aluminium rail-mounted trolleys for overhead distribution of compressed air and electricity. The ATS range is ideal.

ATS



Internally pressurised swivel arms in aluminium for supplying tools with a wide range of motion. SAB and ATS on SAB ranges.

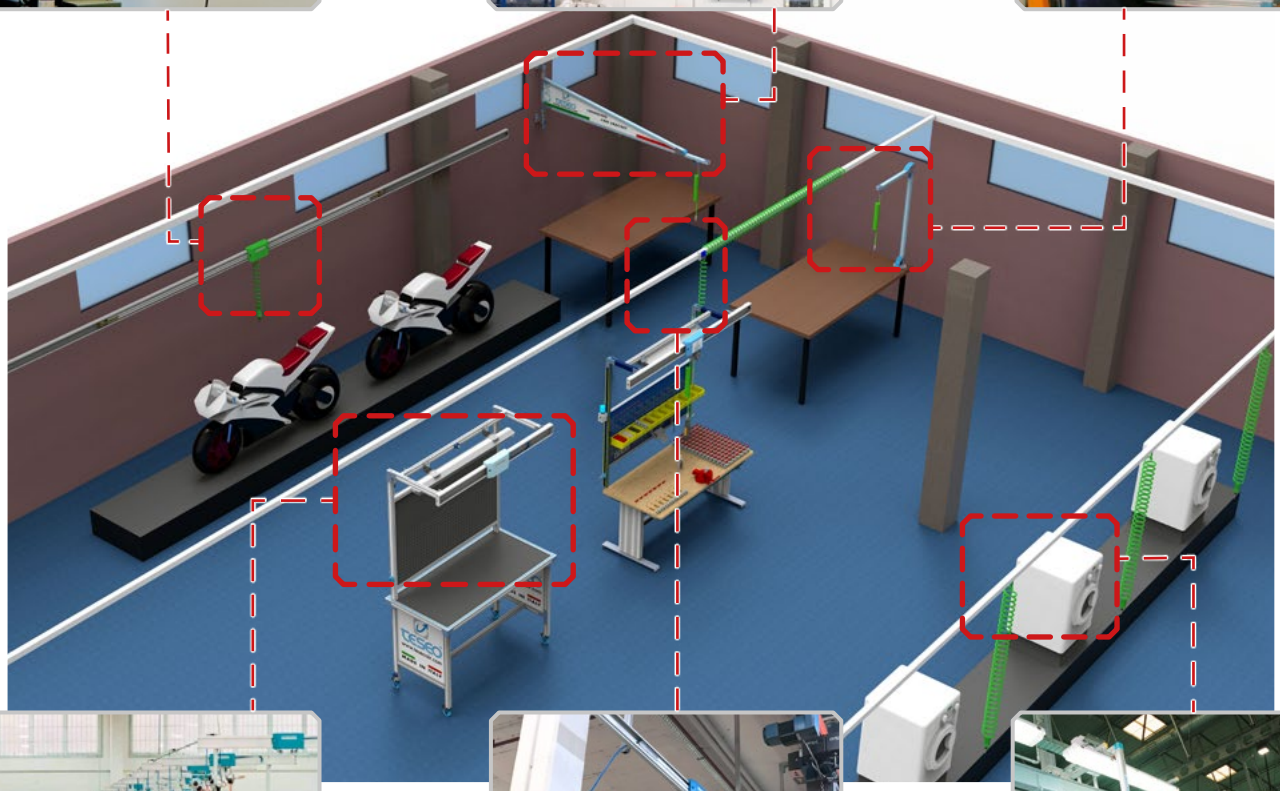
SAB



Bench-mounted swivel arms in anodised aluminium for supporting pneumatic tools. SAB range.

SAB







Ergonomic workbenches, internally pressurised and equipped with an ATS trolley for the supply of electric and pneumatic tools, with customisable accessories. WBA range.

ATS

WBA



Sliding trolleys on aluminium profiles for integrated and ergonomic support and supply of pneumatic and electrical devices. MTS and ATS ranges.

MTS

HBS

ATS



Assembly lines built with HBS profiles and sliding trolleys, offering integrated and ergonomic support and power supply for pneumatic devices, electrical tools and data cables. MTS range.

MTS

HBS

TRADE FAIRS

Trade fairs remain a valuable tool for spreading awareness of technological trends and the latest innovations developed by manufacturers. As the first Company in the world to introduce aluminium and modularity to the distribution of non-hazardous pressurised fluids, TESEO has participated in the most important international exhibitions since its founding, gaining recognition from thousands of visitors. At major Fluid Power trade shows, TESEO has also received numerous awards and acknowledgements for the innovation and performance of its aluminium modular distribution systems.







IN THE PRESS

From the very beginning, TESEO has invested in communication through specialist technical magazines in the fields of pneumatics and industrial engineering — both with advertising campaigns and editorial articles about its products and applications.

Over time, TESEO's communication strategy has expanded to include new channels, aiming to reach an ever-wider audience.

Thanks to this long-standing effort, TESEO today is a brand strongly associated with the values of quality, reliability, and modularity, and enjoys prominent visibility in some of the world's most prestigious and widely recognised trade publications.



www.teseoair.com

SELECTED ONLINE SERVICES

The www.teseoair.com website features the following sections:

- **Products:** This section is dedicated to our product range, where users can carry out advanced searches for components and view part numbers, technical specifications, and sample images.
- **Press and Communications:** This includes a selection of articles related to brand and product promotion, such as trade fairs and features published in industry magazines worldwide.
- **References:** This section focuses on various application examples of our products in real-world installations.
- **News:** This covers recent and noteworthy updates, including events and product launches.
- Visitors can also **get in touch** with the various departments within TESEO directly through the website.
- A **dedicated software** tool is available to help design TESEO pipework systems tailored to the specific needs of your facility. A comprehensive unit converter is also provided.

It is possible to download this Catalogue and many other documents in PDF Acrobat ®

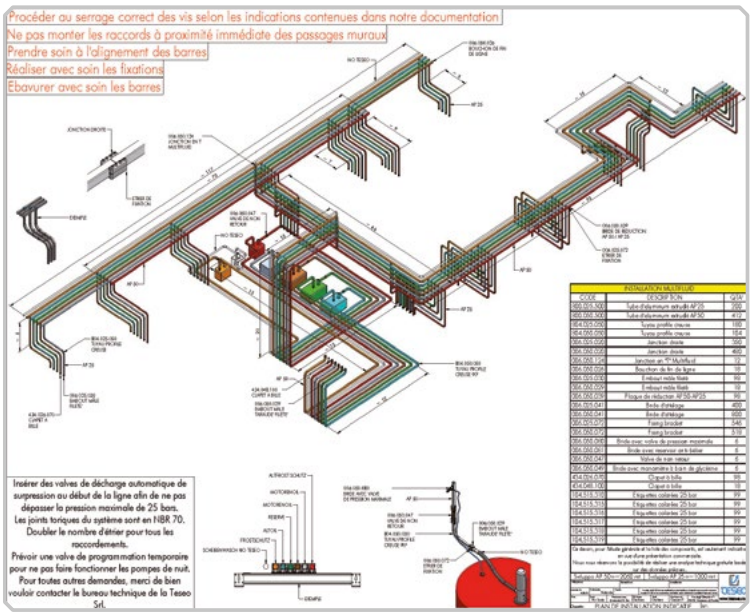
AWARDS

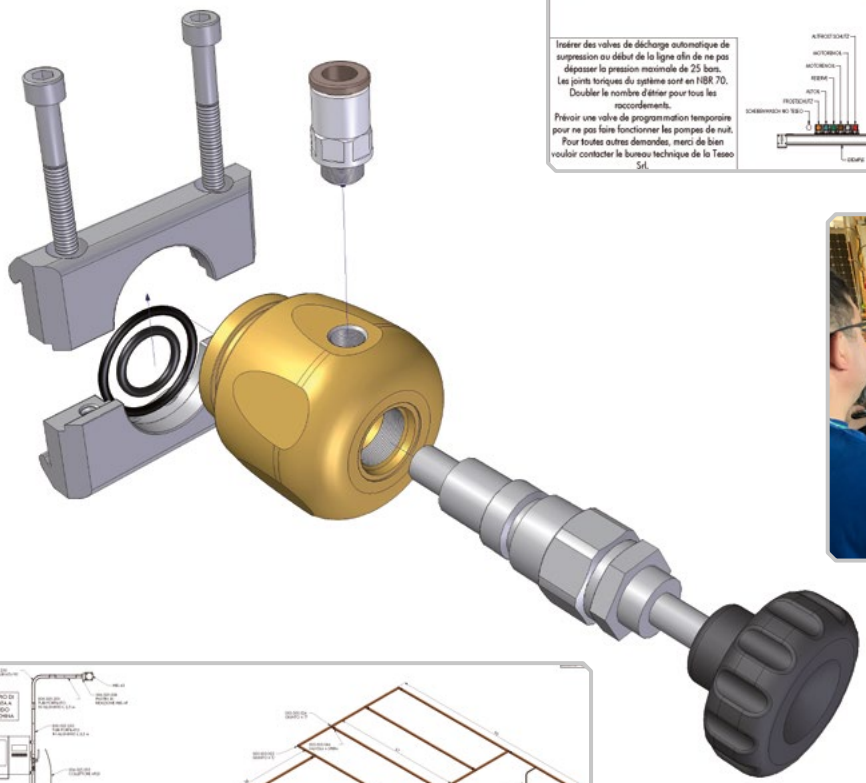
WINNER 2007	FINALIST 2006	FINALIST 2006	FINALIST 2006	WINNER 2006
WINNER 2001	WINNER 2000	WINNER 1999	WINNER 1996	WINNER 1992

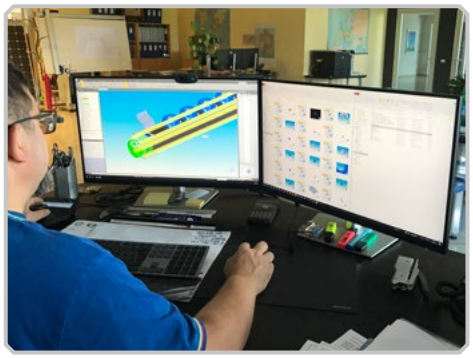
FROM DESIGN TO INSTALLATION

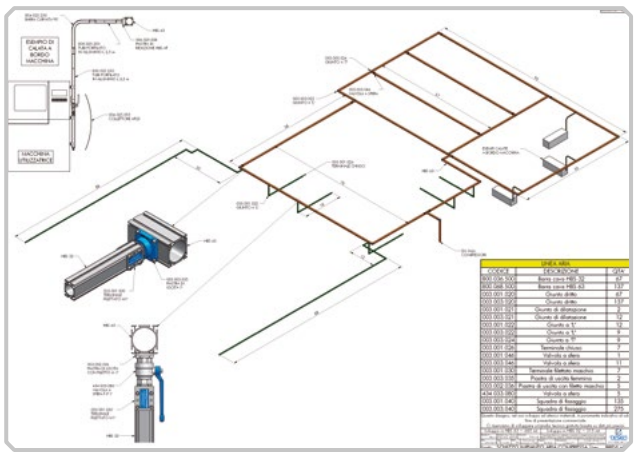
TESEO supports its partners and customers by designing and sizing distribution systems and pipelines, **developing tailored solutions for both on-machine applications and production lines.**

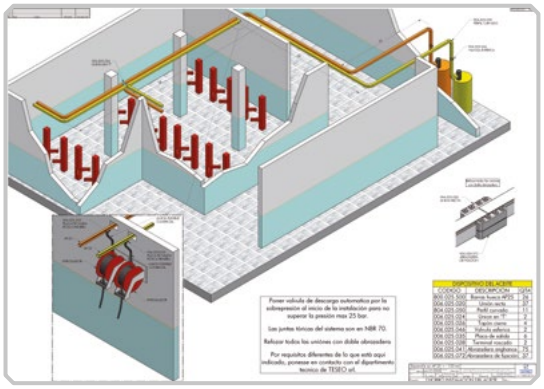
We also provide regulatory consultancy, training for installation technicians, and on-site supervision, with **our specialised personnel assisting customers throughout installation and final commissioning**.



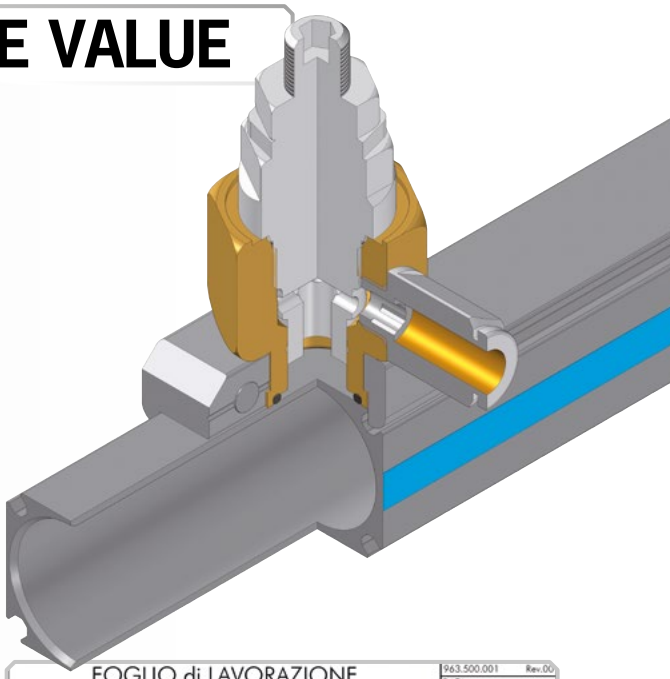








ITALIAN DESIGN AS A CORE VALUE



At TESEO, we design using the most advanced 3D CAD systems, combined with a flexible and efficient working process.

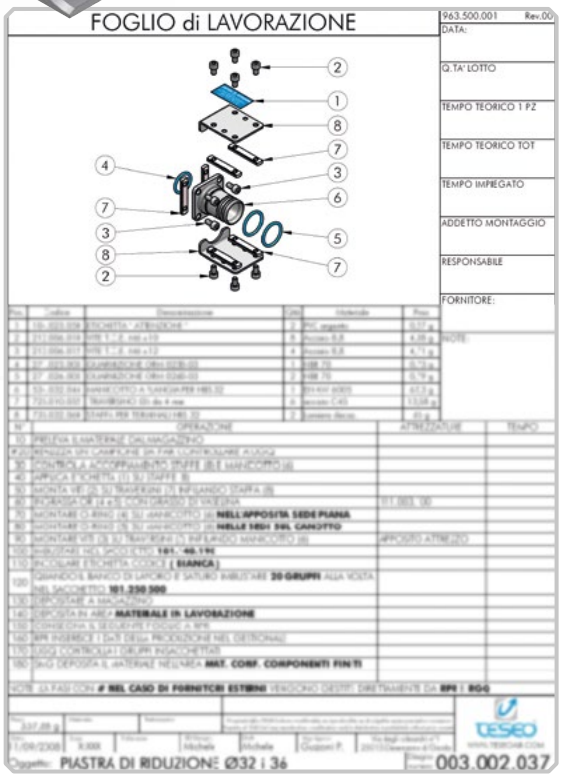
Each project is approached with a focus on innovation, environmental and ergonomic impact, design enhancement, production process optimisation, and guaranteed quality and functionality.

We work in collaboration with external studios, university departments, and—most importantly—our customers, whose needs and experience guide us in developing innovative solutions.

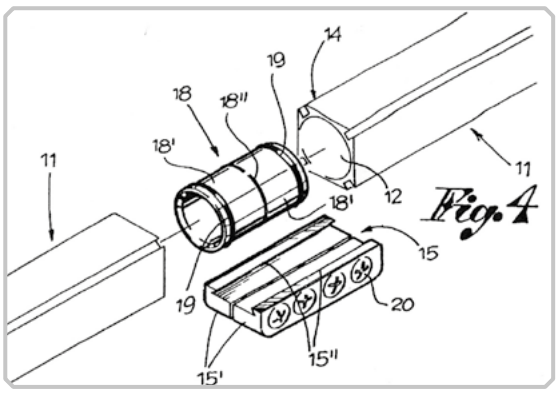
Every patent requires a significant effort: from technical preparation and the drafting of patent drawings, to prior art analysis, the definition of technical specifications, and the compilation of the documentation required by the relevant authorities. This is followed by the ongoing maintenance and legal protection of both our own and our customers' rights.

Certifying and approving our products is essential. We maintain constant collaboration with certification bodies because, although we are confident in the quality and safety of our production, we believe in obtaining approvals seriously and with integrity.

TESEO designs in accordance with UNI ISO standards, including UNI 4820, UNI 5456 and others relevant to the design process.







PATENTS

A patent lies at the heart of TESEO's design philosophy, and we continue to seek out new, patented solutions.

Our patents protect the creativity of our technical team and the trust of our distribution network and customers– those who value innovation and the quality of the products they purchase.

At TESEO, we believe that patents are of vital importance and represent the true hallmark of original inventors and manufacturers.

Today, our R&D department manages several patents registered in multiple countries, and continues to develop new patented products, including those related to design.

To make our philosophy distinctive and recognisable, TESEO has also registered its trademark internationally.



CERTIFICATION


This is a translation of the certificate IT97/0218

The management system of

TESEO S.r.l.

SGS

Via degli Oleandri, 1 25015 Desenzano del Garda (BS) Italia

has been assessed and certified as meeting the requirements of

ISO 9001:2015

For the following activities

Design and manufacturing of aluminium piping systems, related components and installation tools, for compressed air and other fluids distribution.

IAF Sector: 17

This certificate is valid from 22 August 2024 until 22 August 2027 and remains valid subject to satisfactory surveillance audits.

Issue 10. Certified since 01 December 1997

Authorised by

Paola Santarelli

SGS ITALIA S.p.A.

Via Caldera, 21 20153 MILANO - Italy

t + 39 02 73 93 1 - www.sgs.com

ACCREDIA

IAF

TESEO's design, production and quality management system is certified in accordance with the **UNI EN ISO 9001 standard. SGS,** a world-renowned certification body, audits and certifies our management system annually, ensuring its ongoing compliance and continuous improvement.

TESEO components are tested both in our internal testing facility and at **external accredited laboratories** such as **SIT, ISPESL, UNI,** and certification bodies including **SGS, TÜV, TSSA,** and others.

Our Quality Manager is supported by experienced external consultants with extensive expertise in the field. TESEO components are manufactured using high-quality raw materials that comply with international standards, including **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 others.**

TESEO components have been tested using various procedures:

TÜV conducted cyclic pressurisation tests on an HBS system assembly;

AQM tested the main components of the APS range at pressures up to 120 bar and temperatures ranging from -20°C to +130°C;

SGS certified the burst pressure tests on the APS system, which exceeded 160 bar.

We also collaborate with university departments. The **Politecnico di Torino** has independently tested and measured the flow capacity of our pipework, while the **University of Brescia** supports us with technical consulting on specific projects. All measuring instruments used by TESEO are periodically checked and certified by accredited laboratories.

TESEO pipework complies with **US standards ANSI B31.1 and B31.3**, as certified by provincial safety authorities in Canada. Our systems are designed, manufactured, and tested in accordance with the essential safety requirements of the **European Pressure Equipment Directive 2014/68/EU (PED).**

KIWA has certified that TESEO's quality management system meets the requirements of Annex III, Module E1 of Directive 2014/68/EU. Our products also meet fire reaction classification in accordance with EN 13501-1:2007 + A1:2009.

RINA (Italian Naval Register) has certified the **fire resistance** classification according to EN 13501-1:2007.

The Italian Institute of Welding (IIS), a founding member of the **International Institute of Welding**, has issued a positive test report confirming the **suitability of TESEO pipework for use in argon gas distribution systems.**

EN 13501-1:2007

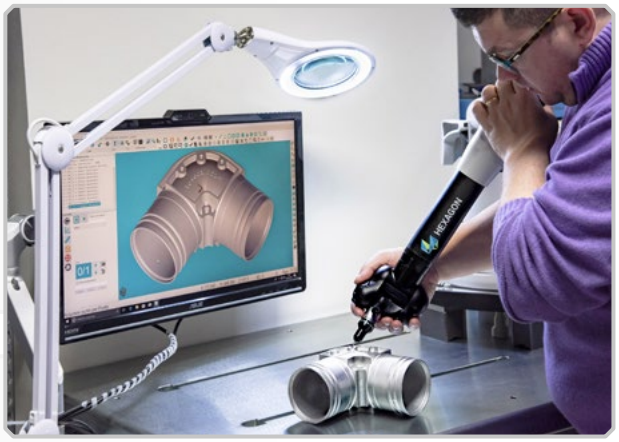
QUALITY CONTROL



TESEO carries out inspections to verify product conformity with contractual specifications. Monitoring and measurement activities are in place throughout the stages of incoming material inspection, production processes, and final checks before shipment to the customer.

No product is released to the customer unless all required checks have been completed with positive results.

TESEO performs material quality control based on a sampling plan in accordance with UNI ISO 2859. Each part produced to drawing specifications is checked using a dedicated inspection sheet. Every product sheet defines the specific controls to be performed. Based on the criticality of the dimensions and the product itself, an Acceptable Quality Limit (AQL) is defined, selected from 1.5, 2.5, or 6.5.



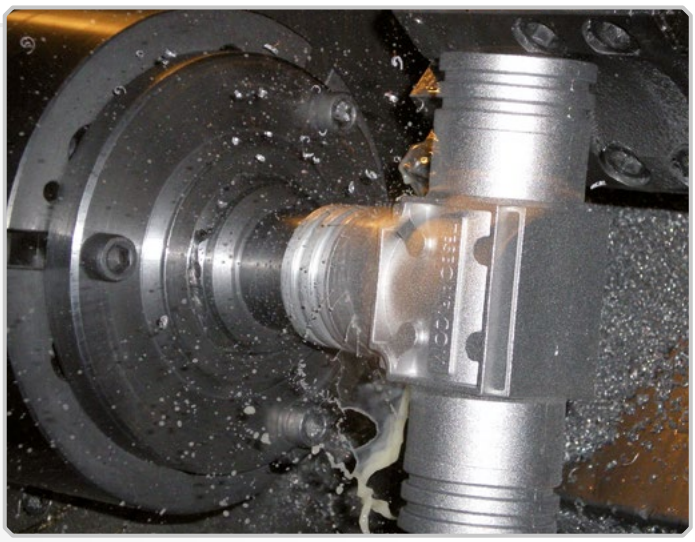
TESEO pipes undergo ten functional, dimensional, and visual checks throughout all stages of production and packaging.

Where traceability is required, TESEO applies a dedicated traceability procedure. This enables document review in case of detected non-conformities and helps identify the root causes of defects within the production process, allowing for quick and effective preventive and corrective actions.



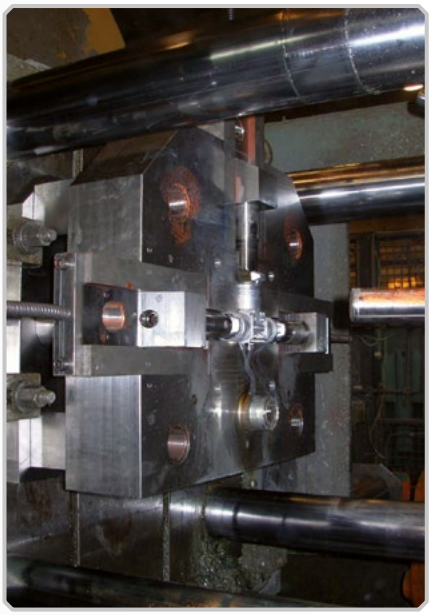
We have implemented a preventive programme for the inspection and calibration of measuring instruments. Written procedures define the calibration methods and frequency for all instruments and devices that may affect product quality and safety.

100% MADE IN ITALY



TESEO collaborates with leading Italian companies capable of consistently meeting the extremely high quality standards essential to achieving excellence in every stage of production. Suppliers are carefully evaluated and selected based on a number of criteria: certifications held by the manufacturer, price-to-quality ratio, market relevance, product quality declarations, logistics capabilities, availability and flexibility, and the ability to respond efficiently in urgent situations.

The production of aluminium pipes is entrusted to the most advanced extrusion manufacturers, who continue to deliver excellent performance and consistent results.



TESEO has established strong, long-term partnerships with some of the most advanced mechanical workshops in the country. These facilities are equipped with state-of-the-art machine tools and are able to produce high-quality, reliable components.

TESEO also operates an internal assembly department, staffed by specialised technicians capable of handling a wide range of parts that are constantly being improved in both design and quality.

This department is managed in the same way as an external supplier: all assembled material undergoes the same rigorous inspections and quality control processes.

MADE IN ITALY





HBS

HBS
HOLLOW BAR SYSTEM

1ST WORLD'S FIRST



HBS - Hollow Bar System **is the world's first modular system made from extruded aluminium hollow bars, designed to enable the fast, safe, and functional installation of compressed air lines and other fluid distribution systems.**

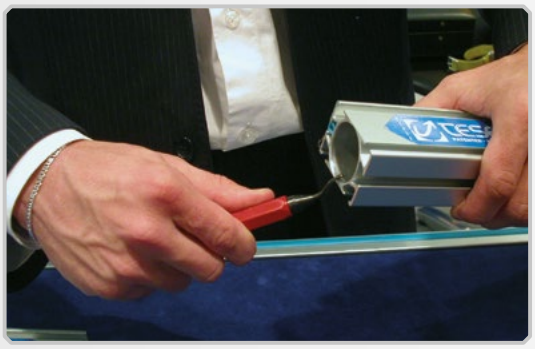
A milestone product in the sector, HBS **remains unmatched to this day** in terms of strength, efficiency, and versatility of application.
Thanks to its **quick-fix outlet plates** and **blocks**, the system can be **easily and safely modified or extended at any time.**
The system is based primarily on **extruded aluminium hollow bars**, available in various diameters. The bars are joined using **straight, L and T connectors, sealed with O-rings to ensure tightness and reliability.**
A **wide range of outlet plates** with ports from 1/8" to 2", threaded ends in various sizes, **accessories**, and **mounting brackets** ensures maximum versatility for the system.

PLUS

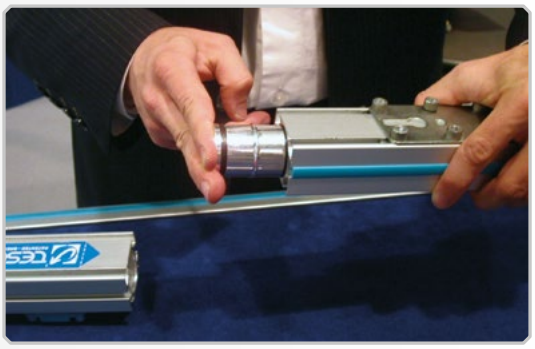
- Fast installation;
- Quick installation of additional outlets;
- Easy to make changes and add new branch lines;
- Clean and smooth inner and outer surfaces;
- Integrated modular system;
- Energy efficiency;
- 100% recyclable aluminium.

EASY TO ASSEMBLE

DEBURRING



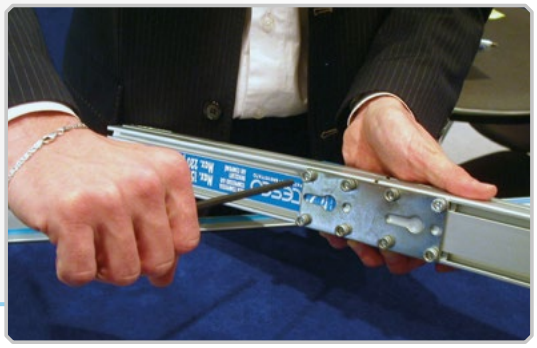
MOUNTING



ASSEMBLING



TIGHTENING



BLUE DESIGN

TESEO's new blue generation is the result of a complete review and update of all systems.
Our ongoing pursuit of excellence in **energy efficiency,** combined with a growing focus on **design**, has guided every technical decision. We have re-engineered internal passages and wall thicknesses to increase flow efficiency.
A double O-Ring seat is now featured on all joints, providing enhanced sealing performance. **The high-quality blue O-Rings,** produced exclusively for TESEO, ensure outstanding tightness and durability.
The entire system has been made more ergonomic through optimised shapes and reduced weight.
Precision machining on several components has improved external finishes and eliminated typical defects associated with die-casting.
The redesigned **outlet plates**, along with locking and anchoring components, have been developed with a focus on faster installation and longer-lasting performance. The continuous expansion of accessories and components further enhances system functionality.
International certifications and approvals provide additional assurance of product quality.



Guideline table for selecting the HBS System diameter based on the compressor's maximum power.

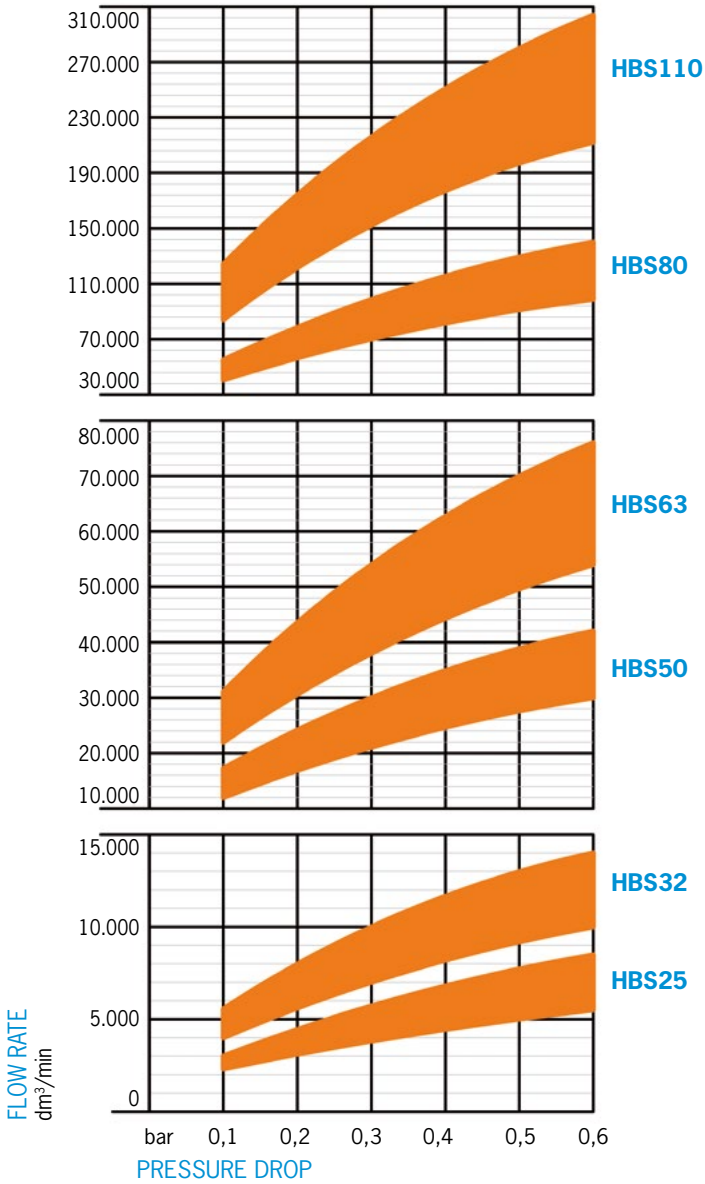
Compressor power kW	HBS	Indicative flow rate (L 30 m - 6 bar - Δp 3%) Nl/min
19	25	2.900
36	32	5.400
110	50	16.400
195	63	29.200
350	80	53.000
785	110	117.500

Dipartimento di Meccanica
Politecnico di Torino

Indicative diagrams of compressed air flow rates and related pressure drops in a line 30 m long (20°C - 1013 mbar).

The data used has been provided by the UNIVERSITY POLYTECHNIC INSTITUTE OF TURIN.

See online software (page 9)



AIR PRESSURE: 6 → 12 bar
0,6 → 1,2 MPa
87 → 174 psi

HBS

TIG

TECHNICAL SPECIFICATIONS

Extruded Aluminium	**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	**Aging T5 or T6**
Surface treatment (on request)	**Chemical silver anodization**
Specific weight, density	**Kg/dm³ 2,71**
Electrical conductivity	**% IACS 53**
Thermal conductivity	**W/m·K 200**
Specific heat	**J/Kg·K 96**
Coefficient of thermal expansion	**mm/m °C 0,024**
Ultimate tensile strength	**Kg/mm² 24**
Yield strength	**Kg/mm² 20**
Modulus of elasticity	**Kg/mm² 6.700**
Brinell hardness	**HB 70÷80**
Melting range	**°C 600-650**
O-ring material	**NBR 70**
Operating temperature	**°C -20/+120**
Screw material	**Steel class 8.8**
Screw tightening torque	**Nm 10÷13,5 (90÷120 Inch Lbs)**
Outlet plate thread	**BSPP/BSPT or NPT**
Terminal thread	**BSPP/BSPT or NPT**
Maximum operating pressure	**15 bar - 1,5 MPa - 217 psi**
Burst test pressure	**56 bar - 5,6 MPa - 813 psi**

Compatibility with fluids
Compressed air, Vacuum, Argon, Nitrogen, Carbon Dioxide, Mineral oil*,Synthetic oil*, Other fluids*.

! DISCLAIMER AND WARRANTY CONDITIONS !

TESEO RESERVES THE RIGHT TO VOID THE WARRANTY TERMS IF THE CUSTOMER MISUSES TESEO PRODUCTS, MODIFIES THEM, COMBINES THEM WITH NON-ORIGINAL PARTS OR PRODUCTS, OR COUNTERFEITS TESEO ITEMS IN ANY WAY.

TESEO components are intended **exclusively for the uses expressly defined** by the manufacturer and patent holder. This does **not exempt the professional user** from verifying the **technical and design compatibility** of their own application.

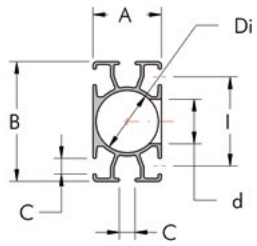
Our Technical Department is available for evaluations, special use analysis, and to design and potentially manufacture custom components and assemblies.

TESEO shall not be held liable for any damage resulting from improper, incorrect, or unreasonable use, or from **incompatibility with applications not covered** by the specifications in this catalogue.

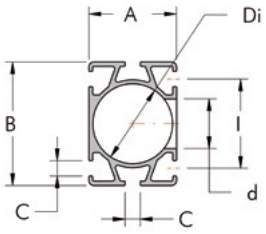
**For further information, please contact TESEO Srl's Technical Department.*

PROFILE SECTION OVERVIEW

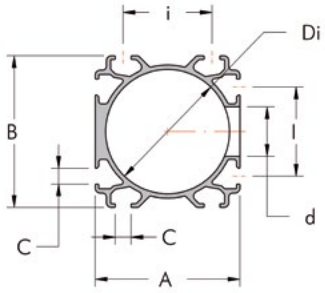
HBS25



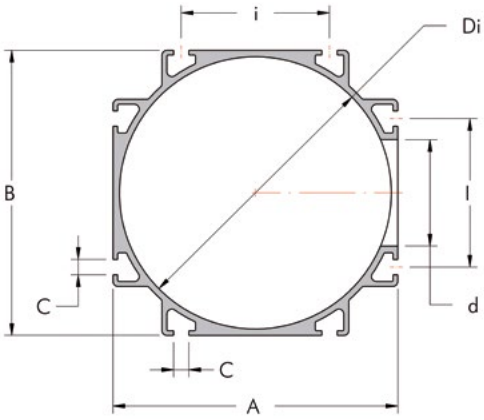
HBS32



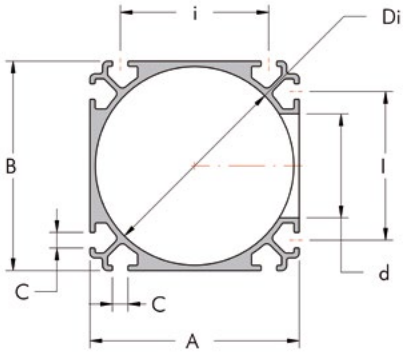
HBS50



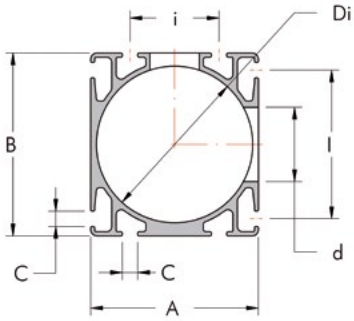
HBS110



HBS80



HBS63

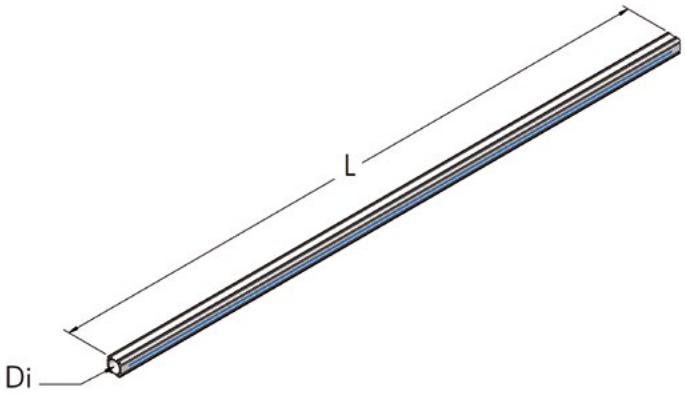


Our nominal diameters are larger than those of other pipe systems available on the market. As a result, the flow capacity of our pipework is physically greater. See pages 35 and 90 for more details.

SIZE DIMENSIONS

Name	Dimensions						Max hole	Inner volume	Weight	Moment of inertia		Section area
	Di mm	A mm	B mm	l mm	i mm	C mm	d mm	V l/m	P g/m	Jx cm^4	Jy cm^4	cm^2
HBS25	25	28	49	36	-	6,2	18	0,5	800	6,70	2,90	5
HBS32	32	36	50	36	-	6,2	20	0,8	1150	11,90	6,60	8
HBS50	50	60	60	36	36	6,2	20	2,0	1800	25,00	31,50	20
HBS63	63	68	74	60	36	6,2	20/30	3,1	2770	74,20	58,80	31
HBS80	80	85	85	60	60	6,2	42	5,0	3300	120,00	120,00	50
HBS110	110	115	115	60	60	6,2	43	9,5	4200	265,00	265,00	95

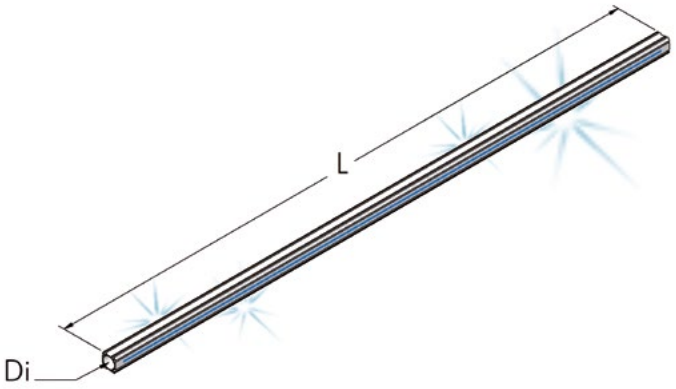
NATURAL ALUMINIUM EXTRUDED PIPE



Di mm	L m	Part. N°	P Kg	
25	5	800 028 500	4,0	
32	5	800 036 500	5,7	
50	5	800 060 500	9,0	
63	5	800 068 500	13,8	
80	5	800 085 500	16,7	
110	5	800 114 500	21,0	

Di mm	L m	Part. N°	P Kg	
25	2,5	800 028 250	2,0	✍
32	2,5	800 036 250	2,9	✍
50	2,5	800 060 250	4,5	✍
63	2,5	800 068 250	6,9	✍
80	2,5	800 085 250	8,3	✍
110	2,5	800 114 250	10,5	✍

ANODIZED ALUMINIUM EXTRUDED PIPE

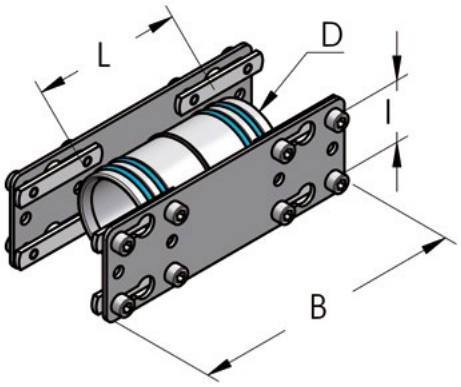


Di mm	L m	Part. N°	P Kg	
25	5	801 028 500	4,0	✍
32	5	801 036 500	6,3	✍
50	5	801 060 500	9,5	✍
63	5	801 068 500	14,0	✍
80	5	801 085 500	17,0	✍
110	5	801 114 500	21,3	✍

Di mm	L m	Part. N°	P Kg	
25	2,5	801 028 250	2,0	✍
32	2,5	801 036 250	3,1	✍
50	2,5	801 060 250	4,7	✍
63	2,5	801 068 250	7,0	✍
80	2,5	801 085 250	8,5	✍
110	2,5	801 114 250	10,6	✍

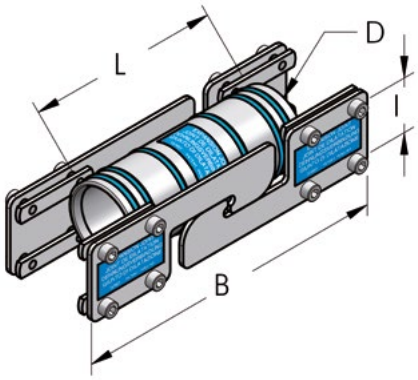
TESEO offers 100% customisable modular systems in natural or anodised aluminium, available in a range of colours. In addition, **TESEO** supplies a wide variety of special versions on request, tailored for various industrial applications. **See page 89 for more information.**

STRAIGHT JOINT, COMPLETE



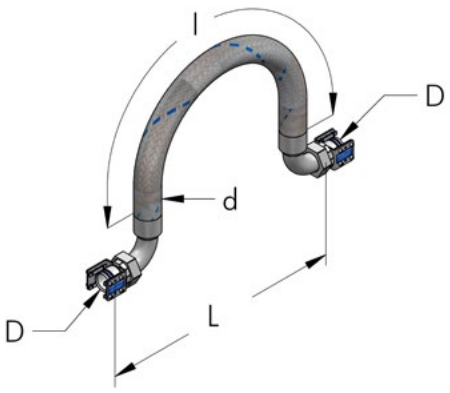
D mm	I mm	L mm	B mm	Part. N°	P g	
25	36	50	120	003 000 020	180	
32	36	65	120	003 001 020	200	
50	36	90	160	003 002 020	570	
63	36-60	106	160	003 003 020	770	
80	60	130	160	003 004 020	950	
110	60	180	230	003 005 020	2000	

SLIDING JOINT, COMPLETE



D mm	I mm	L mm	B mm	Part. N°	P g	
25	36	75	200	003 000 021	420	
32	36	95	200	003 001 021	450	
50	36	130	200	003 002 021	780	
63	60	150	200	003 003 021	1000	
80	60	180	200	003 004 021	1400	
110	60	280	280	003 005 021	2500	

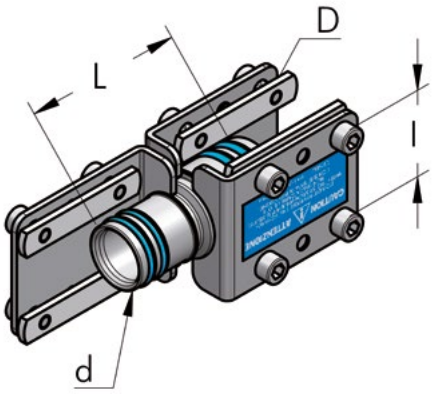
FLEXIBLE HOSE FOR U-BEND CONNECTIONS HBS-HBS



D mm	d mm	L mm	I mm	Part. nr.	P g	
25	37	1000	1050	003 000 057	1900	✍
32	44	1000	1080	003 001 057	2400	✍
50	65	1000	1100	003 002 057	4300	✍
63	77	1300	1450	003 003 057	5000	✍
80	90	1600	1800	003 004 057	6300	✍

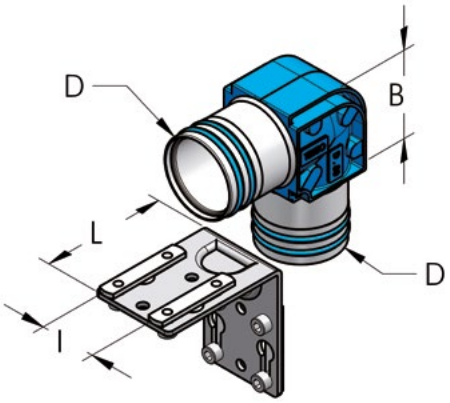
PLEASE NOTE: The drawings in this catalogue are intended to be illustrative only and are not binding. As part of our ongoing commitment to product improvement, TESEO Srl reserves the right to modify the shape and dimensions of its products at any time, without compromising their intended functionality.

REDUCTION STRAIGHT JOINT, COMPLETE



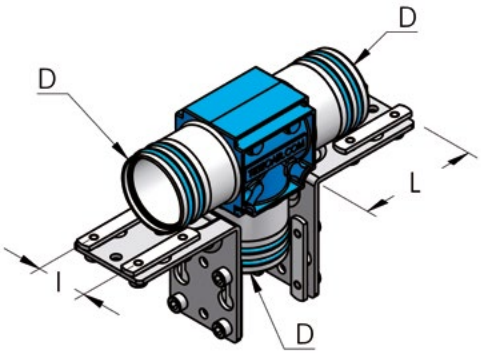
D mm	d mm	L mm	I mm	Part. N°	P g
32	25	66	36	003 001 049	270
50	32	88	36	003 002 049	621
63	50	105	36	003 003 049	777
80	63	125	60	003 004 049	1470
110	80	280	60	003 005 049	3000

L JOINT, COMPLETE



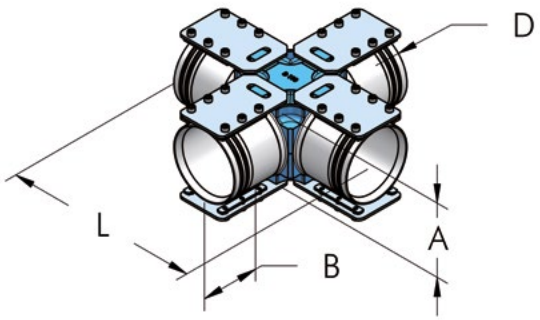
D mm	I mm	L mm	B mm	Part. N°	P g
25	36	60	30	003 000 022	240
32	36	60	42	003 001 022	280
50	36	80	60	003 002 022	530
63	36-60	80	75	003 003 022	1400
80	60	80	85	003 004 022	2600
110	60	110	165	003 005 022	3000

T JOINT, COMPLETE



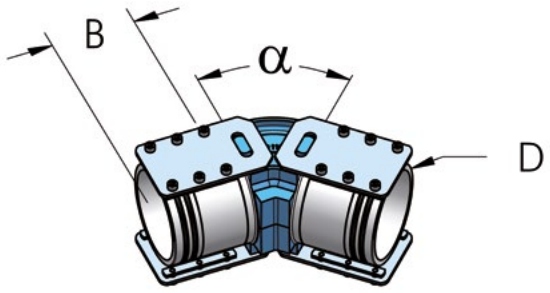
D mm	I mm	L mm	B mm	Part. N°	P g
25	36	60	30	003 000 024	400
32	36	60	50	003 001 024	430
50	36	80	60	003 002 024	820
63	36-60	80	75	003 003 024	2100
80	60	80	85	003 004 024	3500
110	60	110	230	003 005 024	4000
110/50	60	110	230	003 005 123	3910
110/63	60	110	230	003 005 124	4210
110/80	60	110	230	003 005 023	3900

CROSS JOINT, COMPLETE



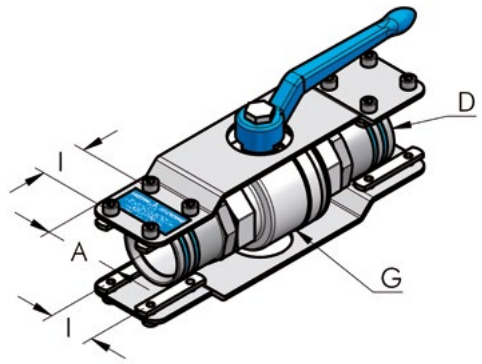
D mm	L mm	A mm	B mm	Part. N°	P kg	
80	260	83	60	003 004 045	4,6	✍
110	306	114	90	003 005 045	5,6	✍

45° JOINT, COMPLETE



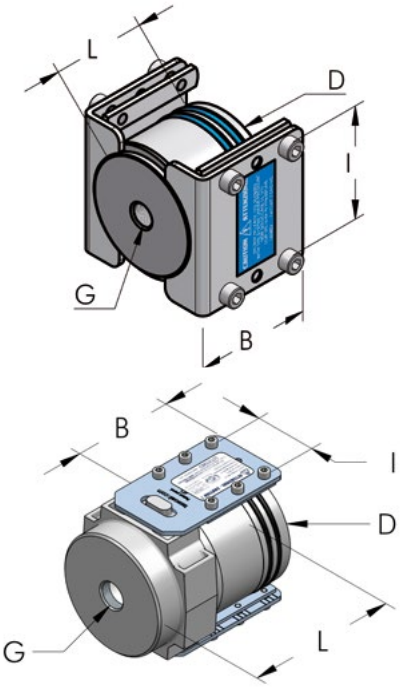
D mm	∝ °	B mm	Part. N°	P kg	
80	45	60	003 004 051	2,4	✍
110	45	90	003 005 051	3,2	✍

BALL VALVE, COMPLETE



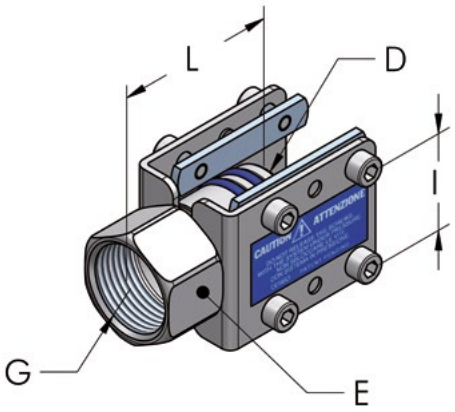
D mm	G	I mm	A mm	Part. N°	P g	
25	3/4" - BSPP	36	50	003 000 046	630	✍
32	1" - BSPP	36	50	003 001 046	1120	✍
50	1"1/2 - BSPP	36	60	003 002 046	2050	✍
63	2" - BSPP	36	60	003 003 046	3360	✍
80	2"1/2 - BSPP	60	72	003 004 046	5300	✍
110	4" - BSPP	60	78	003 005 046	12600	✍

TERMINAL WITH THREADED HOLE, COMPLETE



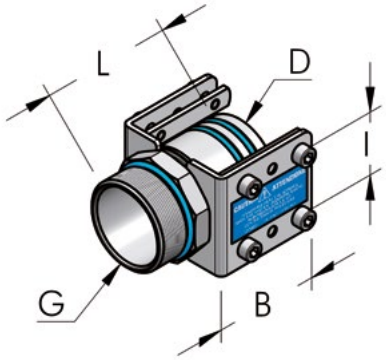
D mm	G	L mm	B mm	I mm	Part. N°	P g
25	1/4" - BSPP	28	60	36	003 000 025	114
32	1/4" - BSPP	32	60	36	003 001 025	130
32	1/2" - BSPP	32	60	36	003 001 031	128
50	1/4" - BSPP	40	60	36	003 002 025	440
50	1/2" - BSPP	50	60	36	003 002 029	430
63	1/4" - BSPP	50	60	60	003 003 025	656
80	1/4" - BSPP	66	80	60	003 004 025	1300
80	1/2" - BSPP	66	80	60	003 004 029	1300
110	3/8" - BSPP	150	110	60	003 005 025	2160
110	1/2" - BSPP	150	110	60	003 005 011	2090
110	3/4" - BSPP	150	110	60	003 005 012	2090
110	1" - BSPP	150	110	60	003 005 013	2080
110	1" 1/4 - BSPP	150	110	60	003 005 014	2060
110	1" 1/2 - BSPP	150	110	60	003 005 015	2050
110	2" - BSPP	150	110	60	003 005 016	2010

FEMALE THREADED TERMINAL, COMPLETE



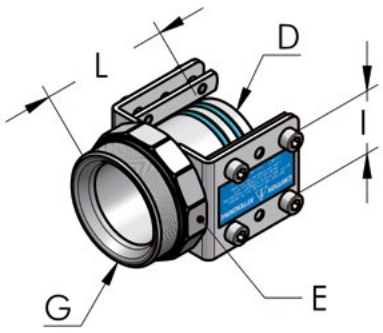
D mm	G	E mm	L mm	I mm	Part. N°	P g
25	3/4" - BSPP	30	45	36	003 000 027	120
32	1" - BSPP	36	60	36	003 001 027	140
50	1"1/2 - BSPP	52	70	36	003 002 028	340
63	1"1/2 - BSPP	65	72	60	003 003 028	440
80	1" - BSPP	-	66	60	003 004 027	1300
80	2" - BSPP	82	95	60	003 004 028	920
110	2"1/2 - BSPP	115	150	60	003 005 028	2000
110	3" - BSPP	115	150	60	003 005 017	1840

MALE THREADED NIPPLE, COMPLETE



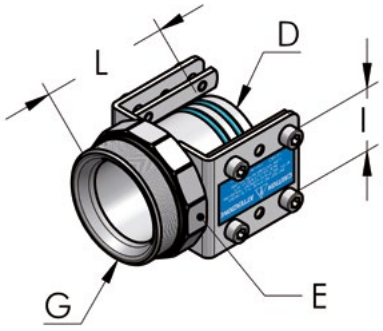
D mm	G	L mm	B mm	I mm	Part. N°	P g
25	3/4" - BSPP	47	60	36	003 000 029	110
32	1" - BSPP	55	60	36	003 001 030	230
50	1"1/2 - BSPP	76	60	36	003 002 030	330
63	2" - BSPT	80	60	60	003 003 030	430
80	2"1/2 - BSPT	100	80	60	003 004 030	650

MALE THREADE TERMINAL, COMPLETE



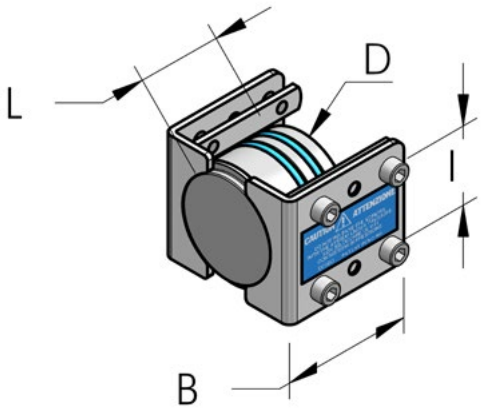
D mm	G	L mm	E mm	I mm	Part. N°	P g
25	1" - BSPP	45	36	36	003 000 030	130
32	1"1/4 - BSPP	61	50	36	003 001 029	190
50	2" - BSPP	75	65	36	003 002 031	440
63	2"1/2 - BSPT	90	82	60	003 003 031	600
80	3" - BSPT	110	90	60	003 004 031	830
110	4" - BSPT	152	115	60	003 005 031	1500

SHORT MALE THREADED TERMINAL, COMPLETE



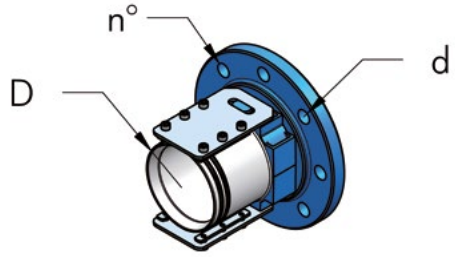
D mm	G	L mm	B mm	I mm	Part. N°	P g
50	1"1/2 - BSPP	69	60	36	003 002 130	320
63	2" - BSPP	70	60	60	003 003 130	420
80	2"1/2 - BSPP	88	80	60	003 004 130	640

CLOSED TERMINAL, COMPLETE



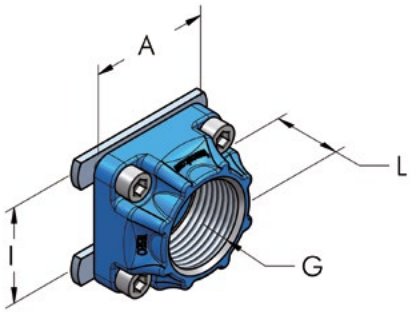
D mm	I mm	L mm	B mm	Part. N°	P g
25	36	29	60	003 000 026	120
32	36	32	60	003 001 026	120
50	36	40	60	003 002 026	430
63	60	40	60	003 003 026	700
80	60	66	80	003 004 026	1350
110	60	150	110	003 005 026	2000

FLANGED ADAPTER



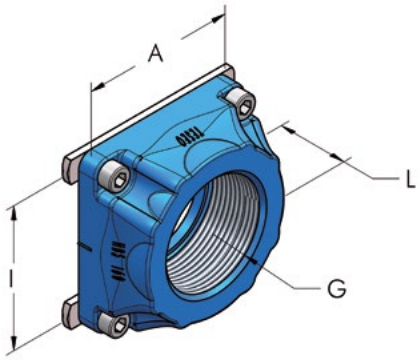
D mm	d mm	Norm	n°	Part. N°	P kg	
80	18	UNI-EN 1092	4	003 004 050	2,4	
80	19	ASME 150lb	4	003 004 450	2,4	
110	18	UNI-EN 1092	8	003 005 050	3,3	
110	19	ASME 150lb	8	003 005 450	3,4	

I36 FEMALE OUTLET PLATE, COMPLETE



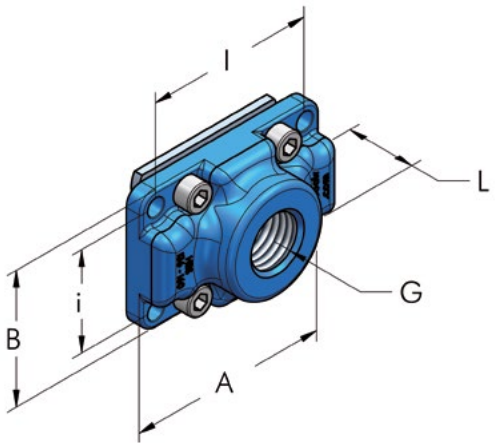
I mm	G	A mm	L mm	Part. N°	P g	
36	1/8" - BSPP	50	25	003 001 032	80	
36	1/4" - BSPP	50	25	003 001 033	80	
36	3/8" - BSPP	50	25	003 001 034	80	
36	1/2" - BSPP	50	25	003 002 033	110	
36	3/4" - BSPP	50	25	003 002 034	105	
36	1" - BSPP	50	25	003 002 035	90	

I60 FEMALE OUTLET PLATE, COMPLETE



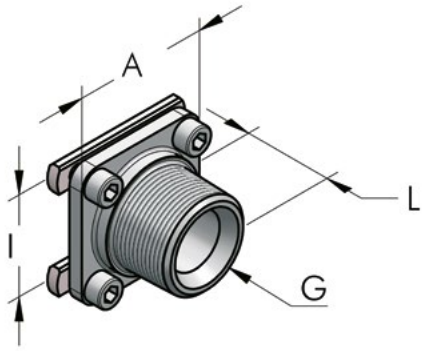
I mm	G	A mm	L mm	Part. N°	P g	
60	1/2" - BSPP	72	30	003 003 033	250	
60	3/4" - BSPP	72	30	003 003 034	220	
60	1" - BSPP	72	30	003 003 035	200	
60	1"1/4 - BSPP	72	30	003 003 038	175	
60	1"1/2 - BSPP	72	30	003 003 036	150	
60	2" - BSPP	72	30	003 003 039	193	

MODULAR OUTLET PLATE



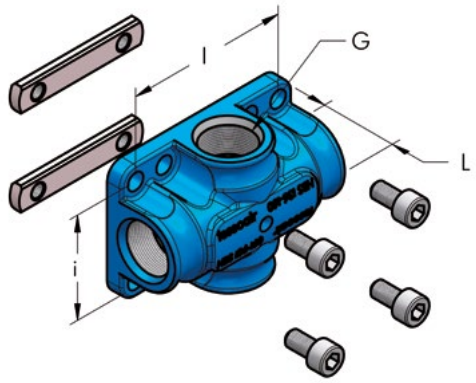
I mm	i mm	G	A mm	B mm	L mm	Part. N°	P g	
60	36	1/8" - BSPP	72	48	25	003 360 030	140	✍
60	36	1/4" - BSPP	72	48	25	003 360 031	137	✍
60	36	3/8" - BSPP	72	48	25	003 360 032	133	✍
60	36	1/2" - BSPP	72	48	25	003 360 033	129	✍
60	36	3/4" - BSPP	72	48	25	003 360 034	125	✍
60	36	1" - BSPP	72	48	25	003 360 035	120	✍

MALE OUTLET PLATE, COMPLETE



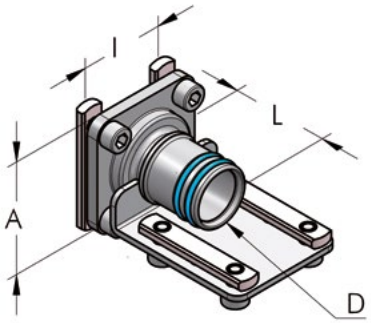
I mm	G	A mm	L mm	Part. N°	P g	
36	1" - BSPT	48	32	003 002 036	120	
60	2" - BSPT	70	39	003 004 036	600	

FEMALE MULTIPLE OUTLET PLATE, COMPLETE



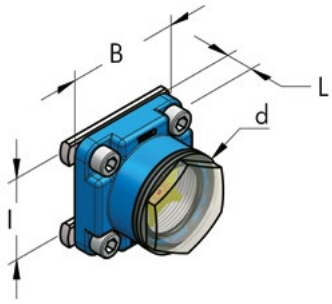
I mm	i mm	Outlets	G	L mm	Part. N°	P g	
60	36	4	1/4" - BSPP	30	003 360 054	190	✍
60	36	4	3/8" - BSPP	30	003 360 056	175	✍
60	36	4	1/2" - BSPP	30	003 360 058	150	✍
60	36	2	1/2" - BSPP	30	003 360 059	160	✍

REDUCTION PLATE, COMPLETE



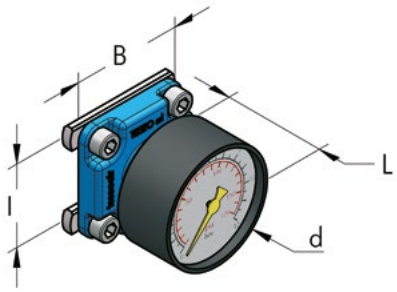
D mm	I mm	A mm	L mm	Part. N°	P g	
25	36	48	40	003 000 037	190	
32	36	48	44	003 002 037	200	
50	60	70	60	003 003 037	530	
63	60	70	72	003 004 037	610	

CONDENSATE LEVEL SPY HOLE



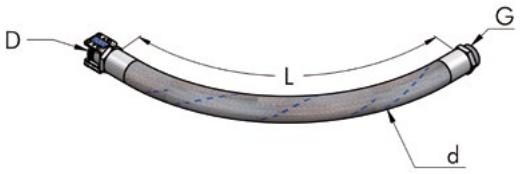
I mm	d mm	L mm	B mm	Part. N°	P g	
36	40	10	48	003 001 044	100	✍
60	40	12	72	003 003 044	180	✍

MANOMETER, COMPLETE



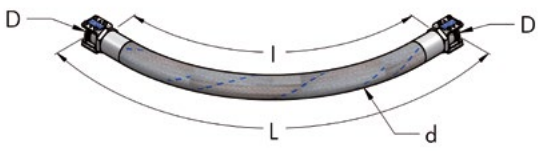
l mm	d mm	L mm	B mm	Part. N°	P g	
36	50	45	48	003 001 048	144	✍
60	50	55	72	003 003 048	205	✍

FLEXIBLE PIPE FOR CONNECTION TO COMPRESSOR



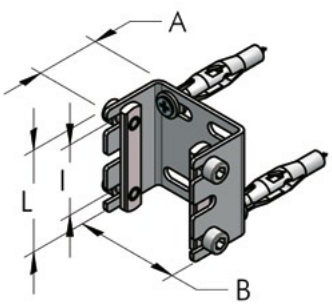
D mm	G	L mm	d mm	Part. N°	P g	
25	1" - BSPT	1000	37	003 000 058	1700	✍
32	1"1/4 - BSPT	1000	44	003 001 058	2200	✍
50	2" - BSPT	1000	65	003 002 058	4000	✍
63	2"1/2 - BSPT	1300	77	003 003 058	4700	✍
80	3" - BSPT	1600	90	003 004 058	5800	✍

FLEXIBLE JOINT FOR HBS-HBS CONNECTION



D mm	d mm	l mm	L mm	Part. N°	P g	
25	37	1000	1050	003 000 059	1900	✍
32	44	1000	1080	003 001 059	2400	✍
50	65	1000	1100	003 002 059	4300	✍
63	77	1300	1450	003 003 059	5000	✍
80	90	1600	1800	003 004 059	6300	✍

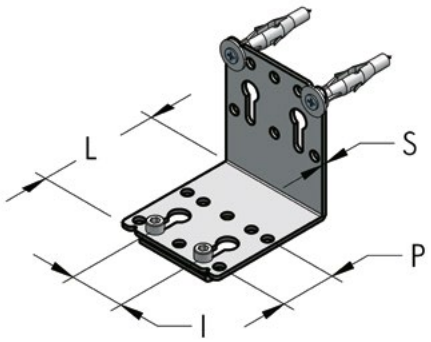
U BRACKET, COMPLETE



l mm	B mm	L mm	A mm	Part. N°	P g	
36	50	52	30	003 000 040	140	

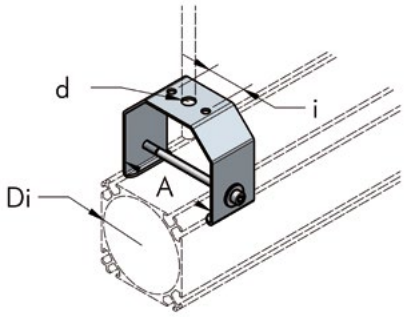
Suitable for HBS 25 only

L PLATE, COMPLETE



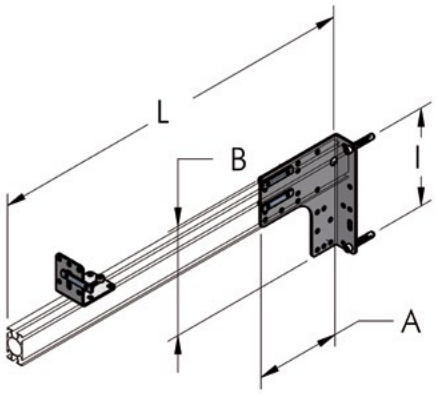
I mm	P mm	L mm	S mm	Part. N°	P g	
36	36	60	2	003 001 040	100	
36-60	36	80	3	003 003 040	260	
36-60	36-60	140	3,5	003 004 040	430	

HANGING BRACKET



Di mm	A mm	d mm	i mm	Part. N°	P g	
50/63	68	11	36	003 003 073	395	
80	85	11	36	003 004 073	391	
110	115	11	36	003 005 073	481	

SUPPORT BRACKET, COMPLETE

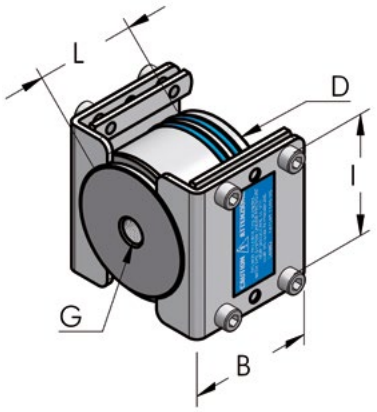


A mm	B mm	I mm	L mm	Part. N°	P g	
130	170	140	600	003 001 070	1300	✍
130	170	140	*	003 001 071	360	✍

*without bar

TERMINAL WITH NPT THREADED HOLE, COMPLETE

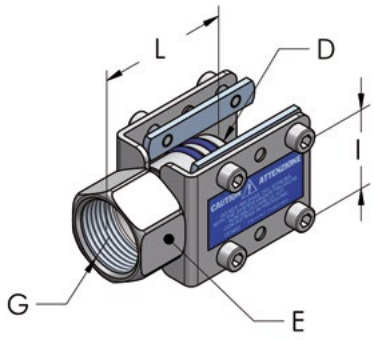
NPT



D mm	G	L mm	B mm	I mm	Part. N°	P g	
25	1/4" - NPT	22	60	36	003 000 425	114	
32	1/4" - NPT	25	60	36	003 001 425	130	✍
32	1/2" - NPT	25	60	36	003 001 431	128	✍
50	1/4" - NPT	40	60	36	003 002 425	440	✍
50	1/2" - NPT	40	60	36	003 002 429	430	✍
63	1/4" - NPT	50	60	60	003 003 425	656	✍
80	1/4" - NPT	66	80	60	003 004 425	1300	✍
80	1/2" - NPT	66	80	60	003 004 429	1300	✍
110	3/8" - NPT	150	110	60	003 005 425	2000	✍

FEMALE NPT THREADED TERMINAL, COMPLETE

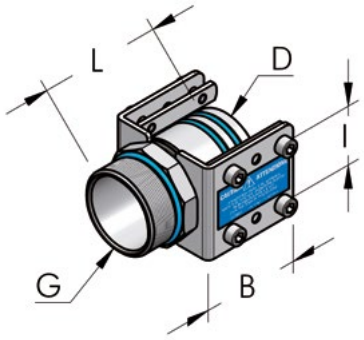
NPT



D mm	G	E mm	L mm	I mm	Part. N°	P g	
25	3/4" - NPT	30	40	36	003 000 427	120	
32	1" - NPT	36	50	36	003 001 427	140	
50	1"1/2 - NPT	52	70	36	003 002 428	340	✍
63	1"1/2 - NPT	65	75	60	003 003 428	440	✍
80	1" - NPT	-	66	60	003 004 427	920	✍
80	2" - NPT	82	95	60	003 004 428	920	✍
110	2"1/2 - NPT	115	150	60	003 005 428	2000	✍

MALE NPT THREADED NIPPLE, COMPLETE

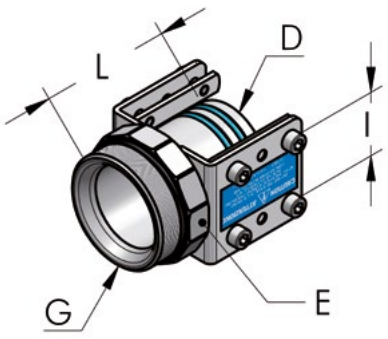
NPT



D mm	G	L mm	B mm	I mm	Part. N°	P g	
25	3/4" - NPT	36	60	36	003 000 429	110	
32	1" - NPT	44	60	36	003 001 430	230	
50	1"1/2 - NPT	75	60	36	003 002 430	330	✍
63	2" - NPT	80	60	60	003 003 430	430	✍
80	2"1/2 - NPT	102	80	60	003 004 430	650	✍

NPT MALE THREADED TERMINAL, COMPLETE

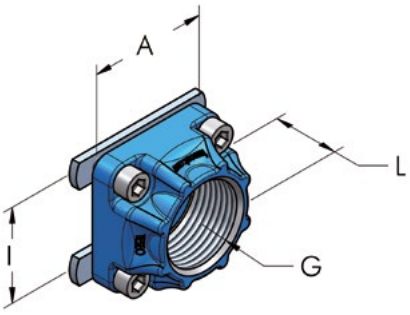
NPT



D mm	G	L mm	E mm	I mm	Part. N°	P g	
25	1" - NPT	40	36	36	003 000 430	130	
32	1"1/4 - NPT	52	50	36	003 001 429	190	✍
50	2" - NPT	75	65	36	003 002 431	440	✍
63	2"1/2 - NPT	90	82	60	003 003 431	600	✍
80	3" - NPT	120	90	60	003 004 431	830	✍
110	4" - NPT	150	115	60	003 005 431	1500	✍

I36 NPT FEMALE OUTLET PLATE, COMPLETE

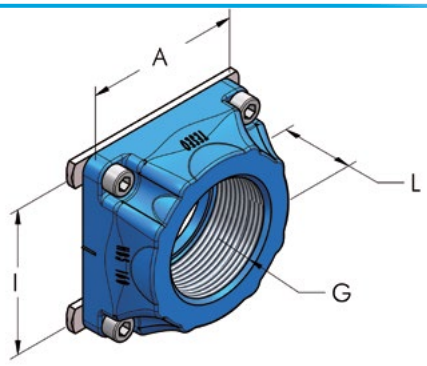
NPT



I mm	G	A mm	L mm	Part. N°	P g	
36	1/8" - NPT	50	25	003 001 432	80	✍
36	1/4" - NPT	50	25	003 001 433	80	✍
36	3/8" - NPT	50	25	003 001 434	80	✍
36	1/2" - NPT	50	25	003 002 433	110	✍
36	3/4" - NPT	50	25	003 002 434	105	✍
36	1" - NPT	50	25	003 002 435	90	✍

I60 NPT FEMALE OUTLET PLATE, COMPLETE

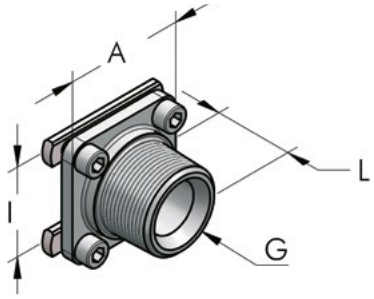
NPT



I mm	G	A mm	L mm	Part. N°	P g	
60	1/2" - NPT	70	30	003 003 433	250	✍
60	3/4" - NPT	72	30	003 003 434	220	✍
60	1" - NPT	72	30	003 003 435	200	✍
60	1"1/4 - NPT	72	30	003 003 438	175	✍
60	1"1/2 - NPT	72	30	003 003 436	150	✍
60	2" - NPT	72	30	003 003 439	193	✍

NPT MALE OUTLET PLATE, COMPLETE

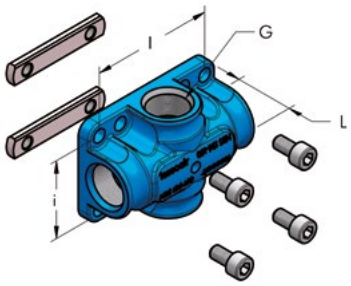
NPT



I mm	G	A mm	L mm	Part. N°	P g	
36	1" - NPT	48	36	003 002 436	120	✍
60	2" - NPT	70	49	003 004 436	600	✍

NPT FEMALE MULTIPLE OUTLETS PLATE, COMPLETE

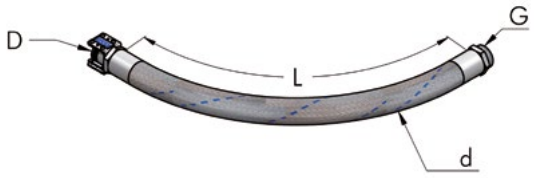
NPT



I mm	i mm	Outlets N°	G	L mm	Part. N°	P g	
60	36	4	1/4" - NPT	30	003 360 454	190	✍
60	36	4	3/8" - NPT	30	003 360 456	175	✍
60	36	4	1/2" - NPT	30	003 360 458	150	✍
60	36	2	1/2" - NPT	30	003 360 459	160	✍

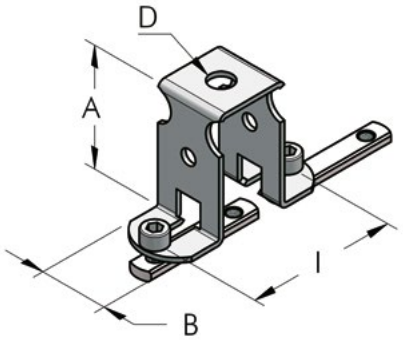
FLEXIBLE PIPE WITH NPT THREADED TERMINAL FOR CONNECTION TO COMPRESSOR

NPT



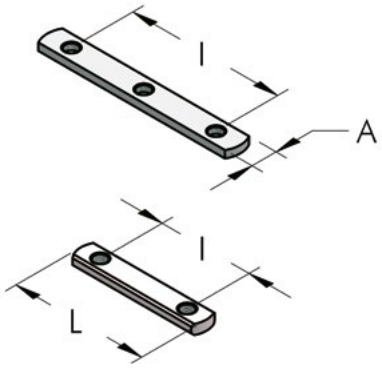
D mm	G	L mm	d mm	Part. N°	P g	
25	1" - NPT	1000	37	003 000 458	1700	✍
32	1"1/4 - NPT	1000	44	003 001 458	2200	✍
50	2" - NPT	1000	65	003 002 458	4000	✍
63	2"1/2 - NPT	1300	77	003 003 458	4700	✍
80	3" - NPT	1600	90	003 004 458	5800	✍

HANGING BRACKET



I mm	A mm	B mm	D mm	Part. N°	P g	
36-60	50	28	10	003 001 074	100	

SMALL PLATE WITH M6 HOLES



I mm	A mm	L mm	N° holes	Part. N°	P g	
36	10	56	2	725 010 056	12	⚙ ✍
60	10	80	2	725 010 080	23	⚙ ✍
60	10	78	3	725 010 081	22	⚙ ✍

COMPRESSED AIR AND FLUIDS PIPING SYSTEMS





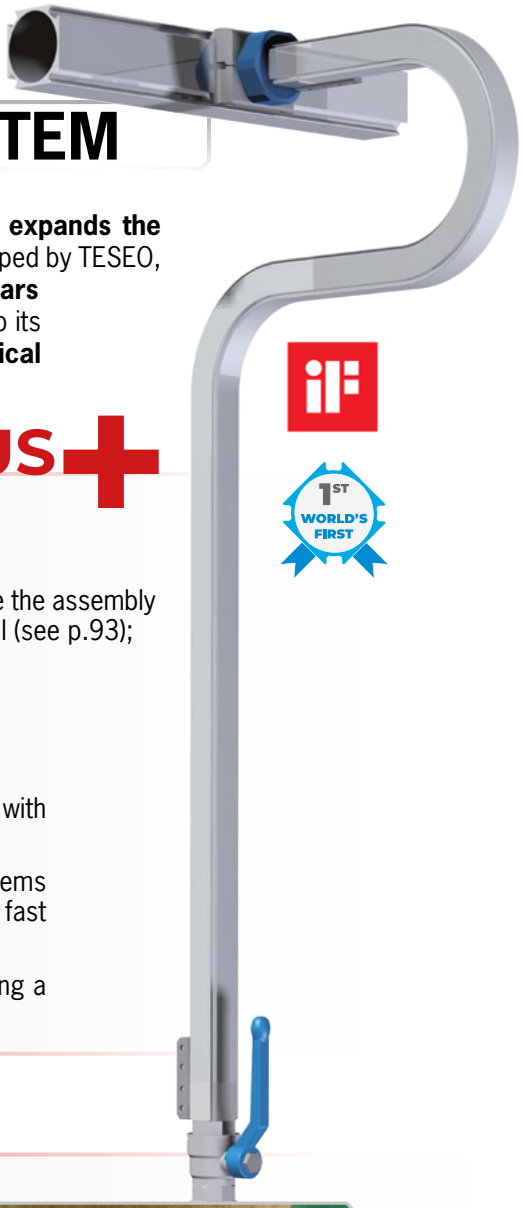



ASSEMBLY AND PRODUCTION LINES





APS ALUMINIUM PIPING SYSTEM



APS - Aluminium Piping System is TESEO's aluminium piping line that **expands the range** of its modular pipework systems. APS is a **patented solution** developed by TESEO, the result of **careful industrial design, engineering expertise**, and **years of hands-on experience** in the installation of industrial systems. Thanks to its design excellence, **APS received the IF Design Award for its ecological value.**

Advantages of APS over traditional systems PLUS

- Faster, quicker, and more intuitive assembly;
- No need for special or expensive tools;
- Easy to install, allowing even less experienced users to complete the assembly successfully, provided they have first read the instruction manual (see p.93);
- Symmetrical profile;
- All four faces can be used;
- Easy to cut;
- Wide range of accessories, compatible with TESEO HBS line and with both BSPP/BSPT ("GAS") and NPT threaded pipes;
- Competitive and cost-effective compared to traditional systems on the market, thanks to its design, system technology, and fast assembly – with no waste;
- 100% recyclable aluminium and reusable components, supporting a true circular economy.

EASY TO ASSEMBLE

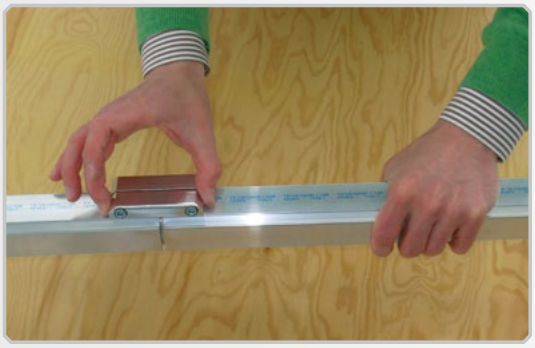
DEBURRING



MOUNTING



ASSEMBLING

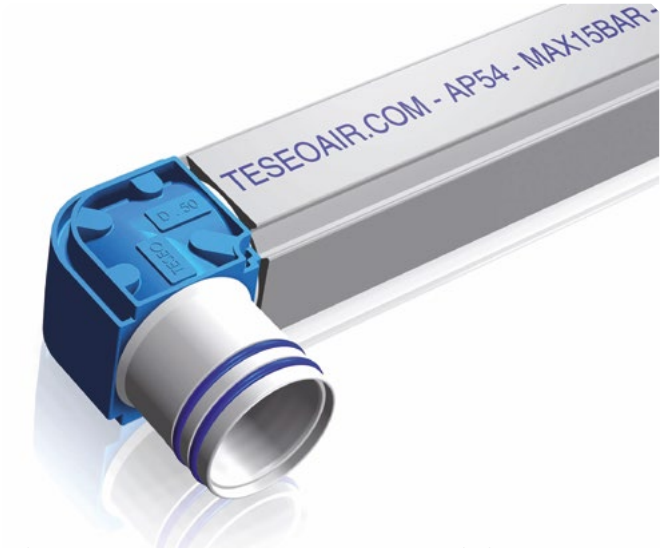


TIGHTENING



BLUE DESIGN

TESEO's new blue generation is the result of a complete review and update of all systems.
Our ongoing pursuit of excellence in **energy efficiency,** combined with a growing focus on **design**, has guided every technical decision. We have re-engineered internal passages and wall thicknesses to increase flow efficiency. **A double O-Ring seat** is now featured on all joints, providing enhanced sealing performance. **The high-quality blue O-Rings,** produced exclusively for TESEO, ensure outstanding tightness and durability.
The entire system has been made more ergonomic through optimised shapes and reduced weight.
Precision machining on several components has improved external finishes and eliminated typical defects associated with die-casting.
The redesigned **outlet plates**, along with locking and anchoring components, have been developed with a focus on faster installation and longer-lasting performance. The continuous expansion of accessories and components further enhances system functionality.
International certifications and approvals provide additional assurance of product quality.



Guideline table for selecting the APS System diameter based on the compressor's maximum power

Compressor power	APS	Indicative flow rate (L 30m - 6 bar - Δp 3%)
kW		Nl/min
11	22	1.650
19	28	2.900
36	36	5.400
67	45	10.000
110	54	16.400
195	68	29.200

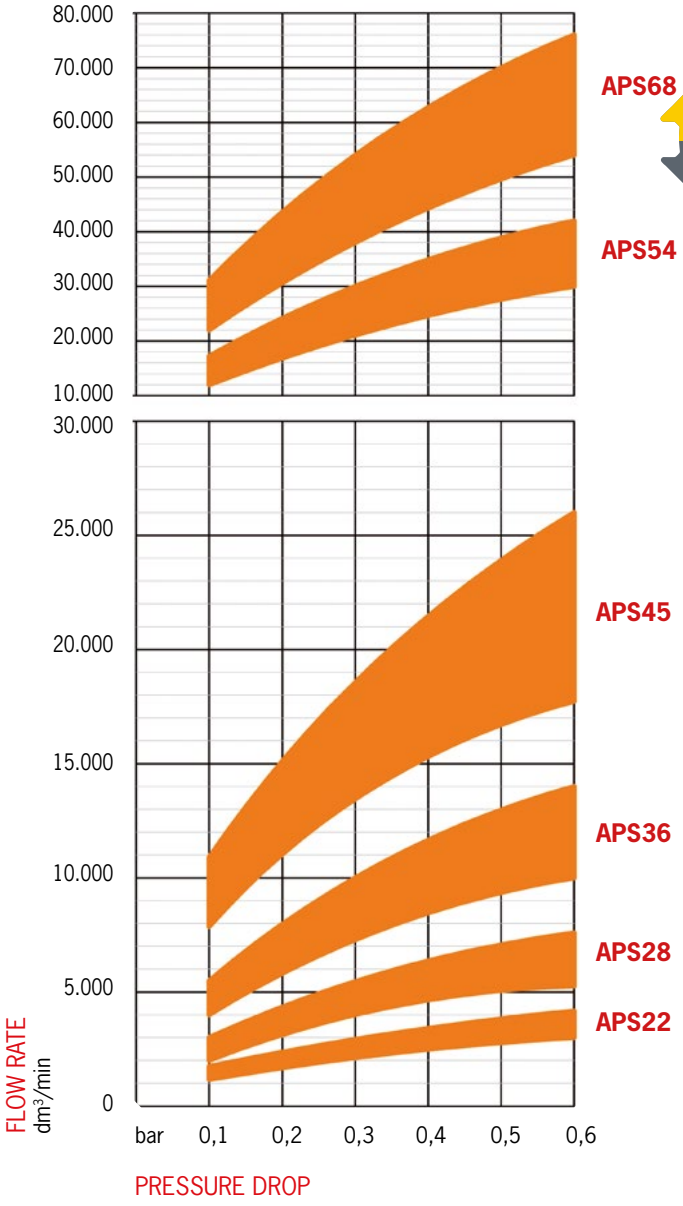
Dipartimento di Meccanica Politecnico di Torino

Indicative diagrams of compressed air flow rates and related pressure drops in a line 30 m long (20°C - 1013 mbar). The data used has been provided by the UNIVERSITY POLYTECHNIC INSTITUTE OF TURIN.

See online software (page 9)

APS

TIG



AIR PRESSURE: 6 → 12 bar
0,6 → 1,2 MPa
87 → 174 psi

APS

TIG

TECHNICAL SPECIFICATIONS

Extruded Aluminium	**Alloy EN AW 6060 UNI EN 573-3:1996**
International designations	**ANSI 6060 - DIN 1748/1: AlMgSi 0,5 BS 6060**
Chemical composition	**Si: 0,45% - Mg: 0,45% - Fe: 0,3%**
Heat treatment	**Aging T5 or T6**
Surface treatment (on request)	**Chemical silver anodization**
Specific weight, density	**Kg/dm³ 2,71**
Electrical conductivity	**% IACS 53**
Thermal conductivity	**W/m.K 200**
Specific heat	**J/Kg.K 96**
Coefficient of thermal expansion	**mm/m °C 0,024**
Ultimate tensile strength	**Kg/mm² 24**
Yield strength	**Kg/mm² 20**
Modulus of elasticity	**Kg/mm² 6.700**
Brinell hardness	**HB 70÷80**
Melting range	**°C 600-650**
O-ring material	**NBR 70**
Operating temperature	**°C -20/+120**
Screw material	**Steel Class 8.8**
M5 Screw tightening torque	**10 N·m (90 Inch·Lbs) ± 10%**
M6 Screw tightening torque	**14 N·m (120 Inch·Lbs) ± 10%**
Outlet plate thread	**BSPP/BSPT or NPT**
Terminal thread	**BSPP/BSPT or NPT**
Maximum operating pressure.	**15 bar - 1,5 MPa - 217 psi**
Powering APS Multifluid (MPS), maximum operating pressure	**25 bar - 2,5 MPa - 362 psi**
Burst test pressure	**80 bar - 8 MPa - 1160 psi**

Compatibility with fluids

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

! DISCLAIMER AND WARRANTY CONDITIONS !

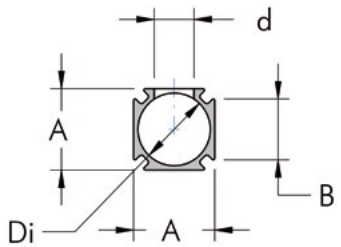
TESEO RESERVES THE RIGHT TO VOID THE WARRANTY TERMS IF THE CUSTOMER MISUSES TESEO PRODUCTS, MODIFIES THEM, COMBINES THEM WITH NON-ORIGINAL PARTS OR PRODUCTS, OR COUNTERFEITS TESEO ITEMS IN ANY WAY.

TESEO components are intended **exclusively for the uses expressly defined** by the manufacturer and patent holder. This does **not exempt the professional user** from verifying the **technical and design compatibility** of their own application. **Our Technical Department is available** for evaluations, special use analysis, and to design and potentially manufacture custom components and assemblies.

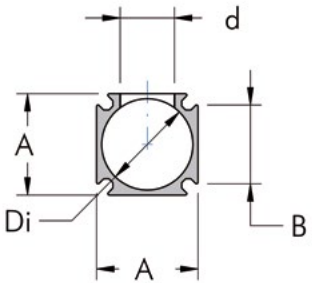
TESEO shall not be held liable for any damage resulting from improper, incorrect, or unreasonable use, or from **incompatibility with applications not covered** by the specifications in this catalogue. **For further information, please contact TESEO Srl's Technical Department.*

PROFILE SECTION OVERVIEW

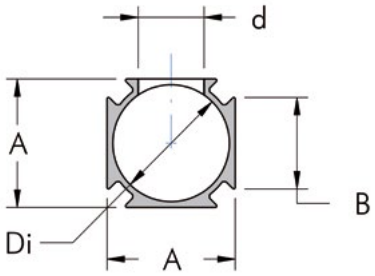
APS22



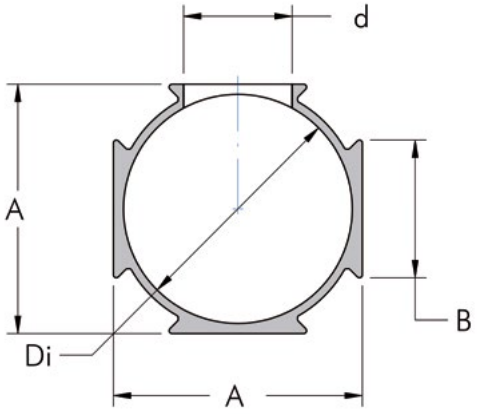
APS28



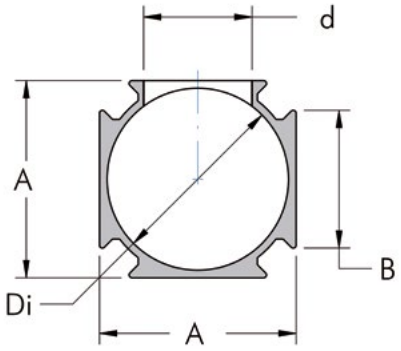
APS36



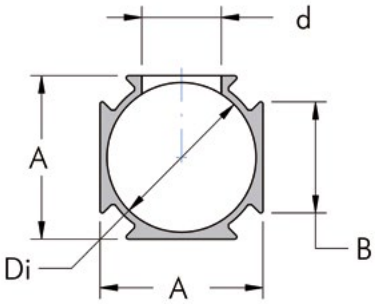
APS68



APS54



APS45



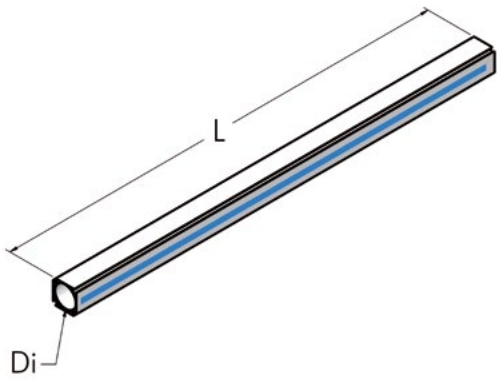
Our nominal diameters are larger than those of other pipe systems available on the market. As a result, the flow capacity of our pipework is physically greater. See pages 35 and 90 for more details.

SIZE DIMENSIONS

Name	Dimensions			Max hole	Weight	Moment of inertia		Inner volume
	Di mm	**A** mm	**B** mm	**d** mm	**P** g/m	**Jx** cm^4	**Jy** cm^4	**V** l/m
APS22	20	22,4	16,4	11	370	0,90	0,90	0,32
APS28	25	28	21,5	15	590	2,20	2,20	0,5
APS36	32	36	25	18	780	4,60	4,60	0,8
APS45	40	45	31	22	1170	11,00	11,00	1,3
APS54	50	55	38	30	1690	23,70	23,70	2
APS68	63	69	38	30	2080	44,10	44,10	3,1

APS

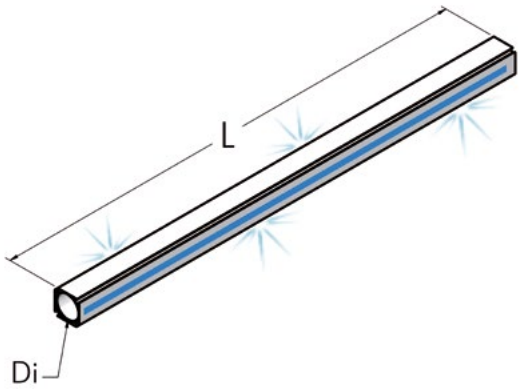
NATURAL ALUMINIUM EXTRUDED PIPE



Di mm	L m	Part. N°	P kg	
20	5	800 020 500	1,9	
25	5	800 025 500	3	
32	5	800 032 500	3,9	
40	5	800 040 500	5,8	
50	5	800 050 500	8,4	
63	5	800 063 500	10,4	

Di mm	L m	Part. N°	P kg	
20	2,5	800 020 250	0,95	✍
25	2,5	800 025 250	1,5	✍
32	2,5	800 032 250	1,95	✍
40	2,5	800 040 250	2,9	✍
50	2,5	800 050 250	4,2	✍
63	2,5	800 063 250	5,2	✍

ANODIZED ALUMINIUM EXTRUDED PIPE



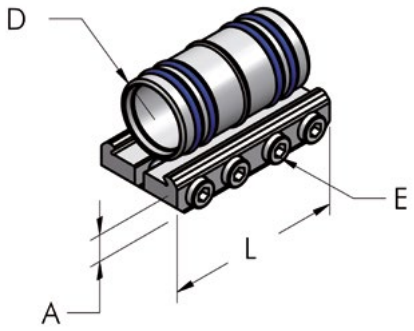
Di mm	L m	Part. N°	P kg	
20	5	801 020 500	1,9	✍
25	5	801 025 500	3	✍
32	5	801 032 500	3,9	✍
40	5	801 040 500	5,8	✍
50	5	801 050 500	8,4	✍
63	5	801 063 500	10,4	✍

Di mm	L m	Part. N°	P kg	
20	2,5	801 020 250	0,95	✍
25	2,5	801 025 250	1,5	✍
32	2,5	801 032 250	1,95	✍
40	2,5	801 040 250	2,9	✍
50	2,5	801 050 250	4,2	✍
63	2,5	801 063 250	5,2	✍

TESEO offers **100% customisable modular systems in natural or anodised aluminium**, available in a range of colours. In addition, TESEO supplies a **wide variety of special versions on request**, tailored for **various industrial applications**. See page 89 for more information.

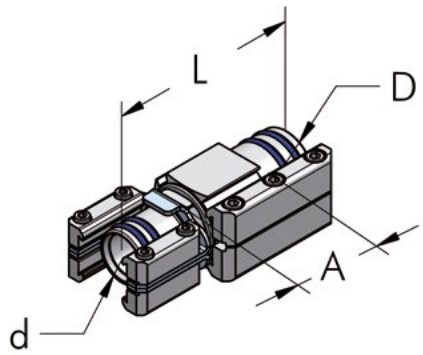
PLEASE NOTE: The drawings in this catalogue are intended to be illustrative only and are not binding. As part of our ongoing commitment to product improvement, TESEO Srl reserves the right to modify the shape and dimensions of its products at any time, without compromising their intended functionality.

STRAIGHT JOINT, COMPLETE



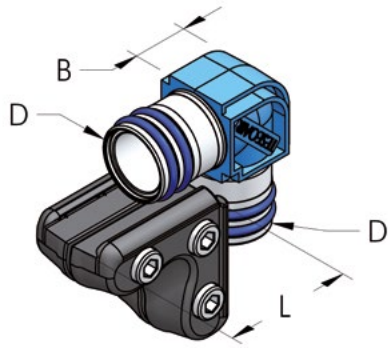
D mm	L mm	A mm	E mm	Part. N°	P g	
20	46	9	4	006 020 020	39	
25	60	10	4	006 025 020	86	
32	95	11	4	006 032 020	170	
40	80	12	5	006 040 020	200	
50	150	12	5	006 050 020	395	
63	150	12	5	006 063 020	480	

REDUCTION STRAIGHT JOINT, COMPLETE



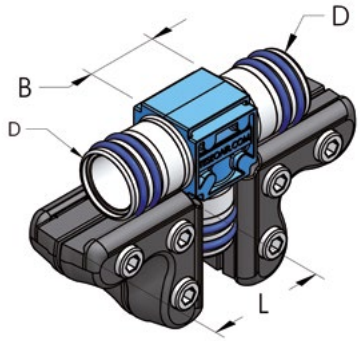
D mm	d mm	A mm	L mm	Part. N°	P g	
25	20	55	100	006 025 051	170	✍
32	25	33	90	006 032 051	295	✍
40	32	55	120	006 040 051	495	✍
50	40	45	115	006 050 051	880	✍
63	50	15	90	006 063 051	1030	✍

L JOINT, COMPLETE



D mm	L mm	B mm	Part. N°	P g	
20	40	22	006 020 022	90	
25	50	30	006 025 022	135	
32	45	42	006 032 022	260	
40	75	50	006 040 022	430	
50	100	57	006 050 022	780	
63	100	72	006 063 022	910	

T JOINT, COMPLETE

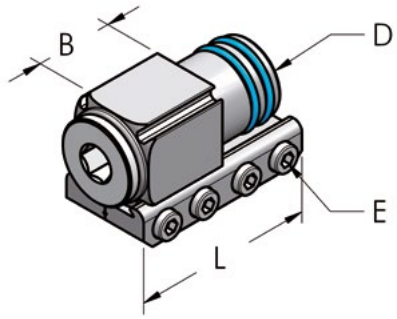


D mm	L mm	B mm	Part. N°	P g	
20	40	24	006 020 024	150	
25	50	30	006 025 024	240	
32	45	50	006 032 024	430	
40	75	53	006 040 024	730	
50	100	60	006 050 024	1325	
63	100	76	006 063 024	1530	

APS

CLOSED TERMINAL, COMPLETE

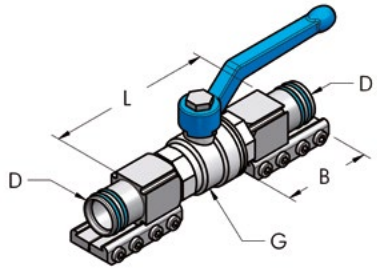
DCS



D mm	L mm	E mm	B mm	Part. N°	P g	
20	46	4	24	006 020 026	70	
25	60	4	28	006 025 026	125	
32	46	4	30	006 032 026	220	✍
40	80	5	35	006 040 026	300	✍
50	150	5	75	006 050 026	710	✍
63	90	5	-	006 063 026	700	✍

BALL VALVE, COMPLETE

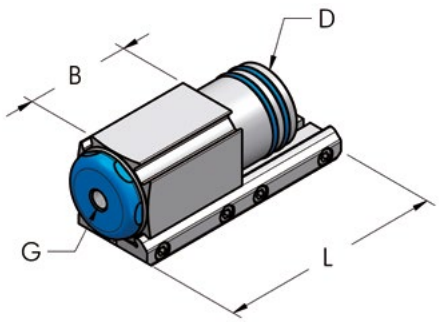
DCS



D mm	G	L mm	B mm	Part. N°	P g	
20	1/2" - BSPP	100	46	006 020 046	290	✍
25	3/4" - BSPP	118	56	006 025 046	500	✍
32	1" - BSPP	90	46	006 032 046	830	✍
40	1"1/4 - BSPP	150	70	006 040 046	1250	✍
50	1"1/2 - BSPP	245	150	006 050 046	2450	✍
63	2" - BSPP	150	90	006 063 046	3300	✍

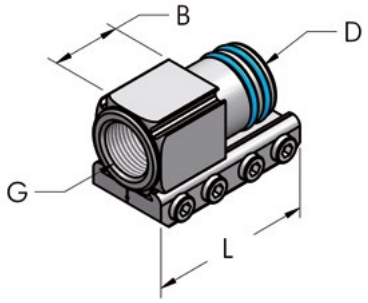
TERMINAL WITH THREADED HOLE, COMPLETE

DCS



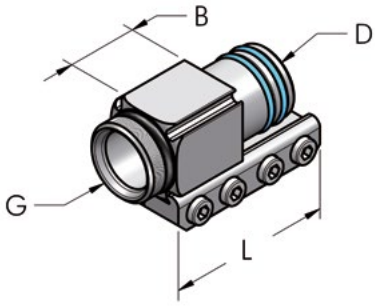
D mm	G	L mm	B mm	Part. N°	P g	
32	1/4" - BSPP	46	30	006 032 025	200	✍
32	1/2" - BSPP	46	30	006 032 031	200	✍
40	1/8" - BSPP	80	35	006 040 015	295	✍
40	1/4" - BSPP	80	35	006 040 025	260	✍
40	3/8" - BSPP	80	35	006 040 016	290	✍
40	1/2" - BSPP	80	35	006 040 017	280	✍
40	3/4" - BSPP	80	35	006 040 018	270	✍
50	1/8" - BSPP	150	75	006 050 015	705	✍
50	1/4" - BSPP	150	75	006 050 025	700	✍
50	1/2" - BSPP	150	75	006 050 017	690	✍
50	3/4" - BSPP	150	75	006 050 018	670	✍
50	1" - BSPP	150	75	006 050 019	655	✍
63	1/4" - BSPP	90	-	006 063 025	660	✍

FEMALE THREADED TERMINAL, COMPLETE



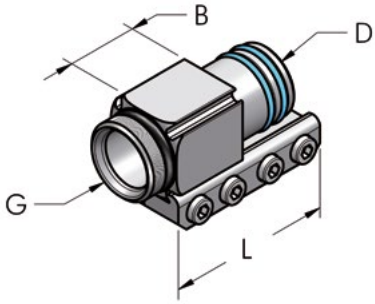
D mm	G	L mm	B mm	Part. N°	P g
20	3/8" - BSPP	46	24	006 020 028	54
25	1/2" - BSPP	60	28	006 025 028	105
32	1" - BSPP	46	23	006 032 027	205
40	1" - BSPP	80	35	006 040 027	260
50	1"1/4 - BSPP	150	75	006 050 027	615
50	1"1/2 - BSPP	150	75	006 050 028	565
63	1"1/2 - BSPP	90	20	006 063 028	430

MALE THREADED TERMINAL, COMPLETE



D mm	G	L mm	B mm	Part. N°	P g
20	1/2" - BSPP	46	24	006 020 030	57
25	3/4" - BSPP	60	28	006 025 030	110
32	1" - BSPP	46	11	006 032 030	200
32	1"1/4 - BSPP	46	13	006 032 029	255
40	1"1/4 - BSPP	80	35	006 040 029	245
50	1"1/2 - BSPP	150	75	006 050 029	655
63	2" - BSPT	90	12	006 063 030	390
63	2"1/2 - BSPT	90	13	006 063 031	450

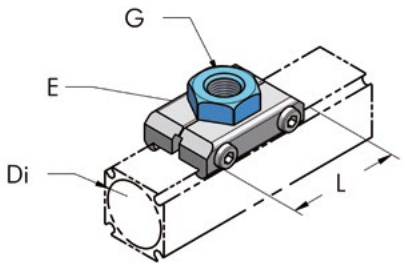
SHORT MALE THREADED TERMINAL, COMPLETE



D mm	G	L mm	B mm	Part. N°	P g
40	1"1/4 - BSPP	80	40	006 040 129	235
50	1"1/2 - BSPP	150	75	006 050 129	645
63	2" - BSPP	90	12	006 063 130	380

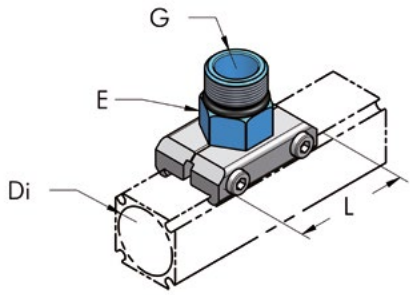
APS

FEMALE OUTLET PLATE, COMPLETE



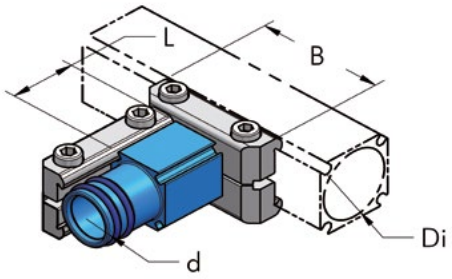
Di mm	G	L mm	E mm	Part. N°	P g
20	1/4" - BSPP	46	22	006 020 033	36
20	3/8" - BSPP	46	22	006 020 034	40
25	1/4" - BSPP	46	22	006 025 033	37
25	3/8" - BSPP	46	22	006 025 034	46
25	1/2" - BSPP	46	30	006 025 035	55
32	1/4" - BSPP	50	30	006 032 033	70
32	3/8" - BSPP	50	30	006 032 034	65
32	1/2" - BSPP	50	30	006 032 035	70
40	1/8" - BSPP	70	36	006 040 032	148
40	1/4" - BSPP	70	36	006 040 033	140
40	3/8" - BSPP	70	36	006 040 034	135
40	1/2" - BSPP	70	36	006 040 035	130
40	3/4" - BSPP	70	36	006 040 036	120
50/63	1/4" - BSPP	74	50	006 050 033	195
50/63	1/2" - BSPP	74	50	006 050 034	190
50/63	3/4" - BSPP	74	50	006 050 035	215
50/63	1" - BSPP	74	50	006 050 036	195

MALE OUTLET PLATE, COMPLETE



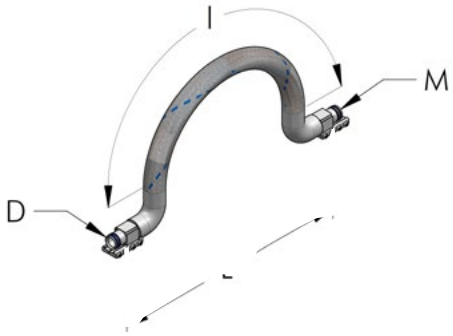
Di mm	G	L mm	E mm	Part. N°	P g
20	3/8"- BSPP	46	22	006 020 063	36
25	1/2"- BSPP	46	22	006 025 064	49
32	1/4"- BSPP	50	30	006 032 064	75
32	3/8"- BSPP	50	30	006 032 065	75
32	1/2"- BSPP	50	30	006 032 066	74
32	3/4"- BSPP	50	30	006 032 067	72
40	1/2"- BSPP	70	36	006 040 062	135
40	3/4"- BSPP	70	36	006 040 063	140
40	1"- BSPP	70	36	006 040 064	140
50/63	3/4"- BSPP	74	50	006 050 063	190
50/63	1" - BSPP	74	50	006 050 064	185
50/63	1"1/4 - BSPP	74	50	006 050 065	190
50/63	1"1/2 - BSPP	74	50	006 050 066	195

REDUCTION PLATE, COMPLETE



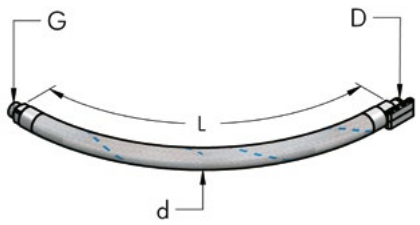
Di mm	d mm	B mm	L mm	Part. N°	P g
25	20	46	24	006 020 039	112
32	20	50	50	006 032 061	140
32	25	50	42	006 032 062	155
40	20	70	24	006 040 037	190
40	25	70	28	006 040 038	235
40	32	70	28	006 032 039	300
50/63	20	74	35	006 050 038	318
50/63	25	74	60	006 050 039	370
50/63	32	74	28	006 032 060	370
50/63	40	74	35	006 040 039	370

FLEXIBLE HOSE FOR U-BEND CONNECTIONS APS-APS



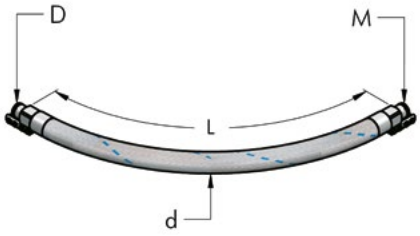
D mm	M mm	L mm	d mm	Part. N°	P g	
20	20	700	30	006 020 057	510	✍
25	25	700	35	006 025 057	830	✍
32	32	1000	44	006 032 057	2260	✍
40	40	1000	50	006 040 057	3050	✍
50	50	1000	65	006 050 057	4300	✍
63	63	1300	77	006 063 057	5000	✍

FLEXIBLE PIPE FOR CONNECTION TO COMPRESSOR FOR COMPRESSED AIR (15 BAR)



D mm	G	L mm	d mm	Part. N°	P g	
20	1/2" - BSPT	700	30	006 020 058	500	✍
25	3/4" - BSPT	700	35	006 025 058	750	✍
32	1"1/4 - BSPT	1000	44	006 032 058	2000	✍
40	1"1/4 - BSPT	1000	50	006 040 058	3000	✍
50	2" - BSPT	1000	65	006 050 058	4075	✍
63	2"1/2 - BSPT	1300	77	006 063 058	4700	✍

FLEXIBLE JOINT FOR APS-APS CONNECTION FOR COMPRESSED AIR (15 BAR)

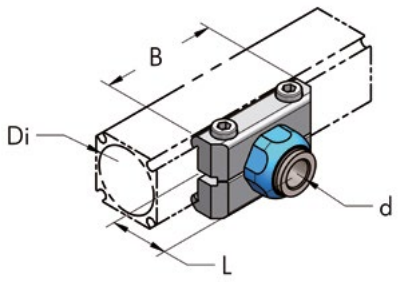


D mm	M mm	L mm	d mm	Part. N°	P g	
20	20	700	30	006 020 059	510	✍
25	25	700	35	006 025 059	830	✍
32	32	1000	44	006 032 059	2260	✍
40	40	1000	50	006 040 059	3050	✍
50	50	1000	65	006 050 059	4300	✍
63	63	1300	77	006 063 059	5000	✍

APS

OUTLET PLATE WITH QUICKFIT, COMPLETE

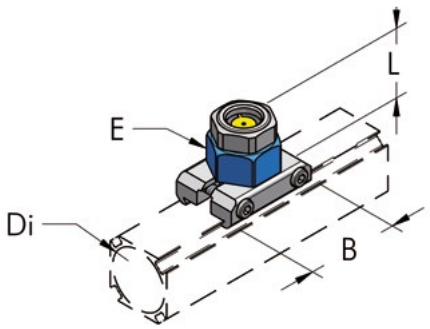
DCS



Di mm	d mm	B mm	L mm	Part. N°	P g	
20	8	46	23	006 020 084	112	✍
20	10	46	26	006 020 085	190	✍
25	8	46	23	006 025 084	235	✍
25	10	46	23	006 025 085	246	✍
32	8	50	30	006 032 084	80	✍
32	10	50	30	006 032 085	80	✍
32	12	50	30	006 032 086	80	✍
40	10	70	23	006 040 085	318	✍
40	12	70	26	006 040 086	370	✍

CONDENSATE LEVEL SPY HOLE, COMPLETE

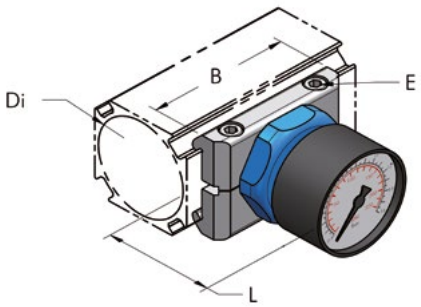
DCS



Di mm	L mm	B mm	E mm	Part. N°	P g	
32	38	50	30	006 032 044	105	✍

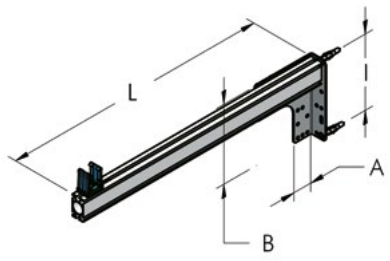
MANOMETER, COMPLETE

DCS



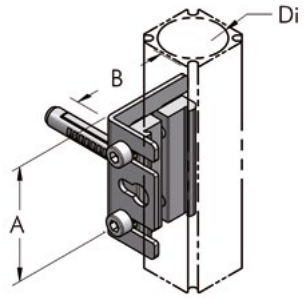
Di mm	L mm	B mm	E mm	Part. N°	P g	
20	58	46	4	006 020 048	70	✍
25	52	56	4	006 025 048	75	✍
32	54	50	4	006 032 048	145	✍
40	58	70	5	006 040 048	174	✍
50/63	58	74	5	006 050 048	230	✍

SUPPORT BRACKET, COMPLETE



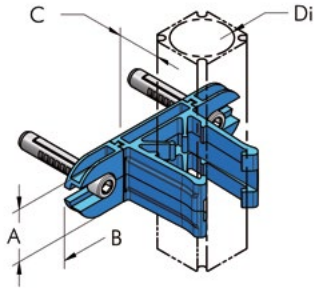
A mm	B mm	L mm	I mm	Part. N°	P g	
136	174	600	140	006 020 070	1300	✍
136	174	600	140	006 025 070	1300	✍
136	174	600	140	006 040 070	1400	✍
136	174	600	140	006 050 070	1450	✍
136	174	600	140	006 063 070	1400	✍

L PLATE, COMPLETE



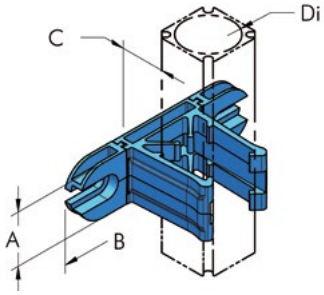
Di mm	d mm	A mm	B mm	Part. N°	P g
20	8	50	40	006 020 040	70
25	8	50	40	006 025 040	75
32	8	80	60	006 032 040	127
40	8	80	60	006 040 040	140
50/63	8	80	60	006 050 040	160

SNAP CLAMP, COMPLETE



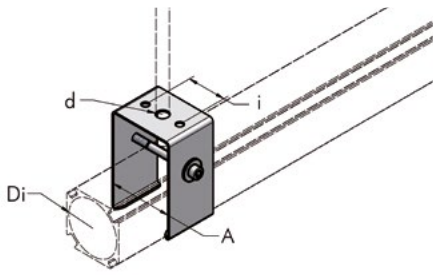
Di mm	A mm	B mm	C mm	Part. N°	P g
20	20	70	20	006 020 041	17
25	25	88	17	006 025 041	25
32	40	135	46	006 032 041	175
40	40	135	43	006 040 041	175
50	50	150	40	006 050 041	213

SNAP CLAMP



Di mm	A mm	B mm	C mm	Part. N°	P g
20	20	70	20	006 020 042	17
25	25	88	17	006 025 042	25
32	40	135	46	006 032 042	140
40	40	135	43	006 040 042	140
50	50	150	40	006 050 042	174

HANGING BRACKET

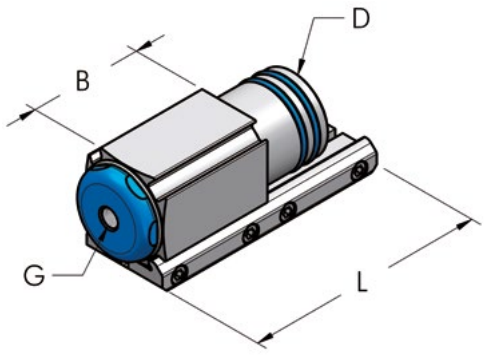


Di mm	A mm	d mm	i mm	Part. N°	P g
32	36	11	24	006 032 073	100
40	45	11	30	006 040 073	274
50	55	11	36	006 050 073	302
63	69	11	36	006 063 073	323

APS

TERMINAL WITH NPT THREADED HOLE, COMPLETE

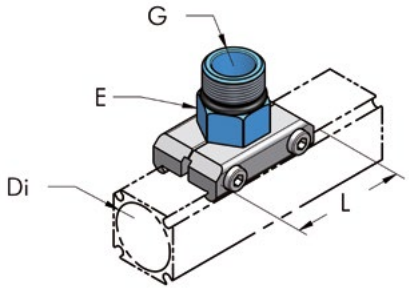
NPT DCS



D mm	G	L mm	B mm	Part. N°	P g	
32	1/4" - NPT	46	30	006 032 425	200	✍
32	1/2" - NPT	46	30	006 032 431	195	✍
40	1/8" - NPT	80	35	006 040 415	295	✍
40	1/4" - NPT	80	35	006 040 425	260	✍
40	3/8" - NPT	80	35	006 040 416	290	✍
40	1/2" - NPT	80	35	006 040 417	280	✍
40	3/4" - NPT	80	35	006 040 418	270	✍
50	1/8" - NPT	150	75	006 050 415	705	✍
50	1/4" - NPT	150	75	006 050 425	700	✍
50	1/2" - NPT	150	75	006 050 417	690	✍
50	3/4" - NPT	150	75	006 050 418	670	✍
50	1" - NPT	150	75	006 050 419	655	✍
63	1/4" - NPT	90	-	006 063 425	660	✍

NPT MALE OUTLET PLATE, COMPLETE

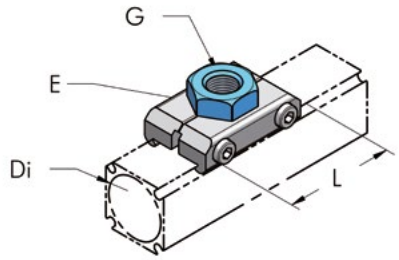
NPT DCS



Di mm	G	L mm	E mm	Part. N°	P g	
20	3/8" - NPT	46	22	006 020 463	36	
25	1/2" - NPT	46	22	006 025 464	49	
32	1/4" - NPT	30	50	006 032 464	75	✍
32	3/8" - NPT	30	50	006 032 465	75	✍
32	1/2" - NPT	30	50	006 032 466	74	✍
32	3/4" - NPT	30	50	006 032 467	72	✍
40	1/2" - NPT	70	36	006 040 462	135	✍
40	3/4" - NPT	70	36	006 040 463	140	✍
40	1" - NPT	70	36	006 040 464	140	✍
50/63	3/4" - NPT	74	50	006 050 463	190	✍
50/63	1" - NPT	74	50	006 050 464	185	✍
50/63	1"1/4 - NPT	74	50	006 050 465	190	✍
50/63	1"1/2 - NPT	74	50	006 050 466	195	✍

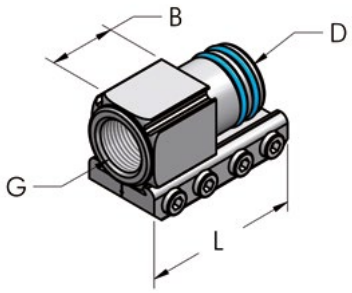
NPT FEMALE OUTLET PLATE, COMPLETE

NPT DCS



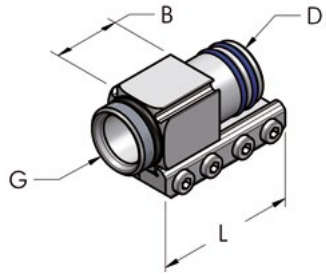
Di mm	G	L mm	E mm	Part. N°	P g	
20	1/4" - NPT	46	22	006 020 433	36	
20	3/8" - NPT	46	22	006 020 434	40	
25	1/4" - NPT	46	22	006 025 433	37	
25	3/8" - NPT	46	22	006 025 434	46	
25	1/2" - NPT	46	30	006 025 435	55	
32	1/4" - NPT	50	30	006 032 433	70	✍
32	3/8" - NPT	50	30	006 032 434	65	✍
32	1/2" - NPT	50	30	006 032 435	70	✍
40	1/8" - NPT	70	36	006 040 432	148	✍
40	1/4" - NPT	70	36	006 040 433	140	✍
40	3/8" - NPT	70	36	006 040 434	135	✍
40	1/2" - NPT	70	36	006 040 435	130	✍
40	3/4" - NPT	70	36	006 040 436	120	✍
50/63	1/4" - NPT	74	50	006 050 433	195	✍
50/63	1/2" - NPT	74	50	006 050 434	190	✍
50/63	3/4" - NPT	74	50	006 050 435	215	✍
50/63	1" - NPT	74	50	006 050 436	195	✍

NPT FEMALE THREADED TERMINAL, COMPLETE



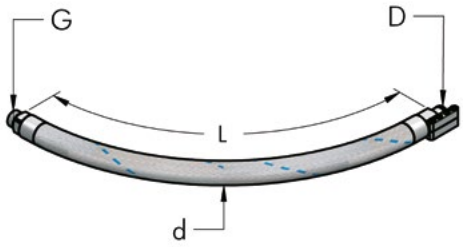
D mm	G	L mm	B mm	Part. N°	P g	
20	3/8" - NPT	46	24	006 020 428	54	
25	1/2" - NPT	60	28	006 025 428	105	
32	1" - NPT	46	23	006 032 427	205	✍
40	1" - NPT	80	35	006 040 427	260	✍
50	1"1/4 - NPT	150	75	006 050 427	615	✍
50	1"1/2 - NPT	150	75	006 050 428	565	✍
63	1"1/2 - NPT	90	20	006 063 428	430	✍

NPT MALE THREADED TERMINAL, COMPLETE



D mm	G	L mm	B mm	Part. N°	P g	
20	1/2" - NPT	46	24	006 020 430	57	
25	3/4" - NPT	60	28	006 025 430	110	
32	1" - NPT	46	11	006 032 430	200	✍
32	1"1/4 - NPT	46	13	006 032 429	255	✍
40	1"1/4 - NPT	80	35	006 040 429	245	✍
50	1"1/2 - NPT	150	75	006 050 429	655	✍
63	2" - NPT	90	12	006 063 430	390	✍
63	2"1/2 - NPT	90	13	006 063 431	450	✍

FLEXIBLE PIPE WITH NPT THREADED TERMINAL FOR CONNECTION TO COMPRESSOR FOR COMPRESSED AIR (15 BAR)



D mm	G	L mm	d mm	Part. N°	P g	
20	1/2" - NPT	700	30	006 020 458	500	✍
25	3/4" - NPT	700	35	006 025 458	750	✍
32	1"1/4 - NPT	1000	44	006 032 458	2000	✍
40	1"1/4 - NPT	1000	50	006 040 458	3000	✍
50	2" - NPT	1000	65	006 050 458	4075	✍
63	2"1/2 - NPT	1300	77	006 063 458	4700	✍

MULTIFLUID 25 BAR

MPS

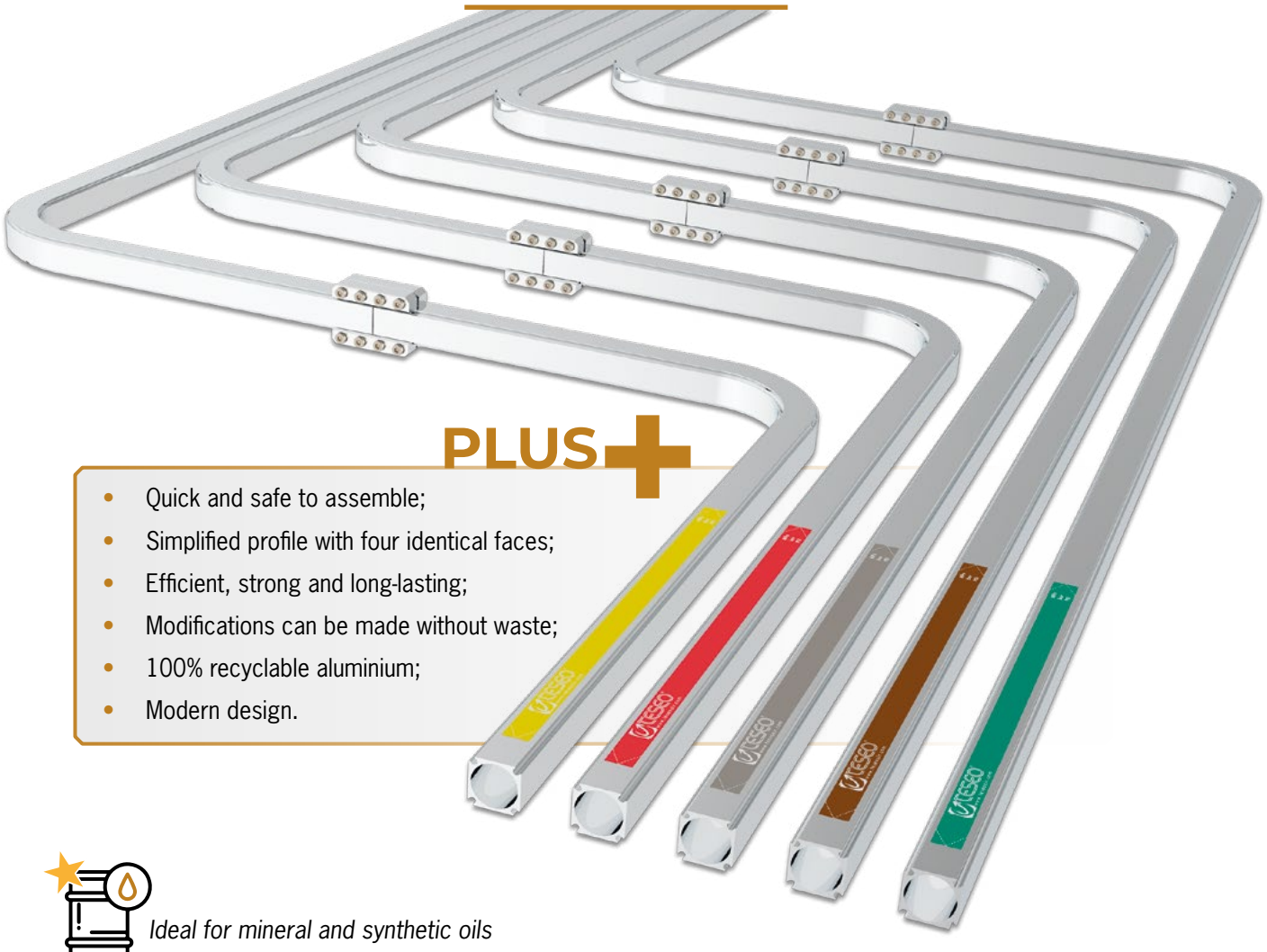
USE OF MPS – MULTIFLUID PIPING SYSTEM AT 25 BAR (360 PSI)

The ***MPS - Multifluid Piping System*** range is specifically designed for the **distribution of fluids at working pressures of up to 25 bar.** The increased working pressure allows the safe transport of **incompressible fluids**, such as **mineral and synthetic oils, and coolant-lubricant fluids**.

For these types of applications, TESEO **uses its patented APS pipework** – suitable for the distribution of non-hazardous gases and fluids – in combination **with a range of dedicated accessories**, such as **safety valves, pressure gauges, and expansion tanks**, as detailed in the following pages.

KIWA has confirmed that the product complies with the requirements of **Directive 2014/68/EU, Annex III, E1 for pressure equipment.**

KIWA Certificate No.: PED 0042. CE Marking: CE0476

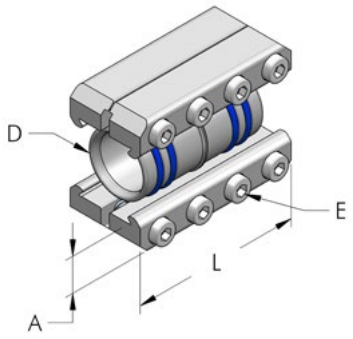


PLUS

- Quick and safe to assemble;
- Simplified profile with four identical faces;
- Efficient, strong and long-lasting;
- Modifications can be made without waste;
- 100% recyclable aluminium;
- Modern design.

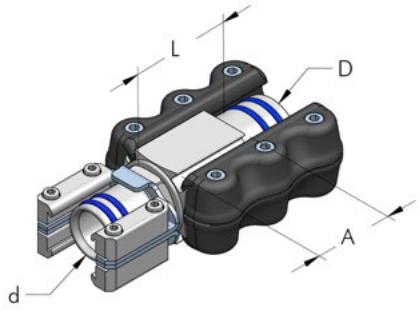
Ideal for mineral and synthetic oils

STRAIGHT JOINT FOR MULTIFLUID, COMPLETE



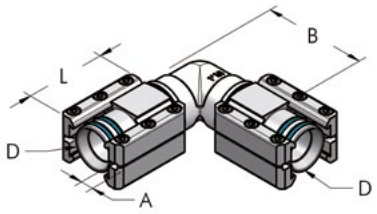
D mm	L mm	A mm	E mm	Part. N°	P g	
20	46	9	4	006 020 720	70	
25	60	10	4	006 025 720	146	
32	95	11	4	006 032 720	300	
40	80	12	5	006 040 720	320	✍
50	150	12	5	006 050 720	680	✍
63	150	12	5	006 063 720	480	✍

REDUCING STRAIGHT JOINT FOR MULTIFLUID, COMPLETE



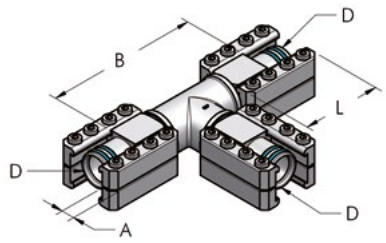
D mm	d mm	A mm	L mm	Part. N°	P g	
25	20	55	100	006 025 751	260	✍
32	25	33	90	006 032 751	485	✍
40	32	55	120	006 040 751	745	✍
50	40	45	115	006 050 751	1205	✍
63	50	15	90	006 063 751	1320	✍

L-JOINT FOR MULTIFLUID, COMPLETE



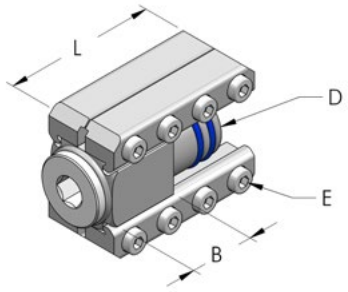
D mm	L mm	A mm	B mm	Part. N°	P g	
20	46	9	50	006 020 722	214	✍
25	60	10	65	006 025 722	330	✍
32	46	11	88	006 032 722	824	✍
40	80	12	100	006 040 722	640	✍
50	150	12	150	006 050 722	1500	✍

T-JOINT FOR MULTIFLUID, COMPLETE



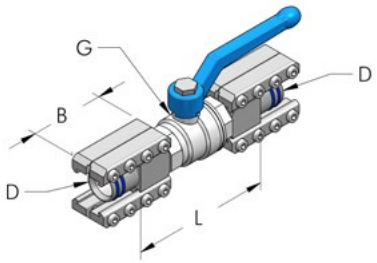
D mm	L mm	A mm	B mm	Part. N°	P g	
20	46	9	100	006 020 724	270	✍
25	60	10	130	006 025 724	425	✍
32	46	11	120	006 032 724	1130	✍
40	80	12	160	006 040 724	890	✍
50	150	12	245	006 050 724	2100	✍

END CAP FOR MULTIFLUID, COMPLETE



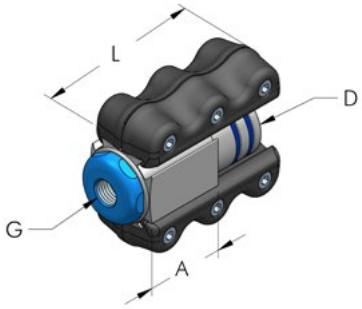
D mm	L mm	E mm	B mm	Part. N°	P g	
20	46	4	24	006 020 726	102	
25	60	4	28	006 025 726	185	
32	46	4	30	006 032 726	350	✍
40	80	5	35	006 040 726	420	✍
50	150	5	75	006 050 726	985	✍
63	90	5	-	006 063 726	700	✍

BALL VALVE FOR MULTIFLUID, COMPLETE



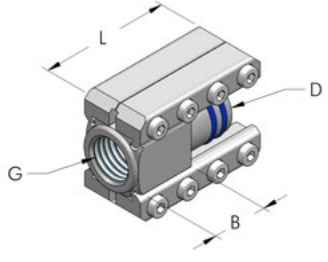
D mm	G	L mm	B mm	Part. N°	P g	
20	1/2" - BSPP	100	46	006 020 746	355	✍
25	3/4" - BSPP	118	56	006 025 746	620	✍
32	1" - BSPP	90	46	006 032 746	960	✍
40	1"1/4 - BSPP	150	70	006 040 746	1370	✍
50	1"1/2 - BSPP	245	150	006 050 746	2735	✍
63	2" - BSPP	150	90	006 063 746	3300	✍

END CAP WITH THREADED HOLE FOR MULTIFLUID, COMPLETE



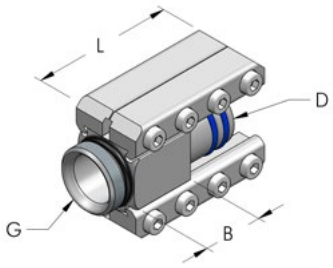
D mm	G	L mm	B mm	Part. N°	P g	
32	1/4" - BSPP	46	30	006 032 725	330	✍
32	1/2" - BSPP	46	30	006 032 731	330	✍
40	1/8" - BSPP	80	35	006 040 715	420	✍
40	1/4" - BSPP	80	35	006 040 716	380	✍
40	3/8" - BSPP	80	35	006 040 717	410	✍
40	1/2" - BSPP	80	35	006 040 718	400	
40	3/4" - BSPP	80	35	006 040 725	390	✍
50	1/8" - BSPP	150	75	006 050 715	990	✍
50	1/4" - BSPP	150	75	006 050 725	985	✍
50	1/2" - BSPP	150	75	006 050 717	975	✍
50	3/4" - BSPP	150	75	006 050 718	955	✍
50	1" - BSPP	150	75	006 050 719	940	✍
63	1/4" - BSPP	90	-	006 063 725	945	✍

FEMALE THREADED TERMINAL FOR MULTIFLUID, COMPLETE



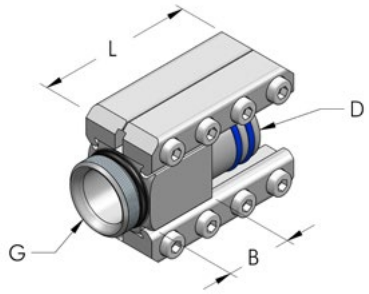
D mm	G	L mm	B mm	Part. N°	P g	
20	3/8" - BSPP	46	24	006 020 728	86	✍
25	1/2" - BSPP	60	28	006 025 728	165	✍
32	1" - BSPP	46	23	006 032 727	335	✍
40	1" - BSPP	80	35	006 040 727	380	✍
50	1"1/4 - BSPP	150	75	006 050 727	900	✍
50	1"1/2 - BSPP	150	75	006 050 728	850	✍
63	1"1/2 - BSPP	90	20	006 063 728	430	✍

MALE THREADED TERMINAL FOR MULTIFLUID, COMPLETE



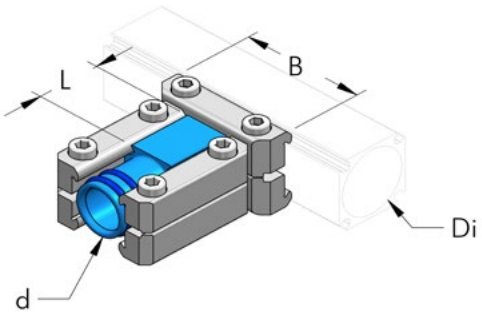
D mm	G	L mm	B mm	Part. N°	P g	
20	1/2" - BSPP	46	24	006 020 730	90	
25	3/4" - BSPP	60	28	006 025 730	170	
32	1" - BSPP	46	11	006 032 730	330	✍
32	1"1/4 - BSPP	46	13	006 032 729	385	✍
40	1"1/4 - BSPP	80	35	006 040 729	365	✍
50	1"1/2 - BSPP	150	75	006 050 729	940	✍
63	2" - BSPT	90	12	006 063 730	390	✍
63	2"1/2 - BSPT	90	13	006 063 731	450	✍

SHORT MALE THREADED TERMINAL FOR MULTIFLUID, COMPLETE



D mm	G	L mm	B mm	Part. N°	P g	
40	1"1/4 - BSPP	80	40	006 040 732	365	✍
50	1"1/2 - BSPP	150	75	006 050 732	930	✍
63	2" - BSPP	90	12	006 063 732	380	✍

REDUCTION PLATE FOR MULTIFLUID, COMPLETE



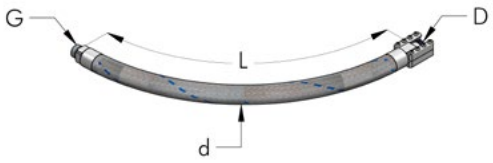
Di mm	d mm	B mm	L mm	Part. N°	P g	
25	20	46	24	006 020 739	144	
32	20	50	50	006 032 761	170	✍
32	25	50	42	006 032 762	210	✍
40	20	70	24	006 040 737	220	✍
40	25	70	28	006 040 738	295	✍
40	32	70	28	006 032 739	430	✍
50/63	20	74	35	006 050 738	350	✍
50/63	25	74	60	006 050 739	430	✍
50/63	32	74	28	006 032 760	500	✍
50/63	40	74	35	006 040 739	490	✍

APS FLEXIBLE HOSE FOR U-BEND CONNECTIONS – MULTIFLUID, COMPLETE



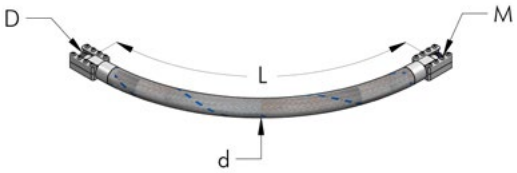
D mm	M mm	L mm	d mm	Part. N°	P g	
20	20	700	30	006 020 757	600	✍
25	25	700	35	006 025 757	950	✍
32	32	1000	44	006 032 757	4520	✍
40	40	1000	50	006 040 757	3290	✍
50	50	1000	65	006 050 757	4870	✍
63	63	1300	77	006 063 757	5000	✍

FLEXIBLE CONNECTION HOSE FOR MULTIFLUID, COMPLETE



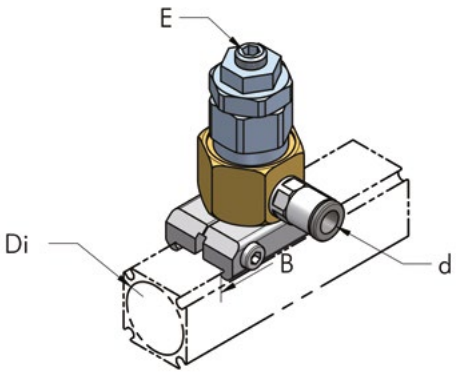
D mm	G	L mm	d mm	Part. N°	P g	
20	1/2" - BSPT	700	30	006 020 758	530	✍
25	3/4" - BSPT	700	35	006 025 758	810	✍
32	1"1/4 - BSPT	1000	44	006 032 758	3130	✍
40	1"1/4 - BSPT	1000	50	006 040 758	3120	✍
50	2" - BSPT	1000	65	006 050 758	4360	✍
63	2"1/2 - BSPT	1300	77	006 063 758	4700	✍

FLEXIBLE MPS-MPS CONNECTION HOSE FOR MULTIFLUID, COMPLETE



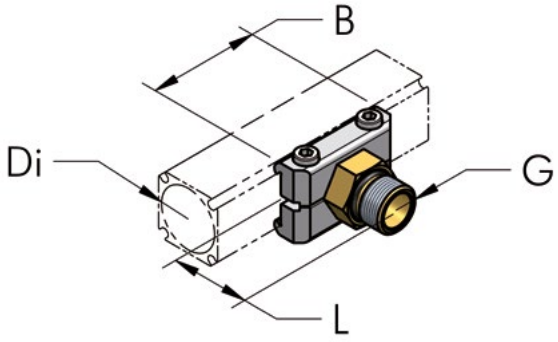
D mm	M mm	L mm	d mm	Part. N°	P g	
20	20	700	30	006 020 759	570	✍
25	25	700	35	006 025 759	950	✍
32	32	1000	44	006 032 759	2520	✍
40	40	1000	50	006 040 759	3290	✍
50	50	1000	65	006 050 759	4870	✍
63	63	1300	77	006 063 759	5000	✍

OUTLET PLATE WITH PRESSURE RELIEF VALVE (SAFETY OUTLET PLATE), COMPLETE



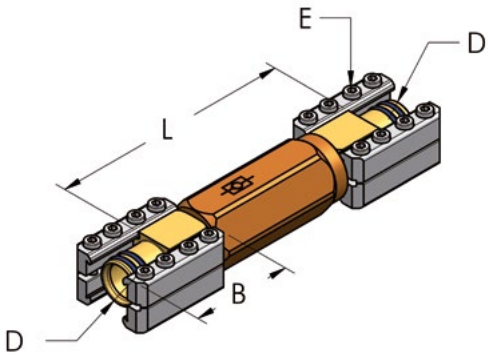
Di mm	d mm	B mm	E mm	Part. N°	P g	
20	8	46	5	006 020 780	48	✍
25	8	56	5	006 025 780	50	✍
32	8	50	5	006 032 780	310	✍
40	8	70	5	006 040 780	220	✍
50	8	74	5	006 050 780	300	✍

OUTLET PLATE FOR EXPANSION TANK, COMPLETE



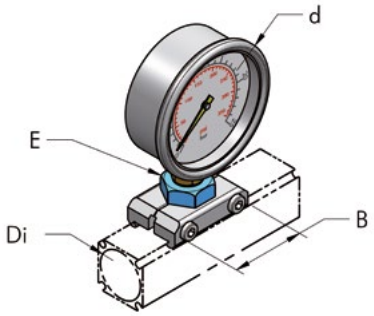
Di mm	G	L mm	B mm	Part. N°	P g	
20	M18x1,5	32	46	006 020 781	45	✍
25	M18x1,5	33	46	006 025 781	71	✍
32	M18x1,5	32	50	006 032 781	70	✍
40	M18x1,5	36	70	006 040 781	136	✍
50/63	M18x1,5	36	74	006 050 781	197	✍

NON-RETURN VALVE, COMPLETE



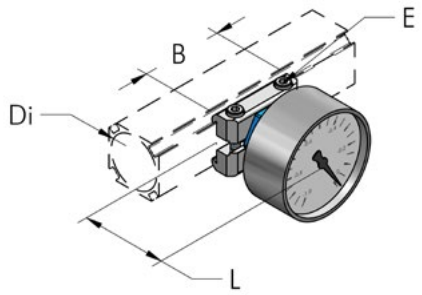
D mm	L mm	B mm	E mm	Part. N°	P Kg	
20	130	46	4	006 020 747	0,35	✍
25	145	60	4	006 025 747	0,82	✍
32	172	46	4	006 032 747	1	✍
40	210	80	5	006 040 747	2,2	✍
50	300	150	5	006 050 747	3,4	✍

GLYCERINE MANOMETER, COMPLETE



Di mm	d mm	B mm	E mm	Part. N°	P g	
20	70	46	22	006 020 749	240	✍
25	70	56	22	006 025 749	250	✍
32	70	50	30	006 032 749	275	✍
40	70	70	36	006 040 749	345	✍
50	70	74	50	006 050 749	400	✍

VACUUM MANOMETER, COMPLETE



Di mm	L mm	E mm	B mm	Part. N°	P g	
20	60	4	46	006 020 348	70	✍
25	60	4	56	006 025 348	75	✍
32	60	4	50	006 032 348	210	✍
40	60	5	70	006 040 348	174	✍
50/63	60	5	74	006 050 348	230	✍

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TESEO components are intended **exclusively for the uses expressly defined** by the manufacturer and patent holder. This does **not exempt the professional user** from verifying the **technical and design compatibility** of their own application. **Our Technical Department is available** for evaluations, special use analysis, and to design and potentially manufacture custom components and assemblies. **TESEO shall not be held liable for any damage resulting from improper, incorrect, or unreasonable use,** or from **incompatibility with applications not covered** by the specifications in this catalogue.

PLEASE NOTE: The drawings in this catalogue are intended to be illustrative only and are not binding. As part of our ongoing commitment to product improvement, TESEO Srl reserves the right to modify the shape and dimensions of its products at any time, without compromising their intended functionality.

DCS DROP COLUMN SYSTEMS



The wide *DCS - Drop Column System* range includes both **standard and customised drop solutions, all designed, configured, and supplied by TESEO** — from the upper connection point to the terminal end of the drop column. The terminal section can be equipped with a variety of configurations, including **application-specific options, depending on the operator's needs**.
Whether it's a **standard or custom drop**, designed to **support an integrated electrical cable tray** or to **act as a structural support**, TESEO provides everything required to configure the **best possible solution in terms of installation speed, ergonomics, energy and cost efficiency, and long-term durability**. TESEO's drop column systems, for example, can **cantilever directly from the main line to supply a machine**, or they can efficiently power a workstation in an ergonomic, economical and functional way. **The new generation of TESEO drop terminals offers exceptional versatility**, and the **drop module is supplied pre-assembled** and ready for installation. All drop column systems **come complete** with valves, mounting brackets, and any necessary accessories or filtration units suited to the specific application.
A comprehensive range of mounting brackets is also available, ensuring compatibility with various installation requirements.

Drop Columns in HBS/APS/MPS:

PLUS

- Easy and quick to install at any time, even after the system has been completed;
- Customisable;
- Made from 100% recyclable aluminium;
- Modular design with reusable components;
- Fully accessorised;
- Pre-assembled – plug & play;
- Multifluid compatible;
- Easy to install as a cantilevered drop from the ring main to the machine edge;
- Can also serve a structural support function.



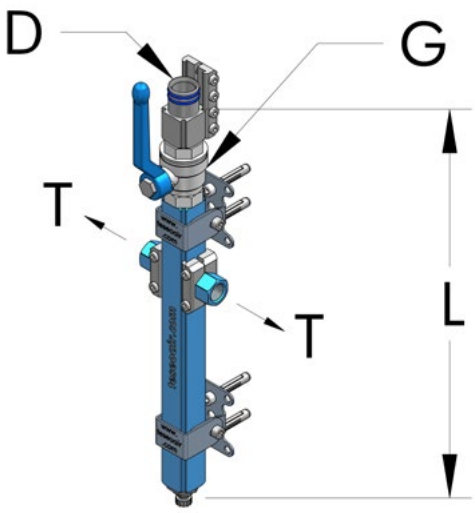
WARNING!

Drop columns are a crucial part of the system. TESEO solutions allow you to create a drop outlet at any time — even when the system is already operational — and to configure the most suitable drop module for your specific needs.
A core feature of TESEO products is **cost optimisation**, achieved through **ergonomic, easy-to-install, durable, and efficient solutions**, enabling you to implement drop columns quickly and without complications.
Tell us what you need at teseo@teseoair.com – we'll be happy to design and provide the right solution for you!


Custom-Made Bends
Wide range of mounting brackets
to suit every installation requirement
Extremely versatile and modular drop manifold assemblies,
configurable to meet customer-specific needs

DROP COLUMN MANIFOLD COMPLETE WITH ACCESSORIES

APS



D mm	L mm	G	T	Part. N°	P g
20	440	1/2" - BSPP	3/8" - BSPP	006 020 055	680
25	440	3/4" - BSPP	3/8" - BSPP	006 025 055	1060

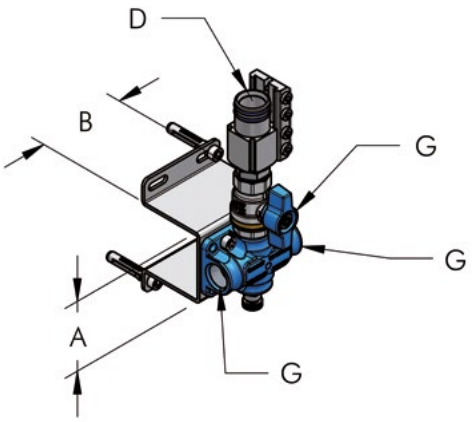
NPT

D mm	L mm	G	T	Part. N°	P g	
20	440	1/2" - BSP	3/8" - NPT	006 020 455	680	✍
25	440	3/4" - BSP	3/8" - NPT	006 025 455	1060	✍

DCS

2 OUTLETS BLOCK FOR APS DROP COLUMN

APS



D mm	G	A mm	B mm	Part. N°	P g
20	1/2" - BSPP	60	75	006 020 068	783
25	1/2" - BSPP	60	75	006 025 068	865

NPT

D mm	G	A mm	B mm	Part. N°	P g	
20	1/2" - NPT	60	75	006 020 468*	783	✍
25	1/2" - NPT	60	75	006 025 468*	865	✍

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2 OUTLETS BLOCK FOR APS DROP COLUMN WITH BENT PIPE



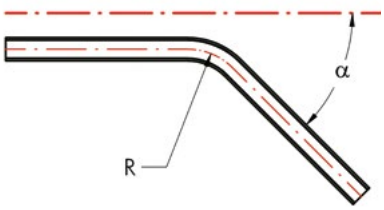
Di mm	G	A mm	B mm	L mm	Part. N°	P kg	
20	1/2" - BSPP	60	75	635	006 020 069	1,12	
25	1/2" - BSPP	60	75	635	006 025 069	1,36	

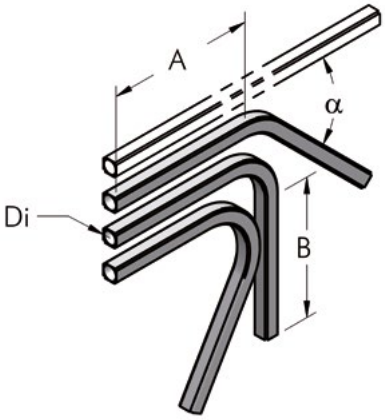
Di mm	G	A mm	B mm	L mm	Part. N°	P kg	NPT
20	1/2" - NPT	60	75	635	006 020 469*	1,12	✍
25	1/2" - NPT	60	75	635	006 025 469*	1,36	✍

*G 1/4" – BSPP, without condensate drain

DCS

SPECIAL ANGLE CURVED PIPE

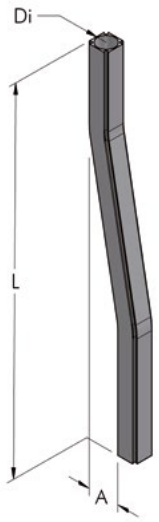




The technical department can produce custom-bent bars according to the customer's needs.

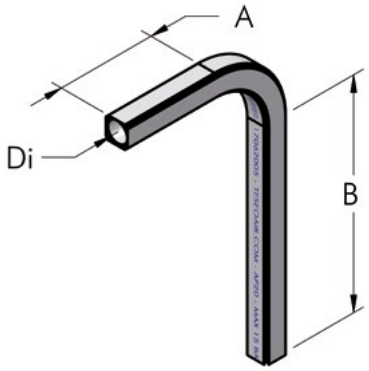
Di mm	A mm	B mm	R mm	α°	Part. N°	P Kg	
20	220	240	77	30	804 020 047	0,2	⚙ ✍
20	220	220	77	45	804 020 048	0,2	⚙ ✍
20	220	200	77	60	804 020 049	0,2	⚙ ✍
20	160	180	77	120	804 020 057	0,2	⚙ ✍
20	160	160	77	135	804 020 058	0,2	⚙ ✍
20	160	140	77	150	804 020 059	0,2	⚙ ✍
25	220	240	77	30	804 025 047	0,3	⚙ ✍
25	220	220	77	45	804 025 048	0,3	⚙ ✍
25	220	200	77	60	804 025 049	0,3	⚙ ✍
25	160	180	77	120	804 025 057	0,3	⚙ ✍
25	160	160	77	135	804 025 058	0,3	⚙ ✍
25	160	140	77	150	804 025 059	0,3	⚙ ✍
32	160	260	150	30	804 032 047	0,6	⚙ ✍
32	160	220	150	45	804 032 048	0,6	⚙ ✍
32	160	180	150	60	804 032 049	0,6	⚙ ✍
40	190	230	150	30	804 040 047	0,7	⚙ ✍
40	190	190	150	45	804 040 048	0,7	⚙ ✍
40	190	150	150	60	804 040 049	0,7	⚙ ✍
50	160	260	150	30	804 050 047	1	⚙ ✍
50	160	220	150	45	804 050 048	1	⚙ ✍
50	160	180	150	60	804 050 049	1	⚙ ✍
63	250	450	250	30	804 063 047	1,3	⚙ ✍
63	250	385	250	45	804 063 048	1,3	⚙ ✍
63	250	320	250	60	804 063 049	1,3	⚙ ✍

BENT PIPE FOR APS DROP COLUMN



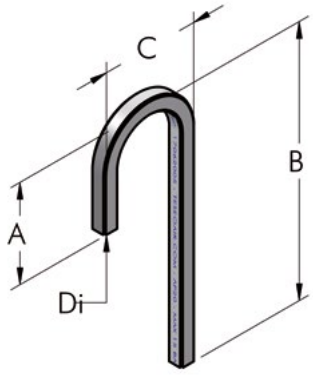
Di mm	A mm	L mm	Part. N°	P g	
20	40	500	804 020 040	257	
25	42	500	804 025 040	412	

90° CURVED PIPE



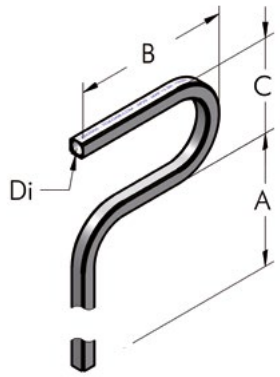
Di mm	A mm	B mm	R mm	Part. N°	P Kg	
20	80	300	77	804 020 050	0,2	
20	310	570	77	804 020 100	0,4	
20	370	2010	77	804 020 250	0,9	
25	115	250	77	804 025 050	0,3	
25	310	570	77	804 025 100	0,6	
25	370	2010	77	804 025 250	1,5	
32	135	255	150	804 032 050	0,8	
40	135	255	150	804 040 050	1	
50	160	230	150	804 050 050	1,05	
63	250	360	250	804 063 050	1,3	

180° CURVED PIPE



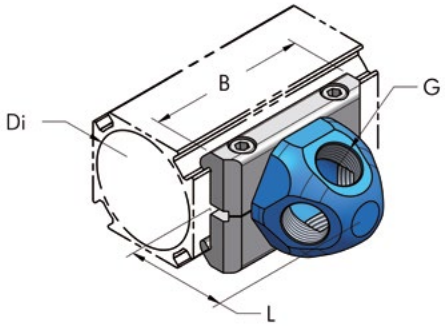
Di mm	A mm	B mm	C mm	Part. N°	P Kg	
20	190	496	176	804 020 060	0,25	
20	180	1255	176	804 020 149	0,55	
25	240	450	182	804 025 060	0,4	
25	200	1240	182	804 025 149	0,9	

180°- 90° CURVED PIPE



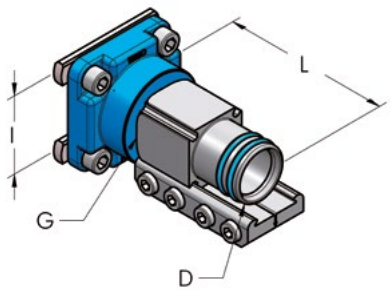
Di mm	A mm	B mm	C mm	R mm	Part. N°	P Kg	
20	1375	296	176	77	804 020 148	0,95	
25	1370	302	182	77	804 025 148	1,5	

4 HOLES FEMALE OUTLET PLATE, COMPLETE



Di mm	B mm	L mm	G	Part. N°	P g	
50/63	74	47	3/8" - BSPP	006 050 053	200	
50/63	74	47	1/2" - BSPP	006 050 054	190	

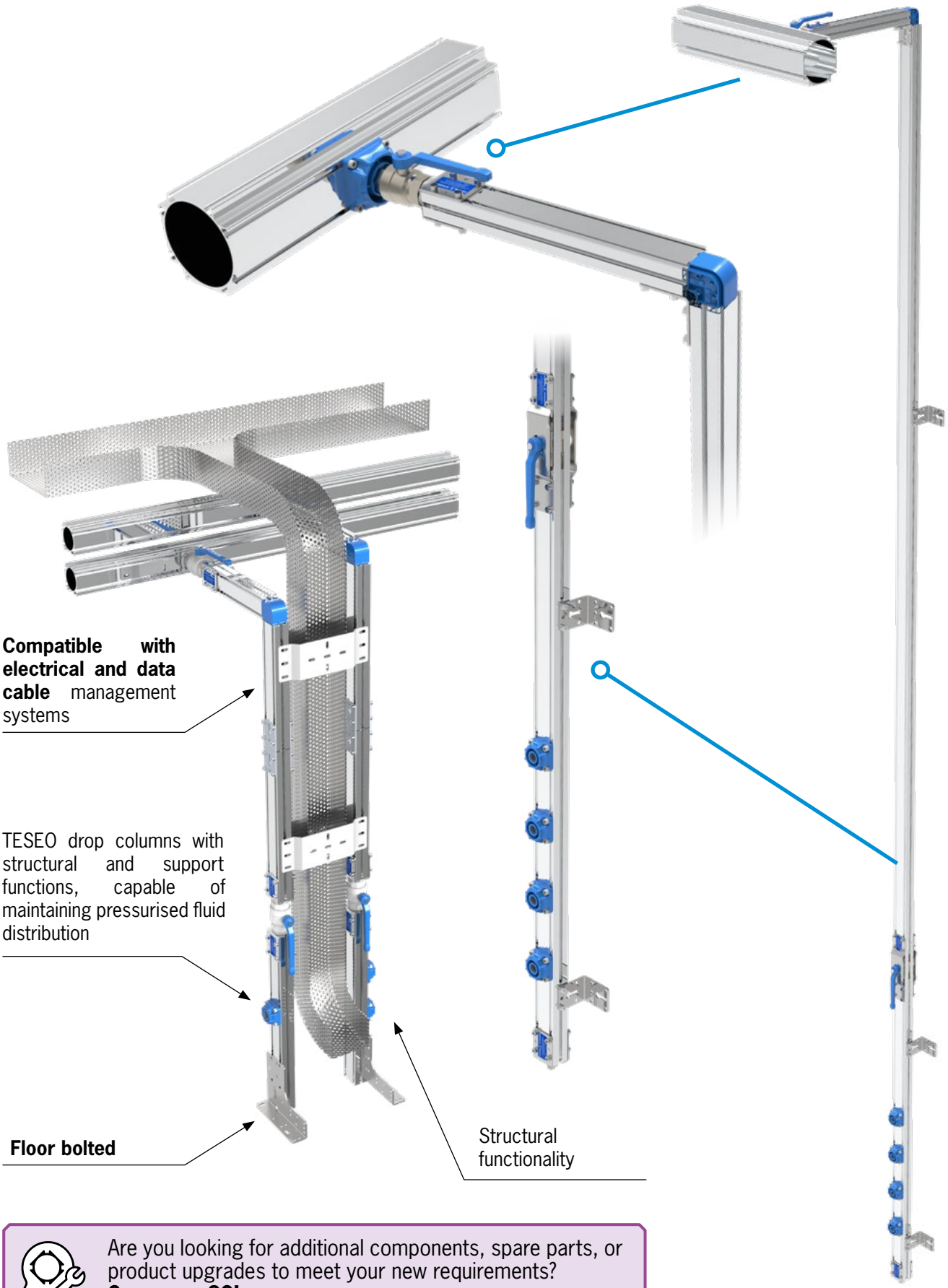
REDUCTION PLATE HBS - APS, COMPLETE



D mm	G	I mm	L mm	Part. N°	P g	
20	1/2" - BSPP	36	49	006 020 037	180	
20	1/2" - BSPP	60	54	006 020 038	190	
25	3/4" - BSPP	36	49	006 025 037	310	
25	3/4" - BSPP	60	54	006 025 038	340	
32	1" - BSPP	36	37	006 032 037	305	
32	1" - BSPP	60	42	006 032 038	435	
40	1"1/4 - BSPP	60	70	006 040 060	750	
50	1"1/2 - BSPP	60	105	006 050 037	820	
63	-	60	72	006 063 037	800	

Are you looking for additional components, spare parts, or product upgrades to meet your new requirements? **See page 89!**

DCS DROP COLUMN EXAMPLES



Compatible with electrical and data cable management systems

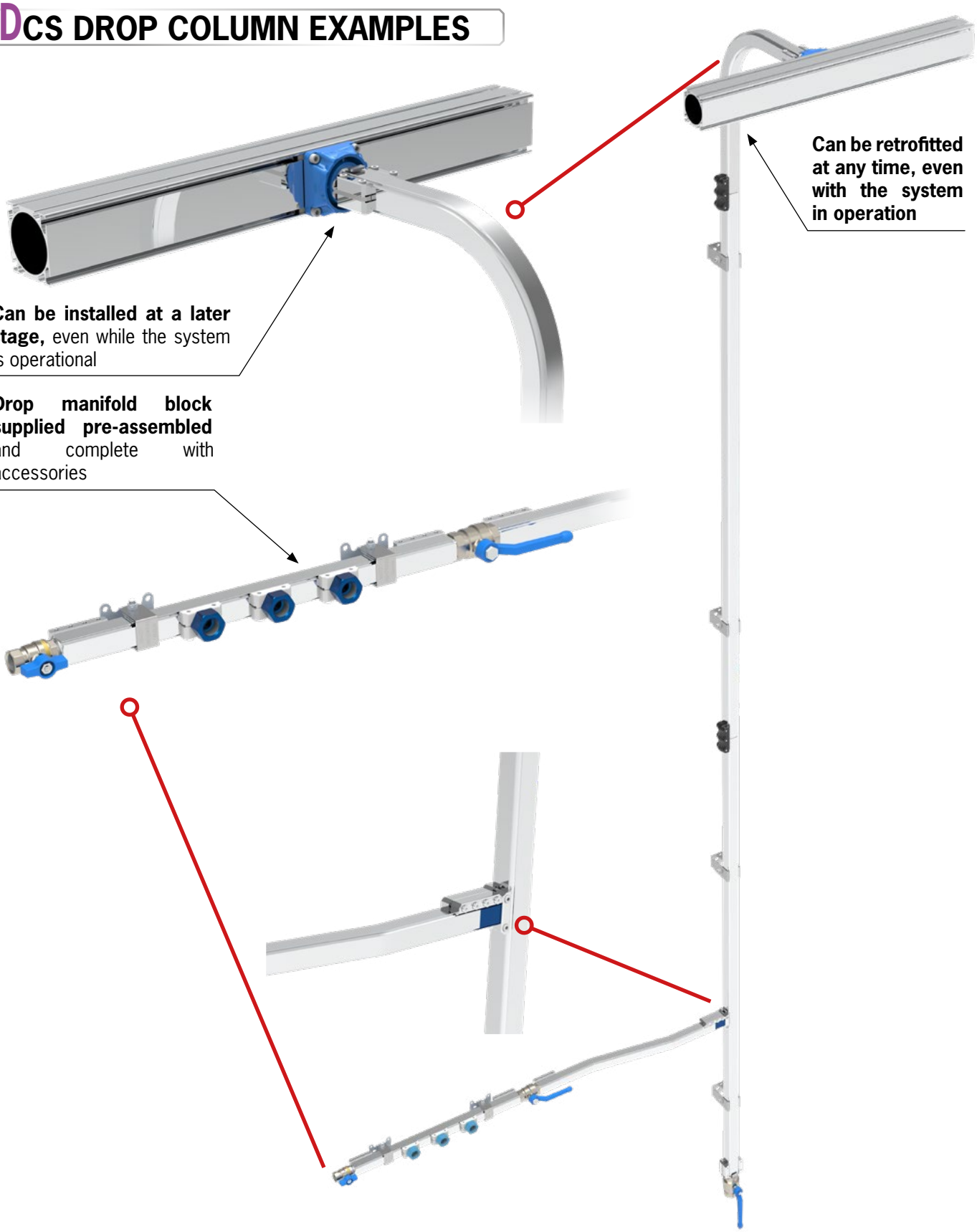
TESEO drop columns with structural and support functions, capable of maintaining pressurised fluid distribution

Floor bolted

Structural functionality

Are you looking for additional components, spare parts, or product upgrades to meet your new requirements?
See page 89!

DCS DROP COLUMN EXAMPLES



Can be installed at a later stage, even while the system is operational

Can be retrofitted at any time, even with the system in operation

Drop manifold block supplied pre-assembled and complete with accessories

TESEO offers **100% customisable modular systems in natural or anodised aluminium**, available in a range of colours. In addition, TESEO supplies a **wide variety of special versions on request**, tailored for **various industrial applications**. See page 89 for more information.

ATS AIR & ELECTRIC TRACK SUPPLY

1ST WORLD'S FIRST

The *ATS - Air & Electric Track Supply* system, designed by TESEO, is the **first solution of its kind ever introduced on the global market**. It allows **fluid and electrical power** to be easily accessed **along the entire travel length** of the trolley.

This system consists of a **modular rail,** which can be mounted using brackets to walls or existing structures. Inside the specially designed rail profile, **tubes or cables are housed to deliver compressed air or electricity directly to the moving trolley.**

The trolley slides freely along the rail and is equipped with **various outlet points for operational use.**

ATS

PLUS

- Outlets for compressed air and/or electrical sockets available at any point along the trolley's travel;
- Supports the weight of portable tools;
- Reduces the risk of accidents caused by trailing or floor-laid hoses;
- Supplied pre-assembled – plug & play.





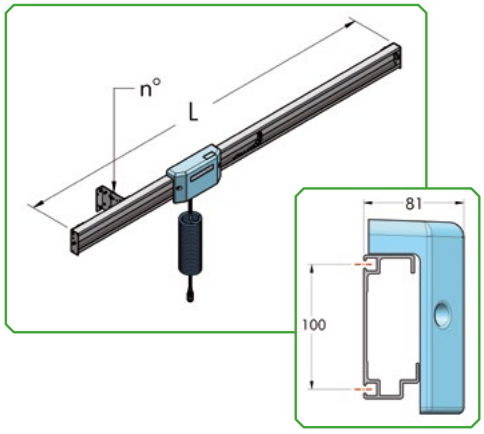
Technical specifications

- Extruded anodized aluminium rail.
- Trolley runs on roller bearings.
- Supply tube: 8 mm (1/4").
- Operating pressure: 8 bar (117 psi).
- Supply Voltage: 240v AC.
- Approximate load on trolley: 30 kg (66 lb).
- Cable: 4G-2,5 mm² C/47.

TESEO's Technical Department is available for feasibility studies, special-use analyses, and to design and manufacture custom components and assemblies. The Technical Department develops custom trolleys for pressurised and electrified rail systems, supplied fully assembled. To request a tailored offer, please provide technical and usage specifications.

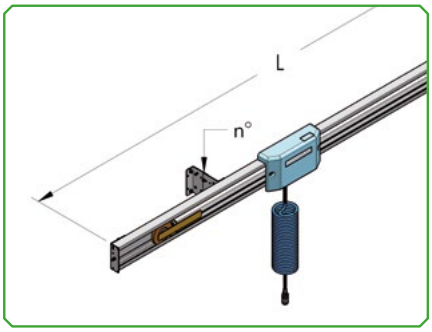
The systems are delivered in a preassembled kit, packed in a stout cardboard box 3 m long (10 ft. ap-prox.) containing all its units already preassembled, along with the fixing brackets and the instructions.
On the trolley there are one 1/4" outlet and one hook.
The following parts are to be ordered separately:
- accessories, special supports: see page 78;
- assembling tools;
- transport and installation at the customer's factory.

PNEUMATIC ATS, WITH CHAIN



L m	Part. N°	Brackets n°	P Kg	
1,5	001 003 001	2	10	
2	001 003 002	2	11	
2,5	001 003 081	2	12	
3	001 003 003	2	13	
4	001 003 004	4	15	

PNEUMATIC ATS, WITH BAR



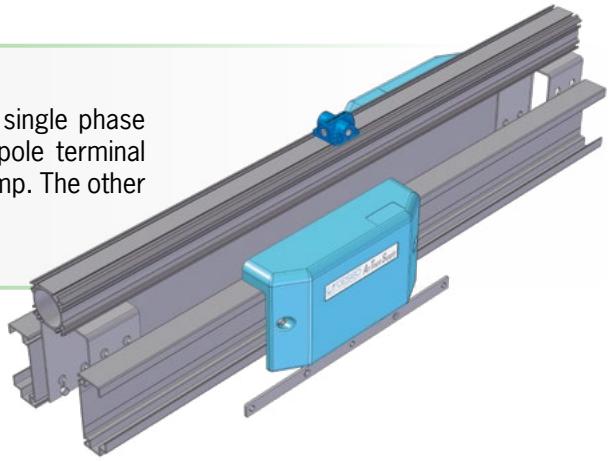
L m	Part. N°	Brackets n°	P Kg	
5	001 003 005	4	20	
6	001 003 006	4	23	
7	001 003 007	4	25	
8	001 003 008	4	27	
9	001 003 009	6	30	
10	001 003 010	6	33	
11	001 003 011	6	35	
12	001 003 012	6	37	
13	001 003 013	8	40	
14	001 003 014	8	42	
15	001 003 015	8	44	
16	001 003 016	8	47	
17	001 003 017	10	49	
18	001 003 018	10	51	

! DISCLAIMER AND WARRANTY CONDITIONS !

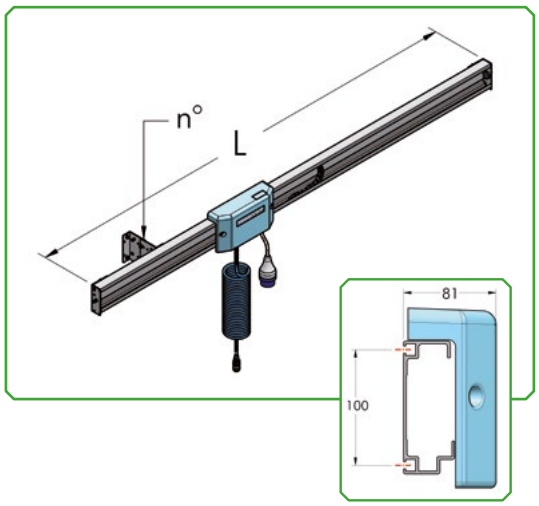
TESEO RESERVES THE RIGHT TO VOID THE WARRANTY TERMS IF THE CUSTOMER MISUSES TESEO PRODUCTS, MODIFIES THEM, COMBINES THEM WITH NON-ORIGINAL PARTS OR PRODUCTS, OR COUNTERFEITS TESEO ITEMS IN ANY WAY. TESEO components are intended **exclusively for the uses expressly defined** by the manufacturer and patent holder. This does **not exempt the professional user** from verifying the **technical and design compatibility** of their own application. **Our Technical Department is available** for evaluations, special use analysis, and to design and potentially manufacture custom components and assemblies. **TESEO shall not be held liable for any damage resulting from improper, incorrect, or unreasonable use,** or from **incompatibility with applications not covered** by the specifications in this catalogue. **PLEASE NOTE:** The drawings in this catalogue are intended to be illustrative only and are not binding. As part of our ongoing commitment to product improvement, TESEO Srl reserves the right to modify the shape and dimensions of its products at any time, without compromising their intended functionality.

ATS WITH ELECTRIC FEED

This system has a compressed air feed and is equipped with a single phase electric feed. An output on the trolley is provided with a three-pole terminal board and an input on one side of the rail with a box and safety clamp. The other features are the same as the standard model.

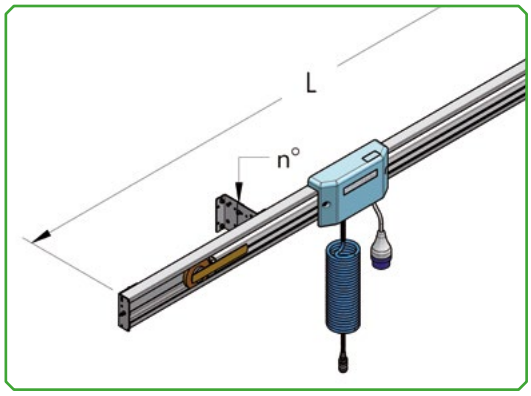


PNEUMATIC AND ELECTRIC ATS, WITH CHAIN



L m	Part. N°	Brackets n°	P Kg	
1,5	001 004 001	2	13	
2	001 004 002	2	14	
2,5	001 004 081	2	15	
3	001 004 003	2	16	
4	001 004 004	4	18	

PNEUMATIC AND ELECTRIC ATS, WITH BAR



L m	Part. N°	Brackets n°	P Kg	
5	001 004 005	4	24	
6	001 004 006	4	28	
7	001 004 007	4	31	
8	001 004 008	4	34	
9	001 004 009	6	36	
10	001 004 010	6	41	
11	001 004 011	6	44	
12	001 004 012	6	46	

Are you looking for additional components, spare parts, or product upgrades to meet your new requirements? **See page 89!**







ATS











TIG

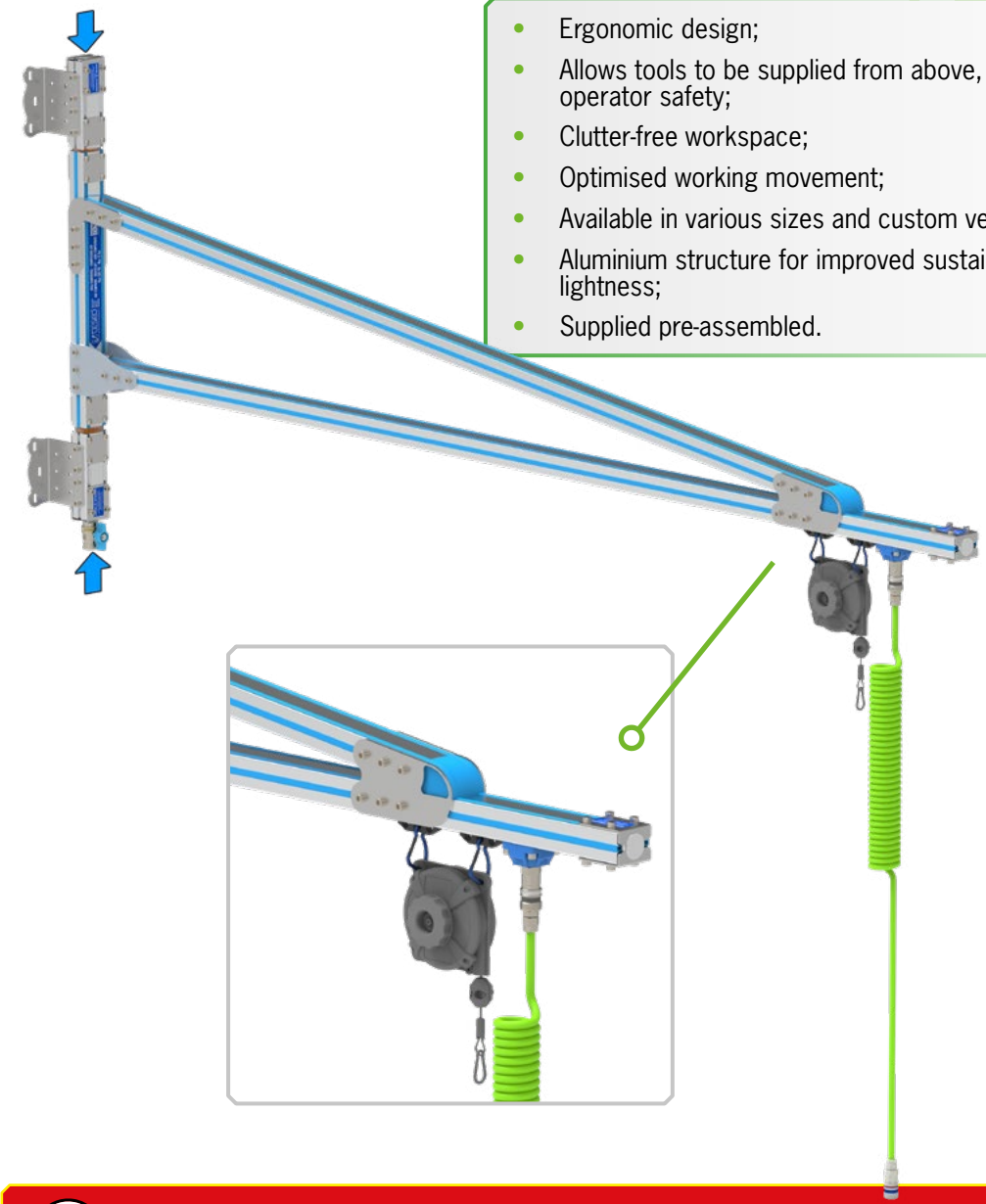
SAB SWINGING ARM BRACKET

SAB - Swinging Arm Bracket is a system **for supplying compressed air and/or electricity**, designed to position, **support and power pneumatic tools across a semicircular working area**.
It is built using TESEO's patented HBS system, which **allows compressed air to flow directly along the arm**, serving **both as a support structure for tools and as a pressurised air conduit**.
The **horizontal bar** is fixed to a **rotating hollow pivot,** mounted on **self-lubricating bearings** and fitted with **seals to ensure airtightness**. The pivot is supported by two brackets, which can be mounted to a **wall with anchors**, or in the **bench-mounted version**, fixed directly to the bench using a column support.
By **combining an SAB with an ATS**, it is possible to integrate rotational and **translational movements**, covering very wide work areas and **enhancing operator ergonomics**. **SAB is designed and manufactured by TESEO and supplied pre-assembled.**

SAB

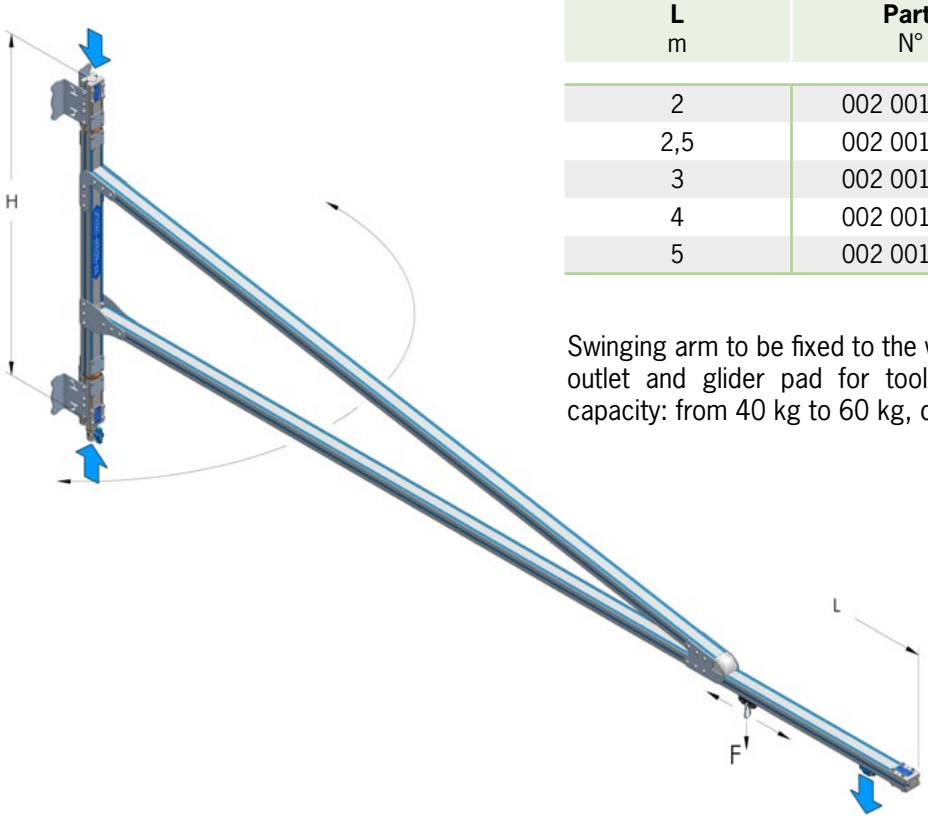
PLUS

- Ergonomic design;
- Allows tools to be supplied from above, improving operator safety;
- Clutter-free workspace;
- Optimised working movement;
- Available in various sizes and custom versions;
- Aluminium structure for improved sustainability and lightness;
- Supplied pre-assembled.



TESEO's Technical Department designs custom swinging arm brackets upon customer request and supplies them fully assembled. To request a tailored offer, please provide technical and usage specifications.

SAB - WALL VERSION

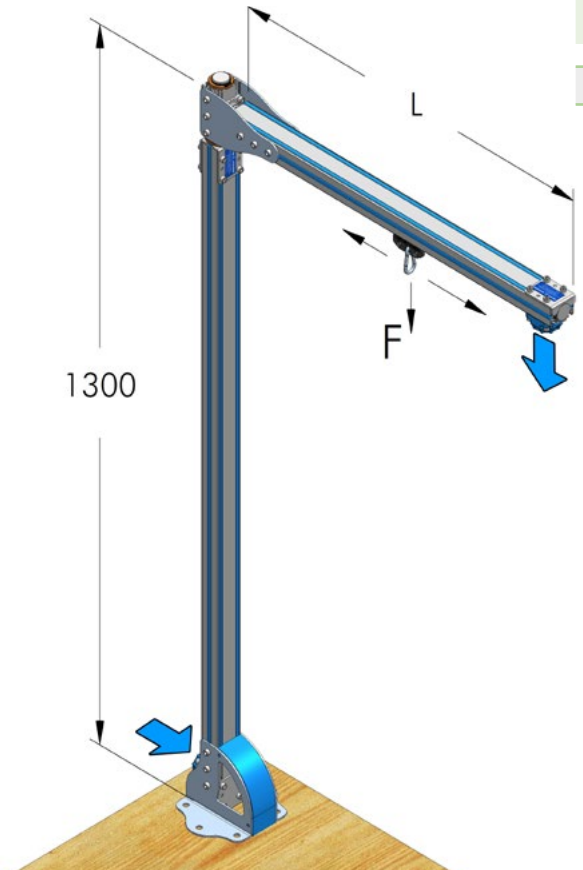


L m	Part. N°	H mm	P Kg	
2	002 001 200	920	11	
2,5	002 001 250	920	11,5	
3	002 001 300	1100	12	
4	002 001 400	1320	13	
5	002 001 500	1320	14,5	

Swinging arm to be fixed to the wall complete with fixing dowels, 3/8" outlet and glider pad for tool balancer attachment. Maximum load capacity: from 40 kg to 60 kg, depending on arm length.

SAB

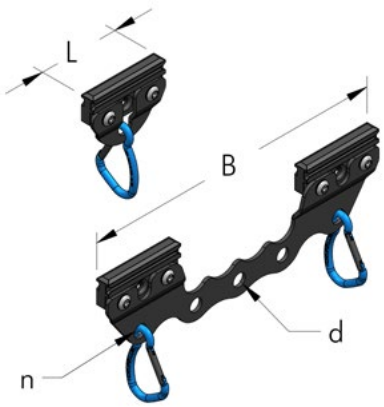
SAB - BENCH VERSION



L m	Part. N°	P Kg	
0,7	002 002 070	5,5	

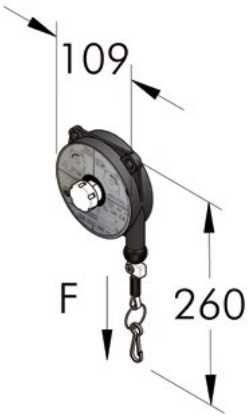
Swinging arm to be fixed to the bench, complete with fixing screws, 3/8" outlet plate and glider pad for tool attachment. Maximum bearable weight: 20 kg (44 lbs).

SLIDING TOOL HANGER



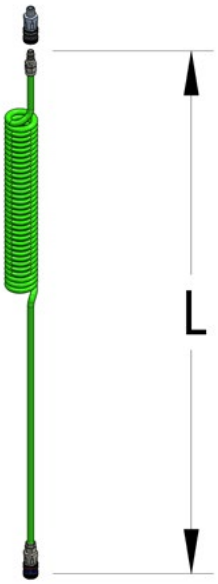
L mm	B mm	d mm	Part. N°	n° attachment points	P g	
60	-	10	002 001 040	1	80	
60	224	10	002 001 043	5	200	

TOOL BALANCER



F Kg	Part. N°	P g	
0,4 ÷ 1	001 003 072	500	
1 ÷ 2	001 003 073	500	

FLEXIBLE HOSE WITH QUICK COUPLINGS



L m	Section Øi x Øe mm	Part. N°	P g	
4	6,5 x 10	001 003 065	550	
6	6,5 x 10	001 003 165	700	
8	6,5 x 10	001 003 265	800	
4	8 x 12	001 003 080	700	
6	8 x 12	001 003 180	900	
8	8 x 12	001 003 280	1100	

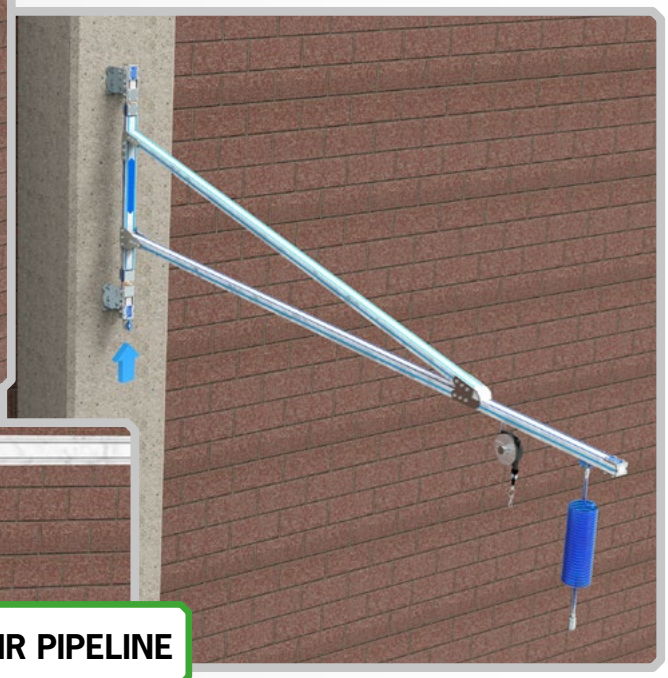
Max operating temperature: T_{max} 60 °C at 8 bar.
Thread available in 1/4", other thread sizes available on request.

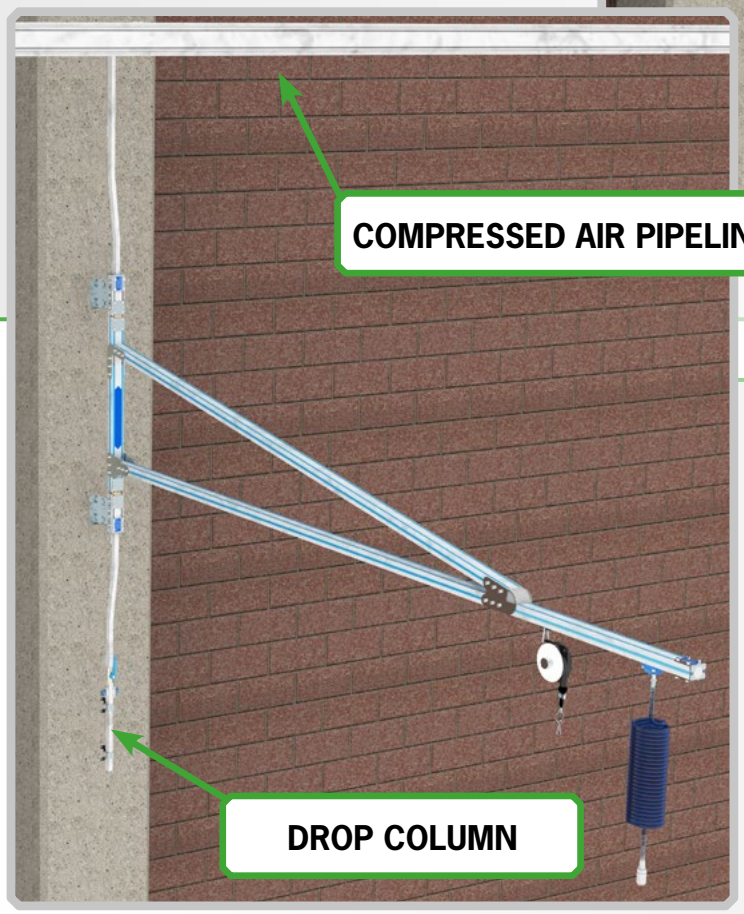
PLEASE NOTE: The drawings in this catalogue are intended to be illustrative only and are not binding. As part of our ongoing commitment to product improvement, TESEO Srl reserves the right to modify the shape and dimensions of its products at any time, without compromising their intended functionality.

SAB INSTALLATION

Are you looking for additional components, spare parts, or product upgrades to meet your new requirements? **See page 89!**

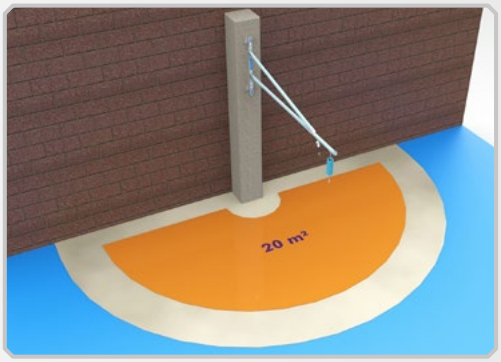






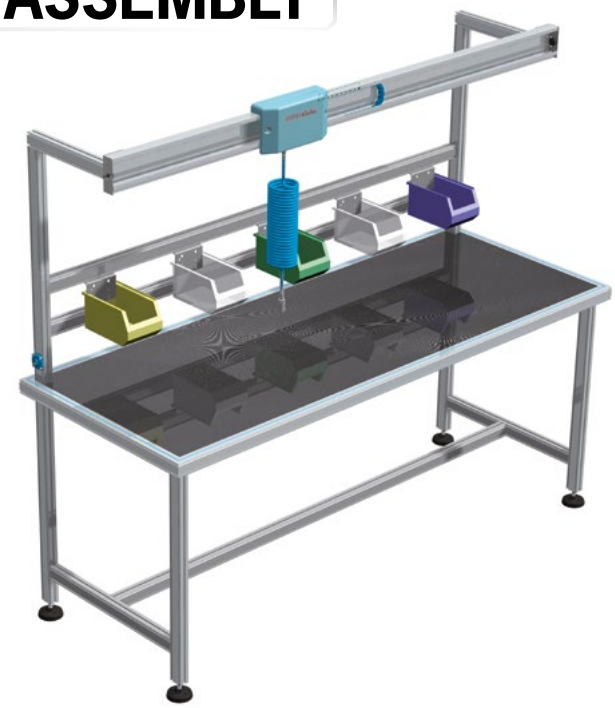
Suitable for large working areas!

Up to 20 m²



PLEASE NOTE: TESEO reserves the right to void the warranty terms if the customer misuses TESEO products, modifies them, combines them with non-original parts, or counterfeits TESEO products in any way. See pages 2 and 18 for further details.

WBA WORK BENCH FOR ASSEMBLY



WBA - Work Bench for Assembly by TESEO is the **first modular aluminium workbench system** with **internal pressurisation**, designed to **supply pneumatic – and optionally also electric – tools** within a **custom-built workstation**.

How does it work? The WBA, invented by TESEO and **100% customisable**, is built using **HBS aluminium extruded pipework**, which functions both as the **structural frame** and as the **pressurised fluid conduit and reservoir.**

The workbench can also feature the **ATS system** on top: this consists of a **rail with a free-sliding trolley**, equipped with a **compressed air outlet and/or electric cable**, plus a **tool support hook.**

One or more sections of the bench can be **pressurised**, drawing **fluid power** from the main ring line or from below. At the same time, the bench **can carry electrical energy or data cables** to make the operator's work easier and more efficient.

The workbench is supplied **pre-assembled and packaged**.

WBA

PLUS

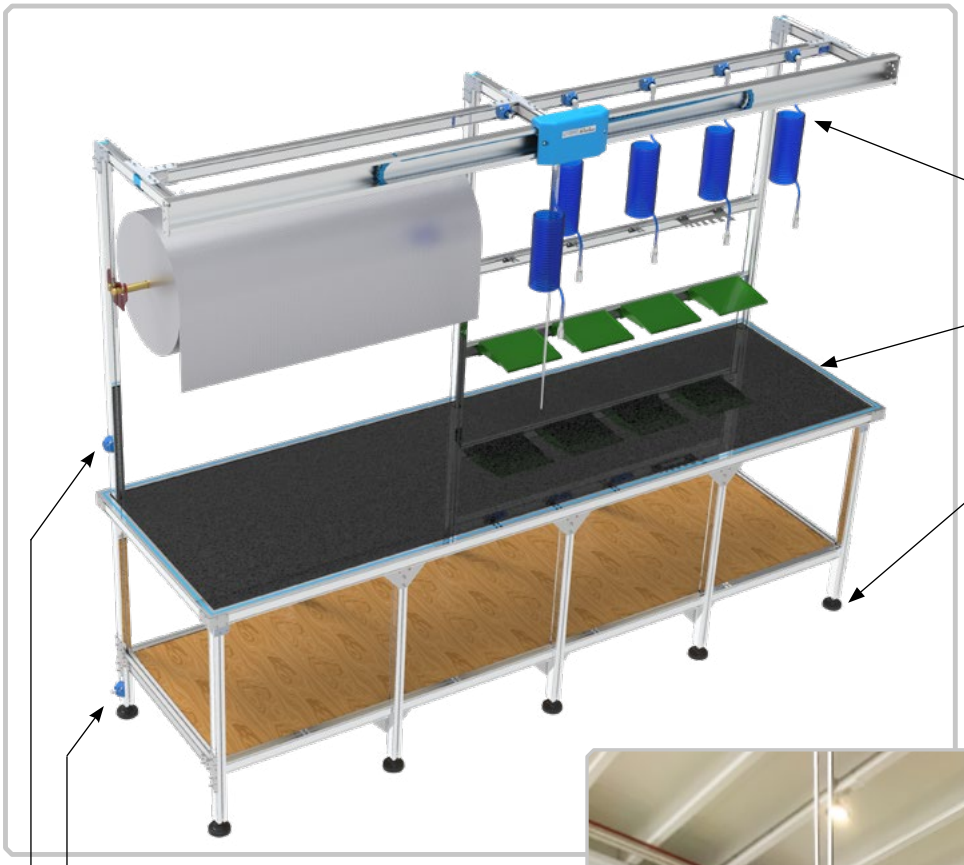
- Workbench and power supply in a single product!
- Modular structure in anodised aluminium;
- Ergonomic design for operator comfort;
- Cost-effective and long-lasting;
- Optimises work processes;
- Durable and modular;
- Option to include electrical supply;
- Customisable work surface;
- Height-adjustable;
- Pre-assembled;
- Customisable in shape and dimensions;
- Robust yet lightweight;
- Internally pressurised;
- Configured with accessories based on your needs;
- Ready for data cable integration;
- Equipped with LED work light;
- Supplied with tool panels, drawers and shelves;
- Equipped with FRL unit and safety pneumatic fittings.



! PLEASE NOTE !

TESEO reserves the right to void the warranty terms if the customer misuses TESEO products, modifies them, combines them with non-original parts, or counterfeits TESEO products in any way. See pages 2 and 18 for further details.

SOME EXAMPLES



With **integrated manifold** built into the structure

Customisable surfaces in various materials

Adjustable feet for levelling and vibration dampening

Tool balancers and hose spirals

Condensate drain

Power supply in multiple locations, based on customer requirements

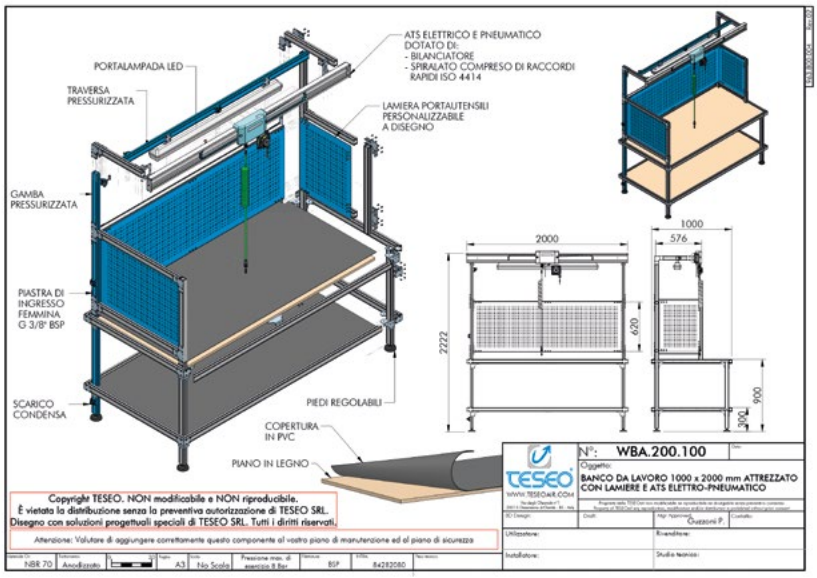


WBA

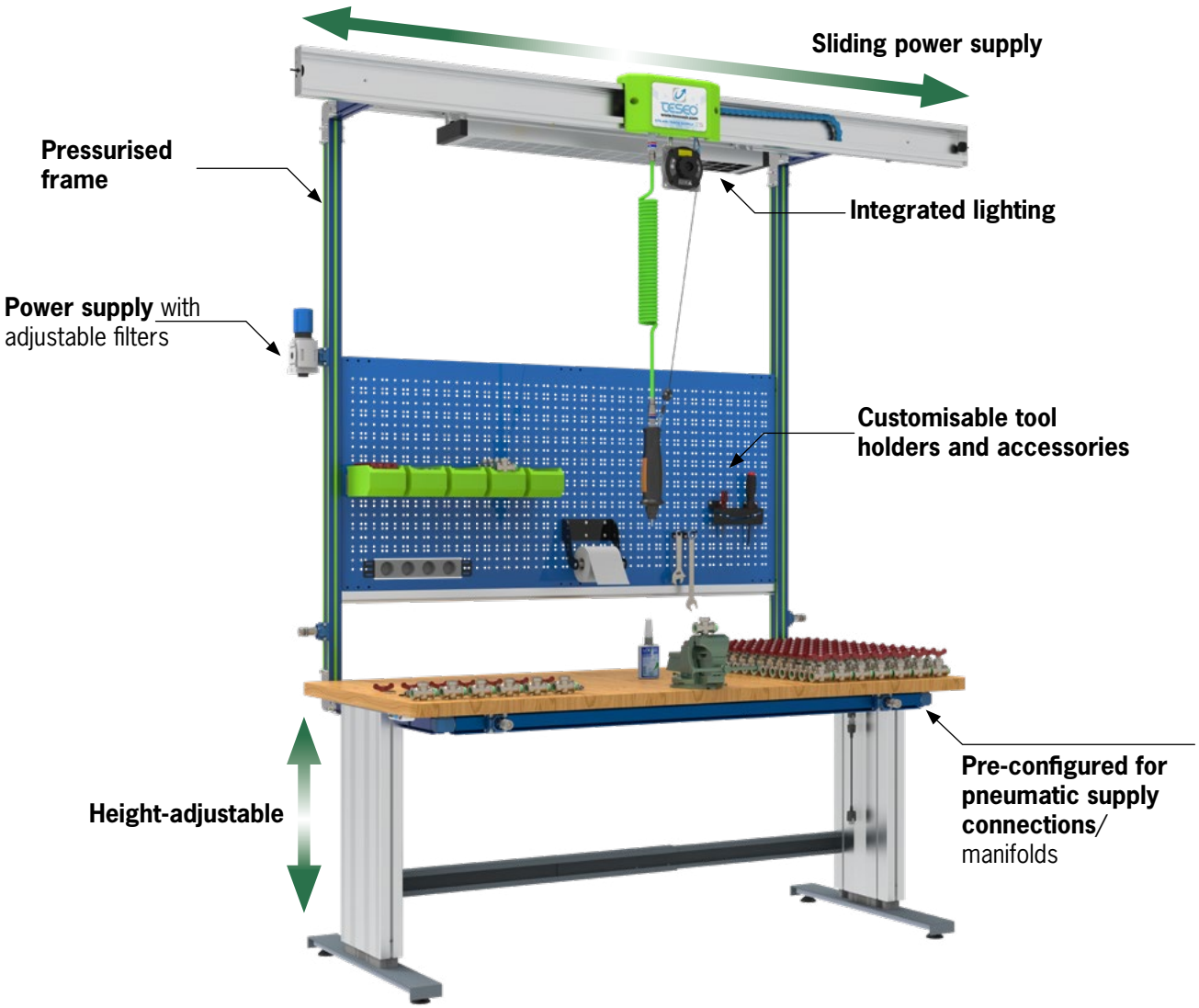
Are you looking for additional components, spare parts, or product upgrades to meet your new requirements? **See page 89!**

CUSTOM-BUILT STRUCTURES

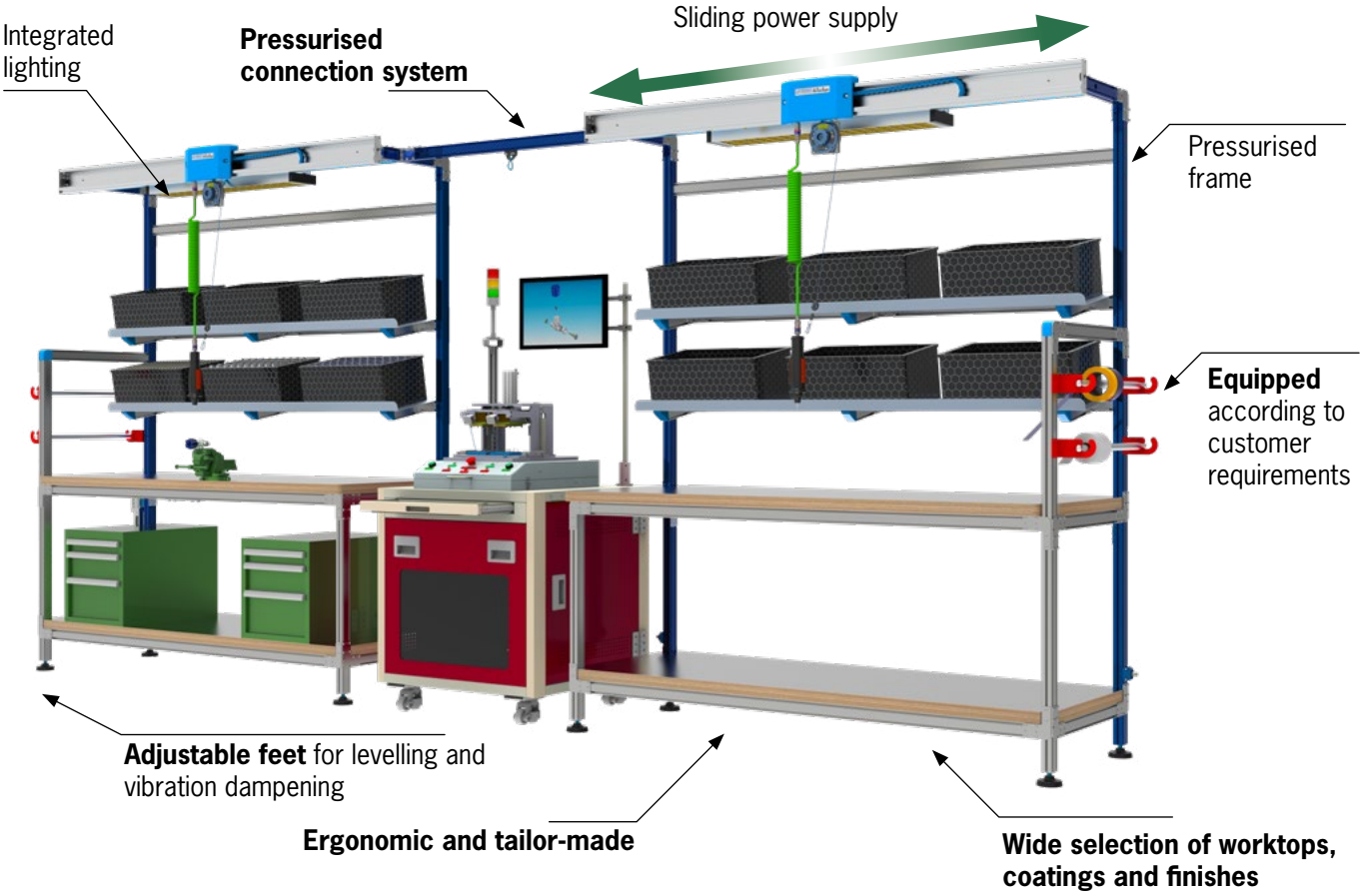




WBA



CUSTOM-BUILT STRUCTURES



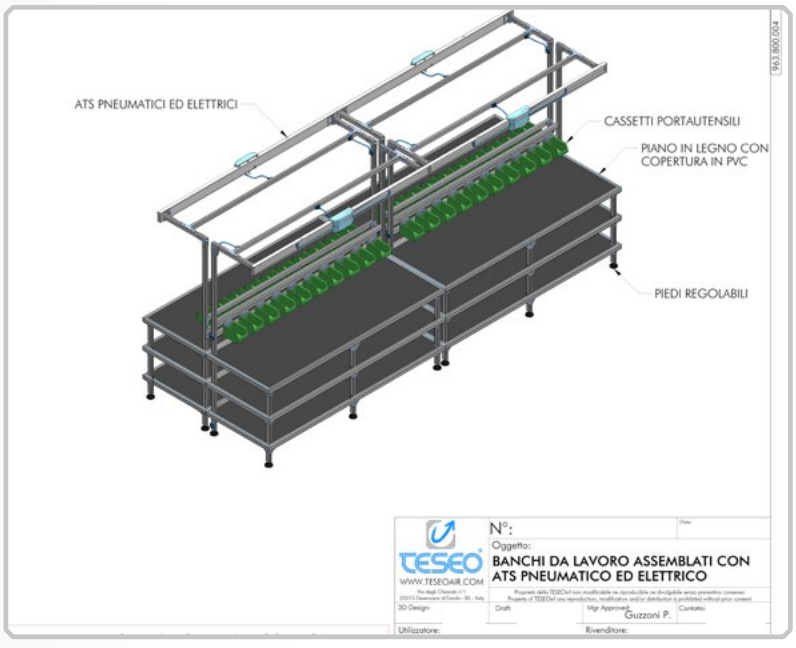
WBA

Find My Solution!

TESEO's **Technical Department** can design, quote, and manufacture workbenches tailored to meet each customer's specific requirements.

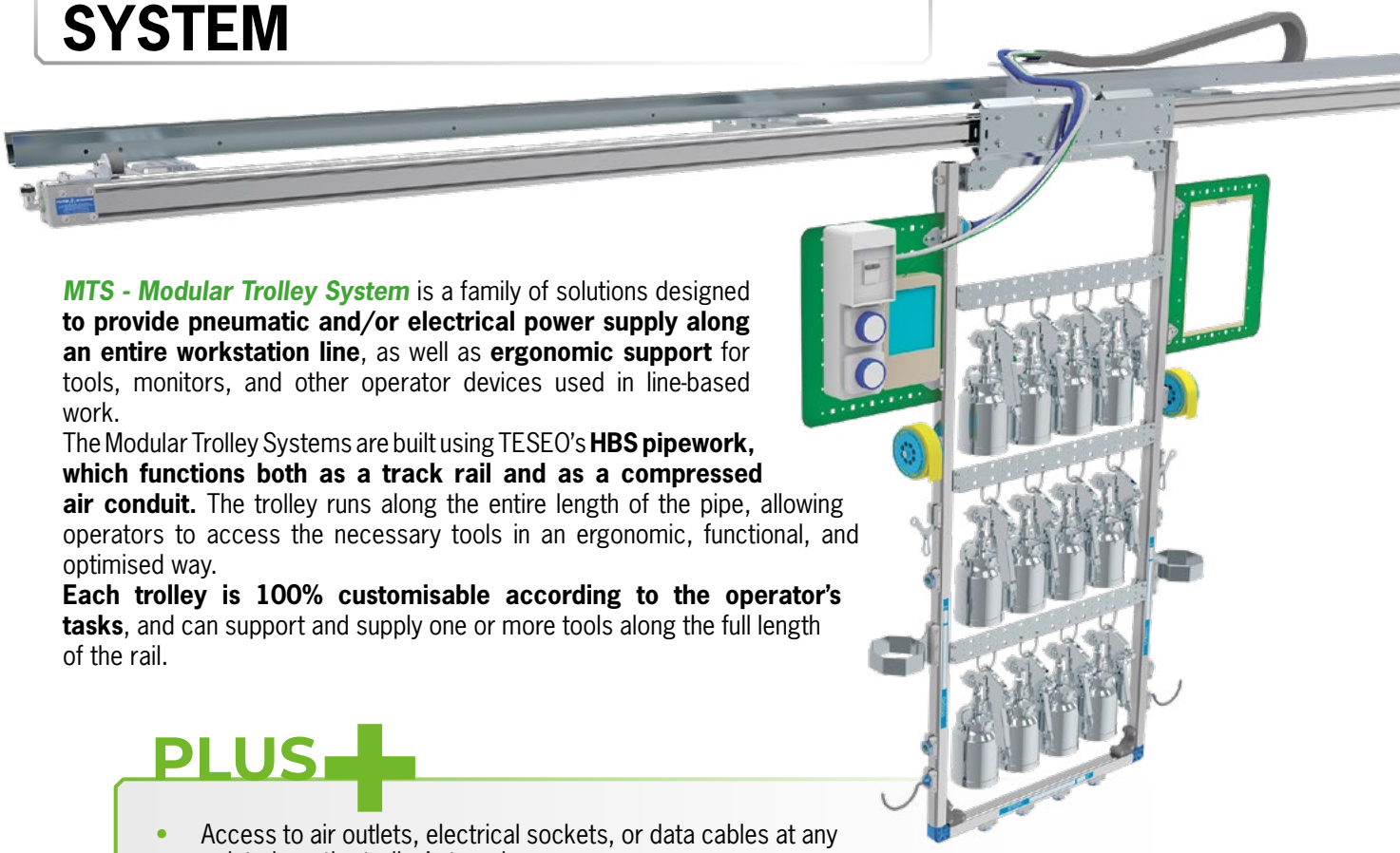
Customise your workbench!
Write to ***teseo@teseoair.com*** – we'll contact you to develop the **best solution for your needs!**
Please note: To prepare an accurate quotation, TESEO requires technical and usage data.

Based on the customer's requirements, TESEO's Technical Department designs **custom WBA workbenches**, tailored in both **dimensions and accessories**, to ensure optimal working conditions for the operator.



From **design to finished product**, TESEO takes care of the **entire process**, delivering the workbench in **pre-assembled, packaged units** ready for installation.

MTS MODULAR TROLLEY SYSTEM



MTS - Modular Trolley System is a family of solutions designed **to provide pneumatic and/or electrical power supply along an entire workstation line**, as well as **ergonomic support** for tools, monitors, and other operator devices used in line-based work.
The Modular Trolley Systems are built using TESEO's **HBS pipework, which functions both as a track rail and as a compressed air conduit.** The trolley runs along the entire length of the pipe, allowing operators to access the necessary tools in an ergonomic, functional, and optimised way.
Each trolley is 100% customisable according to the operator's tasks, and can support and supply one or more tools along the full length of the rail.

PLUS

- Access to air outlets, electrical sockets, or data cables at any point along the trolley's travel;
- Supports the weight of tools;
- Reduces the risk of accidents caused by trailing or floor-laid hoses and cables;
- Improves operator ergonomics: work times are optimised by eliminating unnecessary and non-ergonomic movements;
- Modular, easy to assemble and fully reconfigurable;
- Made of aluminium for lightweight construction and high recyclability.

MTS

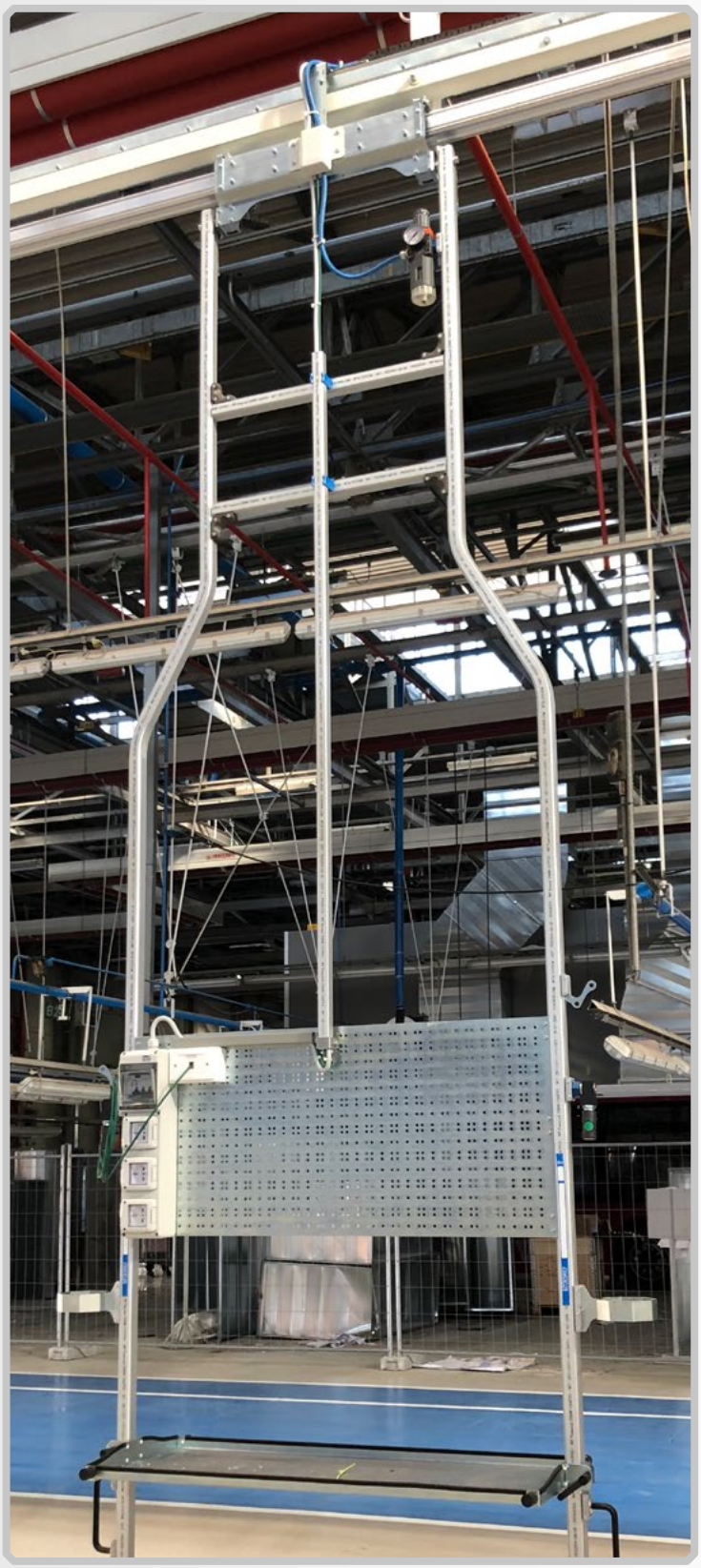
Find My Solution!

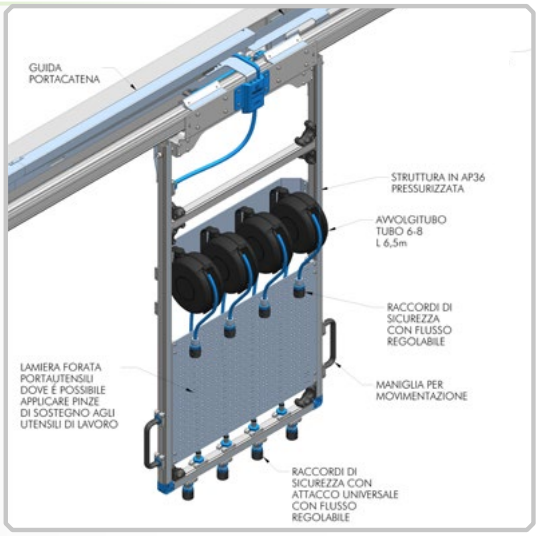
As a pioneering Company with over 35 years of experience in inventing innovative products and solutions, **TESEO can design custom systems that provide real competitive advantages to businesses** — making them more energy-efficient, improving workplace ergonomics, and solving specific fluid distribution needs.

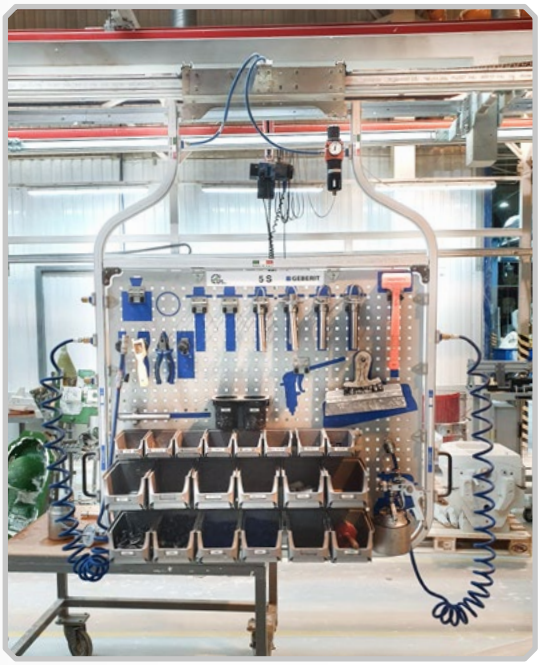
Tailor Your MTS Solution!
Write to *teseo@teseoair.com* – we'll contact you to develop the best solution for your requirements.
Please note: to request a tailored offer, please provide technical and usage specifications.

PLEASE NOTE: TESEO reserves the right to void the warranty terms if the customer misuses TESEO products, modifies them, combines them with non-original parts, or counterfeits TESEO products in any way. See pages 2 and 18 for further details.

CUSTOMIZED STRUCTURES









Are you looking for additional components, spare parts, or product upgrades to meet your new requirements?
See page 89!

AMS ALUMINIUM MANIFOLD SYSTEM

AMS - Aluminium Manifold System includes a **wide range of revolutionary modular aluminium manifolds for the distribution of compressed air and other pressurised fluids** such as tap water or industrial water, oil, inert gases, and vacuum ⚠.

The ideal application of AMS is on automated machinery, to supply various servo-mechanisms, or on injection moulding or die-casting presses, to cool the moulds.

TESEO designs and assembles the product, delivering it ready to be mounted directly onto the machine.

PLUS

- Custom-designed by TESEO and supplied pre-assembled;
- Modern, functional and visually appealing design;
- Lightweight and Robust;
- No rust or corrosion;
- Modular;
- Easy to mount on machine frames and structures;
- Extends the life of filters and pneumatic devices.



TIG

TECHNICAL DATA:

MAXIMUM WORKING PRESSURE

- 15 bar with APS and standard HBS
- 25 bar with MPS (APS Multifluid) ⚠
- Higher working pressures available upon request

DIAMETER RANGE

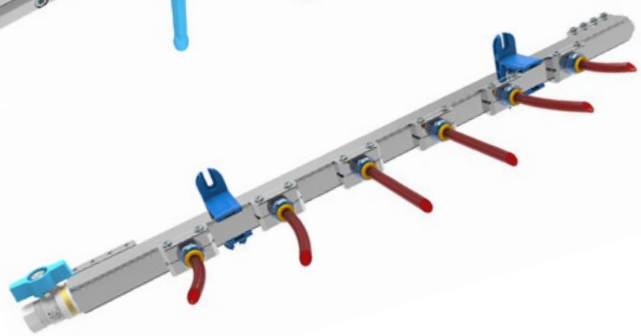
(Internal diameter in mm)

- 20, 25, 32, 40, 50, 63, 80, 110
- Additional diameters available upon request

WORKING TEMPERATURE

- -20°C / +120 °C
- Technical extensions of the temperature range available upon request





AMS

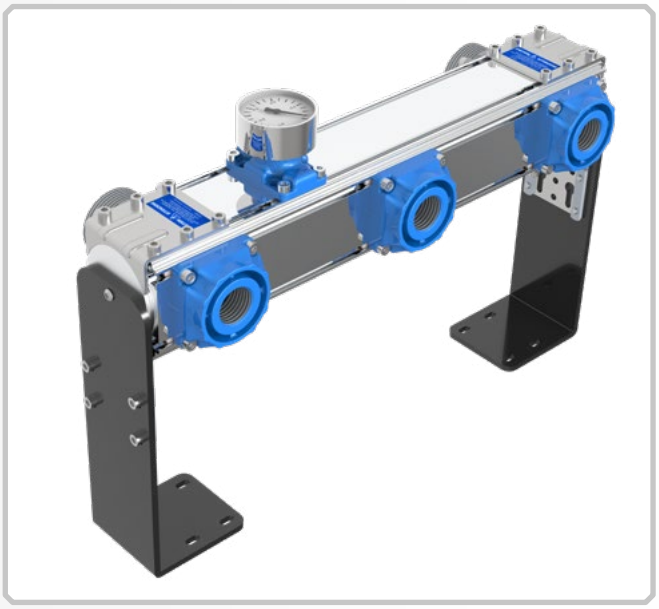
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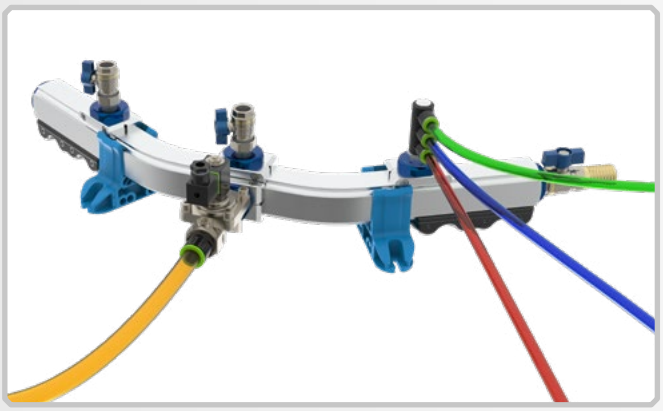
For chemical compatibility and further technical details, please contact TESEO Srl's Technical Department. The Technical Department designs **custom manifold solutions upon request** and delivers them fully assembled. To request a tailored offer, **please provide technical and usage specifications.** ⚠

CUSTOM MANIFOLDS

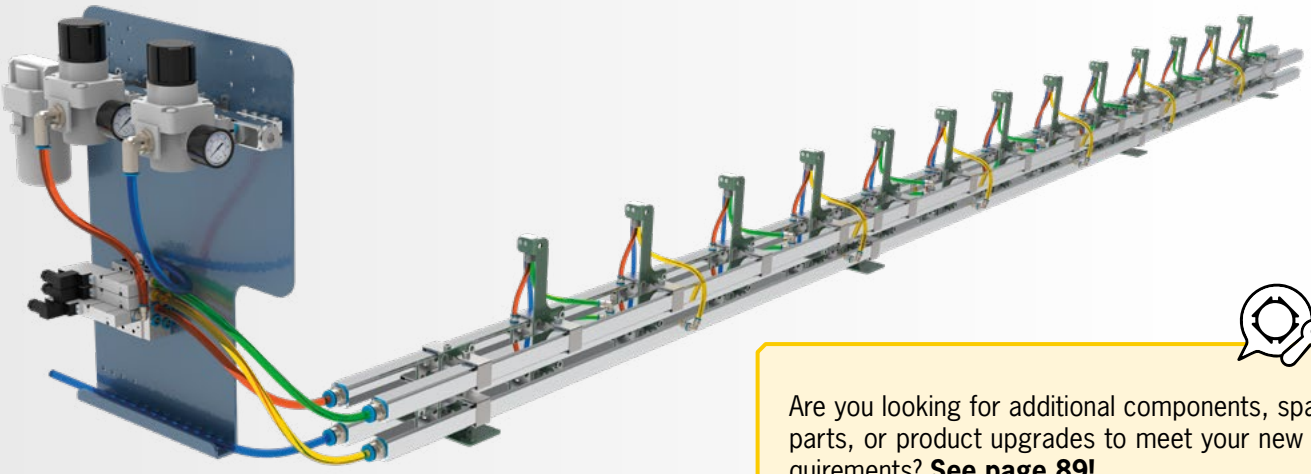
Find My Solution!
Write to ***teseo@teseoair.com*** – TESEO's Technical Department is at your service to design and deliver **custom manifolds**, supplied **pre-assembled and ready for installation**.











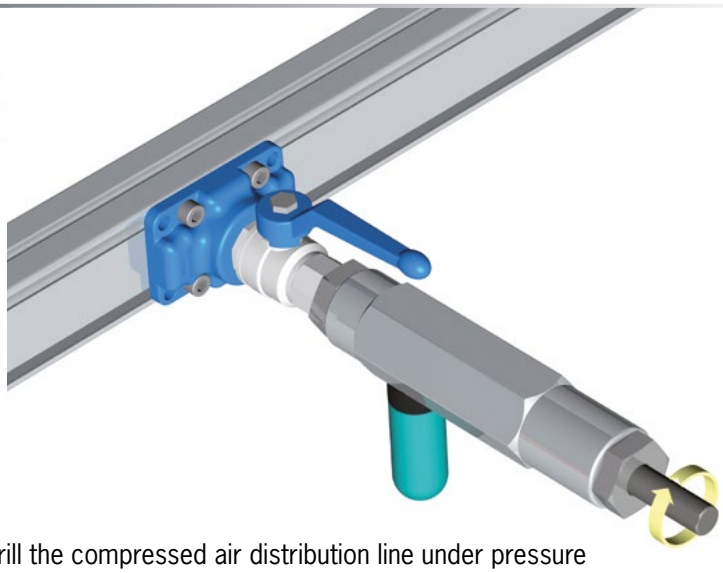
Are you looking for additional components, spare parts, or product upgrades to meet your new requirements? **See page 89!**

WTK-TAC

DRILLING TOOL

Applicabilità - Applicability - Anwendbarkeit - Applicabilité

Drilling Tool 1/2" - 005 004 021		Drilling Tool 3/4" - 005 004 026	
HBS25	✓	HBS25	⊘
HBS32	✓	HBS32	⊘
HBS50	✓	HBS50	✓
HBS63	✓	HBS63	✓
HBS80	✓	HBS80	✓
HBS110	✓	HBS110	✓
APS22	⊘	APS22	⊘
APS28	✓	APS28	⊘
APS36	✓	APS36	⊘
APS45	✓	APS45	✓
APS54	✓	APS54	✓
APS68	✓	APS68	✓

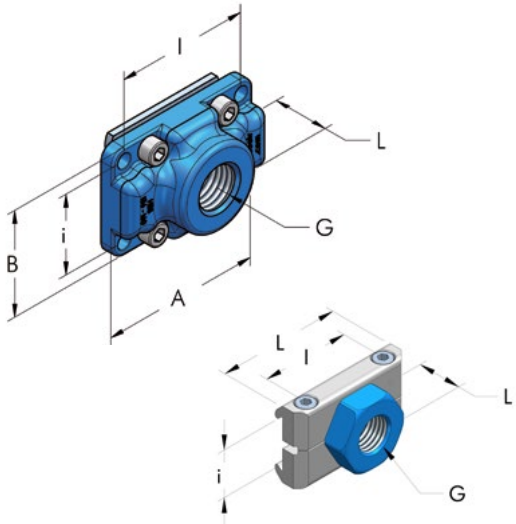


DT (Drilling Tool) is a tool that enables you to drill the compressed air distribution line under pressure with ease and safety.

The main advantages derived from the use of DT:

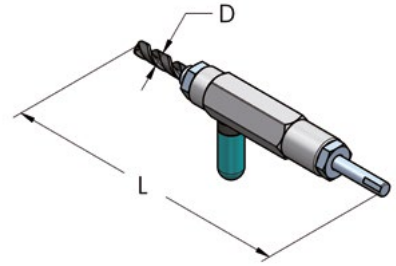
- No down time! You don't have to empty the system or stop production.
- Aluminium chips produced by drilling does not penetrate into the pipework.
- The addition of an outlet plate is easy and safe.
- This product is designed for the HBS and APS systems of TESEO.

OUTLET PLATE



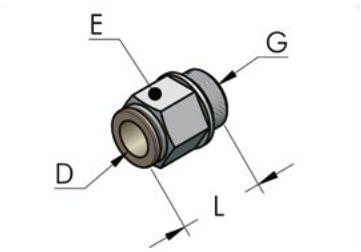
I mm	i mm	G	A mm	B mm	L mm	Part. N°	P g	
36	36	1/2" - BSPP	48	48	25	003 002 033	110	
36	36	3/4" - BSPP	48	48	25	003 002 034	105	
60	60	1/2" - BSPP	72	72	30	003 003 033	250	
60	60	3/4" - BSPP	72	72	30	003 003 034	220	
60	36	1/2" - BSPP	72	48	25	003 360 033	129	✍
60	36	3/4" - BSPP	72	48	25	003 360 034	125	✍
-	-	1/2" - BSPP	46	-	26	006 025 035	66	
-	-	1/2" - BSPP	50	-	27	006 032 035	70	
-	-	1/2" - BSPP	70	-	25	006 040 035	130	
-	-	3/4" - BSPP	70	-	24	006 050 034	190	

DRILLING TOOL



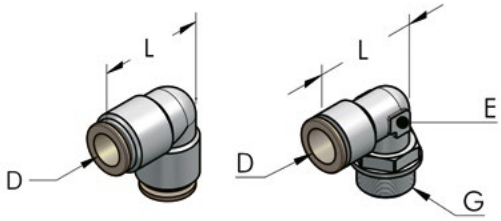
D mm	G	L mm	Part. N°	P g	
13	1/2" - BSP	320	005 004 021	750	✍
19	3/4" - BSP	335	005 004 026	840	✍

THREADED STRAIGHT PUSH FITTING



D mm	G	L mm	E mm	Part. N°	P g	
8	1/8" - BSPP	26	13	413 010 008	10	
10	1/4" - BSPP	29	-	413 014 032	29	
10	3/8" - BSPP	29	16	413 017 010	50	
14	3/8" - BSPP	36	22	413 017 036	46	
14	1/2" - BSPP	34	22	413 021 034	47	

L PUSH FITTING



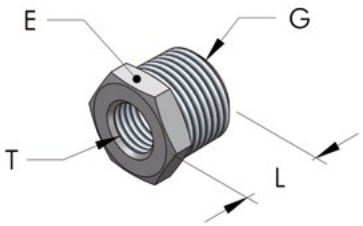
D mm	G	L mm	E mm	Part. N°	P g	
10	1/4" - BSPP	34	14	414 014 027	38	
14	-	35	-	414 014 035	77	
14	1/2" - BSPP	35	18	414 021 035	88	

AIR REGULATION UNIT



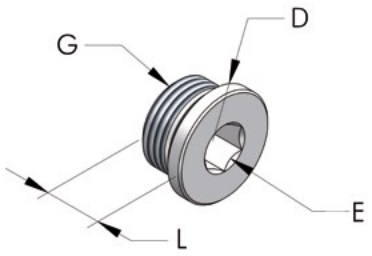
G	Configuration	Part. N°	P g	
3/8" - BSPP	Pressure regulator, filter, manometer	003 001 060	1200	
3/8" - BSPP	Regulator, filter, lubricator, manometer	003 001 062	2000	

M/F NIPPLE WITH TAPERED THREAD



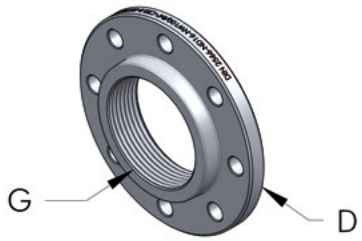
G	T	L mm	E mm	Part. N°	P g	
1/2" - BSPT	1/4" - BSPP	16	24	417 021 016	31	

THREADED PLUG, WITH SEAL



G	D mm	L mm	E mm	Part. N°	P g	
1/4" - BSPP	18	11	6	418 014 011	10	
3/8" - BSPP	21	13	8	418 017 013	20	
1/2" - BSPP	26	15	10	418 021 015	32	

FEMALE FLANGE EN 1092



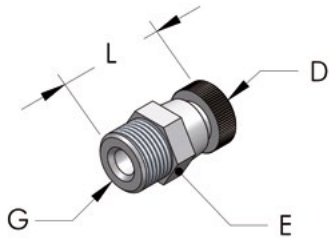
D mm	G	N° holes	Part. N°	P kg	
200	3" - BSPP	8	436 085 035	3800	
220	4" - BSPP	8	436 114 040	5000	

M/M THREADED NIPPLE



G	L mm	E mm	Part. N°	P g	
3/8" - BSPT	28	17	417 017 028	26	
1/2" - BSPT	35	22	417 021 033	44	
3/4" - BSPT	40	27	417 026 040	78	
1" - BSPT	34	34	417 033 034	221	
1"1/2 - BSPT	60	55	417 048 060	290	

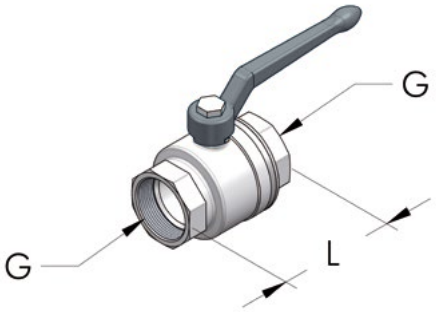
CONDENSATE DRAIN



G	D mm	L mm	E mm	Part. N°	P g	
1/4" - BSPT	13	26	14	435 014 035	20	
3/8" - BSPT	14	27	17	435 017 024	30	

F/F BALL VALVE

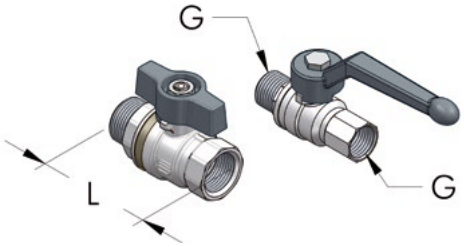
HBS APS MPS AMS ATS MTS SAB WBA DCS



G	L mm	Part. N°	P g	
1/2" - BSPP	50	434 021 050	170	✍
3/4" - BSPP	68	434 026 070	300	✍
1" - BSPP	80	434 033 080	420	✍
1"1/4 - BSPP	90	434 042 080	670	✍
1"1/2 - BSPP	100	434 048 100	990	✍
2" - BSPP	115	434 060 120	1600	✍
2"1/2 - BSPP	150	434 075 150	3550	✍

M/F BALL VALVE

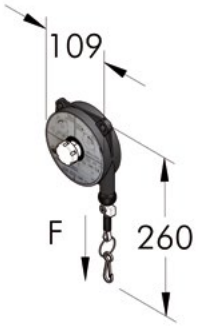
HBS APS MPS AMS ATS MTS SAB WBA DCS



G	L mm	Part. N°	P g	
3/8" - BSP	55	434 010 055	150	✍
1/2" - BSP	67	434 021 067	210	✍
3/4" - BSP	82	434 026 075	360	✍

TOOL BALANCER

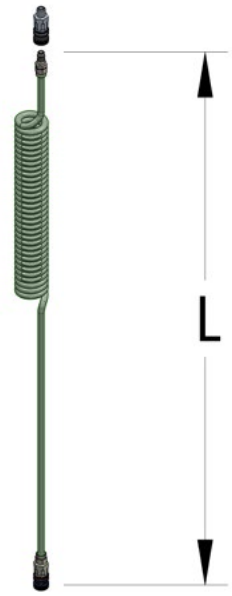
ATS SAB WBA



F Kg	Part. N°	P g	
0,4 ÷ 1	001 003 072	500	✪ ✍
1 ÷ 2	001 003 073	500	✪ ✍

FLEXIBLE HOSE WITH QUICK COUPLINGS

APS HBS ATS MTS WBA



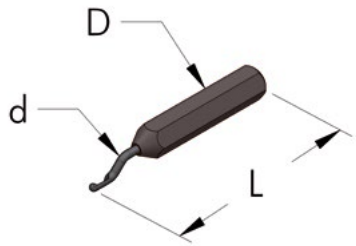
L mm	Section Øi x Øe mm	Part. N°	P g	
4	6,5 x 10	001 003 065	550	
6	6,5 x 10	001 003 165	700	✪ ✍
8	6,5 x 10	001 003 265	800	✪ ✍
4	8 x 12	001 003 080	700	✪ ✍
6	8 x 12	001 003 180	900	✪ ✍
8	8 x 12	001 003 280	1100	✪ ✍

Max operating temperature: T_{max} 60 °C at 8 bar.

Thread available in 1/4", other thread sizes available on request.

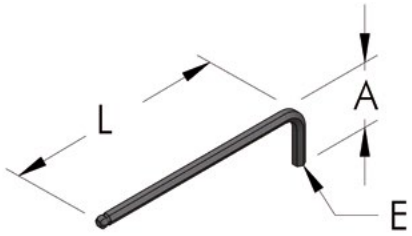
TREATMENTS, AUTOMATIONS, COMPONENTS - **WTK** WORK TOOL KIT - TAC

DEBURRING TOOL



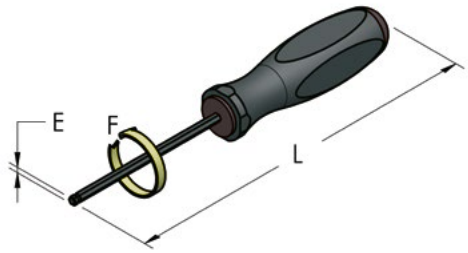
d mm	D mm	L mm	Part. N°	P g	
3	14	150	909 012 130	55	
3	**Spare blade**		909 003 047	3	

ALLEN SPANNER



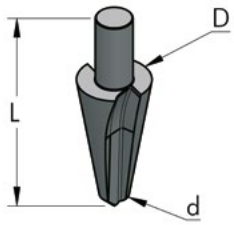
E mm	A mm	L mm	Part. N°	P g	
5	34	140	901 130 005	30	

ALLEN SCREW DRIVER



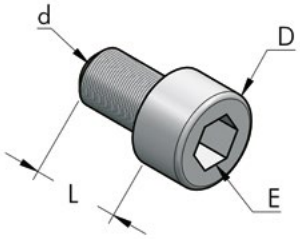
E mm	L mm	F	Part. N°	P g	
4	200	6-10	901 170 004	40	✍
5	220	6-14	901 190 005	75	✍

DRILLING TOOL



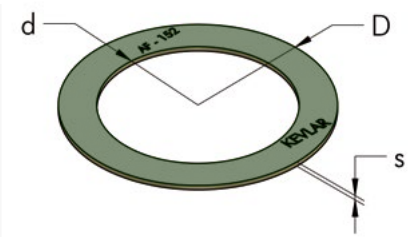
D mm	d mm	L mm	Part. N°	P g	
20	8	62	922 020 062	46	⚙ ✍

ALLEN SCREW, IN GALVANIZED STEEL



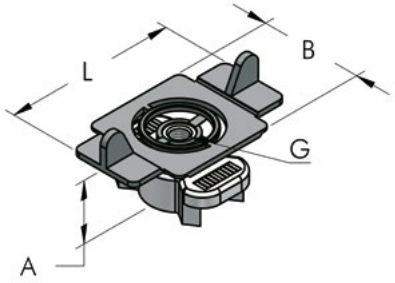
d mm	L mm	D mm	E mm	Part. N°	P g	
M6	8	10	5	212 006 008	4,2	⚙
M6	10	10	5	212 006 010	4,5	⚙
M6	12	10	5	212 006 012	4,8	⚙
M6	14	10	5	212 006 014	5,0	⚙
M6	18	10	5	212 006 018	5,8	⚙

FLAT SEAL FOR FLANGES



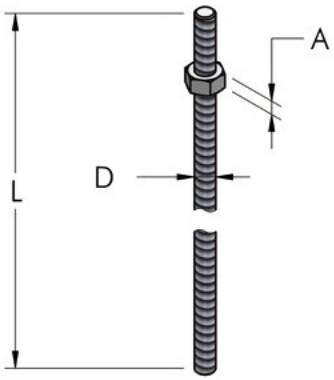
D mm	d mm	DN	S mm	Part. N°	P g	
142	90	80	2	274 089 002	33	
160	116	100	3	274 116 003	56	

HEXAGONAL NUT M6 FOR HILTI SYSTEM



L mm	B mm	A mm	G	Part. N°	P g	
50	30	15	M6	233 006 034	22	

HEXAGONAL NUT

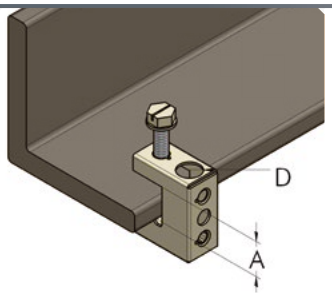


D mm	A mm	Part. N°	P g	
M6	5	230 006 005	2,5	

HANGING TIE ROD

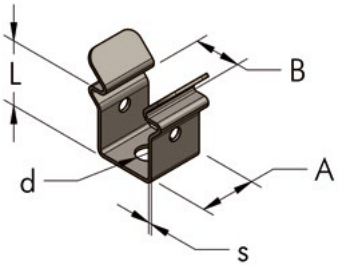
D mm	L m	Part. N°	P g	
M6	1	226 006 100	200	

BUCKLE



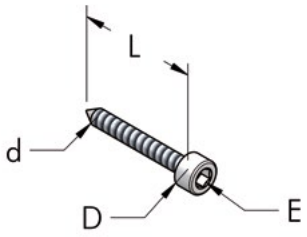
D mm	A mm	Part. N°	P g	
10	18	294 010 018	25	

SNAP CLAMP FOR ELECTRIC BUSBAR (ZUCCHINI)



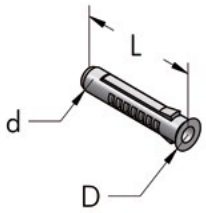
L mm	B mm	A mm	d mm	S mm	Part. N°	P g	
20	22	18	7,5	1	292 022 020	20	

ALLEN SCREW 5X38



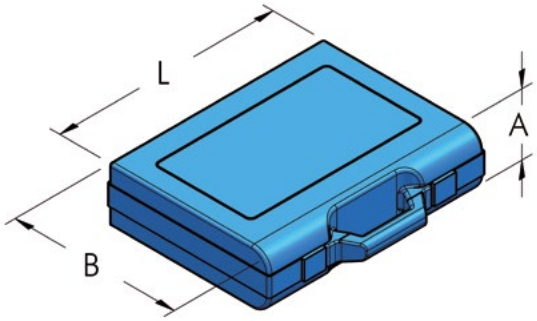
L mm	D mm	d mm	E mm	Part. N°	P g	
38	10	5	5	206 005 038	5,7	

PLUG SX8



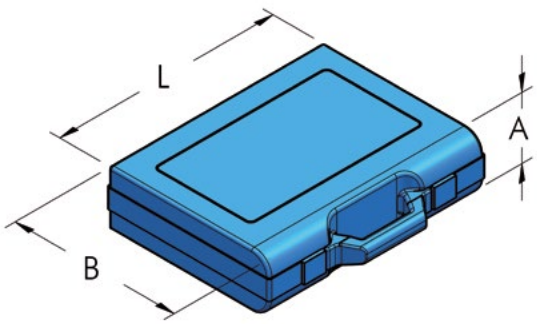
L mm	D mm	d mm	Part. N°	P g	
40	10	7,6	208 008 040	1,5	

BASIC TOOLBOX - HBS



A mm	B mm	L mm	Part. N°	P g	
50	190	240	003 001 092	700	✍

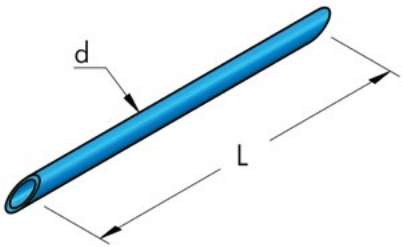
BASIC TOOLBOX - APS



A mm	B mm	L mm	Part. N°	P g	
50	190	240	006 020 092	600	✍

TUBES TO HOLD SMALL PLATE IN POSITION

HBS



d mm	L mm	Mat	Part. N°	P g	
8	150	PVC	421 006 015	5	

PTFE BLUE GREASE

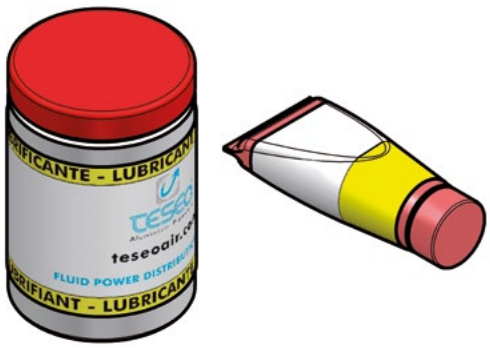
HBS APS MPS AMS ATS MTS SAB WBA DCS



Part. N°	P g	
114 003 005	50	

VASELINE GREASE

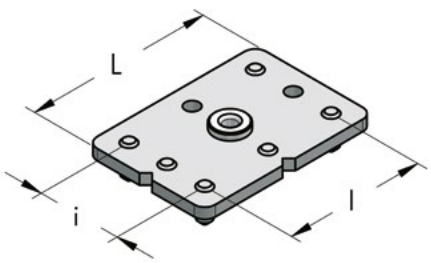
HBS APS MPS AMS ATS MTS SAB WBA DCS



Part. N°	P g	
111 003 100	850	
111 003 010	100	

DRILLING JIG

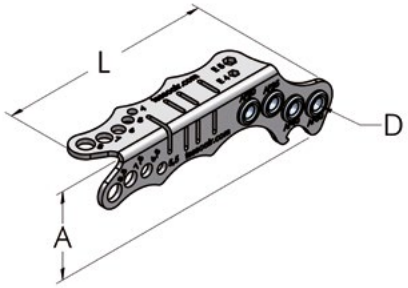
HBS



l mm	i mm	L mm	Part. N°	P g	
60	36	80	911 036 060	190	

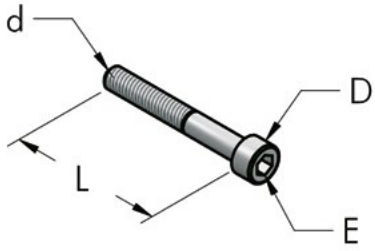
TREATMENTS, AUTOMATIONS, COMPONENTS - **WTK** WORK TOOL KIT - TAC

DRILLING JIG FOR APS22-APS28-APS45-APS54



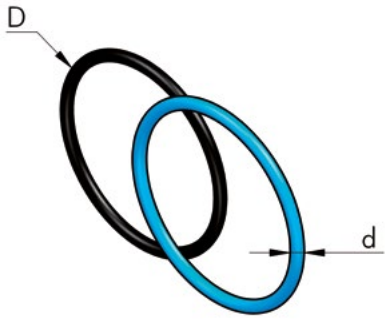
A mm	D mm	L mm	Part. N°	P g	
45	6	136	911 020 050	90	

ALLEN SCREW, IN GALVANIZED STEEL



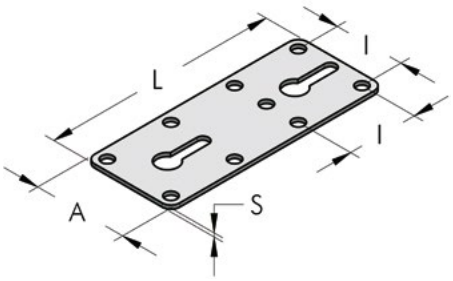
d mm	L mm	D mm	E mm	Part. N°	P g	
M5	20	8,5	4	212 005 020	4	⚙
M5	25	8,5	4	212 005 025	5	⚙
M5	30	8,5	4	212 005 030	5,5	⚙
M6	35	10	5	212 006 035	9	⚙
M6	45	10	5	212 006 045	14	⚙
M6	55	10	5	212 006 055	14	⚙

O-RING SEAL IN NBR70



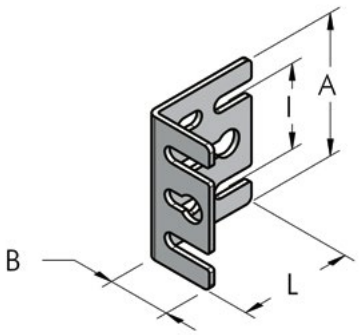
D mm	d mm	Part. Norm AS/BS	Part. N°	P g	
16	1,78	2050-014	271 012 002	0,1	⚙
16	2	0120-02	271 013 002	0,2	⚙
20	1,78	2062-014	271 016 002	0,2	⚙
20	2	0160-02	271 017 002	0,2	⚙
25	1,78	2081-019	271 020 002	0,3	⚙
25	2	0210-02	271 021 002	0,5	⚙
25	2,62	3087-118	271 022 003	0,5	⚙
29	3	0230-03	271 023 003	0,7	⚙
32	3	0260-03	271 026 003	0,8	⚙
32	2,62	3106-121	271 027 003	0,6	⚙
36	3	0300-03	271 031 003	0,9	⚙
40	3	0350-03	271 035 003	1,1	⚙
50	3	0440-03	271 043 003	1,3	⚙
50	2,62	3175-132	271 044 003	1	⚙
63	3	0560-03	271 056 003	1,5	⚙
63	2,62	3225-140	271 057 003	1,3	⚙
80	3	0720-03	271 072 003	2,2	⚙
80	2,62	3287-150	271 073 003	1,6	⚙
110	3,53	4387-241	271 101 004	4	⚙

STRAIGHT PLATE, IN GALVANIZED STEEL



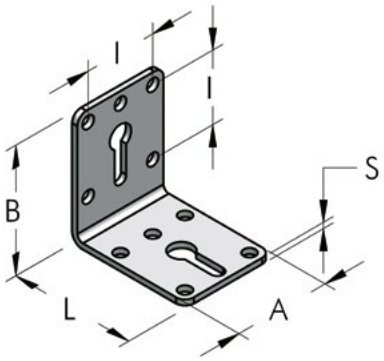
A mm	L mm	I mm	S mm	Part. N°	P g	
48	120	36	2	711 048 120	80	
54	160	36	2,5	711 056 160	146	
72	160	36-60	2,5	711 072 160	201	
78	240	36-60	3,5	711 078 230	422	

L PLATE, IN GALVANIZED STEEL



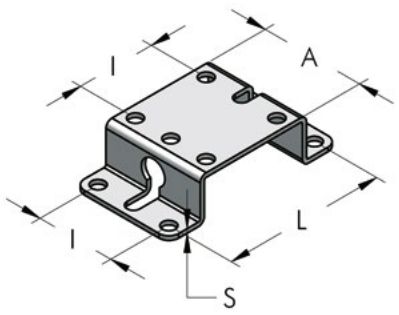
A mm	B mm	I mm	L mm	Part. N°	P g	
50	25	30	40	732 020 050	37	
66	35	50	47	732 066 080	60	

L PLATE, IN GALVANIZED STEEL



A mm	B mm	L mm	I mm	S mm	Part. N°	P g	
48	60	60	36	2	721 048 060	77	
54	80	80	36	2,5	732 056 080	148	
72	80	80	36-60	3	732 072 090	245	
78	94	140	36-60	3,5	732 078 140	420	

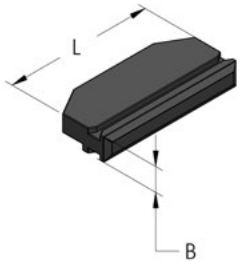
FIXING BRACKET, IN GALVANIZED STEEL



A mm	L mm	I mm	S mm	Part. N°	P g	
48	72	36	2	735 048 120	78	

INSULATING BLOCK

HBS



d mm	L mm	l mm	B mm	Part. N°	P g	
6	60	36	10	003 001 075	26	

Load 30 kg; -20°C / +80 °C

15 BAR ADHESIVE COLOUR STICKERS

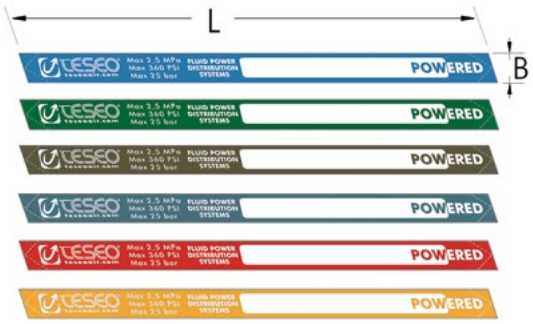
HBS APS AMS SAB WBA



L mm	B mm	Colour	Part. N°	P g	
310	15	Blue RAL 5015	104 015 310	29	
310	15	Green RAL 6029	104 015 315	29	
310	15	Brown RAL 8003	104 015 316	29	
310	15	Grey RAL 7000	104 015 317	29	
310	15	Red RAL 3020	104 015 318	29	
310	15	Yellow RAL 1028	104 015 319	29	
310	28	Blue RAL 5015	104 025 150	29	
310	28	Green RAL 6029	104 028 315	29	
310	28	Brown RAL 8003	104 028 316	29	
310	28	Grey RAL 7000	104 028 317	29	
310	28	Red RAL 3020	104 028 318	29	
310	28	Yellow RAL 1028	104 028 319	29	

25 BAR ADHESIVE COLOUR STICKERS

MPS



L mm	B mm	Colour	Part. N°	P g	
310	15	Blue RAL 5015	104 515 310	29	
310	15	Green RAL 6029	104 515 315	29	
310	15	Brown RAL 8003	104 515 316	29	
310	15	Grey RAL 7000	104 515 317	29	
310	15	Red RAL 3020	104 515 318	29	
310	15	Yellow RAL 1028	104 515 319	29	
310	28	Blue RAL 5015	104 525 150	29	
310	28	Green RAL 6029	104 528 315	29	
310	28	Brown RAL 8003	104 528 316	29	
310	28	Grey RAL 7000	104 528 317	29	
310	28	Red RAL 3020	104 528 318	29	
310	28	Yellow RAL 1028	104 528 319	29	

Are you looking for additional components, spare parts, or product upgrades to meet your new requirements?
See page 89!

Teseo Warranty

Confident in the high quality of our products, designed to deliver efficient and waste-free energy use for years, we are proud to offer an extended warranty to those who choose TESEO.

What does this mean?

If you need a replacement part, simply send an email to: ***support@teseoair.com*** or call our office at **+39 030 9150411** and **provide the following details:**

- **Which TESEO products you have installed** (e.g. HBS, APS, MPS systems, SAB, WBA, ATS, assembly line, or others);
- **Where** your TESEO product is installed;
- **Which** component you wish to replace;
- **Why** you are requesting the replacement, ideally with **supporting photos.**

This will enable us to provide you with the necessary replacement or upgrade, free of charge where applicable, and get your TESEO system or product back to peak performance.

Please note: We may request some **technical details** (e.g. type of fluid used, working environment, etc.) in order to offer you the **most suitable and stress-free solution.**

REQUEST FOR NON-CATALOGUE PRODUCTS

In order to continue guaranteeing a **high-quality service, TESEO** may require certain information for specific products or components before confirming availability or proposing an agreed alternative.

If you are looking for components not listed in the catalogue, please kindly send your request to: **support@teseoair.com** or call us at: **+39 030 9150411**, and provide the following information:

- The reason for the request;
- The Company where the product will be installed.



Please note: We may request some **technical details** (e.g. type of fluid used, working environment, etc.) in order to offer you the **most suitable and stress-free solution.**

TESEO PIPING SYSTEMS APPROXIMATE FLOW RATES

Based upon independent data provided by the University of Torino (I), Mechanical Department, research **Contract n° 1089/97.**

PRESSURE DROP			FLOW RATE IN L/MIN								
Working pressure (bar)	Δp= Pi – Pu about 3%	L (m)	Ø 14	APS22	APS28 and HBS25	APS36 and HBS32	APS45	APS54 and HBS50	APS68 and HBS63	HBS80	HBS110
2	0,07	30	160	600	1.000	1.900	3.600	5.900	10.500	19.000	42.300
4	0,12	30	300	1.100	2.000	3.600	6.650	10.900	19.500	35.400	78.500
6	0,18	30	460	1.650	2.900	5.400	10.000	16.400	29.200	53.000	117.500
8	0,25	30	628	2.300	4.000	7.300	13.500	22.700	39.700	72.200	160.000
10	0,30	30	650	2.700	4.800	9.000	16.800	27.200	48.500	88.000	195.000

Flow rates in this chart are calculated with 3% pressure drop from inlet pressure. Lenght of pipe is 30 metres.

WE EAT THEM ALL!



Comparing nominal diameters with the competitors, the flow rate of our piping is physically larger.
The blue lines are small, they fit in ours. **MAKE THE RIGHT CHOICE!**

APPROXIMATE CHART FOR CHOOSING TESEO PIPING DIAMETER - HBS SYSTEM

Flow rate			LENGTH (in meters)									
m³/h	l/min	cfm	20	50	100	200	300	400	500	1000	1500	2000
21	350	12	25	25	25	25	25	25	25	25	25	25
30	500	18	25	25	25	25	25	25	25	25	25	25
42	700	25	25	25	25	25	25	25	25	25	25	32
54	900	32	25	25	25	25	25	25	25	25	32	32
66	1100	39	25	25	25	25	25	25	25	32	32	32
90	1500	53	25	25	25	25	25	25	32	32	50	50
120	2000	71	25	25	25	25	32	32	32	50	50	50
150	2500	88	25	25	25	32	32	32	50	50	50	50
216	3600	127	25	25	32	32	50	50	50	50	50	63
360	6000	212	25	32	50	50	50	50	50	63	63	63
540	9000	318	32	50	50	50	50	63	63	80	80	80
690	11500	406	32	50	50	50	63	63	63	80	80	80
780	13000	459	50	50	50	63	63	63	80	80	80	110
900	15000	530	50	50	50	63	63	80	80	80	110	110
1260	21000	742	50	50	63	80	80	80	80	110	110	110
1620	27000	954	50	63	63	80	80	110	110	110	110	#110
2000	33300	1177	50	63	80	80	110	110	110	110	#110	#110
3000	50000	1766	63	80	80	110	110	110	110	#110	#110	#110
3360	56000	1978	63	80	110	110	110	110	#110	#110	#110	#110
3720	62000	2190	80	80	110	110	110	#110	#110	#110	#110	#110
4800	80000	2825	80	110	110	110	#110	#110	#110	#110	#110	#110
5880	98000	3461	80	110	110	#110	#110	#110	#110	#110	#110	#110
6720	112000	3955	80	110	#110	#110	#110	#110	#110	#110	#110	#110
9600	160000	5650	110	110	#110	#110	#110	#110	#110	#110	#110	#110
12000	200000	7063	110	#110	#110	#110	#110	#110	#110	#110	#110	#110
15000	250000	8829	110	#110	#110	#110	#110	#110	#110	#110	#110	#110

This chart indicates Teseo piping diameters calculated at 8 bars pressure and 5% pressure drop from inlet pressure.
#110 = indicates pressure drop over 5%

APPROXIMATE CHART FOR CHOOSING TESEO PIPING DIAMETER - APS SYSTEM

Flow rate			LENGTH (in meters)									
m³/h	l/min	cfm	20	50	100	200	300	400	500	1000	1500	2000
21	350	12	22	22	22	22	22	22	22	22	22	28
30	500	18	22	22	22	22	22	22	22	28	28	28
42	700	25	22	22	22	22	22	22	28	28	28	36
54	900	32	22	22	22	22	22	28	28	36	36	36
66	1100	39	22	22	22	22	28	28	28	36	36	36
90	1500	53	22	22	22	28	28	36	36	36	45	45
120	2000	71	22	22	28	36	36	36	36	45	45	45
150	2500	88	22	28	28	36	36	36	45	45	54	54
216	3600	127	28	28	36	45	45	45	45	54	54	68
360	6000	212	28	36	45	45	54	54	54	68	68	68
540	9000	318	36	45	45	54	54	68	68	#68	#68	#68
690	11500	406	45	45	54	54	68	68	68	#68	#68	#68
780	13000	459	45	45	54	68	68	68	#68	#68	#68	#68
900	15000	530	45	54	54	68	68	#68	#68	#68	#68	#68
1260	21000	742	45	54	68	#68	#68	#68	#68	#68	#68	#68
1620	27000	954	54	68	68	#68	#68	#68	#68	#68	#68	#68
2000	33300	1177	54	68	#68	#68	#68	#68	#68	#68	#68	#68
3000	50000	1766	68	#68	#68	#68	#68	#68	#68	#68	#68	#68
3360	56000	1978	68	#68	#68	#68	#68	#68	#68	#68	#68	#68
3720	62000	2190	#68	#68	#68	#68	#68	#68	#68	#68	#68	#68

This chart indicates Teseo piping diameters calculated at 8 bars pressure and 5% pressure drop from inlet pressure.
#68 = indicates pressure drop over 5%

RESISTANCE TO CHEMICAL AGENTS

HBS APS MPS AMS DCS

TIG

MATERIAL	ALUMINIUM (Al)	O-RING SEALS	NYLON	NICKEL-PLATED BRASS	2014/68/UE
GAS					
Compressed air	A	A	A	A	K
Vacuum	A	A	A	A	K
Nitrogen	A	A	A	A	K
Carbon dioxide	A	A	A	A	K
Argon	A	A	A	A	K
Argon - Nitrogen Mixture	A	A	A	A	K
Argon-Carbon Dioxide Mixture	A	A	A	A	K
Oxygen	D	C	A	A	
Dry Chlorine	A	D	D	C	
Sulphidric Acid	A	D	A	C	
Dry Sulphur Dioxide	A	D	C	A	
ORGANIC AND CHEMICAL COMPOUNDS					
Mineral engine oil	A	A	B	A	K
Synthetic motor oil	A	A	B	A	K
Exhausted engine oil	A	A	B	A	K
Oil emulsion 3% for metalworking	A	A	A	A	K
Oil emulsion 8% for metalworking	A	A	A	A	K
Glycol	A	A	B	A	K
Glycol and water mixture	A	A	A	A	K
Windscreen washing fluid	B	D	B	D	
Ammonia solution	A	B	B	C	
Methyl alcohol	B	B	B	C	
Vinilic glue	A	A	A	A	
Ethanol	A	A	B	A	K
Formalin	A	A	B	A	K
Acetone	A	D	A	A	K
Aniline	C	D	C	A	
Potassium bicarbonate	D	B	B	A	
Potassium permanganate	A	B	D	A	
Benzene	A	D	B	A	
Gasoline	A	B	B	A	K
Diesel fuel	A	A	B	A	K
ACIDS					
Citric acid	B	A	B	C	
Boric acid	B	A	B	C	
Acetic acid	B	C	D	C	
Cloridric acid	C	D	D	D	
Oleic acid	B	C	B	D	
Nitric acid	C	D	D	C	
Tartaric acid	A	A	B	C	K
Phosphoric acid	D	D	D	D	
Sulfuric acid	D	D	D	D	

Legend: *A = Very good; B = Good; C = Low; D = Poor; K= KIWA PED*

Attention: the content of this table is based upon customer's inquiries forwarded by customers during past 35 years.
It is always recommended to evaluate the PED 2014/68/UE directive and consider norms and laws applicable.
PED = 2014/68/UE, annexe III, E1 compliant - CE 0476 - KIWA.
For any enquiries, please contact TESEO's Technical Office.

CONDITIONS FOR THE TRANSPORTATION OF WATER IN THE TESEO SYSTEMS

TESEO products are suitable for water distribution, provided that the water meets the following conditions:

1. Softened water is to be avoided because of its richness in sodium ions.

2. The acidity must range between pH5 and pH8.

3. The maximum content of chlorine ions must not exceed 2000 mg/L.

4. Iron (Fe), Nickel (Ni), Lead (Pb) and Tin (Sn) must not be present.

5. The maximum Copper (Cu) content should be not exceed 0,05 mg/L; the maximum Mercury (Hg) content should not exceed 0,005 mg/L.

6. Aluminium must not be in direct contact with iron or Copper. Aluminium and iron must be insulated by galvanization while aluminium and Copper must be insulated with plastic or inert organic matter.

7. Oxygen, Carbon Dioxide and ammonia ions, dissolved in water do not cause corrosive effects.

8. Water with solution of emulsion oil for the cooling of machinery does not cause any problems.

9. Steam and distilled water can be conveyed through piping at a maximum temperature of 140 to 150°C, provided that suitable O-rings are used.

10. We recommend the use of ANODIZED bars.

In the event of any doubt, please contact Teseo's Technical office.

Source: AQM, technical services SINAL Accredited (UNI CEI EN 45001).

HBS-APS ASSEMBLING INSTRUCTIONS

See 8 key points for guidance:

1. INTRODUCTION

1.1. This manual is very easy to consult and we recommend reading it before starting work, bearing in mind the regulations in your country.

1.2. Pay attention to the instructions identified by the mark **ATTENTION**.

1.3. The HBS and APS ranges of products from TESEO are suitable for the distribution of compressed air, nitrogen, vacuum and inert gases.

1.4. For any application with **water** distribution, please check our sheet on page 92. For other fluids it is necessary to know their exact composition and to check if they are compatible with the HBS and APS system; in case of any doubt, please contact the technical department of TESEO.

1.5. ATTENTION: TESEO is not responsible for problems due to failure to follow the instructions contained in within this manual.

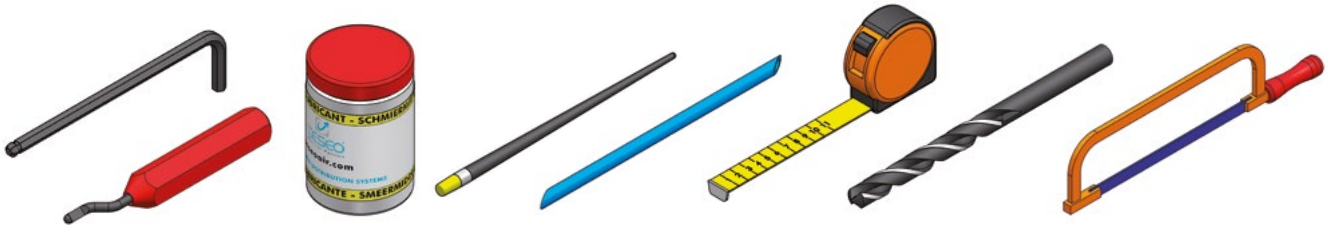
2. TOOLS AND FIXTURES

2.1. The **tools required** to install even a small system are: one Allen wrench for 4 and 5 mm slots, one deburring tool or one scraper, neutral grease, one drill bit and one drilling machine, one hacksaw, some small tubes for placing the small plates, one tape measure.

2.2. The **tools suggested** for fast and safe work are: one pair of adjustable pliers, one battery screwdriver, one drilling jig, one chop saw with metal circular blade, one stepped cone cutter or cone cutter, one PTFE tape or sealing band, one torque wrench, one level or one plumb line, one bench on wheels.

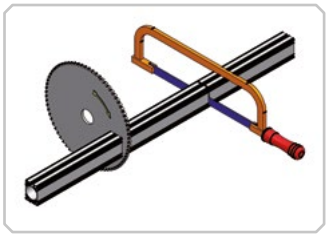
2.3. Close attention should be paid to safety. To this purpose, scaffolding, helmets, harnesses, gloves and protective glasses must be used by all personnel.

2.4. ATTENTION: follow the regulations concerning safety at work presently in force in your country.

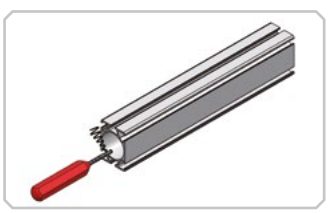


3. PREPARATION

3.1. **Cutting:** this can be done by hand, using a hacksaw provided that the blade has been lubricated with vaseline or other oils, as aluminium is a material which could clog the tool. When making many cuts, we suggest using a circular chop saw with metal cutting blade.



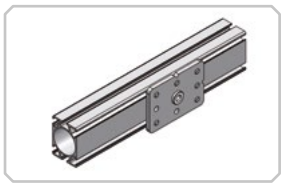
3.2. **Deburring:** after cutting the pipe, it is necessary to remove the sharp edges using a deburring tool. This operation is required to avoid any damage to the O-ring and to make easier the connection.



3.3. **Lubrication:** in order to make it easier to insert joint, lubricate the inner surface of the hollow bar with neutral grease (ref. page 85), in order to avoid any damage to the O-ring.

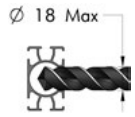
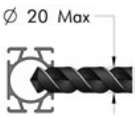
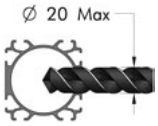
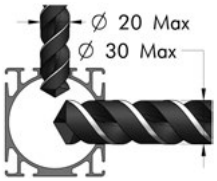
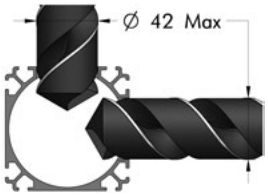
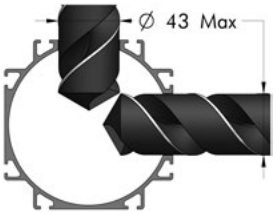


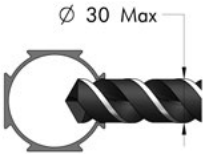
3.4. **Drilling:** during the drilling operation, it is required to have the pilot hole in the centre of the pipe. Please use a drilling jig.





The maximum diameter of the smoothed hole must not exceed the recommended diameter. Please see the table.

HBS25	HBS32	HBS50	HBS63	HBS80	HBS110
					

APS22	APS28	APS36	APS45	APS54	APS68
					

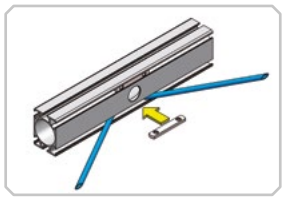
The following tools can be used: a drill, a coned drill, a counter bore, a hole saw.

3.5. **Hole de-burring:** on outlet plates we recommend de-burring a maximum 1mm around the hole in order not to damage the o ring seal.

3.6. **ATTENTION: Wear protective glasses and gloves during cutting and drilling. Flying chips could cause injury to eyes and hands.**



4. HBS SYSTEM ASSEMBLY OPERATIONS



4.1. **Insertion of small plates:** the small plates can be inserted into the slot in the bar at any point. Straighten and secure them by means of sharpened small tubes.

4.2. **Joint insertion:** to make it easier, first insert the plates and the small plates with loose screws into the slots, then insert the joint and connect the second bar. Now position the plates half-way on each side and tighten the screws.

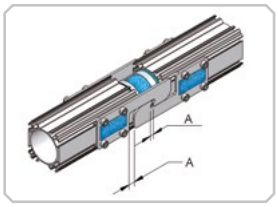


4.3. **How to tighten the screws:** The screws must be tightened but be careful not to tear the thread. The torque of the m6 screws should be between a minimum of 10 N·m (91 inchlbs) and a maximum of 13.5 N·m (120 inch-lbs).

4.4. **"L" and "T" Joint** have to be fixed using specific fixing plates. They allow you to fix pipes on two sides. Should you need to connect HBS 25 piping, using an "L" joint on the narrow side, it is required to cut 6 mm on each corner.

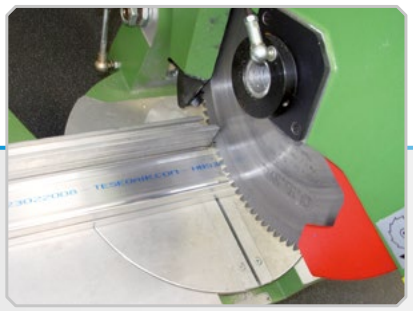


4.5. **Expansion of the line**: for lines with a straight section longer than 50 meters, we suggest mounting a sliding joint every 30 to 40 meters. This will make any future dismantling easier. The two fixing plates have to be assembled in the middle of the available space.



4.6. ATTENTION: check that all the screws are tightened at the end of each pipe connection and when securing them be careful not to tear the thread.

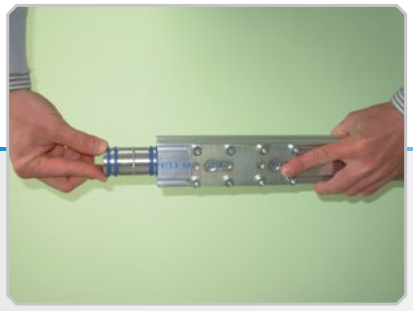
HBS INSTALLATION EXAMPLE

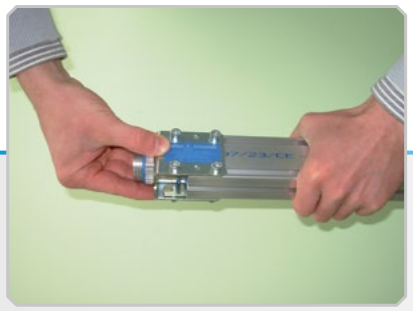




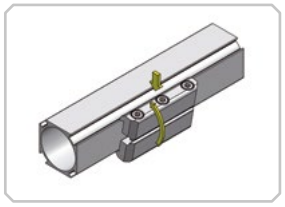




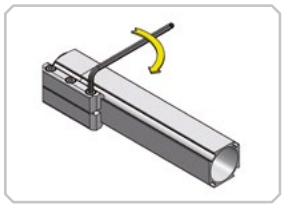



5. APS SYSTEM ASSEMBLY OPERATIONS



5.1. **Clamping brackets installation:** insert one side of the clamping bracket in the groove of the profile, push both clamping brackets to touch the profiles and tighten the screws.

5.2. **Joints:** introduce the joint into one pipe, then connect the second pipe, position the clamping bracket equally so that it is clamping both pipes or fitting and half the other and finally tighten the screws.



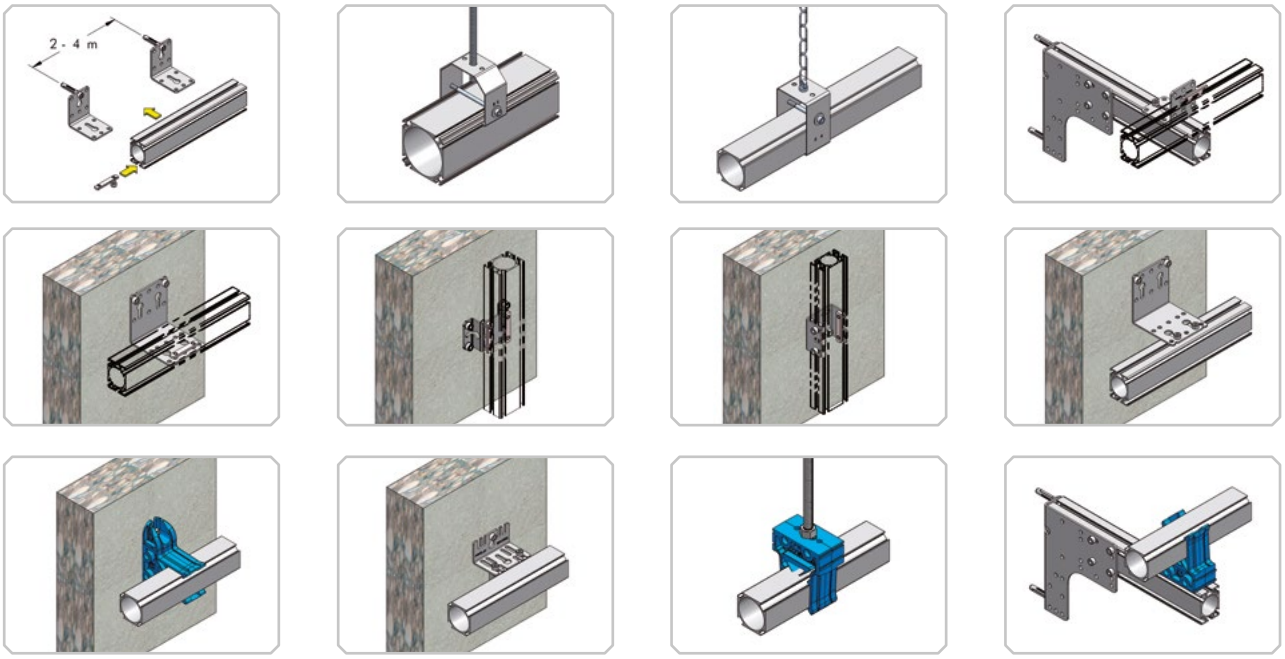
5.3. **Screws tightening:** Screws must be tightened properly but not excessively, to avoid stripping the threads. The recommended tightening torque for M5 screws is beetween 9 N·m and 11 N·m maximum. For M6 screws the minimum is 13 N·m and the maximum 15 N·m.

5.4. ATTENTION: once completed the assembly of every joint, double check the screws correct blockage and be sure that no threads are damaged for excessive tightening.

6. INSTALLATION

6.1. **How to trace the distribution line:** trace a horizontal line at the chosen height by means of a stretched plumb line. With the TESEO system you do not need to give the inclination to collect the condensate as the up-column and the down-column are already equipped at the bottom with a collection and a drain valve.

6.2. **How to secure the pipework:** The pipework can be supported by several types of ceiling or wall mounted fixing plates and brackets. The recommended distance between these fixing brackets is 2 to 4 meters, depending on the weight of the distributed fluid.

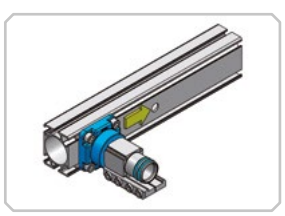


6.3. **Isolation valves:** ball valves must be mounted both at the beginning of the line and at the beginning of the branches of the main line. Mount a pressure gauge at the beginning of the main line and a safety valve on the air receiver.

6.4. **Take-offs:** for the down tubes: to prevent any impurities fouling the bottom of the hollow bar, we recommend fitting the outlet plates on the sides of the hollow bar.

6.5. **Flexible pipe:** its use is recommended in order to isolate the installation from the vibrations of the compressor.

6.6. **Earthing:** it is recommended in case of stray electrical currents.



6.7. ATTENTION: wear a safety helmet, harnesses and use scaffolding in compliance with the law before tracing and installing the line, as these operations are usually carried out at a dangerous height.

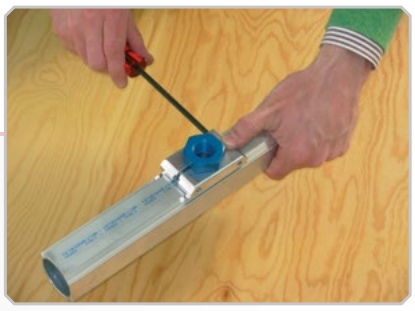
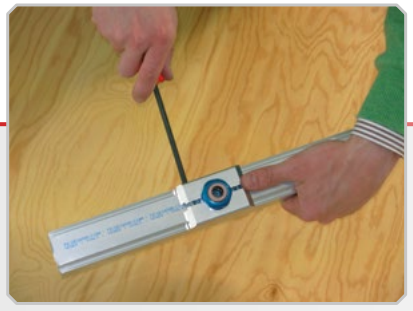
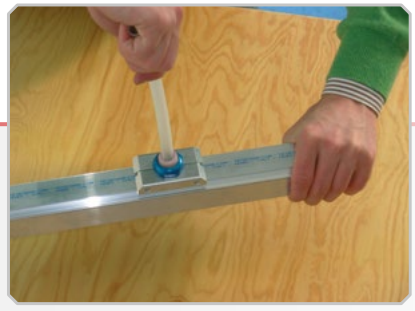
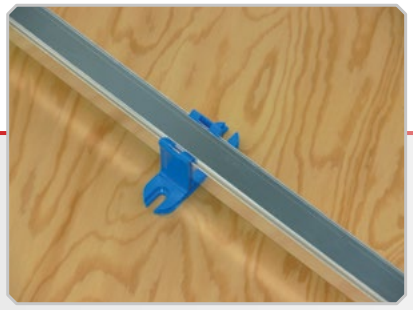
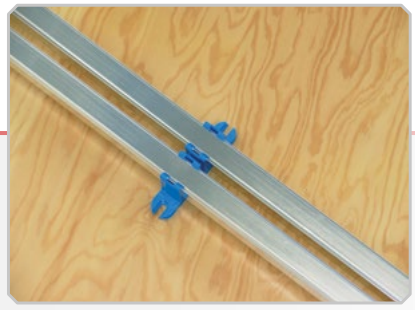
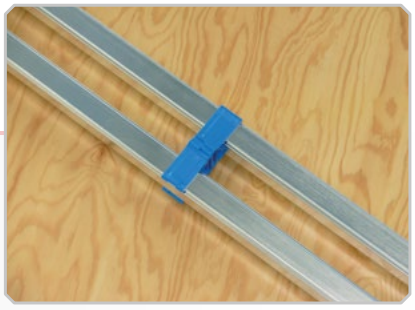
APS INSTALLATION EXAMPLE









7. GENERAL TEST AND INSPECTION

7.1. **Inspect** every part of the system and check that no screw is loose, that all joints are properly in place and all brackets are properly secured.

7.2. Check that the **service valve** placed between the compressor room and the line is closed.

7.3. Start the compressor and fill the tank up to the maximum pressure. If a compressor is not available, use nitrogen tanks and/or small portable compressors.

7.4. Open the valve and fill the system up to 1 bar approx. (15 psi); close the valve and check that no leaks are detected in the system.

7.5. **Increase the pressure** of the system slowly until you reach the maximum pressure. Keep this pressure for about 1 hour. Test the system when the pressure is 1.5 times higher than the working pressure.

7.6. Inspect the system again and check that no leaks or other unusual deformations are visible in the joints.

7.7. **Empty** the system.

7.8. ATTENTION: testing and inspection must be carried out only when no one is present in the working area. Wear a safety helmet and protective glasses when inspecting the system. Please follow all safety precautions.

8. REPAIRS AND MODIFICATIONS

8.1. Modifications to the system are quick and easy. We suggest preparing all tools in advance, next to the area where modifications are to be made. By doing so, the downtime of the line is minimized.

8.2. If a leak is detected in the system, consult the following table where the most common causes and corresponding remedies are described.

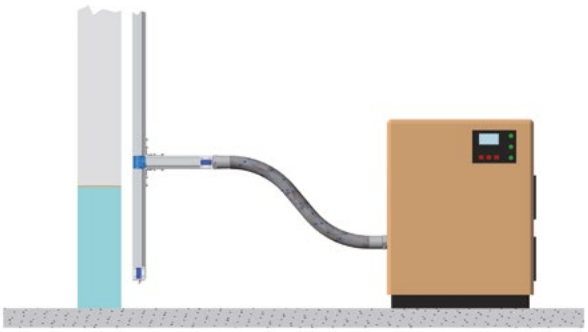
8.3. In the case of faulty pieces manufactured by TESEO, please contact our technical department.

8.4. ATTENTION: release pressure from the area of the system to be modified before carrying out repairs, maintenance or modifications. Isolate the area and inform people about maintenance operations.

CAUSE OF THE LEAK	CORRECTIVE ACTION (REMEDIAL)
O-ring seal damage due to incorrect installation, or defective.	Replace the O-ring seal.
Fitting or outlet plate threads damaged.	Seal with a Teflon band or replace the faulty piece.
The drilled hole on the bar is too big or misaligned.	Replace the faulty section of the hollow bar.
Extrusion blowholes into the hollow bar.	Replace the defective part.
Misaligned mounting of the joint in the corresponding bar seats.	Disassemble the joint and realign the bars.
Defects in the seat of O-ring of “I” and “T” joints.	Replace faulty joint.

INSTALLATION OF FLEXIBLE PIPES

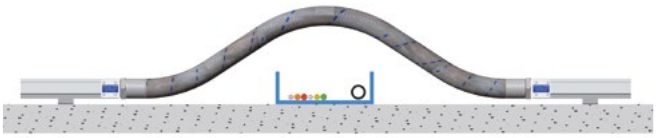
1. CONNECTION TO MACHINE



We recommend that the compressor is connected with a flexible pipe to absorb the vibrations due to the machine on every installation.

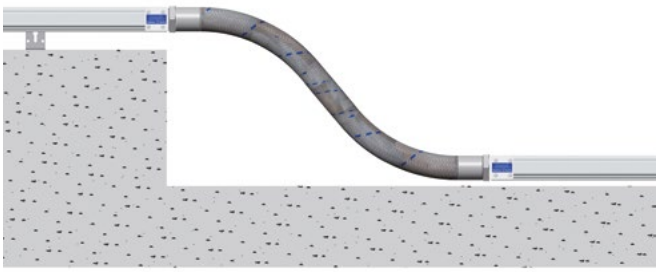
2. OBSTACLES

We remind you that to avoid any distortion, the bend radiuses of the flexible rubber pipes must not be too sharp to avoid damage it, the flexible pipe mustn't be forced against the obstacle.



3. CHANGES IN HEIGHT

Hoses can be useful when the changing of level is lower or equal than the encumbrance of two L Joints. However it is recommended when the vertical side of the line can't be fixed.

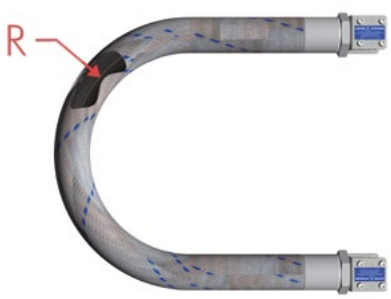


4. SPECIAL ANGLES

It is useful too when the horizontal angle of the line can't be achieved with other components from our catalogue; however it remains possible to use threaded terminals together from steel components (not recommended) from retail trade.



5. CURVING AT 180°



Flex Pipe	HBS25	HBS32	HBS50	HBS63	HBS80
Min Radius mm	100	130	200	270	340

Flex Pipe	APS22	APS28	APS36	APS45	APS54	APS68
Min Radius mm	90	100	130	150	200	270

Material	EPDM
Temperature	-30°C ÷ +70°C

COMPRESSED AIR IS EXPENSIVE: DON'T WASTE IT!

Useful tips for new investments:

MAKE THE RIGHT CHOICE
You may change your compressor or dryer in future, but your compressed air piping is a fixed utility in your plant.

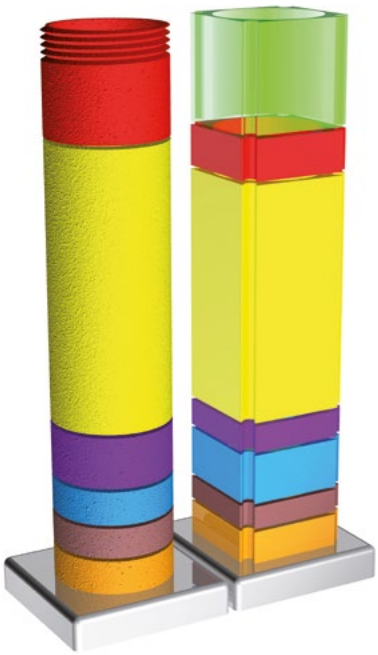
USE QUALITY PRODUCTS
Original quality piping system will assure reliable performance and expected safety standards in your factory.

CHOOSE THE RIGHT SIZE
The right engineering & sizing of the system is fundamental to save energy, potentially more than any other practice.

INSTALL A LEAK FREE SYSTEM
Modular systems with positive seals will perform better than any threated conventional tubing.

DON'T FOCUS ON INITIAL COST
The cost of components is only a small part of the total investment. Choose systems with the lowest cost of ownership!

COMPRESSED AIR LIFETIME COSTS



- **MONEY SAVED:** saving due to correct sizing and engineering, optimised working pressure and choice of high quality product.
- **LEAKAGE:** cost of air leaks and inappropriate use of compressed air during the lifetime of the system.
- **ELECTRICITY:** cost of electricity to feed the air compressor.
- **INSTALLATION:** cost of labour for installing the system, for extensions and modifications, for ordinary maintenance.
- **MATERIAL:** cost of pipes and fittings for assembling the system.
- **MAINTENANCE:** cost for running ordinary maintenance of the machines generating compressed air.
- **GENERATION:** cost of machines for generating compressed air (including compressor, receiver, dryer, filters).

Some good general practices...

Prevent and reduce leaks
In a conventional piping system leaks may waste 20-40% of your compressed air. Routinely check your system for leaks.

Reduce air pressure
Reducing the pressure in your system of 1 bar (15 psi) will lead to 7% saving on your annual energy consumption.

Feed compressors with cool air
With 3°C cooler intake air, compressor will save 1% energy to reach the desired working pressure.

Avoid inappropriate use
Check the efficiency of compressed air used for cooling, agitating, mixing or inflating in your factory.

Contact our technical department for a first quick check-up of your system. We will help you to focus on the analysis and intervention by giving an assessment of costs and waste.

DATA FOR PLANT

Agent: Installer:

Retailer: End user:

Fill in at least 4 fields below to develop your new project:

	units	Flow rate
	units	Teseo diameter
	units	Maximum pressure drop
	units	Absolute starting pressure
	units	Length of the considered network

For complex systems with multiple diameters, make a sketch on the next page, adding any notes you like.

Refine your project:

Compressor/s Power

c1 Units_____ c2 Units_____ c3 Units_____ c4 Units_____ c5 Units_____

Air demand per zone

z1 Units_____ z2 Units_____ z3 Units_____ z4 Units_____ z5 Units_____

Units_____ use factor (%)

Type of thread: BSP NPT

Drop columns*

Diameter:..... Quantity:.....

Diameter:..... Quantity:.....

Diameter:..... Quantity:.....

Already have an installation? With just a few details, we can tell you how much it costs!
And when purchasing a new system, TESEO will calculate the payback period for you!

Product installed: Total development:

Age of the installation: Ø Pipe:

Daily working hours: % Leaks hypothesized:

Labor cost: Cost of electricity:

In what language do you wish the project to be developed:

English Italian German

French Spanish Dutch

Preferred Project Delivery Date:

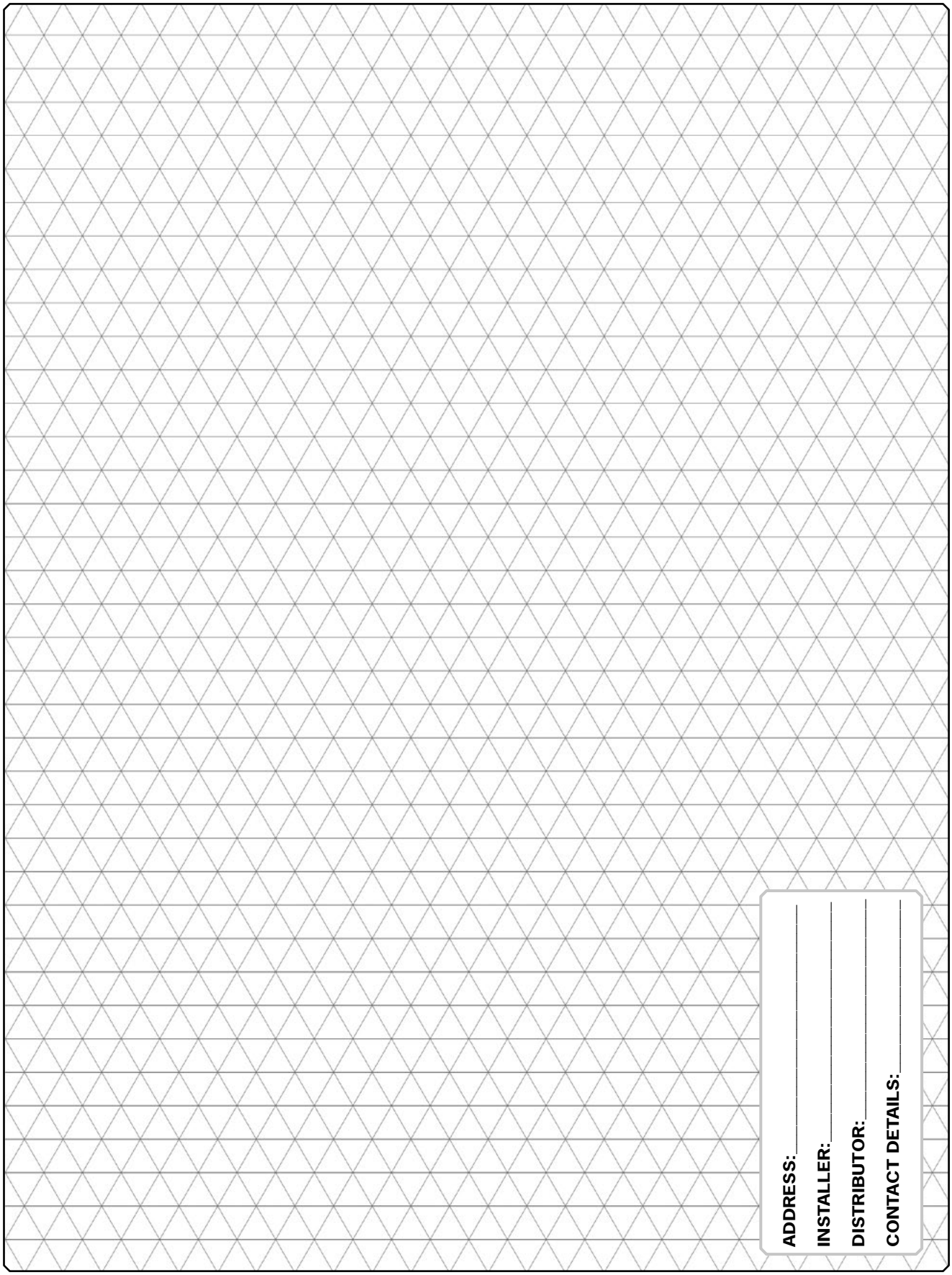
Please provide any additional data on the subsequent page. Comprehensive information will enable us to optimize the development of your project. Kindly send all documents to your designated Teseo sales contact and this email address: *support@teseoair.com*!

*DCS see page 54

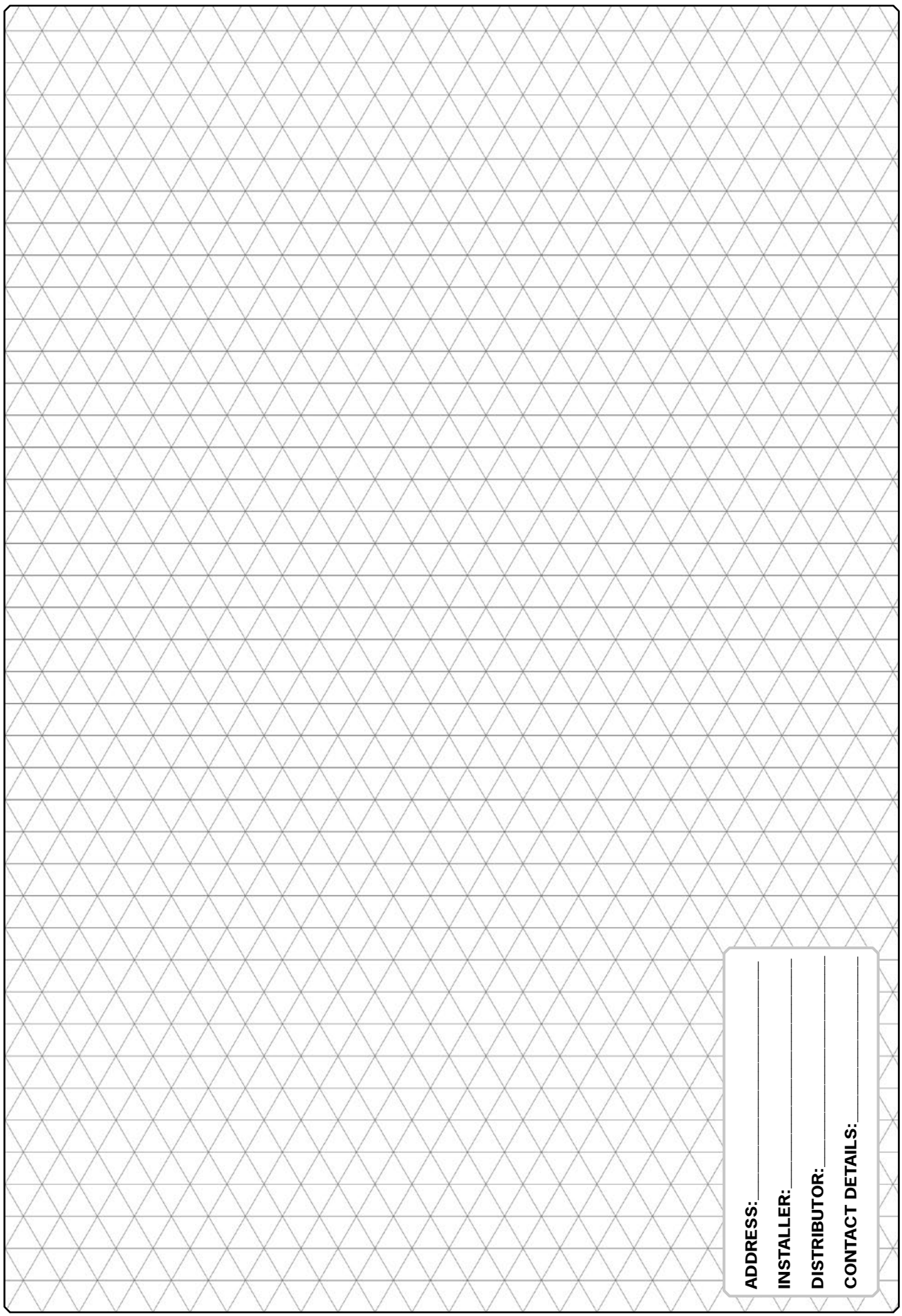
For any special product you need to develop, please contact TESEO's technical department.

Use the isometric grid below to sketch your required system layout or a specific installation detail. Then send your drawing along with the completed table on page 101 to: **support@teseoair.com to request an initial consultation and quotation.** We will be happy to support you in **bringing your project to life!**

DATE:



CUSTOMER NAME:



DATE:

CUSTOMER NAME:

ADDRESS:

INSTALLER:

DISTRIBUTOR:

CONTACT DETAILS:

DATE:

CUSTOMER NAME:

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INSTALLER:_____

DISTRIBUTOR:_____

CONTACT DETAILS:_____


Square thinking
outside
the box
PIONEERS OF INNOVATION
PIONEERS OF INNOVATION

1ST WORLD'S FIRST

THE WORLD'S FIRST MODULAR ALUMINIUM SYSTEMS FOR THE DISTRIBUTION OF COMPRESSED AIR AND TECHNICAL FLUIDS UNDER PRESSURE

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