

Service systems

We are creating laboratories today, thinking of the future. Our range of services is created from an overall view of work spaces in laboratories. Burdinola offers multi-purpose, reconfigurable and scalable systems that combine aesthetics with functionality, to adapt to any usage scenario both at the time of installation and in the future. Our new range of services (vertical, front, benchtop and ceiling-mounted) is more versatile than ever and makes it possible to customise every installation to achieve a comfortable, safe working environment, with maximum optimisation of space.

Range of service systems



Self-supporting.
P.198



Stand-alone.
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Accessories for service systems



Panels
P.210

Electrical services
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Characteristics

Asepsis.

Thanks to its design and the materials chosen, we achieve the best quality in finishes and minimisation of joints.

Adaptability.

The variety of solutions for service systems allows maximum adaptation to the needs of each workstation.

The ergonomic design of the service system makes it possible for consumption points to be easily accessible by locating services at the point required, thus avoiding hoses or cables laid out over the work area. Vertical service systems for workstations where visibility and communication are paramount, air service systems for workstations where flexibility is the critical factor.

Easy maintenance.

The service system creates a service compartment in the lower part to provide services along the lower part of the bench to all points in the laboratory. The routing of service installations is accessible to make changes or expansions, while being independent of work areas.

Self-supporting.

The BECOME system of services is self-supporting, fully independent of the bench. This is the key to our laboratories being reconfigurable and flexible.

Durability.

The service life of the service system is undoubtedly limited by that of its service panels. BECOME service system panels are made of ABS, which gives them great durability.

Safety.

The service system makes it possible to organise the workstation, key to ensuring the safety of the activity, through the storage possibilities it provides on shelves or in cabinets in the upper area of the bench.

Capacity.

The front service system offers a maximum capacity to house electrical and mechanical services (water, pure gases, vacuum, gas, etc.).

Communication.

The vertical service system provides greater visibility to the laboratory and communication on both sides of the bench, as well as greater use of the worktop.

Flexibility.

The highest levels of flexibility are achieved through a combination of wall/ceiling-mounted service systems and mobile benches: a laboratory layout that can be adapted by users themselves when required.



Assembly sequence of service panels

Service systems allow laboratories to be easily reconfigured, as they are selfsupporting. They are supported by anodised aluminium profiles and have an internal frame that makes it possible

to put service panels in place and the superior locking system ensures the positioning of the panels. This makes maintenance tasks for changing or expanding services a lot easier. The different

services are installed in service panels, as shown in the image below:



1 Turn the hinge



2 Remove the buffer



3 Remove the buffer



4 Unscrew the panel



5 Remove the panel



6 Panel removed

The BECOME service system allows the assembly of different storage elements, such as shelves and/or suspended cabinets. The slots on the side allow the height of the shelves and cabinets to be adjusted at any point and independently on each side of centre benches.

The shelves have a steel support with a heat-hardened powder coating and are adjustable in height and independent on each side of centre benches. We offer a choice of glass shelves or compact melamine fibreboard. Low power consumption LED lighting is integrated under shelving or

suspended cabinets. The electrical sockets on Burdinola benches and fume cupboards are fitted with an IP-55-protected cover. In this way, it is possible to prevent shunts due to splashes or spills.

Details of layout of bench installations



Installations run through benches hidden by the service compartment. The connection is usually made from the ceiling through service downpipes or from the floor.

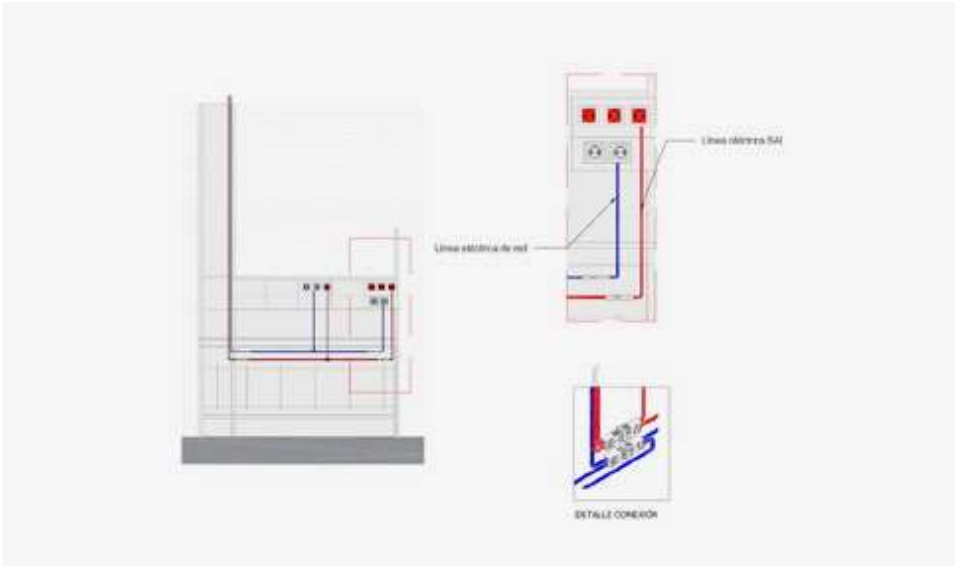
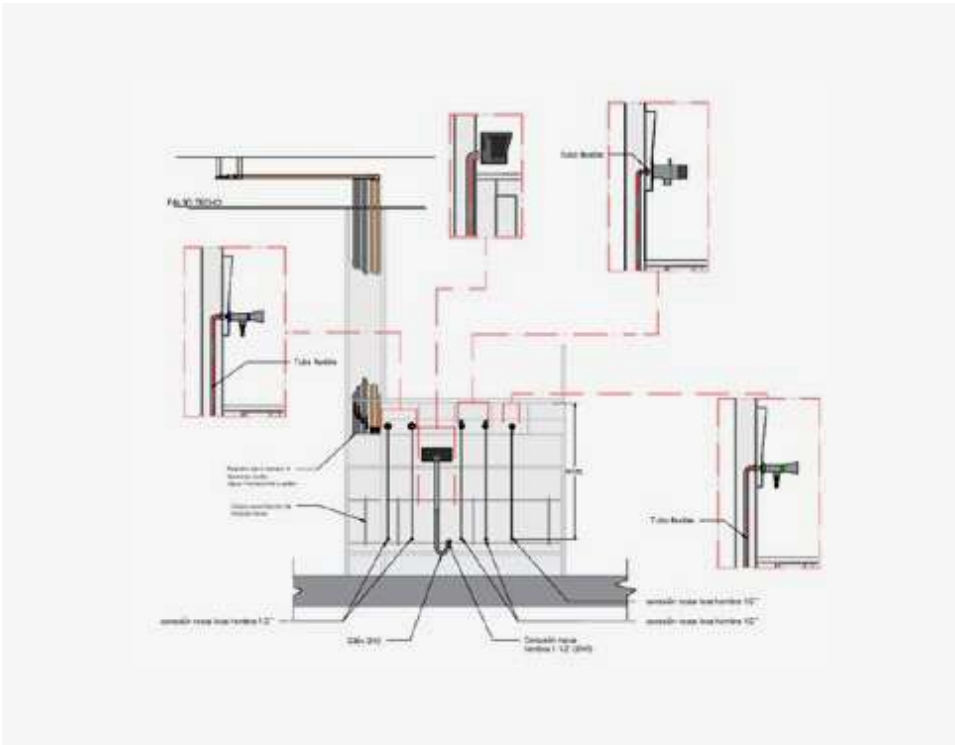


The 150 mm service compartment for a wall bench and 300 mm for a centre table allows for proper routing of all installations fixed to the guide provided for this purpose.



This accessible layout improves flexibility, as it makes the maintenance and/or modification of installations easier, depending on the changing needs of laboratories.

The pre-installation of our service compartments allows us to reduce assembly times in situ and ensure the consistent quality of all of our projects.



Service systems

Range of service systems

Self-supporting P.198
Stand-alone P.202
Wall/ceiling mounted P.206

BECOME range > Service systems



Self-supporting



Application

The service systems, which are designed and certified in accordance with EN-13150, allow easy reconfiguration of laboratories, are self-supporting and independent of benches, provide a large capacity for hosting services and the possibility to expand and/or make simple modifications to their configuration. In their front and vertical layouts, they are fitted with anodised aluminium profiles. A galvanised steel sheet support frame allows service panels that can be easily replaced to be put in place, thanks to a locking system at the top. The service panels are made of recyclable thermoplastic, with approximate measurements of 300 x 300 mm, available in different colours. These panels allow the incorporation of elements for different services, such as water, electricity, gas, etc., and are easily expandable and replaceable.

Safe product

Range certified under the European EN 13150 standard. The service panels are made of recyclable thermoplastic with high impact resistance and VO fire resistance. As it is a non-conductive plastic material, it avoids the risk of direct electrical contact.

Models



1. Wall-mounted benchtop service system



2. Wall-mounted vertical service system



3. Wall-mounted front service system



4. Centre benchtop service



5. Centre vertical service system



6. Centre front service system

Materials

- Self-supporting frame: anodised aluminium.
- Service panels: ABS.
- Finishes: argenta, black fine, fresh lime, alba.

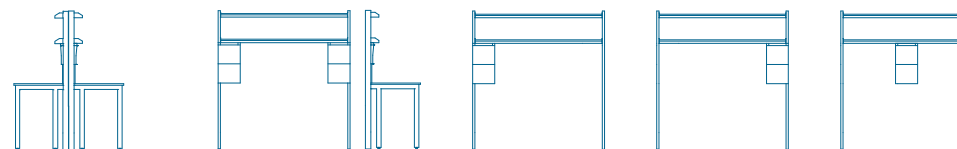
Optional accessories

- Panels
- Electrical and fluid services.
- Downpipe for services.
- Turret / conduit.
- Lighting.
- Storage: shelf / cabinet.

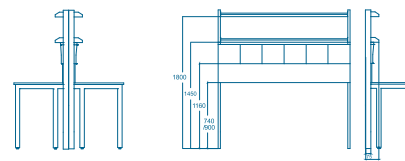
*For more details, see the chapter on "Accessories for service system".

Drawings

Vertical service system



Front service system



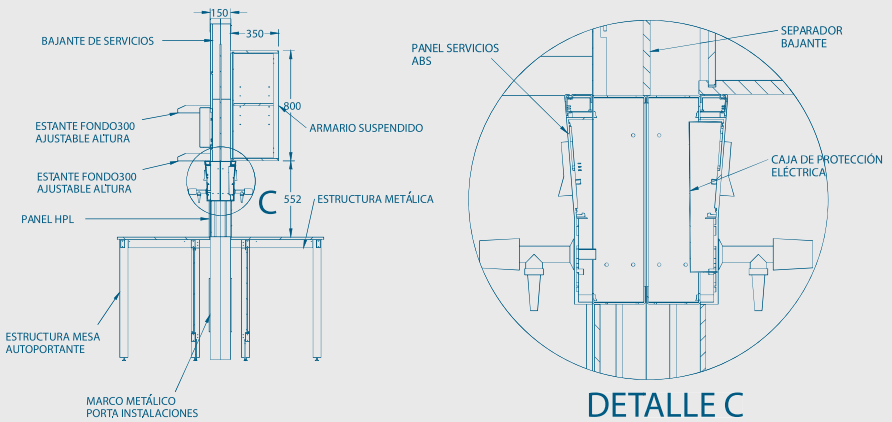
Technical characteristics						
Models	600	900	1200	1500	1800	
Self-supporting frame	75 x 30 mm anodised aluminium.					
Support frame for panels	Galvanised sheet steel.					
Service panels	Recyclable ABS 300 x 300 mm service panel. V0 resistance to fire (*).					
Panel seal	Compact white core high pressure laminate.					
Maximum no. of panels for front version	2	3	4	5	6	
Height of services panel (mm)	1.160					
Load capacity						
Shelf (kg)	30					
Cabinet Panel (kg)	20					
Accessories						
Shelf	3+3 thick laminated safety glass or compact wood fibreboard, covered with decorative paper with 8 mm melamine resins. Depths: 150-225-300 mm.					
Cabinet	Versions with sliding glass, blind or open doors. Height: 800 mm and 650 mm (with height-adjustable panel) and 410 mm. Colours: white or grey.					
Height of first shelf/cabinet (mm)	1.450					
Height of second shelf (mm)	Adjustable along the entire length from 1600 to 1800 mm.					
Downpipe for services.	Integrated into all service system models and made of aluminium sections covered with steel plate. 300 x 75 or 300 x 150 (mm).					
Lighting	LED modular lighting.					
Electrical / fluid services	For details, see chapter 3.2					

(*) Self-extinguishing and fire retardant. In accordance with UL94 (vertical burning). V0 classification is equivalent to the fire being extinguished in 10 seconds without dripping.

Diagram of the path of the installations.



Diagram of details and scalability



Stand-alone



Application

Stand-alone service systems, which are designed and certified in accordance with EN-13150, allow easy reconfiguration of laboratories, are self-supporting and independent of benches, provide a large capacity for hosting services and the possibility to expand and/or make simple modifications to their configuration. The ergonomic design of the service system makes it possible for consumption points to be easily accessible, including behind large equipment and the organisation of the workstation, by locating services at the point required, thus avoiding hoses or cables laid out over the work area.

Safe product

Range certified under the European EN 13150 standard. The service panels are made of recyclable thermoplastic with high impact resistance and V0 fire resistance. As it is a non-conductive plastic material, it avoids the risk of direct electrical contact.

Models



1. Stand-alone wall-mounted benchtop service system



2. Stand-alone wall-mounted vertical service system



3. Stand-alone wall-mounted front service system



4. Stand-alone centre benchtop service system



5. Stand-alone centre vertical service system



6. Stand-alone centre front service system

Materials

- Self-supporting frame: anodised aluminium.
- Service panels: ABS.
- Finishes: argenta, black fine, fresh lime, alba.

Optional accessories

- Electrical and fluid services.
- Downpipe for services.
- Turret / conduit.
- Lighting.
- Storage: Shelf / Cabinet.
- Benches (as per chapter 2).
- For details, see chapter 3.2.

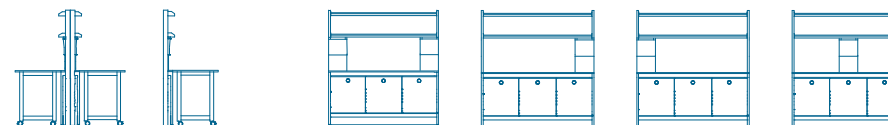
*For more details, see the chapter on "Accessories for service"

Drawings

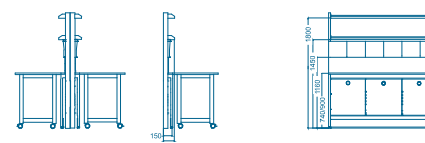
Stand-alone benchtop service system



Stand-alone vertical service system



Stand-alone front service



Technical characteristics						
Modelo	600	900	1200	1500	1800	
Self-supporting frame	75 x 30 mm anodised aluminium.					
Support frame for panels	Galvanised sheet steel.					
Service panels	Recyclable ABS 300 x 300 mm service panel. V0 resistance to fire (*).					
Panel seal	Compact white core high pressure laminate.					
Maximum no. of panels for front version	2	3	4	5	6	
Height of services panel (mm)	1.160					
Load capacity						
Shelf (kg)	30					
Cabinet Panel (kg)	20					
Accessories						
Shelf	3÷3 thick laminated safety glass or compact wood fibreboard, covered with decorative paper with 8 mm melamine resins. Depths: 150-225-300 mm.					
Cabinet	Height: 800 mm and 650 mm (with height-adjustable panel) and 410 mm. Colours: white or grey.					
Height of first shelf/cabinet (mm)	1.450					
Height of second shelf (mm)	Adjustable along the entire length from 1600 to 1800 mm.					
Downpipe for services	Integrated into all service system models and made of aluminium sections covered with steel plate. 300 x 75 or 300 x 150 (mm).					
Lighting	LED modular lighting.					
Electrical / fluid services	For details, see chapter 3.2					

(*) Self-extinguishing and fire retardant. In accordance with UL94 (vertical burning), V0 classification is equivalent to the fire being extinguished in 10 seconds without dripping.



Wall/ceiling-mounted



Application

Wall/ceiling-mounted service systems, designed and certified in accordance with EN-13150, allow maximum flexibility and the reconfigurability of laboratories, suspended from the ceiling, in combination with mobile benches, provide a user-modifiable layout configuration depending on the changing needs of the laboratory. Large capacity for hosting services and the possibility of expansion and / or the simple modification of their configuration. In their wall/ceiling-mounted layout, they are fitted with anodised aluminium profiles. A galvanised steel sheet support frame allows service panels that can be easily replaced to be put in place, thanks to a locking system at the top. The service panels are made of recyclable thermoplastic, with approximate measurements of 300 x 300 mm, available in different colours. These panels allow the incorporation of elements for different services, such as water, electricity, gas, etc., and are easily expandable and replaceable.

Safe product

Range certified under the European EN 13150 standard. The service panels are made of recyclable thermoplastic with high impact resistance and V0 fire resistance. As it is a non-conductive plastic material, it avoids the risk of direct electrical contact.

Models



1. Wall/ceiling-mounted vertical service system - one column



2. Wall/ceiling-mounted vertical service system - two columns



3. Wall/ceiling-mounted front service system

Materials

- Self-supporting frame: anodised aluminium.
- Service panels: ABS.
- Finishes: argenta, black fine, fresh lime, alba.

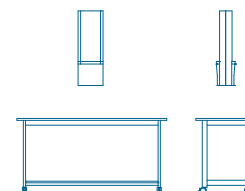
Accesorios opcionales

- Panels.
- Electrical and fluid services.
- Downpipe for services.
- Storage: shelf / cabinet.

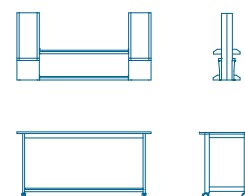
**For more details, see the chapter on "Accessories for service systems".*

Drawings

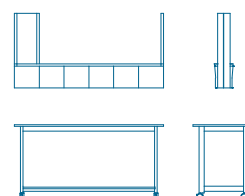
Wall/ceiling-mounted vertical - one



Wall/ceiling-mounted vertical - two



Wall/ceiling-mounted front



Technical Characteristics of Wall/Ceiling-Mounted Column

Models	300
Self-supporting frame	75 x 30 mm anodised aluminium.
Support frame for panels	Galvanised sheet steel.
Service panels	Recyclable ABS 300 x 300 mm service panel. V0 resistance to fire (*).
Maximum no. of panels for front version	1
Accessories	
Electrical / fluid services.	For details, see chapter 3.2

(*) Self-extinguishing and fire retardant. In accordance with UL94 (vertical burning), V0 classification is equivalent to the fire being extinguished in 10 seconds without dripping.

Technical Characteristics of Wall/Ceiling-Mounted Front

Models	1200	1500	1800
Self-supporting frame	75 x 30 mm anodised aluminium.		
Support frame for panels	Galvanised sheet steel.		
Service panels	Recyclable ABS 300 x 300 mm service panel. VO resistance to fire (*).		
Maximum no. of panels for front version	4	5	6
Height of services panel (mm)	1.160		
Load capacity			
Shelf (kg)	30		
Cabinet Panel (kg)	20		
Accessories			
Shelf	3+3 thick laminated safety glass or compact wood fibreboard, covered with decorative paper with 8 mm melamine resins. Funds: 150-225-300 mm.		
Cabinet	Versions with sliding glass, blind or open doors. Height: 410 mm Colours: white or grey.		
Height of first shelf/cabinet (mm)	1.450		
Height of second shelf (mm)	Adjustable along the entire length from 1600 to 1800 mm.		
Downpipe for services	Integrated into all service system models and made of aluminium sections covered with steel plate. 300 x 75 or 300 x 150 (mm).		
Lighting	LED modular lighting.		
Electrical / fluid services	For details, see chapter 3.2		

(*) Self-extinguishing and fire retardant. In accordance with UL94 (vertical burning), V0 classification is equivalent to the fire being extinguished in 10 seconds without dripping.

Service systems

Accessories for service systems

Panels P.210**Electrical services** P.212**Fluid services** P.214**Lighting** P.216**Storage** P.218

Service panels



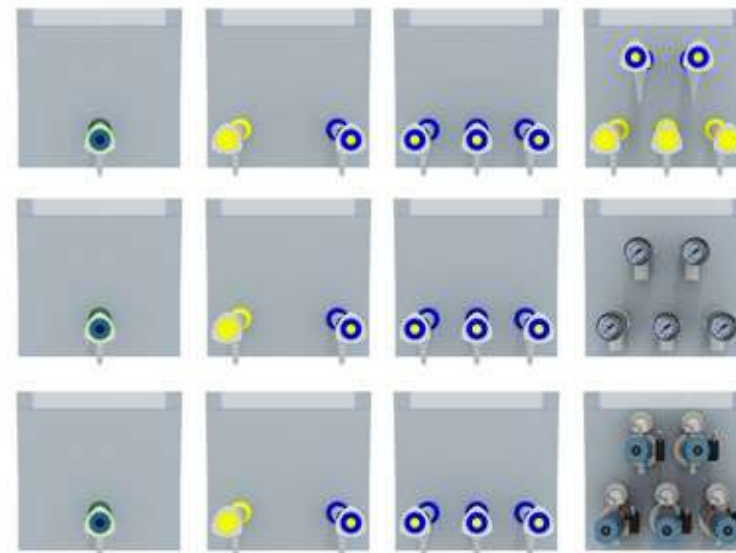
Application

The service panels are made of recyclable thermoplastic, with a high resistance to impact and approximate measurements of 300 x 300 mm, available in different colours and with a V0 resistance to fire. As it is a nonconductive plastic material, it avoids the risk of indirect electrical contact. These panels allow the incorporation of elements for different services, such as water, electricity, gas, etc., and are easily expandable and replaceable. The service system can also be configured according to the range of colours offered. Users can differentiate areas in laboratories (research areas, etc.) using panels of different colours in different areas. Available colours: RAL 9006; RAL7021; PANTONE 379C; PANTONE 434C.

Models



1. Configuration of electrical panels.



2. Configuration of fluid panels.



3. Possibility of combinations in the same panel.

Electrical services



Application

The BECOME range electrical services can be installed in both electrical conduits or turrets and panels, depending on their use and operation. Conduit: Made of an aluminium profile, with the possibility of incorporating 125 V, 220 V and 380 V electrical sockets, making it possible in each case to select unipolar, bipolar or tripolar alternating current, in addition to the possibility of configuring them to resolve the needs of incorporating direct current for computer lines, telecommunication lines, etc., with UNE 20-324-89, UNE 21- 316-74 and UNE 53-315-86. Turret: Made of ABS and designed to be fixed directly to the worktop by means of a support. Makes it possible to install up to two sockets per side. Reference Guidelines: UNE 20-324-89, UNE 21-316-74 and UNE 53-315-86.

Models



1. Conduit



2. Turret

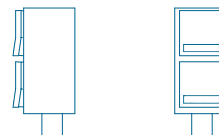
Drawings

Sizes of electrical conduits

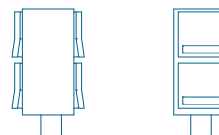


Sizes of SINGLE electrical turrets

SIMPLE



DOUBLE



Electric sockets

Socket voltage, BUR	Socket voltage 230 V - 16 A.
	Socket voltage 230 V - 13 A.
	Computer socket.
	Telephone socket.
MK socket	Voice and data socket.
	13 A MK socket with switch
	16 A single-phase thermal magnetic circuit breaker.
	16 A three-phase thermal magnetic circuit breaker.
Magnet	20 A single-phase thermal magnetic circuit breaker.
	20 A three-phase thermal magnetic circuit breaker.
Socket power	Single-phase power socket (3 poles) 230 V - 16 A.
	Single-phase power socket (3 poles) 230 V - 32 A.
	Three-phase power socket (5 poles) 400 V - 16 A.
	Three-phase power socket (5 poles) 400 V - 32 A.
Start/stop	Start / stop switch.
Berker	16 A, 250 V Berker socket
Displays and control	Fluid control sensor.
	Emergency stop button.

Fluid services



Taps for water

Taps for water with a brass body and EPDM seal that withstands a maximum pressure of 10 bar. Handle with identification code in accordance with EN 13792:2000, made of acid-resistant polypropylene. Acid-resistant epoxy powder coating. Nozzle with the possibility of disassembly in accordance with the DIN 12898 standard. Thread in accordance with the ISO 228/4 standard, class B tolerance in accordance with the DIN 12918 and DIN 12898 standards.

Taps for pure water

Designed so that the water is only in contact with the propylene, never with metals or contaminating materials. The sealing system, made of PP that can be rotated 90°, can operate up to 6 bar pressure. Handle with identification code in accordance with EN 13792:2000, made of acid-resistant polypropylene. Thread in accordance with the ISO 228/1 standard. The taps are manufactured in accordance with the DIN 12918 and DIN 12898 standards. Acid-resistant epoxy powder coating.

Taps for combustible gas

Taps for combustible gas with safety lock. Brass body, ceramic seal with a nitrile gasket. Acid-resistant epoxy powder coating. Maximum working pressure of 7 bar. Nozzle with the possibility of disassembly in accordance with the DIN 12898 standard. Handle with identification code in accordance with EN 13792:2000, made of acid-resistant polypropylene. Thread in accordance with the ISO 228/1 standard, class B tolerance, in accordance with the DIN 12918 standard and approved by DVGW.

Taps for technical gases

Brass body, fine adjustment valve, PTFE shut-off. Acid-resistant epoxy powder coating. Handle with identification code in accordance with EN 13792:2000, made of acid-resistant polypropylene. Fixed nozzle in accordance with DIN 12898. Thread in accordance with the ISO 228/1 standard, class B tolerance. The taps are manufactured in accordance with the DIN 12918 and DIN 12898 standards. Oxygen and hydrogen taps are lubricated with specific, approved oil.

Taps for instrumental gases with handle

Brass body, fine adjustment valve, PTFE shut-off. Acid-resistant epoxy powder coating. Handle with identification code in accordance with EN 13792:2000, made of acid-resistant polypropylene. Fixed nozzle in accordance with DIN 12898. Thread in accordance with the ISO 228/1 standard, class B tolerance. The taps are manufactured in accordance with the DIN 12918 and DIN 12898 standards. Oxygen and hydrogen taps are lubricated with specific, approved oil.

Taps for technical gases with handle

BS Reducers with a chrome-plated brass body and EPDM seals are intended for distributing pure gases, except corrosive gases, for a second reduction in control and analysis laboratories, when very precise pressure regulation is required. The BS-A model is intended for acetylene.

Models

11012.2 MDS	Water tap on a vertical panel with a 90° outlet.	
11062.2 MDS	L-shaped benchtop water tap with a benchtop mounting.	
11080.2 MDS	Benchtop water tap with swivelling spout	
11081.0 MDS	Benchtop mixer water tap.	
11066.2 MDS	Benchtop mixer water tap with two controls.	
11086.0 MDS	Benchtop mixer water tap with one control.	
11090.0 MDS	Benchtop mixer water tap with one control and a shower option.	
11100.3 MDS	Benchtop mixer water tap with one control and a column.	

1. Taps for water.

11250.2 MDS PP	Pure water tap made of PP.	
11251.0 MDS PP	Pure water recirculation tap made of PP.	

2. Taps for pure water.

12012.0 MDS	Single benchtop combustible gas outlet.	
12011.2 MDS	Double 180° benchtop combustible gas outlet.	
12012.2 MDS	Double 90° benchtop combustible gas outlet.	
12053.2 MDS	Combustible gas outlet on a vertical panel with a 90° outlet.	

3. Taps for combustible gas.

13010.2 MDS	Single benchtop technical gas outlet.	
13011.2 MDS	Double 180° benchtop technical gas outlet.	
13053.2 MDS	Technical gas outlet on a vertical panel with a 90° outlet	

4. Taps for technical gases

Pressure reducer for vertical panel.	
Pressure reducer for vertical panel with fine tuning.	
Single benchtop pressure reducer.	
Single benchtop pressure reducer with fine tuning.	
Pressure reducer for wall.	
Pressure reducer for wall with fine tuning.	

5. Taps for instrumental gases with handle.

Pressure reducer with shut-off valve.	
PDG pressure reducer.	

5. Taps for technical gases with handle.

Lighting



The light fitting is inside an aluminium body with a polycarbonate diffuser. The light fitting has a colour rendering up to CRI94. It has 120 LEDs per metre.

Models



1. Lighting

Drawings

Lighting



Measurements

Table module (mm)	Length of light fitting (mm)
600	540
900	840
1.200	1.140
1.500	1.440
1.800	1.740

Technical characteristics	
Electrical output potential	24V
Direct current	950mA/m
Power	15W/m
LED colour temperature	4000K
Copper thickness	30Z
Angle	120°
Static electricity	800V
Working temperature	-20°C – +40°C
IP protection	IP20 not water resistant and IP65 silicone
Number of LEDs/metre	120 LEDs
Regulations	EN 55015, EN 61457, EN 62776, EN 62471 and EN 62384, Directive 2004-108-EC, Directive 2006-95-EC, UL2108, UL8750 and LM 80IESNA (> 97.16%)

Storage in service systems



Application

The configuration of the bench with respect to the storage elements will allow the work area to be well organised, avoiding the presence of unnecessary material, misuses and distractions. The upper part of the bench can be configured with:

Shelves: Range of height-adjustable shelves for mounting on BECOME service system columns. Available in depths of 150-225-300 mm. Support frame in powder-coated steel tube based on polyester resins.

Suspended cabinets: For benchtop or wall mounting, available in configurations of one or two-door blind doors, sliding doors or open doors in white and grey.

Models



1. 2-shelf service system



2. Shelf and cabinet service system



3. Cabinet service system



4. Centre 2-shelf service system



5. Centre shelf and cabinet service system



6. Centre cabinet service system

Materials

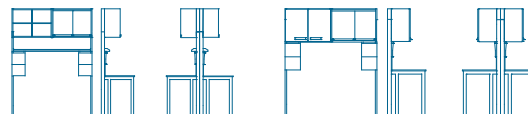
- Shelf: 3 + 3 mm laminated safety glass or 8 mm compact fibreboard.
- Cabinet: Made of particle board covered with decorative paper treated with melamine resins.

Optional accessories

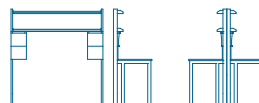
- Scaffold.

Drawings

Cabinets



Shelf



Suspended cabinets

	Dimensions
Width (mm)	600 900 1.200 1.500
Depth (mm)	350
Height (mm)	410 650 800

Shelf

	Dimensions
Width (mm)	600 900 1.200 1.500 1.800
Depth (mm)	150 225 300
Height	Adjustable.