BULGIN

Plugs and Sockets



S.A.1988, Socket right P.21 Above and P.20 below, polarised, non-reversability is given by male key upon socket, mating with a cup-shaped slot in the side of the plug.



S.A.468, Plug left

The pair, List No: P.20

S.A.472, Socket right



The pair, List No. P.200 (with S.A.1334) List No. P.260 (with S.A.1526)

Above, SOCKET assembles through cabinet-back, conferring polarised non-reversibility and safety, by automatic disconnections upon opening cabinet.





S.A. 2019, Plug
left
P.437 above and P.438 below are FACILTY OUTLETS, not Inlets.
Accordingly it is the socker or 'live' half and not the PLUG that is fixed, or apparatus, member.



S.A.2026, Socket left

2/9

The pair, List No: P.438

4/6

S.A.2025, Plug

108

2-Pole Inlets, Polarised; 3-Pole 'Facility Outlets' Further Mains Connectors for a wide field of applications. The INLETS are all 2-pole types, for use where Earthing is not required, or is carried out separately. Mouldings are in glossy phenolic, highly polished, normally BLACK, As with most other Bulgin other products, however, colours can be moulded to quantity order, if previously agreed. Pins and Sockets are non-ferrous, highly Nickelplated, and 6 BA, terminals are fitted to both members in all the INLETS (excepting the PLUG of P.200.) With these Connectors, mains-leads can be disconnected from apparatus, and interchanged. Uses extend from Professional and Domestic to Laboratory, Industrial, etc.

The FACILITY OUTLETS shown lower left allow 2-poles and Earth out of apparatus in subsidiary or auxiliary manner e.g., mains to dependant-unit and sub-unit, or to gram'motor, or similar. P.437, 6 BA. terminals to both members; P.438 connections are soldered to either member. Mouldings are glossy phenolic, normally BLACK. Arrangements may be made for mouldings in colour upon enquiry. Pins and Sockets are highly plated.

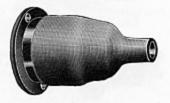
Plugs and Sockets TECHNICAL DATA AND DIMENSIONS



List No.		Amps at V:			(Proj: is from front face of panel)			
Pair	Members	6	250	500				
P.200 2-Pole	S.A.1344 Plug	7 ~	5~	1 ~	2×4 BA. Clear at 1½" 38-1 mm. crs., with central aperture 1" 25-4 mm. × ½" 25-9 mm, to clear polar parts. Solder-tag connections			
	S.A.1334 Socket		100		2×%. 7-9 mm. Ø holes at 13/1. 33-3 mm. crs., with central hole %. 23-8 mm. Ø Max. panel thickness: 1/2 3-2 mm. Terminal connections			
	S.A.1344			1	As above			
P.260 2-Pole	S.A.1526 Socket	· 7 ≃	5~	~	As above, but Solder-tags not terminals			
P.20 2-Pole	S.A.468 Plug S.A.472 Socket	7 ~	5	1 ~	Proj to front 1 1/4 25.8 mm., to rear: 11/4 28.2 mm., O.A. Ø: 13/4 41.3 mm. Panel hole: 11/4 27.mm. Ø Fixing holes: 2×6 BA. 3.3 mm. Clear at 11/4 32.5 mm. crs., Max. panel: Unlimited. Terminal connections.			
P.21 2-Pole	S.A.475 Plug S.A.198 Socket	_ :		5				
_	-	6-	12 2	50 2	50			
P.437	S.A.201			5	Panel hole: 1 1/4" 27-0 mm. clearin			
3-Pole	S.A.202 Socket	0		1				
P.438 3-Pole	S.A.202 Plugtt		3 1		Proj to front 1°%," 48-8mm. to rear. '%," 20-6mm., including sleeve. O.A. 21.1%," 23-8mm. Panel hole: ½" 19-1mm. st. clearing + keyway ½" 3:mm. wide × ½," 0.8 mm. deep. Fixing holes: see panel hole. Max panel: ½," 4.8 mm. Solder tags.			
	S.A.207 Socker	26			mm. si clearing + keyway % - mm. wide × ½, 0.8 mm. dec Fixing holes: see panel hole. Ma panel: ½, 4.8 mm. Solder tags.			

^{*} For separation or de-mating whilst loaded; otherwise 3A. Not for 500V.

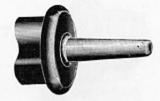
Accessories for Standard Mains-Connectors Ideal for use with P.437 and P.21 shown on these pages and the panel mounting Mains-inlet plugs of the standard size 3—5 Amp. connectors on pages 112-113. The terminals, tags, and the wiring connections are covered using this flexible moulded cover, Part No: 8878 which confers an extra degree of safety against inadvertent contact inside apparatus.



Part No: 8878, Plug-COVER, normally BLACK

Plug-Cover, Part No: 8878 Can fit on:—P.437/Sk., P.340, P.350, P.73, P.73/SE., P73/RT, P.73/RS., P.73/SE./RT., P.74, P.74/RT, P.20.

The standard Connectors can also have a flexible grip-sleeve added to their Sockets or Flex-Members, ask for Part No: 8037.



Part No: 8037, Cable-SLEEVE, normally BLACK

Socket-Sleeve Part No: 8037 Can fit on:—P.437/Pl, P.340, P.350, P.73, P.73/BB., P.73/RT., P.73/RS., P.74, P.74/RT., P.74/BB., P.161, P.162, P.166. P.18., P.21.

[†] For separation or de-mating whilst loaded; otherwise 1-5A. Not for 500V.

^{††} Supplied complete with cable sleeve.

BULGIN

Plugs and Sockets 3, 4 & 6 Pole



Plug: P.429 To obtain P.429 and P.430 together, Order P.360 To obtain P.429 and P.430/SE together, Order P.360/SE



List No:



Socket: P. 428



The Pair P.560



Plug: S.A. 2367

These Polarised 3, 4 and 6-pole Connectors are principally intended for Mains-Inlet Connections and accept cables up to 14/36" flex., or 18 S.W.G. The resilient sockets are protected and maintain their grip to the plug-pins, for sure and low-resistance contact. Strain-Relief for various sizes of Flex is given by a resilient plastic "bung", fitted internally to the flex-member. In addition the cable-sleeve can be drawn over the flex to minimise strain due to any sharp bending (axial cable-exit members only). Protection against accidental contact is given by ordering the flexible-cover accessory, Part No. 9555. All models are fully non-reversible with coded poles with contact and solderparts heavily SILVER able plated.

These models have side-entry for the cable on the flexmember and approved clamping for cable-grip. They are of

design,

with

specifications. One-piece electrodes (terminals integral with pins or sockets) that float, resilient sockets with solid

pins wherever possible, and screws concealed whilst mated, greatest safety, highest ratings. Mouldings are

of high grade phenolics, polished in appearance Connector P.493 (approved by G.P.O. and many Authorities, here and Overseas) also

has versions with retention-

lock and neon-glow. ("It glows whilst live") These are

additional variations by means

of different sockers. (The PLUG remains common to all

Entry mates with other P.73 versions; note the newest PLUG in this range fully cross

mating, with AMP-type male

versions).

three

latest

conformity

having

modern

P.73/Side

Side Entry Plugs and Sockets, 5 Amp.



List No: The Pair P.493



Socket: S.A. 2097



List No: The Pair P.73/SE



Socket: S.A. 2111





List No: The Pair P.545



Socket: S.A. 2111

Plug: S.A. 2341 AMP. type female push-on connectors for S.A.2341 can be supplied if requested.

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Plugs and Sockets 3, 4 & 6 Pole TECHNICAL DATA AND DIMENSIONS

BULGIN

Lis		pole		Dimensions		
Pair	Members	6	110	250	('Proj.' from Front of Panel)	
	P.429 Plug	3 ≅	2 ≃	1.5 ≅	Proj: 1 ² ½, ² 43·7 mm. (To Rear- ½, ² 19·1 mm. O.A. 2: 1.1 25·4 mm. Panel Hole: ½, ² 19·1 mm. 2 clear & keyway, ² 3·2 mm. min. wide × ½, ² 0·6 mm. min. deep. Max. Panel: ½, 6·4 mm.	
P.360 3 pole	P.430 Socket					
P.360/S.E.	P.429 Plug	3 ≅	2 ≃	1.5 ≅	Proj: ¾4" 15·5 mm. To Rear: ¼" 19·1 mm. O.A. Ø:1 ¼" 27 mm. Panel Hole: As P.360 Max Panel: ¼" 6·4 mm.	
3 pole	P.430/S.E. Socket					
P.194 6 pole	P.427 Plug P.428 Socket	3 ≃	2 ≅	1-5 ≃	Proj: 1½" 44-5 mm. To Rear: 1½" 31-4 mm. O.A. Ø; 1" 25-4 mm. Panel Hole: As P.360 Max panel: ½" 3-4 mm.	
P.560 4 pole	S.A. 2367 Plug	4 ≃	3 ≃	2 ≃	Proj: *%4" 17-6 mm. To Rear: 1" 25-4 mm. O.A. Ø: 1" 25-4 mm. Panel Hole: ½" 19-1mm. Ø clear and keyway. 100" 2-55 mm. Deep × -050" 1-27 mm. rad. Max. Panel: *½" 7-1 mm.	
	S.A. 2368 Socket					

N.B .- 110 and 250 V. D.C. rating subject to not being de-mated whilst loaded

3 and 6 pole Accessories for Miniature Mains Connector



Part No: 9455 Plug-COVER, normally BLACK Can fit on:— P.360, P.360/SE., P. 194, These Miniature Connectors can also have a flexible grip-sleeve added to their Sockets or Flex-Members, ask for Part No: 8819.



Part No: 8819 Cable-Sleeve normally BLACK
Can fit on:—P.20., P.21., P.437., P.73.,
P.74., P.340., P.350., P.73/BB., P.74/BB.,
P.73/SE., P.493., P.493/C.R., P.161., P.162.,
P.166., P.360., P.360/S.E.

Side Entry Plugs and sockets, 5 Amp. MODELS WITH TERMINALS TO BOTH MEMBERS

List No.		An	ıps. a	t Vo	lts:-	
Pair	Members	6	110	250	500	('Proj.' from Front of Panel)
P.73/S.E. 3-pole	S.A.1861 Plug§ S.A. 2111 Socket	7 ≃	6~	5~	~1	Proj: */4," 24-2 mm. To Rear: 11/4," 28-2 mm. O.A. Ø: 11/4," 39-7 mm. Panel Hole: * 11/4," 27 mm. clear, Fixing holes: 2× 6 BA. @ 11/4," 32-1 mm. crs
P.73/S.E./ R.T.† 3-pole	S.A.2190 Plug† § S.A.2111 Socket	7 ≃	6~	5~	1 ~	Proj: *½," 24-2 mm. To Rear: 1½," 33-3 mm. O.A. 8:1½," 39-7 mm. Panel Hole: *1½, 27 mm. clear. Fixing holes 2×6 BA. @ 1½," 32-1 mm. crs
P.493†† 3-pole	S.A.2096 Plug§ S.A.2097 Socket	5 21	5~	5~	1 ~	Proj: "%," 24-2 mm. To Rear: 11%," 36-7 mm. O.A. Ø: 11%," 40-5 mm. Panel hole: 1 1%," 27 mm. clear. Fixing holes: 2 × 6 B.A. @ 11%," 32-1 mm crs, csk. 1%, 5-6 mm. Ø @ 90°

MODEL WITH TERMINALS for SOCKET and TAGS ACCEPTING series 250 'AMP' Connectors to Plug

Rear: 1 2/3° 7 mm. 0 mm. 3-7 mm @ 90°.

PLUG is fixable member in ALL these connectors † Plug member only has tags. †† These do not cross-mate into members of other pairs.

Member with Pins



List No: P.493/Clip Retainer

A supplementary device to fix between plug-flange and panel (using same bolts) to provide a lock against accidental de-mating



SA.2097/Neon Socket

As SA.2097 but with warning neon. Available RED or Water Clear Glow for 110V, or 250V, Please state voltage and colour when ordering.

BULGIN

Plugs and Sockets, 5 Amp.



SA. 1861. Plug with Slit Pins left

The Pair List No. P.73

SA. 1862 with Solid Sockets right



SA. 468. Plug with Slit Pins left

The Pair List No. P.74

SA. 1988 with Solid Sockets right



SA. 1403, Plug with Solid Pins left

The Pair List No. P.340

SA. 1393 with Slit Sockets right



SA. 1383. Plug with Solid Pins left

The Pair List No. P.350

SA. 1373 with Slit Sockets right

Famous Bulgin Mains Inlet original Connectors, connecting pioneered, for and disconnecting the Mains-Lead at the Apparatus or Appliance itself. Widely used Domestically, and Professionally for Power and Lighting, and in Laboratories, especially where alternative portable apparatus is used common with selectively Mains-Lead, often made up as Laboratory fitments of differing lengths. All models are glossy moulded in highest commercial grades of phenolic material, and normal stock colour is BLACK. All metal parts are highly nickel-plated. In general, models have solid, tubular SOCKETS (in SOCKETmembers), and slit-PINS (in PLUG-members), and terminals with 6 BA. pinch screws. Models with resilient-SOCKETS (and Solid-PINS) not for cross-mating, are now also listed, with solder-tag connections. Note, however, **SA.1861-PLUG** is also Tags. available with rear ORDER as SA.2190-PLUG (+SA.1862=P.73/RT) and SA.468-PLUG with rear tags becomes SA.2221 (+SA.1988 =P.74/RT). Axial-entry Sockets predominate, generally being preferred by Users, but side-entry models (with clamp-bar cable-grip) are equally suitable in many cases and often essential; they are illustrated on pages 110-111. All models have high current ratings, based on separation whilst carrying; as carryingratings the figures may be much higher.

Plugs and Sockets, 5 Amp. TECHNICAL DATA AND DIMENSIONS

BULGIN

MODELS WITH TERMINALS TO BOTH MEMBERS

Li	Am	ps. at	Vo!	ts:-	Dimensions	
Pair	Members	6	110	250	500	('Proj.' from Front of panel)
P.74;	S.A.468‡ Plug §	7 ~	69	5~	1	Proj: 1 1/4" 27 mm. To Rear: 11/4" 28:2 mm. O.A. @: 11/4" 39:7 mm. Panel hole: 1 1/4" 27 mm. clear. Fixing holes: 2 × 6 BA. @ 1 1/4" 32:5 mm crs.
2-pole	S.A.1988 Socket				~	
P.73 3-pole	S.A.1861 Plug § S.A.1862 Socket	7 ≃	٥٧	5~	- ~	Proj: 1 1/4" 27 mm. To Rear: 11/4" 28-2 mm. O.A. Ø: 11/4" 39-7 mm. Panel hole: 1/4" 27 mm. clear. Fixing holes: 2×6 BA. @ 11/4" 32-1 crs.
P.73/RT. † 3-pole	S.A.2190 Plug†§ S.A.1862 Socket	7 ~	6~	5~	1~	Proj. 1 1/4" 27 mm. To Rear: 1 1/4" 33-3 mm. O.A. Ø:1 1/4" 39-7 mm. Panel hole: *1 1/4" 27 mm. clear. Fixing hole: 2x. 6 BA. @ 11/4" 32-1 mm. crs.
P.73/B.B. 3-pole	S.A.2042 Plug § S.A.1862 Socket	7 ≃	6~	5~	1~	Proj:2*%4, 60-7 mm. To Rear: Nil. O.A. Ø:1*%4 48-8 mm. Panel hole:*None. Fixing holes: 2×4 BA. @ 1*%3 38-9 mm. crs.
P.74/B.B. 2-pole	S.A.2041 Plug §		6	5~		Dimensions as P.73/B.B.
	S.A.1988 Socket	2 ≃	~		~	

P.73/B.B. can be supplied with Side-Entry. — S.A.2042 + S.A.2111
P.73/B.B. and P.74/B.B. plug* has two knockouts at each side of base 180° apart for cable acceptance

For side entry versions P.73/S.E. and P.73/S.E./Rt. see pages 110-111

MODELS WITH TAGS TO BOTH MEMBERS

P.350‡ 2-pole	S.A.1383 Plug §	6 21	4~	3~		Proj: "%," 22.6 mm. To Rear: "%," 24.2 mm. O.A. Ø: 1 %," 39.7 mm. Panel hole: "1 %," 27 mm. clear. Fixing holes: 2 × 6 BA. @ 1 %," 32.5 mm. crs.
	S.A.1373 Socket				~	
P.340: 3-pole	S.A.1403 Plug §		4~	3~		Proj. "1/3" 23-0 mm. To Rear: 1 1/3" 26-2 mm. O.A. #: 1 1/4" 39-7 mm. Panel hole: "1 1/4"
	S.A.1393 Socket	~			~	39-7.mm. Panel hole: *1 1/2" 27-mm. clear. Fixing holes: 2 ×6 BA. @ 1 1/2" 32-5 mm. crs.

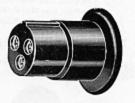
- †† These DO NOT cross-mate into members of other pairs
- † Plug-member only has tags

All other members have 6 BA. Terminals

- PLUG is fixable member in ALL these connectors
- Member with Pins
- Also available with REAR TAGS, plug No. becomes S.A.2221 complete item P.74/RT.



SA. 2042. Plug with Slit Pins



S.A. 1862 Socket with solid Sockets.

The Pair List No. P.73/BB. (P.74/BB similar, but with 2 pins. Plus: SA.2041. Socket: SA. 1988.)
Accessories Listed on page 109

In general, these proved, tried. and tested Plug and Socket Connectors have slit pins with tubular sockets. Terminals or Solder tags are variously available, as listed. Inter-fit is widely possible, and is indicated where practicable. Some models have slit sockets, and solid pins, to prevent unauthorised 'adjustment.' Slit-pin PLUGS can mate with appropriate Slitsocket sockers but solid-pin and socket items will not mate.

Modern and future trends are towards solid-pins, resilientsockets, for new designs, with one-piece (integral tag or terminal) metal-parts, and many such new designs are now shown in this section of this Catalogue.