

# INDUSTRIAL CONNECTORS

Selection Guide





## INTRODUCTION

RS PRO Heavy Duty Connectors are designed for Industrial applications, in particular Light & Sound, Robotics and Machinery. They offer a value choice along with leading brands to our customers.

These products support Machine and Panel Builders, Maintenance Engineers and cost conscious Buyers.

The RS PRO seal of approval means products have been tested in line with Industry standards, giving you added confidence in the quality of the offer. The range gives great electrical and mechanical protection and is available in screw and cage

clamp versions that are UL approved (ML file no. E500382). Inserts have a grounded contact to stop incorrect polarisation and contacts are mounted in the insert. This also means no additional tooling is required. Inserts are available in the most popular sizes of 3PE, 4PE, 6PE, 10PE, 16PE and 24PE.

Hoods and Housings are made from zinc die cast metal that are IP65 rated. All include metal locking levers to secure safely together. The range offers Top Entry, Side Entry, Surface Mount and Bulkhead/Panel Mount versions in sizes 3A, 6B, 10B, 16B and 24B.

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Series A - Housing



Specifications

Material

- Zinc die-cast

Colour

- RAL 7036

Surface

- Powder-coated

Locking element

- Steel, zinc-plated

Lever type

- Metal

Material (seal)

- NBR

Limiting temperatures

- -40°C to +125°C

Degree of protection

- IP44

		Side entry	Top entry	Bulkhead mounted
<b>RS Stock No</b>		<b>171-5690</b>	<b>171-5689</b>	<b>171-5688</b>
<b>Dimensions (mm)</b>	<b>a</b>	28	28	41
	<b>b</b>	27	27	40
	<b>c</b>	-	-	30
	<b>h</b>	54.3	60	23
	<b>M</b>	M20	M20	-
		Cable to cable, top entry	Bulkhead mounted, angled	Surface mounted, open bottom
<b>RS Stock No</b>		<b>171-5691</b>	<b>171-5687</b>	<b>171-5692</b>
<b>Dimensions (mm)</b>	<b>a</b>	24	40	58
	<b>b</b>	34	28	40
	<b>c</b>	-	30	30
	<b>h</b>	57	23	24.5
	<b>M</b>	M20	-	M20

Series A - Inserts



<b>RS Stock No</b>	171-5720	171-5721	171-5722	171-5723
<b>Termination</b>	Screw terminal	Screw terminal	Screw terminal	Screw terminal
<b>Number of contacts</b>	3 +	3 +	4 +	4 +
<b>Electrical data (EN 61 984)</b>	10A 230/400V 4kV 3 600V	10A 230/400V 4kV 3 600V	10A 230/400V 4kV 3 600V	10A 230/400V 4kV 3 600V
<b>Wire gauge (mm<sup>2</sup>)</b>	1 to 1.5	1 to 1.5	1 to 1.5	1 to 1.5
<b>Size</b>	RS Pro 3A	RS Pro 3A	RS Pro 4A	RS Pro 4A
<b>Male / Female</b>	M	F	M	F

Specifications

**Insulation resistance**

- $\geq 10^{10}\Omega$

**Flammability acc. to UL 94**

- V-0

**Limiting temperature**

- -40 to +125°C

**Mating cycles**

- $\geq 500$

**Material (insert)**

- Polycarbonate

**Colour (insert)**

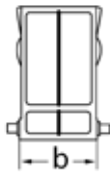
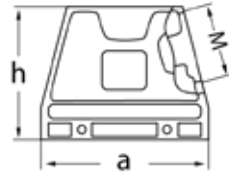
- RAL 7032

**Approvals and Specifications**

- EN 60664-1, IEC 61984, UL 1977 ECBT2



Series B - Housing



Side entry, single lever



Side entry, double lever



RS Stock No		171-5694		171-5700		171-5701		171-5708		171-5709		171-5715		171-1516	
		RS Pro 6B		RS Pro 10B		RS Pro 16B		RS Pro 16B		RS Pro 16B		RS Pro 24B		RS Pro 24B	
Dimensions (mm)	a	60		72.6		72.6		93.5		93.5		120		120	
	b	43		43		43		43		43		43		43	
	h	57		60		60		74.5		74.5		74.5		74.5	
	M	M25		M25		M32		M25		M32		M32		M40	

Specifications

Limiting temperature

- 40 to +125°C

Degree of protection

- IP65

Material

- Aluminium die-cast

Surface

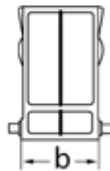
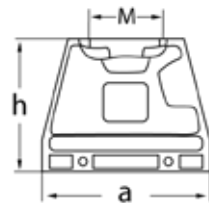
- Powder-coated

Colour

- RAL 7036

Material (seal)

- NBR



Top entry, single lever

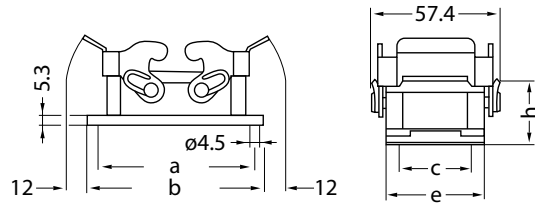


Top entry, double lever



RS Stock No		171-5693		171-5698		171-5699		171-5706		171-5707		171-5713		171-5714	
		RS Pro 6B		RS Pro 10B		RS Pro 16B		RS Pro 16B		RS Pro 16B		RS Pro 24B		RS Pro 24B	
Dimensions (mm)	a	60		72.6		72.6		93.5		93.5		120		120	
	b	43		43		43		43		43		43		43	
	h	57		60		60		74.5		74.5		74.5		74.5	
	M	M25		M25		M32		M25		M32		M32		M40	

Series B - Housing



Specifications

Limiting temperature

- 40 to +125°C

Degree of protection

- IP65

Material

- Aluminium die-cast

Surface

- Powder-coated

Colour

- RAL 7036

Material (seal)

- NBR

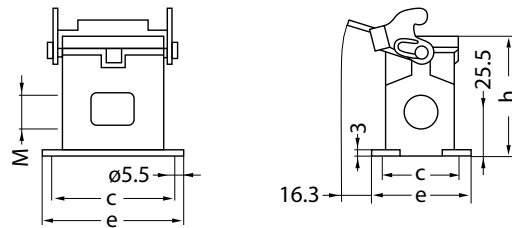
Locking element

- Steel, zinc-plated

Lever type

- Metal

		Bulkhead mounted, single lever		Bulkhead mounted, double lever			
RS Stock No		171-5695	171-5702	171-5710	171-5717		
		RS Pro 6B	RS Pro 10B	RS Pro 16B	RS Pro 24B		
Dimensions (mm)	a	70	83	103	130		
	b	80	93	113	140		
	c	32	32	32	32		
	e	43	43.5	43	43.5		
	h	28.5	28.5	28.5	28.5		



		Surface mounted, single lever		Surface mounted, double lever					
RS Stock No		171-5697	171-5704	171-5705	171-5711	171-5712	171-5718	171-5719	
		RS Pro 6B	RS Pro 10B		RS Pro 16B		RS Pro 24B		
Dimensions (mm)	a	70	82	82	105	105	132	132	
	b	82	94	94	117	117	144	144	
	c	40	45	45	45	45	45	45	
	e	52	57	57	57	57	57	57	
	h	54	74	74	56	81	81	81	
	M	2 x M20	1 x M25	2 x M25	1 x M25	2 x M25	1 x M32	2 x M32	

Series B - Inserts



<b>RS Stock No</b>	<b>171-5724</b>	<b>171-5726</b>	<b>171-5729</b>	<b>171-5730</b>
<b>Termination</b>	Screw terminal	Screw terminal	Screw terminal	Screw terminal
<b>Number of contacts</b>	6 +	6 +	10 +	10 +
<b>Electrical data (EN 61 984)</b>	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V
<b>Wire gauge (mm<sup>2</sup>)</b>	0.75 to 2.5	0.75 to 2.5	0.75 to 2.5	0.75 to 2.5
<b>Size</b>	RS Pro 6 E	RS Pro 6 E	RS Pro 10 E	RS Pro 10 E
<b>Male / Female</b>	M	F	M	F

Specifications

**Insulation resistance**

- $\geq 10^{10}\Omega$

**Flammability acc. to UL 94**

- V-0

**Limiting temperature**

- -40 to +125°C

**Mating cycles**

- $\geq 500$

**Material (insert)**

- Polycarbonate

**Colour (insert)**

- RAL 7032

**Approvals and Specifications**

- EN 60664-1, IEC 61984, UL 1977 ECBT2



<b>RS Stock No</b>	<b>171-5734</b>	<b>171-5735</b>	<b>171-5738</b>	<b>171-5739</b>
<b>Termination</b>	Screw terminal	Screw terminal	Screw terminal	Screw terminal
<b>Number of contacts</b>	16 +	16 +	24 +	24 +
<b>Electrical data (EN 61 984)</b>	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V
<b>Wire gauge (mm<sup>2</sup>)</b>	0.75 to 2.5	0.75 to 2.5	0.75 to 2.5	0.75 to 2.5
<b>Size</b>	RS Pro 16 E	RS Pro 16 E	RS Pro 24 E	RS Pro 24 E
<b>Male / Female</b>	M	F	M	F



Series B - Inserts



<b>RS Stock No</b>	<b>171-5727</b>	<b>171-5728</b>	<b>171-5732</b>	<b>171-5733</b>
<b>Termination</b>	Cage-clamp terminal with wire protection	Cage-clamp terminal with wire protection	Cage-clamp terminal with wire protection	Cage-clamp terminal with wire protection
<b>Number of contacts</b>	6 + ⊕	6 + ⊕	10 + ⊕	10 + ⊕
<b>Electrical data (EN 61 984)</b>	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V
<b>Wire gauge (mm<sup>2</sup>)</b>	0.14 to 2.5	0.14 to 2.5	0.14 to 2.5	0.14 to 2.5
<b>Size</b>	RS Pro 6 E	RS Pro 6 E	RS Pro 10 E	RS Pro 10 E
<b>Male / Female</b>	M	F	M	F

Specifications

**Insulation resistance**

- $\geq 10^{10}\Omega$

**Flammability acc. to UL 94**

- V-0

**Limiting temperature**

- -40 to +125°C

**Mating cycles**

- $\geq 500$

**Material (insert)**

- Polycarbonate

**Colour (insert)**

- RAL 7032

**Approvals and Specifications**

- EN 60664-1, IEC 61984, UL 1977 ECBT2

<b>RS Stock No</b>	<b>171-5736</b>	<b>171-5737</b>	<b>171-5740</b>	<b>171-5741</b>
<b>Termination</b>	Cage-clamp terminal with wire protection	Cage-clamp terminal with wire protection	Cage-clamp terminal with wire protection	Cage-clamp terminal with wire protection
<b>Number of contacts</b>	16 + ⊕	16 + ⊕	24 + ⊕	24 + ⊕
<b>Electrical data (EN 61 984)</b>	16A 500V 6 kV3 600V	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V	16A 500V 6kV 3 600V
<b>Wire gauge (mm<sup>2</sup>)</b>	0.14 to 2.5	0.14 to 2.5	0.14 to 2.5	0.14 to 2.5
<b>Size</b>	RS Pro 16 E	RS Pro 16 E	RS Pro 24 E	RS Pro 24 E
<b>Male / Female</b>	M	F	M	F



# The RS PRO Seal of Approval - a sure sign of quality



## AUDITED

In compliance with industry standards



## INSPECTED

For guaranteed quality and performance



## TESTED

By leading engineers



Since 1937, RS PRO has had a passion for industrial parts. More importantly, we believe that every part matters, because the quality of your applications will always be linked to the quality of every part going into them.

This is why we rigorously test every part against demanding industry standards to gain the RS PRO Seal of Approval.