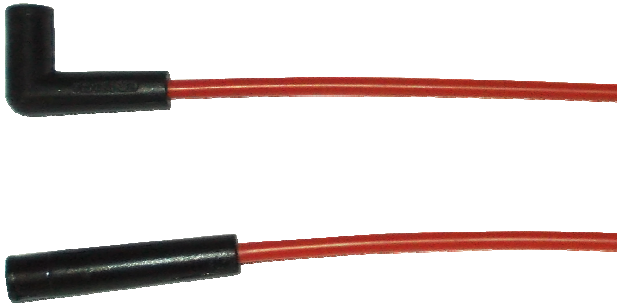


# HIGH VOLTAGE CABLES

## PC.... /PD.... Series



### DESCRIPTION

The cables of this series are suitable for the connection of the high voltage output of ignition transformers to ignition electrodes, as well as for the connection of flame detection electrodes (also manufactured by BRAHMA).

The cables can be supplied with various lengths and types of terminals (on this subject, see paragraph CONSTRUCTION CHARACTERISTICS).

### CHARACTERISTICS

Followings are the main features of the high voltage cables type PC..../PD....:

- **Operating temperature range:** up to 270°C
- **Cable insulation voltage (IEC 60-1):** 20 kV impulsive
- **Protection rating:** IP00
- **EMC resistor:** 1 kΩ, 2.7 kΩ, 4.7 kΩ
- **Suitable for use with:**  
 gaseous fuels (1st, 2nd and 3rd family),  
 hydrocarbons (light and heavy oils)  
 and operating temperatures up to 270°C

### DIRECTIONS FOR INSTALLATION

After having fixed the **Spark Gap** (for example 3 mm), the **Min. Clearance and Creepage distances** (see fig. 1) must be calculated as follow:

- **Clearance distance 3 times the spark gap**  
 example:  $3 \times 3_{\text{spark gap}} = 9 \text{ mm} (*)$
- **Creepage distance 6 times the spark gap**  
 example:  $6 \times 3_{\text{spark gap}} = 18 \text{ mm} (*)$

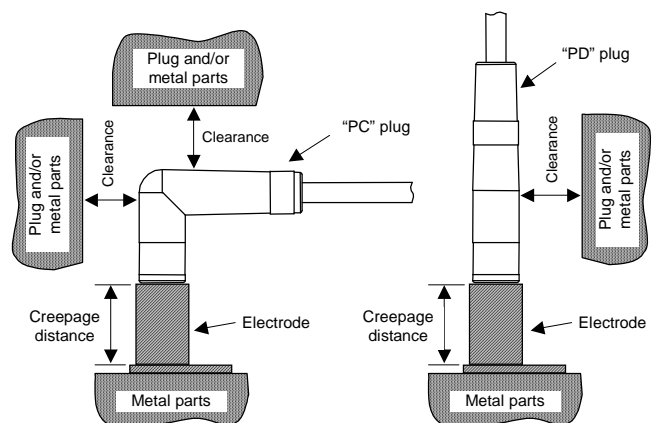


fig. 1

\* BRAHMA declines any responsibility for any improper use of the devices.

**CONSTRUCTION CHARACTERISTICS**

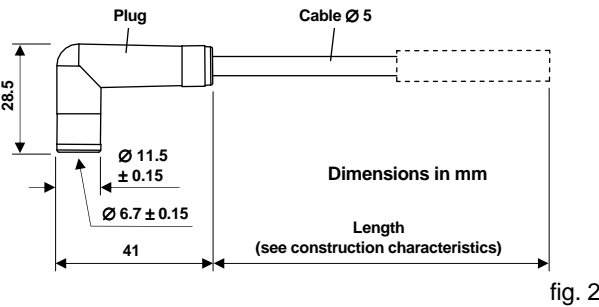
		Y	J	K	Z	/P	X	W
90° bent plug (see fig. 2)	:	PC	←					
Straight plug (see fig. 3)	:	PD						
Terminal Ø 4 (plug side)	:	4	←					
Terminal Ø 6.35 (plug side)	:	6						
Female fast-on 2.8x0.5 mm	:	F2						
Female fast-on 2.8x0.8 mm	:	F3						
Female fast-on 4.8x0.8 mm	:	F4						
Female fast-on 6.35x0.8 mm	:	F6						
Female fast-on 2.8x0.5 mm	:	2	←					
Female fast-on 2.8x0.8 mm	:	3						
Terminal Ø 4	:	4						
Female fast-on 6.35x0.8 mm	:	6						
Terminal Ø 6.35	:	7						
Female fast-on 4.8x0.8 mm	:	8						
Plug without resistor	:		←					
Plug with 1 kΩ resistor	:	R1						
Plug with 2.7 kΩ resistor	:	R2						
Plug with 4.7 kΩ resistor	:	R4						
Without protection	:		←					
Rubber protection (see fig. 8)	:	/P						
Length out of plug	:	XXX	←					
Without protection	:		←					
Rubber protection (see fig. 4)	:	PG5						
Silicone prot. for termin. Ø 4 (see fig. 5)	:	PS4						
Prot. c/w heat-shrinking tube (fig. 6)	:	TRM						
Silic. prot. for Sheared Cable (see fig. 7)	:	PST						
Sheared cable (no unsheathing – no stripping)	:	TGL						

For example, the designation “PC64R1 600MM PS4” refers to a cable with the following features:

- 90° bent plug (PC);
- Terminal Ø 6.35 – Electrode side (6);
- Terminal Ø 4 – Transformer (or Board) side (4);
- Plug with 1 kΩ filter resistor (R1);
- Length of the cable out of plug 600 mm (600MM);
- Silicone protection for terminals Ø 4 (PS4).

**DIMENSIONS**

- Cable with “PC” 90° bent plug:



- Cable with “PD” straight plug:

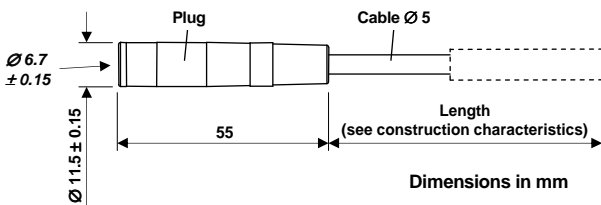


fig. 3

- Rubber protection: PG5

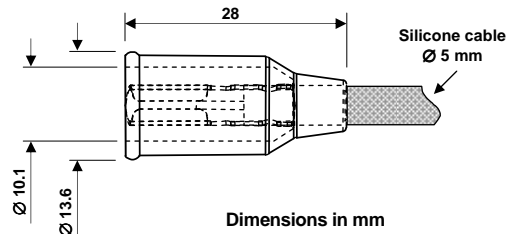


fig. 4

- Silicone protection for terminals Ø 4: PS4

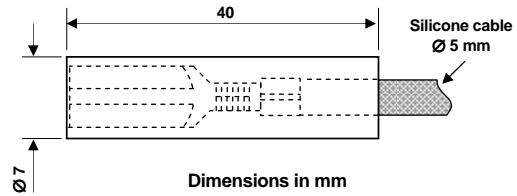


fig. 5

- Protection with heat-shrinking tube: TRM

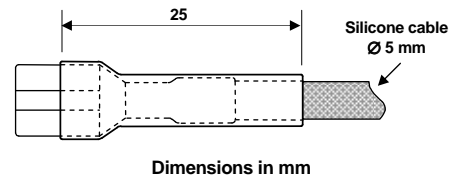


fig. 6

- Silicone protection for sheared cable: PST

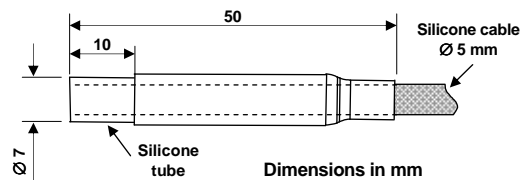


fig. 7

**ACCESSORIES**

When the cables are used with BRAHMA electrodes with a ceramic diameter of 8 and 10mm, and the creepage distance mentioned in paragraph “DIRECTIONS FOR INSTALLATION” cannot be respected, it is possible to fit PC and PD plugs with a rubber protection “/P” enabling to reduce the declared min. creepage distance (see fig. 8).

- Rubber protection: /P

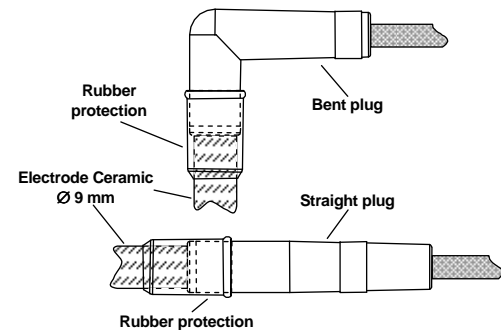


fig. 8

**ATTENTION -> Company Brahma S.p.A. takes no responsibility for any damage resulting from Customer tampering with the product.**

**BRAHMA S.p.A.**

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