

## FLAT SPRAY NOZZLE(For Tank Cooling)

**05 WC15B (brass) or 05 WC15S (316SS)**

**05 WC20B (brass) or 05 WC20S (316SS)**



05 WC15B



05 WC15S

Progard Flat Spray Nozzle distributes water in a wide angle flat spray pattern with medium impact to prevent fire/heat penetration. They produce a uniform spray distribution of medium sized droplets.

When installed in a upright (or pendent) position, the nozzle acts as a window spray nozzle to protect windows, interior wall and other openings in a building which are affected by fire.

The nozzle can also be installed in a horizontal position with the flow towards the ground, to produce a flat water curtain for cooling of exterior tank walls and roofs. The water flow to these nozzles is normally controlled either by a manual operated block valve or by means of an automatically operated deluge valve system.

These nozzles are available with different orifice sizes. The minimum pressure to achieve a reasonable spray pattern is 1.4 bar (20 psi). All spray patterns shown are based on tests carried in a closed environments (indoor). The wind velocity must be taken into consideration when designing these nozzles for outdoor systems.

### Technical Data

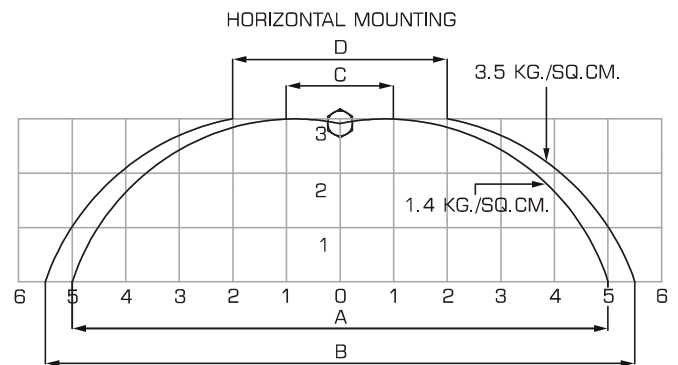
Material	: Brass or 316 SSS
Working Pressure	: 12.3 bar (175 psi) max
Working Pressure	: 1.40 bar (20 psi) min
Finish	: Brass or Nickel-Chromed for Model 05 WC15 and 05 WC15S Natural finish for Model 05 WC20 and 05 WC20S
End connection	: 05 WC15    ½" BSPT (or NPT) 05 WC15S    ½" BSPT (or NPT) 05 WC20    ¾" BSPT (or NPT) 05 WC20S    ¾" BSPT (or NPT)

### Nozzle Selection

Product Code	Material	Nozzle K-Factor	Orifice Size (mm)	Spray Angle (Degree)
05 WC15B	Brass	K-23	6	150
		K-30	7	
		K-37	8	
		K-45	9	
		K-53	10	
05 WC15S	316SS	K-72	12	
		K-23	6	
		K-30	7	
		K-37	8	
		K-45	9	
05 WC20B	Brass	K-53	10	
		K-72	12	
		K-98	14	
05 WC20S	316SS	K-120	15.5	
		K-140	18	
		K-98	14	

### Dimensions

Nozzle Model	Inlet Size	Length
05 WC15B / PGN-WC15S	½" BSPT	42 mm
05 WC15B / PGN-WC15S	¾" BSPT	46 mm



### Horizontal Spray Distance in METRES (approx.)

K-factor	A	B	C	D
K23	10	11	1.8	2.2
K30	11	11	1.8	2.2
k37	11	12	2.2	2.4
K45	12.2	12	2.2	2.4
K53	13.8	13.3	3.3	3.6
K72	13.8	14.2	4.4	4.8
K98	14	14.4	4.2	5.2
K120	14.4	15	4.4	5.4
K140	14.6	15.1	4.5	5.5

Recommended distance between nozzles is 2.5 metres (max). The above figures shown are indicative trajectory (max) with no specific density applied



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**Pendent Spray Distance in METRES**  
**(approximate)**

Nozzle K-factor	A	B
K23	5	5.5
K30	5	5.5
k37	5.3	5.8
K45	5.3	5.8
K53	5.5	6
K72	5.9	6.2
K98	6.2	6.3
K120	6.4	6.5
K140	6.6	6.8

**Ordering Information**

The following details should be specified when placing orders:

- 1) Product code
- 2) K-Factor
- 3) Spray angle
- 4) Material and Finish

PENDENT MOUNTING

